BIOLOGY OF KUNDALINI

Exploring the Fire of Life

Jana Dixon

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DEDICATION

Dedicated to Mr. Universal and my friends in the flame. Many thanks to all the fabulous people that have contributed to this book knowingly or unknowingly. May your light shine eternally into the deepest night. Special thanks to New Zealand for being the most magnificent and mystical country in the world, and for giving me such an appreciation for beauty, science and the mystery.

DISCLAIMER

Because of the urgent need, this book has been bestowed on the world many decades before the extensive lab research needed to solidify a true science of kundalini. I wish to make it clear that I am not a spiritual teacher and make no claims to any degree of enlightenment. Nor am I a medical doctor. The only authority I have comes from my own experience, gnosis and research. Nothing contained in this book should be construed, nor is intended to be used for medical diagnosis or treatment. You should never disregard medical advice or delay in seeking it because of something you have read in BOK.

COVER ART

This alchemical symbol describes the Chemical Wedding or the Sacred Marriage of the charge, poles, hemispheres and sexes. The triangle represents ascending male/yang/positive force and the circle symbolizes the encompassing female/yin/negative. The Caduceus represents the dance of the two polar forces in the spiral movement of all energy and matter through spacetime, in generating the evolutionary process of the Universe. The fire symbolizes the zero point plenum from which Kundalini, Matter and Spirit emerge. The prana, Ether or ferment that is both the Source, Cause and final Omega.

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KUNDALINI - (Sanskrit kund, "to burn"; kunda, "to coil or to spiral") so-called because it is believed to lie like a serpent in the root chakra at the base of the spine. Kundalini is a psycho-spiritual energy, the energy of the consciousness; a concentrated field of intelligent, cosmic, invisible energy, intrinsic and vital to life. Reputedly beginning in the base of the spine when a man or woman begins to evolve as wisdom/Presence is earned through spiritual surrender. Kundalini has been described as liquid fire and liquid light and is an aspect of Shakti, the divine female energy and consort of Shiva. The ultimate outcome of kundalini is the union of Will *(shakti-kundalini),* Knowledge *(prana-kundalini)* and Action *(para-kundalini).* The inner fire is the most potent of all forces, for it knows no limits and penetrates the fabric of space, matter and time.

PART I
PRELIMINARIES

PREFACE

The aim of this book is to suggest a preliminary protocol to support the fire of kundalini, allowing for permanent gains in transformation. To do this we must prevent ego blowback and prevent neurodegeneration, thereby reducing the biological depression that often happens after an awakening. As the science of kundalini progresses such a protocol for adaptation or higher homeostasis will be greatly refined and expanded. Till then, please be aware dear reader that this is an experimental book. The medical research that will give us the definitive answers to the secrets of metamorphosis has yet to be done. In the past we have had no scientific understanding as to what was actually happening during kundalini and so the alchemy of spirit was shrouded in mystery and superstition. Now in with modern science we can begin to understand what is really going on, and thus build an alchemical science like never before. There is an urgent need to understand the evolutionary process of transmutation, for our human survival might indeed necessitate it.

The Biology of Kundalini will hopefully change the way we look at spiritual evolution, medicine and ourselves. With this book I offer a theory of the biology of kundalini, which explains many of the symptoms, suggests a protocol of adaptation, and encourages research into a new branch of medicine..."Evolutionary Medicine." It is part self-help book and part notes for students, scientists and medical minds with an interest in the alchemy of consciousness. It also honors the often difficult process of spiritual crisis in a way that hopefully will reduce the suffering for those undergoing the Great Transformation, and for those around them watching the miracle. This information will be invaluable for anyone going through an awakening, for their family and for therapists both medical and psychological.

BOK is laid out in spiral fashion so that subjects will be picked up again further down the path at a deeper level, after interlocking material on related subjects. If you are a doctor or kundalini researcher, you may want to download BOK from lulu.com so that you can do word searches and connect up the loops of the spiral in your own documents. I recommend you pass over areas you find dry on the first couple of readings. If the subject of metamorphosis in anyway inspires you then eventually even the dry areas will become juicy.

It is very important to grasp the distinction between "damage" (pathology and disease) and the transformative process of "metamorphosis." Certain phases of metamorphosis include cellular necrosis and catabolic breakdown, for the new cannot grow without the removal of the old. Kundalini with its amplified metabolism and nerve activity and increased oxidation, will eventually tend to down-regulate neurotransmitter and hormonal receptors, as well as rewiring the nervous system. However even if we are in the between-slump, when the hyper-functioning has

backed off, but our receptors have not yet regrown, we cannot really consider kundalini as being "brain damaging." We must see all phases of metamorphosis as necessary allostatic changes in the transformation of our organism and the human collective. Once we drop our pathologizing and bring compassion to the whole of it, we prevent the secondary-backlash chemistry that causes regression and hence get to keep the gains made through heightened kundalini.

I don't recommend that anyone pursue the raising of kundalini energy itself. Instead I recommend detoxification, supernutrition, nerve and body strengthening, plus self-discovered spiritual practices and soulful adventures. I recommend following your Muse, developing your creative genius and working on giving your greatest gift for the widest distribution. If you do these things then an awakening is very likely to occur. If you don't do these things then you will not be prepared for a kundalini awakening and will have no "use for it" and so it will probably not serve you or anyone else. Therefore I don't tell people directly how to raise their kundalini, but encrypted throughout BOK are ways that you can use to aliven the spirit within.

BOK is for the solutions-orientated original thinker, who cherishes inner authority and the sense of the living Spirit. The living Spirit is untamed, cannot be defined, or encased within any book, creed or teaching, nor entombed within any system, nor encrusted with dogma. Remember this, and you will not be burdened with the weight of your own belief system. Only the living Spirit itself contains the "juice," and the living Spirit is always "new." Writing this book has been the most incredible ride...the information arises on a wave of energy and bliss. When I am hot on the kundalini trail spiritual Presence is heightened, the muse is tangibly potent and the pieces of the puzzle formulate themselves around the "pull" of the Holy Spirit. I have attempted in BOK to make what was unconscious, conscious and what was subrational, rational. The species work we need to do now is in emotional authenticity, shadow projection and building up the visionary neurology. These I will go into in more detail in BOK-2.

Future books associated with this work include *Raw Weight Loss and Detoxification, BOK -2* which has more of the alchemy, physics and sociology of kundalini, *Cosmic Influences on the Earthly Realm* and *Solaris: Vision of a Future Civilization.*

INTRODUCTION

Throughout this book the term "kundalini awakening" is used interchangeably with metamorphosis, spiritual alchemy, spiritual acceleration, the inner marriage, the sacred marriage, The Passion and even The Great Bliss. The energy of kundalini could be variously called prana, chi, mana, star-fire. Also around the world it is referred to as ka, ichor, inua, sila, manetuwak, oloddumare, qi, Tao, ki, aether, archeus, etheric energy, vital life-essence, vital energy or life force, and quintessence. Baron Carl von Reichenbach' called it the odic force (od), Paracelsus - archaeus, Wilhelm Reich - orgone, Ken Wilber - Spiritual Eros, Henri Bergson - élan vital, Tielhard de Chardin - radial energy and Freud - libido and it is also synonymous with Sheldrake's morphogenetic fields.

Whether it be from a spontaneous awakening, the result of spiritual practice (sadhana) or through Shaktipat from a Guru, metamorphosis tends to be such an overwhelming cataclysmic process that the more knowledge and tools for the road we have the better. Transformation is not comfortable, but it can be paced. To surrender to our own evolution, is to strengthen us to endure the all-consuming flame of spirit. My aim in writing this book is to help others in facilitating their own chemistry through a sustained awakening, rather than have it go wildly up and down in raw reactivity. For in my experience after a full-on six month kundalini peak it takes about five years to recover, but the more we know about the neurological activity of kundalini, the higher the potential spiritual gains and the faster the recovery.

One can see in each of us going through this phenomena, that it is transpersonal, archetypal and trans-anthropomorphic. Though in its insidious omnipresence it is intensely personal and specific, especially crafted to our own unique needs and condition, for it is a consummate perfect storm of the Self. Kundalini works with whatever we have built ourselves to be. Whatever our encrustations and blocks, the fire in perfect equanimity uses everything good and bad to fuel the flame of consciousness.

You can look at kundalini through quantum, subatomic, atomic, molecular, cellular, organ, organism, physical, emotional, mental, spiritual, mystical, mythic, sociological and species evolutionary lens—for it encompasses all of these. Just because our reality has a material component however, is not to dismiss the sublime beauty and significance of our subjective experience of the Divine. Kundalini is very specific and unique chemistry, that uses every facet of our biology, and affects our entire being. To me kundalini is a friend, a lover, a guide, a teacher, a taskmaster, a spirit and the presence of the Holy Ghost. As I became familiar with kundalini I noticed that any genuine insight or creative urge, simultaneous arises on a flux of kundalini. Thus I really have to say that kundalini is none other than spirit itself, manifesting on every level. In fact any meaningful psychic, relational, mental or spiritual event is simultaneous with a flux in kundalini.

The fire of Transmutation feels like desire, it feels like passion, the ULTIMATE passion. So we have to distinguish between life-destructive desires that reduce the fire of Transmutation and the GREAT Passion itself. The paradoxes involved with

kundalini abound. The more we do to open ourselves up, the hotter the flame becomes. But if we try to stem the flame then we regress and damage ourselves. It really is a case of how much bliss we can stand and how fast can we process our emerging Self, which is largely determined by how fast and thoroughly we can unload our baggage and past self. The increasing sense of being at home and being Alive makes metamorphosis seem inevitable. As the awakening speeds our incarnation, a feeling of objective conscience (baraka) and gratitude arises as a powerful urge to go-with the force of evolution. For the spiritual drive of Eros is our own deepest source and condition of being that we share with all Life. If we do not listen and surrender to this feeling of right-will, we will resort to sense gratification and self-destruction in an effort to avoid our Self and abdicate our lives.

Kundalini awakening can leave us totally incapacitated at times, or permanently damaged as far as our adaptability to this culture. Even Muktananda complained that he feared he would not be able to look after himself after he had experienced samadhi a couple of times. The Guru ashram system is great in this way, in that it insures those that are completely lost to kundalini, will be looked after. Not so in Western society however, the initiate is more likely to be misunderstood, taken advantage of or locked up. Thus the more we know about the kundalini process, the better adapted we can be to the evolutionary force while still surviving in the Western way of life.

Metamorphosis must surely be the most amazing and misunderstood phenomena on earth. My main intent while writing this book was to dispel misinformation, myths, fear, resistance and superstition with regards to this most mysterious of all life processes. So many things have to be right for a successful kundalini awakening; going it alone is hard; being insulted and attacked by spiritual Nazis (formalists) for expressing ones experience--these make it harder. The experience of persecution is a common one, and the individual learns to not take it personally, and this too becomes part of the courageous growth of the Self, while we live in a society that is largely ignorant of and fearful of metamorphosis. Compassion and joy gets you safely through any social ignorance.

The path of fire compared to the stoic path of many traditions might seem unruly and unsure, but the heart can understand kundalini better than the mind can. The heart just knows! My work is entirely bent on helping to alleviate ignorance on this matter, to reduce the compounded suffering humanity has undergone in the name of evolution. If one is already in total upheaval with kundalini it's just not advantageous to have one's community responding in devalidation, fear and rejection to one's metamorphic altered states. Thus the initiate has to be twice as strong—both to endure the fire, and to endure the social backlash.

In life we get remarkable opportunities but without knowledge, strength and determination we can make a mess of the greatest gifts nature offers us such as sex, youth, brains, talent and kundalini awakenings. With a kundalini awakening we are given the possibility of unwinding the bodymind that has been largely conditioned by others, in order to be remade by a will larger than our own, and

far larger than the social will. Kundalini takes us on a Kosmic adventure to the essential core of "consciousness in life." I wonder how illumed life would be if all stops where pulled out, and we could handle the full charge of what could only be called "extreme lifestyle."

Metamorphosis is perhaps the most complicated thing humans can investigate. Scientific investigation doesn't destroy the mystery, it is just one of the languages we use to describe it. In fact scientific understanding increases the depth and span of the mystery taking it to new heights. There is nothing romantic about being in the depths of total upheaval and not knowing what the heck is going on at the cellular and chemical level. Beyond the veil of material reality, inconceivably mystery is at play, working tirelessly for the greater good.

All biological processes from the very beginnings of life go toward creating this awesome chemistry change...a huge jump to the next level beyond the normal-human function. Transmutation doesn't "accidentally" just happen, it is the ultimate outcome of all life. All life in all its trillions and trillions of atomic and molecular transactions over the last 4 billion years is an inevitable chain of events autopoietically undertaken by a hylozoic universe, to ultimately lead up to the transmuting human bodymind. We are the Universe becoming aware, that we are the Universe becoming aware of itself. I can't even express how awesome it is that this alchemical chemistry is an a priori attractor—it is the kundalini passion, the muse itself that is driving me to reveal itself. Kundalini and spiritual evolution is the tangible manifestation of the great drive toward divinity that every atom of the universe has secretly been engaged in from the beginning.

Since it is completely natural, like child bearing or falling in love, my mind just boggles at this zenith chemistry and its unity with the Entire Chain of Being. Transmutation is a priori evolutionary drive—this was the goal all along. If not, then how could the ultimate chemistry just "happen" in everyday classical biology. Surely this nexus must have been the carrot drawing life through its infinite choices. The clockwork precision of the creative universe has got to be admired. Kundalini uses all chemicals and systems in the body...it is a form of ultimate chemistry which life has been working toward for eons. Either it will drive us mad, or we will be saved from ourselves.

The way that we have built our bodies in the West, with dough bodies of starch, sugar and stimulants means that we do not have the mineral base, energy reserves, protein strength and cellular integrity to withstand intense kundalini. With feeble structural integrity, instead of steady sustained evolution, we tend to blow up like a ton of dynamite. Since increasingly more people will be exposed to kundalini energy through Eastern practices and the stress of increased survival pressures, it means we will have increasing numbers of individuals popping in bodies and lives that could be severely damaged by the full evolutionary of consciousness. The Eastern teachers and traditions cannot help us in the West with this problem, for our biophysical, mental and social make up is quite different to what has historically been the case in the East. The medical industry in its present form cannot help us. They will attempt to suppress the symptoms with

antidepressants, anticonvulsants, antiseizure medicine, diuretics, antihistamines and high blood pressure drugs. Undoubtedly they will invent a new smorgasbord of highly destructive drugs to "cure us" of spiritual awakening. Humanity is going to be at a loss with how to deal with this growing problem of people awakening in bodies and socioeconomic conditions that do not serve the awakening process.

If we do not awaken to the reality of the situation as a society then many of the initiates will invariably crash and burn, becoming a burden to themselves and others. They would have been lifted up by the wave of evolution only to crash onto the beach and be ground into the sand. Then instead of initiates forming the leading edge of the developmental wave, we will find them living on the streets as human refuse to an enlightenment experiment gone terribly wrong. In this way the evolutionary wave of humanity could be aborted due to lack of understanding, then the only means of growth left to us then is mental conventional growth and this is not adequate to save us from ourselves. Without spiritual evolution we are doomed as a species.

All healing is spiritual healing and just as healing is innate to the organism, so is enlightenment. The human body is genetically engineered to become enlightened, however this potential mostly remains latent…a sleeping giant. However, the more people that pop, the greater the morphogenic propensity for increasing numbers of people to pop through state resonance. To cope with this contagion of awakening we are going to have to collectively learn to consciously incarnate through a POSITIVE APPROACH to kundalini awakening that includes preparation, protection, practices and higher purpose. Much of what we are suffering from these days is a combination of nature-deprivation, stress overload, mineral-nutrient depletion, enzyme insufficiency, heavy metal poisoning, EMF pollution, parasite infestation and magnetic deficiency syndrome. A kundalini awakening will quicken and reveal any and all of these causes and conditions. Thus a successful awakening entails a full spectrum lifestyle change which addresses all of these types of imbalances. If we fully prepare and protect the body from the radiation, oxidation, glycation, toxicity, catabolysis and inflammation associated with kundalini, then we can sustain a perpetual awakening without depression and burnout or exhaustion phases. And so transform civilization from within our cells!

Boulder 2006

Consider that the fire that Prometheus stole from the Gods was actually Kundalini fire, and he gave it to the people so they could become Gods.

MY STORY

My story starts in rural New Zealand at the age of 16, when inflamed with the heat of Eros and the Muse, I drew pictures of this curiously beautiful man with a conical spiral hat on his head. I knew the pictures I drew were of a new type of human I called the Universal Man, who would be born out of the old. Even back then I was aspiring to the mystic civilization.

In July 1988 at the age of 27 after two years sailing through the pacific and living in Hawaii, I went back to Auckland and took a job as a picture framer and went on a raw diet. Six months later due to various stresses and along with an unconscious biological intuition of my father's immanent death, I had my first kundalini awakening. Though at the time I knew nothing of kundalini, I just assumed I had been "struck by lightning from God" so to speak. There was a nervous condition fall-out from my first awakening that lasted until I left New Zealand for California eight months after my fathers' death. But basically I could not adjust to unadjustable conditions, for my consciousness was emerging from its repressive mechanisms and it needed space.

No obvious kundalini activity occurred for almost ten years after that first blast. My book writing escapade started in 1993 and most of my energy went into that; I was resolving my past and attempting to heal myself and my family through my writing. Then in 1996 I saw a face in a book catalog that looked curiously like my Universal Man. So I got the book, read the first sentence and started laughing. Yep, this was him alright. I proceeded to read his books, revving up my neurons and exploring his worldview.

The Universal Man then started to show up in my deepest most meaningful dreams. The first dream I had on a visit to Hawaii, which reflected on the core nature of my potential for relationship. In this first dream I learnt that fear of intimacy and fear of rejection are the same thing, and that the resolution of this constitutes the success or failure of all relationship, including that which we have with our own soul. I can't say I would have gotten such a clear picture of the cause and resolution of the separate-self-sense and its self-alienating mechanism, if I had not had that first dream of Universal Man. I had this dream 3 years prior to meeting my initiator and it did not prevent me from playing out an excruciating drama of separation as I came up against my own barriers to intimacy.

As an archetypal influence on my psyche Mr. Universal touched my core wiring for bonding, and basically revealed to me a "hole" in my primary matrix. Since I had not bonded well with my family in infancy, this fueled an irreconcilable sense of separation I carried with me throughout life. Richard Alan Miller points out that individuals with a high natural endorphin level fail to bond well, due to a decreased desire and need to bond. Some factors that would increase endorphin neurology in a fetus and infant are, the stress and workload of the mother, inharmonious and patriarchal marriages, solar max, war, poverty, poor nutrition of the mother and addiction in the family. All givens come with a pro and a con however, so such a circumstance need not be all bad. Such individuals are more likely to be unconvinced by consensus reality, not dependent on relationship, exhibit an expanded range of consciousness and unique creativity.

Meeting Mr. Universal, my most profound "great attractor," uncovered this hole within, creating enormous tension that sparked off my kundalini awakening. For I had met up with my ultimate socio-emotional healer—it was the chance resolution of a lifetime. Before the awakening-proper came on, through my yearning for Mr. Universal, I would feel an incredibly painful hole in my heart. The inner sense of the heart must be part of the affect-regulation and socio-emotional brain development that is supposed to be laid down in the first years of life. A fullness would represent adequate development and a hole would represent disturbed or insufficient development in the heart-brain wiring.

Anyway, back to the story—In 1998 after I finished my book on regeneration and earth-soul recovery, my sexual heat was increasing and I was having throat/thyroid pains and symptoms of the heating stage of kundalini. This heating phase gave forth a vision of the futuristic city that I had been seeking for many years. Because the image was so transrational and beyond the known, I felt I had the key to the mystic civilization. (Check out Solaris on my website MyFacilitate.net/jana/) Immediately on receiving the Solaris vision I intuitively knew I had to move to Colorado—that there was something important for me to do there. After all little me had the key to the future of humanity. It wasn't until I returned from my second visit to Colorado for an Alex Grey workshop in 1999, that I realized I was having another kundalini episode. For that November I went through a four day Die-off and around that time I was experiencing such wrenching grounding that I had to lie down on the beach on my back with my legs open to the sun, to counter the excessive pull of energy through my pelvis and into the ground. Fortunately recharging and repolarizing with the sun's rays provided relief.

It was apparent from the intensity of the grounding and my heart's atomic pull over to Colorado, that I was going through some very unusual chemistry indeed, and that I had better get over to Colorado, even if I didn't know what for. I wanted to obey this Force whatever it was, for I frankly didn't want to go through more of this dying, wrenching and pulling. To rationally explain my moving I decided I was going to Colorado to write a book on Metamorphosis, for surely this was what was happening. Even though I was still very much a neophyte as to what metamorphosis actually was at that stage.

During full moons in Santa Barbara I used to walk along the beach at night to taste the particular flavor of the moon and be informed by it. By doing this I worked out the yin/yang moon cycles and how this relates to the cycles of metamorphosis (to be included in BOK 2). One full moon in particular I asked when I would see Mr. Universal and a deep silent voice within said "July." In May 2000 I finally made it over to Colorado, at the dawn of a new millennium, a good year for something different. I found a place to live without much trouble and proceeded to orient myself. My kundalini phenomena steadily heated up with heart expansions and sexual longings that often left me groaning in bed. To help assimilate the energy I walked around in nature most of the day. I was adamantly called to be outside under the open sky where I felt closer to the Mr. Universal and my soul. The awakening energetic senses of kundalini make you realize how "flat" the human spirit is indoors.

At sunset I would meditate on a ledge of some vertical red rocks, while facing toward the sun. I also ran in the hills, and hung on a bar from my hips. I was intuitively drawn to do nude sun meditations and put sun-heated rocks on my body to relieve energy blocks and muscular contractions. Afterwards I would jump into a cold stream to try to awake up from the bliss and right-brain trance I was in…my goal after all in moving to Colorado was to "wake up." I did these practices nearly every day for the first few months in an attempt to handle the chemistry I was experiencing and intuitively I knew I was preparing myself to meet Mr. Universal.

Of course all my efforts to "handle" the energy only served to propagate and exaggerate the awakening I was about to have. Ten days into July things started to get really strange. The left side of my head and brain had become significantly numb with a vice-like cramp and I had shifted even further into a more right-brained elemental consciousness. I thought I had just pinched a nerve while using the hot rocks, as I had used one as a pillow. But no, this left-brain freeze was accompanied by the classic kundalini symptoms—left foot tingle, ecstasy, heart expansions, along with a full body rise in temperature and a permanent blissful sexual heat.

One morning three days after this strange left-brain freeze began I woke up at 11.00 am, whereas normally I awoke at 6.00 am. This holy exquisite day that I had awoken to was like no other. Everything was scintillating with white light, and there was celestial music playing in my head as I wandered through the afternoon in a very right-brained state. That evening I was to attend a book talk by a spiritual teacher and I told some friends on a web forum that I would give them a review of this authors talk. It was early as I entered the room where the author's talk was to be held. Mr. Universal was there on the stage with his back to me. He turned around like a panther with a smile on his face like he knew I had walked into the room. You can imagine the shock, seeing him live after 24 years and me being in this utterly weird right-brain condition that I had no control over and which was somehow related to him. Note that this is indeed "July" that I am seeing him like the "Full Moon" had told me.

That night Mr. Universal was cameraman at his friends book talk. Alarmingly he proceeds to set up his camera not four feet from where I was seated. Whereupon I respond with a series of panic attacks and with each wave he sensed my panic and backed away from me. I had just read in this authors book that *energy applied to counter something sets up an opposite effect*, like being in the zero-gravity of space and punching forward while being bodily forced backwards. Having read this I was trying to digest the panic by moving "into" it without trying to counter it, as each wave washed over me. New activity began in my prefrontal lobes from the first instant of being in Mr. Universal's presence. My prefrontals had never responded to anyone else like this, nor ever will again.

The following evening was the introduction of the weekend workshop that was to follow the author's book talk. So I trot along thinking I will see Mr. Universal Man and sure enough he was there playing cameraman again. I sat in a row of chairs

and began talking to the guy beside me. Next thing I know someone pounced their fingers on my back. I assume someone wants me to shift along so I scuffled my chair and peered back to see that it was Mr. Universal that had pounced. His fingers had penetrated my flesh with such love that I thought Christ himself had touched me. For days after there were little spirals of zingy energy going off at the back of my heart where he had touched.

There was a Shaktipat effect from Mr. Universal's spontaneous touch, however I had been heating up for 4 years prior to that and was already in full peak chemistry during the time I was in his presence. His work and presence was the catalyst for the entire 11 year awakening and the touch was just one extra ingredient in propelling a full mature peak. We not only affect each other via kundalini when we are in each others presence, we also affect those we are close to across the globe, as well as the entire noosphere. If one was to view spirituality from an ethical viewpoint, this is the moral imperative to get our act together. Our affect on others is much more pronounced when we are going through intense kundalini.

During the workshop, while in the Universal Man's presence, the acceleration phase of the alchemy proceeded. The main component of this was gratitude—awesome gratitude for the privilege of being in his presence. Nearly everyone going through kundalini awakenings feels a sublime sense of gratitude as a result of the hormonal changes that occur, but mine was specifically focused on gratitude for being around Mr. Universal. It was like my entire life had come to a head.

While in his presence it was a trial to just be in my body as my digestive system was purging and every pain, numbness and deadness within me was presenting itself to my awareness. It felt also like my field had expanded and all my spiritual pores had opened up. My pelvis felt like it was expanding in the way that it does in the first few weeks of pregnancy and I sensed there was a spiral cord of energy descending into the ground from my pelvis. This was probably due to the great increase in histamine and consequent increase in Nitric Oxide, which facilitated the dilation of the uterus just as it does during pregnancy. This is an example of "extreme" chemistry sparked off by the hyper activated sympathetic nervous system and uniquely amplified hormone profile.

Partly because I was preoccupied by these unusual symptoms, I never got to greet the Universal man in the normal way. Had I done so I probably would not have experienced such extreme alchemical phenomena. Due to the utter frustration of having such an unearthly attraction aborted, and my separate-self-sense challenged to the limit of endurance, all that energy went into igniting my metamorphic flame. I suspect that had there been even a simple "Hello" on the social level, that this tension of non-reconciliation would have been substantially reduced and the energy turned into something of a less archetypal nature. However, because of my limitations at the time a full-on kundalini awakening was all I could handle. During the workshop there were some subtle interaction, visions and insights, but mostly I was going through unconscious metabolic preparation to plunge into the most extreme experience of my life.

After leaving the workshop on Sunday evening I went to bed and the great winding up from being in Mr. Universal's presence let go into the most ecstatic

holy experience of my life. This was the Sex with Eros phenomena that I talk about later in Exploring the Symptoms. The spontaneous ecstasy was not just like an amplified version of normal-sex. I actually felt like I was divine, like I was a Goddess—which I won't even attempt to describe.

From this pivotal opening, in which I was probably my most expanded or realized, the next morning I awoke to find that I had flipped into its opposite. My physiology had hyperboled into a massive autonomic shock that I call the **White Shock**. This contraction, I theorized years after the fact, is essential to reset the body's metabolism and organ function into the main climax phase of the alchemy. The endocrine system, nervous system, immune system, viscera and the energy generating processes in the mitochondria are reset through this extreme expansion and contraction.

With the help of a Hakomi session to help put myself back in my body the extreme autonomic shock gradually subsided over about 3 days. Then I went into about a 6 month period of the main transmutation phase, with symptoms gradually reducing over the next four years. The main phase cycled through a series of symptoms including: the suspension of the use of my left-brain, two Die-offs, heart-exploding expansions, gravity warping effects, intense grounding, bliss and heat. My huge heart at this time had a contagious effect on the hearts of others I was in contact with, so they somewhat participated in my transmutation, and complained about being too "opened" in my presence. I discovered I had bio-telepathic navigation to whereabouts of Mr. Universal and the sense of being atomically pulled toward him. I also spotted him around town a couple of times by unconsciously following my body bliss signals which directed me to go buy some bananas. It happened four times. I would be off looking for bananas and there he would be right in my banana-seeking path. Mr. Universal being a slightly more edifying version of a banana fix. High stress, you see, increases potassium loss from the kidneys and bananas are high in potassium. Potassium is needed to keep the cellular potassium/sodium pump going; if there is inadequate potassium, sodium enters the cell and sodium is an enzyme inhibitor. (See The Ammonia Hypothesis for more on this.)

During the two weeks after the workshop I wrote a few pieces in an automatic flow of the Muse on the reconciliation of the sexes, global initiations and a model for global spirituality. I also went through a chakra awakening where I spontaneously created a poem on the reconciliation of the sexes from each of my chakras, starting at my solar plexus and moving up one chakra each day. This chakra voicing experience is an inherent method of karmic blow off to free the bodymind of tensions, allowing the yin/yang currents to marry on more sublime levels on route to the Self. The voice of reconciliation arising from deep within, creating a Grand Symphony of union to promote harmony between the sexes, poles, charges and hemispheres. The **chakra voicing practice** bought my awakening to a head, resulting in my achieving my Self on my birthday in a Silver Cord inner-conjunction. After this 30 minute spinal zap, I looked in the mirror and looking back at me was an otherworldly being with bright blue luminous eyes shining with an inner light. I didn't know myself, yet I was more myself.

The meeting with my initiator was a preordained factor in the sequence of my awakening that my biology was in total coordination with trans-spacetime. Something I had intuited as a 16 year old, half a world away. Now many years after my peak I basically do inhabit a new bodymind, with new senses, new inner-feeling and Presence, for kundalini has indeed made a permanent home in my body. I passed through the confusion being so subatomicly affected by another human being to understand this kind of alchemical event as a transpersonal nonrelationship that occurs as part of the Necessity of the awakening of the global brain.

There is little material out there that people going through awakenings can really "use." Having to go through our awakening blind, without knowledge or support, can create a lot of secondary effects like resistance, panic, depression and damage to the body via addictions and inertial coping mechanisms. Since kundalini is the transformative fire that burns through and transforms all illusions, blocks, neurosis, bad wiring, PTSD, and damage of various kinds, it is not advisable to try to stop it with heavy foods...but instead learn how to ride the wave with the greatest skill and assist the energy in its transformative work. However many of us do try to slow it down by various means anyway, because that is what we humans do—seek to "control." Believe me you will regret it if you try to back down... because the awakening will last about 3 years and you want to make the most amount of progress in that time. Any inertia you place on yourself will cause damage to your organism by overworking organs with clogging foods, drugs and other devitalizing methods.

It wasn't until 3 years after my 2000 awakening, having attempted to progressively rationalize the "how" and the "why" of the alchemy, that I finally grokked the role that free radicals play in kundalini. After this pivotal eureka it was just a matter of time till I figured out the rest of the chemistry and many tools for dealing with the alchemical process of awakening. Through Grace the pieces of the puzzle came together allowing me to offer you this manual for coping with evolutions most arduous and mysterious ordeal. Since I didn't have a teacher or sangha I had to rely on my inner teacher and so the physical, mental and emotional trials of my awakening resulted in my looking within for many tools to cope with the extreme chemistry. These are detailed throughout the book and especially in the Kundalini Skills List.

There is an enormous amount of growth that occurs in an awakening and the loss of normal ego mode provides energy for the wholesale inevitable changes. It's like the organism is completely stripped and trimmed for the storm. It's absolutely mind blowing all the factors involved and how it all comes together. Through this book I hope to do my bit to promote a science of spiritual evolution so we can participate consciously in the discovery of who we really are.

The Universal Man is an archetype like the Magical Child, the Wizard, the Messiah, the King, or the Sage. He exists within us all as a symbolic figure that heralds a new beginning, and holds the promise of transformation. As deeper layers of the psyche present themselves they appear as the other-within...which

we might project onto a living being in our waking lives and thus we fall in love with this person. We tend to lose the power present in the internal archetype as we project that power onto a mere worldly version. The awesome energies and extra sensory phenomena of such a transference occur because this process is causal, and breaks through the veil that separates the conscious mind from the subconscious and superconscious. Our work of transformation is to consciously integrate the archetypal soul within ourselves in order to use its powers in the world. I think enlightenment is the process of the realization of our imperfection and the ability to act anyways with anything and all that we have got. (See Exploring the Symptoms for more detail.)

The risen lifeforce of kundalini creates an amplification and heightened sensitivity to both our interiors and our external world. Thus we have no choice but to face into our condition because to avoid doing so is tantamount to spiritual suicide. The bliss and Grace of kundalini make it almost impossible to deny love-consciousness and forfeit our existence as Spirit.

"To this day I find myself trying to get a handle on that Shakti and make it mine. But I can't possess it—I can only be possessed by it." 87, Joseph Chilton Pearce, *The Biology of Transcendence*

The more we learn the more we know our ignorance and thus humility and awe define the mystic soul.

INITIATION

Spiritual initiation is an event in Eros, and like love cannot be conjured or contrived. It either happens or it doesn't.

Kundalini is operating in all of us to a degree, occasionally however it sparks up into what is known as a kundalini awakening, transmutation, metamorphosis, transfiguration, spiritual alchemy or spiritual awakening. In this book you will see me call this initiation "**popping**." People pop to various degrees. Some fizzle like soda, without the cork popping drama of champagne. Others pop spontaneously at 17 years like Ramana Maharishi without any prior spiritual practice. He just read a book on the lives of the saints and so identified with them that he practically instantly became one. His experience of going into death, was his ego recognizing its own demise as the Atman arose within. Gobi Krishna's initiation was through meditation. Philip St. Romain was sparked off through prayer. Meher Baba awakened when he was hit on the head with a stone as a boy. Joseph Chilton Pearce popped in his 60's by Shaktipat from Muktananda. Some spend all their energies in resistance, preventing themselves from the Ego-death of popping at all and so never really come ALIVE and live. As Sir Francis Bacon says, *"I do not believe that any man fears to be dead, but only the stroke of death."*

The kundalini probably follows the 7 year growth cycles that Joseph Chilton Pearce pointed out. Know that there is a lot of subterranean activity going on below the level of conscious registration. For example we can be heating up for 2-3 years without being aware that an awakening is on its way. I popped spontaneously at 28 and 40 years. If we are uninformed we will not even know a kundalini awakening is upon us when it is blasting us full force to Kingdom Come. We will tend to think it is external conditions that have propelled us into a psychic breakdown or illness. We normally interpret these intense rapid initiations as some form of "outer" influence impacting on us, because of the sudden jump into a different state-view which doesn't appear to be the familiar us. We are not normally aware that we have an infinitude of windows of being that we can enter and see out of.

The myriad of factors that contribute to an awakening include: High altitude, air and water quality, diet, exercise, stress, relationships, degree of being on purpose and acts of generosity. Risk, adventure travel, exposure to the elements, novelty, new experiences and environments, and the breakdown of habit and torpor. Various elemental changes and shocks to the body like alternating hot and cold such as saunas and cold showers, light and dark. Determination to adhere to soul rather than social convention, genetics, and both the good and bad conditions of one's upbringing (stressors and satiety). Other factors include latitude and longitude on the earth's sphere, seasons, sun and moon cycles. Chronological and biological age, spiritual practice, having to use a new set of skills. The calling of the Muse and the future time stream…that is the individual Eros, and perhaps the needs of the human species as a whole—expressed through the psychosomatic tension of revelation, known in history as The Oracle.

It is the differential between the old and new growth that initiates the dissolution of the old brain and resurrection of the new. So a rapid growth in cognition, change

of environment or spiritual practice that instigates new brain development will bring on an awakening. Since kundalini is the "flow" of energy/consciousness—areas that promote flow will facilitate an awakening, such as higher altitude, mountain high ion air, certain geography that conveys earth currents better. I was pulled to Colorado because I could not pop at sea level, in a polluted California city. The summer of 2000 in Boulder was a particularly electrical one with a lot of dry thunderstorms. In order to initiate a full awakening I needed that electrically charged air. Of course I was not aware of this at the time. Like a great attractor the awakening of Self itself pulls you toward it both in time and geography.

Also areas with powerful tree growth such as the redwoods of Big Sur or virgin forests. Definitely the moon cycle is involved hence gravitation plays a big part. Also the solar cycle, solar flares and the solar 8 day sector changes affects biological and alchemical processes. The biofields of certain human populations would be more or less conducive to promoting awakenings depending on how gross or subtle the noosphere of the culture we inhabit.

One needs to have a certain genetic and cellular strength in order for kundalini to spark up, for it will not ignite in a body that will be greatly damaged by its arousal. Kundalini is apt to rise when we increase our vital energy and are relatively block-free, as in eating a raw diet, doing yoga and getting plenty of exercise. Often there needs to be self-initiatory psychological conditions such as devotion, excessive generosity, crisis, Shaktipat from a Guru, or the meeting a great love in order to set off the chemistry to a high degree of intensity.

Shaktipat literally means descent of grace. It is yogic initiation in which the Siddha Guru transmits spiritual energy to the aspirant, thereby awakening the aspirant's dormant kundalini shakti. Mae-Wan Ho suggests that all life is connected by nonlocal field interpenetration of quantum wave functions. Shaktipat is an example of this effect; while more pronounced when organisms are in each others presence, it also operates globally and seems to have strange temporal effects also. The interpenetration of spiritual energy occurs through quantum waves, electromagnetic waves, scalar waves, light waves, acoustic waves and through the superconduction of consciousness…that is the sympathetic resonance of oscillating systems. To a certain extent we are all shaktipatting each other all the time…we live in a world-field of shaktipat.

The impact of shaktipat, or the contagion of spirit between individuals, is endlessly interesting to both consider and experience. The dramatic psycho-somatic effects cannot be predicted but can be understood in hindsight. The book *Spiritual Cannibalism* by Rudi is a good account of the potential of spiritual relationship. I have come to the conclusion that skatipat is only spiritually moral within an ongoing bonded teacher-pupil relationship, where the teacher takes responsibility for the consequences of his/her actions

Kundalini is not about people enjoying each other or themselves, it's about waking up—which most often is a very painful process. Like secondhand smoke, secondhand kundalini can be very disturbing for people. If their chemistry is off or heart closed, they are going to feel uncomfortable around an individual with

awakened kundalini. Postmenopausal women who are not self-actualized…(ie: dependent types) can be deeply disturbed by proximity to a younger woman's kundalini awakening. As the younger woman's chi will revitalize the older woman's hormones thereby forcing extra growth in a body that is declining in vitality and is used to its habitual plateau.

It is unlikely to get kundalini activity from relationship breakup situations, especially of the fizzle-out kind...wrong hormonal components. But getting out of a restrictive or repressive relationship might cause an expansion rather than a contraction of love and this could stimulate kundalini and growth. Also unrequited, tragic or thwarted love is a great promoter of kundalini because the alchemical conditions are primed for sex and relationship but energy is not used up in sex but instead can be translated into metamorphosis. This translation of attraction into alchemy is what is known as "sublimation."

Whether it's consummated or not, romantic interest is a great stimulator of kundalini because it activates both the parasympathetic and sympathetic nervous systems, increases sex hormones, growth hormone, nitric oxide and macrophage activity. Thus the body is primed to pop. The symptoms of being in love such as acute senses, increased psychic abilities, creativity, wonder, awe, faith, courage, motivation to action, generosity, forgiveness, compassion etc... all these are both cause and effect, feeding back into the alchemical loop to prime the kundalini pump. I think that most of our assumptions of sex and relationship are apt to be either wishful thinking or defense mechanism. Love should essentially blow our minds to a deeper reality beyond what we know ourselves or others to be.

It's not sex per se that helps to trigger kundalini, it's the vasodilation of the cardiovascular system, and the associated introduction of new parasympathetic levels of "relaxation" in the bodymind. According to an article in Brain/Mind Bulletin, Rollin McCraty and Glen Rein have found connections between heart patterns and positive emotional states. Normally chaotic electrocardiogram spectrum patterns become coherent during positive states like falling in love. What initiates kundalini is therefore the opening of the heart, coupled with the positive state of the mind and increased prana flow that comes with being in love. Love in whatever form is transformational, for love is source energy.

Kundalini relates to sex in that the sex hormones are the root element of the alchemical process, for you simply don't get an awakening without an elevation of the sex hormones. Also the nitric oxide that is produced in copious amounts during an awakening from the macrophages and hyperactivated nervous system...engorges both heart and sex organs. Since both the parasympathetic and sympathetic sides of the nervous system are in hyperdrive one is both hormonally and vascularly opened and ready for super-sex. This occurs during the heating phase of 2 years prior to an awakening and the 3 years of the peak phase, and especially during the 6 month apex. However I never had sex during that time so I cannot say for sure how that would be, but I would imagine it's pretty damn profound depending on the partner one was with. Since the energy of kundalini is emergent consciousness itself, it becomes increasingly hard to use it in an unconscious fashion.

Itzhak Bentov is probably partly correct when he says that the syncopation of the various oscillating systems in the body amplify energies and increase the ionization of the cerebrospinal fluid, conveying a current/charge—known as kundalini. Itzhak Bentov's idea is that kundalini occurs through the micromotion of the body. This model postulates that various body structures can potentially oscillate in sympathetic resonance with each other leading to the production of increased magnetic currents in the cerebral cortex. Bentov correlates this enhanced electromagnetic action in the cortex with kundalini release. Bentov looks at the body like a mechanical machine so his physics is surpassed by modern biophysics. Nowadays we are more apt to look to quantum microtubules, neuron receptors and neurochemistry for the cause, but the larger electromagnetic and resonant aspects also come into play. The HeartMath Institute has done more recent research on the oscillating frequencies of the heart and nervous system:
www.heartmath.org/research/

Giving birth and other stressful conditions in which will is overcome often lead to a kundalini experience. The potent neurological and hormonal mix that is pumped into the body during birthing activates kundalini. There is an increase in oxytocin to create the contractions...both sides of the nervous system are activated... release of mega opiates...DMT release...pressure of the baby in the pelvis...muscles are charged by exertion...extra breathing increases blood oxygen...CSF ionized by heightened condition of parasympathetic & sympathetic nervous systems... liver releases glucose for exertion---all these and more is why kundalini sparks up during birthing. Christina Grof mentioned that kundalini that had arisen during the birthing of her child was stopped by an injection of morphine.

During the initiation stage of a full-on awakening we can assume that both the **thyroid** and the parathyroid glands are hyperactive. It's interesting to note that hyperparathyroidism increases the ionized calcium in the cerebrospinal fluid causing psychotic symptoms. The parathyroid governs the extra-cellular calcium levels. It could be a unique combination of oxygen intake, hormonal levels and activation of the sympathetic nervous system that creates the initial spark of kundalini up the spine.

Sudden stress or the relief of prolonged stress can bring on a kundalini awakening. Whether it is the stress of recognition of the Self though contact with a Guru or through finding a "true love." *"When the senses are heightened because of stress, novelty, or fear, it's much easier to become a mystic or feel ecstasy or fall in love. Danger makes one receptive to romance. Danger is an aphrodisiac."* P.166, Diane Ackerman, A Natural History of Love. Stress, even the stress of new growth, might be essential to trigger hypertonality of the sympathetic nervous system, allowing kundalini to spark off. **Post Traumatic Stress Disorder** (PTSD) can also be a preparatory factor to kundalini triggering. Because PTSD represents an accumulation of the "suspension of the arousal cycle." The pressure of the frozen fight-or-flight response caught in the nervous system creates an inefficiency, which the organism tries to eliminate through the complete discharge of the energy in a kundalini awakening. Thereby allowing the nervous system to heal, grow and mature.

In my experience the initial spark up the spine can occur out of the blue. Kundalini can occur even quite late in life, but usually in someone who is already psychically sensitive and mystically aware. Mine occurred in association with stress and stress relief...longing and fulfillment. But we have to be on our edge, they don't occur in dull, satiated and ordinary periods of one's life. My first awakening arose through stress, overt-generosity and biological precognition of my fathers eminent death…the second through my love for Mr. Universal and the muses insistence that I write a book on metamorphosis. Though no matter what the trigger, the awakening of kundalini seems as inevitable and natural as breathing. It's as though an inexpressible question in us, an ineffable drive has been answered. The restless search ends as we surrender to the maker and come home to our Self.

Since kundalini awakening is most often just something that happens, we don't have a whole lot of say over how "mature" we are when it strikes. However by its very extreme nature, kundalini will force greater maturity and lucid adjustment to reality in order to survive. Along with the sense of danger inherent in the dissolving of ones known self, there is also a buoyant faith that arises from being so lit with Spirit and at one with the Universe.

Kundalini arousal and the ongoing development of the nervous system make us more sensitive to the inner and outer worlds. The self-directed force of kundalini purifies accumulated stress caused by our past habits and traumas. Friction and difficulty during awakening occur not so much from the process itself but from our conscious and unconscious interference with it due to not understanding what is going on.

Kundalini burns off much of the primary reactivity imprinted from our family of origin and early life experience. With kundalini the opportunity for change is increased because our neurological slate is wiped relatively clean, but it depends on our will, faith and environment as to how far we can grow. If we do not change our habits to reflect the Self's true interests, we will continue to rebuild the conditioned reactive self we thought ourselves to be. We spend our entire lives thinking we are an entity that was created by our parents and culture...but are we really that entity? I mean they don't even know us, they only know their projections of us. The Grail of course is the true Self that is beyond all such imposition.

Kundalini is the consciousness in matter becoming more conscious of itself; therefore if one wants to evolve such an awakening is necessary. Or rather evolution and awakening simply "are" and we surrender to this reality or fight it. Sometimes we have a rocky time of it, because awakening is always moving through uncharted territory and because we exist in a civilization still based on fibs, repression and inertia. If we didn't get so contracted and arrested while forming…then the kundalini would go through its cycles without fireworks, because there would be fewer boulders in the flow to create friction and damming of energy. Detoxifying is always the first thing to aim for in any spiritual endeavor and it is especially important "prior" to kundalini awakening. In fact because it is so detoxifying, switching to a raw diet will probably lead to a kundalini awakening if other things are also in place.

I don't recommend drug use for triggering because kundalini is hard enough to handle in itself, without trying to bring it on. Anything one does to detoxify, enliven, exercise, strengthen, impassion and enthuse will bring on increased kundalini. If you are interested in a more intimate relationship with your maker, and desire to be overwhelmed in love with the Beloved...then kundalini is likely to arise naturally from ones heart and spirit attuning actions. We are naturally told what to do to come into alignment with our Self. The desire will and carry-through just needs to be there, along with the faith to proceed despite all appearances and setbacks.

Prior to the obvious activation of kundalini various strange symptoms can occur years prior to the awakening itself. For example my left shin became really sore for about a year prior to my 1988 awakening. I used to rub rosemary oil into it to improve the nerve flow. Kundalini shows up mostly in the left side of the body and you know it is obviously kundalini when you feel the tingle at the bottom of the left foot. Although if one looks back one can see various warning signs, often the initial blast of awakening happens out of the blue. That is we go from the consensus worldview and material understanding of ourselves to a vastly new universe in a matter of seconds as the energy shoots through the body like a thousand suns. Another sign that an awakening is on the way is the front of the neck around the thyroid might become painful for years prior to an awakening. We can also experience years of painful contraction in the inner core as though a rubber band was getting tighter and tighter within us.

The mind if healthy is a handy tool for integration of the transmutation. The mind, if unhealthy or weak, is increasingly disturbed by the rising of kundalini energy such that the individual becomes even less adapted to consensus reality. "Correct" use of mind can perfect the body structures, open the heart, provide a strong nervous system etc... and this will allow the awakening to proceed in a healthy rather than pathological manner. The heightened psychic, insight, sensory awareness of active kundalini can make one more sane in the cosmic or universal sense than the consensus-trance of conventional reality, but more easily triggered into dramatic action as well because everything in the psyche and soma is less repressed...that is one becomes more Godlike and more elemental/archetypal also. The barrier between material and spiritual becomes more permeable and the range of our consciousness expands into regions we could only vaguely sense previously.

During heightened kundalini I have increased precognition and nonlocal information activity...it is no longer surprising as it is first nature to me now. I can also turn on my stereo and start the CD in my sleep during high spiritual energy periods, I did it recently when I was working on a piece of writing in my dream. This spontaneous turning on of the CD player always happens at 3am, perhaps because the body's circuits must change from sleep cycle into wake cycle and the flipping of the brain frequencies turns on the stereo. However, it doesn't happen with light fixtures or other electric equipment as far as I know.

But I have learnt to not get overly emphatic about psychic level information. For me it is just reaffirmation of the mysterious nature of the universe and consciousness. It gives me great hope for the future of humanity, however I

tend to reduce it to being no more relevant than information received during normal waking consciousness. The reason being that we cannot often act on our psychic level information in a social world that is habituated to the lower levels of connectivity and communication. Thus unless you actually live around peers that are equally psychically alive, chances are you will have to keep your psychic life under wraps. Thus until we all approach a similar level of consciousness there will be a disconnect between worlds—due to this schism in states of consciousness.

Someone with active kundalini is more elemental and "archetypal, however the reduction in adaptive cognition can be so great that one can't drive a car in an urban environment. There are periods when the cerebrocortex is greatly incapacitated while the limbic and autonomic brains are hyper-activated. As the repressive mechanism of the ego is reduced during the initial stages of awakening there is a purging the primitive emotions of shame, guilt, fear, panic, paranoia, depression and self-pity. In a hostile social environment these emotions could be catastrophic, essentially completely paralyzing effective function and aging the individual into an acute illness of bodymind. If this emotional cathartic development is suspended and not able to run its course we could end up in the funny farm.

"Katz (1973) writes of the !Kung people of the Kalahari Desert in Northwest Botswana, Africa, who dance for many hours to "heat" up the n/um so that the !kia state can be attained. He notes that the n/um is analogous to the kundalini state. !Kai is the state of transcendence. It is more than a peak experience of going beyond the ordinary self; !kia is like Satori, participation in eternity. Education for transcendence teaches the adept the way to stir up the n/um and how the threshold of fear can be crossed into the !kia state. The n/um is said to reside in the pit of the stomach. As it warms up, it rises from the base of the spine to the skull where then !kia occurs…!kia is painful, fearful, and unpredictable each time it occurs." Lee Sannella, M.D., *Kundalini: Psychosis or Transcendence, p14-15*

Conditions that contribute to this kind of communal kundalini raising include fasting, music, drumming and a fire. Such a rite is probably conducted around full or new moon also. Like the Sundance of the American Indians where they dance and chant for extended periods. The Kung use the energy in a holy way to tap psychic information and precognition to enhance the welfare of the tribe. But kundalini energy can also be used in a more prepersonal Bacchian sense as well, for example Dionysian rites were first mostly undertaken by women then at some point in history the men also joined in. The women collectively gave themselves over to kundalini trance, dancing, feasting and revelry under the moon. Similarly a group of people can have an orgy and the energy can be somewhat evolutionary wasted, or they can have a joint tantric ceremony that could greatly increase the evolution of the group and community.

Why the increased numbers of people experiencing awakening? More people pop as more people pop. As survival pressures rise, the increased stress chemistry plays into creating the type of instability in which kundalini energy can ignite. Also contributing to igniting the flame is our declining metabolic strength and inferior "processed" diet, coupled with ever refining nervous systems as we encounter more

transformative spiritual ideologies (rather than conservative non-transformative mythic religious ideas). Our bodies are making a valiant effort to throw off former trauma wiring in order to give us survival advantage in a rapidly changing world. Also individuation is such nowadays that we can break away from rigid-stagnant community/family in order to get the type of philosophical stimulation and sexual romantic opportunities which throw us into this second puberty and the thorough rebuilding of our body, mind, soul and emotions. We essentially have to undergo these rebirths in this day and age, because the way we were formed by our parents is so antiquated that the wiring in our primary matrix is holding us back in patterns which we and culture that we have long outgrown. Our faster philosophic and psychological development of the prefrontal lobes essentially triggers this cathartic transformation so that enough change can happen in the old wiring to bring our whole being up to contemporary operational mode. Whereas in the past such in-depth change did not need to occur in the lifetime of the individual because the pace of change was so slow back then. The faster the pace of change the more rebirths individuals will have to undergo within their lifetime.

People are fascinated with the idea of the origins of kundalini? Kundalini doesn't particularly start anywhere, although some people might like to blame the sacral kundalini gland for initiation. But the coccygeal gland is merely a regulator/stimulator of the major systems of the body especially as relates heightened emergency-energy situations of FFF (Flight, Fight, Fuck). It too simply comes under the awesome power of the global awakening of the organism. Kundalini is the cathartic synthesis of the organism-total and it doesn't really start anywhere, but starts "everywhere." If one was intent on tracing back causation to find an "origins" point, one would ultimately have to conclude that it would have to be the Big Bang!

Basically spiritual awakening is the utilization of the life/sex energy amplified and refined in metamorphic transmutation of the flesh. The all-inclusive nature of sex energy (prana, chi, mana, star-fire, soul, ka, ichor, inua, sila, manetuwak, oloddumare, qi, Tao, ki, aether, orgone, archeus, etheric energy, vital life-essence, vital energy, life force and quintessence) has not been correctly understood by humanity! Once kundalini is initiated it can be a lifelong process, but it is naïve to think that "initiation" itself be the focus of our efforts. I was at no point attempting to "raise" kundalini. Indeed my first awakening occurred when I had no idea what kundalini was and even when my second awakening occurred I still had no idea such intensity was possible. Thus for initiation at least I would recommend fasting, a raw diet, overt-generosity, compassionate action and adventure to be better methods of popping than ambitious preoccupation with yogic practices. However, if we don't have some form of internal arts like yoga and meditation, then we are upstream without a paddle and are battered about on the rapids with no sense of control over our boat. That is becoming more alive and following your Muse is more likely to allow kundalini to become active naturally, and then some form of learned or self-derived yogic practice will help you handle the energy and use it for productive ends. These inner arts should be a natural part of our existence from infancy and for all the days of our lives.

PREPARATION

"Following the way of Yoga a man must reach the state of Samadhi, that is, of ecstasy or enlightenment, in which alone truth can be understood." 249, P.D. Ouspensky, A New Model of the Universe, Dover, 1997

Perhaps the main caution that I have discovered through my own experience and in my research, is that if you set your chemistry toward a "hot-burn" without also providing the resources for structural strength, detoxification and oxidation-inflammation protection, then depending on your constitution, a kundalini awakening "could" age the body faster, might lead to cancer and in extreme cases may result in organ failure. This is why I stress the need for preparation, meta-adaptation and most importantly to avoid the lust of "chasing the dragon" through excessively stimulating substances, practices and experiences. There is a need for each of us to modulate and moderate our flame according to our changing ability for meta-adaptation within body, mind, soul and community.

Our modern cultural conditions such as sedentary lifestyle, removal from nature and cooked-clogging diets are not conducive to kundalini flow or awakening. This means when we do pop it tends to be explosive rather than an ongoing thread of alchemy throughout our lifetime. Still I don't think it should be the aim of spiritual practices like yoga and meditation to have a nice smooth calm awakening. Safe growth is translation not transformation. It is the machination of the ego to want to control the process of evolution, either through balance or through exaggeration of the extremes. Spiritual practices however can tend to tame the ego's resistance to the process so that less friction and damage to the organism occurs, thereby making the metamorphic process more thorough and enduring.

Funny thing was in 2000 on arriving in Boulder, I was heading for the major blast and I was spontaneously doing a kundalini practice and I didn't know it at the time. Some of the things I was doing daily were meditation on iron rocks at sunset, alternatively jumping in a cold stream then putting hot rocks on my body, juicing, running in the hills, and hanging. If I didn't do these things chances are I would not have popped so richly. We have to prepare ourselves to meet the Beloved. This is the essential work of elevating the vehicle to receive the Self.

It is the unusual nature and intensity of metamorphosis which forces respect, awareness, awe and faith. Fear and panic is unavoidable with the hyperactivation of the sympathetic nervous system and the unknown quality of what is happening and where it's going. But in the end passing through this fear leaves one with such an altered physiology and deeper perspective that allows one distance from the collective fear. Only then do we have any power to dispel consensus fear and increase love in the world, for we become karma eating machines, offering cellular forgiveness. This is the gift of bio-maturity that constitutes the "Christ."

Whether rocky or calm one always has the awakening specifically designed for one's own needs. Each individual is different. Some nuts are harder to crack than others and so take more force or unusual mechanisms to open. Kundalini herself will guide the way if we listen intently to be informed from within and hold lightly to our "shoulds" and known concepts. During Gobi Krishna's major cycle he was

having severe problems with extreme energy, aberrant mental states, heat, fear and pain. Although there was very little help available for him (even in India at the time), someone did tell him that if the energy goes up the right sympathetic trunk (pingala) that his could result in the symptoms he was experiencing, and possibly end in death. During the height of his suffering he had the intuition to concentrate on directing the current up the central channel of the spine. After success at doing this, his torturous symptoms abated and he entered a more gentle, blissful and illuminated awakening, which lasted the rest of his life.

Those who have had a childhood of abuse, neglect of dysfunction, tend to have more catastrophic awakenings because their systems are built for repression and dissociation. This is not always the case but it is a pattern. One can imagine that the more loving-touch and self-validation, the child receives the more efficiently wired their nervous system will be, and the fewer psycho-somatic and emotional blocks they will have. But consciousness will out no matter what the formative structure.

The nature of one's individual awakening not only depends on one's past history it is also determined by one's future history. That is, what one is to become and experience is already at play in one's present. In-forming us trans-temporally in ways the rational mind cannot perceive. The tree is already inherent in the seed. The future magnetically draws us toward it, almost as though the karma of the future were enacting on the present. It seems like the more open, surrendered and evolved one is, then the more challenge one is faced with in incarnating one's soul. Because there is more at stake for the person of depth to be brought to their creative climax, as the species evolves through the successful realization of these outstanding individuals. So here's the rub…the more spiritual preparation one does, the larger the flow of kundalini coursing through one. Traditional spiritual practices were developed to both bring on an awakening, give one the strength and skills for navigating the awakening and to substantiate the awakening in the life of the individual and his/her relationship to the world.

Pranotthana is Sanskrit for intensified, uplifted life-energy. I find it endlessly ironic that the hardest thing we will ever have to face in life is the pranotthana of our Self. Fortunately now with modern science we can largely understand the unusual and disturbing symptoms, raise our homeostatic coping ability and avoid a lot of the dangers posed by radically increased life force. Although they had traditional medicines and intuitive wisdom, the amazing Realizers of the past did not have the comfort of scientific rationality by which to understand and accept what was happening to them.

After several episodes of samadhi, Ramakrishna told his disciples that he actually feared that he would no longer be able to look after himself. Because the old has to die before the new emerges, there will always be this feeling of being completely "out of our depth" during some leg of the journey. However through rational understanding, self-inquiry and reassurance from the experience of others, we can greatly reduce secondary stress, resistance and negative coping mechanisms, such that we can learn to flow with the evolutionary force, rather than fight against it.

Our attitude toward being "out of our depth," and toward the death of the old and how well we can accept the Great Unknown, will largely determine how well we weather our kundalini journey. If we fight with kundalini it will harm us, but if we learn the cosmic ways of metamorphosis and fall into sublime relationship with it, trusting the very force of the power itself, it will transform our frog-self into our Royal being.

The yogic traditions that were developed in response to the evolutionary urge include:

- Raja Yoga—The development of consciousness
- Jnana Yoga—The refinement of knowledge
- Karma Yoga—The science of right actions
- Hatha Yoga—Power over the body
- Bhakti Yoga— Right spiritual action, devotion, surrender.

All of us need to develop and integrate these various sides of ourselves to support a positive awakening, however we will likely be drawn more toward one or another at various times of our lives. Of course this rounded development is none other than taking care of the three domains of Being: I, We and It, which is outlined throughout Ken Wilber's work. He gives **Integral Practice** suggestions in *Integral Psychology* on page 544; and *One Taste* page 130; and also in *The Essential Ken Wilber* on page 105. The Integral Institute has put together a *Integral Life Practice Starter Kit* to help with establishing ones own integral spiritual practice. *Integral Spirituality: The Role of Religion in the Modern and Postmodern World* by Ken Wilber, Aug 8, 2006. For a porthole into Wilber World go to: http://multiplex.integralinstitute.org/

Integral lifestyle is essential to balance body, brain function, emotions, intellect and spirit. If we do not apply ourselves to developing our lives integrally then we tend to narrow our focus and become habitually lopsided real fast. Then any self-realization our awakening has given us is undermined by the lack of balanced foundation to our lives. The amplified energies and awareness of awakening will tend to exaggerate the insufficiencies in our lifestyle and being, making it easier to see where we need to apply ourselves.

During a kundalini awakening we are at a lifetime peak in pituitary potency, this raises our center of being to the psychic level, through which we have access to a vastly higher vision and taste of reality. While at that level we cannot fit our larger being down into the consensus flatland "reality," thus when in this higher operational mode we become acquainted with our essential aloneness. As well as the endocrine glands, the spleen, liver, stomach-brain, and the heart-brain are radically important to the metamorphic process. We can assume that over-utilization of the reserves in liver and spleen, combined with exhaustion of neurotransmitters, hormones, enzymes, plus the build up of metabolites are the main cause of the classic **burnout** effects. After the 3 year peak is over the pituitary hormones drop off and we can fall into a slump, losing our psychic abilities, inner-navigation, motivation, attractiveness and attraction to others, purpose, meaning, drive, zest etc... From the heights of Everest we may drop back down to crowd consciousness and forget the power of our visions.

One thing we must be aware of during the height of our psychic peak is that while in the exhaustion phase we may become "less" psychic than we were prior to the awakening. As a culture when we learn to manage kundalini without excessive organic damage, we should be able to grow in a fashion that prevents blowback slumps in our functioning. We should anticipate and be psychologically prepared for a loss of physic ability after the peak, so that we do not become soul-sick from our apparent loss of depth. Integral practice prior to awakening will deepen the integration and integrity of our hormonal base so that when an awakening occurs we can use the peaking energies and hormones to productive effect, rather than have them wasted in resistance, dysfunction and coping mechanisms. Integral practice will permanently up our baseline pituitary hormone levels so that we do not fall quite as low after an awakening.

To illustrate the need for preparation I will quote a very important passage from Ouspensky's *A New Model of the Universe.*

"Hatha yoga prepares the physical body of man to bear all the hardship connected with the functioning in him of the higher psychic forces; higher consciousness, will, intense emotions etc… These forces do not function in ordinary man. Their awakening and development produce a terrific strain and pressure on the physical body. And if the body is not trained and prepared by special exercises, if it is in its usual sickly condition, it is unable to withstand this pressure and cannot keep up with the unusually intensive work of the organs of perception and consciousness, which is inevitably connected with the development of the higher forces and possibilities of man. In order to enable the heart, brain and nervous system (and also the other organs the role of which in the psychic life of man is little, if at all, known to Western science) to bear the pressure of new functions the whole body must be well balanced, harmonized, purified, put in order and prepared for the new and tremendously hard work that awaits it." 249

What is the motive of the need to kindle kundalini? I question the soundness of trying to initiate kundalini via yoga practices. I think just to have a yoga/meditation practice for its own sake is the correct way to go about it. In my experience kundalini sparks up spontaneously in the course of one's life through the interplay of stress/release, pain/pleasure, trauma/achievement. Going after kundalini is like going after orgasm for its own sake, it's masturbation. Saying that however, I think that only the raising of kundalini (or various extreme life experiences that facilitate neuronal dissolution and regrowth), can free us from the pain-body, neurosis, trauma and the miasmas of past history that we have recorded in our tissues.

We can never know what kundalini is like until it sparks up and in our unbalanced western bodies the fire is going to pretty much dismantle our existing life. You have to be spiritually advanced or supported in order to keep up productivity and function during the height of the flame. Everyone is going to get some downtime, some crisis, some death—this is unavoidable during a full-on awakening. Yet to be afraid of kundalini only amplifies the dangers, for it is like being afraid of one's own soul. Realizing that kundalini is the very process of incarnation itself, we

can devote the very best of ourselves to learning all we can, and respecting the process with the same devotion we would apply to God. A triumphant, successful kundalini awakening is reliant on our potential to surrender to illumination, ourSelf and love.

The **adventure** of Self discovery takes us to our edge, puts us in various life and death situations that quicken our spiritual metabolism. Through adventure we evolve by facing challenge and so real life skills are learnt. We grow by living out our hero's journey. We discover the various characters, heroes and antiheros within. How does spiritual practice fit into the Hero's journey in the making of soul? Spiritual practice won't make a soul, only the Hero's journey will. However, practice will prepare us and give us resources for the journey. At times a left-brain methodical approach might be what is needed to build strength, energy and hope. Kind of like, build ones inner resources and the journey will come! Spiritual practice helps us maintain our core and ballast as we are going on our adventure, but it's not the adventure itself. Our adventure is nothing other than following our Muse.

Of course it's helpful to have a guide or friends on the path, but if one wants to be an independent researcher one needs to do it alone, for the amount of misinformation and distraction out there is infinite. Also, through having to guide oneself, one finds the inner guide whom is infinitely intelligent. If we feel the need to rely on outside sources, we may remain dependent instead of discovering the source within. The progression of maturity goes: dependent—self-survival—self-actualization. The more we fail and have to pull "ourselves" up, the further we get in the process of self-actualization. The beauty of having a teacher or master is that through state-resonance we can stabilize ourselves faster, and have less secondary symptoms and fear. But for an investigator such as myself, I have to go it alone, it's my duty in consciousness, for only then can I bring "new" riches into the world.

Meditation leads to a balancing of the neuronal activity of left/right hemispheres, overall brain syncopation, balances the sympathetic/parasympathetic nervous systems, and reduces the stress hormones cortisol and adrenaline to provide a deeper rest, relaxation and recovery period. The inhibiting neurotransmitter GABA increases in the blood during meditation. Regular meditation will permanently reduce the baseline activation of the Hypothalamic-Pituitary-Adrenal axis. Some of the factors that play into meditations beneficial effects are perhaps magnetization of blood and economy of enzyme use. It probably leads to growth of neurons, increased dendrite connections, regeneration of receptor sites, conservation of neurotransmitters, plasticity of brain function, hence enhancing learning and memory. Not to mention the "optimization" of the hormonal system through maximizing the health of the pituitary gland. Also with increased ionization of the cerebral spinal fluid, the action potentials of the nerves are stronger. Thus the body is able to substantiate the structure of the Higher Self, essentially incarnating a deeper more profound human experience. So this is like amplifying ones neurology such that the governing "host" has more conscious control over the bodymind. Only that which is made conscious can be "dropped."

The way I see it is that meditation reduces friction, strengthens, detoxifies and regenerates. With the balancing of the autonomic nervous system there is a removal of excess energy from reptilian defense system, thus allowing brain function to become more contemporary rather than ruled by past trauma and reptilian mechanisms. This obviously gives us more prefrontal control over our amygdala (fear center) and limbic brain, and this could be described as a maturing or enlightenment of the mind. Thus new energy and consciousness is made available for higher human capacities rather than being wasted away in reactive animistic responses to our environment and autonomic coping mechanisms to the stresses and traumas of life. The orbitofrontal regulation that our mother originally "provided" (to the degree that she engaged in primal mothering) is now taken over by mediation and spiritual practices in the individuating aspirant.

Is kundalini a Divine or God Energy? Basically it is love. That is the easiest way to describe it...what Joseph Chilton Pearce calls the Intelligence of the Heart and Teilhard de Chardin sees as the next revolution in harnessing the forces of the Universe. It is the intelligence within the atom, cell, organ, brain, organism lit up, integrated and resonant with Love energy. It has the bliss component that anaesthetizes former structures so the larger order can transform the being. It is what we mythic humans have tended to call God, and all the various names of God. You could say that it is the butterfly self emerging from the cocoon of the conditioned self...a socialized being into a Universal Being...born unto himself. This miraculous force is truly the most phenomenal process.

Due to the nature of the egoic armor we have built in response to our nonenlighted culture—it takes an enormous amount of energy to open and "receive" our higher self. It is the Spirit-in-Nature that calls us toward awakening. It is Nature that initiates us. It is Nature that eases the burden of awakening. It is Nature that allows our awakening to be successful. And it is Nature that gives us the power to extend our awakening out into the world. It takes an enormous amount of oxygen to give birth to ourSelves, so exercise and breathe in Nature every day. The more you do so, the more Nature will be your ally. We want Nature to work for us, not against us, therefore we must comply with Nature's mandate and thus have the powers of creation on our side. In the words of Sir Francis Bacon, "Nature, to be commanded, must be obeyed."

Only that which is made conscious can be "dropped."

CONSCIOUS INCARNATION

"Our challenge is to recognize and develop the biological potential within. This is the true goal of life." Joseph Chilton Pearce

Kundalini is the miracle of life itself quickened and amplified. Metamorphosis must be made increasingly conscious in order to reach and stabilize higher homeostasis and meta-adaptation to spirit. "Awakening" or *spiritual acceleration demands conscious incarnation*, for if the awakening of consciousness does not become increasingly conscious several negative outcomes may occur:

- If there is psychological or emotional resistance the body will not be able to handle the charge leading to the breakdown of metabolism.
- The influx of energy meeting resistance could generate more primitive chemistry and madness.
- There maybe a reduction in consciousness due to numbing and addictions as the lower nature tries to control what is happening.
- If we don't have a desire for lucidity, we could use the ecstasy for zoning out, rather than breaking through to even greater lucidity.
- The down cycles will be more extreme and recovery prolonged.
- If we bite down against our own incarnation we could become spiritually anxious, essentially losing trust in the benevolence of the Universe.
- We respond to kundalini in the same way that we respond to life in general depending on the set of our nervous system and our sincere desire for growth and maturity.

The formula for kundalini is Flow X Energy ÷ Resistance. That is conductance (Amps) times energy resources (Watts) divided by toxicity or inferior wiring.

The results of our awakening will be determined largely by our attitude, intention and ability to "allow." We fully manifest on planet earth to the degree of our acceptance or rejection of our own incarnate being. This "allowing of Self" will dictate the flavor of both our life and our kundalini trip. To avoid resistance and maladaptation the path of fire requires a certain strength. The key to metamorphic mastery is to become superbly adapted to one's own incarnation. Conscious incarnation is giving ourselves permission to show up, hence awakening is a "choice." Metamorphosis is a process of purification, and yet it is not a simple detoxification that is occurring, but the ongoing refinement of life itself toward the incarnation of a deeper Self. Evolution simply IS when we stop suppressing, abusing and holding ourselves back from the fluid realization of our Being.

The inertia and resistance of past structure causes tension between what we are now and that which is trying to manifest from beyond the veil. Due to this disparity the pressures of birthing consciousness can be enormous, and there is the tendency for the poor ego to be drawn all over the map while the deeper Self is coming to light. Thus we need enormous faith, understanding and compassion in order to ride the wave. It takes genius to ride the wave of emergence into the depths of the unknown, in order to avoid being smashed under the tension-wave or vainly

try to save ourselves by crawling back up the beach. In order to move from a past structure of consciousness to a new structure of consciousness the present one must be perturbed or penetrated with greater energy of awareness. The peak experiences of kundalini are such a "perturbation" of our former conditioning. Whether we receive this perturbation through vibration (music/drum/dance/chanting), through drugs, through stress, through romance, Guru devotion or through meditation...it is a door into our own deepest source and condition of Self. The peak experience of kundalini awakening allows participation in the World-brain/Earth-soul, through the disidentification with the ignoble conditioned stage.

"The process of Awakening is the hardest thing in the world to do for the simple reason that we must confront ourselves. Rather than attempting to formulate "reasons" for our behavior and engagement of life, we have to come to clearly see we are not and have not been Awake." Garwin Redman www.bewideawake.com/

Incarnation is the hardest task imposed on us, for the instinct is to back away from the edge as the energy of consciousness touches our contraction. To the degree that we retreat, our entire physiology and consciousness is diminished and growth is suspended. The immune system, nervous system and mitochondria exist in the matrix of our positive or negative assessment of our world and ourselves. Our defensive resistance to negative experience and trauma tightens the rubber band of the armoring making the symptoms of our contraction more obvious. You might say rigid belief in the memory of our past-self is the only thing holding us back from enlightenment. When we give ourselves permission to move beyond who we have known ourselves to be...at least then we are growing.

Repression does not simply "make things go away" but condemns them to the shadow realms, where they incubate and infect the entirety of our lives with disharmony. Numbness and unconsciousness produce ever-increasing dysfunction, neurosis and removal from reality. Thus when our conditioning is "penetrated" the symptoms are likely to be more extreme than it would be say if we come from a very benign-loving history. The way we have each built our armor IS its own particular re-solution. That is, our kundalini awakening will arise in direct relation to the specific armor/archetype that we have constructed. That is why life itself is archetypical. Through "Archetypal Sympathetic Resonance" we are inevitably drawn to the specific Great Attractor that will break through our veil and 'touch" of our deepest level of existence. This is the "humanizing" process...The Great Alchemy of Awaking Up!

Intimacy and consciousness are essentially the same thing. If you turn your feeling-sense, emotion and thought toward coming forth to the n'th degree without hesitation or doubt, then you will automatically increase both the strength and the number of mitochondria and immune cells. I am proposing a conscious and intentioned incarnation as a form of mindfulness meditation in coordination with breath. Imagine an embodiment practice or purposeful incarnation! Not just as a visualization or affirmation, but as an allowing, a letting the universe permeate one's being to the max. When you do this you can actually feel your cells respond. With conscious incarnation we "initiate" ourselves through our individual cells.

Since kundalini is the universe becoming more conscious of itself, when the miracle of metamorphosis happens to us we should learn to go-with it, not just for our own salvation, but for the entire tree of life. Every time we resort to our addictions to back down from the raw edge of our existence and full self-response-ability, the more we interfere and resist the "spiritual" plan for humanity. In metamorphosis, the body-soul does most of the work, including the transmutation of elements. All we can really do is to get out of the way and just doing that takes all our courage, all our intelligence and intuition and all our respect and love. Evolution just Is. Half the battle would already be won if we just stopping getting in our own way. To the extent that we choose energy increasing choices in any situation is the extent to which we "create our soul." In reference to Jung now, this means embracing the tension of opposities...the marriage of matter and spirit, form and Emptiness—the heart of the tantric tradition. Compassionately embracing shadow and light and the up and the down of the Tao. To take the brakes off. To stop hiding under our shell of conformity. To stop pretending we are limited and deficient.

Self-abandonment is the primary trauma that we must learn to "face into" to avoid abdicating from our own life. All we really want and need is our Self; that is what we are longing for. TOTAL RESPONSIBILITY for ones condition needs to really be grokked in order to move into the kind of sovereignty where self-Self development is even possible. Otherwise everything else in the world (according to our triggers) determines who we are. Love of course is the opposite of abandonment. Self-responsibility, that is becoming responsive to Self is none other than freedom, enlightenment sovereignty and Individuation.

Spiritual realization has a concurrent physical component...this must be fully understood and "allowed" in order for spiritual substantiation. That is the body must be allowed to transmute for incarnation to become Real. Our culture tends to prevent physical spiritualization of the body and thus neither emotion, mind nor spirit tends to grow. By understanding the changes to the nervous system, metabolism, hormones and all facets of the bio-physics and chemistry of kundalini we can work-with the changes to increase our adaptive and homeostatic abilities. In this way as our life force and incarnation rises we can prepare to meet it, thus sustain the evolutionary wave. Without conscious meta-adaptation we tend to grow in fiery spurts that generate burnout and take years of recovery. By being unskilled at metamorphosis we spending so much of our energy and effort into coping with the physical, emotional and mental effects of kundalini, that there is little of us left to bring our true creative gifts of spiritual genius into the world. Having foreknowledge or insight into this natural metabolic process can save years of fear, regression, secondary fallout and inertial back stepping.

As with life in general, we can choose to be maladapted or proadapted to kundalini. It takes more Heart, intelligence and discipline to be proadapted because often the first impulse to change is to seek comfort, and often the comfort we choose is to numb-out through various life-negative means. We have free choice so that even the evolutionary energy of kundalini itself can dumb us down and zonk us out if we are not aware. Or we can use the metamorphic energy to awaken us

progressively into the Mystery and deepen our experience of life. It's our choice. By searching within and learning how to be proadapted "under circumstances that have no precedent" we become pioneers paving the way for the rest of humanity to follow.

Integrating the huge energies of kundalini is very difficult at times. We have to both relax into allowing the dissolution of our former self, while building up and supporting new neurological growth for a deeper and higher skill level. We must not fear the temporary loss of our left-brain adaptive functions, while at the same time exercising those functions in order to preserve the neurons for higher brain capacities. We must progressively both "let go" and "build." And the reason why we must do this, is so that the gains we make during our period of spiritual acceleration will not be lost, but will be preserved through our experience of the art and science of Being. Integrating the energy therefore becomes our warriorship... it is our growing edge. And as each of us does this, it becomes easier and easier for all of humanity to hold and convey the full power of Spirit…and to loosen the hold of the Borg. The Borg is anti-individualism—a menial, default, automatic programming of consensus conformity, essentially created through splitting and compartmentalizing the mind creating a schism between body, mind and soul. This Thanatos means loss of differentiation and integrity of the individuals allowing them to form a Borg (tumorous mass of anti-life preditorism).

Kundalini is not a snake coiled up and waiting...the awakening of kundalini is a synergy and synthesis of body, mind and soul, which our dense culture tries strenuously to avoid. Waking up to the sleep and the pain of deadness is hard work, and then maintaining the momentum and trajectory so that one doesn't fall back into the plenum of consensus trance is even harder. If you look at the absolute great minds in history few of them were able to save themselves from the fury of the ignorant crowd. Modern man has broken down the habitat of the natural man, hooked humanity onto an IV of sugar water and now the sugar water is now seen for what it is.

Now that our moral line is presenting itself to us more clearly through sheer necessity, we can change over to a more profound sustainable culture. Those that try to cling to the past will suffer, as will those who are simply without a muse-vocation in the transformation to the new culture. The ensouled way of human existence is forced on us from all sides, because the soporific distraction of the sugar water is no longer valid. The old system must be done away with if humanity is to be permitted to grow towards a noble condition. If we are sick, we should start defining our sickness, give a prognosis and work out the "cure." It begins of course with the rape and abuse of the earth herself, then we lose the strength and humanizing that she can provide. But in particular there is the dumbing down of the population with fluoride and aspartame and all the zillions of other chemicals including the hormonal agricultural chemicals. No way can spirit survive the onslaught of generations of such abuse.

We "must" get over our myopia of simply dealing with symptoms and get quickly to the root-causes of things. We need origins-ology to become the

foundations of all sectors of human thought, as the first and primary impulse of the process of consciousness itself. This change from the degenerative to the regenerative state is brought about individual by individual, ultimately resulting in a regenerative or truly humane civilization that does not spread forth upon the face of the earth trillions of tons of toxins and agricultural biocides. Once the collective gets it together, the individual will have a chance of surviving in noble form to reinstate the humanizing principal in Man.

In order to integrate the different branches of human investigation I have proposed an overarching field of study that I call **The Logos of Original Cause** If philosophy be the highest of the human sciences, then the highest of the philosophies is the Logos of Original Cause. This iis I think the most important branch of philosophy, which embraces all philosophies, arts, religions, sciences. It is the pure transanthropomorphic witnessing at the Causal level, to reveal the causes of things through the complex matrix of symptoms and facts. Since we have barely risen out of problem consciousness we still have a civilization built through attention to the symptoms of things. We haven't yet developed the type of solutions consciousness that naturally and instantly attempts to penetrate and deal with causes. With a Logos of Original Cause we begin a new branch of philosophy to facilitate causal thinking on all levels of society and in all realms. In this way our ecology, industry, commerce, justice, medicine, education, politics and military all become governed by the highest spiritual and moral imperatives.

With a science of assisted evolution we can start a new era of civilization and begin to live as a global mystic society, illuminated and synchronized from within. We need no longer pull on the reigns of inertia to hold ourselves back. We need no longer cower in fear of the atomic force we embody. We can let that force run free and we can grow to meet our soul's needs. We can "connect" and know ourselves as the Beloved. Allowing the full force of the bliss of the return itself to wake us up. To do this we need kundalini coping skills and a faith born of the realization that what this world really needs is a revolution of authentic spirituality—an ecstatic wave of evolution that spreeds across the globe.

No matter how exultant our genius may soar into our utopian future, or how sophisticated we appear, it is all just idle braggadocio if our sympathetic nervous system affords us no security.

PART II
SYMPTOMOLOGY

SENSE OF SELF

During periods of accelerated spiritual growth when there is a rapid shift in the sense of self the main adjustments we need to make are adaptation to the:

- Loss of a rigid sense of the known
- Loss of the sense of sure identity
- The sense of infinity, space, groundlessness and emptiness
- Loss of routine habits
- Amplification of sensory acuity
- Magnification of or loss of appetites
- Increased psychic and subtle abilities
- Greater range and depth of emotion and feeling
- Changes in one's sense of energy and embodiment
- Distortions in the sense of time

Kundalini threatens the safety focused conditioned self because there is no place to hide from truth, for the brightening Eye of God is within us. *Truth is healing and healing is truth.* Depending on how well we can let go of the past and be restructured in the moment through cellular forgiveness, this determines our ability to substantiate spiritual growth. However the irony is that, supersensory ability withstanding, one has to become meta-adapted to a spiritually corrupt world—this is the challenge, to not react negatively to negativity, or in other words to fear no evil. If we listen very carefully Kundalini teaches us how to do this, but we have to be willing to experience earth shattering bliss and the full implications of our higher purpose and place in the whole. We must be willing to fully feel the call to spiritual action!

Unfortunately kundalini has been associated with symbols such as the serpent and so non-awakeners might relegate it to the mere physical domain. But one is never so close to Spirit than during a kundalini awakening. Kundalini is an amplification of Spirit in flesh. This is one of the reasons why post-awakening life seems so lack luster for the tide of Spirit has nearly returned to the socially conditioned acceptable level. And the individual still feels the echo of the calling to a sense of humanity that is beyond our wildest dreams, but there is nowhere to put this in our consensus "fallen" world. On feeling the depths of ones fear and helplessness there is less need to prevent these in others, one realizes that it's all good and it's all ok.

To the degree that we get rid of the parasite of the defense system (the safety addicted conditioned self) that we created from day zero, this is the degree to which we can access our higher self. Kundalini is involuntary parasite killing, for it dissolves our pupal defense strategy, yet it doesn't automatically mean that we suddenly have the skills to deal with our world in a higher fashion, we essentially have to grow those through deeper insight.

"To not be identified with our egoity is not about existing in some impersonal state bereft of idiosyncrasy and individuality, but rather is about being present both as our unique somebody-ness and as self-transcending Being. Even at the same time. The point is not to negate or minimize our selfhood - which is less a noun than a verb (selfing) - but to permit it such rich transparency relative to our fundamental nature that it cannot help but colorfully and fittingly represent us, however superficially. However, when we let "I" do the driving, we usually end up wandering like hungry ghosts through the I-gotta-be-me malls of distorted or overfed desire, shopping until we're broke, sated, or diverted elsewhere. Even so, it's crucial to not prematurely cease such wanderings. It's so easy - as when we are in the spineless throes of spiritual correctness - to make an ideal out of being "good" or "spiritual" and a villain or scapegoat out of our darker impulses. To transcend yourself, be yourself." – Robert Augustus Masters, *Darkness Shining Wild,* p. 179

We can endure anything if there is a goal and a reason. This belief in a larger purpose is the most important factor in people keeping it together under crisis. In the dissolution of the ego, bliss too is sensed as a kind of hell. Kundalini awakenings are the burning away of the pain-body and the creation of a new template. What we do with that template constitutes our spiritual attainment or not. With kundalini we get a second birth, a second chance. But without skillful means, we could very well just create another pain-body in replace of the old.

During the flux of kundalini the Presence (witness) rises up and the little ego would like to pop in and give running commentary, explanations and inane musings. And we notice the drop in energy as we put on the conditioned self's cloak for a sentence or two, just to see if our old self is still there, and we feel the loss of the Beloved that we are, when we stoop down that way. We can't get rid of thought, getting rid of thought is not what is called for. It's becoming an observer of one's thought, master of one's thought, and pointing one's thought in a larger direction than self-defense and ego-survival that is really the key to spiritual attainment.

The spiritual gains of equanimity, detachment and disidentification resulting from a kundalini awakening, comes about through years of being strung all over the emotional map, having ones archetypal images and psychic material blown up billboard size and in ones face. By having our interiors so radically heightened and exposed and having to live intimately with our projections, obsessions and demons. After about 3 years of this, when the chemistry starts backing off, the suspicious, mythic, grasping bodymind is clearly transparent to us.

Repetitive or overwhelming circumstances and conditions create cumulative resonance that increases in magnitude until the entire organism is in sympathetic resonance and the barriers to unity are penetrated so to speak. The increased charge and particular frequency of neural firing opens up unique neural thresholds in crucial parts of the brain. As the contagion of kundalini builds it pulls all bodymind systems into its service.

Sympathetic resonance of oscillating systems is something that occurs in the higher energy states...the EMF of the heart must pull the other organs into phase

lock. Phase lock is definitely a necessity for the massive chemistry of the inner-conjunction and this is subjectively felt as an uncommon Absolute Unity. This unified sense of self is quite alien to our usual divided self. Thus the highly amplified sexual chemistry fuels the Awakening, creating an anabolic energy-building condition that brings things to a crescendo and propels all kinds of alchemical events and radical far-out states and experiences, including increased PSI and time anomalies. All this leads to its opposite in a catabolic breakdown, depression, Die-off of tissue and restructuring of the body and brain. Fortunately for us the whole thing is governed by massive endorphins, which makes the highs and lows of the second birth endurable and creates a cellular equanimity.

Depersonalization

The depersonalization effect of kundalini is interesting and is one of the hardest things to adjust to. Try to use this loss of self-centrism to your advantage by noticing that you have different and deeper capacities within this new vast gentle consciousness. Don't fight it in an effort to maintain your old self, just fall deeper into spacemind and follow "its" dictates. Drawing information from your dream life, feeling into your extra sensory abilities, obeying your body's rhythms and basically using this new you to full effect. Don't think that this depersonalization is "wrong" so much as just a different realm of experience beyond the known. The old you was the pupae, but this new you is the butterfly, so now you need to learn how to fly rather than crawl. To proactively adjust to spacemind you have to let go of the "need to control," while becoming increasingly more mindful and focused toward inspired action...thereby falling in sync with Kairos or God's time.

As we metamorphosize we must embody changes in our sense of time, priorities, social sensitivity and meaning. Thus we require a different skill base, different metaphors, different ideas, and different goals. We can start by expanding our language to describe our lived experience...perhaps leaning toward visionaries and poets for inspiration and stability in this unprecedented state of formlessness. Remember the butterfly you is vastly more sensitive and wise and its needs must be respected, for consequences become immediately apparent. So your relationship to yourself must become more responsive to the new needs belonging to this transformed person you have become. Don't get depressed just because everything has permanently changed. Instead, find out the best way to live within this enigmatic experience of the spacious self...and more alive you will become as the butterfly.

After a catastrophic awakening we are often faced with the challenge of depersonalization and anhedonia. Your sense of aliveness will return when you build up your nerve sheaths with nonGM lecithin, B complex, nutritional yeast, fish oil, silicon and increase the raw greens in your diet. Cut back on cooked carbohydrates and all sugar; instead try to eat your carbohydrates in sprouted raw form or fruit. This will reduce the spaced out feeling. Do the grounding techniques in the Kundalini Skills List and the inner-contact practices in the Inner Arts. You may need to find a Tai Chi or martial arts teacher to help you focus on energy circulation and breathing into your experience.

CHANGES IN SELF-ORIENTATION

DISSOLUTION: Mental confusion. Difficulty concentrating. Old anchors and safety nets no longer hold. Freefall in surreal limbo. Disorientation in sense of self. Sense of fading, of not really being here. Loss of coordination and motor control during the shock and inner-conjunctions. Loss of affective memory, a flattening of memory. Loss of egoic self-continuity and focus. Preoccupation with symbols, archetypes and myth. Panic in those with no meditation experience who feel they need to control rather than surrender. Emotional outbursts, rapid mood swings, unprovoked episodes of grief, fear, rage or depression, all within a background of bliss. Desire for quiet, meditation, baths and solitude in nature. The symptoms and experience of kundalini are also so preoccupying as to make all else disappear in one's perception. Leading up and during the peak there is a sense of one's life coming to a nexus; a convergence of dream and daily experience by breaking through of the walls of one's conscious "I" to experience more of the sub and super conscious levels as well.

SUBSTANTIATION: Eventual loss of cyclic reactive mental patterns that dissolve along with the body armor. That is the mind becomes more silent. The body holds less tension and is calm and relaxed. Loss of compulsive and self destructive habits. After the blocks are cleared and the structures changed to convey more prana flow there is a permanent equanimity of the transcendental state. Less ambivalence, distance from decisions, more centered. More single-mindedness of purpose. Clearer, deeper perception of reality. Distance from symbols, myths, stories and superstitions. Increased ability to embrace paradox, opposites, marriage of the concrete with abstraction. Able to unify focal and peripheral perception; that is merging of left and right-brain consciousness which integrates the body-mind-spirit. Increased fullness, integration and wholeness. Increased autonomy and uniqueness, lack of desire to "fit in." Sensation of seeing with an inner eye. More spontaneity, openness and non-attachment to experience. Increased gratitude and appreciation. Increased detachment, objectivity and transcendence. Increased empathy, diplomacy and sensitivity, yet less sentimentality. Impervious to enculturation, manipulation, coercion. Establishment of true moral intuition rather than mere abeyance to law. Ability to love, improved relationships. Oneness with the world. Detachment, objective witnessing, separation from thought and emotion. Loss of hunger sense due to pervasive endorphins and perhaps due to more gluconeogenesis.

In this yoga of awakening both the "good" and the "bad" of life are turned into the service of emergence.

SYMPTOMS LIST

The spontaneous symptoms of kundalini awakening can be roughly arranged into the various practices of yoga. Yoga practice or *Sadhana*, is essentially the speeding up of the flow of consciousness.

KRIYA YOGA

Muscle twitching, cramps or spasms, shaking, trembling, limpness, rigid-contraction, facial contortions. Itching, vibrating, pricking, tingling, effervescent bubbles of bliss. Tingling/throbbing in left foot and leg is one of the main signs that kundalini is active. Hot or cold changes in body temperature. Shooting currents of energy or heat. Zigzag or double helix of energy up the spine. Prana flow in the central nervous system. Pulsating sensation in the sacrum. Involuntary laughing or crying, deep sighs. Abdomen may flatten toward the spine. Contraction of visceral organs. The anus contracts and is drawn up (bandhas). Bad digestion; purging or constipation. False pregnancy feeling as energy pools in the belly. Chin may press down against the neck (neck lock posture). Eyeballs roll upwards or rotate. Eyelids may not open despite effort to open them. Left eyelid flickers, then towards the end of the awakening the right eye may flicker. Tongue rises to the roof of the mouth or stretches back. Repetitive popping sensation in the sinus above the palette. Body may twist in all directions. Body may bend forward or back, or roll around on the floor. Spontaneous yoga asanas and mudrus. Breathing constriction, heaviness or contraction of diaphragm. Unusual breathing patterns, tendency to belly breathe, emphatic out-breath. Racing heart, expansion pains in heart. Feeling of levitation or intensified gravity, radical grounding and associated lethargy, chronic fatigue. Body sense might expand to feel huge or small. Strange aches and head pressures, headaches. Clenching jaw. Yawning, excessive sleep. Inability to sleep during hyperactivation and high blood pressure; Hyperactivity, need to constantly walk or exercise. Dry throat, great thirst. Feeling headlessness, mindless, giddy, heaviness of head like one is wearing a helmet. Build up of pressure at the head, neck, throat, spine, thorax and eyes. Paralysis during Samadhi or hypnogogic states. Numbness and pain in limbs, especially the left foot and leg. Numbness on the left scalp and down into left face, with drooping of the left eyelid. Years of pain in the throat (thyroid) or in the left foot or shin prior to the awakening. Loss of strength in the arms during rapture and heart expansions. Heat, sweat. Psychokinetic interference with electrical equipment, ability to spontaneously draw a bolt of lightning from a light bulb, or to autoelectrocute oneself with ones own energy while asleep. Spontaneously turning on electrical equipment, dim or blow out street lamps, cause pigeons to crash into car windscreen.

LAYA YOGA

Inner visions and lights, flames, geometric shapes. Visions of deities, or saints. Dream-scenes. Inner sounds, celestial music, bird sounds, animal sounds. Rhythmic clicks/pops inside the neck moving up into head. Occasional popping in the joints of the skull bones. Buzzing or humming in the ears. Inner voices. Spontaneous

mantras. Speaking in tongues or foreign languages. Vivid dreams and visions in transcendental vision, everything luminous scintillating, vibrating both in inner vision and outer visual field Atom bomb, fire and snake dreams. Temporary loss of eyesight.

BHAKTI YOGA

Love with no object arises. Devotion. Sublime gratitude. Uncommon compassion and understanding. Tolerance and patience for "What Is." Enormous faith accompanies the bliss. Transcendence of reactive patterns, social conditioning and egoic habits. Intense sexual arousal without provocation. Intensified sexual and sensual pleasure. Feeling of gaseous bubbles arising from reproductive organs, champagne pelvis. Feeling of radiating ambrosial bliss, an aura of nectar. Strange activity and bliss in different areas of the head at different times. Sensations of blissful honey moving through brain, spine and connecting heart to other parts of the body. Traveling bliss, or pervasive bliss, rapture. Spontaneous sexual ecstasy with no stimulation. Multiorgasmic. Increased ESP, precognitive dreams, telepathy. Bio-location of loved one through heart's navigation. Alchemical preparation for future unknown events, ie: translocal transtemporal development. Linear time transcended. Feeling of entire life reaching a nexus point. Self-remembering, déjà vu. Heightened senses. Hyper-sensitive. Field of self widens, peripheral awareness increases. Exquisite awareness of one's environment and others. Precognitive biosense of someones immanent arrival, often 2-4 hours ahead of time. Ability to affect energetic states and promote heart expansion in other humans and animals via sympathetic resonance. Fragrant smell of roses or peaches eminating from the skin.

JNANA YOGA

Deep questions and answers arise. Spontaneous mystic poetry that writes itself. Important insights, eurekas. Scientific and creative solutions especially through dreams. The Herald of the Muse appearing as a sound or voice in the upper right-brain field prior to the emergence of information. Increased creativity and expression. Intensified understanding. Finer focus on "the most important thing." Compulsive need to write. Psychic ability to open a book at the right page and go directly to the right sentence for information. Automatic writing. Intellectual masturbation to a Jnana Yogi is better than sex. Less ego investment in campaigning and righteous trail blazing as ones true art comes to the fore.

Although they may be overwhelming at times the symptoms of kundalini don't mean much other than the body is transforming itself one way or another. It is what we do with our energy that matters. Spiritual experiences and symptoms are not important. What is important is spiritual insight—gnosis, understanding and the growth itself. To stay on track we have to become "muse focused" rather than "symptom and meaning" focused. Comprehensive sage insight will come about in time, so don't get too involved mentally, emotionally, or analytically with what you're experiencing. Just let it wash over you, enjoy it and be grateful for the chance to experience it.

EXPLORING THE SYMPTOMS

The unconscious nervous system is the autonomic nervous system...which yogis do have some control over. Many of the kundalini symptoms arise from the brainstem, which consists of the medulla, pons, cerebellum and midbrain... that is the majority of kundalini symptoms originate from areas of the brain that are beyond our normal control. Hence many of the symptoms and feelings arise directly from physiological events triggered by specific neural circuits and changes in neurochemistry. Over the period of peak awakening sex hormones and other pituitary hormones are raging; the heart is radically expanded and engorged with blood, and the digestive system venting due to parasympathetic hypertonality; skeletal muscles are ready for action and hypervigilance is up due to the fight-or-flight activation of the sympathetic nervous system. Thus during a kundalini awakening there is a simultaneous hyperactivity of the 4F-Responses: fuck/freeze/fight-or-flight. It is not all tongue in cheek when I say that this **4F Response Theory** is intimately related to kundalini symptoms and health consequences.

"In response to threat, the organism can fight, flee or freeze. These responses exist as parts of a unified defense system. When fight and flight responses are thwarted, the organism instinctively constricts as it moves toward its last option, the freeze response. As it constricts, the energy that would have been discharged by executing the fight-or-flight strategies is amplified and bound up in the nervous system…If the organism is able to discharge the energy by fleeing or defending itself and thus resolve the threat, trauma will not occur…In humans, trauma occurs as a result of the initiation of an instinctual cycle that is not allowed to finish. When the neocortex overrides the instinctual responses that would initiate the completion of this cycle, we will be traumatized." Peter A. Levine, Ann Frederick, *Waking the Tiger: Healing Trauma: The Innate Capacity to Transform Overwhelming Experiences*

The fact that the freeze response occurs during the hypertonality of both sympathetic and parasympathetic nervous systems has profound implications. I used to think the **paralysis** that occurs during extreme events was due to overloading of the sensorymotor cortex with kundalini energy. This may play a part in it, but now I think the paralysis is due to the brainstem stimulating an extreme parasympathetic response to meet the extreme sympathetic activity that is occurring...thus both on and off switches are at full bore. To prevent any further escalation of this duel between the on and off systems the body turns on a massive **freeze response** via the dorsal vagal complex. The **dorsal vagus complex** (DVC) is a cluster of connected neurons in the brainstem medulla that slows down the energy-expending processes. It is the primitive unmyelinated vagus related to the conservation of metabolic resources.

This freeze response is experienced as paralysis and as far as I know the paralysis only happens during inner-conjunction events when the energy is pouring at maximum voltage up the spine itself. Thus the total paralysis instigated by the parasympathetic dorsal vagus freeze complex only occurs with the radical simultaneous activation of the on-switch either in a freeze response or an inner-

conjunction. One of the reasons why paralysis occurs during the full flux up the spine is that the spine must be straight at this time—people always talk about their spine becoming as rigid as a stick during the spinal inner-conjunction. This might be a similar thing to sleep paralysis that prevents the body moving during REM sleep, and also to the state of immobilization without fear that occurs during sexual activity in the female mammal.

During the peak heart expansion event (Heart Nova or Solar Heart) again the sympathetic and parasympathetic are dueling at their maximum and the dorsal vagal complex again kicks in bringing on a freeze response. But in this particular situation instead of paralysis a **Dive Reflex** occurs, essentially pulling the individual into the ground and making them lie flat. That way the heart that is already laboring at max due to the expansion doesn't have to work at pumping against gravity to get the blood around the body. In other words the intense grounding where the body is forcibly pulled into the ground during a heart expansion event, maybe due to the "dive reflex" stimulated by the dorsal vagus complex (DVC) during a freeze response. The DVC governs the dive reflex in reptiles, where they remain submerged for long periods of time to pursue prey or escape predators. Research on the human dive reflex suggested that it does involve concurrent sympathetic and parasympathetic activation.

Perhaps both the heart expansion and the dive reflex will always go together as the body tries to tone down the expansion of the heart and dilated vessels. For this hyper expanded heart may stimulate the vagus to initiate a dive reflex to prevent the organism from overexertion when the cardiovascular system is so engorged, dilated and overworking. By lying down the heart does not have to work so hard against gravity to pump blood. Since the blood vessels and the heart itself are hyperdilated blood pressure would fall, so lying down would both reduce the toll of low blood pressure and having to work against gravity. Low blood pressure reduces oxygen in the brain and this would force the body into a faint, with acute fatigue and bring on the compulsion to lie down.

The **heart expansions** themselves might occur when the parasympathetic gains dominance in the cascade of kundalini activity. They occur during periods of intense bliss, right-brain consciousness and are associated with intense grounding and extreme lethargy. This dive reflex makes more sense than my first explanation, which was the extra grounding needed by the hearts field pulling one into the ground during the massive heart expansion periods that occur. Whatever the cause of the grounding, it must be noted that the extreme pull on the body is relieved by lying for half an hour on the grass or bare earth with ones spine on the ground. This is no doubt a key to understanding the phenomena.

By looking into the ancient spiritual literature, Hal Puthoff surmised that spiritual phenomena like the **levitation** of the human body may be due to the ability to mentally cohere the vacuum fluctuation energy. This led him to propose the idea that gravity itself might be a redistribution of vacuum fluctuation energy. (See the Hal Puthoff - Alan Steinfeld talks on youtube). To mentally cohere the vacuum fluctuation would require a quantum phase-lock at a certain frequency(s)

that would redistribute zeropoint energy/warp spacetime, and essentially create an antigravity field effect like the warp-field around a spaceship. If biological systems can do this it would probably due to their liquid crystal structure and the monatomic M-state elements in their nervous system. I have no idea what I am talking about, but it sounds like fun, for "extreme symptoms demand wild speculations." Other kundalini symptoms such as the inner conjunction, biolightning, increased Psi, the great desire for grounding and open air...in fact all kundalini phenomena might be somehow linked to the increased biological interaction with zeropoint energy. Scientific investigation of this would propel us directly into the mind of God and the discovery of how ourselves and the universe are put together.

The **gravity warping** sensation could be a fluxing in the nerve sheath between sympathetic and parasympathetic dominance. Since they are both in a highly activated state this shifting might be more noticeable than usual and give the sensation of gravity crushing (sympathetic) or gravity expanding (parasympathetic). As Nitric Oxide increased vasodilation this would give an expanding gravity effect, while a turn toward vasoconstriction would give one the sense of gravity crushing, or implosion. It is apparent that when both sides of the nervous system are radically hyperactivated then the freeze response automatically comes on to modulate the over activity, essentially to protect the brain from excessive stimulation and damage by nitric oxide, glutamate, adrenaline, norepinephrine and cortisol. Thus there must be a freeze in effect throughout a kundalini awakening to varying degrees, culminating in total paralysis during the inner-conjunction.

Given the right circumstances stress could trigger a full-on kundalini awakening. It appears that the awakening of kundalini means the prolonged hyperactivation and dance between both sides of the nervous system with periodic dominance of the freeze response during extreme inner-events. It could be that after a certain period of this extreme nerve activity the immune system goes into a radical catabolic condition, what I call a Die-off. Part of the function of a Die-off could be the resetting of the nervous system equilibrium, breakdown of axions and restructuring to a more mature/advanced functioning. It does seem that the sense of being overwrought and out of our depths disappears after a Die-off for we have assimilated our metamorphic progress to date and have a new lease on life. The timing of the Die-off must correspond to both the intensity and duration of nerve activity. A more acute phase of neurological chemistry is followed more quickly by a Die-off to help bring the rest organism up with the refinement or growth that has occurred in the nervous system.

Sleep Paralysis with its complete or partial atonia, most likely is the result of hyper-parasympathetic activation of the Dorsal Vagal Complex (DVC)h. Sleep paralysis is experienced when the individual bypasses directly to REM dream sleep with its Beta-wave cortical activity. The REM sleep phenomena is associated with the inhibition of certain motor neurons; inhibition of sensory input; rapid eye movements; activation of brainstem neurons that control the movement of facial muscles; and important to the hallucinatory experiences associated with sleep paralysis, the activation of visual pathways. These events normally occur when

neurons in the pons (a medullar structure) become active after a period of non-REM sleep (slow-wave, synchronized sleep).

Sleep paralysis is an evolutionarily old function to keep animals still while they are sleeping and prevent them falling off cliffs, trees or attracting predators. Certainly it must have emerged simultaneous with REM dream state to prevent motor response to dream imagery. The most obvious neurotransmitter agents to sleep paralysis would be inhibitors GABA and glycine, but it probably more complex than that. Those that become "aware" of being paralyzed descend to Theta of hypnogogic states without going through the normal phases that kick in the loss of consciousness, so they are conscious while paralyzed, usually with amazing visions to account for their journey. The lucid perception of sleep paralysis can give one the sensation of compression on the chest and suffocation as energy is removed from the diaphragm. It is the sympathetic side of the nervous system that stimulates breathing activity and thereby raises blood oxygen.

Besides Robert Scaers idea of the dorsal vagus complex causing freeze paralysis another possible cause of paralysis during extreme spiritual energy states could be the hyperactivation of the limbic system and brainstem and its consequent effects on incapacitating the motor-sensory cortex. Rhawn Joseph at Brain-mind.com says that freezing is brought about by both the overload/overwhelm of the motor and frontal lobes and the consequent burnout of dopamine and serotonin in these areas. Freezing is a life preserving reaction in nature that is apparently mediated by the amygdala and striatum. He writes the amygdala under conditions of extreme fear and arousal, can induce catatonic-like frozen panic states—resulting in a inability to initiate a voluntary movement, and the "Will" to move or vocalize maybe completely negated. Given the extensive interconnections of the medial frontal lobes, corpus and limbic striatum with amygdala, it appears that when exceedingly aroused or emotionally stressed, the amygdala is able to *inhibit* (by over activation) the frontal-striatal motor centers. When this occurs, the organism may fall and cease to move, blink or even breathe, thus appear to be dead and in a state of rigor mortis.

Rawl Joseph suggests the **numbing** during the fear response is caused by a massive secretion of opiates within the amygdala and basal ganglia, while the **rigidity** and loss of Will is a consequence hyper-amygdala influences on the medial frontal lobe and corpus and limbic striatum. The amygdala is able to induce these catatonic states, via interconnections with the basal ganglia, brainstem, as well as the medial frontal lobes. Under extremely stressful conditions the striatal, frontal lobe and amygdala, are simultaneously undergoing dopamine depletion, which in turn results in hyperactivation of these areas. In the Eastern traditions there is a catatonic deathlike state called **Nirodha** "meaning "prior to the arising of ignorance and volitional impulse." Like deep Samadhi, Nirodha is a very high non-meditative meditative state. During Nirodha there is no time sense, heartbeat and metabolism are slow and practically cease so very little energy is burned, and body temperature drops well below normal. In fact this spiritual catatonia is so deathlike that there is the danger of being mistaken as dead and so buried alive. It

is said that Nirodha is a precursor to Ego Death. **Nigredo** in Western alchemy is the death-like withdrawal of the soul from the body.

Tingles are felt especially on the left side of the body from the base of the foot up, and bubbles like champagne in the pelvis. Tingles and bubbles are always associated with increased kundalini flow, heat and bliss, so this phenomena is probably an effect of the nervous system and opiate receptors. There is some indication that the tingly feeling of kundalini maybe associated with an increased amount of nitric oxide generated by Nitric Oxide Synthetize nerves.

The **left-brain freeze** was one of the first radical symptoms to arise at the beginning of my July'2000 awakening. This symptom includes a pressure-clamp and numbness covering the left side of the scalp that extends down the forehead and into the eye socket. This numbness started peaking 3 days "before" I met my initiator, so my body-soul already knew exactly when the meeting was to happen. Or rather the alchemy was occurring despite the temporal and geographical distance between us. And my condition proceeded in direct response to when we would meet and be in each others presence, though my conscious mind had no idea we would meet at all. For me the left-brain freeze continued in varying intensity throughout the 3 years that kundalini was highly active, though it was most severe during the 6 month apex. Since this neuroinhibiting clamp only occurs on the left side of the brain, this is another factor leading to the conclusion that the over excitation of nerves by kundalini energy mostly occurs in the left hemisphere and left side of the body. Although why this is I do not know.

I assumed that this numbing clamp was due to the neuroinhibitors GABA, Glycine and endorphins. In the google video by Robert Sapolsky *"Stress, neurodegeneration and Individual Differences,"* he said the neuronal defenses against over excitation by glutamate include substances such as adenosine, GABA and taurine. The neuroinhibitor **Adenosine** plays an important role in biochemical processes, such as energy transfer—as adenosine triphosphate (ATP) and (ADP); as well as in signal transduction as cyclic adenosine monophosphate (cAMP). Caffeine's stimulatory effects are primarily (although not entirely) credited to its inhibition of adenosine by binding to the same receptors. This reduction in adenosine activity leads to increased activity of the stimulatory neurotransmitter dopamine. Adenosine also acts as a vasodilator of the arteries through the relaxation of smooth muscle, thus might be a factor in both the heart expansions and the red eyelid effect. By blocking adenosine receptors caffeine on the other hand is a vasoconstrictor; 250 milligrams of caffeine can decrease central blood flow by 20-30%. With the information currently available we can assume that the left-brain freeze is caused by both vasodilation and neuroinhibition.

With the left-brain freeze one can see that the **left eyelid** is droopy, the pupil is dilated and a strange new consciousness is apparent in the eye itself. During sun meditation as I looked at the sun I found my left eyelid was lit red from the increased blood supply due to dilated blood vessels. (Eyelids are closed during sun meditation, as it is not good to actually "look" at the sun.) Understanding the experience of the **red eyelid** capped off my entire investigation, for once I

understood the presence of increased nitric oxide during kundalini and started reading about the freeze response. I realized that the paralysis, the left-brain freeze and red eye lid were not accompanied by the "contraction" of tissues but by their dilation, even if the numbing pressurized clamping effect "feels" like a contraction. And that the paralysis during the inner-conjunction may not be due to the over stimulation of the motor-sensory cortex, but due to the freeze response that operates on the brainstem and the dorsal vagus complex.

The neurological cause of the numbness in either of the hemispheres is probably rather simply explained. Since most of the "electrical" activity in kundalini is experienced on the left body and left-brain I assume that the numbing of the scalp of the left side of the head is simply the result of massive beta endorphin (opiate) production in an effort to inhibit the excessive nerve firing in the left side of the brain. This left-brain clamp/crab gives new meaning to the term "numb-skull." Doing mathematics in the head is almost impossible. One has to watch out that one doesn't do silly things, or rather one watches oneself "do" silly things. The effect of having the left-brain function suspended results in the body-soul claiming its own time and space for metamorphosis to occur. The ego and one's life becomes subordinate to the metamorphic crisis as it totally takes over one's existence. With these awesome forces the ego soon learns that it is not in the drivers seat, that it is kundalini that is living us. The numbing effect of the left-brain freeze can reach such acute proportions that I was reduced to a radically "right-brained consciousness" on the day that I met Mr. Universal. On that day my left-brain freeze reached its zenith and right-brain consciousness became more prominent in general during the entire period of the awakening.

The night after leaving my initiators presence I had the most ecstatic divine experience of my life. I had lapsed into a paralyzed, rapturous trance as soon as I had gone to bed. Although time is incalculable during such events, it seemed like for perhaps half an hour or more a blissful electric penis was entering me while ecstatic energy poured upwards through every cell of my body. I call this experience **Sex with Eros**. It wasn't anything I "did" and it only happened once, sex on that level is not sex, it's some kind of God communion activity of the cells. I felt like Jesus Christ after the first awakening in 1988, but with this Sex-with-Eros thing, I was God his-very-self and she was a woman. Thus I like to say that Sex with Eros was the best sex I NEVER had!

Sex with Eros involves spontaneous prolonged full body orgasm during an inner-conjunction, without a partner or any stimulation. However "orgasm" in no way describes the sense of divinity and absolute unity that occurs. I think this is what mythic traditions might have interpreted as having sex with the Gods, or with angels. It might even correspond to the idea of being impregnated by God and consequently the virgin birth. Stimulation of these contractions is probably due to a combination of vasopressin, oxytocin, prostaglandins, nitric oxide and histamine; within the context of generally upgraded sex hormones that occurs during the heating and peak kundalini stages.

As night follows day, the morning after this complete opening I woke to find myself in its opposite. A massive autonomic shock that I call the **White Shock**.

This involved an involuntary contraction of my entire body. The skin turns white as adrenaline causes blood to leave the surface tissues and into the vasodilation of the skeletal muscles to be ready for action. My face was white and my hair stuck out like I had been electrocuted and my intestines, liver, spleen and other viscera curled up and were fiercely contracted for days. Motor control was greatly impaired and the freeze response, endorphin numbing, (and possible nitric oxide damage) leaves us with the dissociated feeling of "not being in our body." In fact I was so disembodied that morning that I had a Hakomi session (body-centered psychotherapy) to try and put myself back in my body. The Hakomi exercises worked to a degree, at least to help me feel less like a car crash victim or dissociated robot. After any such autonomic shock it is imperative to shake, dance, run, to push against walls with arms, back and legs and make expressive noises to eliminate the stored tension of the **freeze response** from the body. Dr. Robert Scaer's book *The Trauma Spectrum* is a great source of information on the freeze response, trauma and PTSD. http://www.trauma-pages.com/scaer-2001.htm —Dr. Robert Scaer. (There is more information on the White Shock in the Nitric Oxide section)

After this radical expansion and contraction the full conflagration of **kundalini heat** came on, along with intense heart pressure and mystic ecstasies. My left-brain continued to be so contracted that my left scalp, extending into the face and neck was radically numb. The numbness becoming more prominent when the flow of kundalini increased during its monthly progressions. I didn't experience a lot of pain but I did have discomfort and intolerance for the overpowering intensity of the energy. Of course going "with it" rather than resisting or running from it is the answer. To breathe into it and raise the energy up, without fear.

Philip St. Romain in "*Kundalini Energy and Christian Spirituality*," says that his kundalini symptoms of **the crab**, the pincers and the sword on his head, became more painful when he deviated from spiritual alignment into various things like TV, reading, writing, certain foods etc...This pain kept him on track to more fully enter his surrender. Philip St. Romain attributed great significance in the tucking in of the chin to facilitate the free flow of energy between the body and the head, and thought his symptom of the Crab was due to not practicing this neck-lock posture during prayer. He assumed the Crab effect was the result of pressurized cerebrospinal fluid in the ventricles. Since the **left-brain freeze** always occurs along with radical heart expansion, the numbness might be related to the vasodilators: histamine, nitric oxide, serotonin and acetylcholine. But whatever it is it must be pretty substantial chemistry to exist for more than 3 years at varying intensity. As I mentioned, since the left eyelid was redder on looking toward the sun, suggesting the vessels were dilated, this leads me to assume that the expanded state of the heart and associated dilated blood vessels is a major contributor to the left-brain freeze effect. Could the lowered blood pressure caused by the expanded vessels create this numbness, and why only on the left side if the effect is neurotransmitter based. The numbness actually occurs along with what feels like pretty intense head pressures especially in the prefrontal lobes. The logical answer is that the numbness is endorphin based, but there again why only on the left side of the brain.

The phenomena of the left-brain freeze points to the pivotal conjunction between the immune system, cardio and nervous system. Nitric oxide is used by all these systems and its heightened production during metamorphosis leads to both a cascade of major changes throughout the body and to many of the classic kundalini symptoms. The fact that nitric oxide is a free radical gas explains why half of the metamorphic process is about dissolving the old structures, and is one of the main reasons why normal operation of ego functions is suspended. While catabolism and cell death is underway we are not our old self.

Initially I thought that the Left-brain Freeze (the "Crab"- Philip St. Roman) was due to the increase in the Heart's electromagnetic field, because the heart expansion is such an overarching, omnipotent affect. But another cause could be related to initiation of spleen and special immune activity, from the hyper-activation of the sympathetic nervous system during the acute phase of the awakening. In which case histamine would factor into the mix. The left-brain numbness and contraction probably starts at the same time that the spleen contracts releasing its store of blood. Thus the spleen, bone marrow and the immune system reboot to change from normal function to metamorphic mode, in order to break down and dissolve the pupal body. It could be that as long as the spleen is functioning in its "metamorphic capacity" there maybe some left-brain freeze. (See the Practice List for methods of dealing with the left-brain freeze.)

If indeed the spleen and macrophages are set into hyperdrive by the oscillating on/off of the nervous system (rapid flipping between hyper-sympathetic to hyper-parasympathetic) then the white blood cells would be producing a lot of nitric oxide (free radicals) and this liberal dosing of vasodilator would keep the hyperactivation of the nervous system going, coupled with the radically increased heart expansion and associated amplified heart electromagnetic field. Within the heightened heart field the entire body would be dissolved and reformed in alignment with the higher template of the expanded heart. The end result of the effect of sustained heart expansion over many years results in the dissolving of body armor and traumatic memory in the brain—thus reducing neurosis, tension and body pain.

During fight flight first the inflammatory response is activated, then when acute danger is over the immune system is activated. This stimulates the spleen to contract, releasing much of its blood into circulation, as well as the liberation of glycogen stores from the liver. It seems all the visceral organs go into a major contraction at the onset of the acute kundalini phase in preparation for the shift to the self-dissolution work. Thus blood leaves the spleen, liver and digestive system and travels to the skeletal muscles to prepare the organism for action in the face of danger and possible injury. At this point histamine metabolism in the bone marrow probably sets off the mechanism of using energy stored in the Calcium bonds in the bones. This provides extra energy for the kundalini conflagration and produces heat which seems to penetrate "down to the bone."

The acute phase of kundalini seems to largely consist of both fight-or-flight response and freeze response. That is the body is in a state of hyper-vigilance (go) coupled with a freeze (stop) and this burns a lot of energy without any "work"

being done, thus we can loose a lot of weight this way. People often report rapid weight loss during their first awakening especially when this radical shock is more in effect than in latter awakenings. Remember this shock is autonomic, we have no control over it, except perhaps if we are an advanced yogi. The brain is a hologram of the body, so the condition of various tissues throughout the body is reflected in the nature of the brain. An occluded dead pelvis for instance would have its corresponding occlusion and deficiency in the brain structure and chemistry. Thus when we have kundalini moving through the pelvis it is simultaneously moving through a particular pathway in the brain. The end result of this chemistry seems to be an unlocking of connective tissue, a loosening of the entire body armor and reduction in the pain of the pain-body.

Kriyas are seizure type impulses related to certain neurotransmitters and areas in the brain. Traditionally it was thought kriyas were purifying movements or cleansing actions revealing blocks to the flow of kundalini. They say that yoga arose through observing the various spontaneously arising positions (asanas) created by kriyas. I think this might be partly the case...whether a voluntary complying with the way the energy wants to go, or involuntary compulsory asanas. It was assumed that kriyas, or the spontaneous convulsions and contorted movements produced by kundalini are stress being released in order to unblock and restructure the tissue to convey greater consciousness. However kriyas are best explained in terms of neurochemistry such as the "over excitation or disinhibition" of the body's glycine and GABA-producing neurons in the brain centers that coordinate movement. So that the nervous system is all "go" and the inhibiting off-switch is incapacitated. I think they are probably convulsive discharges of the letting go of the freeze response and from spontaneous firing through the motor areas in the brain. The convulsions are more likely to be the result of kindling type brain chemistry that perpetuates itself and slowly changes nerves, brain and cells—until the whole body is transformed to a higher rev state.

Kriyas might be painful with the spontaneous contraction of muscles, not everyone experiences kriyas though. Mostly kundalini is not associated with pain because of the extreme levels of opiates produced. Traditionally the spinal knots that kundalini penetrates are called **grathis**. In the East they say the root chakra, heart and third eye charkas are the greatest obstacles to the rising of kundalini. However, the process is not linear, it moves with the seasons, returning again and again to the same spot to work at a deeper level each time.

During acutely active kundalini it feels like there is **white light** flowing inside the body and illuminating the world—a pervading sense of white even though one cannot actually see it as white—it's like we see white with our whole body. This sense of whiteness maybe due to a general increase in nerve action potential and the increased ionization of cerebrospinal fluid.

Visual acuity (**transcendental vision**) goes up in the heating and peak phases of kundalini due to stimulation to the occipital lobe where the visual cortex lies, and to increased pituitary hormones, nitric oxide, histamine, phenylethylamine, dopamine, norephinephrine...and increased blood flow to the brain. Color is

more saturated due to the increased biophotons generated in the brain. Because transcendental vision is very much like being on the drug Ecstasy, which is a dopamine drug, I suspect that it is phenylethylamine and dopamine that gives us the radical shift in vision as though every atom were scintillating and super-alive…ie: the eyes of love. Whatever the neurotransmitter mix one can assume that increased energy passing through the optic center in the brain leads to scintillating transcendental vision. Kundalini as a general rule is not hallucinogenic, although there is a high level of opiates being produced. Entheogens (Theo=god or spirit, Gen=creation) are substances which generate god or spirit within producing states of shamanic ecstatic possession and transcendent and beatific states of communion with deity. Endogenous entheogens that the body produces are probably the agents for visions and deep spiritual experiences. The visual experiences involved are more dream-like than the extreme psychedelia inspired by drugs.

The increase in **psi and telepathy** is harder to explain but is probably something equally as simple such as nonlocal primary perception or the increased superconduction of consciousness. The EMF of the human body is greatly magnified during kundalini and the brain might be able to pick up the "radio signal" of a significant other. The other alternative is that consciousness doesn't "travel" in any kind of wave, but that it is a "nonlocal" phenomena; but I think we need new physics to explain that one; especially as it relates to precognition. Psychic and bioenergetic phenomena doesn't particularly "mean" anything other than the *meaning we give it*. Psi, subtle and causal effects are simply a revelation or confirmation of the way the universe is put together. However because it is extrasensory and transcends the mind we tend to think that it is more important than the consensus reality that is based on the cognitive interpretation of information from the five senses.

Because material flatland is so painful in its superficiality, lack of meaning and dire lack of connection, we are beset with a deep intrinsic need, desire and passion for spiritual experience. Just because something is beyond the five senses we often think it has greater holy *significance* and we tend to be drawn hither and tither by our spiritual ambition to "get more God." Remember only 1% of our consciousness is conscious....that means there is a lot going on we never know about. The larger mind likes to remind us of its presence and so it feeds us precognitive and psychic tidbits, synchronicity and psi information in dreams. Such Siddhas don't really *mean* much other than their being an intrinsic examply of kundalini energy and a reminder of the nonlocal and unusual properties of consciousness itself. Like my ability to turn my stereo/radio/CD player on at 3 am in the morning during particularly rarified holy energy states of kundalini sleep. It happened twice recently...but mostly in 2000, perhaps 10 times altogether. I think it only happens in summer when bio-energy is higher, so there is no miscalculation with daylight saving time. As metamorphosis proceeds the ultimate outcome of kundalini awakenings is a reduction in background fear, body armor and emotional volatility. The various symptoms are slightly different for each person, but they don't "mean" anything in themselves, other than as signs that the bodymind is transforming and fuller powers are being realized.

IMMUNE SYSTEM AND TRANSMUTATION

The first impulse of fight-or-flight activation decreases immune activity in order to conserve energy for dealing with immediate danger, after this the immune system is activated to prepare for possible damage to the body. *Candice Pert* discovered that receptors for neuropeptides and neurotransmitters are on the cell walls of the immune system, showing that the immune and endocrine systems are modulated not only by the brain but also by the central nervous system. The meta-activation of the sympathetic nervous system during kundalini would profoundly facilitate changes in the immune system and endocrine system. What probably happens is that during the years of kundalini there are alternating periods of increased immunity followed by periods of reduced immune activity. Immune suppression resulting from prolonged high adrenaline/cortisol levels might occur for different reasons in both the peak and the exhaustion phases. Although there are periods of radical immune activity during Die-offs and restructuring associated with hyper-parasympathetic activation, the majority of the awakening probably involves immune overload if not outright immune suppression because of highly active nervous system. The parasympathetic "growth" periods are obvious by increased mitosis (cell division) and the illuminating "glow" that occurs which makes the bodymind seem supernaturally vital...this is probably when the immune system is back on with avengeance. You will notice that the biophoton glow is always associate with massive bliss and heart expansion periods, signaling a parasympathetic rest-recovery and opening.

Macrophages are large, phagocytic cells that engulf foreign material that enters the body and the dead and dying cells of the body. I am convinced that it is largely the macrophages which do the catabolic breakdown (self-digestion) of tissues in preparation to building the spiritualized body capable of carrying deeper consciousness. General hyperactivation of the sympathetic nervous system stimulates immune response factors such as interferon, which in turn elicits increased production of nitric oxide synthase (NOS). Macrophages produce nitric oxide in their attack on invading bacteria. Under certain conditions, this can backfire with sudden severe infection (sepsis), or toxic shock, involves the excess production of nitric oxide by macrophages, leading to widening of blood vessels and is one of the main causes of low blood pressure in sepsis. (Science may find this to be a factor in the White Shock after inner conjunctions, and the incapacitation during Die-offs.)

The spleen symptoms of the Left-brain-Freeze and the self-digestion (autolysis) sensation during the Die-offs, convince me that it is the highest alchemical function of the immune system to dissolve the pupal body. This catabolic action is probably brought about through the activation of the **reticuloendothelial system** (**RES**), part of the immune system. The RES consists of the phagocytic cells (primarily monocytes and macrophages) located in reticular connective tissue. These cells accumulate in lymph nodes and the spleen. The Kupffer cells of the liver and tissue histiocytes are also part of the RES. To fulfill their many functions macrophages in their activated state are able to produce more than one hundred different substances.

"Macrophages secrete not only cyotoxic and inflammation controlling mediators but also substances participating in tissue reorganization. They include enzymes, as hyaluronidase, elastase, and collagenase, inhibitors of some of them (antiproteases), regulatory growth factors and others. Hyaluronidase, by destroying hyaluronic acid, an important component of connective tissue, reduces viscosity and thus permits greater spreading of material in tissue spaces. Hyaluronidase is therefore sometimes designated the "spreading factor." Elastase and collagenase are enzymes capable of spitting collagen and elastin, the basic members of connective proteins."

http://nic.sav.sk/logos/books/scientific/node23.html

The above quote explains how the fossilized tension and heaviness of the uninitiated body's armor is reduced as the work of dissolving the pupal body proceeds. In fact the body after a kundalini awakening is so much more opened, painless and flexible than the former body, that it seems that only kundalini initiation could produce such effects by melting former hyper-contracted connective tissue associated with the conditioned ego-personality. Obviously if the ego and its patterns of tension has been overruled by a deeper consciousness, then the old tension patterns would automatically unravel. Considering that the body becomes inhabited by a "new" host, the immune system now adheres to the blueprint of the new more powerful ruler—The Self.

The term "macrophage" means *big eater*. These immune cells are the evolutionary oldest and most competent. They patrol, scavenge, attack and destroy invaders and send for help and stimulate a balanced response of the whole immune cascade. They clear abnormal cells and cellular debris and remove aged dead cells. Although macrophages are found all over the body they are concentrated in the largest quantities in the spleen, lymph nodes, tooth sockets and in the alveoli in the lungs. As "big eaters" it seems more the macrophage eats the more active they get. These phagocytic macrophages play a major role in acquired cell-mediated immunity, being activated and mobilized by T-cells to the site of infection where they kill invading organisms. Macrophages can also function in processing and presenting antigens to lymphocyte cells to neutralize.

All immune cells originate from stem cells located in the bone marrow, and various immune cells cycle in and out of the **spleen** and bone marrow for special conditioning, nourishment and instruction. This immune system trafficking follows the cortisol cycle, so if the cycle is disrupted, especially at night, then the immune system is adversely affected. Short and long-term stress is known to suppress the immune response and lower resistance to infection while increasing allergic reactions. The spleen receives blood from an artery off of the aorta. After passing through an intricate meshwork of tiny blood vessels, the blood continues to the liver. As blood flows slowly through the spleen, any disease organisms within it are likely to come into contact with lymphocytes in the spleen tissue. This contact activates the lymphocytes, which can then attack the foreign invaders. Blood vessels in the spleen are lined with macrophages that swallow and digest debris in the blood, such as worn out red blood cells and platelets. Because a great

deal of blood circulates through the spleen, this organ serves as a reservoir for blood in times of emergency.

You can experiment with this theory of metamorphic catabolic breakdown by macrophages by eating something noxious to the body like processed cheese or processed meats which will activate the immune system. If you eat enough of the immune activator, within an hour you will notice that a small left-brain-freeze (with numbness in the left eye-socket and forehead) will occur as the immune system activates to deal with the offending substances. Note that I may have sensed this only because I have been through major dissolution and have experienced the left-brain freeze sensation before. I was able to distinguish the connection to immune activation only because my metamorphic cycles had drastically waned so did not confuse the temporary digestive-immune response with the general metamorphic-immune activity. A person without awakened kundalini might not be sensitive to the percipience of immune activation or left-brain freeze.

"Although any number of factors can trigger the adrenocortical stress reaction, the response itself is always the same. It involves the release from the adrenal glands of specific hormones, mainly the corticosterioids, which in turn mobilize the body against invading germs or foreign proteins. Thus the stress response always activates the immune system." 292, The Body Electric, Robert Becker M.D. and Gary Selden.

During a kundalini awakening the sympathetic nervous system and adrenals are perpetually, chronically activated during the peak phase. With that general activation, acute kundalini events are similar to the immediate threat response and produce adrenalin and histamine; followed by cortisol release and immune mobilization. Thus an awakening represents a hyper-activation of the self-defining and self-preservation systems of the body. However, instead of an invasion by a foreign pathogen or noxious substance, the body is simply dissolving and rebuilding a new or more refined version of itself.

Macrophages can live up to 2-3 years and it is probably due to this that the main awakening phase also corresponds to this duration. The macrophages that were grown and activated during the metamorphic initiation chemistry probably have a very different nature and purpose than those produced by the body under normal chemistry. So when those specially activated metamorphic macrophages die out, the main transmutation period also finishes. We can assume that the cyclic periodacy of metamorphosis is a reflection of the growth and activity of the immune cells involved. The cells are activated, grow, carry out their function and die. In metamorphosis the immune system increasingly becomes a full-body brain, generating peptides, catabolic enzymes, dissolving and transforming tissue. This immune activation would explain some of the heat involved with kundalini and many of the symptoms, especially those during the Die-offs.

One of the most extraordinary metamorphic phenomena is the **sweating of blood**. This maybe explained by the catabolic enzymes (hyaluronidase, elastase and collagenase) produced by the macrophages. If they act to make the vessel walls more permeable during the height of an acute cycle then its conceivable that blood could ooze out of the skin through the sweat glands. Skin, and blood vessel

walls are made from elastin, collagen and hyaluronic acid after all and during a certain phase of an awakening the tissues of the body could become so permeable that red blood corpuscles could squeeze out of the capillaries. The base of each sweat gland is surrounded by capillaries, and the capillary wall is only one cell thick, composed largely of collagen and can be as little as 3-4 mm in diameter. While red blood corpuscles are 7.5 thousandths of a mm, so one can see how collagen dissolving enzymes could increase the permeability of the capillaries such that red blood corpuscles could squeeze through the capillary walls surrounding the sweat glands.

"Tears of Blood and Bloody Sweat. During times of intense kundalini heat, when emotions are being eliminated through tears, it is possible that blood vessels near the surface of the skin and in the tear ducts would rupture, reddening the sweat and tears. St. Lutgard, Blessed Christina, and several others are listed as recipients of this "gift." Christ at Gethsemane also experienced bloody sweat." P.112 Philip St. Romain, *Kundalini Energy and Christian Spirituality.*

During an awakening we have the hyper-activation of the sympathetic nervous system creating the physiology of "stress" and this increases the permeability of the blood vessels. While there is also an increase in endorphins and NO which reduces smooth muscle contraction, causing the smooth muscles in the arteries to dilate and increase blood flow. The blood sweating phenomena is also undoubtedly due to the increase in **histamine** release during extreme stress. Although increased histamine is probably common throughout an awakening, and if there was also an extreme threat to life then a greater amount of histamine might be released; creating the bloody sweat of Jesus. Histamine produces larger pores in the blood vessels as the first step in launching an inflammatory response. The increased blood vessel porosity improves brain nutrition in times of emergency, when high performance is imperative to survival. The release of histamine in the brain and the consequent improvement of blood supply is probably one of the main reasons for the increased sensory and extrasensory perception during kundalini. Brain nutrition and oxygen supply would be greatly enhanced by the dilated and porous blood vessels, as part of the fight-or-flight responses facilitation of alertness and readiness for action in the face of danger.

Body elongation is another change the body can undergo during metamorphosis. This no doubt is related to the permeability and relaxation of the connective tissue brought about by these collagen and elastin splitting enzymes. Romain sites Stephana Quinzani and St. Catherine of Siena as examples of body elongation. I imagine that the connective tissue of the pupal body and the connective tissue of the transmuted body are quite different in structure. The calibration of such subtle changes might still be impossible to detect with our present science. One can assume that the transmuted connective tissue has greater strength, while having less molecular density. Perhaps even a change in composition. It is apparent that the butterfuly self requires more "space" in the body and that body armor and the associated neurotic egoism is the direct opposing force to our spiritual emergence.

LYSOSOMES-BECOMING UNGLUED

Lysosomes, sometimes called "suicide bags," are acid-containing vesicles that enable cells to digest unwanted material. These organelles digest the macromolecules from phagocytosis (ingestion). They form the cell's recycling process, where old components such as worn out mitochondria are destroyed and replaced by new ones, and receptor proteins are recycled. Other functions include digesting foreign bacteria that invade a cell and helping repair damage to the plasma membrane by serving as membrane patches to heal the wound in the cell membrane. Protein processing in the lysosomal system is modulated heat-shock proteins (HSP). The nervous system with its long-lived neurons, is vitally dependent on an effective lysosomal waste disposal system. For unlike other cell types, the neurons cannot divide to replace cells that have died through the accumulation of indigestible material. So lysosomes are responsible for the breakdown of damaged cells and are particularly prominent in nerve cells, as an efficient way of dealing with abnormal proteins and recycling proteins.

Lysosomes contain about 40 different types of hydrolytic enzymes, which are optimally active at low pH. The membrane surrounding a lysosome prevents these digestive enzymes inside from destroying the cell. The products of metabolic breakdown are acidic and this acid breaks the membranes of lysosomes spilling hydrolytic enzymes into the area to digest the damaged cytoplasm. The release of hydrolytic enzymes from lysosomes maybe a primary cause of neuronal damage. Aged neurons have more difficulty processing proteins and reduced efficiency in the lysosome system maybe a factor in ageing and many diseases including Alzheimers. Lysosomal activity is responsible for the accelerated rate of muscle protein breakdown during and after exercise.

Lysosomes also are also responsible for cell-self-digestion during autophagic cell death, a form of programmed self-destruction, or autolysis. As well as the clean cellular recycling that occurs through apoptosis, there might be the occasional catastrophic autolysis occurring during metamorphosis. As I mentioned before, very infrequently there is sweating of blood during peak kundalini in some saints such as Jesus, St. Lutgard and Blessed Christina. Besides the release of collagen dissolving enzymes, this unusual bleeding could be brought about when the body's capacity for programmed cell death is overwhelmed and a more necrotic form of cell death takes over. Due perhaps to a simultaneous activation of the HPA axis from an acute shock, during a normal Die-off immune activation.

The perfect such example was when Jesus bled through his pores in the Garden of Gethsemani, before being carted off for crucifixion. Under these psychosocial circumstances he would have been peaking in metamorphosis and in supreme autonomic shock. Bleeding from the pores could be explained by acute stress producing free radical oxidation damage to the lysosomal sacs in his cells. This punctured the lysosomal membranes releasing enzymes into the cell. Whereupon they proceed to digest through that cell, and neighboring cells producing more free radicals as they go. This combined with high blood pressure, and other normal attributes of high stress such as increased heart rate and sweating, it is easy to see

how this phenomenon occurs. Both high free radical and high acid conditions would tend to break the membranes of lysosomes spilling their catabolic enzymes into the surrounding tissue.

A successfully adapted metamorphosis results in a subtler, more efficient body and youthful appearance. If increased free radicals means that the collagen of the body will invariably be attacked and cross-linked then why is it that kundalini leads to a relaxing of the connective fibers of the body? The answer may come from cancer research: *"An increase of free radicals could break down the barriers that hem cancer cells in. In most areas of the body, cells and tissues are held together by collagen—a fibrous material made of protein. The University of California's Bruce Ames theorizes that free radicals and ROS could activate latent collagenases—enzymes that break down collagen. As these enzymes dissolve the collagen glue, local cells and tissues would separate. Cancer cells could escape and move easily to other areas of the body."* 91 Hari Sharma, M.D., Freedom From Disease. Note that in the above quote by Hari Sharma the body becomes "unglued" under the influence of increased free radicals and collagen dissolving enzymes (collagenases). This undoubtedly would make the blood-brain-barrier more porous, plus increase diffusion of chemicals between the central nervous system, cerebrospinal fluid, lymph and the blood.

When faced with danger, after the initial fight-or-flight response of the HPA axis backs off the immune system comes on with avengeance. The immune cells spew free radicals into the surrounding tissue as well as using them internally in their job as janitor. The immune cells engulf and digest inferior cells that cannot cope with the increased free radical load. This removal of the weak and old makes way for the new cells to be constructed at a higher energy level, using the building blocks of the old cells. The butterfly is thus born from the gestating pupae.

The release of free radicals and collagenases (collagen digesting enzymes) from macrophages and neutrophils can result in widespread cell damage, amounting to pervasive cellular inflammation. Also while fighting, the macrophage cells release interleukin-1 which travels to the hypothalamus and increases the body temperature, this mechanism for generating fever disables bacterial reproduction. The increased heat helps to eliminate the body's microbe population to free up the immune system for the work of reconstruction. Eric Van Winkle (Toxic Mind Theory-BOK2) says that these lysosome enzymes degrade proteins, nucleic acids, mucopolysaccharides, fats and glycogen, but they do not degrade catecholamines, serotonin, GABA and amino acids, and so during the detoxification crisis these substances flood the synapses. See more on how the body catabolically dissolves and recycles itself in Autolysis—Self Digestion. There are some suggestions for the blood sweating phenomena in High Pressure Symptoms.

KUNDALINI IN DIAPHRAGM AND THROAT

Breathing is the key to the successful integration of kundalini. During an awakening it's hard to breathe sometimes, perhaps due to hyper or hypo-activity in the vagus nerve, especially during heart expansion periods. Also histamine release during panic attacks prompt nitric oxide to plump up the air passages making breathing laborious. The breathing difficulty always arose at the same time as the panic states for me. But rather than find it a source of "pathology" I interpreted it as Spirit forcing me out of the house to go for long fast walks. One walk I encountered a form a fish breathing in which I kind of breathed in and out at the same time. As kundalini passes through the diaphragm muscle one can feel the tension between the former contraction and the relaxation that has begun in the connective tissue of the diaphragm. This change strikes at the core of one's being and every breath during this ordeal is a reminder of "love or death," surrender or decay. I felt it as a host of heavy black bats hanging from my diaphragm for several days; and I got through it by walking long distances while deep breathing and chanting "love or death."

In the initial stages of an awakening you might find yourself fall into an episode of spontaneous breath of fire; that is rapid panting breath for half an hour or so. During the peak, kundalini moving through the diaphragm usually is associated with a panic attack. This is no doubt a period in which the sympathetic nervous system becomes dominant forcing a faster breathing rate, but histamine release reduces the free intake of air. These breathing-panic events may occur during each metamorphic cycle of the peak years. Then once substantiation has progressed this breathing angst disappears and breathing deepens with the relaxation and sensitization of the diaphragm muscle. This relaxed breathing feeds the Self and not the ego and thus tends to stabilize the evolutionary changes. After peak/angst cycles the movement of kundalini through the diaphragm creates profound joy and a bubbly, tingly laughing effect. Usually in association with kundalini moving through the digestive system and lungs around the months of September-November.

Activity can be modulated in the brain hemispheres by breathing through the opposite nostril. If you want to increase left-brain function close the right nostril, or to increase right-brain function close the left nostril. Specifically for the lungs you could try Alpha Lipoic, L-carnitine, Essential Fatty Acids, N-Acetyl-Cysteine (NAC). Use the leaves, flowers and seeds of borage and you will find it to be a Godsend for normalizing and calming. Make teas of borage, chamomile, elderflower, lemon balm, marshmallow, mullein and peppermint. Eat bioflavonoid rich foods...spinach, berries...think max color.

LOOSENING THE GRIP

If there is tightness in the chest you might try to put a heavy weight, or a hot water bottle on your diaphragm area and breath into it to try and shift the chemistry. Also the Primal Release Pose in the Kundalini Skills section relaxes both the psoas and the diaphragm at the same time, this might be just what you need, it

is truly remarkable as is CMR. The Primal Release Pose and the Cardio-Muscular Release technique will help take contraction out of the diaphragm and rewire the vagus nerve/medulla area. To get that spontaneous Ahhh breath the Inner Arts of the Pot of Gold and Opening the Mouth of God help to reset the nervous system…it can take a full half hour of applied relaxation before you get a deep spontaneous Ahhh breath. Besides these any emotional release work would help, both cathartic and quiet; plus breathing techniques such as Holotropic breathing. Also you could try what I call "flying," which is to lie on your back on a bolster about 8" thick put under the back of the chest—put your arms out and relax your breathing into the pose.

A consistent practice of singing, toning, chanting, mantra, humming and growling will help to loosen the diaphragm—and detoxify the central nervous system. Doing these near a river or waterfall greatly amplifies the effect, and if you are having persistent trouble with breathing, you might consider buying a negative ion generator for your home. Running and other aerobic exercise will give you more lung volume and give the diaphragm mechanism more energy to relax itself with. But the most natural solution for me was long breathing-walks "in nature," preferably around flowing water. Also keeping adequately hydrated will relax the diaphragm because then the diaphragm is not trying to conserve loss of water from the lungs. If you are still having trouble breathing you might have hyper-histamine levels so check out the antihistamine measures in the histamine section and adopt a non-allergenic diet.

Our vegetative and social faculties are tied together through the old and new vagus nerves. So retraining the vagus needs to incorporate a form of social-therapy and what is social-therapy if not loving-relationship. Healthy relationship or "intimacy" with others retrains the vagus. Thus some sort of social/relationship training that helps us to form loving bonds with others will reform our social wiring and permanently relax the breathing mechanism. Because we primates tend to get more stressed out over relationships than anything else, learning how to relate in a healthy manner is fundamental to good health and longevity. *Healing is growth beyond patterns of disease.*

KUNDALINI THROUGH THE THROAT

Kundalini opening up the throat area can be mighty uncomfortable. The Inner Arts and Skills in this book will help. You can lessen the choking in the narrows by doing CMR/Neuroemotional Reprogramming on your solar plexus, with plenty of breathing into the belly (hara). Focus on making a jumper cable between your third eye and the heart, you can do this with your hands during a CMR type session. Opening the Mouth of God and The Pot of Gold will also facilitate the opening of the throat area (see all these techniques in the Inner Arts section.) Also tapping your thymus gland rhythmically throughout the day, and doing heart to throat jumpercable with your hands also. Do plenty of stretching, singing and toning. Group encounter or confessional groups similar to 12 step programs, where each person gets to voice their say will help enormously. As the throat starts to open there is a psychological need to de-repress ones vocal faculty and learn

to speak in the moment with greater truth—finding our true voice. Any kind of physical exertion will also help. Try a ginger root tea with honey in it, for ginger often causes throat contractions, so the forced stimulation might help you to move through the phase faster. I needn't say that toning, singing mantra, growling and any sound techniques are essential to releasing the throat. The Primal Release Pose is very effective for releasing painful energy blocks in the diaphragm and throat.

As the Solar Heart first starts its circuitry connections you can get pain in the thyroid throat area for several years...breathing is the key to handling and facilitating this. Use CMR on the area placing one hand on the right side of the Heart and the other on the throat. Send consciousness into the area through the brainstem and mind's eye, with the breath slightly throaty while focusing on "Joy" at the nostrils. Doing this will facilitate growth of the Solar Heart even if you do not have the throat pain. Work on the solar plexus a little as well while doing this throat work as you need to substantiate any healing or growth in other areas through the enteric brain.

Continuous Breathing—A type of regenerating breath that is good for energy integration during panic attacks, ecstasy and heart expansions is Fish Breathing. The mouth is completely relaxed and open like a fish; you breathe gently at medium pace in and out of the mouth without a pause between in and out breath. This is especially effective while walking. This continuous, non-pause breathing can be done through the nose also when needing more focus and brain power during peak kundalini activity. For maximum effectiveness make the in-breath nasally and the out-breath throaty.

Books with exercises and practices include Allan Saltzman's two wonderful books *The Healing Way* and *The Belly and Its Power*.

Mantak Chia's *Chi nei Tsang: Internal Organs Chi Massage*.

Breathwalk: Breathing Your Way to a Revitalized Body, Mind and Spirit , Gurucharan Singh Khalsa

HEART EXPANSIONS

"Thinking hard about subtle energy seems to lessen its influence while just being seems to make its influence stronger." Paul Pearsall, The Heart's Code

I use the term "heart expansion" to describe the escalation of the kundalini heat and associated Heart opening above the normal ecstasy of the initiated heart. For me heart expansions last around 1-2 weeks and tend to coincide with new or full moons, at any month of the year. They are definitely more cosmically orchestrated rather than socio-stimulated, as you will notice other people going into altered states around the same time. To a large degree the movements of the sun, moon, seasons, the bodies within solar system and the space/earth weather influence our social dynamics as well.

The heart then the nervous system are the first things to form in a human embryo. At 5-9 days the heart begins to form and the foundations for the fetal brain, spinal cord, and entire nervous system are set in place. By 10 weeks the heart is completely developed—the organism is developed within the field of the heart. As the dissolution progresses one can assume that the heart muscle itself is relaxed and made more permeable to energy to the same degree that the neuromuscular-skeletal system is decontracted. The heart being a holographic representation of the entire neuromuscular-skeletal system. As the heart starts to experience this "new space" it would go through contractions and expansions which in effect feel like gravity warping and crushing.

"…about sixty to sixty-five percent of all the cells in the heart are neural cells which are precisely the same as in the brain, functioning in precisely the same way, monitoring and maintaining control of the entire mind/brain/body physical process as well as direct unmediated connections between the heart and the emotional, cognitive structures of the brain. Secondly, the heart is the major endocrine glandular structure of the body, which Roget found to be producing the hormones that profoundly affect the operations of body, brain, and mind. Thirdly, the heart produces two and a half watts of electrical energy at each pulsation, creating an electromagnetic field identical to the electromagnetic field around the earth. The electromagnetic field of the heart surrounds the body from a distance of twelve to twenty-five feet outward and encompasses power waves such as radio and light waves which comprise the principle source of information upon which the body and brain build our neural conception and perception of the world itself." Joseph Chilton Pearce
www.ratical.org/many_worlds/JCP98.html

Joseph Chilton Pearce says that the EMF of the heart can be measured up to 15 feet from the body. Yet the "immeasurable" scalar-healing energy field emerging from the heart would perhaps also be formed in a torus shape (toroid is a doughnut-shaped object), but this field would be many times larger than the electromagnetic field itself. The metamorphic awakened heart is more sensitive and responsive to the vibratory condition of the body and environment and the bodymind is dismantled and rebuilt within this new greatly expanded and amplified heart field.

Heart expansion occurs along with intense love, bliss and weakness in the arms. The heart expansions and grounding are also associated with fatigue because the heart's field becomes so huge seems like it pulls one into the ground. This grounding is actually caused by temporary parasympathetic dominance which inflates the blood vessels and lowers blood pressure. The grounding can be so severe that it is really difficult to put one foot in front of the other in order to walk. This fatigue is dealt with through grounding the entire spine by lying on one's back on grass. Also by walking on grass, repolarizing around running water and in nature, eating greens and avoiding stimulants. Whatever aids grounding and repolarization will reduce the fatigue!

At this time one is intuitively called to spend as much time as possible outside under the open sky and in nature because the electromagnetics of this event need to occur in communion with the planetary field and nature's energy fields. Being inside buildings at this time you will feel cut off for your true nature—the heart expansions will demand that you be outside. The metamorph proceeds when we are connected to the earth's energy and the sun. You could say that we lose our soul in buildings. After the body has grounded, the heart now freed, sours out of the body as though painfully breaking through the chest. To relieve the pain of expansion one needs to thump the thymus gland on the sternum like an ape, and this relieves the pressure. The thymus gland under the sternum wakes up significantly; this could be part of the huge expansion and energetics of the chest that is felt during an awakening. I have yet to scientifically verify this, but I am sure that the thymus is retraining white blood cells in their transmutational function.

Entrainment represents the integration or harmonization of various oscillators, creating a blending of various rhythms. The amplified heart field and the associated heart-brain entrainment is probably the cause of the increase in ESP, insight, higher states of awareness and supersensoral abilities that are prevalent at this time. The amplified heart and the opening of new areas of the brain, or the new synergy of parts working in greater unison, leads to a melting of the former being and a surrender to the bliss of transmutation.

The morphic field around us that is generated at this time of transformation is probably the largest it will ever be in our lifetime. This maybe a major factor in outer body experiences and ESP. Extrasensory means that the senses are so amplified that it "seems" like ones consciousness is "out there." Ones sense of self is so radically different during kundalini I call it "super-sensoral" or experiencing the supernal realm. There is such an unprecedented relaxation of heart, muscle and nervous system that one no longer feels confined to the body, and ones feeling self seems to extend beyond the body allowing us to "feel" others from a distance. I could never figure out if the remote sensing of special individuals in our home range was due to these supernal senses or whether it was due to the amplified precognition of our own timeline. Perhaps it is a bit of both, having celestial supersenses in both space and time.

In a healthy individual a delicate balance is achieved between vasoconstriction by endothelin, calcitonin etc… on the one hand and vasodilators nitric oxide,

prostacyclin etc… on the other. These two modes of expansion and contraction constitute the kundalini path as it hyperboles from one extreme to the other…giving the expansion/contraction gravity warping effect. It is apparent that expansion phases where there is an influx of spirit, a relaxation and euphoria are associated with the circulation of vasodilators in the body. The dilation of the blood vessels lowers blood pressure and this increases fatigue—heart expansion and gravity expansion periods are always associated with fatigue and the urge to go to ground. Some of the agents that facilitate this vasodilation would be histamine, serotonin, acetylcholine, nitric oxide and even endorphins themselves. Studies found that arteries in an actively contracted state were dilated in a dose dependent manner by enkephalins and morphine, due perhaps to the presence of opiate receptors in the vessel walls. Another vasodilator is Adenosine, which plays an important role in biochemical processes, such as energy transfer—as adenosine triphosphate (ATP) and adenosine diphosphate (ADP)—as well as in signal transduction as cyclic adenosine monophosphate, cAMP. If energy production goes up in the mitochondrias during kundalini, Adenosine might be an important promoter of the expansion phase. When adenosine enters the circulation, it causes an increase in coronary vasodilatation.

In order to bring the body back to equilibrium after the expansion phase the sympathetic nervous system kicks in to bring about vasoconstriction. This contraction phase is associated with gravity crushing, panic, hypervigilance, desire for movement, and emotional stress. The agents of this phase include vasopressin, adrenaline, the catecholamines: epinephrine, norepinephrine and dopamine; antihistamines and caffeine. This serves to increase heart rate, blood pressure and raise blood glucose. Endothelin is a vasoconstricting peptide that plays a key part in vascular homeostasis. It is one of the strongest vasoconstrictors currently studied. Found in smooth muscle and endothelial cells and is instrumental in increasing the discharge of sodium through urine and the production of urine by the kidney. It also stimulates Nitric oxide (NO) release to redilate vessels and mediate vascular homeostasis. Overproduction of endothelin can cause lung artery hypertension. Prostacyclin is a prostaglandin produced in the walls of blood vessels that acts as a vasodilator and inhibits platelet aggregation. It is used in the treatment of primary pulmonary hypertension.

Prostaglandins are another important factor in the regulation of vascular homeostasis. Prostaglandins are a large group of fatty acids that regulate cellular processes, where they are produced. They are not stored but are produced as needed by cell membranes in virtually every body tissue. They may also act as messengers for hormones, in that the hormone binds to the cell, increasing the levels of prostaglandins, which activate a specific cell process. They participate in a wide range of body functions such as the contraction and relaxation of smooth muscle, the dilation and constriction of blood vessels, control of blood pressure, modulation of inflammation, glandular secretion and Ca movement. One such substance, which stimulates contraction of the uterus, is used clinically to induce labor. Prostaglandins also control the substances involved in the transmission of

nerve impulses, participate in the body's defenses against infection, and regulate the rate of metabolism and cell growth in various tissues. Histamine stimulates prostaglandin release, which increases vascular permeability, producing a range of affects on brain function and metabolism. Several prostaglandins have been shown to induce fever, possibly by participating in the temperature-regulating mechanisms in the hypothalamus. The fact that aspirin and other nonsteroidal anti-inflammatory drugs have been shown to inhibit prostaglandin synthesis may account for their usefulness in reducing fever and inflammation.

PULL FROM SKELETAL MUSCLES

With the heart expansion of February 2007's full moon, I realized I had not built up my body's nutrient resources enough. Thus the monthly heart expansions were literally drawing amino acids (arginine, glutamine, taurine) and glucose out of my skeletal muscles in order to feed the heart expansion. And because my reserves are inadequate the rest of my frame goes into deprivation mode. Each heart expansion period would be accompanied with painfully weak arms, a sense of pain and weakness in the buttocks, fatigue and grounding.

I turned my awareness on the big-draw in my skeletal muscles and remembered that this has been happening every full moon now for 6 months or so at least. About 5 days prior to a heart expansion period there was a drain on nerve energy resulting in ticks and pulsations of muscles. Then 3 days prior to full moon I can feel the heart start to power up, with associated loss of strength from the arms and gluts. Plus I can feel what probably amounts to amino acids being removed from the skeletal muscles of the gluts, making them weak and sore. My theory is that the body was harvesting the amino acid glutamine and arginine (and possibly taurine) to convert to the neurotransmitter glutamate, glucose and nitric oxide in order to fuel the heart expansion around the full moon.

March 2007 was a very parasympathetic opening moon...it didn't suck the nutrients from my skeletal muscles so that meant the nutrient saturation with my smoothies worked. However it blew my cardio system so wide open I had to spend a day in bed, and have been on go-slow for 5 days. It made me realize I now need to really build up the strength of my cardiovascular system with aerobics (running) in order to withstand the fluxes and flows of the cosmos. A silicon rich diet is important to endure heart expansions also both in improving nerve transmission and increasing the elasticity and tone of the blood vessels. I also find catnip tea useful for helping the mind to surrender, for psychological resistance to the expansion will create a tension differential.

By the late July heart expansion I had saturated my reserves through nutrient dense greens and superfood smoothies, so I only felt a little sleepiness rather than fatigue with the heart expansion. There was no sense of "drawing" of nutrients from the skeletal muscle. However, because the increased nutrition allows the heart to sore higher, I found I needed to moan, groan and use panting breath to accommodate the largeness of the heart. (A reminder that lying on the earth will help you to endure the times when the heart is most intensely blown open.)

During the peak we tend to flip from one mode to its opposite, but after many years there is not such an obvious flip into contraction after opening, for you barely notice any descent within the background of permanent ecstasy and heart expansion. I found that in the latter stages of the alchemy I do not go into sympathetic drive for crucial scary or stimulating events, but into parasympathetic. **Parasympathetic overdrive** involves: grounding, expanded blood vessels, great weakness in the legs, slowness in moving and the heart feels like it is falling into the ground. This happens automatically and the state will persist in directly in relation to the subconscious charge generated by the stimulating or provocative event or cosmic influences (such as an eclipse, new moon and equinox occurring simultaneously).

This second half of 2007 I am going through mourning heart expansions... where the heart is dropping into the enteric brain (solar plexus). It is delicious but laced with deep sadness of helplessness over our current human predicament. In the evening the expansion lifts to a more of the ecstatic side of the equation. At night in bed my heart wanted to soar open to new heights, but each time it flexed the guy downstairs would snore loudly. The opening heart loves whatever is there. If there is grief, anger or fear there, the expanding heart melts sweetly into that. The Heart (solar heart expansion) moves down into the solar plexus in the last few months of the year coming up to winter solstice and the enteric brain tells it like it is. The emotional solar plexus brain doesn't confabulate reality as the head can do, but presents us with the raw reality of our inner existence.

Females tend to get weepy and whiney toward the end of a heart expansion period. Heart expansions tend to blow your expansion adaptive functioning so loss of left-brain faculties does produce depression. But there must be some specific chemistry with the aftermath of excessive heart opening, perhaps to do with serotonin levels, the loss of dopamine and maybe reduction in norepinephrine…and perhaps after the long exposure to endorphins (amrita) a tolerance point is reached and the neuron reuptake mechanism is overwhelmed with neurochemicals which creates a temporary neurotoxicity. And this produces the lack of brain function and the whining. Why females whine more than males I don't know. Males must have different dopamine wiring, or be more efficient at clearing their brain chemicals. Or perhaps they don't have heart expansions to quite the heart rendering level due to less oxytocin. If large amounts of oxytocin are released during heart expansion, as it is in childbirth, then any deprivation of cuddling and intimacy is going to show up as a pretty major depression. I notice the parasympathetically expanded heart does tie so intimately into the social arm wiring, that it is literally painful not to hug someone. Or it could be that it is the serum estrogen and testosterone levels which determine whether one whines after a heart expansion or not. Opening is hard work, perhaps that is it, perhaps we just don't like to be opened beyond our comfort level when our adaptive faculties have gone offline. Anyway the moral of the story is that to follow your cycles in association with the annual/monthly moon/sun cycles and prepare for heart expansions. To maintain meta-adaptation and higher testosterone we need to be cardio-aerobically fit. Then the exhaustive/

depressive downside of a heart expansion will not be so extreme. You may not be able to run during a heart expansion, but run on those days that your heart is more normal, in order to condition both the heart itself and the brain toward more yang chemistry and mastery.

As the Solar Heart grows, during a peak heart expansion you might notice waves of intense physical heat coming off your heart…along with full-body heating. Simultaneous with this heart-wave heat I also had intense heat arising from my shoulder joints. That day I ate some cooked peanuts and the next morning my shoulder joints were painful. So I recommend you stay clear away from cooked, processed or damaged fats during the extreme heating periods of heart expansions, or active kundalini in general. For these fats just add to the oxidative load and contribute to inflammation—not transformation. As a general rule the hotter the kundalini heat we are experiencing, the more careful we have to be to not include cooked carbohydrates or transfats in our diet, and to increase our antioxidant intake.

"Inner harmony requires a person to think with the heart as well as to feel with the brain." Maria Szepes*, The Magic of Everyday Life*

A TOLERANCE FOR BLISS

The hardest thing to actually handle is the "pleasure" of our own emergence.

The ecstasy of Kundalini occurs at the cellular level as well as the extreme pleasure of love in the heart region. Various regions of the body such as the left-brain, belly, the left side of the body, pelvis and the sex organs can also undergo periods of radical bliss satiation lasting for days to a lifetime. There is the feeling of saturation of the tissues with ambrosial honey through the veins. It is like constant lovemaking with God. During heavy bliss periods the brain is lit up with the light of kundalini and you can see the biophotons lighting up the irises of the eyes and illuminating the skin. During the parasympathetic stage of a heart expansion the blood vessels are so opened that blood pressure is lowered, the arms loose strength, movement is slower and you feel pulled into the ground. Some days the ecstasy can be so extreme that all you can do is lie around reading, and get around very slowly.

The Greek meaning of ecstasy is to stand outside oneself. To stand outside oneself and thus turn subject into object is Samadhi. Ecstasy means 'to stand outside the ordinary self' through unification with the numinous or God, via the direct experience of Divinity. The experience of divine union can not be translated into words, but it is the basis of all religion and spirituality the world over. We can in describing this ineffable event only communicate in symbol, word and metaphor...and thus we create our religions and myths. People have been trying to express the ecstasy of Divine Union ever since they first encountered it. Here is some words that attempt to describe ecstasy: Grace, beatitude, blessed, delirium, ebullience, elation, enchantment, euphoria, exaltation of the cells, full-gladness, glad-fullness, complete, gone, happiness, heaven, inspiration, intoxication, joy, paradise, rapture, ravishment, rhapsody, trance, transport, twilight zone, scintillating transcendence.

It is ironic that in the beginning of our adaptation to ecstasy we can end up feeling "poor little me" and isolated. So one ends up asking, "Well just how IS one supposed to deal effectively with ecstasy, instead of suffering from the awesome power of so much pleasure?" Even though all spiritual practice and religious motivation is a step in the ecstatic direction, nowhere are we told exactly how to tolerate the "prize" when we get it. I realized there is only really a problem if I try to stay as small as my normal egoic self. You see, that much energy and Presence trying to fit into the tiny vessel of my defended-wounded self is what causes the angst of ecstasy. The small self tries to hang on for dear life as the current of bliss is blasting it away.

As the years pass our system can handle more bliss without reduction in brain function or loss of lucidity. The greatest spiritual challenge is engaging the bliss with the intent to let it wake us up rather than become less conscious. The ecstasy of the incarnation of Presence is difficult if approached with an unconscious lack of piety or ungrateful attitude. It might be that each successive Heart expansion period renders the ego less and less resistant to Spirit's force simply through

progressive loss of the habit of unconsciousness. The intensity of the pleasure literally commands surrender, and it is very apparent that conscious-will must be "actively" engaged throughout the Heart expansion period to accept both the pleasure sensation of ecstasy and the presence of Presence in the bodymind as well. During such periods of rapid incarnation we cannot simply passively open to Spirit and be filled by it, but we must be "actively" bailing out in order to make room within us. Plus we must apply conscious-will to "WELCOMING" Spirit's emergence, that is to end the internal violence and have a loving appreciation for Spirit—our own included, seeing the world and our self with soft, loving eyes. Accepting ecstasy becomes therefore an agentic act of devotion and gratitude; in fact devotion might simply BE the active allowing of ecstasy.

It is when we meet Spirit with hesitation, agenda, resistance, divisiveness, rebellion, lust, usury or any other ulterior motive that the tension of extreme pleasure becomes intolerable. Just as when we greet another person with these kinds of egoic attitudes. To avoid this we must maintain the correct stance (koroko gamae)…to actively voluntarily surrender to the pleasure of consciousness…to embrace it and not back away from it or attempt to use it for lower purposes. If we are passive toward the enormous overwhelming influx of Love and Light during ecstasy then we will feel self pity even in extreme rapture...until we take up an active Will in order to receive this unbridled pleasure. Self-pity is not bad, it is just the weaker side of compassion; it is the first sensing of the harm or deprivation prior to taking up ones Will to doing something about it. If however you simply stay in self-pity as a general state then you are stagnating the natural growth process and are living in bad faith.

Calling this kundalini force Dionysus is appropriate for it is like being taken over by a blissful spirit that is not interested in reading or writing or in maintaining a solid sense of self. It's only interested in "Being." One day I was just beginning to wimp and then I remembered Dionysus. Dionysus is the ground of consciousness prior to the conditioned mind (Apollo). On making this distinction conscious, I realized that when Dionysus turns up one is just supposed to Be the ground of consciousness, and to not try furiously to hold onto our conditioning (Apollo). For the way to achieve a higher more capacious Apollo is by fully surrendering to a deeper Dionysus! If we hold fast to the 1% as the be all and end all of consciousness, then we forfeit the other 99% of the vast reaches of awareness that constitute the sub and super of the ground of consciousness itself.

Other than the obvious practical methods for metabolizing extreme chemistry such as breathing, circulating energy, grounding, taking baths, drinking plenty of water and such, there is a need to widen the size of the vessel by circulating the energy to others. If we try to keep the ecstasy contained within the narrow confines of our body and normal personality we run into great difficulty. As soon as we make an effort to widen the circumference of self then we have more room in which the energy can flow and the pressure and isolation of extreme states of ecstasy are relieved. Anything is endurable if we widen the vessel enough. Though I am still not brave enough to ask "Bring it ON Spirit, I can take all you've got to give."

NO WAY OUT BUT THROUGH

We cannot whine about the injustice of persecution and the non-understanding of those who are uninitiated and have no idea what it is like to have an actively transmuting body. We must instead return our focus on the singular privilege we are given to experience kundalini, the expansion of consciousness and ongoing ecstasy. We must therefore "grab the bull by the horns" and positively embrace our chemistry, no matter how inconvenient or socially incongruous it might be. In this way we protect our primary metamorphic chemistry from the perversities of living in an unilluminated culture. Eventually every human will be lit - it is just a matter of time. Thus to handle whatever we are going through we must see things from the largest possible perspective and know that we are doing "The Work" for all humans and all life. Swami Muktananda in Kundalini: The Secret of Life reminds us of the "largest" picture: *"The Kundalini creates the universe out of Her own being, and it is She Herself who becomes this universe."*

If you are having state or emotion difficulty, first be grateful for the "kundalini" and breathe into and release whatever you don't like about your present condition. This will raise energy and get you beyond-where-you-are-at faster. Just being in ecstasy is not enough…we need to explore the essence of our social dynamic and learn new ways of behavior and response with regard to others, and our place in the world. For this we need to see through an *expanded lens,* which takes into account and integrates the dynamic conditions of animal chemistry, primate sociology, archetypes, empathy, psychology and spiritual purpose or stance, direction and "the well-being of all life."

"The happiness of the individual is inextricably linked to the well-being of humanity as a whole, in part because we are social animals which find meaning in relationships, and because cultural progress benefits everybody who lives in that culture." Wikipedia, The Meaning of Life

Rather than going the lower road of unconscious conformity to society in order to feel a-part-of, what this ecstasy period showed me was that we can actually be more gregariously intimate with Other through embracing our Presence and extending it "out" by sharing the Juice! That is, the source of our social being changes from the mask and shield of the automaton with its projection of attraction and aversion, to the sharing of a prior unity and a joint participation in the Mystery. We stop looking for "differences" and simply participate. Since we are "vessels of spirit" we can only find ourselves and be ourselves in relation to others for we are socially wired creatures. But at the same time we must be differentiated and transcendent of the social realm through divine umbilical to the universal. If we were not adequately bonded with our initial primary caregivers a kundalini awakening gives us the opportunity to die and regrow toward a higher form of bonding with humanity at large, through progressive loss of our defenses to pain and deprivation. Ecstatic love undoes all that the ego tries to protect and sustain itself with. With Heartfield expansion we can become wired for spiritual communion and community.

That the ecstasy of incarnation is not solely for us gives a new spin on the meaning of responsibility...responding to Spirit. Spirit keeps turning up the volume on the bliss dial until we get it. That we are a "vehicle" for Spirit and that Spirit is driven to merge with itself through amplification of its force. If the "work" of Spirit is for the collective anyway, then at some point we should be able to say "Yea Spirit, bring it on, give me all you've got so I can spread it around!" You might find that dogs bark at your heart expansion energy, for it vicariously inflates their heart field. Humans and all living creatures respond unconsciously to a radically magnified heart field, sometimes not always positively.

Despite the fact that Divine Union is the reason and goal of all religions, even so ecstasy is still apparently a dangerous subject when it comes to establishing and maintaining the power differential in the workplace and community. For ecstasy constitutes social emancipation and freedom from destructive social codes and power structures (what I call Baboon Politics). Because it is not "normal" for someone to be in radical ecstasy in a daily life setting, be careful who you tell. Generally while we are actively sharing the pleasure of our ecstasy and Presence with others we cannot "let on." We cannot put a crack the cosmic egg of normality and expect others to still participate...thus we must bridge worlds! Massaging others while you are in radical heart expansion-ecstasy is generally not a good idea, for the blood pressure is too low with the expansion of all the blood vessels and heart... and there is no strength in the arms anyway, coupled with the slowing and fatigue generated by this expansion period.

In Christian theology, **Kenosis** is the concept of the 'self-emptying' of one's own will and becoming entirely receptive to God and his perfect will. It is used both as an explanation of the incarnation, and an indication of the nature of God's activity and condescension. It just might be that a female can be affected by a spiritual male more so than the other way round. Perhaps because a female's brain is more functionally diffuse, with different areas able to take on the tasks of other areas, while male brains are more specific and localized. Since a females brain is wired to go unconscious during sex, and since kundalini is similar to sex chemistry but greatly magnified, this means that a females awakening might biochemically exhibit a more fundamental form of surrender which the male body is unlikely to ever experience.

BLISS AND THE RELATIVE DOMAIN

*"Society cannot allow ecstasy. Ecstasy is the greatest revolution…If people become ecstatic, the whole society will have to change, because this society is based on misery."*17, Osho, *Body Mind Balancing*

The bliss is a permanent background which is impervious to both suffering and pleasure. The bliss is all pervasive. That is we can be in the worst physical or emotional suffering and still be in radical bliss. Then on top of the bliss there are emotions, desires, suffering, numbness, anhedonia and whatever our relative response to life is at the time. I have humorously proposed a bliss scale from 1-10. With 10 being when one is in a catatonic-like state due to extreme ecstasy.

I would say kundi-actives hang out between 8-10 on the bliss scale. Both the bliss and ecstasy of kundalini are NOT a mood, but are the pervasive state of the bodymind. Within this moods might occur such as happiness, depression, sadness, anger, fear and all the other emotions, however they all occur within the context of all pervasive ecstasy. Ecstasy is the normal state of a human when the light of life is flowing through the cells. Bliss is the natural state. Thousands of years of Western culture however prevents the full flow of light and ecstasy except in those few who pop.

Desire to some extent is reduced once kundalini has been working on the body for many years and a state of permanent bliss or ecstasy is reached...but desire is not a problem unless you use it to destroy your life and body...in which case it is the lack of "wisdom" that is the problem not desire. The most useful thing about moving between the grace of ecstasy and then coming down to mortal flesh again, is that the contrast allows us to consciously work on the painbody. It is like being plugged into the universe, having the plug pulled and then having to work to replug oneself back in. In my experience destruction and creation happen in cycles, but like the yin/yang symbol, each part of the hyperbolic curve of growth and decay has a bit of the other side in it as the seed-form of the other. One example of these cycles is that each period of ecstasy will result in a corresponding revelation in the painbody, which must be entered into with the mind's eye and heart in order to stabilize and integrate the light into that area.

Thus the light seeks out and presents to conscious awareness that which is holding back from full inclusion in the perfect communication—communion of cells of the organism-total. We establish a condition of permanent ecstasy as the light of Spirit increasingly transmutes the body removing all blockages and deficiencies to its perfect flow. We learn how to conserve Spirit's energy and order (syntropy) through abeyance to certain thoughts and behavior. Know that we can never know the whole of reality in the moment, but reality unfolds like a Chinese box with the internals becoming ever more fundamental and profound, revealing ever deeper layers of conditioning and ignorance to be carted out of the way.

It is perfectly ironic that ecstasy becomes the hardest spiritual task. It gets far easier in time as the nervous system and biology rewires, but you have to be determined to get more "lucid" with it, rather than merely using it like an anaesthetizing drug to avoid your existence. This is one of the reasons why being Muse-driven is absolutely essential to the spiritual path—in fact being Muse driven IS the spiritual path. Without somewhere specific and substantial to put the largeness and profundity of our emergence we are lost! As the heart-brain connection becomes stabilized our periods of ecstasy no longer disrupt cognitive function, but enhance it to the point where we can live in perpetual illumination, that is one with the Muse. At this point it means we are basically an Adept...however living up to that enormous Grace is the next challenge and doing something substantial in the world other than mere theorizing.

(See Quantum Mind BOK-2 for more on handling ecstasy. The next book in my kundalini series includes a Lightbody herbal formula for enabling the metabolism of bliss without reduction in lucidity, thereby gaining spiritual "mastery.")

INNER-CONJUNCTION

"As Kundalini moves up through the sushumna, She transforms the body and makes it fit for spiritual sadhana; it is only after the body has been purified that the Shakti can work with full force." P. 28 Swami Muktananda, Kundalini, The Secret of Life.

The **inner-conjunction** is the most intense kundalini experience when it feels like thousands of volts are tearing through one's system. There are many ecstatic experiences during a kundalini awakening, but the shooting up the spine and its associated "Silver Cord" or "Sex with Eros" is the most extreme experience one can endure energetically. I haven't found a name for it in Western literature and no corresponding Eastern name so I call it the inner-conjunction. I liken it to 10,000 orgasms pouring through every cell of one's body and gushing out the top of the crown, threatening to explode one's head. I say that it is **10,000 orgs** up the spine to convey its huge quantum jump from the normal experience of our body. Thus in this book you will see me refer to the charge of the Inner-conjunction as 10,000 orgs. But if someone did actually have the equivalent of 10,000 orgasms all at once it would kill them instantly. The degree of ecstasy is inexpressible, other than to say that every cell in the body is lit up with God...with bliss in the extreme. Both males and females experience the inner-conjunction as the "peak event" of an awakening or a lifetime. I have had 4 of them...one spontaneous blast out of the blue completely not knowing what it was, one dark night version corresponding to this first one. One Sex With Eros inner-conjunction with womb contractions as well, and the last one included the silver cord.

The **Sex with Eros** event is an inner-conjunction that includes genital contractions and spontaneous sexual ecstasy. Some people experience daily spontaneous extreme orgastic activity either in the whole body or parts of the body. Since inner-conjunctions are the most intense energetic kundalini experience, having this energy activate the sex organs also makes for the most intense sexual experience possible. But you must understand that because it is a spontaneous event and is part of the entire body lighting up, such an event is not sexual in the normal sense. Thus paradoxically the most extreme sexual experience possible to humans is not even sexual and it is this realization that helps one to intuit the larger purpose, meaning and direction of life beyond all our conditioned assumptions, concepts and self-centric myopia.

Men and women experience these spontaneous superorgansms, but it might be more frequent or intense in women, it is hard to say. This spontaneous "inner sex" may be linked to the mythic ideas of the virgin birth, as well as "showers of gold from Zeus" and having sex with Gods. In Eastern traditions the inner-conjunction might be confused with men ejaculating up their spine. Obviously the men are not actually ejaculating up the spine, though for some reason the Easterners interpret the event as that. What they are experiencing is the inner-conjunction...others might call this samadhi, although samadhi is usually associated with a lot of other stuff which is not the inner-conjunction. (See Kundalini Gland for more on this)

The peak inner-conjunction of my lifetime happened during the transmutation phase of my 2000 awakening, 12 days after the start of the peak-influx. This was

when enough purification had occurred such that the crown pole and the sacral pole united in what felt like a sword or silver cord penetrating the center of the spine. It is hard to say how long it lasted for time disappears; yogis work to prolong the duration of this union. After my short union I felt more my Self and more alien than I have ever been, and the irises in my eyes were shining bright blue with an inner light. I have blue irises, which have normally more brown-grey in them. But during ecstasy or inner-conjunctions there is more light photons coming through the irises themselves, so they are lit up from the inside...making them almost iridescent light blue...like the spice eyes in the movie *Dune*. It may be that the color spectrum of the light that emerges from the eyes may indeed be blue. The life-energy itself is said to be of a blue hue and ultra violet is given off by dividing cells.

This peak inner-conjunction was the only one that I had looked in the mirror within half an hour. It happened on my birthday when I was up the hill in nature, lying on the ground putting sun-heated rocks on my body. During the previous 5 days I had run through a series of **spontaneous chakra voicing** poems on the reconciliation of the sexes—starting at the power chakra (solar plexus) and moving up the chakras one poem a day. This focus on the reconciliation of the sexes helped to reconcile the positive/negative, left/right, male/female sides of myself to bring on the peak inner-conjunction of my lifetime.

The principle charge of energy is experienced as the **Silver Cord** or Sutratma. This main charge has been referred to as Excalibur as well, because it "feels" like a solid metallic shaft descending into the crown at the same time as massive energy is pouring up the body and out the top of the head. The body is paralyzed and the spine stiffened throughout the experience and this paralysis might add to the sensation of this main charge of energy actually being a solid object. Of all the metamorphic events it is obvious to the experiencer that the Silver Cord is the highest or most extreme.

Sutratma, the spiritual umbilical cord, or amrita nadi, begins at the crown chakra. The Sushumna in the center of the spine is simply the extension of sutratma. The thickness of the sutratma is said to be just a few centimeter in diameter and varies in size according to the individual's obedience to the laws of the Cosmos. Our life cord connection with the divine is determined our genius for balancing the pairs of opposites in any transaction in Nature. The fundamental tone or octave of "love" integrates the various dimensions of matter, mind and spirit. By strengthening the Qi of the Silver Cord and the consequent generation of amrita we achieve transcendental wisdom and the genius of the Muse through "Self-remembering." After a Silver Cord experience you will feel both the most alien and the most your Self you have ever been.

As far as I know with kundalini orgastic activity there is no vocalization, moaning, screaming or cooing in bliss as in normal relational sexual activity. The word orgasm doesn't really relate to these full body inner-conjunctions of absolute bliss, setting the body on fire with ecstasy that is experienced in every cell of the body. One's entire body is orgasmic with many times more energy than a normal orgasm. In fact so much energy one may think the brain is about to fuse

or explode. Willy Conjuncto has repeatedly gone in and out of inner-conjunction for over 6 hours, he has daily inner-conjunctions and is now having fully body orgasms and prolonged spontaneous orgastic activity throughout various organs and parts of his body. There may or may not be orgasm like contractions of the sex organs it depends on the type of inner-conjunction one is having. I call the one with contractions Sex with Eros. Here is an example of a male experiencing such an event:

"The wave goes down to the groin in the sexual organs. It becomes very sexual, at the same time maintaining an essence of purity and spirituality. When the wave reaches the sexual organs, I feel a push to the lower back, that is pressed towards the sky and I reach some sort of very intense " orgasm." The penis is not erected and no semen is ejaculated. But the pleasure is a thousand times more intense than a normal sexual experience." GS, a Scientist listed on the website: Archives of Scientists' Transcendent Experiences (TASTE)

Time disappears during inner-conjunctions so one can't really say if it was half an hour or 4 hours. But this climax cannot be compared to a 30 minute orgasm. There is no ego available to jump up and look at the clock and start cataloging what happened. One is incapacitated in bliss for hours after the event. After the inner-conjunction one literally feels and behaves like Jesus Christ. When motor coordination returns any stored charge or tension in the neuromuscular system has been expended so there is a great relaxation of the tissues. Hours after this hyper-relaxation we could however flip into a radical contraction, almost like it's a response to being opened too much, but it's simply the aftermath and counter play of the chemicals.

During extreme events such as an inner-conjunction (10,000 orgs) you cannot consciously direct energy because you are paralyzed and have no ego, but you can direct the normal flow of kundalini energy. For example, by drawing it up the back to avoid wimping out, or by focusing with the minds eye coupled with breathing on the solar plexus to recover some will and clarity and gain a handle on the excessive bliss. Note you can also have the chemistry of an inner-conjunction experience that involves extreme terror rather than extreme bliss. This Electric-Dark Night is the same intensity of energy rushing through the body and exploding the head, but in a "bad trip" sense. We may not have a "bad trip" inner-conjunction with every awakening. I only had one during my first because of a pre-conscious body knowledge of my fathers upcoming death, coupled with the fact that I had no idea what kundalini or awakenings were at the time. The shock of kundalini in a neophyte body might predispose us to having a dark-night form of inner-conjunction; especially if we have no idea what is going on.

I don't think that "bad trip" inner-conjunctions occur often in normal healthy individuals (in benign circumstances), because of the years of priming prior to the event and because a kundalini climax only happens during a period of maximum heart expansion when the psycho-somatic resistance that normally prevents a conjunction has been removed. An inner-conjunction sparked off by drug use, or by stressful circumstances, however could turn nasty because the bodymind has simply not prepared itself for this zenith chemistry.

In the *evolutionary model* kundalini is the mechanism of the ongoing maturation and development of the nervous system. Traditionally the symptoms are equated with detoxification, the release of accumulated nervous stress and the overcoming friction or resistance. However I think we need a comprehensive rethinking of this assumption that almost turns the idea of kundalini into a trial of punishment by fire. We normally do not think of romantic love, childbirth or death as stress release, detoxification and overcoming resistance—however these experiences do contain components of these. There are so many factors involved in the actual outcome of one's kundalini experience including: genetics, cellular strength, reservoirs of nutrients, social conditioning, exposure to spiritual practices etc…

In the *pathological model* it is assumed that the symptoms of kundalini maybe mild or intense depending on how much stress has accumulated in the organism. Stress is said to create "noise" in the system that prevents the attainment of higher functional states. That is, noise prevents the sublime syncopation of sympathetic resonances in the bodymind. The stress of say child abuse or war can create **Post Traumatic Stress Disorder** (PTSD), but if it was not for this extreme perturbation of consciousness by trauma, chances are that the individual would not experience a kundalini awakening. Thus what is seemingly "bad" can lead to great "good." This is an example of the paradoxical and complex nature of spiritual evolution.

PTSD wiring can make us more prone to pop and to pop with a big bang. But nothing gets rid of PTSD wiring, the pain body and armoring as well as kundalini…over several years it will get right in there and completely restore the bodymind to its aboriginal condition. That is kundalini will revamp us to a more pristine condition beyond the neurotic mess generated by the slings and arrows of outrageous fate. This is why kundalini breeds equanimity and transcendence… through the literal restructuring of our reactive cellular memory. During the initial stages of this rewiring however we wear our archetypes and Great Attractors on our sleeve and will generally find ourselves in all kinds of situations and relationships that push our specific buttons real well. Also since the limbic brain's usual suppressive mechanisms are reduced during the peak, we can find that our responses to triggers can be more extreme and reactionary than when not kundalini active. This too serves as a form of emotional catharsis that can last for years and which ultimately integrates the limbic brain more thoroughly into the prefrontal rational mind. Having the volume of our emotional life turned up and played out to the full during the peak results, in us gaining remarkable calm and detachment after our awakening is over.

Some may feel panic and others may feel rage as the first impulse of the creative energy of spiritual eros. The rage you feel is the firing up of the amygdala and limbic brain regions with the power of realization-energy (muse) which then makes it way into the self-reflexive regions of the brain as some form of insight, vision or illumination. To facilitate this you might want to push against walls or trees with your arms and legs during the rage/panic stage…or do some active sport like boxing, running etc…Long walks with deep breathing are better with panic. In this way your body can run more easily through its cyclic chemistry, because bottling rage or panic is very unhealthy to the system and will lead directly into

depression chemistry if not spent in forms of exertion. Rage at the tiger, then sleep like a baby so to speak.

Lee Sannella was an advocate of the detoxification model. "*In its rise, kundalini causes the central nervous system to throw off stress. The stress points will usually cause pain during meditation. When kundalini encounters these stress points or blocks, it begins to act on its own volition, engaging in a self-directed, self-limited process of spreading out through the entire physio-psychological system to remove these blocks. Once a block is removed, kundalini flows freely through that point and continues its upward journey until the next stress area is encountered. Further, the kundalini energy diffuses in this journey, so that it maybe operating on several levels at once, removing several different blocks. When the course is completed, the energy all becomes focused again at the top of the head. The difference between this final state and the initial state is not simply that kundalini is focused in a different place, but that in the meantime it has passed through every part of the organism, removing blocks and awakening consciousness there. Thus, the entire process of kundalini action can be seen as one of purification or balancing."* P.11 Lee Sannella, M.D. Kundalini, Psychosis or Transcendence.

The idea of blockages to the flow of kundalini can instead be interpreted as insufficient, immature and nascent tissue. Metamorphosis is a process of death, reconstruction and upgrading to greater efficiency at conveying energy and consciousness. Since you can have the full charge of 10,000 orgs up the spine with little preparation...how could there be "blockages." In reality there is ripeness, fruition and the resistance to that! If the nerves are ready and resourceful and person surrendered enough then the inner-conjunction will occur. The initiation spark will be lit and the inner fire will begin its transformative work.

Awakening is all about increased flow...the higher the flow of consciousness, the greater the stage/state. When there is a high degree of energy flowing in the system, ie: when the cells are producing a lot of energy, and the nerves are conveying high energy, there is concurrently a great deal of energy flowing in the body's electromagnetic field (EMF). The EMF surrounds the body like an egg, with one pole at the crown and the other at the base of the spine. One has to consult Rawls and Davis's book *Magnetism* to get a more sophisticated version of the configuration of the EMF, but for simplicities sake we can imagine it as an egg. According to **Bentov** the two poles of the EMF egg find the shortest distance between them and unite through the sushumna. Rawls and Davis 1974, say that the line of force comes out of say the right side of the north pole, goes through the equator and enters the left side of the south pole. Thus all lines of force in these field systems are in a figure of 8. And they would spiral around also, giving the appearance of spinning vortexes. Their poles are probably aligned positive-negative on the axis of the spine.

The years of kundalini priming activity purifies and strengthens the organism to allow this inner-conjunction to take place. Somehow the evolution of the nervous system inexorably leads up to this climatic event and our ongoing evolution requires it. The inner-conjunction occurs when the "noise" or diffusion of nerve energy is temporarily suspended such that all the oscillating systems can entrain

and fall into sync**.** As everything from atom, to cell to organ organizes into a perfect symphony of vibration, all energies are heightened and ordered to facilitate the spark of amplified-lasered prana/plasma through the center of the spinal cord (sushumna).

It's not as though the organism needs to be completely opened and stress (noise) free in order for the two poles to conjunct, but there needs to be a sufficient reprieve from stress, combined with sufficient charge built up, to surmount the inertial forces accumulated in the system. Once the zap occurs the higher EMF sets about dissolving whatever stress and disorganization are embodied in the organism so that a greater current of energy is able to flow freely. This temporary reprieve from stress (noise), plus excited charge is probably one of the main reasons why fasting, raw diet, falling in love, being in the presence of a Guru or taking certain drug trips can spark off a kundalini awakening.

In terms of harmonic vibration an inner conjunction is a phase locked synchronized rebounding wave with no interference, creating the maximum efficient flow of energy up the spine. The Ipsalu Formula: A Method for Tantra Bliss by Bodhi Avinasha explains wave coherence and wave interference which no doubt plays a part in the radical amplification and sympathetic resonance of the body's energy. Another possible explanation or component of the inner-conjunction comes from the work of Michael Persinger on **interhemispheral penetration**. Where a interhemispheral penetration of energy between the brain hemispheres may amplify and change the fields and flow, whereby a charge is released up the spinal cord. His work is found in the book *Neurotheology* and www.shaktitechnology.com/index.htm

THE FUTURE OF INNER-CONJUNCTIONS

There is probably no limit to detoxifying-strengthening-opening the body to kundalini. My friend Willy who in his 40's gives himself daily inner-conjunctions with the aid of his own binaural music. He is able to sustain an inner-conjunction for several hours with no harmful effects and thereby keep his metamorphic (spiritual/revelatory) chemistry moving along at a rapid rate of ascendancy. His frequent inner-conjunctions are not debilitating perhaps because he auto-initiates them with his music, and perhaps since he is a musician his system is already detoxified and integrated! What Willy has shown me is that if we cleanse and strengthen our instrument with the music of kundalini and with careful use and understanding of the energy, we can indeed transform ourselves and our lives. There is no limit or lid on our potential with kundalini. Normally I would not encourage others to escalate their kundalini, but to focus on strengthening the organism toward the natural progression of awakening to greater cosmic-unity (popping). Willy's experience makes me realize that with continued alignment and sympathetic resonance the nervous system can go into a permanent high rev state without burnout or damage. This is I think the information we have been waiting for, that the body can be aclimatized to ongoing radical chemistry.

PART 111
CYCLES OF AWAKENING

COSMIC INFLUENCES

Kundalini is the unfolding of the coil of the cosmos

Kundalini is so interrelated (nottwo) with the rest of the cosmos that trying to convey it in words and "facts" is very difficult. One can never express the complexity and interrelatedness of the exquisite sensible inevitable sequence of alchemical events. The mysterious awe-inspiring thing is how the universe wakes itself up by giving birth to the new out of the bones of the old. Ones entire being and life prior to an awakening goes into the making and riding of the wave. The whole universe is a kundalini machine winding us up to ever increasing sentience. With active kundalini it is apparent that the body is a tuning fork for the entire planet (and solar system). I can feel my kundalini responding the low pressures of hurricanes in the Gulf of Mexico as bliss in the lungs and belly. On a subliminal level a kundi-active will give a greater biological response to the long waves transmitted through the earth from waves crashing on the shore during a hurricane and those initiated from the build up of pressure before an earthquake. As the hurricanes start forming in the Atlantic, the energy will move down into the lungs and belly, and then in November down into the pelvis and through the jaw. I go into radical ecstasy and kundi-heat for the 4-5 days in which a huge hurricane or cyclone is occurring in other parts of the world such as the Caribbean or Bangladesh. I think however that I may only register a significant charge from storms that are occurring in the same hemisphere of the globe to me. This peak in ecstasy may be due to the particular frequency of the subaudible sound of Schumann harmonic which must affect everything from the atoms in the body to the resonance within the cavity of the skull. The Schumann resonance is generated in the resonant cavity between the earth's surface and the ionosphere.

The same solar/lunar, climatic, ionic and atmospheric conditions that create hurricane season also generates the blissful kundalini in the lungs and belly. This hurricane bliss could partly be due to seismic waves caused by the hurricane. These seismic waves created by a hurricane in the Atlantic pass through the entire United States. Kundalini actives are supersensory and their enteric (stomach) brain is particularly sensitive and active, thus it is easy to understand how seismic waves coming through the ground would be registered physically, electrically and atomically (quantum), and ionically. *"Seismic surface waves, which travel through the Earth's crust, were detected 30 hours before the hurricane made landfall, while body waves, which bounce down into the mantle, arrived some 18 hours later. "The body waves had traveled down to 1100 kilometers inside the Earth," Gerstoft says."* www.newscientist.com "Hurricane Katrina's Waves Felt in California"

Earthquakes are also easily detected in a body that is highly lit with kundalini. A normal person would still be receiving and perhaps behaviorally responding to these changes, but they just do not register it consciously because their sensitivity

and affects in the body is lower. Be aware also that with heightened kundalini you will be able to pick up the long waves that proceed earthquakes and also feel the pressure of the ionic changes in the atmosphere as a very heavy prefrontal lobe daze coupled with adrenal activation, for up to 2-4 days preceding a major earthquake within your hemisphere of the globe.

While Boulder CO, I felt the 6.5 Paso Robles Quake on 12/23/03 as a very heavy prefrontal lobe daze, and noticed their was a Chinook positive ion-high wind at the time. The positive ion-high wind over here in Colorado is signified by a special type of compact high-wind clouds and high pressure in the body. I theorized the atmospheric positive ion sheet probably existed over California and reached out to Colorado. During the day of the 2003 quake I did register a significant adrenal "danger" flush, however I was in such bliss at the time that the danger sense I felt to be not personally relevant. NOAA and the Russians are collaborating on a satellite detection system of ionospheric changes related to immanent earthquakes, and can predict a quake and anticipate its size 2 days before it occurs.

The influences on kundalini by geomagnetic stress of earthquake build up and the weather, and space-weather can be explained by changes in the Schumann resonance and ionosphere affecting the cells. Between the earth's surface and ionosphere, a resonating cavity is formed. Broadband electromagnetic impulses, like those from lightning flashes, fill this cavity, and create globally the Schumann resonances at frequencies 5 - 50 Hz. The base Schumann Resonance is 7.8Hz quasi standing electromagnetic waves mainly traveling from West to East. There is a +/- 0.5 Hertz daily variation which is a function of the height of the ionosphere, which changes with solar activity. Obviously huge high or low pressure systems would also alter the height of the ionosphere, pushing or pulling on it as if it were the membrane of a balloon.

Through their own DC field all living organisms are plugged into the electromagnetic field of the earth, which varies in response to the sun and moon. Because someone with active kundalini has a heightened field and superfluid condition, magnetic storms on the sun and the sunspot cycle will affect them more so than the average organism. The earth's normal field resonating at Alpha 10 Hz normalizes our own field and biorhythms, and we remain in sync with the planet through her field changes effecting a change in our own.

Changes in the earth's field affect the pineal glands production of melatonin and serotonin, as well as changing acetylcholine levels in the brainstem. In this respect not only do our normal biorhythms respond this way, but so too do our psychic and spiritual capacities respond to changes in earth's field. Thus we are keyed into a cosmic timing devise for the emergence of consciousness that is governed largely by the movements of the earth, sun and moon. Researchers will find that kundalini (and indeed normal physiology) follows the rhythm of the sun's magnetic field/ solar wind field sector boundary. One effect of this is the alteration of intestinal bacteria and pathogen count, and immune cell spectrum and number. The two day turbulence during the move from one sector boundary to another will also affect biology, consciousness and behavior.

Kundalini, like cell growth, health, intellect and consciousness itself, follows cosmic cycles whose influences include: oxygen consumption, pH, cell division rate, senescence rates, membrane fluidity rates and uptake/elimination rates of cells, precipitation rates of chemical reactions, the propensity to greater or lesser colloidal suspension, flocculation, growth-rates of pathogens, hormone output and fertility rates. The solar-lunar impacts on changes of atmospheric ions affect the polarization of cells and organisms, ionization and ion differential charge, polarization and firing capacity of nerves, hormonal/neurotransmitter and receptor changes. Cosmic influences probably also affect the speed and spectrum of protein and enzyme construction. Free radical and antioxidant changes would factor in all of this. All these cosmic influences boil down to our subjective experience…such that we ARE the cosmos.

Humans (and perhaps all animals) have magnetic sensing material in the ethmoid bone which is located in the sinus close to the pineal and pituitary glands. The slight rotation of the magnetic crystals in response to external changes in field is picked up by nerve endings in the area. Robert Becker and Gary Selden suggest this organ also transmits the biocycle timing cues from the earth's field micropulsations to the pineal gland. You might detect a rapid change in field through the sensation in the area of the sinuses.

Perhaps one of the best texts on electromagnetic effects on life is still *The Body Electric* by Robert O. Becker M.D., and Gary Selden. Chapter 14: *Breathing With The Earth* covers the earth's field effect on life. This quote from P.249 is particularly interesting: *"Recently a group under Indian biophysicist Sarada Subrahmanyam reported that the human EEG not only responded to the micropulsations, but responded differently depending on which way the subject's head was facing in relation to the earth's field. Oddly enough, however, the head direction had no effect if the subject was a yogi."*

Presumably the yogi's stabilized strengthened field is less influenced by the interference patterns of external fields. This might hint at the difference between a Yogi and an ordinary person undergoing a kundalini awakening. The Yogis mind and structure is cohesive, aligned and his autonomic system is consciously directed. The fact that a yogi is autonomous from the earths EMF probably shows that they have changed their nerve response to the magnetic crystals in their forehead through their own amplified brain EMF. The practices of a yogi…the breathing, fasting, meditation and yoga would build a very different bodymind than the average gym goer or householder. A yogi would have already cleared inferior cellular structure, blockage, chemistry imbalances, have a strong neurotransmitter and hormone profile, superior immune system and antioxidant system, because their bodies are trained to convey higher energies and consciousness. Brain mapping would show quite a different brain structure, and nervous system than the person who is not trained in this way.

Changes in the solar cycle affect our biology and behavior. For example, around solar max you will find more wars occurring around the world because the increased solar wind creates more positive ions in the air, which in turn make the blood and cell environment more acidic. Acidic pH leads to more aggression; that is a

defensive cellular response rather than a growing one. It is apparent from tracking my metamorphic cycles that they power up during the gravitational highs of full or new moon. Sometimes it's the new moon when I am peaking other times it is the full moon, depending on which has the highest tides. The higher the tide, the greater the tidal influence on the atmosphere as well and this translates into greater ionic effects on lifeforms, so we cannot automatically say that it is a gravitational trigger to metamorphosis or an ionic, for it is both. Full moon changes the surface tension of the water in the body, thereby affecting the endocrine system.

Metamorphosis is also socially initiated as well, but even the cycle of spiritual alchemy of the social/guru/romance effect is directly initiated and influenced by the solar/lunar cycles, gravitational, ionic, atmospheric, barometric and cosmic wave influx. Also the sunspot cycle and the magnetic axis flips and the changes of polarity in the eight day solar skirt sectors. The sun, moon, Jupiter and to a lesser effect the other planets as well, all play into the progressive unfoldment of the metamorphic butterfly, both individually and collectively.

Earth's orbit is elliptical, or slightly oval-shaped. This means there is one point in the orbit where Earth is closest to the Sun, and another where Earth is farthest from the Sun. The closest point (perihelion) occurs in early January, where Earth-Sun distance will be 147,093,602 km and Earth speeds up a bit in its orbital progress. The far point (Aphelion) happens in early July, where when the Earth-Sun distance will be 152,097,053 km and Earth moves slower than average along its path. The passing of equinoxes and solstices has a huge impact on our kundalini, consciousness, biology and magnetic influences on life processes, health and behavior.

There is a distinct seasonal progression of metamorphosis (love), which repeats itself with precision year after year. July (summer) is the most energy-expansive month of the year when the physical potency of Spirit is most noticeable. If you are female you might even mistake July's high vitalism for pregnancy, for there is a sense of fullness and wholeness in the belly and there is a pressure of fullness in the head and throat, while the heart seems more connected to everything. Also there is a heaviness like being grounded, which makes walking slower. In high-energy people you can actually see this July fullness in their face...they look like they pregnant bursting with energy. Head pressure and the sound of pulsing or ringing in the ears can get intense during the annual head popping months August and September. There are things you can do for blood pressure and tinnitus, but the best thing is long walks near moving water, and lying on the grass and staying away from carbohydrates and dairy. Supplements for tinnitus, pressure and vertigo are listed in the last section of BOK. October full moon, kundalini is in the lungs and digestive system. This feels "really" blissful but makes a mess of ones digestion, then in November full moon it moves down into the pelvis and through the jaw. After winter solstice it will flip back up to a heart-brain connection, which is pure liquid honey fire.

August 2006 was particularly drawing into the head, with amazing head pressure, that translates into more breakdown during the back to soil phase of year

in Oct-Nov. Don't worry though the more you facilitate the Die-off period, the more profound will be the rejuvenating effects next spring. The deeper the Die-off means bigger spring regeneration, so expect a spiritual renaissance in April-May. (April- May 2007, I had a "very" intense period of extended spacemind, high blood pressure, ecstasy and revelation connected with the Keystone and Quantum mind writing at the time)

It is interesting that toward November-December, after kundalini has passed through its annual cycle: heart—spleen—pelvis—digestive system, then there is some obvious kundi activity in the right-brain hemisphere and a noticeable kundi-heat in the right side of the body. Thus the geomagnetic-gravity and light spectrum influence of winter solstice might alter the configuration of the NMDA receptors to promote right-brain firing at this time. Thus in winter organisms are generally more right-brain dominant than in summer. Perhaps because they require more intuition and long range planning (future sight) to survive in winter, while summer is time for building.

The initial cycles are apt to be of acute intensity in the peaks and valleys, with a more lateral focus on the left side of the body as the Solar Heart establishes itself. After several years the cycles occur without abatement but they are of lesser (chronic) intensity, with smaller peaks and valleys and more balance between the hemispheres of the brain and sides of the body. That is the male and female poles within find deeper reconciliation in the lovemaking of the Soul with matter, as the gross structures and blockages are cleared away, and the bodymind incarnates more of its Superconducting-Soul template.

While we are lit and at our penultimate Self in the up-cycle we are essentially pumped up as high as our organism can tolerate at the time. All the chemicals that produce this state however create metabolites and so there is a "down cycle" that corresponds to rest, recovery and repair. The ensuing depression and disenchantment does have a subjective element (both individual and collective), but it is also very much caused by the cascade of neurochemistry that has occurred. There is an emotional component to this flip of having been in a high state of gratitude and wonderment, then returned back to a state of normality or depression.

I have noticed on numerous occasions that kundalini just increases, amplifies, deepens and often makes lucid whatever state or condition we are predisposed to at the time, and this exaggeration may increase the propensity for am "obvious" bipolar flip into its opposite. All chemistry is bipolar, we just are not usually conscious of the cycles because we are "embedded" in the present-point of the hyperbolic curve. Where we are on the rollercoaster depends on ones age, the time of year, time of the month and countless other factors. But most of all it depends on the prior chemistry and state that one goes into the peak event with. That is it depends on what is "up" in the lived experience of the psyche-body-soul. Because most of "us" is subterranean, there is always something that is trying to emerge given enough energy, oxygen and attention to do so. There is endless transconscious and preconscious material that is trying to filter into the conscious arena – should we let down our guard.

The perturbation of consciousness and infiltration of unconscious material can only "work" with the biochemistry and consciousness that we bring to it. Thus a kundalini event or drug trip is a kind of Judgment Day and exploration of a "vaster consequence of our being" than we normally have access to. Keep a spiritual diary to document your kundalini phenomena, along with dreams so you can map out your whole spiritual journey. If many people did this we would have lots of data to work out the alchemy, as it occurs in a range of types. Also by doing this and tying ones subjective experience into the monthly and annual cosmic cycles it makes whatever stage we are at easier to handle when seen in the light of the larger picture.

Electromagnetic influences on the earth's magnetosphere from the 22 year sunspot cycle has a direct ubiquitous effect on life and the weather. The next (2011) solar max cycle may be the most intense solar maximum in fifty years. NCAR predicts it to be 30% to 50% stronger than the previous one, with the intensity of solar activity almost equivalent to that of the Solar Max of 1958. Bigger sunspot cycles 'ramp up' faster than smaller ones and lately the max has tended to occur in two peaks. So for the coming cycle we can expect a larger peak in 2010 and then another slightly smaller peak 16 months later in 2012. Besides electrical interference and amplified storm activity, there will also be large numbers of people going through kundalini awakenings during the coming solar max. During such an exaggerated cycle it will be easier to correlate solar activity with its effects on weather, kundalini and mood. For example due to greater storm and hurricane cells we can expect frequent recurrent ecstasy and revelation periods. You can watch the progress of solar activity at NASA and NCAR websites and spaceweather.com/. Check out the prediction graph at the bottom of the NASA page solarscience.msfc.nasa.gov/SunspotCycle.shtml

THE ANNUAL COSMIC CYCLE

Kundalini and the full spectrum of human existence and experience follows the same annual cyclic pattern as plant growth through the seasons. A general monthly outline is as follows:

Seed—JFM—head-heart, ethereal, abstract
Leaves—MAM—heart-solar plexus, powering up, urgency, portent
Flower—JJA—belly-pelvis, highest heat and Heart, body physical illumination
Fruit—ASO—head pressure-heart-lungs, revelatory chemistry
Soil—ND—energy to pelvis, Die-offs, descent to subconscious, opening up of right hemisphere consciousness (perhapsdue to increased melatonin in winter)

This is a broad overview of the cosmic growth cycle which cannot reflect the infinite variables and complexity of human existence. (Southern Hemisphere people are obviously switched with their flower period occurring in Jan-Feb.) The 22 year sunspot cycle probably follows a similar growth cycle from seed-leaves-flower-fruit-soil. This is the flow of the Tao of life, it is a hyperbolic curve that spirals through time. The astronomical influences on cell development are instigated by the solar/lunar influences on the EMF of the earth. The sunspot cycle and the

moon have a greater influence on health, fertility, consciousness and behavior than any other cosmic influence I think. The goal being to unify the gestalt of objective and subjective, yin and yang, introversion and extraversion, cosmos and Self.

"The Moon Phase concept is based on a four-fold division: instinct, emotion, intellect and perception as in Carl Jung's four functions: sensing, feeling, thinking and intuiting; or Max-Luscher's four-color person: red, green, yellow and blue. An interesting parallel appears when comparing the Moon Phases with Jungian psychology. Jung first defines two attitudinal types: the extrovert and the introvert. The Moon Phase concept also first defines a two-fold division: primary and antithetical: primary-objective and antithetical-subjective." Marilyn Busteed and Dorothy Wergin, *Phases of the Moon, A Guide to Evolving Human Nature.*

Cosmic Influences on Human Behavior, Michael Gauquelin (1985)

How Cosmic and Atmospheric Energies Influence Your Health, Michael Gauquelin

Cosmic Influences on Humans, Animals, and Plants, John T. Burns (He served as the Executive Director of the Foundation for the Study of Cycles for five years).

Cosmosophy: Cosmic Influences on the Human Being, Rudolf Steiner

Cosmic Influences on Mind & IQ, S. S Chatterjee

Sun and Earth, Herbert Friedman, Scientific American Library, 1987.

Tutankhamun Prophecies, Maurice Cotterell, Appendix 1: The Sun

The Lunar Effect: The Moon's Effect On Our Weather, Harry Alcock; Moana Press

Moon Rhythms in Naure: How Lunar Cycles Affect Living Organisms, Klaus-Peter Endres et al

Phases of the Moon: A Guide to Evolving Human Nature, Marilyn Busteed and Dorothy Wergin (Jungian)

Earthmind: Communicating With the Living World of Gaia, Paul Devereux, John Steele, and David Kubrin, 1992.

Hidden Nature: The Startling Insights of Viktor Schauberger, Alick Bartholomew and David Bellamy, 2005.

The Fields of Life: Our Links with the Universe, Dr. Harold Saxton Burr, 1973

Bio-Dynamic Book of Moons; and Weather and Cosmology, Dennis Klocek

www.borderlands.com/sun/sunspots.htm —Sunspots and Human Behavior by James Borges

AGE AND KUNDALINI

Our entire lived experience prior to an awakening goes into the making and riding of the wave of emergence. We undergo the kundalini process to bring about substantial growth and change to the brain after full myelination has taken place. One doesn't have to be special or be a rocket scientist to go through a kundalini awakening. Those with sensitive nervous systems, high energy, trauma damaged nervous systems, highly stressed, and high psychic sensitivity are often susceptible to the transformative fire.

Some kundalini activity is no doubt apparent in childhood and related to growth in general. Children indeed do experience all kinds of psychic phenomena and strange-body sense and energy phenomena. But for a full on awakening the nervous system must be fully myelinated to avoid serious damage. For a high degree of charge will not carry well in an un-myelinated system because the nerves are still not yet insulated for "speed." Full myelination occurs in the early twenties and a lot of people have their first awakening at 27-29 years.

Approximately 7 years after full myelination at 27-29 years is time for the major break-away from the family-meme. This is an enormously difficult period when one is trying to workout who one is and what is reality is beyond the dicates of the collective mind of family and society. This is an organic process that arises of its own accord and is not necessary a process of "thinking" but of alchemical upheaval and restructuring of the brain. The tensions involved in having codependencies, enmeshments and family dynamics made conscious is enormous and often sparks a kundalini awakening or schizophrenic-type breakdown at this time. There can be an exaggeration of or rebellion from family patterns and beliefs as the matrix of the family psyche becomes more available to conscious introspection, or childhood patterns reach their zenith. Personally I don't think true adulthood starts until after this crisis. If the individuation crisis doesn't occur the individual remains predominantly a socially conditioned adult-child, with little self-will or Self-realization.

This individuation crisis occurs around 7 years after full myelination of the brain. Myelination of course is related to socio-emotional and functional "use" of the brain, laid down mostly in response to the societal conditioning. So that when this next 7-year-cycle of neuron pruning arises there is a physiological evaluation of the brains neural networks to assess their validity and value. This is why "everything" seems to arise out of the woodwork at this time, repression mechanisms are lifted and the contents of our neurology seem to impress themselves on our minds. Since neural pruning after full myelination involves a more extreme method of axon death, a kundalini awakening might occur in order to create the massive oxidation, apoptosis and self-digestion necessary for a brain overhaul. This is especially so if the individual experienced chronic deprivation, rejection, abuse or developmental deficiency of some sort during their first 27 years.

The kundalini cycle probably follows the 7 year neuron growth cycles that Joseph Chilton Pearce pointed out, and this is probably attributed to the 11 year sunspot cycle. Further research will probably find that we all go through a 7 year

neurodetoxification cycle that might show up in changes in mood state, mania, depression or behavior (the 7 year itch). A full-on kundalini cycle is a more obvious version of a developmental process that is usually subterranean, passing without notice. Depending on the set point of the hyperbolic extremes the symptoms maybe observable or not.

Because of the natural homeostatic feedback mechanisms of the body, a kundalini awakening proceeds as a play between the sympathetic (on) and parasympathetic (off) sides of the nervous system. However, it is not a fight between them, but the natural process of growth which becomes " observable" simply because it is more exaggerated than normal. All growth in life may proceed in this hyperbolic fashion from one pole to the other, not so much in an effort to achieve balance between them, nor some kind of unreachable resting state of perfect equilibrium, but the polar dance itself might represent the dynamism and dynamo of life. Thus "Life" is the play between the charges, poles, hemispheres and sexes.

Although it appears that kundalini awakenings begin after the mature nervous system is established there is always exceptions to the rule. For example Ramana's first awakening was at 17 years, and Meher Baba at 12 years, so both were obviously not fully myelinated. It might be that those who are going to be great teachers and gurus have early awakenings. Ramana couldn't help the neglect of his body during the height of the awakening because he was so "gone." Also his awakening happened when he was so young his physiology didn't have the preparation of years of spiritual practice. Kundalini is chemistry that is prior to and "transposed" on top of any other existing chemistry. We cannot assign a females kundalini awakening to peri-menopause, anymore than we can assign a males metamorphosis to male menopause. Metamorphosis is the distinct fundamental biochemical phenomena within which age, gender, psychology, relationship, lifestyle, culture, geographic and cosmic influence all have a secondary effect in producing the "flavor" of the metamorphic experience.

Perhaps within our lifetime we will start to see the process of Metamorphosis as being central to our identity as a spiritual creature. We will see how it is tied into the underlying rhythms, drives and happenstance of our lives. We will distinguish more clearly the predetermined life of the "conditioned" self and thus we will free ourselves from unconscious abeyance to the "isms" that we fell prey to. Teasing apart the levels and seeing how they all interrelate, we are no longer victim to their wholesale persuasion. Thus we are free to follow the highest call as it moves within us subatomically and prepares us for our ultimate duty. The transformation of the human species to its "noble" condition.

PHASES OF KUNDALINI

Just like everything else in life kundalini cycles through a specific flow of chemistry. The general periods for a full-on awakening are 2 years priming, 6 month apex, 3 years peak, 5 years recovery, but awakenings come in all shapes and sizes. The peak-apex of a mature awakening is usually around 6 months, the awakening itself is usually around 3 years, then the assimilation phase is perhaps around 5 years. These figures are almost impossible to contrive because everyone has an awakening specific to themselves. Each stage has its particular sensations, symptoms, emotions and thoughts. Broadly speaking the following outlines the linear process. The kundalini process cycles through these phases again and again, creating a hyperbolic wave of nested cycles.

PRIMING—Two or more years of sexual heating, increased creative drive and muse/PSI—*Thyroid, sex hormone activation.*

INFLUX—Opening, Grace, ecstasy, electrical. Initial Inner-conjunction, Double Helix of energy rising around the spine—*Sex with Eros, God's Lightning Bolt.*

SHOCK—Major septic shock from the nitric oxide of the influx—contraction, panic, sympathetic/adrenal hyper-activation—*White Shock.*

TRANSMUTATION—Fires, Heart-expansions, grounding, gravity warping.

MAIN INNER-CONJUNCTION—Full body orgasmic, massive energy up spine, paralysis—*Silver Cord, Achieving Ones Self.*

DIE-OFF—Ego inoperable, 3-7 days in bed, feels like body is eating itself, catabolic breakdown—*Dark Night, Death prior to Resurrection.*

HEART-BRAIN SYNC—Mature link; right orbiofrontal-limbic connection activity and associated heart expansion—*Penis on the Brain, brain orgasms.*

SUBSTANTIATION—Regrowth, building higher quality tissue, integration, calm, wholeness, anabolic—*Spiritual Will.*

All these cycles have to do with the mechanisms of biological transmutation, but one can talk about it in terms of cell-life duration, homeostatic coping ability, reserves of resources, physical-mental-emotional blockage and resistance, conduciveness of ones environment and rest-recovery-repair. The question of the down-cycle's relationship to the up-cycle is a big one for kundalini and is always fascinating to me. The intensity of the up-cycle is usually equivalent to the intensity of the down. However once we understand the actual neuro-hormonal chemistry better, we should be able to modulate both extremes. This might make kundalini awakenings somewhat more functional and adaptable to everyday life. Conscious navigation of the alchemy will not make awakenings less profound, but with greater knowledge there will be less resistance, secondary defensive coping strategies, story and terror, so the whole process should go more smoothly with less stress and organic damage. Metamorphic chemistry "takes over" our life.

Whether parasympathetic relaxation or sympathetic excitation, these cycles run on their own accord and demand adherence. But we do have to make sure that

we are indeed following signals and going-with the particular phase, not fighting it. If it's a grounding, relaxation, exhaustion phase then we must give in and not try to overwork ourselves and prop ourselves up on stimulants. Similarly the excitation phase will demand extra exercise, breathing, hot baths and time in nature. That is we must have a sober and respectful adjustment to whatever reality is presenting to us in order to work-with metamorphosis.

I surmise that the trajectory and **duration** of an awakening is determined by all the body systems and conditions, coupled with one's life circumstances and the specific work that kundalini was doing in the body, plus the nature of one's spiritual practice. By conditions I mean the strength, conductivity vs. friction and reserves: strength of protein structures, strength and openness of cardiovascular system, strength and development of the nervous system, immune strength, degree of muscular spasticity, toxicity load, plaque/ama build up, liver efficiency, glycogen stores, antioxidant supplies, mineral and enzyme reserves, plus hormone and neurotransmitter resources.

The phases of metamorphosis cycle round roughly in an annual cycle following the seasons, and solar-lunar gravitational tides. Over the years the cycles DO get easier, or we become more conscious in our embrace of them. Things tend to get less electrically "raw" also with time and once we are over the peak years it gets much easier. We learn to learn and our resistance gets slowly worn down by ecstasy. We learn to find solutions and through meta-adaptation we can face-into kundalini without fear. "Consciousness" ceases to be a "problem." The more people that do this, the more we awaken as a collective organism, and thus the less likely we are to commit global suicide through heightened sense-ability.

Tao is All magical power
Beauty defined by contrast
Paradox and Polarity
Primordial Being and Non-being
Non-struggle action
With gratitude
No need to possess
Yin and Yang
Rest and motion
Contraction and expansion
Tao is dynamic
Continuously renewing and interweaving
Heaven and Earth
Born of the Continuum
Eternal Cosmic Organism
He who follows the Tao
Is one with the Tao
Tao is eternal
Elusive and intangible
Yet Tao is inexorable

DOWN IS UP

Kundalini does not necessary move "up" the body, for it is all happening in the brain...and "felt" in the body as a consequence. The brain and body are one. The sensations and chemistry occurring in the body is also reflected in the brain and vice versa. One of the physical symptoms of kundalini—the double helix of energy up the spine—has been stigmatized in myth as the serpent symbol. It is unfortunate for this gets mixed up with the symbol of the biblical serpent and then kundalini is relegated to the mere physical realm. In an ignorant and fearful culture, kundalini is then something that is superstitiously desacralized. However kundalini IS the sacred energy itself, that expands and deepens everything physical, emotional, mental, psychic and spiritual. It cannot be relegated anyone domain because it inhabits all domains. Kundalini is no different than Spirit.

The way Eastern language treats kundalini adds to the general mystification of the process. Sanskrit is a metaphorical prescientific language, that often confuses more than it illuminates. There are no "snakes" in kundalini, no coiled thing. There is no such thing as Nadis...the energy fields are just that—fields, not discrete lines of force. The ida and pingala can be seen as the left and right sympathetic trunks that run either side of the spine. Sometimes a special event can occur where energy can be felt to spiral around in a double helix from ganglion to ganglion around the spine and up the sympathetic trunks—giving the sensation of two entwined coiled snakes. We no longer need to use mythic snake metaphors or imagine mysterious forces for which there is no scientific correlate. Many earnest people get rather knotted up about kundalini and are apt to insist that spiritual practice is the be-all-and-end-all of spirituality, without considering the role of Spirit in the process. It's Spirit that spiritualizes after all. Spirit shows us the way from the inside out, at such speed, it's all one can do to try and get out the way in order to cope, adapt and live up to the demands of the alchemy.

Don't believe anyone that tells you awakening is a linear path—all laid out with pretty chakra lights to lead the way—follow the colors and you will get to heaven, Shambhala or enlightenment. Reality is far different from this. Kundalini flows up in order to flow down and down in order to flow up. One way of looking at metamorphosis is the dance of two intertwined opposing forces of charges, poles, sexes and hemispheres. At the central nervous system level the yang force is the sympathetic *on-switch*, and the yin force is the parasympathetic *off-switch*. Kundalini we could say is the rhythmic dance of these two forces taking us on a hyperbolic tango up and down. If we don't know how to flow-with this polar dance, we resist both the up and the down, resulting in the **burnout** of both sides of the nervous system and we succumb to listlessness, depression and meaninglessness.

I don't follow the chakra system except in abstract theory, as a symbolic metaphysical map of the phylogenic and ontogenic development of consciousness. In reality kundalini operates simultaneously in all charkas to varying degrees. To open up more of the higher areas the lower areas are simultaneously opened. In order to open the lower areas, the higher areas are simultaneously opened. As we evolve, the belly, solar plexus and pelvis become increasingly relaxed, more sensate

and therefore more immune to blind reactivity. We can then "digest" phenomena in the hyper-relaxation of our inner-core and in this way we get off the wheel of *Samsara*—or blind adherence to conditioned responses. Samsara literally means "wandering-on," (without conscious witness), while enlightenment or *Moksha* is liberation from samsara. The liberating fires of kundalini in the belly, frees us from our simian nature and culture. (*Hara: The Vital Center of Man* by Karlfried Graf Dürckheim)

Kundalini follows its own course through the body that is specific to each person, but it is definitely not a linear path "up" the body. Except during the conjunction experiences when enormous energy pours upwards through the body with the force of a concord. Since my awakenings I am adverse to saying that the lower plexuses (charkas) or centers open prior to the higher. In my experience they all open simultaneous to varying degrees. And since the linear body is all holographically represented in the brain, and it's activity in the brain that is expressed at various regions of the body, it is hard to say what is top and what is tail. Thus kundalini moving "upwards" is a misnomer—it doesn't start out at the base of the spine and eventually "reach the brain." It is happening in the brain from the start. Even the activation of the root chakra, and the tingling in the left foot is occurring in the brain. The brain is a hologram of the body and the body is represented holographically in the brain. The body and brain are nottwo. Whatever is going on in the body is simultaneously represented in the brain and vice versa.

Kundalini moves hyperbolically through the cosmic cycles of sun and moon round and round, up and down, down and up and basically all over the chakra map. For example in childhood sexual development, there probably has to be a certain level of development of the prefrontal lobes before the genitals become energetically activated. The higher in-forms the lower. So say you want to work on opening your sex center, well you don't do this directly, you work on the solar plexus-(power) and heart-(love) centers. And if you want to evolve sex even further you work on the throat-(honesty), third eye-(psychic) and crown-(integrated whole) centers. Similarly if you want to open up the crown you need to simultaneously work on freeing the pelvis to generate higher energy. There are the fundamentals and the penultimate but it's all basically just one flow of energy. Kink the hose at any point and you interrupt the flow to all parts. Relax into the flow and you know far more than if you try to put your experience into a neat little logical map.

We cannot divide and distinguish the difference in bodymind, subtle and causal effects because they are part of the same thing. There are physical autonomic body reactions such as panic states, grounding, heart expansions, heat, tingles etc...and then there are the subjective experiences such as illumination, devotion, insight, telepathy, precognition, visions, profound dreams, eurekas etc.. There are lower periods say during a Die-off where cacophonous voices may occur without higher-spiritual content (noise), and other periods where the energy is cycling at much higher level in which the voices have something profoundly illuminating to say. You can easily know the difference from the tangible power and Presence contained within the inner communication.

Kundalini flows in different episodes; sometimes panic will force exercise and breathing, sometimes bliss and grounding will force lying down. If we understand the chemistries at play with the various autonomic (sympathetic/parasympathetic) responses we are not confused, resistant or fearful over what is happening. With an informed perspective we know beforehand that if we are down, we are going to go up, and if we are up we are going to go down. Such knowledge breeds humility and awe and guards against inflation. We know how to work-with the on/off switches and ups and downs, to not to suppress either, but to deepen into the energy of each, in a conscious embrace of whatever is happening now.

The Perspective of Whole-Seeing and Farsight: The key to mastery of kundalini is that when the bliss is acute it is imperative to draw energy up the spine or otherwise we find ourselves trying to run from it and push it away. If we wimp out and try to resist the bliss and push down the energy rather than embrace it, then this will lead to inevitable compulsivity, addiction and regression. An immature default rather than mastery and meta-adaptation. The radical amplification of normal sensory and emotional perception and of consciousness itself will inevitably draw us into fixation with whatever part of the hyperbolic curve of experience we might be on at the time. However there is a vantage point from which Whole-Seeing is made possible. From the **Mind's Eye** we can view the changing phenomena of kundalini without being carried away by it. The Mind's Eye is the connective current between the brainstem and the third eye. We obtain the seat of the Mind's Eye by the felt-sense of pulling energy up the body and into this inner connection in the head. This done simultaneously with deep breathing to keep our experience of kundalini conscious rather than being seduced by its ecstatic fires into a narcotic sleep.

I also must relate the importance of the solar plexus in keeping the balance between the two sides of the nervous system. We can prevent morbid overextension of both the sympathetic and parasympathetic nervous systems by conscious breathing into the largest plexus of the body—the solar plexus. If we find ourselves in either a high or a slump, then long walks while focusing on **solar plexus breathing** will help to integrate and balance the energy. This continues to be important for years after an awakening as an aid to integration and establishment of the spiritual will. Without integration we may go through the entire ordeal of an awakening for no benefit to ourselves or others and actually be worse off than we were before. The Solar Plexus responds instantaneously to the brain. Every minute contraction and expansion of the solar-center of Life is in obedience to the brain. The Solar Plexus lies behind the pit of the stomach. It may be energized by practicing a "drawing in" of the abdominal muscles. Draw the abdominal muscles "inward and upward" several times at each exercise.

The closest parallel in normal human experience to mystic ecstasy of kundalini activation is sex sensations. One could look at the spiral of the growth in consciousness in terms of sex energy and its use, and see the pathological, conservative, post conservative and enlightened uses of sex energy. The body is a template of our conscious-proactive-love-Self-expansion VS. our unconscious-

reactive-fear-Narcissus-contraction. Looking at the body we can see where we are at in our relationship to Self and our relationship to the world, for the body doesn't lie.

A kundalini awakening is fundamentally a cellular, atomic and quantum process, and we interpret our awakening through whatever subjective worldview and story we have got going. Whether our theosophy relies on deities, Gurus, Nature, Emptiness or whatever, it doesn't really matter, for our conceptual worldview is all secondary to the chemistry of awakening itself. It is popular to class the realization of "Emptiness" as being the highest on the spiritual totem pole and in some ways it is...but it is the meta-adaptation to metamorphosis itself, and the realizationed action in the world that are the measure of success in spiritual attainment. It is Nature that gives you the energy, resources and will to handle the awesome powers of Nature. Our current cultural memes and urban environments do not supply the needs of Nature.

The bridge between now and the noble future is none other than the mysterious journey of our own personal evolution. However if we do not postulate such a perfected future, we have neither the heart nor the vision to transcend the quagmire of complications born from a rationality that has been hijacked by the ego-centric survival circuit. If we continue to use our rationality in such an unilluminated, entropic and disconnected fashion, it is obvious that the geometric growth of the nuclear-hydrocarbon civilization means doom for planet earth. Thus our science, our morality and sense-ability must become increasingly subtle, syntropic and deeper. And it becomes obvious that the "journey" toward a visionary civilization requires ever greater visionary-gnostic abilities, practice and applied action. The path is that of the subtle unraveling of the Mind of God.

The gap between here and there can only be bridged via spiritual development that ensouls bodies and minds such that we become a new humanity. As we walk the supernal territory the creative solutions to real problems will naturally arise. But if we remain wholly indoctrinated and entertained by the existing culture, we fail to walk the supernal path. Asleep we remain just a cog in the present status quo, which is largely destructive to self and planet. We assume that the capacities of soul by which we "receive" the Mind of God, is largely a function of the refinement and focusing of consciousness in the prefrontal lobes. It is through a distinct initiation of this neurosomatic hardware, that a narcissistic self-survival primate is turned into a worldcentric visionary co-creator. We first must grow tired of life lived in the peripheral development of our shaky self-image created by this culture. We must become desperately lonely for our soul. In becoming conscious of how we have denied our soul to survive in this culture, we can then come home to ourSelves and our true function in the Whole.

Spiritual initiation beyond the threshold involves a literal death and resurrection of the neophyte, or the descent into hell (immanence) followed by the ascension into Heaven (transfiguration). With this initiation there is a dying off of the old self, as the prior conditioned reality and its associated defense structures is ruptured, revealing vast infinite reaches of consciousness beyond.

THE SHOCK OF AWAKENING

"The sudden forced arousal to activity of this hitherto inactive center creates a condition analogous to that created by a serious accident." P.21 Living With Kundalini, Gobi Krishna

Spiritual awakening is damned inconvenient at the best of times. The awakening of kundalini appears to be a major autonomic shock to the whole organism. The shock, panic, anxiety and depression can occur regardless of the conditions in one's life or the personal contents of one's mind, and despite whatever story or explanation we give ourselves as to what is happening to us. This is probably due to the penetration of the veil of conditioning and its repression mechanisms, along with the hyper-activation of the adrenal glands and massive changes in the nervous system. The first awakening appears to be more of a neoteric "shock" to the system than subsequent awakenings, even if subsequent awakenings are more "intense." In my first awakening when I was 28 years I lost 30 lbs in nervous energy and my period ceased for 6 months.

The autonomic shock could also be an expression and felt-sense of the unconsciousness and organic blockages that are becoming apparent with the amplification of energy and consciousness. That is the ego becomes aware that it was only masquerading and was "not our Self" by the Self's sudden appearance and the collapse of our known self and worldview. This "disillusionment" can create an intractable ineffable shock and depression in the beginning stages of the awakening. The ego-mind can't really make sense of this shock for it happens well below conscious awareness and is unrelated to the daily world, but is simply a phase of the metamorphic process. The personality has to learn to adjust to being stuck in the middle of a uproar of our physiology and an inflation of our psychic supersenses.

In *Kundalini Energy & Christian Spirituality* Philip St. Romain relates his ideas on the changes in the autonomic nervous system:

- *The sympathetic nerves constrict blood vessels in the skin and most visera. This leads to an increase in heart rate and faster breathing, both of which are observed during meditation. It may also explain the heat experienced on the skin—particularly the shoulders. One is reminded here of yogis drying cold, wet sheets with their shoulders.*
- *The sympathetic nerves dilate blood vessels in the skeletal muscles. This allows more blood to be taken to the sketetal muscles. Presumably, this once served as an adaptive role in running from danger. During kundalini, it serves to carry more nutrients to muscle tissues being healed from emotional pain.*
- *Sympathetic nerves stimulate glycogenolysis, which increases blood sugar. This serves to keep the body energized in the state of heightened nervous activity. The Hindu's concern for proper diet may also be related to this effect.*
- *Sympathetic nerves stimulate adrenalin secretion, which elevates heat rate and brings the body into a higher state of preparedness. This is also an undeniable effect of meditation, which, paradoxically, results in an eventual lowering the threshold of excitability. Consequently, meditators do not become stressed easily."*

After the first major opening of the influx (Sex with Eros) I experienced a corresponding major contraction. I call this particular contraction the **White Shock** because as blood leaves the skin surface the skin turns white. During this event you feel rather like a robot for motor control is diminished and you are dispossessed. That is you go into unavoidable shock. During the "White Shock" with the meta-activation of the sympathetic nervous, the adrenals are highly active and blood moves away from the body surface and is sent to the sketetal muscles. Perhaps this is tied into the changes in the production of immune cells in the bone marrow during metamorphosis. At this time the nervous system would be flooding the body with a certain mix of neuropeptides that would signal the cells to change from their normal function into the transmutation mode. The fact that neuropeptides are the molecules of emotion, and that this alchemy occurs of its own accord and there is nothing much we can do about it, helps explain why the early stages of a sudden awakening can be so emotionally overwhelming.

The initiation of metamorphic chemistry activates the adrenals and sympathetic nervous system, which is essentially the fight-or-flight response. So great is this sympathetic activation during the initiation-influx stage that the digestive system purges. Digestion is activated by parasympathic or the rest-relaxation side of the nervous system and with the crisis instigated by the radical sympathetic activation the body rapidly purges the intestinal tract so that more energy can be available for strategic thinking for fight-or-flight. The purging is essential so that when the white-shock phase hits the digestive system is relatively empty, for the intestines and the visceral organs go into an intense contraction. Perhaps this contraction is necessary in order to reset the function of the organs into the transmutation mode. Note that while the body is purging it is best to avoid eating food. Instead a little fruit or fresh squeezed vegetable juice should be fine, but only if the desire for it is there.

During the White Shock of the 2000 awakening the autonomic shock my body went into of its own accord was perhaps equivalent to seeing a nuclear blast occur out of the blue. Many people would assume in experiencing this kind of autonomic shock that they are going through a "Dark Night of the Soul" experience. For me the White Shock proper occurred after the initial peak opening of the influx of spirit, the shock being in direct proportion to the extent of the opening.

The White Shock is associated with the ignition phase while the Die-offs happen after a certain time interval of transmutation has occurred. The Die-offs are quite different in sensation and physiology to the White Shock experience. The White Shock is a state of **septic shock** created by the NO, free radicals other metabolites produced during the hyperactivation of the initiation. While the Die-off is an elaborate catabolic process choreographed by hormones etc…and involving the immune cells cannibalizing body cells that cannot withstand the high oxidation conditions. This Die-off phenomena is known in the spiritual traditions as "The Death and Resurrection."

To deal with the septic shock do gentle stretching and pushing exercises and plenty of breathing. Get some form of bodywork or the comfort of another human body to hug. Eat green vegetables and green drinks and avoid heavy foods

for a body in shock is not prepared to digest food. Supplement at least with B Vitamins and antioxidants and drink plenty of water. Take frequent long baths in Epsom salts in order to provide the magnesium that will help turn on the relaxing parasympathetic nervous system and loosen the contraction of the intestines allowing proper peristalsis. (For more on this subject see ***Sepsis of the White Shock*** in the Nitric Oxide section.)

Where kundalini comes in is that besides enlightened child rearing, it is the one thing that can transform the older regions of the brain and bring the individual bodymind and soul into a sense of being that is no longer fixated on defending the illusion of self and in preventing its own death. This is so because the mask of the conditioned self is slowly burned away in the fire of kundalini and a new species is born. A species that is at peace with its own death, because it dies every second into the fire of ecstasy. A species that is at peace with its awesome sensitivity and vulnerability because it is no longer running from these, but opening to them to discover our true power in "depth."

Kundalini provides a disruption and penetration of consensus reality and its repressive mechanisms. The chemistry of awakening with its vividness, bliss and Grace provides us with the spiritual resources to feel into our deadness, shutdown and resistance. In this way Presence incarnates and "fills in" our removal from existence making us fully whole and here (healed). In order to develop the post-conventional mind with which to investigate and use kundalini effectively, we have to be actively transmuting via kundalini itself. Through Gnostic recognition of the innate order of the Universe we overcome the disharmony, dysfunction and entropy in the human condition.

The brightening of the human soul and the overhaul of the physical body, frees us from the conditioning of the past and are thus able to develop a post-conventional mind. To simply engage the full spectrum of the consciousness that is available to us...to live our genius. The bliss of Kundalini IS the Grace, but then the "work" involves the will to let go of the past habitual self. The work is to put love-juice-consciousness into blockages to transform them, but also through faith to treat the blockages as if they were not even there. Communal love and peer-friendship (teleiophilia) acts to stabilize higher states into structures. Higher structures of consciousness are discovered only via a leap of faith into the dark with no knowledge of where we might land.

Kundalini represents a quickening of metabolism, a dissolving of the past morphogenetic habits of form and mind. The reason why it appears that kundalini burns away karma is that oneself and ones world has become more changable, more plastic, exceptional, original, real and unique. With "depth" one is simply not a victim of circumstance, but a conscious cocreative participant in the mystery. The expansion of consciousness that arises as the elixir quickens the blood, constitutes a spiritual healing that redeems body, mind and soul. This redemption involves a cleansing, healing and renewal, not only of the life of the individual, but also of their ancestoral line and the residual imprint of ancestral karma that is embedded within the individuals psychosomatic makeup.

EGO DEATH

"Ego is composed of a socialized set of arbitrary boundaries (limitations) that altogether define a person's inner-identity. These inner-boundaries include values, beliefs and "understandings"- in the sense that people tend to "stand-under" or within these socially-enforced, self-imposed limitations." John Van Bortel

"The myriad forms of dysfunction all derive from the separation between self-awareness and awareness of the whole...a separation that the negative aspect of the ego battles to maintain." John Pierrakos

The ego protects us from full knowledge of the shadow and to the extent that it does this it also blocks us off from super-consciousness as well. The ego (functional personality) disappears in extreme kundalini events because of the enormous energy coursing through the hindbrain, sensory-motor cortex and limbic brain. Normally in extreme fight-or-flight chemistry the prefrontal lobes are disengaged in order to allow the more instinctive parts of the brain to deal with the danger. During a spiritual emergency however, the stimulation to the nervous system is internally generated. Often the autonomic shock involved in kundalini awakening is many times greater than that which we could ever experience in the course of a normal human life.

Just as a virgin only has a limited grasp of what it is to be human prior to having sex, so too, those who have not experienced the ecstatic inner-conjunction or a Dark Night, also have a limited perception of the height and depth of human experience. These extreme events make the ego more sober, respectful and humble because of this cellular reassessment of what it is to be human. This adjustment is largely biochemical, involving the expulsion of stored tension-energy and extensive reconstruction of neural hardware. And it is this chemical, energetic and experiential reformation, which leads to what we know as Ego Death. Whereas it really should be known as the expansion of the limited boundaries of the Ego to encompass a larger felt-sense of what it is to be human.

What is Ego Death? Ego death represents the neurodetoxification of fossilized repression, removing the friction and futile cycling of the nervous system, allowing a higher pattern to form. With higher coherency and integration the neurotic compartmentalized self is healed or made "whole." (See Toxic Mind Theory, BOK-2). Our self is composed of the parent-superego, adult-ego, child-id in ALL STATES. That is waking, dreaming and deep sleep, plus altered states. To this triad there is both the light and dark aspects: Eros (pro-life) and Thanatos (pro-death). Coupled with the Unconscious, conscious and Supraconscious. All these factors interact to create the subjective experience of our seat of self-Self. This is determined by the karma of happenstance and our response to it. Once we are able to stabilize our consciousness a beyond knee jerk reaction to environment, we are capable of cultivating greater depth and coherency. As we increase our "light," that is increase our energy of consciousness, we embody more of the positive-Eros qualities and our conscious bandwidth expands to encompass more of the unconscious and superconscious. Ego death in this sense is simply loss of neurosis via increased integration and coherency.

Eliade says on page 291 of *Yoga, Immortality and Freedom,* that both yoga and alchemy are an experiment of "soul;" of austerely using the body as a laboratory for purification toward the final transmutation or perfection. Perfection being to "decondition life, attain freedom, bliss, the deliverance from the laws of time or immortality—ie: enlightenment. Ego death refers to the death of our resistance to enlightenment. To have mastered life is to realize—Life as Ego Death—is the glorification of the Ego not the degradation of it.

The dissolution of kundalini lifts the repressive hold of the ego allowing us to embrace a much wider sense of ourselves. Kundalini awakenings provide the potential to get real beyond our conditioning and the social models within which we have been sleeping. The dominant rule of the ego over the body, mind and soul is the main problem we face individually and collectively. In alchemical terms the red King must be boiled down and dissolved in the great womb-vessel (regressed as the neurons dissolve themselves) in order for the "wounded King" to be transformed into the Universal or Sacred King. This is the basic principle of alchemical treatises referring to human transmutation. The greater the ego the harder the fall because of the substantially stronger sense of self, so there is a need for a greater force to "perturb" that stability in order for the ego-death and rebirth to occur. A lesser man would not have to go through such an ordeal because it doesn't take such force to reduce his brain to zero point. That is to dissolve it down in the great vessel-womb of the void in order to be reshaped.

"Ego-death does not mean the disintegration of the healthy ego, the ego we need in order to function in daily life. What dies in this process is the part of us that holds on to the illusion of control, the part of us that thinks we are running the show, that we are in charge. What disintegrates is the false identity that operates as though we are the center of the universe." Christina Grof

The fear of death arises because we have been programmed to believe we are an object rather than a process. Then we have to invent mythologies like reincarnation, heaven-hell and punishment-reward in order to reinforce our belief in continuation of the "object." However once we truly Grok that we are a "process" and death is a continuation of the life process, then we no longer feel like it lies as a final humiliation in a long gauntlet of humiliations to our rigid self-sense of being an object. It then becomes a welcome reward for a life truly lived, rather than a death we must constantly avoid. Perhaps the only struggle there is, is in giving up our survivalist personality, and allowing this meltdown to occur, trusting that there is a new world on the other side of the known.

One of the safety valves to ensure that only the truly awakened get the full Siddha power, is that Awakening is an inexorable process of death. Without the sadness and humility of having to "edit out" ones former self...the new cannot be born. True power therefore, is in the death of the former self, thus the first stages of awakening correspond to the **Kübler-Ross stages of grieving:**

1. Denial: *"This can't be happening!"*
2. Anger: *"Why me, why do I have to do all the work?*
3. Bargaining: *"Just let me keep my pointless job, my car and a beer or two."*

4. Depression: *"It's hopeless, why bother with anything?"*
5. Acceptaince: *"I know that I will be in a better place."*

After the inner-child stops clinging and lets go into Spacemind you pass through the self-Self membrane into the higher stages:

6. Progressive Surrender: *Falling into sync with the Muse and Kairos.*
7. Progressive Differentiation: *Pulling away from the need for social affirmation.*
8. Progressive Solidification: *Strengthening of identity with Spirit-in-action.*
9. Progressive Rewards: *Increased bliss, Presence and self-assurance.*
10. Progressive Awe and Magic: *Realization of goals, less obstructions in the way.*
11. Progressive Unity: *Nottwo/Nondual realization continuous in daily life.*

EXISTENTIAL ESCAPISM

Theorems of Nondualism, No-self and EST, propose the idea that the central core self is just another limitation on freedom. However a more advanced way of looking at it is not the negation of self, but the acknowledgement that the self is plastic. Saying that the habitual self is "non existent" when all selves and organisms consist of morphogenic habit is silly. But we can proceed if we acknowledge that indeed new habits can be made along with a perpetually "new" self-concept. The wisdom of no excuse lies not in the self doing a ostrich trick of poking its head in the sand to hide from its own existence, but in realizing our limitations are self-fabricated. By fully owning this self-fabricating, self-morphogenic process we can construct a self-concept that is more adaptable and present to an ever changing reality.

The no-self thought virus is part of the feudal extortion system of religions and cults. Rather than emphasizing that we are a "vehicle" of spirit, they emphasize that we are no-self and so can be enslaved to an external regime. Evolution is always in the direction of autonomy not slavery and self-sacrifice is a control device of exploitive power structures that rule by fiat. Compassionate distancing (witnessing) allows a more pliable morphogenic range of thought, action and emotion. This allows us the emotional stability to build up energy and "Self" integrity…that is to incarnate. Spiritual Eros both in-forms and informs our Being. The self can thus tap into infinite resources through being infinitely pliable and expansive. The self doesn't disappear, it becomes more transparent, more plastic, less rigid and because of this expansiveness it flows along seamlessly with happenstance with less surface tension and less wasteful emotional friction. The answer to the Grail question: "Who does the Grail serve?" is "Spirit!" The more we come to know this question and its answer, the more enlightened we become.

I want to point out the obvious, which is often not so obvious within the confusing multi-layered motivation of human relations. It is only through sovereign realization that we can contribute our most transcendent genius for well-being of the collective. Spirituality is the realization of the individual, not the sacrifice of the individual to the mediocrity of the collective. It is not through neglecting or avoiding our individuality that we connect with the All (God), but by fully embodying and expressing our uniqueness. By default-unawares a sick mechanism

of scarcity and fear throughout all aspects of culture tries to impose its Will on us in determining who we are and our usefulness to the collective (Borg). To emerge from the gravity of this ancient unconscious form of control we need both clarity, stamina and determination to break free from the clutches of these lower primate dynamics. Only by living our genius in constant connection to the All can we contribute anything of evolutionary transcendent value. And thereby be a secret agent of change from the old power-war system to the new green-peace world.

Nonduality is Sahaj Samadhi, or the state of no-difference, in which all that arises is recognized as a mere self-existing and self-radiant divine Being. Enlightenment is the realization of the perfect transparency of the conditional world to its Source. The whole play of existence appears merely as a veil, transparent to the inherent self-light. Adi Da says the three stages of perfect practice entail:

1. The realization of the Witness.
2. The contemplation of Depth
3. Transcendence of the "content" of consciousness

Yet this is no negation or trivialization of the contents of consciousness, but a distance and plasticity in relation to "content," which allows the realization of the highest energetic, coherent, syntropic, win-win outcome. There is the no-self, and there is the Self and the Self is called to evolutionary-action. In this radical move from the personal to the transpersonal there is a dismantling of the ego not the glorification of the ego. Spirituality is the Realization of the Self as one with and not separate from the Universal Organism.

Now if ego (separate-self-sense) is the tension between the poles of subject and object, it is this pull-back into separation...it is this defensive perspective, which contracts us from Infinity that constitutes our suffering. In the act of separation the conditioned reactive self accumulates negative karma. "Finishing" with the past means letting go of the egos "defense" from and "attachment" to, its endlessly recycled conditioning.

This is key to the entirety of life: *"Garwin says that for every breakthrough there is a corresponding breakdown of older circuits, that if re-entrained, are a root cause of potential insanity. "* Arik Redman

"The Gnani (the Enlightened) continually enjoys uninterrupted, transcendental experience, keeping his inner attention always on the Source, in spite of the apparent existence of the ego, which the ignorant imagine to be real. This apparent ego is harmless; it is like the skeleton of a burnt rope--though it has form, it is of no use to tie anything with." Sri Ramana Maharshi

Fabulous article on ego death: *Death of the Ego, A Buddhist View*, By David Loy www.angelfire.com/electronic/bodhidharma/ego.html

Books by David Loy: *A Buddhist History of the West: Studies in Lack* and *The Great Awakening: A Buddhist Social Theory*

DIE-OFFs

"Unless a grain of wheat falls into the earth and dies, it remains alone; but if it dies, it bears much fruit." John 12:24

"When we deny the urge toward transformative death it can only manifest covertly through unconscious projection." Uniting Sex, Self and Spirit, by Genia Pauli Haddon.

"Whoever has studied the history of magic knows very well that in all epochs it has been said that all great initiates remain dead for three days and resurrect on the third day." http://www.gnosis-usa.com/Lectures/kundalini2.html

The best definitions for stages of growth in consciousness that I have found are Egg...Caterpillar...Pupae...Butterfly. This perfectly describes the stages, implications and profundity of metamorphosis. As well as a rebirth, we also have to start seeing metamorphosis as a process of progressive death...the caterpillar dies to its eggness, the pupa dies to its caterpillarness, the butterfly dies to its pupaeness. My hope is to clarify that dark nights, Die-offs and difficult kundalini symptoms and phases are NOT in any way karmic punishment, but simply the metamorphic alchemy at work in a completely natural and wholesome way, to bring about a new truly human species.

FOUR TYPES OF DOWN TRIP

There are four main types of down-cycle events in metamorphosis that need to be clearly understood to prevent unnecessary suffering and secondary backlash:

- **LIGHTNING:** This is a terror event of intense energy pouring up the body similar to a euphoric inner-conjunction, but in this case it is a dysphoric inner-conjunction. Here it seems we descend deeply into our matter and experience great fear with no apparent cause. This "negative" inner-conjunction mostly occurs during one's first awakening, as the polar flip to the spontaneous bliss awakening in a neophyte-body that is unfamiliar with such intensity of consciousness and energy.
- **SHOCK:** White Shock, or autonomic shock that occurs immediately after mystic ecstasy or Sex with Eros. That is the contraction and toxic overload after a significant opening to the extreme bliss of a euphoric inner-conjunction event.
- **SELF-DIGESTION:** Then there are the Die-offs which are a catabolic breakdown of the former structures through apoptosis due to oxidation by free radicals and then phagocytosis by the macrophages.
- **BURNOUT:** Lastly there is the exhaustion phase of the overall awakening cycle where the body's resources of neurotransmitters, hormones, and nutrients have been used up in the climb to the heights of the awakening peak. During exhaustion depression arises, yet there is permanent bliss giving the sense of being dissociated from depression.

These four types of down-cycle could variously be associated with what the mystics call the Dark Night of the Soul. They are unavoidable, as the "living death" must occur for resurrection of the "spiritual" bodymind. All must enter the Dark Night, perhaps many times during the cyclical process of evolution. "He who is not twice born will not ascend to the Kingdom of Heaven."

The deeper one goes into a Die-off, the greater the resurrection. Similarly the more one "allows" the influx of spirit phase during the heart expansion, the deeper one goes into the Die-off. The Die-off is either acute or chronic depending on the person and phase of awakening. It happens after the Influx of Spirit, as the flesh transmutes there is a Die-off of the conventional conditioned structures. For every influx of spirit, there is an accompanying catabolic breakdown of the former pupal body or Die-off. Only those people that have the kundi flow up the spine, and the experience of extreme bliss/influx or massive "opening" events are going to Die-off. Die-offs are distinct periods of catabolic breakdown in which there is no operative ego, other than that which is sufficient to drag one off to the bathroom when appropriate.

By the Die-off I am not meaning a near death experience. It feels more like a bacterial infection is consuming one's body, but there are no bacterial type symptoms or smells. A Die-off is mostly blissful, but at points there can be extreme pain as well. There is a hyper awareness of all the damaged parts of the body...it's like the damaged parts are being eaten. There is slight nausea, but it's mostly a case of not being able to get out of bed, for the three or more days. All one can do to make it to the bathroom and drink water. This is the body bottoming out so it's not a highly conscious condition. One doesn't get subtle level insights, the mind is in a mild hallucinated state and not available for normal egoic function. There is internal music, voices, sounds and lights, coupled with a pervasive sense of Grace. When the Die-off is over we feel a new lease on life, much more so than a simple recovery from illness.

In the degree of holiness of experience I have found that a Die-off is the runner-up to the Inner-conjunction. Mainly because it is the cessation of "doing" and the enforced relinquishment of the dominance of the ego. Eventually this is willingly chosen because any division between bodymind-soul becomes increasingly obvious and painful. My intuition is that the ego cannot handle love, and in actuality the ego loves fear. Eventually this is penetrated and seen as self-defeating. For the love that we give is the love that we are, and the love that we are is that which we can receive from others.

Die-offs can be acute where you are in bed for 3-6 days, or chronic - what I call walking Die-offs, where you can still get around but you have the distinct sense of being eaten from the inside out. During my two awakenings I had several walking Die-offs and 3 acute Die-offs. The first of my Dark Nights was the implosion event several weeks after my spontaneous awakening in Dec 1988. This peak of the down-cycle was one night of extreme panic; electrical and energetically intense as the blissful spontaneous awakening had been. Similarly the energy was pouring up my spine threatening to blow my head off, but I was in abject terror not bliss. This

Dark Night was accompanied by a walking Die-off, where there was an extended period of catabolic breakdown of the body via the immune system but I was not forced into bed rest.

The second Die-off was a month after attending an Alex Grey workshop in November 1999...this was a 4 day somatic collapse and more emotional than electrical and mostly spent in bed. It was accompanied by intense grounding, fatigue and heart expansion. The third was November 2000 after 3 months of the main influx phase of fire and heart expansion after being in my initiators presence...and this was atomic and cellular, an almost complete collapse of normal faculties for 6 days. The sensation of the body eating itself was so apparent in this Die-off that it was this experience that made me realize the role of the immune system in metamorphosis. Ego is suspended, there are mild hallucinations of voice and image, often blissful and a holy sensation, sometimes incredibly painful as the transmutation is working on a particularly congested or damaged part of the body. For me this was the right side of my face and head which felt as though it was being dissolved by acid for a day.

Seems to me that after experiences of radical expansion and extreme euphoria, we tend to compare the difference between where we were in mystic revelry and the condition most of us live in—it is then that extreme cathartic anguish occurs as we mourn the sorry state of our collective human condition. This is one of the hyperbolic curves that occur during the first stages of the alchemy, especially if the realization is around ones family situation. After time I suppose our compassion takes on a lighter air as our own physicality loses its dross and heavy nature and our faith becomes unconditional...ie: detached from worldly appearances. The evolution of faith probably goes from blind faith, to informed faith, to unconditional faith. But it's doubtful that any of us can proceed in this development without periods of the obscuring or loss of faith, for we have to die to our former stage of faith to move onto the next.

Usually what bought us to this impassé is the pull of the heart and psychic intuition and profound spiritual illuminations. So to be plunged into space where we can no longer rely on our conditioning, and Spiritual illumination seems to have left us can constitute an extended period of dark night--usually about 5 years as the body recovers from the extreme chemistry of the peak. This is the period in which spiritual practice, sangha and 'listening' to Spirit for understanding, meaning and direction is most important. We feel as sense of loss during the exhaustion phase when we have lost our "magic" and extrasensory abilities and are temporarily even more mortal than we were prior to our awakening. We all have to come down. This loss feels like losing oneself, ones lover, ones muse, ones God. The difference is shocking and if we do not do the work to rejuice ourselves then life feels like it's not really worth living. What was given to us so abundantly by Grace, must now be won by discipline, hard work and character development.

November-December is the most pronounced Die-off time in the Northern Hemisphere. It has to do with the earths movement round the sun, ie: just prior to solstice and the gravitational forces of the earth turning into the bend of the

elliptic and changing direction. However there is no Die-off during prior to the summer solstice due to a hormonal mix based on growth rather than senescence. The more thoroughly we Die-off the more refined our intellectual achievement is the next year—around Easter is my peak of the year for intellect, and again in July with the maximum prana flow that happens then. If you find yourself really peaking in energy and psi during July chances are you will have a Die-off in November especially if it is triggered by a transcendental dream or significant event in relationship.

The video "*The Naked Truth*" by Jordan Maxwell and The International Research and Education Society on google video is exceptional. It shows the mythic similarity of the world's main religions and how the elements of the story are based on sun worship and the suns progression through the zodiac. This is probably the most healing and informative documentaries out there. They say that when the traditions talk of a 3 day death/resurrection period, this is actually referring to when the sun stays 3 days at the same point at the lowest part of the sundial during winter solstice…ie: the belly of the fish of Jonah. It just so happens that the metamorphic Die-off often constitutes 3 days also. The perennial story goes: The son of the Sun-God, gave up his blood so that we sinners could be absolved of our sins so we would no longer feel guilty...then with a free conscience this would ensure that the sun (light) would indeed rise again tomorrow. Thus we keep the sun, earth and planets in their orbits by sacrificing the Golden Child.

ASSISTED DIE-OFF

By understanding the Tao of energy we can see that the deeper one goes into a Die-off, the greater the resurrection. Similarly the more one "allows" the influx of spirit phase during the heart expansion, the deeper one goes into the Die-off. If we voluntarily help to wipe the slate clean we naturally ascend to higher levels. However if we adopt staunch adherence to our existing stage of consciousness we grow no further. The "secret" to metamorphosis is that we can stimulate the up-phase by going down first, for the cycles follow each other as sure as night follows day. Thus the body can be triggered and assisted into catabolic states through the use of circumstance, conditions and herbs etc... however only if the cycle is ripe with regards to the natural rhythms of the sun and moon. My theory is that you can actually prompt an "influx" stage by putting oneself through a constructed Die-off stage. The idea being that the more our cup is emptied the more that spirit can enter and transmute us. This might be very useful for people in chronic depression, or stuck in limbo etc...Instead of always trying to prop themselves up and get higher, they should instead descend into a "holy resting pupae condition" and then a natural resurgence of spirit will arise after they have "emptied," that is been purged of their former self.

For example time spent in a cave fasting...soaking in mud pools, in some sort of pressure suit, buried in the sand, or in various forms of sensory deprivation and stillness conditions could prepare the bodymind for the influx of light...by providing rest and repolarizing the nervous system. This is what I think the ancients knew with their various cave-womb type rituals. The Die-off phase was traditionally

performed in a cave. “Visit the interior of the earth; through purification thou will find the hidden stone.” Interesting that the Philosophers Stone (White Powder of Gold/Iridium and Rhodium) is called the “hidden stone,” because monatomic elements cannot be assayed for they do not form chemical or crystalline bonds with other elements or even between each other, hence the name monatomic.

I feel that this “Die-off” phase can be enhanced if undergone in a cave in which a pool/tub of volcanic hot clay becomes the “bed” in which the 3-5 day Die-off occurs. Obviously the clay-pool would have to be heated either by natural thermal means or some other means. The death position of feet crossed and hands crossed over the chest also facilitates the process. I also think that the ideal Die-off cave should have a spinal shower. The spinal shower...a 3”wide column of warm water that you let fall on head/neck/spine while sitting under it in trace state. The spinal shower is the best form of psycho-somatic healing I have found...it is the number one nervous system therapy for rebirth and balance.

During my acute phase of heart expansion in 2000, I was called to be outside walking around all day. This way in being exposed to the ground and the open sky I felt my Soul/Muse to be more intensely with me, helping and guiding me through the extreme chemistry. I followed my instinct in this, and perhaps the ancients followed their instincts in being drawn into caves, as being more than mere symbols of the womb, during their Die-off periods. It could be that melatonin and the darkness is a prominent agent in the Die-off process.

Rock, whether it be through electromagnetics, gravitation, proximity to the resonance of large masses of elements in crystalline bond, conveyance of earth energy or what...has an effect of “grounding.” Such grounding is necessary for the Solar Heart to open more fully. I have personal experience of mediating on iron rich rock in vertical formations...not only did I reach a deeper state of connection (satori) on the rocks, when I walked away from doing this one day, I had an episode of such severe grounding, that I could barely walk along the ground. This ultra grounding is associated with the increase in nitric oxide metabolism during peak-conscious events and can accompany both the massive heart expansion stage and a Die-off. Suggesting an extreme parasympathetic overdrive, low blood pressure and autonomic fatigue.

To facilitate an inner-conjunction and higher revelatory states do hot rock treatments on yourself in nature. As well as placing hot iron rich rocks on your body, use one as a head rest as well. It may be that the magnetism in the rock may influence the electromagnetically sensitive hippocampus and facilitate an inner-conjunction and visionary chemistry—thereby producing the visionary frequencies Theta and low Alpha and the chemistry of amrita-living water-DMT.

Being in a cave during the Die-off may facilitate such perfect grounding that the catabolic cycle is magnified and so the Heart expansion phase may occur with less friction and with greater ease and intensity. I learnt to lie down with my spine on the ground during the acute heart expansion for this reason...to ease the tension from the Heart’s extreme need for grounding. And of course to be horizontal during periods when the blood vessels are blown wide open, and blood pressure is low means that the brain still gets its adequate share of blood supply.

WHAT TO DO WHILE DYING

1. **Relax with the collapse**—Allow. Melt into the Unified Field. Stop resistance, without suppressing symptoms, running away or propping yourself up with stimulants. Whatever you do, don't try to keep going like normal.
2. **Set environment**—Make yourself comfortable, make a nest, play music, put a fan on yourself, etc…
3. **Antioxidants**—A Die-off is a free radical storm so take mega doses of antioxidants for protection: Vitamin C 8gm, Bioflavonoids 6gm, Beta Carotene, Vitamin E, Bs and fish oil.
4. **Hydration**—Drink around 5 qts of water a day, and take long baths daily to rehydrate. The body has a huge demand for water during a Die-off.
5. **Fast**—Get someone to juice vegetables for you and drink water, herb tea and broth, "*do not worry about eating for the duration of a Die-off.*" If you are in the full on wammy Die-off, your immune system is essentially catabolically using the body itself as food and all you can do is hangout in bed or under a tree outside. It's best not to eat while the body is in this catabolic breakdown mode, or *"digestion will draw energy away from the transmutation of the flesh"* and your resurrection will not be as complete. You will create toxicity and tissue damage if you work against the nature break-down cycle with food - which is essential for building flesh.
6. **Let go**—Giving up is the first stage of really living. Until we give up we have been trying to live from the concept of self, instead of Self—that is "my" will not "Thine". It is often the case with human action, that what we bring about through our efforts, turns out the very opposite of what we intended, partly because of our own internal blockages (ego). The Die-off is the most extreme experience of nature stepping in to help us move beyond the known to the vast reaches of mystic perception.
7. **Feel Gratitude**—It is a really cool relief when the only thing left to us is surrender. That is why I love Die-off periods! They are so holy in their unassailable consumption of one. At few other times in life, other than perhaps death and child bearing, do we get to experience the full nature of Necessity. The deeper our surrender to the living-death the more we can be reborn anew.
8. **Succumb to Necessity's Grace**—Since metamorphosis is a dissolving of the former self, there are times when the individual will be in total meltdown such as in the die-offs. Thus the necessity to surrender into the process. Meltdown in this sense is essential, for its what is happening and one can't fight it anyway, for even ones fight-faculties are melting.
9. **Empty to Receive**—Self-dissolution is only "half" of the equation. Self-dissolving is addictive and you can do it for lifetimes for there is great pleasure of the blasting of the tower of Babel. However in order to be fully human, and responding to the true call of evolution, you need to do the building and action...that is the CREATIVE side of the equation as well. The dissolving is only there to provide space for the NEW to manifest.

LONELINESS AND CELLULAR PANIC

Two University of Chicago psychologists, Louise Hawkley and John Cacioppo, have been exploring the relationship between social isolation, loneliness, and the physical deterioration and diseases of aging, right down to the cellular level. Hawkley and Cacioppo took urine samples from both lonely and more contented volunteers, and found that the lonely ones had more epinephrine hormone flowing in their bodies. Epinephrine is one of the body's "fight-or-flight" chemicals, and high levels indicate that lonely people go through life in a heightened state of arousal. As with blood pressure, this physiological toll of inner tension becomes more apparent with aging. Since the body's stress hormones are intricately involved in fighting inflammation and infection, it appears that loneliness contributes to the wear and tear of aging through this pathway as well. Loneliness was found to affect around 209 genes involved in the basic immune response to tissue damage and the production of antibodies. www.sciencedaily.com/releases/2007/08/070817130107.htm

Research will have to be undertaken to see whether genuine alchemical dark night experiences and the consequent acceptance of fundamental aloneness, reduces the overproduction of epinephrine and the chronic state of sympathetic arousal (unconscious panic) that is normally associated with a lonely life. This subliminal fear that has always been with us even in the womb, so that we do not even register we are in fear...call it neurosis, stress, narcissism or whatever. Society in the West and war torn areas is generally in permanent state of unconscious panic. This spiritual loneliness cannot really be resolved by others, for if you are already in permanent unconscious panic, the company of others is just another terrible stress. It begins in the womb and reflects the cellular memory of the spiritual separation, anxiety and disharmony, not only of the mother and the primary relationship of the parents, but it reflects the general "quality" of spiritual integration of the community, the times and humanity as a whole. Because it has always been with us, you only get to perceive this fundamental cellular anxiety and spiritual separation from Cosmos when it stops. In the absence of the cellular fear, you realize you have been living in a vice. For no other reason than we are collectively programming ourselves in this way, and it takes shamanic drugs, falling in love, kundalini awakening or samadhi experiences in order to realize that there is another way of being we have not explored yet...in fact there are infinite ways of being yet to be explored.

Like a good self flagellating puritan, I personally feel more matured by my dark night experiences, than my ecstatic peaks and revelations. I used to be plagued by incredible loneliness from the moment I came into this world. Now I treasure my aloneness almost more than life itself. But I am sure I would not have lost the continual organic loneliness, if it wasn't for the absolute joy of encounter with dark nights and Die-offs. Knowing that life doesn't really get worse than this, and this down cycle is the most thrilling enjoyable ride into "depths" I could possibly imagine. Because it is the "conscious" experience of that which was being repressed from consciousness. Thus in a way identical to an inner-conjunction a dark night is an ultimate homecoming. Because it is the "conscious" experience

of that which was being repressed from consciousness. Thus in a way identical to an inner-conjunction, a dark night is an ultimate homecoming. We are in the end only really lonely for our Self.

The Die-offs/dark nights are a "biochemical process" which secondarily brings about the dissolution of the operational personality structure for "a period of time". The brain is undergoing such a catastrophic neurological meltdown and renewal, that the ego personality and functionality is temporarily completely non operational. Depending on ones inner resources at the time and whether one is essentially imbued with a biological faith or has a tendency to fear, depression and self-hatred—this will determine whether the incapacitation is navigated positively or simply adds to the burden of an already difficult life. The psychological-emotional story one gives to interpret this autogenic "biological" event, is secondary to the chemistry, and yet is absolutely key to whether one can use the down cycles to further ones spiritual growth, or simply cause an escalation of our primary suffering.

Down cycles are an opportunity to "stop" and experience our depths. The more we can quit our secondary meaning-making and turn toward our suffering, the faster it transforms. As the wound of inchoate is filled with the energy of Spirit, the more Presence we can bring to all our life—the more we learn from our descent and the faster we rise to the up-side of life again, having gained remarkable new understanding from our journey into the cave. In an audio on Michael Brown's website he said that everything that was wrong with his life was due to the fact that he was "not here." In 1987 he developed an acutely painful neurological condition called Horton's Syndrome and to deal with the pain of his condition he developed a method of increasing Presence to overcome pain. His book that describes this practice is *The Presence Process: A healing Journey Into Present Moment Awareness.* He is especially fabulous on audio: *A Walk Through the Presence Process.*
www.thepresenceportal.com/—Michael Brown,

Dark Night of the Soul by Jason Augustus Newcomb.

It is absolutely amazing that the most primitive functions in the body turn themselves into the service of the highest biological faculty of transmutation.

DEPRESSION

As kundalini moves through the miasmas (repressed, damaged, latent) areas in the brain, we might feel the emotions connected with each developmental arrest. The miasmas were created in stress and in stress they are transmuted. For every up there is a down, so it is understandable that depression might result after the over-stimulation of the brain's pleasure centers and increase in endorphins, during the bliss of kundalini. Depression could also result as the left-brain loses its normal adaptive function during the first few years of the major cycle. Loss of left-brain prefrontal lobe function could lead to paranoia, frustration, self-pity and other negative emotions.

There tends to be a psychological let down when the tide turns down into the valley as the influx of spirit abates, and consciousness plunges deeply into matter. This feels like a loss of Grace after the heady heights of the influx, but the valleys are just as important as the mountain tops in the transformational process. Once the kundalini storm is kindled eventually the body runs out of neurotransmitters and their precursors and so the bodymind falls into depression. A normal diet would not supply adequate nutrients to overcome the deficiency, let alone a SAD diet. Thus relief from depression would occur after enough time has passed after the kundalini peak. A more rapid relief from kundalini created depression could be assured by first making sure one's diet is well supplied with nerve nutrients, and by taking supplements during and after the awakening. (S*ee Five Formulas For Kundalini*).

With the increase in immune activity, higher metabolism and nerve function during metamorphosis, one can assume that there is a greater free radical production. This is probably half the reason why we feel "fried" after the influx. The other major contributor to the down cycle is that the body's resources for making neurotransmitters and hormones becomes exhausted during the peak activity of the influx stage. Plus all the metabolites that were created in the firestorm need time to be converted and disposed of. In our cooked, demineralized bodies this radical swinging of metamorphic cycles is inevitable. With knowledge of the requirements of the process however, we can build the kind of integrity and reserves into our bodyminds that will help to facilitate evolution. By avoiding wasting so much time and energy in the down cycles, our spiritual birth will incur less abortion and labor.

"There are many undergoing this process who at times feel quite insane. When they behave well and keep silent they may avoid being called schizophrenic, or being hospitalized, or sedated. Nevertheless their isolation and sense of separation from others may cause them such suffering. We must reach such people, their families, and society, with information to help them recognize their condition as a blessing, not a curse. Certainly we must no longer subject people, who might be in the midst of this rebirth process, to drugs or shock therapies, approaches which are at opposite poles to creative self-development." P.60, Lee Sannella, M.D. *Kundalini, Psychosis or Transcendence?*

I think it imperative to not treat kundalini-depression with antidepressants. Herbs and supplements for depression are generally fine if you know what you are

doing. I don't generally recommend "pharmaceutical" antidepressants, but would like to see a more nutritional approach to fixing what is obviously a metabolic problem that is many generations in the making. I suspect that tranquilizers and antidepressants will increase repression and prevent necessary tension and the flow of consciousness-energy that transforms blockages (miasmas). The Guru Rawa sensed that the nerves of a woman who had taken 6 types of tranquilizers and antidepressants to be "burned." If we detoxify, adopt a raw diet and do those things that open us up to the flow of kundalini, then we establish a solid self of deep peace, joy and equanimity usually within several years. This sense of coming home to ourSelf is something that drugs, cooked food, and "therapies" can never give us. Kundalini restructures us to a higher order, enabling us to live a spiritual life in the material world. The Die-off's in particular should be regarded with awe and gratitude as very good news. They don't last long and we do not transform without them. The old must die for the new to be reborn. So the highs and lows of the kundalini cycle should be celebrated equally.

"Prescription psychoactive drugs (antidepressants and antipsychotics) can arrest or completely abort a transformational process. This may sound desirable to those who are having a hard time of it, but these drugs do not return one to normal; instead, they tend to freeze the process in its present state. Worse, antidepressants can trigger psychosis for those in a delicate psychospiritual state, and the neuroleptics (antipsychotics) can cause tardive dyskinesia, a persistent and in many cases irreversible pathological syndrome which resembles kriyas! Even so, some people are so prone to severe depression or debilitating psychosis in the heightened states that they cannot function without the temporary aid of these drugs." El Collie, elcollie.com

Instead of suppression and medication I suggest that the initiate get a daily dose of nature, exercise, water therapy (eg: baths), bodywork, stretching, breathing, toning and music etc... A long list of coping techniques are listed further on in Kundalini Skills List. It is imperative that one adopts a diet that does not clog the liver, or weigh down the digestive system or challenge the immune system. The body already has more than enough to metabolize from the alchemy of transmutation itself, so we should be very careful not to overburden it with even more work. Nutritional supplementation should be given to the nervous system to feed neurotransmitters, hormones and to balance and soothe the nerves. Adaptogens like ginseng, ashitaba, neem, gotu kola, olive leaf and ginkgo are probably the most important herbs to take for achieving a higher homeostasis of the nervous system and recovering from depression and anhedonia (numbness). I recommend that both women and men nightly massage their breasts before sleep to help maintain hormone levels and prevent a slide into depression and numbness. This might even positively affect growth hormone production.

Rehabilitation of the brain after an awakening takes physical activity and novel environmental stimulation to encourage dendritic branching, neurotrophic growth factors and increase plasticity i.e. where remaining cells take over from dead cells to improve functional recovery. Exercise and movement therapy increases brain vascularization, birth of new cells and synaptogenesis to establish new connections.

Note that anti-convulsant drugs can increase functional depression, and that if antidepressants are used, instead of proactive healthy interventions such as new activities and exercise, post awakening depression will be radically deepened and extended. For establishing new growth in the substantiation phase we need an appropriately enriched environment. That means people who care, and activities one enjoys. Remember—spiritual acceleration necessitates conscious incarnation, for if the awakening process does not become increasingly conscious negative outcomes will occur.

Depression often sets in through an internal/external conflict that remains unresolved for an extended period of time. No matter what the original cause of the conflict, it eventually affects our decisions and every part of our life. Endurance in the face of a stressor eventually leads to depression because no positive action has been taken to change our attitude or circumstances. Consequently our chemistry then mirrors the adverse conditions through the raising norepinephrine and dopamine and lowering of serotonin. When low serotonin is maintained overtime, we have the biochemical basis for chronic depression.

Depression and chronic anxiety are conditions appear more often in women than in men. Research with PET scans show that women have a greater number of the most common serotonin receptors than men. They also show that women have lower levels of serotonin transporter (SERT), the monoamine transporter protein that transports serotonin back into the nerve cells that secrete it. It is this protein that common antidepressants (SSRIs) block. Also it was found that in women with serious premenstrual mental symptoms their serotonin doesn't respond as flexibly to the hormone swings of the menstrual cycle as that of symptom-free women.

It doesn't matter what age you live in, there is always going to be some contemporary lion at your door. These days it just wears a different face than it did 20 or 2000 years ago. The trick is to allow the lion to wake us up, rather than make us numb or asleep. As soon as we define one lion and deal with that, there will be another lion around. The thing to stay focused on to help us remain open and not dissociated is our contribution. To keep on defining and refining what it is we are here for, might be the major panacea of all ages. Apparently it is greater connection and Presence that wins the fight against depression, as stated here by John Horgan: *"The researches reported in the April 1998 American Journal of Psychiatry that "intrinsic religiosity" was the best predictor of recovery from depression in both the treated and untreated groups. There is no evidence of significant benefits from psychotherapy, drugs, or a combination of therapy."* 121 The Undiscovered Mind.

Drugs like Ecstasy might be good once or twice in our youth to give us a sense of expanded perception beyond this facade we living in. Our culture can be so miserable, people use drugs to "get out of it" not "into it." Therefore the chances of the drugs contributing to enlightenment are very slim unless the individual already has a disciplined sense of their shamanic soul. Those people that try the drug option would be better off to first use raw food and fasting as a means to alter their condition, for fasting is a sure fire way to tune "in" and not "out." Fasting

is the most "successful" way of eliminating pain and dis-ease on all levels and to promote greater communion with Self and God. Fasting itself is still not enough however, for unless the rawfood component of the diet is increased, the biology is so agitated that the soul cannot become coherent, and this physical disharmony shows up as mental and emotional suffering...hence the desire for drugs to "get out of it." Drugs, by themselves, will never ever bring that which is incoherent into the harmonious sympathetic resonance that constitutes the unified, integral, enlightening human being. See: *The Fasting Path, The Way to Spiritual, Physical, and Emotional Enlightenment*, Stephen Harrod Buhner.

NERVE REGENERATION

Recovering from depression, exhaustion or damage to the nervous system involves a multiple pronged nutritional approach. Dr. Robert J. Marshall points out that nearly all neurodegeneration occurs through excitotoxicity and the immune systems use of free radicals, leading to inflammation and chronic infection. Neurodegeneration can escalate when nutritional reserves are inadequate to rapidly reduce infection, which then results in DNA and nerve damage, as the immune system generates free radicals as it tries to eliminate infected cells. We are familiar with the idea of damage to nerves by free radicals, excitotoxicity and inflammation. But we are not as conversant with the effects of infection (viral/bacterial/fungal/yeast) on the nerves via the immune response. This will be an area of great interest to kundalini researchers and those with chronic K-symptoms, such as depression, anhedonia, pain, fatigue or prolonged exhaustion phase.

Dr. Marshall has developed a neutraceutical protocol for preventing neurodegeneration that includes 5 steps to health: First balance the pH, Balance hormones, detoxification of heavy metals etc..., the resolution of inflammation, infection and autoimmune decline of nerve tissue, and the regeneration of nerves and bodytotal.

Infection: Any phytonutrient that has anti-viral properties is capable of DNA repair, because viruses hijack the DNA of living cells and reprogram it to replicate itself. Viral/bacterial overload and autoimmune damage to nervous system can be reduced with antivirals such as: Echinacea, Pacific Yew, Hyssop, Creosote Bush (Larrea tridentate), Olive leaf, Licorice, Lomatium, Osha root (Ligusticum), Astragalus, Elderberry, Huzhang [Polygonum cuspidatum], Isatis root, Wild barley, Sutherlandia, St. John's Wort, and the Ayurvedic herb Soma latha. Also medicinal mushrooms including Coriolus versicolor, Reishi, Krestin, Cordyceps, Maitake, Ganoderma Lucidum, Shiitake. These antivirals have a direct antimutagen, anticancer effect through reducing DNA damage, anti-oxidant, anti-inflammatory, act as an immune stimulants, decreases anxiety and irritability and elevate mood. **Elder flower** blunts the sharp protrusions on the crystalline coat of a virus, so that it cannot puncture cell walls.

Nerve regrowth: Hericium mushroom extract supports nerve growth and rejuvenation. Hachijo ahitabe increases production of NGF (nerve growth factor). L-Carnosine powerful agent for nerve regrowth, extended life by 20% in research.

Nervonic acid found in Purpleblow Maple seed oil, deep sea fish oil and Borage oil increases myelination and nerve growth.

DNA Repair: Aging can be largely attributed to the accumulation of DNA damage. Damage to DNA mechanisms that synthesize proteins results in faulty proteins, which accumulate to a level that causes "fatal" damage to cells, tissues and organs. Colostrum is one of the most powerful, broad-based DNA repair agents; Naringenin a flavonoid in Grapefruit repairs DNA; Folic acid supplements boost DNA repair, as does Fulvic acid; selenium is involved in DNA repair. DNA repair is promoted by all flavonoid rich plants including Moringa Oleifera, Cat's claw, Gingko and all colorful fruits, vegetables, herbs, grains, legumes, nuts, and teas. Significantly lower levels of DNA breaks occur on a raw diet with a high ORAC antioxidant capacity. For a great list of anticancer herbs that aid in DNA repair do a web search on *Sino-Vedic Anticancer Herbs.*

For more details on "The 5 Steps to Great Health" or the Marshall Protocol for Neurodegeneration email: doctors@prlabs.com Robert J. Marshall, PhD, CCN, of Round Rock, Texas. Premier Research Labs www.prlabs.com/ Also check out his fabulous web article *"The Overlooked Role of Chronic Infection in Neurodegeneration and Its Reversal Using Nutraceutical Agents."*

More on nerve protection and regrowth in The Exhaustion Phase Protocol on my website and in BOK-2. The Calm Formula in my Five Formulas section will help with depression. I am really big on remineralizing-regenerating and building up the immune system "for" enhancing mood and brain/nerve function. Removing heavy metals is also very important for lifting mood and feeling-state as well. It takes a lifestyle change toward greater health, aliveness and reason for living.

Depression-Free for Life: A Physician's All-Natural, 5 Step Plan,
Gabriel Cousens and Mark Mayell *Mind Boosters*

A Guide To Natural Supplements That Enhance Your Mind, Memory, and Mood,
by Ray Sahelian.

Natural Highs: Supplements, Nutrition, and Mind-Body Techniques to Help You Feel Good All the Time by Hyla Cass and Patrick Holford

Healing Anxiety and Depression by Daniel G. Amen PhD

Depression and the Body by Alexander Lowen

Stop Depression Now: SAM-e: The Breakthrough Supplement that Works as Well as Prescription Drugs by Richard Brown and Carol Colman

Energy Tapping by Fred P. Gallo and Harry Vincenzi. How to rapidly eliminate anxiety, depression, cravings and more using energy psychology

NO PROBLEM

All perception of lack is acknowledgement of inherent potential.

I love dark nights in all their forms for there is such a collapse of the ego that it gives us a rare spot of relief from our striving. In a Die-off or dark night seeking, the search and hope cease. One could be in hell, but the relief of not being in striving or hope is enormous. In this way death too must be the ultimate relief and release from regret and confusion, for choice ceases. In this way a dark night is like living through a death. Dark nights help us get in touch and accept our fundamental aloneness and loneliness. No one can go with us into our Dark Night...and any "help" just serves to distract us, and weakens the power of the alchemical event. Coming out of a dark night we realize we don't actually need anyone anyways, so infantile need is burnt off as the elemental self is accessed. Dark nights are possibly essential to a mature sense of Self and mature relationship based on Being Values rather than needs. As long as we don't get stuck in an extended depression, I think dark nights are both essential to growth and provide the fastest growth curve. Research will have to be undertaken to see whether genuine alchemical dark night experiences and the consequent acceptance of fundamental aloneness, reduces the overproduction of **epinephrine** (adrenalin) and the chronic state of sympathetic arousal that are normally associated with an isolated lonely life.

A brilliant description of an extreme form of dark night is found in Robert Augustus Masters book*, Darkness Shining Wild, An Odyssey to the Heart of Hell and Beyond.* Here is what he says of the ego: *"Regardless of its appearances to the contrary, egoity is little more than personified separation trauma, made bearable by its compensatory addictions and capacity for psychoemotional numbing and dissociation. A cult of one."* No wonder there can be such shock and dread at letting go of this defensive position and why it can simultaneously be such a relief.

Dark Nights come of their own accord, I doubt anyone volunteers for them. I would say that not everybody needs to experience demons, Die-offs and dark nights. It just depends on our chemistry, armoring, programming, situation and destined calling. But the standard shamanistic cycle is to rise to heaven, cavort with angels then later to descend to hell. Yet sometimes we notice a descent prior to an ascent. This hyperbolic flip can occur within hours, days or months. The alchemical period for the major Die-off associated with ones lifetime kundalini peak is probably around three months between the up-peak at summer solstice to the down peak at fall equinox. Believe me you are not less of a person because you didn't go down, for you may do so on another cycle or if your pace accelerates. Going down is just as fascinating as going up, and requires equal mastery to do it well.

Well after our dark nights and Die-offs are finished we intuit the benefits of the hell aspect of metamorphosis. We slowly become nondual about the difficulty of the journey and the unsolvable paradoxes of human existence. If one is not "afraid" of pain, loneliness, alienation, confusion, loss, being lost, grieving, shadow, lower nature—then this allows for more Flow and speeds synchronicity, the Acausal

connecting principle. Synchronicity, the intimate dance between Self and All, lies under all our reactivity to our perceived demons.

We have been trained in the black and white doctrine of either "sickness or health." Transmutation however teaches us the need to actually "die" in order to "transform." There is such Grace in the Die-offs if only we don't interpret them as being a problem. This secondary layer of assuming the Die-off is " wrong" is the main cause of our inertia to transmutation. If we take off the brakes and consciously and piously surrender to a Die-off, then there is less chance of emotional, mental and physical damage. With knowledge of the process we can proceed with less friction and hell into the illuminated life. If the Die-off is supported and allowed to run its full course then resurrection is able to proceed smoothly. If we resist the Die-off, we interfere with the next stage of metamorphic growth and development and cling to obsolete patterning.

A Die-off may feel like a depression because the cerebral cortex is not in normal operating mode and the energies and functions of the body are drawn away from egoic operation. Some people misinterpret the Die-off as depression, and this does this holy event great injustice and people will start medicating and resisting the Dark Night (Die-off) rather than honoring and assisting it. Also the depression of the existentialists is a malaise of the ego, not the actual ego-death associated with a Die-off. Some people because the way their neurochemistry is primed will always flip into a depression after the electrical initiation of the influx. This is unfortunate...but we tend to make people this way with our unnatural diet and removal from the strength of natures vital forces.

Compounded onto the primary incapacitation of the bodymind during a Die-off, there might be a secondary depression or emotional sense of "dark night" which comes about through a lack of understanding and acceptance of the Die-off process. The ego essentially gets a "shock" over its loss of faculty, tenacity and control. And considering the fragile nature of our modern bodies, this secondary depression could last for an extended period due to our lack of understanding and mistrust of metamorphosis.

If there is fear, ignorance, a severe reaction or psychotic reasoning around a Die-off, there maybe an extended depression involved, which is in a way the ego self trying to maintain the "smallness" of the id and prevent the limitless "space" involved in stepping out of the cocoon. It's not a conscious decision to remain small, it is just the rigidity and inertia of the unconscious that is entrenched in familiarity and habit. Part of the resistance to growth is due to the lack of loving-telepathic peer relationship that allows us to transmute naturally as nature intended in a supportive environment. When society knows about the catabolic Die-off and can appreciate it as necessary to growth, then it will be respected and revered and this *secondary fallout* won't happen as much. It will be known to be a simple metabolic process of the morphing individual, with little story and meaning attached to it, other than we cannot grow one inch without it. A die-off will thus be interpreted and treated as a holy event and put us in touch with the Mystery.

Be careful whom you tell about your condition, some can accept it openly without fear, while others will be freaked out without any real reason to be, just through shear ignorance. If you must mention your awakening experience to blind conservatives, you could just simply describe it as a massive cosmic love affair or something. People also get freaked out when you mention any "strenuous effort" involved in your spiritual process; it is as though spiritual evolution was supposed to be all light and easy going. Reality is often too much to bare for many still programmed exclusively in the religious and economic myths.

With the Grail and the Amrita (Sang Raal) we are set free from our personal and inherited past...but only if the personality is a willing participant in this liberation from bondage. This willingness is reflected in the nature of Percival and Galahad whom both achieved the Grail by divine right of their goodness. Crossing the threshold from one state to another is an advent of Grace. Perhaps it is the very nature of state change that there can be no real preparation between here and there. That the "gift" is actually in the non-preparedness itself...the tacit experience of polarity between the "was and the nothing." Grace you could say is when we are "born again" through a window of amplified spirit in which we are freed from the weight of accumulated past. Grace is a sacred space of Being and the dropping of our autistic sense of separation. The division between feeling, thought and action keeps us floating in shallower realms unable to connect with our spiritual roots.

The "resting-neutral" state is the condition of receiving the ultimate power of Self, in our ongoing understanding of the Solar Heart and Christ Consciousness. We need to train our nervous system in the relaxation necessary to broach thresholds with greater luminality through equanimity, ambiguity, openness, and indeterminacy. The luminal state is a God intoxicated or One-inspired creative trance—the Unitive experience. The unlimited creativity of nonlocalized mind. Without this unitive connection to the primary mover Eros is thwarted on all levels from atom to soul and the afflicted state of war and decay rules in the place where wisdom, nobility and royalty should. If each part, each individual fails to fall into sync with the prime mover of the Unified Field, then enlightened spiritual community can arise and the Mystic Civilization bought about. The more we make this process conscious, the less blowback need occur. Knowing that we are all in this together and have a responsibility in the outcome makes incarnation a whole lot easier.

Ultimately there are no obstacles anywhere, except in ourselves and everything is meant for that perfection." P.197, *Mother,* Satprem.

Fear of Life by Alexander Lowen, M.D.
www.thepresenceportal.com —Check out Michael Brown's inspiring audio!

BURNOUT OR REDEMPTION

A successful awakening results in "redemption or mastery," while more likely than not "burnout or maladaptation" is more likely to occur, because we are not socialized in the alchemical tradition and our science is really lagging behind in this most important area. During kundalini awakenings we are at hormonal lifetime peak after which our hormonal potency will fall off comparatively. Spiritual evolution is driven by sex hormones—they propel one into a full-on awakening, then depending on our knowledge, skill and discipline we either ride the wave or get crushed by it. When we are peaking hormonally we are also peaking physically, mentally and creatively. Our muse is Godlike, we are "globally aware" and "globally sexually active." That is we are responding sexually/psychically/spiritually to the entire globe or polar partners in particular, regardless of whether relationship occurs (see Supra-sex).

Besides nutritional supplementation, our hormonal potency and higher faculties can be sustained after a peak, by camping out in nature and being around sexually potent alpha types. Meditation and toning will help some, but hormones are very much related to human relationship and adventure, so if one is not in relationship and not engaging life as an adventure then we are hormonally deprived. Stress reduces progesterone, thyroxine, testosterone and norepinephrine (NE) and this in turn reduces neuroplasticity. **Neuroplasticity** refers to the changes that occur in the organization of the brain as a result of experience and in response to changes in environment. Besides reducing flexibility and ability to learn the stress hormones (corticosteroids) subject neurons to possible injury. Cortisol causes parasympathetic nervous system to shut us down leading to ennui and depression. Repetitive stress leads to a parasympathetic dominant learned helplessness which makes us less capable of handling further threat or stress.

The nausea, dizziness seem to occur with extended sympathetic nervous system activation, perhaps through an unbalance of neurotransmitters and the loss of serotonin effectiveness in the enteric (stomach) brain, brain stem and cerebellum. The principle function of the neurons of the raphe nuclei of the brainstem is to release serotonin to the rest of the brain. Serotonin is implicated in the sensory motor regulation of the cerebellum. Down regulation of the serotonergic system after acute kundalini flow is probably due to the excessive opiate production and the desensitization and internalization of serotonin receptors. In experiments with rats neonatal cocaine exposure affects the serotonergic cerebellar system, altering the standard development of Purkinje cells and possibly compromising the motor function. Deficiency in the utilization of serotonin (5-HT) is involved in many problems, such as anorexia, depression, sleep disorders, panic disorder, social phobia, obsessive-compulsive disorder, sweating, nausea, anxiety and diarrhea. Hyperactive nerves, coupled with the inability to rest-relax-recover leads to exhaustion, inefficiency and depression and ultimately to inflammation of the nerves, hypersensitivity and neurodegeneration.

Intense arousal and freeze events without a following discharge tend to be accumulative, leading to dissociation, PTSD, hypervigilance, progressive

helplessness and hypersensitivity to threat. The antidote to this is the attainment of self-empowerment, freedom (responsibility), completion of freeze-discharge through exercise or catharsis, building inner resourcefulness, reintegration and strength or conscious incarnation rather than dissociation or dispossession. This increased incapacity in the face of threat can be stopped through a **cellular forgiveness** and reprogramming of the threat remembering mechanisms in the amygdala and hippocampus—the heart you see has direct unmediated neural connections to the limbic brain. This entails a completion of the shock response, resolution of the threat in the heart and cellular forgiveness of the uncontrollable vagrities of mortal existence. That is holding the charge in the expanded heart with breath/meditation/toning until all traces of the original "harm" have been transformed, forgiven and released at the cellular level.

I think this biological discharge of tension is the larger vision of forgiveness, and it's what Jesus was actually taking about when he said "fear not evil." I call it cellular forgiveness...letting go of every bit of fear that every person has directed toward us throughout our life. And forgiving them because they know not what they do. This act of somatic-forgiveness reinforces the stabilization of our Buddha Nature. Understanding clearly the notion of collective karma, we realize that forgiveness is fundamental to rising beyond the ego and our normal animal threat remembering mechanisms.

I spoke about losing abilities through burnout effects, but we also loose pathologies as well, or at least the intensity of the hold the pathologies of our childhood had over us and so we can be variously reborn in our own image. Scaer suggests that kindling might be a way that PTSD symptoms are perpetuated and worsened over time. Kundalini is quite different in that it generates a sequence of alchemical events and background of bliss such that much of our primary matrix wiring is "loosened." If the **scalar energy** of the body rises during an awakening this would cause persistent spontaneous nerve transmission, which in turn would increase scalar energy. This explains the long duration of kundalini awakenings and how they are quite different from seizures or kindling in that kundalini generates transformation and awakening.

Within this self-perpetuating field of heightened kundalini the body is dissolved and resurrected, our true voice found and our soul redeemed. Kindling is proposed as a possible means for the long-term entrenchment of PTSD symptoms and to their progressive worsening. But rather than increasing the symptoms of past trauma kundalini tends to result in a reduction of pain, tension, negative emotion, stress and mind chatter. Thus kundalini awakenings which turn our lives upside down and affect every cell and system in the body, cannot be said to be simple brain seizures. They can for all practical purposes wipe the slate clean offering us some distance from what the past had made of us.

A kundalini awakening with its spontaneous autopoietic (self-manifesting) firing of neurons must lead to the erasing of patterns held in the procedural (unconscious) memory. This leads to a reduction of the effects of the past on the bodymind, effectively overcoming PTSD. Some of the more notable effects of this

rewiring are a reduction in neurosis and paranoia, less energy waste in muscular holding, more efficient neuron firing, less divisiveness between the body, mind and soul, less body pain, reduction in emotional repression/explosion, increased sensation and pleasure, and greater sense of unity with environment.

People often make the mistake of thinking that kundalini offers worldly power...not necessarily so. As a dissolution it more often leaves one helpless in the worldly domain of consensus flatland, learning how to tread new ground in an unreal world. Also people misunderstand in thinking kundalini is cleansing and detoxifying. Yet more than this it is a dissolution allowing the potential for regrowth or elevated growth, ie: death and rebirth. But the outcome is very reliant on the mindset, circumstances and social environment of the kundalini active individual. If the seed falls on rocky ground—well you know the story.

As to living up to the potential of rebirth, that depends on how well the individual is able to penetrate the stickiness of samsara. With kundalini everything becomes more in ones face, so it's a matter of progressive truthfulness, becoming progressively honest with ones world until the world changes around one, circumstances change, and with greater truth and alignment there's less division between body, mind, soul and action. To eliminate negative interference patterns we must become progressively truthful to align our actions with our highest values. After the dissolution, training in mindfulness, transcendence, forgiveness and authenticity are needed in order to substantiate higher spiritual gains in ones life.

Zero Limits: The Secret Hawaiian System for Wealth, Health, Peace, and More by Joe Vitale and Ihaleakala Hew Len. This book features the Hawaiian forgiveness practice of Ho'oponopono. This karmic cleansing prayer is a simple process of "letting go" of any "toxic energies" and the dysfunctional retaliatory nature of ego, to allow a "new space" for the healing power of the Divine.

Spiritual evolution is the progressive assimilation of our original Universal wild-divine nature.

EVOLUTON IS NOT AN ILLNESS

Personally I think there is grave danger in treating the symptoms of kundalini arousal with psychiatric drugs and other forms of suppression such as stodgy food. Since the metamorphic symptoms represent a dismantling, purification and strengthening at work, it is these functions that should be supported and encouraged. Thus our intent must be to go-into and work-with the process, rather than fight it in the effort to remain bound to the pupal bodymind. Understanding the psycho-biology of the transformation is vital to navigating the storms of this greatest of upheavals.

Kundalini is the raising of the energy of the body in an alchemical process of spiritual emergence of the higher self. The medical world do not yet know what they are dealing with in kundalini. They do not know that a hyperactivated sympathetic is going to eventually flip into a hyperactivated parasympathetic...and that we need soothing reassuring conditions not drugs. Allopathic medicine is not scientific—for if they were truly scientific they wouldn't be giving magic bullet cures to complex degenerative conditions associated with our human abusage of the earth and the life principle. The cycles must be left alone to take us through our heights and depths. If we get tranquilized during an up-phase then it will just flatten the energy extremes and dull the mind, so we will not get any benefit from the alchemy, but instead will be spiritually impaired instead. Kundalini can take us to the limits of our energetic and emotional endurance...this is as it supposed to be. If tranquilizers are used instead of allowing the energy to do its cleansing and restructuring then chances are we will just go into an extended depression instead of a spiritual awakening. The same goes for antidepressants and anesthetics as well...however there might be the occasion where these things might be necessary in an emergency.

The medical world also need to be familiar with the Water Cure doctor Dr Batmanghelidj's understanding of hydration and blood pressure; along with the understanding that the high blood pressure of sympathetic activation does not need to be medicated, nor does the low blood pressure when things shift over to parasympathetic dominance. Medically messing around with current symptoms without considering the cyclic nature of kundalini will simply abort any growth potential inherent in the metamorphic process. Imagine trying to stop a chrysalis from dissolving because you are ignorant of the butterfly about to be created... that is what medical meddling is. We must understand the hyperbolic nature of kundalini and support all phases in the fullness of their process rather than trying to counteract each extreme to bring it back to normal physiology and so prevent the butterfly from forming altogether.

Digestion takes the most amount of energy of any activity. The reason we overeat is because we have not "planned" our life and directed our energy toward achievable goals. Thus we "eat our energy" rather than send it forth in self development and achievement. If we are not moving forward, we tend to hold ourselves back! There is a much better way of working with the symptoms than snuffing them out by diverting energy to digestion. Since the difficult symptoms we experience are

due to kundalini working its way through deformations, it doesn't make sense to "reduce" the fire. Instead as these blockages arise we should be aiding the fire in its work "through" the miasmas. For example if angst (choking in the narrows) is occurring in the throat, then toning, mantra, singing and humming greatly helps to relieve the pain and pressure. Clarifying one's truth and relationships should be done at this time. Writing poems from each of the charkas might help the flow of energy through the body. Meditation should be shifted from the third eye to the crown chakra. Gestalt and all forms of artistic expression will help the throat clear. Spontaneous music, drumming and dance are especially helpful in clearing the throat chakra.

And as with any kundalini difficulty, the digestive system should be thoroughly cleansed whenever an obstinate symptom arises. A juice fast of moderate duration is an ideal first line of approach in dealing with any miasma that is up for us. Fasting will generally increase metamorphosis and speed evolution; but *do not water fast during kundalini* for the liver needs all the glutathione it can get. There are solutions to every problem whether it be excessive sex energy, headaches, heat, confusion, radical heart pressure, pain or numbness in the tissues.

Generally the line of approach for difficulties should go something like this:

1. Inquire internally as to the nature of the problem
2. Stop the bad habits (samskaras)
3. Detoxification and juice fasting
4. Increase energy and breathing
5. Calm and soothe energy, toning, yoga, meditation
6. Strengthen tissues nutritionally
7. Exercise tissues physically (O2)
8. Use light, sound, touch, vibration, nature and inquiry-meditation
9. Focus, concentrate, refine, strengthen use of the area
10. Integrate the part more fully into the whole

We don't discard the lower as we ascend Maslow's pyramid, as we ascend there is a "refinement" of the lower levels. The self-actualized body is different than a pupal body. One needs less food, of a higher quality after metamorphosis has progressed. Also consider that sex, relationships, work, nature appreciation, child rearing, dharma, muse and everything is refined and changes as we move up the pyramid. It's a matter of "quality" not quantity. The quality or "depth" of our world changes as we ascend.

If the resistant egos addictive-substance suppression of the liver is lifted, the liver awakens to its full function. Then the right side of the body and the right-brain comes out its subservience and latency. Normally in this culture our liver and right-brain are greatly repressed in order that we may avoid our ESP, truth, creativity, emotion and intuition. The lifting of this repression would be tangibly felt as energy-bliss-awareness rising through the right side of the body. A sign that this transformation is occurring would be the radical relaxation of the right neck and shoulder, with obvious changes to the personality and adaptive functioning including increased emotion and psychic abilities.

DROPPING THE PAIN-BODY

"Pain is in the nature of a nervous and physical recoil from a dangerous or harmful contact; it is a part of what the Upanishad calls jugupsa, the shrinking of the limited being from that which is not himself and not sympathetic or in harmony with himself, it impulse of self-defense against others." 117, Sri Aurobindo, The Life Divine

Because of the attachment to our pain, the hardest thing to handle is the bliss of our own emergence. Either we want to retreat from the "limitless space" of Bliss into the pain-body, or we want to turn the Bliss into some self-indulgent ego gratification. To leave the Bliss pure in its essence is almost impossible at the beginning of the transmutational process. Kundalini is not usually painful, their might be some neuralgic pain years prior to an awakening, and for short periods during the peak, and the heart expansions can be painful as the heart explodes in the chest, and their might be pain during a Die-off. But usually there is so many opiates floating through the system that there is far less pain in the body than normally. Pain is usually the result of obstruction, toxicity or dehydration. Kundalini pain occurs when there is a blockage to the energy and bliss is the result of the flow of kundalini. As kundalini moves through parts of the body that were numb to us, we feel the extent of our contraction, but as Shakti does her work and we start to open up, what was once painful turns to bliss, if you move "into" the pain with the mind's eye.

We can equate the pain-body with Wilhelm Reich's **body armor**. Neurosis and psychosis, and negative ego characteristics all stem from embeddedness in our pain remembering mechanisms in the hippocampus and hypothalamus and amygdala and consequently in the neuromuscular of the whole body as well. We become addicted to our pain-body perhaps because we have found validity for our existence through pain. It seems we continually want to go back and revisit our pain so we can feel like we remember who we are, but this is just the perpetuation of the memory of the false self. Stimulation of our adrenals and dopamine in response to hurtful situations makes us feel alive. Defending our rights is defining our boundaries as an individual and this makes us feel Real, a solid thing that the ego finds reassurance in. Attainment of the Self however requires melting of this limiting defensive structure...which might have been needed in the individuation stage, but is a burden during the enlightenment stage. The caterpillar is completely consumed in the construction of the butterfly.

As conditioning unwinds those with active kundalini are more "elemental" and "archetypal." The cerebrocortex is incapacitated through over-charge while the limbic and autonomic brain are hyper-activated. As kundalini moves through the brain intense emotions are felt. In the beginning stages there is often panic, anxiety, depression, anger, paranoia, confusion shame, fear and self-pity. These negative emotions tend to take over especially when the left-brain is in a clampdown from overcharge. Then as the work of purging and restructuring proceeds there is more enduring bliss, peace, equanimity, love and joy. If the cleansing work is not done however, instead of attaining a true Witness we repress pain and shadow through

dissociation. Dissociation is still the separate-self-sense, it is just a lower order of escape, through not allowing the full embodiment of the Self. This need for the work of nature to take its transmutational course is why **surrender** is fundamental to genuine spiritual growth.

In fact the need for nature to take its course is probably why cathartic release type therapies like Holotropic Breathing™ sessions and Osho's dynamic meditations work so well. The "freeze response" to danger is countermanded such that accumulated shock is released and the chemistry can be resolved and let go. These releasing practices, and **kriyas** in general, allow the psychosomatic noise to be cleansed from the system permitting normal and supranormal conditions of consciousness to occur. There is no avoiding the fire. The emotion has to burn in the fires of purification before illuminative wisdom and unitive balance is achieved. This process of roasting in the fires of transformation creates the Philosopher's Stone of Self. Once the bodymind's resistance to conveying greater consciousness is penetrated the nervous system enters a permanent state of higher functioning.

Kundalini's transformation of the limbic brain means that there is a lessening of the ability to condition the brain to pain and fear, and a lessening of the pain-body and armor. The pain-body is still there in potentiality because it would be extremely dangerous to live without the information of pain. Pain is as essential to the path as bliss. Kundalini/meditation/yoga/breathing does alter the pain mechanisms in the body such that we do have more distance from the automatic reactive mode of our reptilian functions. Or rather, we are no longer a petty tyrant sitting on an errant horse—rider and horse are now one in primordial impeccability.

The pain-body is composed of our negative and unconscious-shadow material and magnetically attracts more of its own vibration. So we need to apply conscious effort toward awakening and alivening in order to transcend the gravimetric pull of the lower emotional states. When we resonate in these lower frequencies we can be easily overwhelmed and controlled by others for we have no "distance" from these dark energies. We can learn not to resonate in response to darkness, but to see it for what it is—to breathe through it and pass quickly beyond, picking up speed, energy, power and focus. To do this we need to be aware of the unconscious programming of the fear, shame, guilt and original sin that we still embody. Thus if we find ourselves getting stuck over personality issues with others or collective darkness, we can directly become aware of the work we still need to do to cleanse our vehicle of life destroying energies.

We suffer when we perceive our experience in a egoic-personal and "downer" kind of way. Even bliss is suffering unless it is turned toward soul gratification rather than ego gratification. However without suffering we wouldn't get the intuition to turn increasingly toward soul. Pain, wounds and shadow are the key to our evolutio. For if we address these things that prevent the full flow of light and faith, we free ourselves from our self constructed cage. The generation of bliss from having done this work constitutes an evolution beyond the pain-body. The pain mechanisms are still there however, but our neurology is so lit up in bliss that we have transcended our pain-body.

Ramakrishna says that a man's spiritual consciousness is not awakened unless his kundalini is aroused. Kundalini is the fire of individuation. Spirituality in my mind is the transcendence of culture…it is an new-emergent added dimension beyond cultural conditioning, through the building of the personal umbilical to the Divine/Cosmos, via the initiation of the solar heart. Spirituality is creative redemption...that is reclaiming the universal self from the abuses, stigmas, power trips, seductions, manipulations and original sin of society at large. Certainly there is no faster and more complete way of emerging from the separate-self-sense and the pain-body that through the fires of active kundalini. Through allowing nature to take her course.

The Christ Light—kundalini is said to burn away ones past sins (life-harming trauma). But even though the body is more efficient after considerable transmutation, if we maintain the normal eating and health habits of the standard society, the body will continue to be aged and decayed via free radicals. One could say that free radicals are the agents of sin, much of what we do physically, mentally and emotionally in this culture just increases the free radical load...that is why most old people look broken at the end of their lives. It doesn't have to be this way if we learn to master stress and free radicals.

It's probably pretty common that we seek to run from pleasure into pain. We are used to pain, pain is the German ethic, the white-man's safety zone. In kundalini it is easier to handle pain than extreme bliss, for pain is less "work" than extreme bliss. If we don't have the skills to open to pleasure we may try to clog up our body to buffer ourselves from the bliss. In ecstasy we feel we have no "control". If we come from a trauma background we expect and want things to go wrong so that we can stick to our familiar (family) mode of being.

Evolution requires us to learn to endure beauty and pleasure without closing down and retreating. Also consider that you are the universe observing itself, therefore you are big enough to handle all the beauty in the entire universe. Love is merely going with the speed of evolution and fear is backing down from that speed and Grace. Resistance to evolution is the fear of letting go of our former identity, developmental level, worldview, opinions, sensoral sensitivity level and habitual groove of consciousness. Growth requires the dissolution of all this before the birth of the new. We must essentially "lose possession" of ourselves in order to provide space for the repatterning of greater soul.

Dion Fortune says that *"Consciousness is raised to a given plane by inhibiting the thoughts and modes of consciousness of all the planes below it."* But I doubt that inhibition ever leads to evolution, for you cannot evolve that which is repressed and what is not called into consciousness in the first place. There must be a full acknowledgement of the present self through which the neurotic anaesthetization is then lifted by Presence naturally infusing and raising our being to higher levels. So contrary to the old ascetic puritan ideas of sublimation and inhibition, we evolve by fully inhabiting and utilizing that which we ARE without resistance or rejection. The alchemy is thus quickened and the amplification of fructifying tensions and stormy energies then result in the inevitable depth and calm of a

more mature "spiritual" condition. As Osho says in Body Mind Balancing: *"Man is unhealthy and pathological because society has crippled him in many ways. You are not allowed to love totally, you are not allowed to be angry; you are not allowed to be yourself. A thousand and one limitations are enforced."*

Families and communities that will not allow you to "show" up; where each is a rote-learned cog in the commercial machine—this is not a society and one is not a citizen, but a subject. This is the roots of the painbody (armoring) and fascism that Riechian Charles Konia calls "the emotional plague." Charles Konia M.D. has a new book called *The Emotional Plaque: The Root of Human Evil*. This book explores the disease of destructive human behavior involving people's emotional lives, that can be spread from person to person with all the characteristics of an infectious disease. *Amoring is essentially the absence of Presence.*

The pain-body can be seen as an energy field of cellular memory, whose prime directive is the generation and accumulation of pain and the continuation of perceptive filters that generate suffering. When disease, dysfunction, imbalance or lack of peace occurs at any level, you can be sure that the imbalance of the undigested trauma stays with us, usurping our positive emotional states. The pain-body represents the sum of the pain of the past that still lives on in our mind and body and is playing an active role in perpetuating its own existence. But the pain-body is not so much an "entity" as it is an energetic standing pattern or habitual dissonant state. Stopping the processing of stress mid cycle means distress becomes internalized. The accumulated pain comprises of a negative energy field of stagnant lifeforce that causes cellular dysfunction, toxicity and vulnerability to infection and disease. The areas of stagnant energy contain unhealthy electromagnetic fields that literally split and subdivide the body's energy field into separate compartments with reduced communication between them. Through the law of emotional resonance the pain-body attracts more distressing circumstances into our experience. Thus a defensive or angry stance toward our experience keeps us locked in a standing pattern of the negative emotions that self-perpetuate the pain-body cycle. This ongoing generation of emotional toxicity prevents the experience of peace, connection, cohesion and the coherence of spiritual stabilization. Thus the ego's attachment to the painbody must be released for the spiritual life to emerge.

Releasing the negative emotional field involves the felt-sense acknowledgement, acceptance and allowance of feelings, without reactivity or judgment as to whether they are "good or bad." Thus liberation from the pain-body is a type of equanimous reality therapy—addressing the truth of the accumulation within us of all the negative experience, resistance and disappointment we have had. Unconsciously, through the lack of objective understanding and mindfulness, we get used to the perceptive filters that cause our suffering. It is this unconscious pain-filter that must be loved to a higher order of frequency, health and unification. Transforming the stagnant negative energy field that holds our cells captive, by feeling into the dark void of the wound and filling it with warmth and light. When we fully accept the reality of now, it passes through us and doesn't get stuck as karmic residue in our tissues.

MATHEMATICS OF AWAKENING

1. **CAUSATION:** First there is prenatal and birth experience and development, which forms the original archetypal karmic template.
2. **REGULATON:** Second there is orbitofrontal connection to the limbic system built through affect-regulation (bonding) with the primary caregiver.
3. **ADAPTATION:** (Family) Then there is years of socio-emotional development built in direct response and adaptation to the Causation and Regulation stages.
4. **INDIVIDUATION:** Differential in growth promotes a psychosomatic tension between the old patterning and the new, which is felt as yearning and seeking.
5. **QUEST:** This tension forces the individual to go on a (Hero's) spiritual journey to find the limbic Attractors that trigger dissolution/reconstruction in order to resolve the tension.
6. **PERTURBATION:** Then there has to be a disinhibition or letting go of the general adaptation patterns. The psychic tension itself can trigger this penetration of repressive mechanisms. Other triggers include—romantic love, proximity to or shaktipat from a Guru, drugs, acute shock, spiritual practices…
7. **AWAKENING:** A flowering of consequences occurs in a massive cataclysmic release of the tension stored in the growth differential, as the Universe Being emerges from the conditioned cocoon.
8. **DISSOLUTION:** Followed by dissolution of former structures and patterns—meltdown, collapse, crisis, Dark Nights, Die-offs. The various kinds of dark night have their own specific chemistry that is in perfect correspondence to the up-cycle chemistry.
9. **REFORMATION:** New contemporary networks are built and substantiated with use, showing greater phylogenic and ontogenic integration between the parts. With the restructuring of the primary matrix the tension of energy differential disappears leading to non-seeking and equanimity.
10. **REALIZATION:** Transcendence of inner outer animalistic and worldly pulls and pushes means that energy and consciousness is available for higher dharmic persuits. The genius of the individual and their artistry of life comes to the fore and is manifest.

Having died to our former nature through the initiation unity, or the Rite of the Center...there is a reanimation of the senses and a cleansing of perception. The vasanas or woeful memories of the collective unconscious are burnt off in purifying fires of kundalini. Freeing us from the emotional pain of Karmas, thereby allowing a Kosmic lucidity or transcendental perception. This scintillating transcendental

perception is simply the true state of our Being that we are collectively blocking with our separation and ignore-ance.

Spirit moving through its symbolic and material accumulations lives out a dramatic journey as an expression of the layers, strengths and weaknesses within us. The interrelationship of the aspects of ourselves, in our environment and in concert with cosmic unfolding, constitutes a kind of spiritual mathematics. Mathematics: *the systematic treatment of magnitude, relationships between figures and forms, and relations between quantities expressed symbolically*. The Mathematics of awakening is the hero's journey.

How forcefully one pops depends on how far the prenatal and birth experience was "resolved" through the following affect regulation (primary bonding), and the degree of growth differential (contained as stored tension). If both CAUSATION AND REGULATON phases are traumatizing, then the lack of orbitofrontal-limbic control will bring on an earlier awakening of a more catastrophic nature. If birth was difficult yet the REGULATION phase was satisfied, then the awakening will be later in life, but maybe equally catastrophic because the original trauma was more "hidden" by completed prefrontal-limbic regulation. Such a person, because they are well socio-emotionally adjusted may not be aware of the cataclysmic energies held within the somatic memory of the birth trauma. So that when it is unleashed it is a complete surprise and the well formed ego is blown to smithereens by the emergent birthing throws of the infant within.

The thing with fetal life and birth is that it is pre-meaning. From the perspective of the subject being born, no amount of cognitive understanding will reconcile such an extreme experience...that is moving from an aquatic being into an air breathing being through a very tight passage, with a very real danger of dying. Nature herself makes anesthetizing chemicals to protect the mother and child during such an prerational ordeal. But if anesthetics (ether, morphine) are taken, both mother and child are prevented from expressing their "protest" and so this irrational screaming protest is held within the tissues for the rest of their lives. If that protest response emerges later in life then everything that person has built themselves to be is undone through temporary regressive chemistry, in order that the protest response be liberated AS the state and form in which the trauma was registered. Thus it is necessary for all filters and repressions to be suspended so that the aquatic-infant can express its outrage. A natural protest response withheld in a mother is likely to turn into chronic postpartum depression.

In his book *The Hero With A Thousand Faces*, Joseph Campbell called the hero's journey a "*monomyth*," suggesting the ubiquitous nature of the overall pattern of the alchemical path of transformation. The fundamental structure of this monomyth involves inevitable states and reoccurring themes that correspond to the death-rebirth process of becoming a shaman.

1. The Call—The herald to challenge and adventure.
2. The Test—Encountering dangers and trials, passing through thresholds.
3. Redemption—The hero must sacrifice his ego to achieve the higher goal
4. The Return—Back to the ordinary world, bridging the divine and human.
5. Resolution—The hero bestows his hard won boon to improve the world.

"The Kundalini creates the universe out of Her own being, and it is She Herself who becomes this universe. She becomes all the elements of the universe and enters into all the different forms that we see around us. She becomes the sun, the moon, the stars and fire to illuminate the cosmos which She creates. She becomes the prana, the vital force, to keep all creatures, including humans and birds, alive; it is She who, to quench our thirst, becomes water. To satisfy our hunger, She becomes food. Whatever we see or don't see, whatever exists, right from the earth to the sky is...nothing but Kundalini. It is that supreme energy which moves and animates all creatures, from the elephant to the tiniest ant. She enters each and every creature and thing that She creates, yet never loses Her identity or Her immaculate purity." Swami Muktananda, *Kundalini: The Secret of Life.*

PART 1V
PHYSIOLOGY OF KUNDALINI

THE NERVOUS SYSTEM

More than half of the estimated 100,000 genes in human DNA seem to be dedicated to building and maintaining the nervous system. Within the brain, the autonomic nervous system regulates and adjusts baseline body function and responds to external stimuli. It consists of two mutually inhibitory subsystems: those nerves which activate tissues— the sympathetic or arousal system, and those which slow structures down for rest and repair—the parasympathetic or quiescent system. The sympathetic is *ergotropic* that is releases energy, and the parasympathetic is *trophotropic*, that is conserving energy. The two sides of our autonomic system reflect the two main processes in life "growth" or "protection." These two mechanisms cannot operate optimally at the same time. Consider that our nervous system is either wired for eating (parasympathetic) or for running away from being eaten ourselves (sympathetic). So the two systems generally act in opposition to each other; yet where dual control of an organ exists, both systems operate simultaneously although one maybe operating at a higher level of activity than the other.

Energy expended in fueling defense takes it way from the process of growth. The consequent inhibition of growth reduces energy generation. The Hypothalamus-Pituitary-Adrenal Axis mobilizes defense against threat and when it is not activated growth flourishes. Hence chronic stress is enervating and debilitating. Thus we can see that children who grow up in stressful homes are deprived in cellular nutrition and growth, in cellular energy generation itself and consequently in mental-emotional-social development. Adrenal hormones constrict blood flow to the forebrain and stress hormones repress the prefrontal cortex activity, thus diverting energy and consciousness to the hind-brain survival faculties. The hyperactivity of the HPA axis and sympathetic nervous system is perhaps one of the reasons why high kundalini activity can make us dumb, that and the excessive production of opiates of course.

SYMPATHETIC

The arousal system is the source of our fight-or-flight response, and is connected to the adrenal glands, the amygdala. The dominant (analytical) mind is connected to the arousal system and reaches into our **left cerebral hemisphere**. It is sometimes called the "ergotropic" system because it releases energy in the body to react to the environment. The **sympathetic** system comprises of paravertebral sympathetic trunks which run up the front side of the spine from the cranial base to the coccyx. Sympathetic nerves run mostly from the thoracic and lumbar region and are longer and less direct than the parasympathetic nerves thus their effect is more diffuse. Instead of separate ganglion for each vertebrae certain segments collect together to form a single large ganglion eg: the cervical ganglion in the neck

and the stellate ganglion in the upper thoracic region. Connected to the ganglion are plexus that pass to the organs. The cardiac plexus via the stellate ganglion supplies the heart and lungs. The solar plexus is connected with the lower thoracic spinal nerves and supplies sympathetic fibers to the stomach, intestines, adrenals and other viscera. The heart is supplied by sympathetic nerves arising mainly in the neck, because the heart develops initially in the cervical region and later migrates into the thorax taking its nerves down with it.

The neurotransmitter of the preganglionic sympathetic neurons is acetylcholine (ACh). It stimulates action potentials in the postganglionic neurons, affecting their targets through adrenergic receptors. The neurotransmitter released by the postganglionic neurons is noradrenaline (also called norepinephrine). The action of noradrenaline on a particular gland or muscle is excitatory is some cases, inhibitory in others. (At excitatory terminals, ATP maybe released along with noradrenaline.)

The release of noradrenaline stimulates heartbeat, raises blood pressure, dilates the pupils, dilates the trachea and bronchi, stimulates the conversion of liver glycogen into glucose, shunts blood away from the skin and viscera to the skeletal muscles, brain, and heart, inhibits peristalsis in the gastrointestinal tract, inhibits contraction of the bladder and rectum and inhibits the immune system to save energy. Stimulation of the sympathetic branch of the autonomic nervous system prepares the body for fight-or-flight. This emergency response is controlled by the hypothalamus and amygdala through the HPA axis. Activation of the sympathetic system is quite general because a single preganglionic neuron usually synapses with many postganglionic neurons; the release of adrenaline from the adrenal medulla into the blood ensures that all the cells of the body will be exposed to sympathetic stimulation even if no postganglionic neurons reach them directly.

One important exception to the activating response of the sympathetic system is that the alimentary adrenergic nerves "inhibit" the activity of the gastrointestinal tract while activity in the cholinergic (parasympathetic) supply results in "activation" of the gastric and intestinal systems. This is because during the adrenaline induced fight-or-flight response or during demanding activity, the blood and energy is needed by the brain and muscles, leaving digestive and eliminative functions until times of rest and relaxation. Hormones produced by the outer region of the **adrenal cortex** regulate the body's metabolism, blood composition, and even body shape. The inner region produces hormones that are the body's first line of defense against stress, whether it be physical or emotional. This inner region of the adrenals is called the adrenal medulla and is considered to be part of the sympathetic nervous system. Adrenaline and norepinephrine act as neurotransmitters when they are released by neurons, and as hormones when they are produced by suprarenal glands.

PARASYMPATHETIC

The parasympathetic or reposing side of the autonomic nervous system promotes relaxation, sleep, growth and repair. It is sometimes called the "trophotropic"

system because it conserves energy. It includes the endocrine glands, parts of the hypothalamus and the thalamus, and reaches into the right cerebral hemisphere. Thus the non-dominant, holistic mind is connected with the quiescent system and involves the hypothalamus and hippocampus. After the activity of sympathetic stimulation the parasympathetic system reverses the changes when the danger is over and returns the body functions to normal.

The main nerves of the parasympathetic system are the tenth cranial nerves, the **vagus nerves**. They originate in the medulla oblongata with separate branches going to the heart and respiratory system, and there are branches throughout the abdomen after passing through the oesophageal opening of the diaphragm. Other preganglionic parasympathetic neurons also extend from the brain as well as from the sacral end of the spinal cord. The ganglia of this system are located near the structures to be innervated or actually in the walls of the organ, therefore the postganglionic fibers are much shorter than those of the sympathetic system. This is one of the reasons why sympathetic effects are usually more diffuse than parasympathetic effects. The sacral parasympathetic fibers supply the rectum, bladder and reproductive organs; and nerves from the two lowest ganglia enter the kundalini gland. Cranial fibers run with the vagus nerve supplying enervation to the heart, stomach and small intestines. True parasympathetic nerves are all motor. Sensory nerves within the parasympathetic system are general visceral sensory nerves that simply run with the parasympathetic fibers and are not strictly part of the system. There is not parasympathetic supply to the limbs or gonads.

Acetylcholine (**ACh**) is the neurotransmitter at all the pre- and many of the postganglionic neurons of the parasympathetic system. However, some of the postganglionic neurons release nitric oxide (NO) as their neurotransmitter. In the parasympathetic nervous system, the postganglionic neurons' ACh is received by muscarinic ACh receptors. Acetylcholine (ACh) opens cation channels for Na+ and Ca+ to flow into and K+ to flow out of a cell. ACh is an example of a direct messenger. Parasympathetic stimulation causes the heartbeat to slow, lowers blood pressure constricts pupils and changes the lens for near vision, increases blood flow to the skin and viscera, stimulates glands to secrete saliva and mucus, stimulates gut peristalsis. Contracts the bladder and uterus, causes erection of penis and clitoris,

Plexus are complex webs of nerves and ganglia that affect the internal organs, particularly by controlling arterial blood flow, hence oxygen and nutrient supply. The location of the plexus are associated with the chakra system. The cervical plexus contains nerves mainly connected to the skin and muscles of the head and neck, but it also contains the phrenic nerve which runs to the diaphragm. The cardiac plexus directly affects the heart and lungs. The solar plexus is the largest in the body. It is involved in the flight or flight activation of the redirection of blood from the digestive organs to the brain and muscles. The solar plexus stimulates the production of adrenaline and activates the kidneys. The pelvic plexus has lumbar and sacral spinal connections and is concerned with elimination and sexuality. Kundalini can be felt as bliss, tingle and heat moving through these plexus at various times.

The **Medulla oblongata** is part of the brainstem or autonomic brain at the top of the spinal cord. The central canal of the spinal cord continues into the forth ventricle of the medulla. It is in the medulla that the nerves from the two hemispheres cross over and head down the spine to control the opposite sides of the body. The parasympathetic nerves that feed all the visceral organs down to the intestines leave the spinal cord from this cranial area. However the colon, urinary organs and the sex organs are parasympathetically fed by nerves leaving the sacrum area at the bottom of the spine.

The **Substantia gelatinosa** is the H shaped gray matter in the spinal cord which surrounds the central canal. This is where the nerve fibers carrying information from the peripheral to the central nervous system terminate. The Substantia gelatinosa is made up of unmyelinated neurons, some of which inhibit pain signals by producing opioids. Since kundalini invariably involves the sensation of bliss part of the endorphin releases could be from the gray matter in the spinal cord itself. Avram Goldstein, one of the first discoverers of endorphins proposed that endorphins in the amygdala create the tingling down the spine, and the shuddering discharge of emotion that we experience as a thrill. In the brain a thin outer shell of cellular gray matter, (the cortex) covers the cerebral hemispheres and clusters of cellular gray matter in the center of the brain form the deep nuclei. A nucleus is a mass of nerve cell bodies and dendrites inside the CNS. Clusters of nerve cells outside the CNS are referred to as ganglion.

The **Locus cerculeus** in the floor of the forth brain ventricle is an alarm center which helps attentiveness, and governs arousal, fear, anxiety and terror. It has extensions of its *noradrenergic neurons reaching into nearly every part of the cortex*, and is thought to be instrumental in directing the attention of the cortex. Researchers have found both the Locus cerculeus and the amygdala and other regions of limbic system to be practically saturated with shorted lived opioid peptides (chained amino acids) called enkephalins.

Opiates—In response to physical injury, terror, and severe emotional stress, the amygdala, hypothalamus, brainstem, striatum and related limbic system nuclei secrete **enkephalins**. Like corticosteroids, enkephalins are released as part of the fight-or-flight response, and insure that an animal or human can continue to do battle, or to successfully run away, although severely injured. Enkephalins are a five amino acid protein chain, the smallest opioid to be used by the body. Although the enkephalin combination of aminos is found within endorphins they actually come from different precursors and have dissimilar distribution patterns. When stained endorphin regions show up as definite streaks, pathways or fibers while enkephalins tend to show up as discrete dots. The strongest of the opioids is the 17 chained amino acid dynorphin. Dynorphin in the spinal cord helps in processing sensory information. As well as the spinal cord it is also found in parts of the pituitary gland, the hypothalamus, medulla, pons and the mid brain.

The three genera of opioid peptides endorphins, dynorphins and enkephalins are used as hormones in the body and something more like neurotransmitters in the brain. They are *inhibitory neurotransmitters*, making it more difficult for the

neuron membrane to become depolarized and fire off an electrical signal. In this way the endorphin system of nerves acts to inhibit other neuronal systems in the brain. The effect of opiates is to inhibit the reaction of tissue to electrical stimulation. Without this inhibitory action to slow down neuron firing, the racing electric activity would result in convulsions and death. Endorphins slow breathing, reduce blood pressure and decrease sensitivity to pain. Endorphins reduce smooth muscle contraction, thus causing the smooth muscles in the arteries to dilate increasing blood flow. Hypoxia or low oxygen creates acidosis stress which increases beta-endorphins as part of the parasympathetic response to achieve balance.

Long-term potentiation (**LTP**) is the long-lasting strengthening of the connection between two nerve cells. Like corticosteroids, **enkephalins** abolish LTP and theta activity, disrupt learning and memory, and induce hippocampal seizure activity without convulsions, which is accompanied by abnormal, high voltage EEG paroxysmal waves which can last from 15 to 30 minutes. Enkephalins can also trigger hyperactivation of hippocampal pyramidal cells—neurons which normally display synaptic growth and dendritic proliferation in response to new learning. Enkephalins can also alter the pre- and post-synaptic substrates, thereby injuring hippocampal neurons and producing a hippocampal amnesia as well as a state dependent memory loss.

Myelination of the nerves proceeds from the bottom to the top, back to front and from left to right. Kundalini generally also follows this path of flow and development over the period of an awakening. We tend to get right body and right-brain kundalini effects occurring in December and towards the end of ones awakening. Myelin is a fatty substance that includes acetylcholine. When we overwork the other neurotransmitters we burn out our acetylcholine as well. Since the myelin sheath is what facilitates 'speed' in the transmission of a nerve impulse, the impairment of our myelin slows down our brain…this is obviously a major contributor to the spiritual burn-out effect from excessive nerve activity during an awakening.

Kundalini awakening is a method that the body uses to promote new growth, because after myelination finishes it's harder to change or evolve the nervous system. Kundalini is so outrageously pervasive that I am sure that not only is there a lot of neurons dying off, there is also demyelination and remyelination that occurs. Research will probably prove that there are major changes in the pattern of myelination resulting from a kundalini awakening, and the function we are left with in the end is a result of these changes. This serves as a good case for AQAL developmental practices and experiences during an awakening because if we "fail to use it, we lose it." In other words "substantiation" equals agency, praxis or use.

GLIAL CELLS

Glial cells perform a variety of functions in the central nervous system and make up 50% of CNS by volume, and 95-98% by numbers. Neurons are the "active" or functional cells of the nervous system and carry electrical signals. Glial cells are small supporting cells that do not carry electrical signals.

In support of neurons glial cells offer:

Nourishment—Glial cells attach neurons to blood vessels and supply nutrients and oxygen to neurons, maintain ionic balance and help control the chemical composition of fluid surrounding neurons. The L-arginine for NO production is mainly supplied mainly from glial cells. They produce cerebrospinal fluid!

Insulation—Glia produce the fatty insulating myelin sheath around axons to insulate one neuron from another, to form a matrix surrounding neurons and hold them in place, this matrix serves to isolate synapses limiting the dispersion of transmitter substances released.

Phagocyctosis—Glia act as scavengers, removing debris after injury or neuronal death and to destroy and remove the carcasses of dead neurons. Phagocytosis occurs when an astrocyte contacts a piece of neural debris with its processes (arm of the astrocyte) and then pushes itself against the debris eventually engulfing and digesting it.

Glycoysis—Aerobic glycolysis in the CNS involves interactions between neurons and astrocytes. The entrance of glucose into the central nervous system from the capillaries occurs primarily through astrocytes. Astrocytes are strategically placed between capillaries and neurons and play an essential role in neuronal energy metabolism and brain glycogen is localized in astrocytes in brain tissue. Astrocytes provide nourishment to neurons by receiving glucose from capillaries, Astrocytes first metabolize glucose to its metabolic intermediate lactate and secrete lactate, releasing it into the extra cellular fluid surrounding the neurons. The neurons receive the lactate from the extra cellular fluid and transport it to their mitochondria to use as a primary substrate for oxidative metabolism to create energy. In this process astrocytes store a small amount of glycogen, which stays on reserve for times when the metabolic rate of neurons in the area is especially high.

Neuronal activity regulates the rate of aerobic glycolysis by a mechanism involving glutamate release from neurons and glutamate uptake into astrocytes. Glutamate is the primary neurotransmitter released by excitatory synapses in the CNS. Glutamate is taken up by astrocytes by a Na+ cotransporter. Na+ influx into astrocytes stimulates the astrocytic sodium pump which produces ADP. *Increased levels of astrocytic ADP will stimulate glycolysis and lactate transport into neurons.* Lactate uptake by neurons will stimulate neuronal oxidative ATP production. Glucose can be incorporated into lipids, proteins, and glycogen, and it is also the precursor of certain neurotransmitters such as g-aminobutyric acid (GABA), glutamate, and acetylcholine.

Schwann cells support the peripheral nervous system, while the central nervous system is supported by glial cells. As the peripheral nerves form, the Schwann cells migrate peripherally from the spinal ganglia, parallel to the axons, and encase them with their cytoplasm. The myelin sheath is created by a synthesis and wrapping of Schwann cell plasma membrane around the axon. During the breakdown of damaged axons Schwann cells participate in **myelin phagocytosis** prior to the recruitment of macrophages. They produce heat shock protein, only when they have transformed into these myelin-"eating" cells from myelinating cells. I am

convinced that during the Die-off some axons do die and Schwann cells would change to their phagocytic mode in order to absorb the dead axons. Research might find that whole neurons Die-off at this time, rather than just certain dendrite connections.

THE ENTERIC BRAIN

The stomach or enteric brain comprises of 100 million nerves - more than the spinal cord. These solar plexus nerves in the enteric brain surround the esophagus, stomach and intestines. Like the brain in the head it has sensory and motor neurons, information processing circuits, and the glial cells. It also uses the major neurotransmitters: dopamine, serotonin, acetylcholine, nitric oxide and norepinephrine. The gut can upset the head-brain just as the head-brain can upset the gut. Both the brain in the head and the enteric brain originate from a structure called the neural crest, which appears and divides during fetal development. One section turns into the central nervous system. Another piece migrates to become the enteric nervous system; it is only later that these two systems are connected via the vagus nerve. The enteric brain is stimulated by stress chemicals and fear also causes the vagus nerve to "turn up the volume" on serotonin circuits in the gut. When we eat pressure receptors in the gut's lining are stimulated and serotonin is released, starting the reflexive motion of peristalsis.

The gut plexus contains glial cells that nourish neurons, mast cells involved in immune responses, and a "blood brain barrier" that protects important neurons. The mast cells secrete histamine, prostaglandins, cytokines and other agents that produce inflammation as protective precaution; the gut is thus inflamed to prime it for surveillance. HPA axis (fight-or-flight) hyperactivation during the peak kundalini phase may cause inflammation in the digestive system through the stress chemical stimulation of mast cells to produce inflammatory agents. Adding to the inflammation, the alerted immune system would liberally release free radicals also. Thus we see the need to reduce stress during active kundalini and to adopt a regular stress relief practice, to calm the vagus nerve and reduce inflammation of the digestive system. The Inner Arts and Kundalini Skills mentioned in this book will do this—as will most of the regular spiritual practices. Merely being distracted, dissociated, medicated, in denial or using addiction to avoid hyperarousal or the acute stress response, will not make it go away. Suppression of the ongoing crisis of hyperactivation of the autonomic brain (brain stem), might lead ultimately to serious imbalance or disease. While "mastery" of the situation through proactive facing the challenge of metamorphic agitation of the nervous system, prevents physical, mental and spiritual degeneration.

GLUTAMATE

Glutamate is a major excitatory amino acid neurotransmitter accounting for an estimated 40% of all nerve signals in the human brain, and involved in phenomena such as neural development, learning, and memory formation. Glutamate is ordinarily released under close cellular biochemical control and re-uptake, for in excess amounts it is an intense excitant of nerve cells and potentially toxic. The

neurotransmitters glutamate and aspartate act as excitatory signals, while glycine and GABA inhibit the firing of neurons. The activity of GABA is increased by Valium and by anticonvulsant drugs. Glutamate or aspartate activates N-methyl-d-aspartate (NMDA) receptors, one of three major classes of glutamate receptors, which have been implicated in activities ranging from learning and memory to the specification and development of nerve contacts in a developing animal. Nitric Oxide (NO) can diffuse across the synaptic cleft back into the synapse that originally released the glutamate. This retrograde transport of NO is thought to reinforce **long-term potentiation** and thus is considered to be a possible molecular mechanism promoting long-term memory and learning.

Glutamate may play the central role in kundalini awakening. The prolonged firing of kindling releases glutamate which activates the N-methyl-D-aspartate (NMDA) receptors in the spinal cord, which may sensitize the spinal cord neurons to become more responsive to all inputs, resulting in **perpetual hyperexcitability**. When glutamate is produced and released by a synapse it activates the NMDA receptor leading to an influx of calcium ions; which in turn bind to calmodulin (CaM), activating the enzyme that synthesizes Nitric Oxide (NOS). Calmodulin is a calcium-binding protein that is considered a major transducer of calcium signals.

Glutamate receptors are selective for calcium ions. Prolonged activation of glutamate receptors stimulates eNOS via Ca/CaM complex binding to the synthetase. NO can only be synthesized, however, if the amino acid arginine is available. Thus neuronal NOS critically depends on arginine, which is mainly synthesized in adjacent glial cells and is transported into neurons. Arginine uptake into neurons is controlled by non-NMDA glutamate receptors. This became evident when these receptors were blocked by arginine-uptake inhibitors such as L-lysine which functions as antagonist to glutamate receptors.

The N-methyl-D-Aspartate (NMDA) receptor is a subtype of glutamate-activated ionotropic channels, that is implicated in synaptic mechanisms underlying learning, memory and the perception of pain. It is also believed to be a target of the intravenous general anesthetic agent ketamine and possibly nitrous oxide. Because it is affected by anesthetic agents, the NMDA receptor is probably key to the "conscious" aspect of consciousness. Presumably, glutamate acts at NMDA receptors on NOS terminals to stimulate the formation of NO, which diffuses to adjacent terminals to enhance neurotransmitter release. In the cerebellum NOS occurs in the glutamate-containing granule cells as well as in the GABA containing basket cells. Many of the cerebral cortical NOS neurons also contain GABA. Release of both acetylcholine and dopamine from the nerve cells is blocked by NOS inhibitors and enhanced by plentiful L-arginine.

One possible reason why where is such a hemispheric difference in the flow of kundalini could be the different placement of glutamate receptors between the left and right side of the brain. According to Isao Ito and his team they found more NMDA receptors on dendrites at the tip of neurons in the right hemisphere and in the left-brain they were found at the base of neurons. This may explain why

the left is more kundi-excitable, active, analytic, logic, language, focus, decision oriented. The right represents a more parasympathetic nature, involved in emotion and memory.

The overall excited condition of kundalini arousal is probably mainly carried both on norepinephrine nerves and via glutamate receptors. Nitric Oxide and Ca2+ levels being the rate mediating factors in the maintenance of the charge through the glutamate system. After the body recycling periods of the Die-offs are finished, the slow depletion of arginine will reduce NO and Growth Hormone production…thus reducing both hyperneural activity and regeneration of tissue and the awakening will very gradually come to a close. For reduced concentrations of NO will down regulate the NMDA receptors reducing the excitation of the neurons. Also since calcium resources of the body would be used to buffer the acidic products from the increased metabolic rate, calcium availability might eventually become a limiting factor bringing the hyper-excitation of neurons to an end. Since glutamate can be made from any sugar, carbohydrates or even from proteins or fats, it is always somewhat readily available as an excitatory neurotransmitter. However since a low-glycemic diet does reduce kundalini and seizures, it is apparent that glutamate levels are also a mediating factor in the firing rate of neurons.

GLUTAMATE TOXICITY

Glutamate neurotoxicity can cause neuronal cell death. Reactive oxygen species are mediators of delayed neuronal degeneration caused by activation of ionotropic glutamate receptors. Oxidative stress was also shown to precipitate programmed cell death or apoptosis. The lineage between these two phenomena relate to the facts that the mitochondria are the source of 80% or more of the oxyradicals generated in the neuron and that Ca2+ deregulation causes excessive activation of glutamate ionotropic receptors, disrupting the mitochondrial electron transport system.

The immediate effect of glutamate on neurons is its role in activating glutamate receptors, (NMDA is a methylated derivative of aspartate*).* The stimulation of NMDA receptors may promote beneficial changes in the brain, whereas over stimulation can cause nerve cell damage or cell death during seizure, trauma and stroke. When neurons are damaged, glutamate pours out, builds up in the synapses, and kills them by overexciting them, enlarging the area of brain damage. Both oxygen deprivation and over excitation of neurons can create an abnormal buildup of glutamate that kills neurons by over stimulating them.

Glutamate works by attaching to N-methyl-D-asparate (NMDA) receptors, proteins on the cell surface. The action of NMDA receptors appears particularly important because they have the special ability to let large amounts of calcium into neurons. When the brain suffers an injury such as a stroke, neurons release glutamate onto nearby neurons which become excited, causing excess calcium release to activate enzymes which eventually leads to destruction of the cell. Because of their "gatekeeper" role, NMDA receptors are important targets for developing therapies to reduce glutamate action. Drugs that block these proteins, called NMDA receptor blockers, can prevent glutamate from harming neurons and stop the enhanced glutamate excitatory activity typically seen in epilepsy.

NO is associated with the main excitatory neurotransmitter Glutamate and the generation of action potentials in the nerves. Small amounts of it open up the calcium ion channels of the nerves (along with glutamate, an excitatory neurotransmitter) sending a strong excitatory impulse. Larger amounts of NO can force the calcium channels to fire more rapidly which can lead to apoptosis or programmed cell death. Thus NO mediates the neurotoxicity of glutamate through the formation of cGMP by activation of glutamate receptors. As stated in the section on Nitric Oxide, cGMP participates in signal transduction within the nervous system.

In the brain a stimulus (such as glutamate) acting at NMDA receptors triggers Ca2+ influx which binds to calmodulin, thereby activating NOS. This mode of activation explains how glutamate neurotransmission stimulates NO formation in a matter of seconds. In blood vessels, acetylcholine acting at muscarinic receptors on endothelial cells activates the phosphoinositide cycle to generate Ca2+, which stimulates NOS to produce NO for blood vessel dilatation.

The influx of Ca2+ into the neuron activates an enzyme called calcium-calmodulin-dependent kinase II (CaMKII). Kinases attach phosphate groups to proteins and altering their functioning. In this case, CaMKII phosphorylates a second type of Glutamine receptor called **AMPA receptors**, which makes them more permeable to sodium ions (Na+) thus lowering the resting potential of the cell and making it more sensitive to incoming impulses. In addition, there is evidence that the activity of CaMKII increases the number of AMPA receptors at the synapse.

PROTECTING GLUTAMATE RECEPTORS

Studies found that alpha-lipoic acid improves memory in aged mice, probably by a partial compensation of NMDA receptor deficits. It is thought that its free radical scavenger properties preserve the cell membrane and so protect loss of NMDA receptors. It also protects membranes and receptors through improved sugar and insulin metabolism. Alpha lipoic acid is a unique antioxidant because it prevents and may even reverse the attachment of sugar to protein, a process known as **glycation** or **crosslinking**. Alpha lipoic protects cells from AGEs by allowing better metabolism of sugar in the cell, this prevents its buildup and also by allowing the body's natural repair mechanisms to work better.

A team of researchers led by Bruce N. Ames, professor of molecular and cell biology at UC Berkeley, fed older rats acetyl-L-carnitine and alpha-lipoic acid. They found that the combination of the two supplements effectively reduce aging by tuning up the mitochondria, rejuvenating and energizing cells and both spatial and temporal memory, and reduced the amount of oxidative damage to RNA in the brain's hippocampus, an area important in memory. It is advisable therefore for those undergoing kundalini to take L-carnitine and alpha-lipoic supplements as well as adopt a low glycemic diet.

Apparently the glutamate receptors in the brains of drug addicts retreat into the cell membrane, perhaps to try and prevent the cell from becoming over stimulated

by all the chemical stimulants. I was thinking that during the peak when the sympathetic NS is fired up and endorphins are blasting full bore the brain would exhibit over-activated conditions "similar" to a drug addicts brain. Perhaps in kundalini initiates the glutamate receptors also retreat into the cell, thus adding to the burn out and lengthy recovery period after the peak. *"One of the problems in addiction is that neurons in some parts of the brain lose glutamate receptors from the cell surface, and those receptors are important for communication between neurons. The researchers have sidestepped this problem by crafting a peptide that mimics a portion of the tail of the glutamate receptor and, once inside a neuron, serves as a decoy to prevent the loss of glutamate receptors."*
eurekalert.org/pub_releases/2005-11/hhmi-gab112305.php

NEUROTRANSMITTERS

In the body there are at least 50 known neurotransmitters which convey a rich selection of possible messages between neurons, and many of these neurotransmitters have over a dozen different types of receptors. Neurotransmitters, the brains messenger molecules come in two forms, monoamines and neuropeptides.

1. Small-molecule neurotransmitters—The key monoamines are:

Serotonin is made from the amino acid Tryptophan. It calms, elevates pain threshold, promotes sleep and feeling of well being, reduces aggression and compulsive behavior.

Dopamine is made from the amino acids Phenylalanine and Tyrosine. It increases feelings of well-being, alertness, sexual excitement and aggression; and reduces compulsive behavior.

Norepinephrine is made from Dopamine it also increases well being and reduces compulsivity

GABA is made from the amino acid Glutamic acid (Glutamine or Glucose). It reduces anxiety, elevates the pain threshold reduces the blood pressure and heart rate and reduces compulsive behavior.

As well as glutamate, aspartate, glycine, biogenic amines, ATP & NO, histamine and prostaglandins.

2. NEUROPEPTIDES:

Amino Acids made in cell body and transported to synaptic terminals. They share opiate receptors and regulate pain (analgesics) and pleasure. Neuropeptides are manufactured in the endoplasmic reticulum and are called opioid peptides because they behave in the brain like opiates such as morphine. Their functions include regulating immune response, raising pain threshold stimulating feeling of well being, regulating sexual activity, promoting emotional balance and enhancing learning. As well as reducing compulsive behavior. There are three groups of neuropeptides—*Endorphins, Enkephalins and Dynorphins* and substance P (pain)

The thing to keep in mind is that excessive use of the on-switch neurotransmitters burns out the off-switch neurotransmitters. While peaking we are so neurohormonally pumped up that we do not actually feel the true consequences of the free radical damage until after the hormones and neurotransmitters run out. When one is pumped up on Spirit you simply can't imagine that burnout and damage will occur. It is apparent that kundalini cycles through the various nerve/receptor systems at different times reflecting both lunar and seasonal rhythms.

During the peak it is probably focused more on the norepinephrine nerves, moving first through the limbic system and then through the norepinephrine net that traces through the cortex. Epinephrine (adrenaline) and the closely related norepinephrine are the chief neurotransmitters at the post ganglion terminations of the sympathetic nerves. *Norepinephrine* is made from dopamine which in turn is derived from the amino acids Phenylalanine and Tyrosine. It increases feelings of well-being, alertness, sexual excitement and aggression; and reduces compulsive behavior.

When it moves through the digestive system it is probably focused on the serotonin system. When in a collapse phase such as a Die-off or exhaustion then GABA, acetylcholine and serotonin would be more prominent during this parasympathetic dominant phase. GABA is most common inhibitory transmitter in a third of all synapses. ACh (acetylcholine) inhibits the heart via the vagus. Opiate and **endocannaboid** receptors and nerve centers are highly active during all kundalini activity even in the exhaustion phase. Acetylcholine is generally associated with the parasympathetic effects, however it is thought that acetylcholine is probably the chief neurotransmitter for the preganglionic fibers of both systems.

Contenders for the neuro-excitatory substances involved in kundalini include the primary excitatory neurotransmitter glutamate in combo with Nitric Oxide and histamine, prostaglandins even the body's fuel molecule ATP. When ATP is split apart a great deal of energy is released to power the cell. This involves the conversion of ATP into its stepped down product cAMP. Then cAMP activates a protein called **Kinase** which makes the neuron membrane more excitable. Thus the whole neuron becomes less inhibited and more easily "turned on" by neurotransmitters fitting into the receptor sites.

Each person is different of course and will exhibit either dopamine, serotonin, GABA or acetylcholine dominance, and so the ability to withstand a kundalini awakening differs as does their experience of the awakening itself. There are infinite factors involved in how readily we will be depleted of neurochemicals, hormones and other bodymind resources during the exhaustion phase: season/sunlight hours, emotional resourcefulness, heredity, trauma history, infancy-conditioning, diet-supplements-antioxidants, emotional processing ability, life circumstances, social community, intimate companionship, life purpose-vocation, education level, urban or rural, latitude, exercised or sedentary, life habits-samskaras…and much more.

The effectiveness of our spiritual practices obviously has a profound impact both on the awakening of kundalini and the rate that resources are depleted. While

meditation makes the awakening of kundalini more likely to happen it also eases its passage and reduces the depletion-crash effect, by making the HPA axis less volatile. It does this by synchronizing neural nets to fire in more in sync thereby reducing energy wastage and improving nervous efficiency. It also stabilizes and amplifies the hormone production of the pituitary gland and reduces the spiking of the sympathetic fight flight response. Because various brain areas are neurologically enrichened by meditation there is also more prefrontal control over the limbic system. Meditation makes up for some of the deficits we may have in our primary matrix neuron growth.

The central functions of **norepinephrine (NE)** are: regulation of alertness and of the wakefulness/sleep cycle, maintenance of attention, memory and learning, cerebral plasticity and neuro-protection. Norepinephrine (NE) stimulates neural growth, significantly influences neuronal maturation and promotes neural plasticity and synaptic development during the early stages of fetal and infant development. NE is neuroprotective and when it's depleted, neurons are exposed to the debilitating effects of enkephalins and stress hormones released during the fight-or-flight response. In the infant NE may destabilize in response to even mild stress such as temporary separation from the mother. Consequently wildly fluctuating NE levels can lead to atrophied neural growth and aberrant neural networks (neuronal pools). These dysfunctional, deprivation and stress induced aberrant networks are especially pronounced within the amygdala, septal nuclei, and the hippocampus, and can lead to the propensity toward abnormal seizure-like activity, such as **kindling.** Neurons in the CNS are organized into definite patterns called neuronal pools; each pool differs from all others and has its own role in regulating homeostasis. A neuronal pool may contain thousands or even millions of neurons.

As well as abnormal growth of nerves unbalanced neurotransmitter levels can lead to inferior firing patterns. Stress induced depletion of NE coupled with excessive secretion of corticosteroids and enkephalins can hyperactivate hippocampal pyramidal neurons and eliminate hippocampal theta and long term potentiation, thereby interfering with learning and memory. Depletion of neurotransmitters is countered by the use of Monoamine oxidase inhibitors. These relieve depression by preventing the enzyme monoamine oxidase (MAO) from breaking down the neurotransmitters norepinephrine, serotonin and dopamine in the brain. As you can imagine with such exaggerated activation of the adrenal/dopamine/cortisol systems we need to focus on building up our serotonin, GABA and acetylcholine systems, which get burnt out during the hyper-phase.

Current research on depression indicates increased deep limbic system activity and shut down in the prefrontal cortex, especially on the left side. In depression, the most important pathways are those of the serotonergic and noradrenergic neurons projecting to the prefrontal cortex, from the raphe nucleus and locus coeruleus, respectively. Extracellular Dopamine in the prefrontal cortex, as well as in the other cortices, may depend on Noradrenaline rather than Dopamine innervation and activity. High dopamine is involved in forebrain functions of thinking, planning,

and problem solving. It is antidepressant and produces optimism and confidence, so is probably a key factor in ones sexual attractiveness and scoring ability. Dopamine has a major role in procreation also for it keeps one positive, focused and intent on the job of sex...thus ensure the continuation of the race. During the heating and peak phases dopamine is obviously high along with the sex hormones and growth hormone. It probably factors into both increased psychic and increased creative genius at this time, not to mention the increased sexual desire.

Suffers from anxiety or depression exhibit increased activity in their hypothalamic-pituitary-adrenocortical (HPA) axis. In these disorders there is a proposed link between noradrenaline (NE) and glutamate NMDA receptors. The NE system has alpha and beta types of adrenergic receptors. There is evidence that chronically depressed people have dysfunctional and atypical noradrenergic systems, particularly their alpha 2- and beta-adrenoceptors. It has also been suggested that noradrenaline (norepinephrine) is crucial in certain cognitive functions associated with the frontal lobes, particularly the prevention of distractibility by irrelevant stimuli (ADD/schizophrenia). The alpha 2-receptors of the prefrontal cortex appear to be of particular importance in this respect. In those who are depressed the "safety memory" mechanism of the prefrontal lobes might not be working well chronically overworking the HPA axis/fear response and burning out the catecholamines, adrenals, cortisol and thyroid, thereby generating depression.

As you will read in the Toxic Mind section (BOK-2) the pilot of the limbic system is the orbitofrontal system, especially in the right hemisphere. Without adequate prefrontolimbic control our emotional regulatory system can become destabilized which in turn interferes with rational thought and thinking, planning, and problem solving. Without a balanced emotional system and healthy socioemotional life we are likely to burn out our HPA axis become depressed, put on weight and head toward contracting some sort degenerative disease. (See the Neuroendocrine Theory of Aging)

NERVE TRANSMISSION

Potential energy is stored in separated electrical charges of opposite polarity. Separation of opposite charges requires energy and uniting of opposite charges liberates energy for "work." Voltage is the measure of potential difference generated by separated charges, and current is the flow of electrical charge from one point to another.

Insulators like fatty cell membranes have high electrical resistance while conductors such as membrane channels have low resistance to current flow. A higher current is achieved by either increasing voltage or decreasing resistance. In the body, charges are carried on charged particles or ions. Thus separation of charges in the body means separation of ions. The amount of current that can be produced depends on the voltage difference across the membrane and the resistance to flow of ions. The cell membrane is a good insulator and can separate and maintain ions or electrical charges of different values. The difference of ions inside and outside of cells is controlled by channels, gates, and transport proteins. Higher concentration

of Na+ outside than inside and higher [K+] inside than outside, but overall there is more Na+ outside than K+ inside. This makes the inside of nerve cells negatively charged and the outside positively charged.

The insulating capacity of the cell membrane allows for the production of an electrical or chemical concentration difference or gradient from one side of the membrane to the other. Current in the body is the flow of ions toward their opposite charge. Cations (+ ions) flow toward a negative charge, and anions (- ions) flow toward a positive charge. Ions will flow down either their concentration or electrical gradients. Both types of gradients provide potential energy to power the movement of ions (charged particles) and thus produce an electrical current. An electrochemical gradient combines the effects of an electrical difference with a concentration difference.

Ion Channels: There are two basic types of ion channels by which ions flow through cell membranes, leakage channels and gated channels.

1. *Passive Leakage channels* (nongated) do not require energy and flow rate and directions is determined by electrical or concentration gradient direction and size. Leakage channels are more open to K+2 than to Na+. Since the electrical and concentration electrochemical gradients go up during kundalini we can assume that Leakage channels become more permeable.
2. *Active Gated channels* require ATP energy and open and close in response to some sort of stimulus such as *voltage* changes; specific *chemical* stimulus eg: neurotransmitters, ions, or hormones; and *mechanical* pressure. We can also expect gated channels to be more active during kundalini for voltage, chemical and mechanical reasons.

Synaptic Transmission occurs first with an action potential arriving at presynaptic membrane. A depolarizing phase then opens Na+ and Ca+2 channels and Ca+2 flows into synaptic terminal. The increase of intracellular Ca+2 produces exocytosis of synaptic vesicles, releasing transmitter into synaptic cleft. Then Ca+2 is removed from the cell by mitochondrial uptake with a Ca+2 pump. The transmitter then diffuses across cleft to postsynaptic membrane and binds to membrane receptors.

Excitatory neurotransmitters are those that can depolarize or make *less* negative the postsynaptic neuron's membrane, bringing the membrane potential closer to threshold, (ie: a depolarizing postsynaptic potential.) Although a single excitatory postsynaptic potential normally does not initiate a nerve impulse, the postsynaptic neuron does become more excitable (sensitized). Thus it is already partially depolarized and more likely to reach threshold when the next excitatory postsynaptic potential occurs.

Inhibitory neurotransmitters hyperpolarize the membrane of the postsynaptic neuron, making the inside *more* negative and generation of a nerve impulse more difficult, (ie: inhibitory postsynaptic potential). A hyperpolarizing potential can decrease the excitability of a resting neuron or counteract the effects of an excitatory postsynaptic potential.

Synaptic Potentiation Sensitization occurs as repeated release of neurotransmitter makes the postsynaptic cell more sensitive to neurotransmitters producing larger excitatory postsynaptic potentials. Thus repeated use of a synapse makes it more efficient thus contributing to conditioning and learning. Synaptic potentiation may also be produced by back propagating action potentials from the cell body to the dendrites. *Synaptic sensitivity is also increased by NMDA (N-methyl-D-aspartate) receptors in the postsynaptic membrane that increase Ca+2 entry.* Elsewhere I mentioned that Isao Ito found more of a specific type of NMDA receptor on the *tip of neurons* in the right hemisphere of mice and in the left hemisphere these where on the *base of the neurons.*

STRESS RESPONSE CYCLE

Wilhelm Reich observed that life has a four beat bioenergetic formula: tension—charge—discharge—relaxation.

Kundalini occurs in **nested cycles** that follow the basic stress response pattern that Hans Selye outlined in the 1950's. First there is "adaptation" a person intermittently secretes slightly higher levels of the fight-or-flight hormones in response to a slightly higher level of stress. Secondly "alarm," begins when the stress is constant enough, or great enough, to cause sustained excessive levels of certain adrenal hormones. Lastly "exhaustion," sets in as the body's ability to cope with the stress becomes depleted. But we now know that rather than the stress-response hormones and transmitters "running out" during the exhaustion phase. It is the stress response itself that is damaging, because the body spends so many resources on stress adaptation that it causes the allostatic **economy of the body** to become bankrupt.

During an awakening all the neurotransmitters and hormones move through the phases of:

1.**Adaptation**: HEATING—homeostatic balance, strengthening and preparation. Building of hormonal and neurological resources.

2.Alarm: PEAK—similar to immediate threat response; heightened use of both on/off facilitating an expanded state of being. Adrenalin and histamine production.

3.Exhaustion: BURNOUT—depletion of resources for dealing with metabolites and free radical damage and production of hormones and neurotransmitters. As adrenal levels plummet this adrenal exhaustion sometimes accompanies, or is mistaken for low thyroid. Prolonged release of high cortisol leads to adrenal exhaustion. Decline in the immune system.

4.Recovery: SUBSTANTIATION—repair and building up resources again once the hypertonality has died down. Growth on a new level reflecting the psychosomatic "space" that has been created from the Die-off and self-digestion.

Adrenal hormones constrict blood flow to the forebrain and stress hormones repress the prefrontal cortex activity diverting energy and consciousness to the hindbrain and survival faculties. Besides stress being enervating, prolonged hypothalamic-pituitary-adrenocortical activation also makes us dumber. (See General Adaptation Syndrome)

"The longer you stay in protection, the more you compromise your growth." 147, Bruce Lipton, *The Biology of Belief.*

GENERAL ADAPTATION SYNDROME

The hypothalamus, though only about the size of a pea, is the director of chemistry in the body. After having received input from the body it then transmits instructions to the pituitary to release its various hormones. The hypothalamus responds to stress by initiating the stress-hormone cascade starting with the corticotrophin releasing hormone (CRH) followed by adrenocorticotropic hormone (ACTH) release, and finally glucocorticoid production. A variety of stressors, both physical and psychological, cause the neurosecretory cells within the paraventricular nucleus of the hypothalamus to secrete corticotropin-releasing hormone (CRH) and arginine vasopressin (AVP) into the microportal circulatory system of the pituitary stalk. Cells in the hypothalamus which secrete CRH have synapses which make contact with blood vessels in the hypothalamus that transport CRH to the anterior pituitary where it stimulates the release of ACTH. ACTH stimulates the hypothalamus (HPA axis) to immediately activate the adrenal glands. From the adrenal glands the hormones epinephrine (adrenaline) norepinephrine (noradrenalin) are secreted which vasodilate arterioles of the skeletal muscles to prepare them for action, but cause vasoconstriction elsewhere. This produces quicker heart rate, higher blood pressure, more frequent breathing. Cortisol and cortisone suppress the immune system in an effort to conserve energy for fight-or-flight. These glucocorticoids promote conversion of protein and lipids to carbohydrates replenishing energy reserves in the body. Cortisol feeds back to the hypothalamus to control release of CRH. There is a circadian (daily) rhythm in ACTH secretion and cortisol levels which is higher in the morning and cortisol is secreted in several 'pulses' during the day.

During stress the thyroid gland is stimulated by the thyroid-stimulating hormone (TSH) to secrete thyroxine to increase metabolism. Gonadotrophins are secreted which stimulate the reproductive glands to produce *less* hormones. The quantity of each kind of hormones the pituitary will secrete depends on the power of the stressor. The more life threatening the brain perceives the stressor to be, the more the pituitary is stimulated. The pituitary responsiveness in hypothyroidism causes adrenal dysfunction directly and results in hypersecretion of ACTH mediated by increases in synthesis of CRH and Vasopressin in the hypothalamus.

The majority of people respond to stressors with activation of the sympathetic system. When our HPA axis is chronically fired up, the stress hormones inhibit and cell division and growth in the hippocampus and prefrontal cortex. Thus our brain areas for rational thinking and memory atrophy and shrink leading to

depression. The hypothalamic-pituitary axis imbalance can contribute to increased gonadotropin releasing hormone (GnRH). When there is abnormal estrogen negative feedback via the pituitary gland, elevated prolactin can in turn contribute to elevated estrogen levels or estrogen dominance.

Follicle-stimulating hormone (FSH) and luteinizing hormone (LH) are hormones synthesized and secreted by gonadotropes in the anterior lobe of the pituitary gland. In both males and females, LH stimulates the production of sex steroids from the gonads. With aging LH levels normally rise with age in both men and women as hypothalamic estrogen *receptors become less sensitive* to feedback inhibition.

Due to the reduced sensitivity of prolactin receptors, prolactin levels are known to rise with age, consequently lowering levels of growth hormone and testosterone. Long-term supplementation with SAMe repairs cell membrane fluidity and enhances the sensitivity of prolactin receptors, as well as GABA and beta-receptors and probably serotonin and dopamine receptors as well. SAMe and Phosphatidylserine increases sensitivity of prolactin and cortisol receptors resulting in lower levels of these hormone in circulation. Phosphatidylserine (PS) is a phospholipid nutrient found in fish, green leafy vegetables, soybeans and rice, which has broad anti-aging effects, memory boosting, and mood enhancement benefits.

The prolonged HPA axis activation of chronic stress can create **amino acid imbalances** due to certain proteins being used up in the energy generating gluconeogenesis. Central to gluconeogenesis is the metabolism of glutamate (glutamine and GABA) and proline and a decrease in cysteine and methionine. There is a loss of serum tryptophan and tyrosine due to their breakdown in the liver and an increase in glutamate and arginine. Depression of the immune system can occur with prolonged stress, dehydration and depression due to an amino acid imbalance generated from incessant cortisol, CRH and vasopressin secretion. This immunosuppression is characterized by an amino acid imbalance that shows an increase in glutamate and arginine and a decrease in tryptophan, cysteine and methionine.

One of the best articles on the neutroceutical protection of the nervous system is by Dr. Robert J. Marshall of Premier Research Labs. The web article is called *"The Overlooked Role of Chronic Infection in Neurodegeneration and Its Reversal Using Nutraceutical Agents."* Those going through an awakening will find this useful as will kundalini researchers.

KUNDALINI GLAND

The Muladhara chakra at the base of the spine is where kundalini is supposed to lie coiled awaiting to rise. Several factors led the ancients to this symbolic idea of the coiled serpent. First when kundalini does rise one of the initial pathways it takes seems to be around the spine between the two sympathetic trunks. The discharge of a double helix of energy can be felt rising up around the spine. Some people such as Gobi Krishna, call this a zigzag. For it appears that energy is flowing backwards and forwards up the ladder of the spine from ganglia to ganglia. I experienced this during a hypnogogic vision around the time of my 1988 awakening. I imagine that energy is transmitted in this double helix fashion at the beginning of an awakening prior to the inner-conjunction through the *sushumna* nadi or central channel of the spine.

Although the traditions are focused on it, there is obviously no such thing as ejaculating up the spine. But the nerve energy is perhaps turned to flow its power back through the nerves to the spine. This is done by yogis through the inner kinesthetic sensing, directing the eye of the mind, and breathing. This redirection of nerve flow might be how the yogis prevent ejaculation while still having orgasm. It might "feel" as though there is ejaculation up the spine because the **kundalini gland** (coccygeal body) at the base of the coccyx is composed of smooth muscle and can pulsate like an ejaculation. Thus to a man it might appear that he is ejaculating up his spine. I have noticed a sense of throbbing (pumping sensation) at the coccyx that occurs at the start of an increase in kundalini flow.

The coccygeal body is an irregular, oval-shaped gland between the rectal wall and the tip of the tailbone or coccyx. This is known in Tantra as the Kundalini gland. During active kundalini one can often feel a pulsation in the sacrum, I suspect that this rhythmic movement might be the kundalini gland becoming active.

The coccygeal gland is fed by sympathetic (adrenergic) from the first two ganglion and by parasympathetic (cholinergic) nerves; and by the median sacral artery and vein, directly influencing the nervous system via chemical messages arising from the blood. It is several millimeters in diameter and is composted of epithelioid cells and smooth muscle cells. A study suggests its possible blood forming function and an immune-modulatory activity by the regulation of the sympathetic nervous system through noradrenergic control. Removal of this gland creates nervous derangement.

Because it is nexus of all the various bodymind systems: hormonal, blood, sympathetic and parasympathetic nerves and the immune system, the kundalini gland is key to the homeostasis of the body and to shifting metabolism over to the metamorphic state. Further study could lead science to discover that the kundalini awakening could be initiated or maintained by stimulation of the coccygeal body and the subsequent increase in the noradrenergic mechanism of the SNS. If further studies confirm the possible involvement of the coccygeal body in the regulation of sexuality, this may explain the immunosuppressive status related to the sexual repression as previously suggested by **Wilhelm Reich**.

Yoga has devised a wide variety of techniques to irritate and awaken this gland into activity: Including Mula Bandha (Root lock-contracting perineum and lower abdomen), Asvini Mudra (contracting the pubococcygeus muscle of perineum, as in Kegel exercises), Tada Mudra—(knocking the buttocks upon the ground, sending rhythmic shock waves rippling up the spine) and rolling on a cotton ball placed under the tip of the tail bone. (Found in *Ecstasy Through Tantra,* by Dr John Mumford).

A study of anatomy defies the traditional idea of ejaculation of sexual "juices" up the spine, however the Nitric oxide and other neurotransmitters that are used in sex would be directly involved in an inner-conjunction event. In fact the sex chemistry involved in an inner-conjunction is many times greater than that which facilitates sex itself. Although the entire body is flooded with sex and growth hormones during the peak in which spinal inner-conjunctions occur and this serves to rev up metabolism in which the energy can build to these intense phase lock situations...I still cannot see how sexual juices can enter into the cerebrospinal fluid. Instead I see the spinal fluid becoming supercharged with glutamate, Ca2+ and other ions along with Nitric oxide driving the maximum nerve activity. The fluid thus is superfluid and supercharged, and doesn't necessarily "shoot" up the spine, even though it feels like the force of 10,000 orgasms is blasting directly up the spine. However, the liquid probably does flow a little faster during the inner-conjunction event due to the increased electromagnetic field, and increased cilli movement of the tissue that moves cerebrospinal fluid (CSF) along (which is excited by the extra nutrition, and ions of fluid and nerve energy at the time.)

Hence the intense upward pressure of an inner-conjunction is not caused by any fast moving ejaculation of liquid within the spine, so much as by increase energy in the nerves. For CSF is moved via hydrostatic pressure and cilli and is reputed to take 24 hours for a full cycle and is completely changed every 6-7 hours. Thus I see the amrita ejaculation of the fluid down the back of the throat more as a brain-ejaculation (see...Amrita Heart Connection)...rather than fluid that comes directly from the sex organs.

CAROTID GLANDS

During the start of a four year period of intense transformation Jiddu Krishnamurti noticed a lump in the middle of the nape of his neck that seemed to be a painfully contracted muscle about the size of a marble. During a 3 day period of radical metamorphic trance the pain literally threw him about the room for several hours each night, after which he would recover, only to have it happen again at 6 p.m. the next night.

Jiddu's countryman U.G. Krishnamurti talks about a cobra-like effect of the neck puffing out during acute prana flow (hence the ancient Egyptian symbol). The "carotid glands" are a reddish-brown oval body, in the top of the neck just below the ears. It is similar in structure to the kundalini gland (coccygeal gland). It is known that oxygen and carbon dioxide concentrations represent the main stimulus for the carotid body. Carbon monoxide as a gaseous neurotransmitter

also appears to be involved in the regulation of chemosensors of carotid body which are regulated by molecular oxygen and inhibited by carbon monoxide. The coccygeal and carotid glands seem to act as neutralizers of systemic poisons. The carotid gland cells produce dopamine, and this is significant to the understanding of their function.

"I do not want to be an exhibitionist, but you are doctors. There is something to the symbolism they have in India—the cobra. Yesterday was the new moon. The body is affected by everything that is happening around you. It is not separate from what is happening around you. Whatever is happening there is also happening here; there is only the physical response. This is affection. You can't prevent this, for the simple reason that the armor that you have built around yourself is destroyed [in the alchemy], so it is very vulnerable to everything that is happening there. With the phases of the moon—full moon, half moon, quarter moon—those swellings here take the shape of a cobra. Maybe the reason why some people have created all these images—Siva and all those kinds of things. But why should it take the shape of a cobra? I have asked many doctors why this swelling is here, but nobody could give me a satisfactory answer. I don't know if there are any glands or anything here." P.31, UG Krishnamurti, The Mystique of Enlightenment.

HORMONES

Metamorphic hormonal secretions are felt as ever more poignant longings and gratitudes.

The fire of kundalini is a circuitous contagion of cause and effect. Increased sex hormone levels intensifies kundalini and increased kundalini upregulates both the level of sex hormones and receptor sensitivity to them. This circle of cause and effect is the basis of metamorphosis and spiritual birth. The metamorphic hormone cycle probably follows a similar sequence to that of romantic love. Dr. Helen Fisher who wrote "*The Anatomy of Love*," says that testosterone might be the main active agent occurring during infatuation, then the stimulants dopamine and norepinephrine coupled with low levels of serotonin during the romantic/obsessive phase and then oxytocin and vasopressin during the attachment, calm and peace of long term relationship. Similarly I think that testosterone might be the predominant agent during the priming phase of kundalini awakening when sexual heat is stimulated regardless of one's social context. Then during the influx, shock and transmutation phases the activating hormones dopamine and norepinephrine are probably predominant. Finally things settle down during the substantiation phase with vasopressin and oxytocin giving one a sense of deep peace and Connection. Fisher says that orgasm is associated with higher levels of vasopressin and oxytocin and a successful metamorphosis stabilizes bliss such that one could liken the state to a permanent brain orgasm. There is more information on the fascinating subject of the chemistry of love in Diane Ackerman's book *"A Natural History of Love."*

All the hormones are amplified during metamorphosis. From some of the symptoms we can work out which ones are dominant at each stage. Track your symptoms on a calendar, because they will fall in with your hormone cycles, and the seasonal-month of the year. That way each month and year you will know what to expect. The monthly and annual kundalini cycle in males will track closely with testosterone and with females it follows the estrogen cycle. As I have said the solar and lunar passage throughout the year is a huge factor in kundalini flow and development, but so is large weather systems. The seasonal effect on kundalini cycles is very apparent and easily explained. One of the factors in seasonal variability is the increased secretion of melatonin in winter maybe what reduces kundalini at this time, by down-regulating the production of sex hormones. Conversely the maximum light hours of July could be why July is max-kundalini month, because of the consequent reduced melatonin and increased sex hormones.

TESTOSTERONE

Testosterone must increase in both men and women during the mystic/sexual heating period in the beginning, and during the influx. Sex hormones probably start falling off during the burnout/fall/substantiation and recovery period. More testosterone is produced during puberty, when in love, through exercise, during war to powerful stimulate cells, prepare for action and make the mind alert and enterprising. So often do people relate a period of intense sexual activation at the

beginning of a kundalini awakening that I think testosterone must be fundamental in spiritual initiation. The sexual heat does indeed feel very similar to taking a hit of testosterone supplement, although because it's something the body is instigating, the sexual heat of kundalini is both more enduring, intense and portentous. It can last for years and penetrates one's being completely.

Consider that the several years of mystic heating that occur prior to the awakening is fueled by testosterone, and testosterone is the hormone of individuation and autonomy. Nature in her wisdom gives us this time of hormonal priming to prepare our lives for the coming awakening. Testosterone by increasing one's boundary definition and activity level is exactly what we need prior to having our adaptive brain (left-brain functions) dissolve in the Great Bliss. This increase in personal power forces us to push for life circumstances that "feed and nurture" us. Thus we prepare our nest for the period when our resourcefulness is diminished during the awakening itself.

If the years of testosterone priming didn't occur we would simply be too vulnerable and exposed to external influences. The awakening therefore is more likely to become a psychotic breakdown if the self-system is not strong enough to hold the heightened senses and expanded levels of perception into a coherent whole. Since stress reduces testosterone it might be that those individuals from stressful childhoods or under excessive stress during the start of an awakening are more likely to become unbalanced because their boundary definition and solid self-sense has been compromised by lack of testosterone throughout their lives. If the years of testosterone priming did not occur we would be more likely to be in an unconscious (parasitic/codependent) social environment, which is antithetical to awakening. So not only does the testosterone work on the biological level to rev up our cells, it also operates in the social and lifestyle departments.

This same effect probably applies to reproductive relationships as well. Just as Nature prepares the ground for children to be born, through the hormonal modulation of social conditions, Nature, the causal force of manifestation, hormonally she prepares a nest for the emergence of cosmic consciousness. The really interesting thing would be to study the triggering of metamorphic chemistry between the sexes through this hormonal and neurological change. This internal dynamo seems to be propelling us forcibly toward some unknown event, like the Eros between lovers forcing union. Yet this enormous pressure is not so much to cause things to happen in the world, but is the very dynamic of evolution itself melting us in the sacred marriage of inner unity. *The marriage of the charges-poles-hemispheres-sexes.* We might be inspired to run here and there by this hormonal tension until we realize that we are simply cooking in God's melting pot. Knowing what is going on within us helps us to get some distance from our uproarious physiology and emotions in order to enjoy the ride.

Testosterone enhances aerobic metabolism and increases protein synthesis in males and females. Low levels of testosterone are associated with muscle loss, weight gain, brittle bones, impotence, loss of sex drive, irritability, depression and fatigue. Levels tend to drop off as we get older at the rate of 1% per year after middle age.

Reasons for low testosterone levels include:

- **Receptors become blocked:** Estrogen gets taken up by the receptor sites and blocks testosterone from acting.
- **Testosterone becomes bound:** Testosterone gets bound to sex hormone-binding globulin (SHBG) leaving only about 2% of testosterone actually free to work.
- **Production falls:** High levels of estrogen trick the brain into thinking that enough testosterone is being produced. Stress and sense of failure also reduce testosterone.
- **Testosterone converts to estrogen**: Testosterone changes to estrogen and DHT, excess estrogen can increase production of SHBG and block receptor sites.

Testosterone And Kindling

Studies show that testosterone can induce **mania or hypomania,** in about 10% of men. There are reports of testosterone patches and DHEA inducing manic episodes. In males, Testosterone and its two metabolites, **estradiol** E(2) and DHT, enhance the development of amygdala-kindled seizures. Since estradiol has the most potent kindling effect anti-estradiol herbal intervention may have potential therapeutic value for males with epilepsy and might help reduce the severity of kundalini awakenings.

Jed Diamond identifies a number of male hormonal cycles including: Testosterone, which goes up and down four or five times an hour. Daily cycles, with testosterone being higher in the morning and lower at night. A monthly hormonal cycle that is unique to each man. Seasonal cycles with testosterone higher in November and lower in April. Hormonal cycles between 40 and 55 that have been called male menopause or andropause. Hormones change depending on stressors in a man's life. www.theirritablemale.com

In a study with male monkeys mean serum prolactin levels increased significantly during June, July and August in all six animals. Peak levels were observed in August and September and then levels declined gradually to reach a minimum in April and May. Mean serum testosterone levels closely paralleled the annual pattern of prolactin. Mean serum LH levels significantly decreased during the time when mean serum prolactin and testosterone levels were increasing and they increased again at the time of decreasing mean prolactin levels, i.e. mean serum LH and prolactin were negatively correlated.

ESTROGEN

Estrogens antagonize the effects of the **parathyroid hormone,** minimizing the loss of calcium from bones and thus helping to keep bones strong. Recent research suggests that rising estradiol levels in estrous females causes a temporary but substantial increase in dendritic spine density of the **hippocampus**.

Estrogen Cycle and Kundalini

It appears that kundalini increases around 8 days after the start of menses, probably due to the sharp peak of estrogen at this time. During menstruation a

new follicle begins to develop in one of the ovaries. After menstruation ceases, the follicle continues to develop, secreting an increasing amount of estrogen as it does so. The estrogen level reaches its peak just prior to ovulation at around 8-10 days, then it drops off for ovulation, and picks up at a lower level, (along with progesterone) for the building of the uterus wall. Estrogen has been shown to increase seizures (kindling), and progesterone to decrease them; and both seem also to modulate bipolar mood states. The estrogen peak of the menses cycle's effect on kundalini might not be apparent during the peak of the awakening, for it would be hidden amongst the intensity of the various symptoms; but it appears to be a very regular phenomena during the quiet substantiation stage for the years following an awakening. There is a nice chart showing the estrogen and progesterone levels during the 28 day cycle: users.rcn.com/jkimball.ma.ultranet/BiologyPages/S/SexHormones.html

Protection from Estrogen

Estrogens (estradiol and estrone) are produced by the aromatization of testosterone in the fat cells, skin, bone and other tissues. Since testosterone changes into estrogen one thing I focused on was to make sure the diet included substances that sop up the extra estrogen so it didn't cause cancer. Increased free radicals plus increased hormones and a preoccupied immune system is a dangerous combo so during a kundalini awakening both men and women should consider taking herbs to protect ourselves from excess estrogen. High levels of estrogens may displace tryptophan from albumin; albumin is the most abundant protein in the body.

Artificial steroid hormones may facilitate the growth of certain cancers, and we can maintain youthful hormone levels without them. The effect of meditation on the pituitary gland is one such way, and exercise will increase testosterone. To facilitate the Heating phase of awakening we can constructively manage our testosterone metabolism by taking herbs to unbind the blood testosterone, free up receptors, increase testosterone production and aid in estrogen elimination.

It is also most helpful to include a cleansing program to detoxify the tissues thus diminishing resistance to whatever circulating thyroid hormone is present. Women who are estrogen dominant have poor thyroid efficiency because estrogen increases thyroxine-binding globulin—the transport system for both T3 and T4, and globulin-bound thyroid is inactive. The more thyroid hormones are globulin-bound, the less of the active form is available. Adequate amounts of natural progesterone reduce **estrogen dominance** and consequently, increase the biologically active form of thyroid hormones. For many women, using natural progesterone along with committing to a healthy diet, using nutritional support, reducing stress and adding exercise is most effective. Saw palmetto has anti-estrogenic and anti-androgenic effects in addition to anti-inflammatory properties.

www.beyondacenturyonline.com sells an antiestrogen formula to inhibit the conversion of testosterone to estrogen and DHT. It contains DIM, chrysin, nettle root and Bioperine. Other antiestrogen products include: quercetin, chasteberry, Saw Palmetto, methoxy isoflavone and calcium D-glucarate.

Avena Sativa or "oat green juice" frees globulin bound (useless) testosterone making it bioavailable and preventing it from turning into DHT. The percentage of testosterone held by globulin increases with age. Those taking oat grass juice report higher free testosterone levels and an increase in strength, and libido in both males and females. Works especially well with higher potency Tribulus. Oat-grass juice is both a sex enhancer and helps recovery from nicotine addiction. helping to increase endurance, mental processing and anaerobic work capacity. Avena Sativa, Saw Palmetto and Nettle Root are a good combo for freeing serum testosterone for women and men.

Nutritional Influence on Estrogen Metabolism by Douglas C. Hall, M.D. Applied Nutritional Science Reports, 2001

LUTEINIZING HORMONE

Luteinizing hormone (LH) and follicle-stimulating hormone (FSH) are called gonadotropins because stimulate the gonads—in males, the testes, and in females, the ovaries. These two hormones secreted from cells in the anterior pituitary are essential for reproduction. In women, LH helps regulate the menstrual cycle and egg production (ovulation); in men, LH stimulates the production of testosterone, which plays a role in sperm production. Women's LH levels normally vary with the phase of the menstrual cycle, rapidly increasing just before ovulation occurs. This "LH surge" could be why kundalini increases at this time in women. Men's LH levels normally remain constant. The principle regulator of LH and FSH secretion is gonadotropin-releasing hormone or GnRH. GnRH is a ten amino acid peptide that is synthesized and secreted from hypothalamic neurons and activates gonadotropic cells of the pituitary. Nitric oxide stimulates gonadotrophin in the Hypothalamus so the increase in sex hormones during awakening might be due to the general dys-inhibition of the pituitary and the sensitization of hormone receptors.

Black cohosh preparations are used in the treatment of menopause to improve symptoms such as hot flashes, depression and sleep disturbance. German researchers found that black cohosh produced an effect on serum concentrations of pituitary hormone levels, including a significant and selective reduction of luteinizing hormone (LH) (while not significantly effecting levels of prolactin and follicle stimulating hormone). Hot flashes have been linked to a significant spike in the release of luteinizing hormone.

OXYTOCIN

The love peptide oxytocin (OT) is released into the blood stream in from the posterior pituitary in response to a variety of stimuli such as suckling, childbirth, or certain kinds of stress. Oxytocinergic neurons display widespread projections throughout the central nervous system, and in peripheral tissues such as the uterus, placenta, amnion, corpus luteum, testis, and heart. OT receptors have also been identified in other tissues, including the kidney, thymus, pancreas, and even fat cells. It is interesting that (in rats at least) the amygdala contains receptors for

vasopressin whose activation increases aggressiveness and other signs of the fight-or-flight response and oxytocin whose activation lessens the signs of stress.

During kundalini awakenings there are some liberal squirtings of oxytocin with very interesting somatic/emotional consequences. Before any inner-conjunction and samadhi there must be a fair amount of this chemical in order to calm one prior to the paralysis of the event. Along with all the bliss chemicals there must be oxytocin as well. Oxytocin is considered the hormone of bonding and trust. It has been labeled the cuddle hormone, increases during nursing, and skyrockets in men and women during orgasms. OT exerts potent antistress effects that modulate the neuroendocrine reflexes to the establishment of complex social and bonding behaviors related to the reproduction and care of the offspring.

The oxytocin system is strongly regulated by gonadal and adrenal steroids. Before the onset of labor, uterine sensitivity to OT markedly increases concomitant with a strong upregulation of OT receptors. The many other reproductive roles oxytocin plays include: stimulation of uterine smooth muscle contraction during labor and milk ejection during lactation, milk let-down reflex, estrous cycle length, follicle luteinization in the ovary, and ovarian steroidogenesis, spontaneous erections, and ejaculation.

Oxytocin is undoubtedly elevated during some of the peak experiences of kundalini influx such as: the inner-conjunction/samadhi/silver cord, and mystic sexual ecstasies and when the helix-cord of energy goes down to the ground from the pelvis. Also during the false pregnancy events when kundalini is working on the belly. Oxytocin stimulates contractions of the uterus at the time of birth, so it is probably dominant during mystical ecstasy (Sex with Eros). Oxytocin is higher in women, and gives uterine contractions this is perhaps why females have more spontaneous orgasms than men. Oxytocin and testosterone in differing quantities are used by both the male and female body. Estrogen seems to enhance the effect of oxytocin, while testosterone seems to reduce its effects. Because oxytocin is one of the main chemicals involved in the actual initiation of kundalini there is great spiritual incentive for upgrading our ability for compassionate action. This explains why compassion, generosity, and caring action for others is essential to the spiritual path for it's the very stones on the path. No walking of compassion, generosity and caring means no spiritual path period.

CORTISOL

Cortisol is synthesized from cholesterol and acts through specific intracellular receptors to affect numerous physiologic systems including immune function, glucose counter regulation, vascular tone, and bone metabolism. The stress hormone *cortisol* is released to generate energy during times of stress along with the hormones epinephrine and norepinephrine that constitute the "fight-or-flight" response to a perceived threat. Following the stressful or threatening event, epinephrine and norepinephrine levels return to normal while cortisol levels can remain elevated for a longer time period. In fact, cortisol levels can remain persistently elevated in the body when a person is subjected to chronic stress.

The stress response requires an intact hypothalamic-pituitary-adrenal axis. Corticotropin-releasing hormone (CRH) secreted by the hypothalamus is the most proximal element of the HPA axis, and it acts as a central coordinator for neuroendocrine and behavioral responses to stress. CRH is made not only in the hypothalamus but also in peripheral tissues, such as T lymphocytes. The stress hormone **CRH produces kindling** and makes it more likely that other external stimuli will create a kindling reaction. The more cortisol that is released in the early stages of an awakening during shock or stressful maladjustment, the more likely depression will occur later on during the exhaustion phase.

Cortisol acts like a thermostat clamping down on its own production. It slows the production of the two hormones that touch off the hypothalamic-pituitary-adrenal axis: corticotropin-releasing factor in the hypothalamus and adrenocorticotropic hormone in the pituitary. Cortisol also has a strong anti-inflammatory effect, it reins in the immune system and reduces swelling from tissue damage. In hypoadrenalism when there is insufficient cortisol the immune system runs wild and reacts to things that do not really pose a threat to the body, such as in the instance of allergies. High cortisol levels are the result of the response to chronic stress and represent the adaptation phase of the stress response. Low cortisol levels are the consequence of adrenal exhaustion or the exhaustion phase of the stress response cycle.

Cortisol output normally has a diurnal and circadian rhythm, rising in the morning, falling at night, and changing with the seasons. Changes related to work-sleep cycles affect this rhythm, and changes in the rhythm affect night-time sleep patterns. Changes in the length of daylight hours, blindness, and loss of consciousness also affects the rhythm. Cortisol levels might be one of the main factors in the timing of kundalini awakenings and its various phases.

Cortisol opposes and works to balance the action of insulin on glucose storage. When insulin lowers blood sugar past a certain point, cortisol levels increase to raise blood sugar. Cortisol mobilizes amino acids from muscle to increase protein breakdown, mobilizes fatty acids to increase lipid concentrations in the blood, and increases blood glucose concentration. At the same time the other tissues of the body such as viscera decrease their use of glucose as fuel. Cortisol also leads to the release of so-called fatty acids, an energy source from fat cells, for use by the muscles. Taken together, these energy-directing processes prepare the individual to deal with stressors and danger, and ensure that the brain receives adequate energy source.

Cortisol stimulates fat and carbohydrate metabolism for fast energy, and stimulates insulin release and maintenance of blood sugar levels resulting in *an increase in appetite*. Thus chronic stress, may lead to cortisol levels that stimulate your appetite, with the end result being weight gain. While muscle growth is adversely affected by cortisol by preventing the production of prostaglandin in response to training (mechanical stimulation) and eating (insulin action). A low glycemic diet is important for sugar handling stress increases cortisol levels. Elevated cortisol, in turn, aggravates the sugar metabolism situation contributing to the development of high insulin levels and ultimately diabetes.

The adrenal cortical hormones suppress inflammatory processes, healing processes and the immune system. Various immune cells (white blood cells) cycle in and out of the **spleen** and bone marrow for special conditioning and possible nourishment and instruction. This immune system trafficking follows the cortisol cycle. High stress levels produce high levels of cortisol in response. When stress is ongoing cortisol levels may also remain high indefinitely, producing a series of biochemical, physiological and even anatomical reactions. Cortisol is known to increase whole body lipolysis, yet chronic hypercortisolemia results in increased fat mass. Depressed patients who are also hypercortisolemic gain increased visceral fat, are resistance to insulin, linking major depression and cardiovascular disorders.

The **hippocampus** is the region of the brain that deciphers and stores emotional and sense memory. It is the most plastic, changeable and vulnerable region of the brain. Nerve cell generation in the hippocampus slows down or stops with the sustained cortisol levels of chronic stress. It also responds to gonadal, thyroid, and adrenal hormones, which modulate changes in synapse formation and dendritic structure. The level of cortisol at the cell level controls thyroid hormone production. Hypothyroidism, reactive hypoglycemia (glucose intolerance) and depressed immunity are often associated with this condition as well. Long-term exposure to high cortisol levels may eventually result in such changes as **osteoporosis**, muscle weakening and wasting, high blood pressure, increased abdominal fat deposition, immune dysfunction, steroid-induced diabetes, and cardiovascular disease. Another serious consequence maybe the eventual **fatigue** and failure of the adrenal glands.

The exhaustion phase of a kundalini awakening needs to be treated as a general hypofunctional down regulation of all body systems. Repeated and prolonged stress leads to the depletion of the adrenal glands and other glands and organ systems. It is the stress response itself that is damaging, because the body spends so many resources on allostatic adaptation that it causes the economy of the body to become bankrupt. An under-working Hypothalamic-Pituitary-Adrenal Axis is one of the results. Prof. Validimir Dilman described an age-related syndrome that he named Hyperadaptosis. **Hyperadaptosis**, or adrenal burnout, results from cortisol resistance and hypercortisolemia. Hypothalamic cortisol receptors become progressively less sensitive with age, so cortisol receptor sensitivity in the hypothalamus determines the biological age of the adaptive homeostat. To recover from chronic stress response it is necessary to increase receptor sensitivity to cortisol, thereby lowering cortisol levels and reducing cellular damage. This reduces loss of brain cells, improves glucose tolerance, reduces body fat and preserves bone density.

SAMe and Phosphatidylserine increases sensitivity of prolactin and cortisol receptors resulting in lower levels of circulating hormone. One of the most effective ways to lower excess cortisol levels is with the nutrient **Phosphatidylserine (PS)**, for it is believed to facilitate the repair of the cortisol receptors in the hypothalamus. Cortisol receptors can become damaged by high cortisol levels, reducing the ability of the hypothalamus to sense and correct high cortisone levels. Because Phosphatidylserine helps repair the feedback control apparatus, it is useful in

correcting both high and low cortisol levels. DHEA can also be used to alleviate the symptoms of excess cortisol or hyperadaptosis. DHEA can improve glucose tolerance, convert excess body fat to lean muscle mass, alleviate depression, increase energy and decrease pain in chronic fatigue and fibromyalgia patients, decrease joint pain and fatigue in inflammatory and autoimmune diseases, improve mental clarity and enhance overall immune function.

The telomere caps at the ends of chromosomes determine how long we will live. Current thinking is that every time a cell divides its telomere caps get shorter. Once the telomeres get short enough cells have a hard time dividing and perhaps become senescent. It has been found that chronic stress appears to speed up this process. When cortisol is present for long periods of time and in excess quantities, it becomes extremely toxic and can do extensive damage to the immune system. It can also diminish muscle mass, and lead to shrinkage of our vital organs and thinning of the skin. Our brain cells, or neurons, are extremely sensitive to the effects of cortisol, which in excess can cause brain cells to die. Magnolia Bark Extract lowers the stress response, anxiety and depression—almost immediately, without side effects. Magnolia Extract promotes enhanced survival and growth of injured brain cells, counteracts adrenal fatigue, reduces inflammation and pain, protects against seizures, acts as an antidote for pesticide poisoning and plays a significant role in alleviating asthma. **Relora** is a new, non sedative herbal stress relief formula derived from Magnolia officinalis and Phellodenron amurense extracts. It blocks the major age-accelerating hormone "cortisol," improves mood, reduces nervous tension and is non habit forming.

Relora: The Natural Breakthrough to Losing Stress-Related Fat and Wrinkles
by James B. Lavalle.

Hormonal Balance: Understanding Hormones, Weight, and Your Metabolism
by Scott Isaacs

Total Renewal: 7 Key Steps to Resilience, Vitality, and Long-Term Health
by Frank Lipman M.D.

HEALTHY HORMONAL FOUNDATION

The present model I work with is that kundalini-fire itself is more tied into the sex hormones than any other biochemical factor. Thus it is the pituitary gland that directs the course, intensity and duration of a kundalini awakening. Histamine, nitric oxide, eicosanoids, thyroxin, adrenaline and the various neurotransmitters, opioids and peptides levels are "secondary" to and under the jurisdiction of the sex hormones themselves. Even though I say it is the sex hormones more than any other biochemical factor that drives kundalini, I also have to add that sex hormones are the origins and end, the alpha and omega of metabolism. Meaning that sex hormones are a "resultant factor" of the organism-total in relationship to the cosmos-total (AQAL). A healthy hormone profile would entail the harmonization of the vibrational manifestation of one's total life-sphere…in the body, mind, spirit, emotions, relationships and soul-vocation with the overall energies of the cosmos. If the foundation of kundalini awakenings and life in general is sex and growth hormones, then it stands to reason that to both fuel an awakening and to prevent its premature end and burnout we need to strengthen our hormonal system.

L-ARGININE a non-essential amino acid commonly found in the diet, is an oxidative precursor of nitric oxide (NO). Arginine is a safer and cheaper way to support NO production than Viagra. Like Viagra, the amino acid **arginine** increases blood flow to the genital area, potentially increasing sex organ sensation and enhancing the pleasure of sex. The concentration of L-arginine can be a limiting factor to both our NO metabolism and the production of Human Growth Hormone. Arginine plays an important role in cell division, the healing of wounds, removing ammonia from the body, immune function, and the release of hormones. According to beyondacenturyonline.com L-Ornithine is about twice as effective at releasing Growth Hormone as L-Arginine.

Arginine synthesis mainly occurs via the intestinal–renal axis, wherein epithelial cells of the small intestine, which produce citrulline primarily from glutamine and glutamate, collaborate with the proximal tubule cells of the kidney. These extract citrulline from the circulation and convert it to arginine, which is returned to the circulation. Consequently, *impairment of small bowel or renal function* can reduce endogenous arginine synthesis, thereby increasing the dietary requirement.
Warning: Until we are informed differently by science I strongly suggest that Arginine, Ornithine, Histidine and possibly Glutamine supplementation be avoided during peak kundalini to reduce nitric oxide toxicity and prevent excessive histamine metabolism. However supplementation of these amino acids maybe very important during the exhaustion phase and after. Also because of its ability to increase human growth hormone (HGH) people with any kind of cancer or herpes infection (e.g., cold sores, chicken pox, shingles), or a history of herpes, should not take L-arginine supplements and avoid food sources of arginine including: chocolate, beer, grain cereals, meats, seeds, nuts, and beans. Choline—It is the neurotransmitter acetylcholine (ACh) that carries the sexual message in the cholinergic nerve transmission of sexual response. ACh also

seems to control sexual behavior through its activity in the brain. Increase ACh levels, and sexual activity goes up (granted the availability of partners that is). ACh is involved in the build-up toward orgasm and the urethral and vaginal contractions that occur during orgasm as well as orgasm intensity and duration. Acetylcholine is also the primary chemical the body uses to transmit signals from nerves to skeletal muscles, so this chemical is needed for muscular control and proper muscle tone, and will enhance energy and stamina. Supplemental choline is taken along with vitamin B5, for the manufacture of more ACh in the body.
VITAMIN B5 (pantothenic acid)—enhances endurance through helping to create ACh from choline and its role in the energy-producing Krebs' Cycle, which is vital for all living cells.
BLACK COHOSH (*Cimicifuga racemosa*)—acts at the hypothalamic and pituitary level, resulting in a decrease in Luteinizing Hormone (LH). LH in women promotes estrogen and progesterone secretion, and maintains ovarian tissues. In men, LH stimulates Leydig cells in the testes to secrete testosterone. With aging LH levels normally rise with age in both men and women as hypothalamic estrogen *receptors become less sensitive* to feedback inhibition. Black cohosh suppresses LH to more youthful levels, perhaps by improving estrogen and progesterone receptor sensitivity. Black Cohosh targets serotonin receptors which are used to regulate body temperature, so might be useful during the peak heat of kundalini.
CATUABA BARK (*Anemopegma mirandum*)—is considered a central nervous system stimulant with aphrodisiac properties. The bark is commonly used for sexual impotency, agitation, nervousness, nerve pain and weakness, poor memory or forgetfulness, general exhaustion and fatigue, insomnia related to hypertension, agitation, and poor memory, hypochondria, and pain related to the central nervous system (such as sciatica and neuralgia). Catuaba has a dopamine-mediated antidepressant-like effect. In Brazil it is regarded as an aphrodisiac with "proven efficacy" and, in addition to treating impotence and enhancing male sexual performance by increasing the brain's sensitivity to dopamine, making the sex act more pleasurable, as well as by vasodilation, enhancing erectile strength. It also has antiseptic, antiviral properties, the extract of which may prevent HIV.
CHASTE BERRY *(Vitex agnus castus*)—helps to restore youthful gonadotropin levels in both sexes by acting at the hypothalamic level to increase secretion of LH and decreasing FSH, also causes a relative increase in progesterone and a relative decrease in estrogens.
CHRYSIN extracted from *Passiflora coerulea* a member of the passionflower family. This inhibits the production of the enzyme aromatase which prevents the conversion of testosterone to estrogen. Chrysin possesses potent anti-inflammation - able to suppress liposacharide-induced COX-2 protein and has anti-oxidation properties. Chrysin is able to stimulate nitric oxide release from endothelial cells leading to vascular cGMP accumulation and subsequent endothelium dependent vascular relaxation.
CNIDIUM SEEDS (*Cnidium monnieri*)—are used in classical traditional Chinese medicine as an antibacterial, antifungal, and astringent. For antiaging,

skin problems, blood/chi circulation, headaches and as a natural libido booster. Cnidium has shown some activity against arthritis, asthma and osteoporosis in animal studies. May be useful in kundalini to keep energy moving through blocked or stagnant areas and pain elimination.

FORSKOLIN (*Coleus forskohlii*)—activates the enzyme adenylate cyclase is incorporated into all cellular membranes which in turn, increases cyclic adenosine monophosphate (cAMP) in cells. Cyclic AMP is essential to synthesize and regulate thyroid hormones, growth hormone, cortisol, DHEA, testosterone, melatonin and other hormones. By increasing cAMP levels there is relaxation of the arteries and smooth muscles, lowering blood pressure, enhanced insulin secretion, which can help drive carbohydrates and protein into muscle cells for energy and recovery. Forskolin also increases thyroid hormone function, thereby raising metabolic rate, and significantly increases fat burning (lipolysis), which may translate into fat loss. It also stimulates digestive enzymes, allowing better digest and assimilation of food.

GINKGO BILOBA—for improved blood flow, enhance oxygenation of tissues, protect blood vessels from free radical damage, and restore elasticity and tone to the entire circulatory system. Researchers suggested that ginkgo worked to increase sex function by stimulating the release of nitric oxide. Nitric oxide is the primary messenger molecule that signals the blood vessels to dilate and sends blood to the corpus cavernosum to achieve and maintain an erection.

GINSENG—As an adaptogen Ginseng's use in treating sexual dysfunction maybe through direct improvement of the central nervous system and gonadal tissue. And through significantly altering the activity of hypothalamic catecholamines involved in sexual behavior and hormone secretion. There is increasing evidence for a role of nitric oxide in ginseng's ability to facilitate erection by directly inducing the vasodilatation and relaxation of penile corpus cavernosum. Increased levels of prolactin cause impotence—studies show ginseng treatment decreased prolactin secretion and suggest a direct nitric oxide effect of ginseng on the pituitary.

HORNY GOAT WEED (*Herba Epimedii*)—A well-known herb that has been used for centuries to treat impotence, reinforce seminal emission, strengthen tendons, bones and limbs, relieve rheumatic conditions and for diabetes and Parkinson's. The Icariin in horny goat weed performs in a similar way to Viagra, and it has long been employed to restore sexual fire, boost erectile function, allay fatigue and alleviate menopausal discomfort.

HUANG QI (*Astragalus Membranaceus*)—To reinforce "qi" and strengthen the superficial resistance; also helps to accelerate new tissue growth.

TRIBULUS TERRESTRIS—leads to increased production of the luteinizing hormone (LH) levels by 72%, and free testosterone levels by 41%. When LH levels are increased, the natural production of testosterone also increases along with sex drive. Protodioscine is a component of Tribulus that converts to DHEA, thereby improving sexual desire and enhances erection. The enhanced erection and aphrodisiac effects observed with tribulus are due to increases in the release of nitric oxide (NO) from the endothelium and nitrergic nerve endings. Tribulus maybe the

best resensitizer of the hypothalamo-pituitary-gonadal (HPG) axis of both men and women, reducing the requirement for hormone replacement therapy. As well as its receptor-sensitizing effects, it reduces receptor downregulation.

MACA ROOT (*Lepidium Meyenil*)—A plant found in Peru, the root being the most potent part. Maca enhances libido in both men and women, therefore it works as an aphrodisiac, as well as increasing sexual simulation through improved blood flow.

MAGNOLIA BARK—Magnolia bark contains two compounds that decrease cortisol levels induced by anxiety which hinder a male's sexual power and reaction. Magnolia bark is a traditional Chinese medicine used to treat menstrual cramps, headaches & migraines, anti-stress, aphrodisiac, antioxidant, antibiotic, digestive, diuretic. It controls the body's primary stress hormone, cortisol, increases levels of the calming neurotransmitter -acetylcholine, and eases digestive disturbances caused by emotional distress and emotional turmoil. Magnolia bark also contains alkaloids that relax tense skeletal muscles, without any change in motor activity or muscle tone.

MUCUNA PRURIENS—is a natural source of L-Dopa. the chemical precursor of the neurotransmitter dopamine, which in turn is a precursor of norepinephrine. L-Dopa stimulates the dopamine and norepinephrine systems of the brain, boosting libido. It appears that higher levels of dopamine are associated with increased sexual interest. The natural L-Dopa in Macuna has been shown to convert into Dopamine in the brain. Dopamine stimulates the hypothalamus and pituitary to release growth hormone. Dopamine also regulates motor control, sex drive, immune function, fat gain and loss, lean muscle gain, bone density, energy levels, and the ability to sleep soundly. L-Dopa and Dopamine are also effective inhibitors of prolactin. Increased levels of the pituitary hormone Prolactin is a hormone released by the pituitary gland is considered responsible for 70–80% of erection failure in males.

MUIRA PUAMA (*Ptychopetalum olacoides*)—also called "potency wood," is a small Brazilian tree used as an aphrodisiac and sexual tonic for promoting virility, fertility, treating impotence and increasing libido. Other benefits include protection of brain cells, reduction in fatigue, improved sleep, and increased morning erections. Native people use the stems and roots from young plants as a tonic to treat neuromuscular problems; a root decoction is used in baths and massages for treating paralysis and beriberi; and a root-and-bark tea is taken to treat sexual debility, rheumatism, cardiac and gastrointestinal weakness, nerve pain, menstrual disturbances, dysentery, depression, menstrual cramps, PMS, nerve pain, and central nervous system disorders.

GREEN OATS (*Avena Sativa*)—Has been shown to stimulate the release of luteinizing hormone (LH). LH is important in effectuating the secretion of certain sexual hormones such as testosterone. These properties give Avena Sativa its aphrodisiac effects.

LONG JACK (*Eurycoma Longifolia*)—The safest & most potent herbal aphrodisiac in the world. It is rare to get the genuine item. Longjack, otherwise known as

Tongkat Ali, has become popular for its alleged testosterone-enhancing properties, libido enhancer and to treat various sexual dysfunctions. In Southeast Asia it is used as a post partum medication, as well as for its anticancer, antimalarial, antipyretic, antiulcer, cytotoxic and aphrodisiac properties. Its anabolic, androgenic properties improve muscle size and strength and enhance sports performance. Since the body's natural testosterone promotes protein synthesis and positive nitrogen balance, the benefits for training and workout, are muscle cell growth and increased body strength as well as faster recuperation and recovery from muscular stress.

RED FLOWER (*Flos Catharmi*)—Activates blood circulation to genitals, removes blood stasis and relieves pain.

RHIZOMA CUCURMAE LONGAE—Helps to eliminate blood stasis, promote the flow of energy to genital area and relieves pain.

ROU CONG RONG (*Herba Cistanches*)—One of the most popular and potent tonic herbs that enhances sexual function, treats impotence and strengthens the back and knees.

SUMA (*Pfaffia paniculata***)—**Suma root is an adaptogen, general tonic, aphrodisiac, a calming agent, and is used to treat ulcers. Suma is employed as a cellular oxygenator and taken to stimulate appetite and circulation, increase estrogen production, balance blood sugar levels, enhance the immune system, strengthen the muscular system, and enhance memory. It supports hormonal balance, reduces inflammation, inhibits cancer and leukemia cells, enhances immunity and raises libido. One reason for its many normalizing and rejuvenating effects may be its ability to increase oxygenation and energy efficiency at the cellular level.

YOHIMBE (*Corynanthe yohimbe*)—is supposed to be the most effective herb for erections, however it is equivalent to 20 cups of coffee so it will trash your nerves. Heart palpitations and excitation with insomnia for up to 30 hours can happen after ingesting even a small amount of yohimbine (the alkaloid extract of yohimbe). Note that yohimbe does not increase testosterone and most yohimbe supplements contain "none" of the active ingredient yohimbine.

Other supplements for sex function include:

Ashwagandha, Dong Quai, Damiana, Dodder Seed, FoTi, Gotu kola, Licorice root, Maca, Oat Grass Juice, Passion flower, Rehmannia, Rhodiola, Sarsaparilla, Saw palmetto, Royal Jelly, Wild Yam. Fish oil (Omega 3) increases NO, papaya increases Arginine. DHEA, Histidine, Vitamin B-6, Niacin, zinc, selenium, magnesium, boron.

Hot Plants, Nature's Proven Sex Boosters for Men and Women by Chris Kilham
The Magical and Ritual Use of Aphrodisiacs by Richard Alan Miller
Natural Sex Boosters by Dr. Ray Sahelian

NITRIC OXIDE

Nitric oxide is one of the key factors in promoting the maximum peak of kundalini and spiritual experience, and in the dissolution of the bodymind. Nitric Oxide (NO) is associated with the main excitatory neurotransmitter glutamate and the generation of action potentials in the nerves. NO and glutamate act as excitatory neurotransmitters, used when high levels of activity are needed, such as during HPA axis activation or sexual arousal. It appears that nitric oxide is a factor present at the very cusp of our existence, both birth, death and resurrection. NO seems to play a part in extreme readiness chemistry, thus it might be implicated in the four great F-Responses: Fuck, Freeze, Fight-or-flight. Thus nitric oxide is part of the body's oxygen delivery system. Nitric oxide enriched hemoglobin delivers more oxygen to the tissues without boosting heart rate or constricting vessels. Hemoglobin senses oxygen levels and releases oxygen and nitric oxide when oxygen levels are low. This property of nitric oxide and hemoglobin is now being used to deliver increased oxygen to cancer tumors, which are always anaerobic and hypoxic. Arginine is being researched as a possible cancer cure through its influence on Nitric oxide chemistry. www.lef.org/protocols/prtcl-027.shtml

Nitric oxide is a recently discovered and highly unorthodox messenger molecule. NO is a labile, free radical gas, although in most biological situations NO is in solution. The discovery of NO as a neurotransmitter has radically altered our thinking about synaptic transmission. NO is not stored in synaptic vesicles, instead it is synthesized as needed by NO synthase (NOS) from its precursor L-arginine. There are three forms of nitric oxide synthase enzyme: a neuronal type called nNOS, an epithelial type called eNOS, and an inducible form called iNOS.

In the central nervous system, nitric oxide is produced enzymatically in postsynaptic structures in response to activation of excitatory amino acid receptors. It then diffuses out to act on neighboring cellular elements, probably presynaptic nerve endings and astrocyte (glial) processes. Being of such a small size NO is freely diffusible across membranes. That is it does not react with receptors but diffuses into adjacent cells. Because it is so liable NO cannot be stored by conventional means nor inactivated after synaptic release. Its local biosynthesis constitutes the only means for regulating NO levels, hence NOS is one of the most regulated enzymes in biology. Thus the compartmentalization of NOS appears to be crucial for its functionality by providing local NO levels.

The molecule possesses a small dipole moment because of the similar electronegativity of oxygen and nitrogen, making it essentially **hydrophobic,** that is it is not soluble in water. Its reactivity is due to the *unpaired electron in the outer valence orbital* of its oxygen constituent. NO is not to be confused with laughing gas or Nitrous Oxide for NO has one extra electron than Nitrous oxide and turns to nitrogen dioxide on contact with oxygen. *NO is a short-lived chemical transmitter, that is almost nonreactive as a free radical compared to other oxygen radicals.* Indeed, NO decays within 6-10 seconds after its synthesis as it interacts with oxygen and superoxide and quickly turned into nitrates and nitrites, or is quickly bound by the iron in hemoglobin and binds with the iron in enzymes also.

In the body, nitric oxide is synthesized from **arginine** and oxygen by the enzyme nitric oxide synthase (NOS) and requires the presence of **calcium** for its production. NOS synthesizes NO depending on the availability of L-arginine, which is supplied mainly from glial cells. The uptake of arginine into neurons is controlled by non-NMDA glutamate receptors. Studies demonstrate that white matter glial cells exhibit a large repertoire of neurotransmitter responses linked to Ca++ signaling and that these receptor systems are differentially distributed on sub-populations of glial cells.

NOS is mainly found in the **hypothalamus** which is the controller of enzyme excretion, and controls the release of oxytocin and vasopressin. In the adrenal gland, NOS is highly concentrated in a web of neurons in the adrenal glands that stimulate adrenaline release. NOS is prominent in fibers and terminals in the posterior pituitary gland but its function has not yet been established. It is also found in the intestine, cerebral cortex, and the endothelial layer of the blood vessels. NO participates in the release of Gonadotropin-releasing hormone (GnRH) from the hypothalamus. Oxytocin stimulates the release of luteinizing hormone-releasing hormone (LHRH) by releasing nitric oxide.

The sleep hormone **melatonin** reduces NOS activity in the hypothalamus of rats. Research has shown that people who have heart attacks have low melatonin levels, perhaps this means higher cortisol levels which plays into heart disease. Melatonin might be able to be used to reduce the intensity of kundalini activity by helping to prevent hyperadrenalism. Besides being an anti-oxidant, melatonin has also been shown to be important for the function of the immune system and also indications that melatonin reduces inflammation by suppressing COX-2. Thus cherries may be good for your heart as they contain high levels of melatonin.

NO has many roles in the cardiovascular system as it is a blood vessel dilator, it thins the blood, reduces platelet stickiness, is involved in blood coagulation and wound healing and is associated with the hearts function. The endothelium (inner lining) of blood vessels uses nitric oxide to signal the surrounding smooth muscle to relax, thus dilating the artery and increasing blood flow. Bluegreen Algae (spirulina) helps to correct all the mechanisms of heart disease. Specifically, it improves the Nitrous Oxide Synthase (NOS) pathway of inflammation, reducing inflammation and oxidization of the arteries. A dysfunctional NOS is one of the most important issues behind arterial endothelial inflammation. A lack of the amino acid L-Arginine has been associated with significant inflammation/oxidation of the cell membranes lining arteries. Marine phytoplankton is high in amino acids including L-Arginine, and has been found to be critical to maintain a healthy NOS and endothelium. When NO is formed by vascular endothelium, it rapidly diffuses into the blood where it binds to hemoglobin and subsequently broken down. It also diffuses into the vascular smooth muscle cells adjacent to the endothelium where it binds to and activates guanylyl cyclase. This enzyme catalyzes the dephosphorylation of GTP to cGMP, which serves as a second messenger for many important cellular functions, particularly for signalling smooth muscle relaxation.

NO is a major signal transduction molecule in vertebrates and serves as a neurotransmitter in the CNS and the GI tract and maybe involved in memory and learning. Unlike most other neurotransmitters that only transmit information from a presynaptic to a postsynaptic neuron, the small nitric oxide molecule can diffuse all over and can thereby act on several nearby neurons, *even on those not connected by a synapse.* It is thought that this process maybe involved in memory through the maintenance of **long-term potentiation**, or long-lasting strengthening of the connection between two nerve cells. The physiological role of nNOS in mechanisms such as long term potentiation has been shown to involve retrograde transport (diffusion) of NO synthesized in post synaptic neurons across the synaptic cleft into synapses, where it stimulated *guanyl cyclase.*

Guanylyl cyclase is the enzyme that catalyzes the formation of the messenger cyclic GMP (cGMP) from GTP. It has been established that cGMP plays a role in the relaxation of smooth muscle, the inhibition of platelet aggregation and participates in signal transduction within the nervous system. Moreover, cGMP is involved in the regulation of the water and electrolyte balance as well as in the metabolism of the bone. cGMP is also involved in retinal **phototransduction**—that is the conversion of a light signal received by a nerve receptor, to an electrical signal transmitted to the brain. Since cGMP is activated by nitric oxide (NO) and peptide hormones and concentrations of both these arise during an awakening, this might help explain transcendental vision, that is the radical increase in visual acuity and sensory perception in general. NO increase in cGMP in retinal phototransduction might explain the light shining from the eyes of those who are awakened.

It is cGMP that signals the smooth muscles surrounding the arteries of the penis to relax and allow more blood to flow into the penis. *NOS neurons are prominent in penile tissue, and the pelvic plexus,* establishing that NO is the transmitter of these nerves which regulate penile erection. It is interesting that Nitric Oxide fuels both erections and possibly the Inner-conjunction (10,000 orgs) up the spine, because Eastern traditions talk about men ejaculating up their spines. That is they turn the ecstatic energy around so that NO ignites the central channel of the spine rather than being lost in the ejaculation of sperm.

Human Growth Hormone (HGH) is a polypeptide hormone secreted by the anterior pituitary gland that regulates tissue growth, cellular repair, energy levels, fat loss, and muscle growth. Most of the substances that increase NO production also increase HGH. Thus many aphrodisiacs, sexual performance enhancers and HGH supplements will help sustain an awakening by preventing the depletion of NO metabolism. Supporting both HGH and NO production keeps the nervous system in a hyperactivated metamorphic condition.

NO in combo with glutamate makes for radical excitability in the nervous system, for special extreme events like fight, flight, fuck, birth, death...and the inner-conjunction (10,000 orgs up the spine). Perhaps the supercharged body generates extra nitric oxide which permeates through to the central channel of the spinal column creating the principle charge of the inner-conjunction itself.

NO operates as a neurotransmitter, vasodilator, and heart expander, so it is key to increasing blood supply to heart and brain to "feed" the awakening, and is one of the main neurotransmitters involved in the extreme kundalini events and strange symptoms like itching, tingling, bubbles, gravity warping and kriyas.

Prolonged activation of glutamate receptors stimulates eNOS; NMDA receptor activation can increase levels of nitric oxide and hydroxyl radicals. As a free radical NO enables white blood cells (**macrophages)** to kill tumor cells and bacteria. NO is also involved in **apoptosis** (programmed cell death), DNA breakage and mutation. Thus it is undoubtedly involved in the catabolic breakdown of the body especially during the Die-off. The highly liable NO might also be one of the methods by which connective tissue in the body is "released" by kundalini, thus dissolving the old body armor structure.

NO AND NEUROTOXICITY

While NO mediates normal synaptic transmission, excess levels of NO maybe neurotoxic. One theory proposes that in the presence of high levels of glutamate, nitric oxide producing neurons behave more like macrophages, releasing lethal amounts of nitric oxide. The neurotoxic effects of NO include depressing glycolysis, DNA damage, depletion of NAD(H) and ATP. The formation of NO is implicated in cell death (apoptosis) through DNA damage, suppressed mitochondrial respiration-(the electron transport chain in the mitochondrion or Oxidative Phosphorylation), leading to energy depletion. Neurons are particularly sensitive to impaired mitochondrial ATP synthesis capacity, because *neurons depend almost exclusively on the oxidative degradation of glucose and ketone bodies.* The cells energy molecule ATP is used by ion selective pumps to maintain the proper ion gradients, for action potential generation in the nerves and neurotransmitter release in presynaptic membranes.

If we maintain a high intensity of metamorphic fire we will simultaneously have to work towards preventing neuron death by **glutamate** and NO neurotoxicity. That is we must take antioxidants to prevent free radical and crosslinking damage to cell membranes and DNA. In particular mitochondrial tissue needs to be protected to preserve energy generation. Thus on the one hand we make sure the fire doesn't run out of fuel, or we would plunge into one of the forms of Dark Night, and we simultaneously protect our tissues from the very metamorphic fire we are feeding. In this way we should be able to manage a sustained accelerated evolution and heightened creativity and productivity.

The fatigue that accompanies acute heart expansion is probably primarily due to NO interfering with cellular respiration. While providing an intense burst of neurological activity NO must then lead to exhaustion and energy depletion. NO as an inhibitory effect on oxidative phosphorylation by blocking the electron transport chain and controlling the levels of citrate in the Krebs cycle essentially blocking the oxidative degradation of acetyl-CoA. Robert J. Marshall, PhD, in his fabulous web article *"The Overlooked Role of Chronic Infection in Neurodegeneration and Its Reversal Using Nutraceutical Agents,"* relates how oxidative stress leads

to the production of NO. First through oxidation producing a transcription factor, NF kappa B, which then stimulates inflammatory cytokines. Then these cytokines induce NO production, which if not reduced by glutathione, will cause peroxynitrite to build in the mitochondria, damaging DNA and enzymes. This cell damage would in turn reduce mitochondrial energy and production of ATP levels.

Evidence has accumulated for a number of years that glutamate released in excess, acting via NMDA receptors, mediates neurotoxicity in stroke, Alzheimer's and Huntington's diseases. Because glutamate, via NMDA receptors, stimulates NO formation, one might expect excess NMDA receptor stimulation to destroy Nitric Oxide Synthase (NOS) neurons. Surprisingly, NOS neurons are resistant to NMDA neurotoxicity. If NMDA stimulates NOS neurons to make NO, but these cells are themselves resistant to neurotoxicity, could the released NO damage other cells? Exposure of cerebral cortical cultures to NMDA kills 60–90% of neurons, with NOS-diaphorase cells being undamaged. Why are NOS neurons resistant to NMDA toxicity? Presumably, NO is never released in the interior of NOS cells, which accordingly are resistant to NO damage. Glutamate receptors are selective for calcium ions; larger amounts of NO can force the calcium channels to fire more rapidly which can lead to apoptosis or programmed cell death. (See Glutamate)

The body's antioxidant **superoxide dismutase** prevents the conversion of nitric oxide to peroxynitrite forming hydrogen peroxide. Nitrite reductase not only prolongs the effective 'life time' of NO, but also reduces the concentration of its highly reactive secondary metabolites: Peroxynitrite, hydrogen peroxide, and dinitrotrioxide all have been linked to cell death (apoptosis) through protein nitration and increased mutagenesis. Acute neural toxicity is linked to the overproduction of the secondary NO metabolite peroxynitrite, which inhibits respiratory enzymes and also damages DNA by covalent bond formation to DNA and removal of bases. In **glial cells** the stimulation of NOS activity causes significant damage to the mitochondrial activities of neighboring neurons. Both a NOS inhibitor and interferon-/ß and antioxidants exhibit neuroprotective properties because they limit the formation of highly reactive nitrogen containing radicals.

NO regulates the function, growth, death and survival of many immune and inflammatory cell types. **Mast Cells** and their potent chemical mediators are known to initiate and modulate a number of important inflammatory cascades. In Multiple Sclerosis besides T-Lymphocytes and Macrophages it is found that Mast Cells also are indicated in central and peripheral nervous system **demyelination.** Mast Cells surround blood vessels in the brain, are juxtaposed to neurons. Mast Cells (activated by Myelin Basic Protein), have been shown to secrete vasoactive and inflammatory mediators in response to neuropeptides and direct nerve stimulation and can participate in the regulation of the Blood-Brain Barrier permeability, as well as in **myelin destruction**.

Kidney failure patients suffer from neurological complications and a recent study shows how free radicals and NO interact to produce oxidative stress that helps produce this nerve damage. A powerful antioxidant (des-methyl-tirilizad) was found to serve some protection from brain dysfunction during kidney failure.

Research results directly demonstrate that vasopressin stimulates NO release via the endothelial V1 receptor in the rat kidney.

SEPSIS OF THE WHITE SHOCK

iNO production is a stress response and can lead to either tissue injury because of its radical chemistry, or be cytoprotective, protecting cells from damage *by destroying pathogenic microorganisms* first. The free radicals, however, cannot discriminate pathogenic DNA from host DNA and overstimulation of iNOS therefore induces cell and tissue damage, sometimes leading to a fatal development (**septic shock**) in the course of bacterial infections. Macrophages produce nitric oxide in order to kill invading bacteria. Under certain conditions, this can backfire. Sepsis infection is caused by excess production of nitric oxide by macrophages, leading to widening of blood vessels, which lowers blood pressure during sepsis.

The autonomic shock of the White Shock could be related to high plasma concentrations of tetrahydrobiopterin and nitrate, which temporarily overwhelm the processing capacity of the kidneys. Nitric oxide synthase (NOS) requires tetrahydrobiopterin for its activity. In sepsis, changes in circulating tetrahydrobiopterin concentrations precede increases in nitrate. Nitric oxide is synthesized from L-arginine by the action of nitric oxide synthase and NOS enzymes require tetrahydrobiopterin for their catalytic activity. Nitric oxide is important in the maintenance of vasodilator tone and **arterial pressure** and it has been suggested that cytokine-mediated circulatory shock is caused by activation of the inducible isoform (type II) of NOS.2.

Increased production of nitric oxide in response to activation of the type II isoform of NOS to cytokines has been suggested to be responsible for the hypotension of septic shock. In patients with weak kidneys (renal failure), both nitrate and tetrahydrobiopterin concentrations tended to be higher…suggesting that those with strong kidneys who can adequately process the metabolites through their renal system may not go through the septic shock or White Shock that tends to follow the radical peak influx kundalini surges. Besides tumor necrosis factor (TNF), other cytokines involved in the development of septic shock include interleukin-1B and interferon-y. http://bja.oxfordjournals.org/cgi/content/full/86/4/578

Another factor that may be involved in the "septic shock" condition after extreme kundalini events, is the possible interference with the energy generation mechanisms in the mitochondria by a rapid increase in free radicals. Mitochondrial DNA is more susceptible to damage from free radicals, toxic chemicals and heavy metals than DNA in the nuclei of cells. And when mitochondria malfunction this can lead to a significant drop in energy production. Loss of ATP would mean less energy for removing toxins and feeding cells, leading to a sudden noxious overload of toxicity. Putting the organism out of order until the antioxidant and detoxification mechanisms can rally to deal with the toxic burden.

"Multiple mechanisms contribute to cell injury after hypoxia, ischemia/reperfusion and toxic chemicals, but a common final pathway leading to acute cellular necrosis may be ATP depletion after mitochondrial failure. One important mechanism causing

mitochondrial failure is the mitochondrial permeability transition, which both uncouples oxidative phosphorylation and accelerates ATP hydrolysis. Interventions that block this pH-dependent phenomenon protect against onset of cell death." The Mitochondrial Permeability Transition in Toxic, Hypoxic and Reperfusion Injury, John J. Lemasters et al.

NO AND THE INNER-CONJUNCTION

My present understanding of the metabolization of spiritual alchemy is that we both have to feed the nitric oxide pathways, and preserve the organism from the consequent free radical storm that it creates; note that a lot of the guru types die of cancer. Thus it is highly amusing that for our ongoing evolution we need to take both aphrodisiacs and antioxidants. So the ironies of ironies is that the ultimate YES is fueled by NO! Logically we should aim for a longer duration burn with less downtime (burnout) by supporting and protecting.

In looking for the mechanism of the Inner-conjunction I knew it was probably connected with the ionization of the Cerebrospinal Fluid (CSF), calcium ions and nitric oxide (NO). What I found pretty much convinced me that I had discovered the key to the Inner-conjunction and explained many of the more extreme symptoms of the hyper-aroused peak. The hyper-activation of the CNS during the height of an awakening would increase the calcium ion (Ca2+) content of the CSF. This in turn leads to the liberation of NO, otherwise known as *endothelium-derived relaxing factor* (EDRF), which then could defuse into the central channel of the spinal column, since it is the most permeating substance in the body.

The high concentration of NO in the spinal channel during the Inner-conjunction would explain the complete loss of ego and self-sense, the loss of motor control (paralysis), the loss of time-sense and the appearance of Witness consciousness coupled with the experience of Emptiness or Infinity. So we have an ultimate condition that constitutes the total cessation of the mind (daily consensus-rational consciousness)—that is a transcendence of the mind under circumstances of amplified consciousness, not a descent into unconsciousness through anaesthetization of the Mind.

Since NO is a vasodilator and smooth muscle relaxor, this explains the radical relaxation of the autonomic neuromuscular system during these peak "up" phases; this we experience as extreme bliss and love. It also explains the tremendous heart expansions and the sensations of gravity warping. Other vasodilators that maybe implicated in this process of somatic "opening" and heart expansion are acetylcholine and vasopressin. NOS neurons occur in the myenteric plexus that feeds the muscles of the intestinal wall and throughout the gastrointestinal pathway thus NO was found to be a neurotransmitter governing **peristalsis**. During certain phases of kundalini activity NO dominant chemistry could also explain the digestive dysfunction that occurs when the blissful kundalini is directly activating the nerves of the GI tract.

The extra nitric oxide produced during an Inner-conjunction is probably why men get **erections** at this time. And for women, the increased NO and

oxytocin is no doubt the dominant chemistry behind the spontaneous orgastic, uterine contractions, that last for the duration of the particular form of Inner-conjunction I call Sex with Eros. What makes this event different than a normal Inner-conjunction is that along with the "10,000 Orgs" up the spine, there is a continuous spontaneous super-orgasm of the vagina and uterus lasting around half an hour. Men also experience a corresponding "sexual" event, in which traditionally they talk about the sense of ejaculating up the spine (which of cause is a physical impossibility). These sexually charged inner-conjunctions are more extreme and pleasurable than any normal sex.

Directly following an inner-conjunction the body looks like it has been fried or electrocuted; probably due to the fact that NO is a free radical gas. The body is so electrically charged that one's hair sticks out. Plus the irises of the eyes are lit from within by an internal light. This is perhaps due to free electrons or photons generated within super-charged proteins (See quote by Stuart Hameroff). It might also be due to extra cGMP from the radical NO metabolism of the inner-conjunction, for cGMP is involved in retinal **phototransduction.** This heightened flow of electrons through the interiors of protein molecules could be the source behind the luminous glow (aura, halo, aureola) of spiritually lit individuals. When kundalini and bliss is up, there will always be this concomitant glow to the skin. The following day there is a shift into a massive contraction and autonomic shock (White Shock), that is the opposite chemistry of the hyper-arousal and opening. It stands to reason that if we are radically fired up by a free radical gas, that we would "fall back down" in need of some serious R&R.

Obviously the validity of this theory will have to be confirmed by research, but there is the slight problem of finding someone in an inner-conjunction while in a kundalini research lab. Inner-conjunctions are spontaneous and only last half an hour, so in order to study them they will have to be induced, and induced ones will no doubt be different from the real thing. But NO in general should increase for the duration of an awakening, for as long as the sex hormones are raised.

NITRIC OXIDE AND SEX

NO and its associated release of vasopressin is obviously a major factor in the phenomena of heart expansions during an awakening. It has been shown that hemoglobin is a major transport vehicle for NO in blood. During sexual arousal the brain sends impulses down the spinal cord to the nerves that serve the sex organs. This triggers the production of NO to be released from blood vessel wall (endothelium) in response to acetylcholine and other vasodilators, which causes vasodilation and engorgement. As I mentioned before nitric oxide mediates the formation of cGMP by glutamate stimulation and cGMP signals the smooth muscles surrounding the arteries of the penis to relax and allow blood to flow into the penis. Interference with the signaling of these messenger enzymes can lead to erectile dysfunction. There is some indication that nitric oxide may also function as a sex-enhancing neurotransmitter. I consider NO to be key in amplifying nerve impulses on glutamate nerves, and probably is involved in the functioning of the

entire hypothalamus-pituitary-adrenal axis…considering that NO metabolism occurs in all these three areas.

When luteinizing hormone (LH) levels are increased, the natural production of testosterone also increases, as does the sex drive. Opioid neurons are an important inhibitory brake that restrains the secretion of LH. NO is a mediator of glutamate effects in the hypothalamus, meaning that opioid inhibition is mediated on glutamate neurons that are upstream of NO neurons. What this means is that there is an opioid-glutamate-nitric oxide connection in the regulation of testosterone and sex drive. There is also some indication that nitric oxide may also function as a sex-enhancing neurotransmitter. Viagra (sildenafil citrate) reduces impotency by enhancing the effects of the neurotransmitter nitric oxide (NO), and maintaining higher levels of the enzyme cGMP, the two key factors in penile erection. Viagra does this by selectively inhibiting the enzymes that destroy cGMP, leading to elevated cGMP levels.

It stands to reason that kundalini is centered in sex chemistry, but I didn't know how far until I cottoned onto Nitric Oxide. Close encounters of the sexual kind can kick off a full blown awakening even without actual sex or relationship; thus I suspect that taking a supplemental sexual empowerment protocol will kick off an awakening in of itself. It might add to the intensity if one was ready to pop, but perhaps would not generate metamorphosis of its own accord. It also reveals why sex and spirituality so often mix in the Guru-student relationship.

Until we are able to distinquish the ecstastic bliss of metamorphosis as being "prior to" sexuality, but moving through the sexual system, we may tend to take our supra-exual impulses literally. Since these kundalini backed drives are vastly more intense than in "normal" mode, they pack more of a commanding authority. This amplified bioenergy affects those we are attracted to more so than usual, making it all the more complicated. For this reason, along with a highened sense of morality and destiny, many kundalini actives find it easier not to bother with sexual relations. Unless of course they can find a relationship in which higher degrees of consciousness can be freely expressed

Nutritional Influences on Nitric Oxide and Hormone Metabolism by Douglas C. Hall, M.D.

HISTAMINE

The hormone/chemical transmitter histamine is a biogenic monoamine similar to serotonin, epinephrine and norepinephrine. Chemically histamine is 2-(4-imidazolyl)ethylamine and has the formula C5H9N3. It is found in plant and animal tissue and released from mast cells as part of an allergic reaction. Use of histamine in the body is not solely involved in allergic inflammatory response. It is released in allergic reactions and causes widening of capillaries, decreased blood pressure, increased release of gastric juice, fluid leakage forming itchy skin and hives, and tightening of smooth muscles of the bronchial tube and uterus. It stimulates gastric secretion and causes dilation of capillaries, constriction of bronchial smooth muscle, and decreased blood pressure and plays a role in the movement (chemotaxis) of white blood cells. It is hydrophilic and once formed is either stored or rapidly inactivated.

Most tissue histamine is found in granules in mast cells or basophils and its release is immunologic in function. Mast cells are especially numerous at sites of potential injury such as the nose, mouth, and feet, internal body surfaces and blood vessels. Basophils represent only 1% of circulating leukocytes. Like mast cells basophils store histamine, they tend to appear in specific kinds of inflammatory reactions, particularly those that cause allergic symptoms. Non-mast cell histamine is found in several tissues, including the brain, where it functions in both neurotransmission and regulation of brain blood flow and vascular permeability effects. Another important site of histamine storage and release is the enterochromaffin-like (ECL) cell of the stomach. ECL cells are a distinctive type of neuroendocrine cell underlying the epithelium in the gastric mucosa, most prevalent in the acid-secreting regions of the stomach. Together, histamine and gastrin are primary positive regulators of hydrochloric acid secretion from the parietal cell.

The four types of histamine receptors each have a different mode of action:

H1 histamine receptor—found on smooth muscle, endothelium, and central nervous system tissue; causes vasodilation, bronchoconstriction, smooth muscle activation, and separation of endothelial cells (hives/bleeding from the pores), and pain and itching due to insect stings; the primary receptors involved in allergic symptoms and motion sickness. Initiates release of intracellular stores of Ca2+ and opens voltage gated calcium channels.

H2 histamine receptor—located on parietal cells, which primarily regulate gastric acid secretion. It is a potent stimulant of cAMP production. It instigates the release of Ca2+ from intracellular stores and increases the intracellular Ca2+ concentrations.

H3 histamine receptor—The H3 receptor has been shown to presynaptically inhibit the release of a number of other neurotransmitters including dopamine, GABA, acetylcholine, noradrenaline, and serotonin. It leads to inhibition of the formation of cAMP.

H4 histamine receptor—Found primarily in bone marrow and white blood cells. It is also expressed in the colon, liver, lung, small intestine, spleen, testes, thymus, tonsils, and trachea. H4 Receptors mediate movement and calcium mobilization of Mast Cells.

Histamine produces larger pores in the blood vessel walls as the first step in launching an inflammatory response. The increased blood vessel porosity improves brain nutrition in times of emergency, when high performance is needed for survival. The release of histamine in the brain and the consequent improvement of blood supply is probably one of the main reasons for the increased sensory and extrasensory perception during kundalini. Brain nutrition and oxygen supply would be greatly enhanced by the dilated and porous blood vessels, opening up latent capacities. The release of histamine in the brain, even by itself, would lead to some expansion of consciousness, but it is just one factor among many that occur during peak events. Histamine release during peak events would synergize and amplify the effects of all other hormonal, neurochemical and nutritional agents.

Histamine release is probably most significant during the periods of panic attack when hypervigilance is at its peak. Histamine contributes to **hypervigilance**, because histaminergic cells in the brain promote the most "wakeful" firing pattern. In fact a sudden rush of histamine in the brain could contribute to a schizophrenic episode. Histamine also features in the **panic events** by causing a closing of the airways in the lungs. When released in the lungs, histamine causes the airways to swell shut in an attempt to close the door on offending allergens and keep them out. Thus panic attack periods during kundalini are known for the sense of weight or contraction on the lungs. As a consequence the sense of suffocation and lack of oxygen will force the individual out of the house for long walks accompanied by deep breathing.

Heat—Research on the ability to withstand heat stress identified histamine receptors as contributing to increased blood flow during heat stress, but only the H1 receptor was involved in skin blood flow changes.

Sleep—It has been shown that histaminergic cells have the most "wakeful" firing pattern of any neuronal type. They fire rapidly during waking, and completely stop firing during sleep. The cell bodies of neurons which release histamine as a neurotransmitter are found in the posterior hypothalamus. From here, these histaminergic neurons project throughout the brain, to the cortex through the medial forebrain bundle. Antihistamines, that is substances that block the H1 histamine receptors improve sleep. Likewise, destruction of histamine releasing neurons, or inhibition of histamine synthesis leads to an inability to maintain vigilance. Finally, H3 receptor antagonists (which stimulate histamine release) increase wakefulness.

Sex—In sexual arousal Histamine is released from mast cells in the genitals, and histamine release in the sex flush in women. The female orgasm can be facilitated by supplemental folic acid along with niacin, which will increase histamine release. Conversely, men with high histamine levels may suffer from premature ejaculations through amplified sensitivity.

Allergies—Histamine is an important protein involved in many allergic reactions. An antigen must first be attached to cell surface receptors on mast cells. This triggers a response that often includes the release of histamine. Most allergies involve the release of histamine and other pro-inflammatory substances.

Allergic reactions typically have an adrenal component. **Cortisol,** one of the primary hormones produced by the adrenal glands, is a strong anti-inflammatory agent. Thus proper adrenal function plays an important role in mediating the histamine release and inflammatory reactions that produce the symptoms experienced with allergies. A vicious circle occurs with adrenal fatigue and the tendency to experience allergies. The more histamine that is released the harder the adrenals have to work to produce more cortisol, thereby the more fatigued the adrenals become, which in turn increases allergic inflammation. With the extreme nature of kundalini it makes sense to take whatever toll we can off our adrenals by reducing our food allergens and avoid environmental conditions of a toxic or inflammatory nature. Cortisol is inflammatory in the brain, while anti-inflammatory in the body. For a adrenal support program read—*Adrenal Fatigue: the 21st Century Stress Syndrome* by Dr. James Wilson.

The carbohydrate digesting enzyme **Amylase** is a natural IgG histamine blocker, which stabilizes mast cells and basophils that release histamine at the start of an inflammatory response. The excessive consumption of carbohydrates will chronically deplete amylase thereby increasing histamine-related health problems such as allergen reactions and sinus headaches. Relief can be achieved through reducing carbohydrate consumption and using plant-based enzymes with meals. Chronic carbohydrate consumption creates stress which exhausts the adrenal glands and the immune system, leaving the body open to attack. Enzymes normally break down allergens into smaller components in order to eliminate them without stressing the body. Allergic symptoms arise when there are inadequate enzyme reserves in the body, so histamine is released rather than enzymatic breakdown of the allergens.

When we eat carbohydrates, a small amount of digestion takes place as we chew through the actions of the enzyme amylase, which is found in the saliva. However in the stomach, food is bathed in hydrochloric acid, which inhibits starch digestion until food exits the stomach and enters the small intestine. Most complex carbohydrate digestion takes place in the duodenum, which is the section of the small intestine which adjoins the stomach. Here another key enzyme called alpha-amylase, joins with hydrochloric acid to breakdown the exceptionally long starch molecule into its component parts: first into sugars called dextrins, and then into glucose. Reduction in amylase levels is associated with insulin resistance and glucose intolerance. Insulin plays a major role in the control of pancreatic amylase biosynthesis. The development of severe insulin resistance (hyperinsulinaemia) is associated with impairment of amylase-gene expression and reduction in glucose metabolism.

Pancreatic enzymes are released in response to histamine, as a protective measure against ingestion of allergens and pathogens. If a prolonged awakening includes periodic release of histamine during the alarm/activation phases, this

could lead to the overworking and depletion of the pancreas. Thus the exhaustion phase would include a reduction in digestive fire and assimilation, coupled with vulnerability of the GI Tract to allergens and pathogens. One way to avoid this is to take papaya or bromelain tablets with meals throughout active kundalini in order to conserve the body's own enzymes and insure adequate digestion. Also take teas of chamomile, valerian, skullcap and wild yam half an hour prior to mealtime to stimulate stomach acid.

Central to the perturbation of normal consciousness, kundalini awakenings are characteristically noted for alterations in the brain's "filtering system," leading to expansion in the range and depth of consciousness, sensory perception and extra-sensory perception. Histamine stimulates prostaglandin release which increases vascular permeability, thus "expanding" the capacities of consciousness. Histamine is involved in balancing the electrical activity of the nucleus accumbens, which is an area of the brain responsible for behavioral responses, filtering incoming sensory information, and communicating with the hypothalamus and amygdala. From the following one can see clearly what type of kundalini trip one is programmed to go on depending on whether one's physiology leans toward high histamine or low histamine. Abnormal histamine levels are found in both schizophrenia and bipolar disorder.

Histadelia (High Histamine): It is estimated that 15-20 % of people with schizophrenia have high whole blood histamine levels and are under-methylated. High histamine individuals are more "Yang," and typically have a history of seasonal allergies, hyperactivity, compulsions, obsessions, inner tensions, blank mind episodes, phobias, chronic depression, perfectionism, high libido, sparse body hair, and delusional thinking rather than hallucinations. Physical signs can include little tolerance for pain, rapid metabolism, lean build, profuse sweating, seasonal allergies, and frequent colds. This condition is characterized by low levels of serotonin, dopamine, and norepinephrine, high serum histamine and elevated basophils (ie: the white blood cells that release histamine and other inflammatory agents). High histamine individuals have increased folic acid; folic acid is used along with B-12 in the production of histamine. So those with high histamine levels need to avoid taking folic acid and B-12. About 35% of bipolar patients have high histamine levels. To reduce histamine take quercetin, nettle leaf and bromelain. Vitamin C inhibits the release of histamine from mast cells, and quercetin blocks histamine receptors, and flavonoids in general reduce histamine release and activity which protects and calms the nerve cells.

Histapenia (Low Histamine): It is found that 30-40 % of people with schizophrenia have low whole blood histamine levels and are over-methylated. People with low histamine are more "Yin" tend toward more severe thought disorder and hallucinations, paranoid thoughts, despair, depression, low libido, anxiety, nervous legs, grandiosity with less pronounced obsessions. These individuals often have a multitude of food allergies and environmental allergies but they do not typically have seasonal allergies. Histapenia is characterized by low blood zinc, elevated levels of serotonin, dopamine, and norepinephrine, low serum histamine, and low

basophils. Those with histapenia have excess copper, which is a brain stimulant and destroys histamine; causing brain dopamine levels to rise; copper then oxidizes catecholamines such as dopamine thus propagating neurotoxin formation. This causes paranoia and hallucinations in younger individuals, but depression may predominate in the older ones. Excess copper can destroy histamine and provoke allergies, especially if zinc is low as zinc is required for histamine storage. With copper toxicity consider adding zinc, molybdenum, and Vitamin C. About 25% of bipolar patients have low histamine levels.

I think during our primate origins we probably ate large quantities of vegetation laden with sulfur compounds. These would help reduce inflammation in the GI tract from excess histamine production and the extra sulfur would help the liver to reduce the poisoning effect of the natural endogenic herbicide and pesticide chemicals in the plants. Perhaps someone of low histamine levels should avoid overdoing sulfur containing foods since sulfur lowers histamine levels in the body.

Carl Pfeiffer's book *Mental Illness: The Nutrition Connection*, will aid you in changing your histamine metabolism if you feel the need.

NITRIC OXIDE AND HISTAMINE

One reason why histamine is a key agent in kundalini physiology is that it is intimately involved with Nitric Oxide. Histamine level changes underlie many kundalini symptoms and experiences, amplifying and augmenting any existing chemistry. The key factor to note is that histamine up-regulates the generation of nitric oxide, while nitric oxide down-regulates the release of histamine. As we have read in the Nitric Oxide section, NO is an essential component the body uses in many functions including neurotransmission and vasodilation. However in excess it is also a potent nitrogen free radical with the capacity to kill neurons and cells in general. Studies of asthma and other inflammatory disorders have all demonstrated elevated levels of nitric oxide and type II nitric oxide synthase (NOS). Nitric oxide can act as an anti-inflammatory under normal health conditions, but when overproduced it can have the opposite effect and cause more inflammation to an already inflamed area.

NO might serve a protective role in down-regulating histamine release from mast cells. Stimulation of H1 receptors increases eNOS transcription, and this may become harmful in conditions of high oxidative stress when eNOS produces reactive oxygen species (ROS) at the expense of NO. We know that certain kundalini events, such as a Die-off, involve highly oxidative conditions. NO can act as an anti-inflammatory under normal conditions, but can lead to inflammation when over produced. The trouble starts when nitric oxide encounters the superoxide free radical and becomes the dangerous chemical **peroxynitrite** (ONOO), which destroys antioxidants like glutathione, vitamin E and common flavonoids, and damages proteins in the body. Wheatgrass juice is known to be extremely high in the body's natural antioxidant Superoxide Dismutase (S.O.D.) which will mop up the freeradicals thereby preventing them from reacting with NO to form the even more pernicious peroxynitrite.

Several factors increase levels of NO in the body: Allergies (histamine), poor iron status, hypoxia (oxygen deficiency), estrogen dominance and Carbon Monoxide exposure. Histamine release stimulates NO synthesis and release. It is proposed that the increased permeability of the blood/brain barrier associated with histamine release is actually mediated by NO. Low iron levels can increase NO levels because hemoglobin is one of the complexing factors that bind NO in the blood rendering it inactive. Thus we must insure that our diet contains adequate iron. NO in turn helps to protect against the release of oxidative free iron from iron-containing compounds. Hypoxia or low oxygen content of the blood cause the release of NO to relax the blood vessels in order to increase blood flow to the tissue. The H1 receptor mediates the relaxation of blood vessels and this is entirely dependent on NO production.

NO synthesis may also become too active under conditions where there is an excess of estrogen in relation to progesterone. **Estrogen dominance** inhibits thyroid function and can result from taking birth control pills, hormone replacement therapy, or exposure to environmental estrogens. A poorly functioning liver, exhausted adrenal glands, insulin resistance, compromised digestion and candida can also contribute to estrogen dominance. When there is inadequate estrogen negative feedback via the pituitary gland, elevated prolactin can in turn contribute to estrogen dominance.

It is apparent to me both from logic and from observation of the feminization of Guru-types, that the later stages of kundalini awakening, and especially the exhaustion phase, are associated with increased estrogen dominance in both men and women. I surmise that the high lipolysis, high oxidation, high heat, overworked liver, increased membrane permeability, increased metabolic and nerve activity, increased hormonal profile and thermogenic/futile cycling ATP generation of a kundalini awakening all contribute toward an increase in potential damage from NO. For this reason the histamine-NO relationship should be addressed during the establishment of a comprehensive kundalini protocol. Although I advise against using glutamate and arginine/ornithine during the peak, when well into the exhaustion phase we may need to take these, and perhaps even histidine also to rebuild the histamine system. Of course for hormone and neurotransmitter health it is our human and relational world that determines their health...manufacturing a healthy supportive environment and relationships is much harder than merely taking supplements.

Researchers working on how histamine levels determine the various phases of a kundalini awakening need to consider both the Toxic Mind Theory and the Neuroendocrine Theory of Aging. Research will show that various events and physiological cycles in kundalini are mediated by the interaction of histamine and Nitric Oxide.

HISTAMINE AND WATER

During kundalini there is an increase in the demand for water by the body and mind. Therefore throughout an awakening it is recommended that you drink at least 10 glasses of water per day, with a drop of Himalayan Salt in each glass. Water is the foundation of life and the regulator of homeostasis. The brain is 85% water. Around 75 % of our bodies are composed of water, 66% of which is inside of the cells and 33% outside. If we don't drink enough water our thickened, concentrated blood will draw water out of the cells.

Fereydoon Batmanghelidj, M.D. author of the book *Your Body's Many Cries for Water* attributes most degenerative disease to dehydration. His research reveals that unintentional dehydration produces stress, chronic pains and many degenerative diseases including Allergies, Arthritis, Angina, Asthma, Autoimmune Diseases, Back Pain, Colitis, Diabetes, Heartburn, High Blood Cholesterol High Blood Pressure, Migraines and Pain.

Histamine is a drought managing neurotransmitter. When there is dehydration the body manufactures and releases histamine to regulate water intake and ration water throughout the body. Thus histamine release is a sign of dehydration in the body—it produces pain, asthma and allergies in a valiant effort at drought management. However instead of quenching that drought with water we give it antihistamines.

Normally, when we drink water it directly diffuses into the cells through the cell membrane. But when there is dehydration, there isn't enough water to flow in by hydrostatic pressure. When the blood becomes concentrated and draws water out of the cell, the first impact of this concentrated, acidic blood is on the membranes of the arteries of the heart themselves. Batmanghelidj says arteries become damaged because their water is extracted by this concentrated blood and consequently cholesterol is laid down as a bandaging system. He points out that **hypertension** is one of the major indicators of dehydration in the human body, and we further exacerbate the problem by treating it with diuretics that further dehydrate the body, eventually causing cholesterol blockage of the arteries. This can lead to heart attacks and small or massive strokes that paralyze. Chronic hypertension will eventually cause kidney disease, brain damage and neurological disorders, such as Alzheimer's disease.

When there is inadequate water to manufacture hydroelectric energy for neurotransmission, histamine is activated to release energy from other sources, such as from calcium bonds. In every calcium-to-calcium bond is one unit of stored energy. Thus the bones and the calcium deposits in the body are stores of potential energy. Histamine has the potential to release this energy, so that active exchanges through cell membranes can take place. One example is the sodium-potassium regulation—Potassium should be in the cell and sodium outside the cell, but when there isn't enough energy to keep this pump going, histamine becomes active and releases energy for this pump. Chronic dehydration making the body resort to scavenging energy from calcium bonds might be a leading contribution to osteoporosis. Just think of all those dehydrated old ladies with porous bones.

Another source of heat generation in kundalini could be from the bones themselves. I always get the feeling that the heat and energy effect of kundalini goes right into and right through the bones, like they become semiconductors and can carry an electric current or something. If histamine features prominently in active kundalini like I think it does, this means some of the extra energy/heat generation of metamorphosis could be due to liberation of energy between calcium-calcium bonds in the bones; plus extra activity of cell production in the bone marrow as well.

Bones have a **piezo-electric** property similar to quartz crystals; when there is increased pressure exerted on bones, the electric charge increases proportionally. The Taoist practice of Bone Marrow Breathing uses this piezo-electric effect through squeezing the muscles into the bones and increasing the pressure on the outside of bones. Since histamine release occurs in an effort to generate energy from the calcium in bones when water is not freely available, one would think that practices such as Bone Marrow Breathing that actually increase the energy in bones and muscles would have a stabilizing effect on histamine production in the body and brain.

"As to water and itching…well I have to say that I unpremeditatedly started drinking huge quantities of water about 2 years ago. And now I drink on the order of about 5-6 quarts daily. Plus I have an ongoing problem with 'dry itchy eyes'. Itchiness has been a sporadic recurring symptom for the last 10 years or so. And I had a really bizarre experience with that last December when I was camping down in Baja.

The week prior I was having a LOT of heart symptoms and anomalies. A huge variety of experiences and such related to the heart area. At that time the main thing happening was a vortex opening into an energy that was truly alien feeling. There was a great soreness right in the center of the chest right over the heart that constantly demanded attention. I found myself time and time again rubbing and massaging that area, but much like a loose tooth, the more I worked it the more it ached and itched and opened.

It culminated in a weird opening that lasted about 2 days – at the peak of which I nearly went out of my mind with an intolerable itching. It was exactly as it a whole hive of hornets were emerging from deep within the vortex and were stinging me under the skin. Maddening itching occurred along with some wild dreams, vivid hypnagogic phenomena and insomnia and stuff like that… It was so relentless I couldn't sleep for days, and was trying everything available to dampen the symptoms. It slowly went away, though I still have an amazing array of heart-based stuff going on all the time these days, but fortunately not involving that damnedable itching." Michael Du Bois

Because Michael's heart anomaly was most intense right in the center of the chest right over the heart—he was probably producing amrita that flows into the blood and lymph and enters the right side of the heart (at the center of the chest), setting up a self-reinforcing cycle of opening. Histamine has a strong vasopressin releasing effect. And besides being an active agent in heart expansions and vessel dilation, vasopressin is responsible for water regulation through the hydrodynamic microtubules of the cell membrane. This one molecule at a time, microstream flow

seems to be a major component of the transport system in nerve tissue. So we see how hydration, the circulatory and nerve system are highly interdependent.

The expanded heart increases amrita production in the central nervous system which in turn increases heart expansion. Histamine, vasopressin and nitric oxide are consequently produced in higher quantities. This would lead to an increase in membrane permeability, hypervigilance, hyper-awakeness from the histamine, increase in free radical load from the nitric oxide etc... Heart expansion periods often come with a general heaviness and fatigue; probably due to the parasympathetic/vagus system being highly activated in order to help control the excessive heart expansion and low blood pressure from dilated vessels. The low blood pressure itself would cause fatigue, and as I have said elsewhere in the book the best way to ease this fatigue-condition is to lie on the ground on your spine for half an hour.

I personally drink up to 5 quarts of water a day. **The Water Cure** recommendation is around 2.5 quarts or 10 cups of water a day to maintain ideal hydration. That is above any other type of liquids one might consume. There is also an equation of half your body weight in pounds taken as ounces of water. It is important to add salt to this water. Dr. Batmanghelidj says that salt is the best antihistamine there is, so it stands to reason we need to put those ionic minerals in our drinking water...he suggests about 1/2 a tsp of salt a day, and Himalayan Salt is of the highest quality electrolitic potential. Histamine is one the major keys in a deep understanding of the physiology of kundalini, with huge implications for everyone, not just those undergoing awakening.

The Fire and Water section describing Dr. Batman's work and how it might relate to kundalini is on my website and in BOK-2

www.watercure.com —Fereydoon Batmanghelidj, M.D.

HEAT

Through tapas (heat) the ascetic becomes clairvoyant and even incarnates the Gods.

By discovering why kundalini flow through the nerves creates heat we can begin to work out just how the function of the nervous system is altered during transmutation. The heat from kundalini is not caused by "friction" as kundalini moves through blockages, as is traditionally thought. Kundalini is purifying in that it uses whatever state of perfection or dross it finds, but purification is not its purpose or goal. Kundalini is the fire of transmutation and the heat from the nervous system we experience is the heat of transmutation. We cannot yet however say exactly 'what' transmutation is.

Kundalini heat is generated by the nervous system. It is felt mostly in the pelvis, and up the spine, especially on the left side of the body, but the entire body temperature is raised a little as well. The majority of the heat produced during kundalini occurs in the sacral and lumbar spine, and I assume that there is more gray matter of the spinal column in these areas than elsewhere in the nervous system. Gray matter of course has larger numbers of mitochondria, organelles that produce both energy (ATP) and heat. To find the cause of heat we might focus on the activity of the mitochondria of the cell bodies of the neurons, especially in the gray matter of the spinal cord and in the brain itself.

Action potentials along nerves cause heat but the significant heat generated by kundalini is not just an "increase" in action potentials, it is a different type of expression of nerve energy altogether. This altered nerve energy generation and action potential generates heat, bliss, tingles and the other kundalini symptoms.

The pelvic and spinal nerve heat is always associated with bliss and heart expansion. When there is heat there is bliss. The heat is most pronounced in the pelvic bowl (kunda). One plausible theory to the generation of the nerve-heat is free radical damage the cell membrane of the mitochondrias in the nerve-bodies leading to less ATP being converted from glucose and more heat being generated...thus inefficient glycolysis might generate the nerve heat. This is the most straightforward theory since free radicals go up during kundalini, the oxidation to the membranes would interfere with the electron-transport-system of ATP conversion. The heat would continue as long as the body's antioxidant capacity is overwhelmed by the concentration of free radicals. Such radicals might include those of Nitric Oxide and its nitrogen metabolites. Since Nitric Oxide is a vasodilator and the heat always occurs along with heart expansion and bliss, it just might be that a combination of glutamine and nitric oxide is the cause of the heat by creating mitochondria membrane damage and sloppy glycolysis.

Inefficient glycolysis and lower cellular energy would mean the cell has a greater demand for glucose to burn. When a neuron doesn't get adequate glucose, or when ATP production falls it switches to glutamate excitation. Thus for the duration of a kundalini awakening we maybe experiencing sloppy glycolysis, cellular glucose hunger, coupled with glutamate excitation. This along with extra free radical and metabolite production and the consequences of increased cell death and recycling

of tissues goes along way to explaining the symptoms and sensations of awakening; and the cyclical nature of detoxification, dissolution and resurrection.

The heat generated by kundalini alters the spectrum of hormones, enzymes, neurotransmitters, receptors, gene expression and protein synthesis. Thus there is a "kindled fire" aspect to the process, in that an increase in transmutation occurs, which in turn perpetuates the heat, which furthers an increase in transmutation. The heat and oxidative stress could help to prune the neurons, for restructuring and maturation of the nervous system. The extra heat shock proteins increase the rate of self-organization and offer protection from oxidation.

Kundalini heat is not like hot flushes, it sticks around for months or years, coming and going a little with the annual solar and lunar cycle and changes in the weather. Kundalini itself is triggered by hormonal changes but it doesn't have the temporary biorhythmic periodacy of a hot flush. Some people sweat with kundalini, but I don't. The heat is not produced through increased blood flow to the skin surface, although sometimes there is flushing of the skin. It's very much a nerve-heat, although some people probably do go through heat-flush type periods associated with sex hormone release in the initial stages of kundalini.

OTHER POSSIBLE MECHANISMS FOR KUNDALINI HEAT

- Over excitation of the nerves by having excess glutamate in the synapses or overactive receptors picking up too much glutamate and thereby overexciting the cell.
- Stressed/overexcited nerves may stimulate histamine and prostaglandin release in the surrounding tissue. Although because there are no allergenic or immune reactions associated with the nerve heating itself, I assume that release of these stress hormones is not the cause of the heat.
- Oxidation by free radicals: a scary thought which I don't like to think about. Can free radicals produce the kind of excessive heat that Kundalini in the spine produces?
- Free radical threat to myelination of fibers producing release of histamine and acetylcholine in order to stimulate remyelination.
- Microwave generation by activated spine. According to research scalar waves are capable of acting on living organisms at a sub-atomic level.
- Increased nerve flow increases the body's electromagnetic field and this may facilitate cellular changes that generate more nerve heat. I don't know whether simply increasing the flow of ions into and out of the neuron as occurs in the "action potential" would create heat.
- Another theory which I can't find yet in any medical literature is that normally astrocytes (glial cells) do the first part of glycolysis and feed the neurons lactate for a more rapid conversion to ATP, but during the hyper-adrenalized state of kundalini there might be such a demand for energy by the nerves that the conversion enzymes are insufficient so the astrocytes give the neurons glucose instead. Thus another fueling mechanism is set up where the first part of glycolysis (conversion to lactate) is aborted or not complete in

the astrocycles and this could mean that glycolysis in the neurons themselves might be less efficient since they normally do not perform the entire glycolysis process, and this inefficiency would result in less ATP and more heat. But since the body is in hyperfuel mode there is more glucose available to convert...so the outcome would be both more energy (ATP) generated, increased firing of action potentials, plus increased heat due to the inefficient conversion to ATP.

- Compounds with thermogenic activity are substances which foster the production of heat relative to the production of ATP. The main thermogenic compound is the thyroid hormone, thyroxin (T4). Thyroxin has the ability "uncouple" **oxidative phosphorylation** (less ATP production and more heat production) by enhancing the activity of glycerol-3-phosphate dehydrogenase and malic enzyme.
- Kundalini heat is not exclusively caused by thermogenesis in brown fat, because otherwise the heat would be centered between the shoulder blades and around the kidneys etc… Although the extra adrenaline of sympathetic activation will increase brown fat energy production and increase lipolysis… one of the reasons we lose weight during our first awakening.
- DHEA enhances the activity of three thermogenic enzymes: glycerol-3-phosphate dehydrogenase, malic enzyme and fatty acetyl CoA oxidase.

THERMOGENESIS

Mitochondria are the organelles sometimes called the "powerhouses" of the cell, where oxygen respiration occurs. As the energy powerhouses of the eukaryotic cell mitochondria dutifully serve as the efficient source of adenosine triphosphate (ATP) for cell function. ATP is an energy-rich molecule used throughout cells for a variety of processes, and is largely produced in mitochondria by the breakdown of energy-rich nutrients such as glucose. Mitochondria are responsible for creating more than 90% of the energy needed by the body to sustain life and support growth. ATP is the "energy currency" of the cell and is used to drive all energy requiring reactions including the synthesis of proteins, carbohydrates and fats. It also causes muscles to contract and nerves to conduct.

Mitochondria are found in high concentrations in high-energy producing organs—such as the nerves, heart, liver, adrenals, GI tract, brain, muscles and endocrine glands. Although some ATP is produced directly in a chemical reaction, most ATP is synthesized by electron transport in the mitochondrion.

Nerve cells obtain ATP only through glucose catabolism in the presence of oxygen. The mitochondria in the brain and the rest of the CNS uses glucose as its fuel, the rest of the body's mitochondria can use either glucose or fatty acids for energy. The brain uses 25% of the energy of the body but constitutes only 2% of the mass. The production of energy from glucose and fatty acids occurs at the cellular level with glycolysis (glucose metabolism) occurring in the cytosol of the cell, while fatty acid oxidation in the mitochondria of the cell and most cells involved with fatty acid metabolism are in the liver.

When a cell's need for energy production increases, a mitochondria can simply pinch into two. The two halves increase in size, thereby increasing the ability to produce ATP. The dependence of cells on the energy provided by mitochondrial oxidative metabolism of **glucose**, especially through critical organs such as the heart and brain, is underlined by the fatal consequences when toxins interfere with the mitochondrial electron transport system. If the mitochondrial theory of aging is correct, then the root cause of aging is damage to mitochondrial DNA by free radical leakage from adjacent cellular-respiratory proteins. The high oxidant exposure of mitochondrial DNA, and its poor ability to repair itself are thought to make it most susceptible to such accumulated damage. Mitochondrial damage would then lead to a loss of energy, reducing the nutrition and detoxification of the cell.

There are three interlinked energy production cycles:

1. The glycolytic (sugar burning).
2. The Krebs' citric acid cycles
   (aminos and fats are "burned" through the Krebs' cycle).
3. The electron transport side chain.

The electron "sparks" released from the step by step slow "burning" that occurs in the Krebs' cycle provide the fuel used by the electron transport side chain to generate much of the ATP bioenergy that literally powers our life. Heat is produced in all animals by the breakdown of ATP and as a by-product of other biochemical reactions. In brown fat cells, a special protein called **uncoupling protein** is produced. This protein disrupts the creation of the proton gradient by making the inner mitochondrial membrane "leaky." As a result, the cells make less ATP and release more energy in the form of heat. Similar uncoupling proteins are found in skeletal muscle. In this way brown adipose tissue and skeletal muscle produces abundant heat by uncoupling the production of ATP from the electron transport chain.

Any food not utilized for energy is subsequently stored for use later, and mostly as fat since it is the most efficient energy storage form at 9 kcal/gm. ATP, while a good energy packet, is not a good fuel storage molecule, as it is used quickly after being formed. Better storage forms of energy are glycogen and triglycerides. Glycogen is broken down to glucose and triglycerides are broken down to fatty acids, both of which are readily utilized for energy. The synthesis of triglycerides requires glycerol (from carbohydrates), fatty acids and energy from ATP. Co-enzyme A, derived from **pantothenic acid** (B5) activates the fatty acids and glucose in the Krebs Cycle performed within the mitochondria. The Krebs cycle is a system of removing H_2 from foodstuffs which are then combusted to water and the free energy obtained is used to form the higher energy compound ATP.

Oxidative phosphorylation: In the inner membrane of the mitochondria are large molecules capable of rapidly alternating oxidation and reduction…the **electron transport system**. Mitochondria take in small organic molecules-like pyruvate (formed by the partial breakdown of sugars) or fatty acids (formed by the partial breakdown of fats) and break them down. **Acetyl CoA**, an essential

substrate for energy production, is an end product of both glycolysis and fatty acid metabolism. Acetyl CoA, as a substrate in the Krebs cycle, produces NADH, NADPH and FADH2, which are reducing agents that supply hydrogen atoms or electrons in chemical reactions and are used for ATP production in the mitochondria via a process called oxidative phosphorylation.

NADH is the reduced (electron-energy rich) coenzyme form of vitamin B3. NADH is involved in all of these different cycles, as well as in the conversion of the glycolytic cycle end product "pyruvate" into the beginning fuel of the Krebs' citric acid cycle**.** The energy from the broken chemical bonds is carried by the reducing agents (electron donors NADH and FADH2) to the electron transport chain. Electrons are passed from one protein to another in the electron transport chain, releasing energy at each step. Some of the proteins in the electron transport chain use this energy to pump protons (H+) across the inner mitochondrial membrane. This creates an electrochemical gradient, or potential. The energy contained in this gradient is used by an enzyme called ATP-synthetase to produce ATP.

Thermogenic utilization of NADH: The oxidation of fatty acids also produces NADH and FADH2. Each mole of NADH produces 3 ATP's within the confines of the mitochondria. NADH is also produced in the cytosol cell medium (outside of the mitochondria) but needs to be transported into the mitochondria in order to be converted to energy. This transport mechanism is called the "glycerol-3-phosphate shuttle" and requires the enzyme glycerol-3-phosphate dehydrogenase to catalyze the reaction**.** This "shuttle" requires energy and the end result is that cytosolic NADH is only able to produce 2 ATP's per mole and the rest of the energy is released as heat.

Another possible source of **metabolic heat** is generated in the reaction which converts malic acid (a Krebs cycle intermediate) to pyruvate and NADPH. This conversion occurs in the cell cytosol and requires an enzyme called malic enzyme. This reaction is important since it not only produces cytosolic NADPH but also produces heat. www.neuro.wustl.edu/neuromuscular/alfindex.htm

HEAT SHOCK PROTEINS

Heat shock proteins (HSPs), or *stress proteins*, are a group of proteins that are present in all cells in all life forms. They are induced when a cell undergoes various types of environmental stress like heat, cold, oxygen deprivation, poisons or signals from nerves or hormones. These heat shock proteins are sometimes called molecular chaperones, because they protect and usher other protein molecules around in the cell. They play an essential role in regulating normal protein equilibrium, that is the balance between synthesis and degradation. Research has demonstrated that prior heat shock protects the nervous system at the functional level of neurotransmission and that specific stress-induced heat shock proteins are created tailored to elements of the synapse. This might suggest that the heat of kundalini actually protects synapses whose functionality must be preserved during stressful conditions to prevent breakdown of communication in the nervous system.

The heating of the nervous system by kundalini could increase the production

of "heat shock proteins" which would protect the nerves and protein synthesis. Heat shock proteins are also present in cells under perfectly normal conditions. They act like chaperones, making sure that the cell's proteins are in the right shape and in the right place at the right time. They also shuttle proteins from one compartment to another inside the cell, and transport old proteins to garbage disposals systems inside the cell. Cells produce high levels of chaperones only briefly, even if stressful conditions persist, because too much HSP can straightjacket the cell into necrosis or cell death.

Inside the cell, heat shock proteins take the peptides and hand them over to another group of molecules. These other molecules take the abnormal peptides that are found only in sick cells and move them from inside the cell to outside on the cell's surface to help the immune system recognize diseased cells. These abnormal peptides are called **antigens** — a term that describes any substance capable of triggering an immune response.

As cells age, the heat shock response doesn't function properly, just when it needs to be most efficient, but inducing extra heat shock protein has a neuroprotective effect. Stimulation of various repair pathways by mild stress has significant effects on delaying the onset of various age-associated alterations in cells, tissues and organisms. Spice and herbs contain phenolic substances which have potent antioxidant and chemopreventive properties. In particular, **curcumin**, a powerful antioxidant derived from turmeric, is a strong inducer of the heat shock response.

Oxidative stress has been implicated in mechanisms leading to neuronal cell injury in various pathological states of the brain. **Brain seizures** start cascades of cell death as the nerve cells in that area release toxic chemicals, including oxygen radicals and excitatory amino acids such as glutamate. Seizures no doubt induce a heat shock response to protect neurons from glutamate-induced excitotoxicity. Studies show protection due to heat shock requires "new" protein synthesis, since it did not occur when protein or RNA synthesis inhibitors were added.

THYROID METABOLISM AND KUNDALINI

Thyroid hormones are derivatives of the amino acid tyrosine bound covalently to iodine. The thyroid gland secretes two principle thyroid hormones thyroxine (T4) and the more physiologically active triiodothyronine (T3). A healthy thyroid is intimately linked to a balanced endocrine system. The health of the endocrine system will reflect our overall health. The thyroid is a major player when it comes to hormonal health since it stimulates and synchronizes all metabolic cellular functions. All tissues in the body are stimulated by the thyroid and the level of cortisol at the cell level controls thyroid hormone production.

The **hyperthyroid** condition of peak kundalini will automatically eventually lead into a prolonged **hypothyroid** under active condition, so it is imperative to take adequate kelp supplementation during an awakening. Depending on what the primary socio-psychological triggers to a particular awakening are, this will determine the hormonal mix and whether the overall awakening serves to be more anabolic (building) or catabolic (breakdown). First awakenings tend to be more adrenalized in general as a fear response to the unusual chemistry. If the death of a loved one is a trigger then this may greatly reduce sex hormone production making the overall awakening more catabolic. Conversely if it is a great love that triggers an awakening then sex hormones and growth hormone would promote a more anabolic awakening.

What is burning in Kundalini? Glucose mainly, but also fat. Because of the shock on the nescient body of first awakening, it appears that a lot of muscle and fat is burnt as fuel...I lost 30 lbs my first awakening. The second awakening I didn't burn body tissue like that, so the mix of thyroid to growth hormone must have been different...I was "hotter" in the second awakening but the increased growth hormone/sex hormones made the second awakening more conservative/ regenerative than the first. Each awakening is flavored by our life stage and the sociobiology of our current circumstances.

Due to acute catabolysis and shock my period stopped for 8 months during my first awakening. Especially during the first awakening when we have no knowledge of what is happening to us, the stress hormones may cease menses by lowering progesterone and thyroid hormone. Perhaps after the shock of the initiation and the boost of hyperthyroid activity the thyroid simply burns out from the stress. The first awakening represents more of a shock as our thyroid, adrenals and nervous system go from an uninitiated to an initiated state. Thus the first awakening is more on-edge, wildly swinging, unintegrated and extreme, even if subsequent awakenings are actually more intense. The shift from the uninitiated to the initiated poses the largest jump for both the body and the mind.

In addition to T3, there are two additional active metabolites of T3: 3,5 and 3,3' diiodothyronines, which they collectively call T2. T2 acts on the mitochondria directly, immediately increasing the rate of mitochondrial respiration, with a consequent increase in ATP production. T3 on the other hand requires a day or longer to increase metabolic rate by acting at the nuclear level, inducing the transcription of genes controlling energy metabolism, primarily the genes for **uncoupling proteins**.

There are a number of supposed mechanisms whereby T2 is believed to increase mitochondrial energy production rates, resulting in increased ATP levels. These include an increased influx of Ca++ into the mitochondria, with a resulting increase in mitochondrial dehydrogenases. This leads to an increase in reduced substrates available for oxidation. Also if there is an increase in cytochrome oxidase activity this would hastens the reduction of O2, speeding up respiration. Scientists looking for the mechanism of increased ATP production in kundalini might like to consider the influence of T2.

HYPERTHYROIDISM

Catabolic—During fasting or when carbohydrate intake is reduced the conversion of T4 to the physiologically active T3 is reduced in order to lower the basal metabolic rate to preserve fat and muscle. Long-term hyperthyroidism with excessive T3 production is catabolic to bone as well as muscle.

Overworked heart—The increased work of the heart puts the greatest single demand on ATP usage, with increased heart rate and force of contraction accounting for up to 30% to 40% of ATP usage in hyperthyroidism.

Increased Oxidative Energy Metabolism—T3 and T2 increase the flux of nutrients into the mitochondria as well as the rate at which they are oxidized, by increasing the activities of the enzymes involved in the oxidative metabolic pathway. The increased rate of oxidation is reflected by an increase in oxygen consumption by the body.

Hyperthyroidism increases ATP production and thereby increases metabolic activity in the following ways:

Increased Na+/K+ATPase: This is the enzyme responsible for controlling the Na/K pump, which regulates the relative intracellular and extracellular concentrations of these ions, maintaining the normal transmembrane ion gradient. It has estimated this effect may account for up to 10% of the increased ATP usage.

Increased Ca++-dependent ATPase: The intracellular concentration of calcium must be kept lower than that outside the cell to maintain normal cellular function. ATP is required to pump out excess calcium. It has been estimated that 10% of a cell's energy expenditure is used just to maintain Ca++ homeostasis.

Futile cycling: Hyperthyroidism induces a futile cycle of lipogenesis/lipolysis in fat cells. The stored triglycerides are broken down into free fatty acids and glycerol, then reformed back into triglycerides again. This is an energy dependent process that utilizes some of the excess ATP produced in the hyperthyroid state. Futile cycling has been estimated to use approximately 15% of the excess ATP created during hyperthyroidism.

Heat Production: T3, has the ability to uncouple oxidation of substrates from ATP production. Resulting in reduced ATP production and an astounding production of heat. Such uncoupling occurs in skeletal muscle, contributing to

T3 induced thermogenesis, with a resulting increase in basal metabolic rate. To make up for the deficit in ATP production "more" substrates (fat and muscle protein) are burned for fuel, resulting in weight loss. Muscle glycogen is also more rapidly depleted, and less efficiently stored during hyperthyroidism, which may create muscle weakness.

Increased Lipolysis: The catecholamines, epinephrine and norepinephrine, bind to the beta 2 adrenergic receptor in fat tissue and activate Hormone Sensitive Lipase (HSL). T3 results in an increased ability of catecholamines to activate HSL, leading to increased lipolysis or fat mobilization. Besides increasing beta 2 receptor density in adipose tissue, T3 upregulates this receptor in human skeletal muscle. Due to excessive T3 in more catabolic awakenings such as the first one, supplemental growth hormone might be necessary to avoid loss of fat and muscle.

HYPOTHYROIDISM

The exhaustion phase of the stress response and kundalini awakenings occurs when the body's ability to cope with stress becomes depleted. At this point, adrenal hormones plummet, from excessively high to excessively low. It is this latter phase of adrenal exhaustion that sometimes accompanies, or is mistaken for low thyroid. Some scientists believe that even the entrance of thyroid hormone into our cells is under the influence of adrenal hormones. Thus, if your adrenals are exhausted, you might do well to take both adrenal and thyroid hormone together. Where do low thyroid and adrenal stress intersect? If you find yourself in the alarm phase of adrenal stress (high levels of ACTH and high levels of cortisol), one result might be altered conversion of T-4 into T-3, or thyronine. The level of **cortisol** at the cell level controls thyroid hormone production. The enzyme that is used to convert T4 to T3 is inhibited by **stress**, acute and chronic illness, fasting and the stress hormone cortisol. Thus a hyper-adrenal situation can reduce the availability of biologically active thyroid hormone.

When the thyroid hormone is deficient, the body is generally exposed to increased levels of estrogen. The thyroid hormone is essential for making the protective hormones progesterone and pregnenolone; so these hormones are lowered when anything interferes with the function of the thyroid. The thyroid hormone is required for using and eliminating cholesterol, so cholesterol is likely to be raised by anything which blocks the thyroid function.

Thyroid disorders are more common in women than men. In women, adequate binding of T3 is dependent upon sufficient progesterone. A low level of progesterone is a common experience in both young and older women. When women stop ovulating (anovulation) this means they are not producing adequate progesterone each month, leading to progesterone deficiency. This is also a similar condition that occurs for perimenopausal women. The main causes of the cessation of ovulation include an poor diet, nutritional deficiencies, skipping meals, emotional and physical stress, and over-exercising. Thus low progesterone levels in young women interferes with thyroid efficiency and is also one of the most frequent causes of infertility. One study showed that 94% of women with PMS

were hypothyroid. Progesterone deficiency in perimenopause or menopausal years can predispose a woman to hypothyroidism during this time of her life.

Thyroid and Estrogen Dominance

Estrogen dominance, that is an excess of estrogen in relation to progesterone, inhibits thyroid function and can result from taking birth control pills, hormone replacement therapy, or exposure to environmental estrogens. A poorly functioning liver, exhausted adrenal glands, insulin resistance, compromised digestion and candida can also contribute to estrogen dominance. There are receptor sites for estrogen and progesterone in every cell throughout the body. Thus the immune system, the nervous system, the circulatory system, the digestive system the vascular system, the respiratory system all are effected by the flow and proper balance between these two hormones. Thyroid hormone is required to convert cholesterol into the vital anti-aging steroid hormones, pregnenolone, progesterone, and DHEA. Pregnenolone converts to progesterone and DHEA in the body. Progesterone and DHEA are precursors for more specialized hormones, including estrogen, testosterone, and cortisol. Pharmaceutical progesterone is made from wild yam using a chemical conversion process, but wild yam roots do not contain and are not converted into progesterone or DHEA in the body.

AUTOLYSIS—SELF DIGESTION

Upgraded cognition will tend to cascade down and cause a revolution in the limbic and autonomic system. This is perhaps why significant growth is followed by a period of "regression." I use the word dissolution instead of regression, because it is a contemporary temporary disorganization/breakdown of patterns of function, to make way for a higher, more complex patterning to form. If there is one thing I am hoping to install in the Global Brain, it's the idea that metamorphosis is a very real and common process that is occurring within us humans. The most obvious examples of this are the huge losses of neurons during various growth periods in childhood and the Die-offs in kundalini awakenings.

Culturally we should become sensitive to the idea of metamorphosis occurring in all our growth and learning developmental processes. We need a trans-temporal, non-linear, hyperbolic-curve perception of the evolution of life processes. We could go so far as to say that development itself IS metamorphosis. The pay off from doing so is to have a more humane, realistic and healthy approach to illness in general. By treating ourselves with greater insight, knowledge and compassion during our periods of dissolution, then we will evolve faster with less secondary psychosomatic damage. We must give great attention and understanding to the impact of secondary fallout from our mismanagement of natural organic processes of evolution itself. So just how does the body "eat itself" in order to restructure its tissues and functions?

CELL DEATH AND DIE-OFFS

Apoptosis is word of Greek origin, meaning "falling off or dropping off." Apoptosis is the word used in science to describe controlled programmed cell death. Cell death plays a considerable role during physiological processes of multicellular organisms, particularly during embryogenesis and metamorphosis. For example in the development of the brain, half of the neurons that are initially created will later die in successive stages as the adult brain is formed. In the adult human body several hundred thousand cells are produced every second by mitosis, and a similar number die by apoptosis for the maintenance of homeostasis and for specific tasks such as the regulation of immune cell selection and activity.

Apoptosis proceeds thus: the cell shrinks, shows deformation and looses contact with neighboring cells. Its chromatin condenses and marginates at the nuclear membrane, the plasma membrane undergoes blobbing or budding, and finally the cell is fragmented into compact membrane-enclosed structures, called 'apoptotic bodies' which contain the contents of the cell. These apoptotic bodies are then engulfed by macrophages and thus are removed from the tissue without causing an inflammatory response, or damage to surrounding tissue. Apoptosis is programmed and "tidy" compared to the messy mode of necrotic cell-death, in which the cells suffer a major insult, resulting in a loss of membrane integrity, swelling and rupture of the cells. During **necrosis**, the cellular contents are released uncontrolled into the cell's environment damaging nearby cells and producing a strong inflammatory response.

Other than infection the two main modes of cell death are apoptosis (programmed) or necrosis (uncontrolled traumatic). Since a metamorphic Die-off is certainly not an infection and does not appear to create inflammation in the tissues, it is apparent that the catabolic breakdown during a Die-off is orchestrated by apoptosis. With the cells being recycled through phagocyctosis by the macrophages and turned into building blocks for the regenerating body. As I have said elsewhere the main phase of this "self digesting" event is three days in which bed rest is imperative. Since the HPA axis reduces immunity to conserve energy for fight-or-flight, Die-offs occur months after the hyperaroused peak, after the intense activity of the HPA axis has dropped off somewhat. As soon as there is adequate energy for immune activation made available a Die-off will occur. The intervening period reflects the intensity of the hyperaroused nervous system. That is if the hyperactivation is extreme the Die-off might come 6 months after the influx-peak, or 3 months after a less intense arousal. For example for a full-on awakening following the normal annual cycle the peak HPA activation occurs in July and the corresponding Die-off occurs in November.

It appears that the key player in switching into this Die-off mode is the **mitochondria** of our cells. In fact we must look to mitochondria as being the chief orchestrators of the entire kundalini alchemy. Mitochondria play a central role in apoptosis by amplifying and mediating extrinsic apoptotic pathways, and in the integration and propagation of death signals originating from inside the cell such as DNA damage, oxidative stress, starvation. Apoptosis is most often induced through the disruption of the mitochondrial inner transmembrane potential and through a sudden increase in the permeability of the inner mitochondrial membrane. This causes an influx of water by osmosis into the mitochondria with the eventual rupture of the outer mitochondrial membrane, resulting in the release of pro-apoptotic proteins from the mitochondrial intermembrane space into the cytoplasm. Proteins released start a apoptotic cascade, ATP synthesis is stopped and free radical generation exceeds the cells antioxidant capacities leading to the oxidation of lipids, proteins, and nucleic acids.

The apoptosis signaling pathways in viable cells are kept in an inactive state and are only turned on in response to a death stimulus. It is thought that all cells of a multicellular animal might be intrinsically programmed to self-destruct and would die instantaneously unless cell death is continuously repressed by survival signals from growth factors, antioxidants, hormones, nutrients. These anti-apoptotic regulatory molecules keep in check the activation of pro-apoptotic factors. During a Die-off however the pro-apoptotic factors become dominant and an exquisite cascade of cell death and self-digestion is set in motion.

Free radicals are generated in the mitochondrial electron transport system. Mitochondria are the source of 80% or more of the oxyradicals generated in the neuron. Reactive oxygen species were shown to cause neuronal degeneration by activation of ionotropic glutamate receptors. Ca2+ deregulation causes excessive activation of glutamate ionotropic receptors, disrupting the mitochondrial electron transport system. Mitochondrial **glutathione peroxidase** (GSH) depletion

and subsequent oxidant induced loss of mitochondrial function was shown to precipitate programmed cell death or apoptosis, since GSH is the major defense against the endogenously produced free radicals. **Seizures/kindling** may result from glutathione peroxidase deficiency. Selenium is necessary to the formation of GSH, and so selenium deficiency maybe an important factor in the promotion of seizures and subsequent neuronal damage.

The 5-carbon sugar **D-Ribose** is an energy producing ATP substrate formed in the body from glucose. Ribose is a component of RNA and DNA and also necessary for the manufacture of ATP. Mitochondria utilize two methods for building or conserving cyclic nucleotides like ATP, ADP, and AMP. The longer pathway where ATP is made "from scratch," starting with ribose, and there is the faster "salvage" pathway, in which the mitochondria "pick up the pieces" of ATP metabolites to form new ATP. Ribose enables cells to quickly and efficiently recycle the end products formed by the breakdown of ATP to form new ATP molecules. There are no foods able to provide enough ribose to rapidly restore ribose levels, should the need arise during exercising, working, or during a heart attack, stroke or kundalini. So D-Ribose maybe an essential supplement to take especially during the down-cycles to prevent enervation and excessive apoptosis.

Creatine is synthesized in the body from three amino acids: glycine, arginine, and methionine. It is involved in energy metabolism as a muscle fuel through its role of regenerating ATP from ADP. Creatine phosphate serves as a reservoir of high-energy phosphate bonds required to rephosphorylate ADP into ATP. The resynthesize ATP at required rate improves endurance and available energy during exercise or excessive expenditure like kundalini awakenings. To prevent fatigue and excessive catabolic breakdown from lack of ATP production ribose and creatine should be taken around the clock during awakening.

Aging appears to be in good part due to the oxidants produced as by-products of normal metabolism by mitochondria. Age related decline in the function of mitochondria is relieved by the supplementation of **alpha lipoic acid and L-carnitine**. Research found that the enzyme carnitine acetyltransferase is less active in old rats. Supplementation with a combination of acetyl-L-carnitine and alpha-lipoic acid restored the enzyme's activity nearly to that found in young rats. The acetyl-L-carnitine protects the enzyme and the higher levels are enabling the protein to work, while alpha-lipoic acid reduces free radicals. The two together reverse the effects of aging on mitochondria. Carnitine also helps protect the mitochondria membranes and assists in the transport of fatty acids into the mitochondria. Since the mitochondrion provide the energy source (ATP) for cell function, through mitochondrial oxidative metabolism of glucose, interference with the mitochondrial electron transport system can have fatal consequences to the cell. The high free radical load during metamorphosis may put such a high demand on the body's glutathione production that there is insufficient to protect against apoptosis. Alpha Lipoic Acid maybe more effective than NAC in preventing apoptosis.

Charged phospholipids in the **cell membranes** play a crucial role in apoptosis. There is increasing evidence that the arrangement of polar lipids in the membrane

phospholipids matrix is an important factor in apoptosis; along with homeostatic mechanism responsible for preserving membrane lipid composition and asymmetry. Early apoptotic events are associated with disturbances in the lipid bilayer matrix generating changes in membrane permeability of mitochondrial membrane in particular.

SPLEEN RECYCLES BODY

The body recycles the cellular materials from cell death by the process of autolysis, also called **self-digestion**. It is kind of obvious what happens to the macrophages that "eat" the body during a Die-off and how they recycle resources to the body. Calculation of the influx of monocytes into the spleen and of the local production of macrophages showed that under steady-state conditions, 55% of the spleen macrophage population is supplied by monocyte influx and 45% by local production. This means that there is a dual origin of spleen macrophages. The mean turnover time calculated with the value for the efflux of spleen macrophages is 6.0 days. Since worn out red blood cells are ingested by phagocytic cells in the liver and spleen, I suspect that macrophages are also absorbed back into the system in this way. Perhaps they too undergo apoptosis and are taken up by phagocytic cells in the liver and spleen. Both the liver and spleen are capable of generating ecstasy, quite possibly when there is a fresh supply of extra ATP recycled from an increase in the breakdown of cells.

Apoptosis is a normal function of the immune system. It is apparent in metamorphosis that the body cannibalizes itself by cell death through oxidation leading to apoptosis and immune phagocytosis. Recycling the constituents of cells is probably a far more energy efficient form of nutrition than the digestion of food. And considering that the digestive system is disrupted with the hyper-SNS, it makes sense that during metamorphosis the body transforms itself through self-digestion. The macrophages eat inferior cells and scavenger enzymes breakdown used and damaged proteins into their component parts for reuse by the cell. Since the energy of the body has shifted toward self-digestion, this is the primary reason why our diet during metamorphosis needs to be light and nutrient, rather than complex and hard to digest. Digestion of food will take energy away from the self-catabolic digestive process.

The most important point I can emphasize is to not presume the catabolic breakdown of cells, and the increased free radical load during metamorphosis as pathological, for this will only increase our stress level. We cannot regenerate without going through the dissolution. Since metamorphosis is a natural process which is "self-governing," our job in working-with what is happening is to first not increase the free radical burden on the body with harmful substances and secondly to increase our antioxidant intake and distressing techniques. We all know the most harmful free radical inducers by now, they are: smoking, pollution, alcohol, charred meat, hydrogenated oils, aged cheeses, rancid fats, sugar and stress.

MITOCHONDRIA'S ROLE IN CELL DEATH

Found in all cells, mitochondria provide cellular energy in their role as the body's power generators. In addition, mitochondria are intricately involved in a process called **apoptosis**, or programmed cell death, which is the body's normal method of disposing of damaged, unwanted or unneeded cells. Apoptosis can be defined as a cell death process in which activation of catabolic processes and enzymes occurs prior to the bursting of the cell (**cytolysis)**, thereby facilitating the recognition, uptake, and digestion of the apoptotic cell by dying neighboring cells. Cytolysis occurs in a *hypotonic* environment, where due to the lower osmotic pressure, water diffuses into the cell until there is more solutes within the cell. If too much water enters the cell will eventually burst, releasing cell contents.

The central role of mitochondria in neurodegenerative disorders has become apparent. Mitochondria appear to be most susceptible in glutathione-depleted tissues because of the high flux of oxygen radicals from the mitochondria's OxPhos activities. Because the mitochondria assume the bulk of the endogenous oxygen radical burden, yet are unable to make their own GSH, so they must import it from the cell cytosol. As **oxidative phosphorylation** proceeds in the mitochondria, invariably single electrons escape, leaking out to react with ambient oxygen and generate oxygen free radicals. An estimated 2-5% of the electrons that pass through the OxPhos system become free radicals and since OxPhos processes at least 95 percent of all the oxygen used by the body, this flux of wayward oxygen free radicals poses a potential toxic risk to the organism.

Mitochondria exhibit major changes in their structure and function during apoptosis and are now considered major players in the apoptotic process of mammalian cells. Mitochondria have been implicated in the maintenance of the calcium (Ca2+) "set-point" in cells, where control of Ca2+ levels plays a significant role in enzymatic regulation and energy production. Pathological conditions that result in increased tissue Ca2+ concentrations include ischemia, oxidative stress, and excito- and neurotoxicity. The subsequent increase in cytoplasmic Ca2+ is widely considered to be a critical initiating event in the development of damage in cells destined to die. Apoptotic and necrotic cell damage is always preceded by an increase in Ca2+. Ca2+ increase in cerebrospinal fluid was noted in connection with psychotic episodes, so I imagine that acid conditions promote cell death prior to and during psychosis.

Cell energy production is reduced by excessive free cytosolic Ca2+ leading to uncoupling of mitochondrial **oxidative phosphorylation** with consequently decreased ATP synthesis. The resulting inactivity of ATP-dependent pumps would lead to membrane depolarization and further exacerbating Ca2+ influx in self-reinforcing accumulative fashion. The cells then make an effort to restore the normal cytoplasmic Ca2+ concentration by removing Ca2+ to the extracellular space and/or uptake into organelles, including mitochondria.

Sodium influx into cells causes depolarization and increased Ca2+ levels in the cells. In depression (down), mood shifts are accompanied by shifts in the amount of salt and fluid in and around the cells. Depressed patients have consistently

shown that they retain salt and fluid only during their depressed phase. The manic (up) phase however is accompanied by increased urea in the urine, probably due to the breakdown of cells that could not handle the reduction in ATP, the increase in Ca 2+, and the excess glutamate stimulation.

Glutamate is the most prominent neurotransmitter in the body, being present in over 50% of nervous tissue. The primary glutamate receptor is specifically sensitive to N-Methyl-D-Aspartate (NMDA), which causes direct action of the receptors ion channel, to drive the neuron to depolarize. Depolarization triggers the firing, or action potential of the neuron, therefore NMDA is *excitatory*. Hyperactivation of glutamate receptors causes neuron programmed cell death or apoptosis through the oxidative stress of free radicals. This is because mitochondria are the source of 80% or more of the oxyradicals generated in the neuron and Ca2+ dysregulation causes excessive activation of glutamate ionotropic receptors, disrupting the mitochondrial electron transport system. Glutamate concentrations in the brain and CSF are higher in some seizure patients.

For more info read Dr. Ward Deans papers on *Mitochondrial Restoration and Mitochondrial Theories of Aging* at http://vrp.com/

THE KINDLING EFFECT

Some of the conditions for the initiation of kundalini appear to be:

Hyperactivation of the thyroid and parathyroids.

Hyperactivation of estrogen and testosterone
(plus metabolities of T. eg: Estradiol).

Hyperactivation of the sympathetic nervous system
(adrenaline, norepinephrine).

Hyperactivation of the stress hormones
(corticosteroids eg: cortisol, DHEA).

Hyperactivation of opiate systems
(endorphins, enkephalins, anandamide, phenylethylamine).

Kundalini awakenings are likely if hyper-arousal of the nervous system is kept going for several years and conditions of perpetual irritation to the brain neurons occurs. The particular blend of hormones and neurotransmitters reduces the threshold by which kundalini passes through the body. Like a river of fire, kundalini forges its own effluent cascade through the nerve tributaries and sustains itself through the changes it induces. In recent years there has been some attempt to correlate the phenomena of kindling with kundalini.

Kindling in epilepsy was first discovered accidentally by researcher Graham Goddard in 1967, while he was studying learning in rats. He found that a sustained, periodic, low-intensity stimulation of the limbic region of mammalian brains eventually sets up a cumulative resonance which increases in magnitude until the entire organism is in sympathetic resonance. Eventually these bursts of electrical activity induce similar patterns in nearby brain regions, and the seizure threshold progressively lowered. While normally the electrical stimulation he used was too low to cause any type of convulsing, he discovered that repeated exposure of brain areas to small electric shocks seem to make subsequent episodes of spontaneous seizure-like electrical events more likely to occur. After repeated stimulation at the same intensity, their brains had become sensitized to electricity, and even months later the rat would convulse when stimulated.

The name *kindling* was chosen because the process was likened to a log fire. While the log itself is very hard to set afire in the first place, when surrounded by smaller, pieces of wood, kindling, soon the log itself will catch fire. There is evidence that the more mood episodes a person has, the harder it is to treat each subsequent episode..." thus taking the kindling analogy one step further: that a fire which has spread is harder to put out.

The kindling sensitization hypothesis suggests that initial seizure episodes make it more likely that future seizure and depressive episodes will occur. Spontaneous kindling is more likely if there has been early damage to the brain through chemical exposure, childhood sexual or emotional abuse, or if one has inherited a sensitive nervous system. If reared in an abnormal, deprived, stressful and socially

isolated environment, the limbic system neurons will atrophy and the septal nuclei, amygdala and hippocampus may develop seizure-like activity, referred to as kindling. Trauma affects our capacity for cortical control over the limbic system to regulate bodily homeostasis. This includes unusual patterns of cortisol, norepinephrine, and dopamine metabolite excretion; the role of serotonergic and opioid systems (arousal and numbing); receptor modification by processes such as kindling; and involvement of central pathways involved in the integration of perception, memory and arousal.

Kindling can start only in the limbic brain where it progresses from the amygdala, then to the amygdala on the other side of the brain, to the hippocampus, to the occipital cortex, and finally to the frontal cortex. In fetal brain development the limbic or emotional brain predates the development of the cortex or "seat of intelligence". The brain's limbic system modulates emotions and memory organization systems, balance, gastrointestinal motility, the autonomic nervous system, and the auditory and visual integration of stimuli.

While kindling was originally thought to be a model of epilepsy, John Gaito of York University has reported that a different mechanism is apparently involved since the amino acid, *taurine*, which suppresses epileptic seizures in laboratory animals, does not prevent phenomena caused by kindling. Also, kindling apparently causes **permanent changes** in the neural circuitry.

Kundalini has elements similar to the kindling phenomena, and yet runs through a very complicated sequence of "events." The article: *"Kindling, once epilepsy model, may relate to kundalini,"* Brain/ Mind Bulletin, Vol. 2, No.7, February 21, 1977; pp. 1-2.) reports on the convulsion-like phenomenon called kundalini. At the Max Planck Institute in Germany, subjects reported "electrical sensations, tingling, inner lights, even convulsions usually followed over a period of time by a moderation of 'symptoms' and apparent alterations in the central nervous system." This article says that the kundalini phenomena typically occurs after a period of meditation in a setting that is non-threatening. This report suggests that while meditating, the individual tries to arrest all thought or cortical activity, thus allowing the evolutionary more primitive areas of the brain to assert itself. The Kindling Model is one of the current interpretations of PTSD. The scientists concluded that those who experienced the kundalini phenomenon were actually re-experiencing **primal pain** laid down before the brain has completely developed (See Toxic Mind Theory).

Periods of cycling may begin with an **environmental stressor**, but if the cycles continue or occur unchecked, the brain becomes kindled or sensitized. With repetitive use pathways inside the central nervous system are reinforced so to speak—and future more frequent episodes of depression, hypomania, or mania will occur by themselves independent of an outside stimulus. Thus, to put it simply, brain cells that have once been involved in an seizure episode are more likely to do so again, and more cells will become sensitized over time. Goddard demonstrated that it was possible to induce kindling chemically as well through repeated small exposures to inhaled toxins; or single overwhelming exposures of

chemical, visual, auditory, electrical stimulation. It has been shown that substances such as cocaine and alcohol have their own kindling effects which can contribute to bipolar kindling.

As a result of many studies involving the kindling model, many researchers now believe that kindling contributes to both rapid mood cycling and treatment-resistant bipolar disorder. This kindling model also is consistent with cases where cycling began with definite mood triggers, stressful or exciting events, and later became spontaneous. Researchers concluded that there was a need for early and aggressive treatment of bipolar disorder, to prevent the brain from becoming more and more sensitized and going into rapid cycling or manic depression.

A **seizure** is a sudden involuntary alteration in perception or behavior caused by an abnormal synchronized discharge of cortical neurons in the central nervous system. **Epilepsy**, on the other hand, refers to chronic recurrent seizures from a primary underlying brain abnormality. Seizures can be attributed to a number of causes including metabolic abnormalities, infections, nutritional deficiencies, or trauma. Emotional stress and sleep deprivation also increase the frequency of seizures, but most seizures occur due to unknown reasons. Seizures can be broadly classified into two major categories: partial, involving onset from a discrete area of the brain that may or may not secondarily generalize to the rest of the brain, and primary generalized, involving simultaneous onset from both hemispheres.

What is really interesting is that pulsed repetitions of telepathic senders have also been shown to increase the reception of telepathic messages. Thus the kindling effect apparently applies to the paranormal channel as well as to more orthodox transmission channels.

DISINHIBITION OF INHIBITION

The two primary regions of the brain that are involved in epilepsy are the cerebral neocortex and the hippocampus. In the neocortex, excitatory synapses are made primarily on the dendritic spines and shaft. The release of neurotransmitters at these sites gives rise to excitatory postsynaptic potentials. The inhibitory synapses are more prominent on the soma or proximal dendrites, and give rise to inhibitory postsynaptic potentials. Abnormal neuronal excitation is thought to occur as a result of disruption of the depolarization and repolarization mechanisms of the cell. Aberrant neuronal networks develop abnormal synchronization resulting in the propagation of an epileptic seizure.

The primary excitatory neurotransmitters in the central nervous system are the amino acids glutamate and aspartate. The primary inhibitory neurotransmitters in the central nervous system are gamma-aminobutyric acid (GABA) and glycine. Excitatory neurotransmitters usually act by opening Na+ or Ca2+ channels, whereas inhibitory neurotransmitters usually open K+ or Cl- channels. Glial are mainly responsible for K+ reuptake.

It seems that one of the mechanisms of kundalini maybe the overstimulation of the neuro-inhibitory glycine and GABA receptors in the spine and brainstem, during the hyper-activation of the sympathetic nervous system. This dis-inhibition

means the hyper-charge is allowed to continue like wildfire because the "off switch" has essentially been rendered ineffective. Simply upping one's glycine intake doesn't return neuron inhibition back to normal. Kundalini abates when the glycine receptors themselves become operational again, once the hyper-charge of kundalini up the spine reduces, perhaps when the fire runs out of fuel. Thus kundalini awakening ends when the "charge" reduces and the "glycine receptors" are once more fully receptive and able to do their neuro-inhibiting job.

Compounding this, it might be that when the free radical load goes up with the onset of kundalini, glycine is pulled from all readily available sources in order to make the antioxidant **Glutathione** (ie: glycine + glutamic acid + cysteine). The cerebrospinal fluid (CSF) would be one of those sources since it contains 100mg of glycine for 100ml of fluid. This reduction in CSF-glycine would further reduce the inhibition of nerve firing up the spine. The wild fire would thus burn until it burns itself out.

Glycine is an inhibitory neurotransmitter in the central nervous system especially in the spinal cord. When glycine receptors are activated, chloride ions enter the neuron and the cell membrane undergoes hyperpolarization, which inhibits the neuron. In seizures the brain naturally accumulates more glycine at the seizure site in order to protect itself by inhibiting neuron firing.

It maybe that during the inner-conjunction the kundalini ignition up the spine is so intense that the inhibitory neurotransmitter glycine may have failed to stop the cascade of electro-chemical reactions that constitutes the awakening. The force of the kundalini cascade may overwhelm the normal nerve inhibition of glycine by rendering the glycine receptors useless or "disinhibited." The poison strychnine causes convulsions for this reason. B-alanine and taurine also activate glycine receptors but with lower inhibitory capacity.

In the brain, glutamine is precursor to glutamate is an "on-switch" neurotransmitter, it is also the precursor to GABA which is an "off-switch" neurotransmitter. Lower GABA correspond to increased seizures and epilepsy. Anti-seizure medications work by increasing levels of the inhibitory neurotransmitter GABA in the temporal lobes, calming neuronal activity and inhibit nerve cells from over firing or firing erratically. Glutamic acid decarboxylase (GAD) is the rate limiting enzyme responsible for conversion of glutamate to gamma-aminobutyric acid (GABA) regulating levels of glutamate and GABA in the mammalian brain. GABA can be taken as a supplement (L-Glutamine), produces a calming effect on people who struggle with temporal lobe symptoms like temper, irritability, and anxiety. Many people with temporal lobe problems also suffer from memory problems, which can be helped with Phosphatidyl Serine (PS), Gingko Biloba and Vitamin E. Brain GABA levels depend on both zinc and vitamin B6. Consequently, zinc deficiency may increase the risk of seizures by reducing brain GABA.

Glutamate concentrations in the brain are higher in some seizure patients, and these concentrations can increase to potentially neurotoxic concentrations during seizures causing cell death. One study showed that with a higher dose of B6 (10 mg/kg), the CSF glutamic acid was normalized. It was concluded that the optimal dose

of B6 for epileptics should be the dose that normalizes CSF glutamate levels, not just the control of seizures. Glutamate is the principal excitatory neurotransmitter in the brain thus it inevitably plays a role in the initiation and spread of seizure activity. The process of "kindling" limbic seizures in rodents by repeated electrical stimulation is dependent on activation of N-methyl-D- aspartate (NMDA) receptors. The function of these receptors is enhanced in the hippocampus of kindled rats and in the cerebral cortex of patients with focal epilepsy.

It is probable that the **adrenocorticotrophin** releasing hormone system in the central nervous system is mainly distributed in the limbic system, and glutamate might be one of the trigger factors to induce excessive stress response in the hypothalamus-pituitary-adrenal axis. Acute mania is accompanied by elevated glutamate/glutamine levels within the left dorsolateral prefrontal cortex. Glutamate and aspartate NMDA receptor antagonists are one potential mechanism for anticonvulsants.

Psychosis could result from AMPA receptor activation caused by over activity of the glutamatergic system, due to reduced GABAergic inhibitory control. Expression of messenger RNA for the GABA synthesizing enzyme in the prefrontal cortex and the number of GABAergic neurons in the hippocampus are reduced in schizophrenia and bipolar disorder. GABAa receptor drugs, which activate Cl- , appear more effective as anticonvulsants than GABAb receptor agents, which activate K+. Apparent the GABAa receptor is involved in epilepsy due to its role in the synchronization or desynchronization of thalamus-cortical pathways. The oscillatory and burst-firing of these circuits is attributed to neurons in the thalamus and leads to synchronization and desynchronization of the EEG.

Dr. Stephen Lasley found that brains of rats that are genetically prone to seizures also have reduced levels of **taurine** as well as increased levels of **aspartate**. Therefore, I believe that avoidance of aspartame should be a key element in an anti-seizure diet. Also, taurine, in doses of 1-3 grams per day maybe helpful.

ENERGY GENERATION

If kundalini starts and you really don't want it then cut all carbohydrates from your diet for 2 weeks, and this should suspend the rapid cascade of change. If stopping the consumption of carbohydrates stops or lessens the progression of kundalini metabolism, this then points to the mechanism of kundalini itself. It is therefore apparent that kundalini is fueled it seems by the burning of glucose "**glycolysis**" and less so or not at all by ketosis or the burning of fat. Glucose is taken up by glial cells and metabolized by glycolysis to lactate and pyruvate, which are then released as substrates for oxidative phosphorylation in the neurons. Within the brain, glycogen is primarily stored in glial cells, Glycogen stores in the brain are low compared to liver and muscle however the glycogen turnover is very rapid.

Glycolysis is the conversion of glucose to pyruvate and lactate resulting in the net production of only 2 mol of ATP. Pyruvate can enter the Krebs cycle and produce 30 mol of ATP via the mitochondrial **oxidative phosphorylation**

cascade. Hence the energetic value of oxidative phosphorylation over glycolysis is obvious. In the early stages of activation the increased energy demand is met by glycolysis rather than oxidative phosphorylation. It was found with PET scans that glucose utilization in activated cortical areas was not matched by an equivalent increase in oxygen consumption, because Glycolysis does not require oxygen to function.

Glucose is the energy fuel for the brain and is almost entirely oxidized to CO2 and H2O. A quarter of the total body's glucose is utilized by the brain although the brain only represents 2% of the body weight. Glucose can be incorporated into lipids, proteins and glycogen, and it is also the precursor to certain neurotransmitters such as GABA, glutamate and acetylcholine. GABA and glutamate serve to regulate the excitability of virtually all neurons in the brain. GABA and glycine are the most important inhibitory neurotransmitters in the brainstem and spinal cord. The neurotransmitter glutamate is derived from glucose, and I think that glutamate is probably the primary neurotransmitter involved in the changes in the conveyance of energy through the nerves.

I propose that Nitric Oxide is produced in excess during certain hyper-kundalini events causing a hypersensitivity to glutamate NMDA receptors and this produces the most radical peak experiences and pivotal height of the awakening cycle itself. Energy metabolism maybe controlled by specific neurotransmitters such as norepinephrine (NE). Cell bodies of NE-containing neurons are localized in the brainstem from which axons project to various regions of the brain including the cerebral cortex. Hence the noradrenergic system could regulate energy homeostasis globally in the brain.

Polarity is vitally important for all living cells, hence they continually work to generate and maintain regions of differing electrical properties against continual leakage of charge. In fact, the ceaseless work involved in achieving and maintaining these electrical polarity needs consumes some 50–60% of the metabolic activity of the cell. Cell polarity regulates cellular morphology, intracellular signaling, asymmetric cell division, cell migration, cellular and tissue physiology as well as complex organ morphogenesis.

"When our cells are functioning normally, a proton (H+, a hydrogen atom with its positive charge) gradient exists across the oxygen-using parts of our cells, which keep out calcium and sodium ions. But when these oxygen-using parts, the mitochondria, are unable to make ATP, they cannot keep up the gradient. Sodium and calcium ions rush into the cell in a fatal process of cell damage called necrosis. (269) If damage caused by these [oxidative] reactants is not reversed to normal, there will be decreases in the capacity to generate ATP, lower global biochemical activity, and reduced use of free energy. The oxidative poisoning can lead to cell damage or trigger the mechanism of cell self-destruction call apoptosis. (271) Levels of the intracellular antioxidant glutathione fall when ATP is not around. Lowered ATP thus reduces the cell's ability to make more of the ATP it needs more than ever." 270, Eric Schneider & Dorion Sagan, *Into the Cool: Energy Flow, Thermodynamics and Life.* University of Chicago, 2005

THE COMBUSTION OF FAT

Ketogenesis is the process by which ketone bodies are produced as a result of fatty acid breakdown. Ketogenesis may or may not occur, dependent on how many carbohydrates are available. Ketone body formation occurs as an alternative energy source during times of prolonged stress e.g. starvation. The initiating event is a change in the ratio of glucagon:insulin in the blood. Insulin deficiency triggers the lipolytic process in adipose tissue with the result that free fatty acids pass into the plasma for uptake by liver and other tissues. Glucagon appears to be the primary hormone involved in the induction of fatty acid oxidation and ketogenesis in the liver. It insures that long-chain fatty acids can be transported through the inner mitochondrial membrane to the enzymes of fatty acid oxidation and ketogenesis.

Ketone bodies are produced mainly in the mitochondria of liver cells when carbohydrates are so scarce that energy must be obtained from breaking down fatty acids. Fatty acids are long chains of carbons with an acid group on one end. The body gets energy from fatty acids by breaking the carbon chain down into pieces that contain only two carbon atoms. These pieces are in the form of acetyl-CoA. When the body has *no carbohydrates* available, fat instead must be broken down into acetyl-CoA in order to get energy. CoA is not being recycled through the citric acid cycle: it is being attached to more and more acetyl groups. You need more CoA to keep breaking down fats, and the only place to get it is from all those acetyl-CoA molecules, by attaching them to each other to get the CoA to fall off. A large amount of energy is released during this process, which can be used for muscle contraction and all of the other activities in the cell.

L-carnitine acts to increase energy by carrying fat across the cell membrane and into the mitochondria. Energy is then stored as ATP. It reduces the metabolites of fats (ketones) in the blood from incomplete fat metabolism and reduces hyperammonemia.

GLYCOSIS AND KETOGENESIS AND SEIZURES

The Ketogenic or high-fat diet was found to reduce epileptic seizures by a 50 to 70%. Dr. John M. Freeman, in *The Epilepsy Diet Treatment* recommends a stringent diet consisting of high fat, low protein, low carbohydrate foods. Generally the ketogenic diet consists of 4 parts fat to 1 part protein/carbohydrate. Notice that protein also is low, the theory being that the body can turn protein into sugars also. (In reality a 50-gram dose of protein (in the form of very lean beef) resulted in only about 2 grams of glucose being produced and released into circulation.) Resorting to the extreme measure of a ketogenic diet might be necessary for epileptics to reduce seizure, but it is simply no way to be generally healthy. Complications can include nutrient deficiency, kidney stones, abnormal liver function, high cholesterol, weight gain, dehydration and bone thinning. Not to mention all the extra free radicals generated from such a high fat diet.

Such extreme measures are perhaps not necessary for a kundalini awakening, however there is much to learn from the ketogenic diet about how we might modify our diet to best serve our awakening. Of paramount importance however is

to prevent the spiking of blood sugar to conserve the integrity of protein structures and prevent glycation, so you can convey a deeper more focused consciousness. This is achieved by ensuring that our carbohydrate quotient consists of low glycemic, non-starchy, high fiber to prevent blood sugar spiking. I also find that **raw** carbohydrates are much easier on the body and on de-fogging and lucidity than all forms of cooked carbohydrate. *Reduce the blood sugar and kundalini doesn't spark up to an all-consuming flame.*

During a kundalini awakening the body is in a mode of hyper-energy generation. The cells are producing more energy (via hyperactivated mitochondria)…what energy is not converted to ATP is given off as **heat**. This extra cellular energy in the nerves causes certain glutamate receptors (NMDA) to be hyperactive increasing the action potential and release of neurotransmitters in the synapses. Thus the sympathetic nervous system is in hyperdrive, and the off switch receptors (parasympathetic, glycine, GABA) are over stimulated hence cannot perform their normal inhibitory functions.

The heat of kundalini itself further exacerbates the excitation of the nerves by facilitating ion movement and increasing neurotransmitter release. Researchers from St Louis School of Medicine have discovered that 'cooling' the neurons responsible for focal epileptic seizures can stop the seizure from ever happening without doing any harm to the brain cells. Cold seemed to prevent the nerve cells firing probably through interfering with the movement of ions in the cells and preventing the release of neurotransmitters.

As the kundi-fired body is in a HPA axis activated state, the liver generates and releases more glycogen to fuel this fire. Cell apoptosis (cell death) occurs through excess free radicals and high glutamate and Ca2+ levels and body tissues are catabolically dismantled and turned into glycogen. The hyperactivity of the limbic brain turns on the pleasure centers generating copious endogenous opiates and cannaboids…and these increase compulsivity so that the individual is attracted to eating carbohydrates (sugar) to fuel the increased energy demand. The body is asking for more energy, and this can be achieved by drinking water (ie: hydroelectric energy).

Giving in to sugar cravings while in kundalini will cause blood sugar spiking that can severely damage tissues and turn the body toward insulin resistance and down-regulate other receptors as well. Even as a rawfoodist you can still have a sugar addiction by eating too much fruit and not balancing your sugar intake with greens. Blood sugar spiking is a major factor in inflammation, aging, neurodegeneration and disease in general. To get over the sugar craving we need to raise our energy through breath, exercise, nature, touch and positive inspirational community...all those things that would naturally stop a child from seeking solace in sugar. Once the body is built up with greens (kale, parsley, spinach, spirulina, wheatgrass) and the social and muse fronts are active and satisfying, then the sugar craving is overcome. The ego thing is tied into the sugar thing.

Besides the reduction of excess glutamate and Ca2+ release, perhaps another reason why the ketogenic diet works could be the actual physical blocking of insulin

receptors with cholesterol due to the high fat content of the diet. This blocking would reduce sugar/glucose uptake by the cells and prevent the energy surge that initiates kindling of seizures. Since the ketogenic diet is so low on carbohydrates the usual blood sugar spiking that initiates excessive levels of insulin and leptin and associated down-regulation of receptors is avoided.

By eliminating the majority of cooked/high-glycemic/starchy carbohydrates from one's diet the fog of bliss can be lifted. Avoid sugars, honey, artificial sweeteners, grains, fruit and anything starchy or sweet except perhaps sativa. Green vegetables, tomatoes and avocados can be eaten but avoid "starchy" plants like rice, potatoes, corn, and "sweet" ones like carrots and beets. You will find that after less than three days of eliminating sweet and starchy foods the bliss-fog significantly clears. I experienced less magnetic activity around my head, probably due to reduced "kindling" or firing of the nerves in the brain. Body pain did not increase, although there was a little tiredness from the rapid cutoff of carbohydrates.

By reducing carbohydrates in our diet kundalini still remains but greatly subdued. Even during peak estrogen day of the month, if not given its glycogen fuel kundalini did not rise significantly. That is, even if all the other triggers are available (thyroxin, sex hormones, DHEA, adrenaline etc…) if there is not a surplus of glucose available in the blood, then kundalini does not increase its fire. Knowing this is a radical boon for people going through kundalini awakenings, and for seizure, epilepsy, psychosis and probably bipolar depression etc.. You might find that during and after a kundalini awakening you may want or need to adopt a low carbohydrate diet indefinitely. One of the contributing factors to my spontaneous kundalini awakening of 1989 was that I had eaten 3 pieces of very rich Xmas cake packed with coconut sugar and dried fruit. After eating this I could feel the blood curse through my veins like speed. This combined with being in a car, playing bongo drums and singing, a biblical New Zealand Christmas evening under the stars, catalyzed my first 10,000 org spontaneous rush up the spine...after which I felt like Jesus Christ.

One possibility why the ketogenic diet controls epilepsy is that the diet alters brain handling of glutamate, the major excitatory neurotransmitter and a probable factor in evoking and perpetuating a convulsion. Researchers found that brain metabolism of ketone bodies can furnish as much as 30% of glutamate and glutamine carbon. Ketone body metabolism also provides acetyl-CoA to the citrate synthetase reaction, in the process consuming oxaloacetate and thereby diminishing the transamination of glutamate to aspartate. Relatively more glutamate then is available to the glutamate decarboxylase reaction, which increases brain GABA. Ketosis also increases brain GABA by increasing brain metabolism of acetate, which glial cells convert to glutamine. GABA-ergic neurons readily take up the acetate and use it as a precursor to GABA.

Ketosis also maybe associated with altered amino acid transport at the blood-brain barrier. Specifically, ketosis may favor the release of glutamine *from* the brain, through transporters at the blood-brain barrier exchanging it for blood leucine. Since brain glutamine is formed in **astrocytes** (glial) from glutamate, the overall effect

will be to favor the release of glutamate from the nervous system. Astrocytes are **glial cells** which make up 80% of the mass of the brain and communicate with neurons via changes in Ca2+. Intracellular Ca2+ mediates changes in membrane proteins to initiate transmitter release and ion channel opening; it also activates enzymes to allow neurons to cover or uncover receptor sites that alter neuronal sensitivity. Several studies indicate that following the rise of calcium, astrocytes release the amino acid glutamate, which helps them talk to the neurons. The communication flows both ways, with neurons also being able to talk to the astrocytes through their own glutamate release. Signaling molecules, such as ATP, prostaglandins and eicosanoids also appear to promote the cell-to-cell communication.

Communication between astrocytes and neurons may aid memory. Adding glutamate to cell samples of astrocytes prompts them to produce special molecules that nourish neurons, known as **neurotrophins**, that are key to memory function. In one recent study, injections of trophic factors into the brains of rats boosted the biological mechanisms known to relate to memory and improved the rats' performance in a memory task. This all may mean that glutamate release from neurons triggers astrocytes to produce neurotrophic factors, which then help neurons process information for memory.

High blood sugar (hyperglycemia) is implicated in increasing the likelihood of seizure. Ordinarily, **insulin** prods the liver to decrease its production of glucose. It also helps the body's fat and muscle tissues use glucose in the blood for energy. Insulin has many roles including stimulating and balancing immune function, stimulating revascularization, stimulating neuron and oligodendrocyte growth, reducing cell death, stimulating myelination and re-myelination of neurons, stimulating differentiation and proliferation of neural stem cells, increasing permeability and transport of nutrients and wastes across cell membranes and the blood-brain barrie r. (Oligodendrocyctes are the structures responsible for myelination. The presence of NMDA receptors in oligodendrocyte processes presents a mechanism by which demyelination might occur under excessive glutamate/Ca2+ conditions.)

LACK OF GLUTAMATE CLEARING

Patients suffering from temporal lobe epilepsy (TLE), experienced increased extracellular glutamate levels in the hippocampus both during and after clinical seizures. These increased glutamate levels could be the result of malfunctioning and/or downregulation of glutamate transporters, indicating impaired clearance of glutamate released by neurons. Glutamate is predominantly cleared by glial cells through the excitatory amino acid transporter 2 (EAAT2) and its subsequent conversion to glutamine by the glial enzyme glutamine synthetase.

Cerebrospinal Fluid, limbic, temporal and striatum glutamine concentrations are implicated in schizophrenia, bipolar disorder and major depression. The answer, it appears, is by cleaning up their synapses. For **LTP** to occur, a presynaptic neuron must release the glutamate in a continuous manner. Normally, glutamate is removed from the synaptic cleft by housekeeping proteins, known as glutamate transporters, in the postsynaptic neuron. Suspecting that this glutamate-removal system might play a role in maintaining input specificity,

An increase in the extracellular concentration of glutamate and aspartate before or during seizure onset, suggesting that either enhanced amino acid release or impaired uptake contributes to seizure initiation. Glutamate antagonists are potent anticonvulsants and provide significant protection against brain damage following stroke or traumatic injury, but can have cognitive side effects. Anticonvulsant compounds which act on sodium channels and reduce ischemia-induced glutamate release, are cerebroprotective but are free from the cognitive side effects of NMDA-receptor antagonists.

In developing a supplemental protocol for kundalini we would do well to consider Ward Deans article *Seizures: A Nutritional Approach at* www.vrp.com/

For seizure Ward Dean M.D. suggests:

Magnesium: 500-1,000 mg/day, Selenium: 100-200 mcg/day, Taurine: 1-3 gm/day, L-carnitine: 1-3 gm/day, GABA 500-1,000 mg/day, Vitamin E: 400-800 IU/day, DMG (dimethylglycine): 50-200 mg/day, Pregnenolone: 100-500 mg/day, Kava Kava: 200-800 mg/day; Vitamin B complex, w/special emphasis on: Vitamin B1: 50-100 mg/day, Vitamin B6: 200-500 mg/day, Folic Acid: 400-1,000 mcg/day

BLISS

Bliss is synonymous with kundalini

Before starting this section on bliss I wish to clarify that the experience of spiritual awakening is not "just" a bunch of chemicals. Just because a particular subjective experience can be the "cause of" or "caused by" a particular release of chemical or electrical phenomena, doesn't mean to say that the subjective experience can be reduced "down" to that physical chemistry. All manifestation has its atomic, chemical and electrical component. The apperception of "interiors" realized in the subjective experience of phenomena is what makes us human.

During and forever after a kundalini awakening there is constant bliss to varying degrees. Some of the chemicals involved in bliss include the endorphins, endogenous cannaboids, sex hormones, nitric oxide, dopamine, oxytocin, ionized cerebrospinal fluid, dopamine, phenylethylamine and possibly the ATP molecule itself. The concentrations of these various bliss agents change with the different kundalini events, the stages and the seasonal and lunar variations in the flux of kundalini.

Normally we just hum along in our conditioned everyday consciousness, and then life seems to perturb this throwing us into heaven or hell depending on the circumstances. Hell...the death of a loved one, a breakup, losses of various kinds can be a direct route to Heaven. Any arousal of the Hypothalamic-Pituitary-Adrenal Axis will cause increased activation of the opiate systems, whether the arousal be stress, shock, trauma, freeze, sports activity or sexual attraction. Kundalini represents perhaps the greatest ongoing efflux of opiates. Sometimes the bliss is so acute that it makes rational thought all but impossible. The point is not to fight the bliss, or fall into compulsive degradation using the bliss as though it were a drug or alcohol binge. While undergoing excessive bliss there is indeed a need to rehabilitate ones faculties by pursuing challenging cognitive tasks. If this is not done chances are one could remain a spiritual bum for the rest of ones life, riding on the high of ones own internal chemistry.

Bliss might be directly associated with healing energy for it does dissolve the pain-body and impact of past trauma on the body and it does dissociate one from ones past pain, however it doesn't automatically create happiness. One can be blissed out and simultaneous be in ennui and depression due to adrenal burnout and hyper-parasympathetic activity. Kundalini can leave one both less functional and with a reduction in spiritual faculty while at the same time being blissed out of our tree. So the whole thing is very complex and to navigate such waters we need to stay focused on the creation and integration of the Whole Human. Although there maybe a deepening or change of flavor of the bliss and a rounding out of other functions to rise above the dysfunction of being blissed out, I don't think one could classify bliss in stages and lines of consciousness, other than to say that bliss affects all states, lines and stages. The good news is that when we are well into our substantiation phase we can have our bliss and our high cognitive function too.

Bliss appears to be kundalini phenomena especially related to heart expansion and is a consequence of increased energy flow in the nerves. One of the functions

of spiritual bliss is to incapacitate the higher cortical functions rendering the individual "childlike" soft, malleable, changeable, open and to conserve energy and internal resources for the metamorphosis of the physical body that occurs. Normally our conditioned "I" is kept so busy, hypervigilant and preoccupied by the tasks of daily life and obligations that this "fall" into the spiritually receptive state doesn't occur. Hence the preponderance of unpopped humans populating the planet, all vigilantly remembering who they are.

Memory takes tremendous energy. The energy used in an effort to maintain the sense of who we are right now prevents us from discovering what we might become. Thus the normal tight hold (neurosis) we have over who we are, our place in the world, and our past...keeps kundalini at bay. Once lit however kundalini dissolves our neurosis, our pain-body, accumulated stress and trauma, and does so by essentially flooding the limbic brain with bliss making us somatically forgetting our past. All parts of the body can experience the flow of bliss, I have had bliss move through the digestive system, spleen, liver, pelvis, lungs etc… I have experienced bliss throughout the entire body, but I don't ever remember my adrenal-kidney area being in bliss

The loss of memory and mental faculty experienced from bliss, expanded states and kundalini occurs because the body's forgetting chemicals: anandamide, enkephalins, endorphins are produced in large amounts in the hippocampus and amygdala, and hypothalamus (limbic system). The increase in charge through these areas heightens the body's cannaboid and opiate systems. This acts in a healing fashion, to help our Pavlov's dog brain to forget past trauma, but it can incapacitate one to varying degrees. Thing to do is to not get anxious on top of the loss of faculty because that will only increase the stress, thereby increasing the "numbing/forgetting" chemistry.

To balance out the bliss, overcome the diffusion and lack of focus and recover our edge we need to drink lots of water, reduce food intake, breath into the belly, jump into cold water to regain lucidity, take long walks in nature, get around falling water, take doses of spirulina and yerba mate etc... The Nootropic Formula listed in the supplement section might help with handling the bliss by stimulating higher cortical function. But I think that a serious attempt at addressing bliss overload requires more environmental stimulation, like radical sports, radical nature, social support and skin-touch to produce endogenous wakeup chemicals. I think there might be something in pinching the end of the nose, for during evolution the limbic system grew out of the olfactory system, giving the end of the nose a sharp pinch seems to wake the brain up a little.

There is a tendency while in ecstasy to think: "I better not meditate or I will increase the bliss and become a total basketcase." This is a very common situation with active kundalini. Whereas forms of meditation or focusing the energy in different parts of the brain and heart really helps us to cope with excessive bliss. You see the bliss can put one into a narcotic sleep—a mythic uroboric dreamland in which we are no longer functional to ourselves or others. One can also automatically resist the bliss and then it becomes just another thing to run

from with our addictions or small-nature. However by drawing the energy up, maintaining a seat in the **Mind's Eye** and deep breathing one can essentially ride the dragon, (like riding the spice worms in Dune). Meditation while already blissed out with active kundalini is the most effective period for growth. There is a chance of regression, brain damage and resorting to addictions and distractions if we do not "proactively cultivate" the Force. (The Mind's Eye is a current of Presence, like the mindful "pilot seat" of the brain, between the Third Eye and the brainstem, which allows a detached witnessing.)

WITHDRAWAL SYMPTOMS

N*euroadaptation* is the principle element of physical addiction and drug tolerance. When the brain is frequently exposed to a drug it adapts to compensate for the presence of the drug; so that if the drug is stopped, it leaves the brain 'overcompensating' and in disequilibrium in an unaccustomed way. Whatever pain or anxiety condition the drug was masking returns with a vengeance in a "rebound" experience. During kundalini ecstatic peak events and stages our brain would become neuroadapted to excessive levels of "up" chemicals, so that when that cycle is over and chemistry flips the other way we can go through an extreme withdrawal. Hence both the Dark Night experience and the exhaustion phase are often accompanied by withdrawal symptoms such as anxiety, depression, memory problems, lack of motivation, and feelings of emptiness. Because of both neuroadaptation and neuron damage kundalini awakenings can be just as much a downer trip as a high, especially to the uninformed.

Nathan Luno has an amazing website on the use of the drug Ecstasy; especially check out his neurotoxicity section. Kundalini researches might be interested in this as an information source. Specifically in the area of how like Ecstasy, kundalini might create excess dopamine release that could damage serotonin receptors in the brain. Kundalini is likely to increase the release of transmitters from synapses because of the increased charge in nerves, increased Ca2+, NO and ATP, heightened adrenaline and norepinephrine. The enzyme monoamine oxidase (MAO) breaks down the neurotransmitters norepinephrine, serotonin and dopamine in the brain. MAO's occur in high concentrations in the blood, liver, stomach, brain and intestines. During Kundalini or Ecstasy use however the brain maybe so loaded with neurotransmitters that the available MAO maybe insufficient to deal effectively with them. So during the extreme ecstasy (up) and dark night (down) events there is likely to be dopamine damage to the serotonin receptors, similar to that which occurs on the drug Ecstasy. *"The dopamine, once in the serotonin cell, gets broken down by the monoamine oxidase into hydrogen peroxide which oxidizes a healthy cell into a deformed and no longer fully functioning one."* http://thedea.org/neurotoxicity.html

KUNDALINI AND THE MUNCHIES

Kundalini can stimulate **compulsivity,** until we reach the point where we can dive into the bliss and Emptiness without resistance. It's like the blissed brain is seeking to drown itself in more and more bliss. This is a point in all this where we

might use food or drugs to actually try to zone out and avoid the extreme ecstasy of kundalini, if we haven't built up our bliss-skills management! During extreme ecstasy there is less self-control somehow, probably through limbic override of the prefrontal cortex. Regulating ourselves in these deep waters is where a spiritual teacher or friend can come in handy.

There are natural cannaboids in the brain (eg: anandamide), as part of the bliss, pleasure-reward, and anaesthetizing/numbing function. I suspect the extra kundalini firing through the brainstem, limbic system, amygdala etc... turns on the bliss making chemistry pretty permanently. This has many consequences: modulating the raw, unrepressed emotionality that occurs on kundalini, giving a background of bliss to all kundalini events and phenomena. But it can also reduce motivation, make one loose one's sense of self, and could promote a false sense of security while one's life tumbles down around one. Considering the loss of normal adaptive left-brain functions that can occur with kundalini, the bliss gives a background of equanimity and grace, and helps to reduce the terror, worry and anxiety that would normally arise in association with incapacitation of our faculties. The world could be going to hell in a hand-basket, but it all looks wonderful to us.

The level of cannabinoids in the hypothalamus is controlled by a fat-regulating hormone, called leptin. This hormone keeps tabs on the energy status of the body and helps regulate body weight. Leptin is the primary signal through which the hypothalamus senses nutritional state and modulates food intake and energy balance. Leptin reduces food intake by upregulating appetite-reducing neuropeptides, and downregulating appetite-stimulating factors. When leptin levels are low, cannabinoid levels rise to stimulate appetite. Marijuana overwhelms the normal system and swamps the receptors, making pot smokers want to eat everything in sight.

There are three groups of opiate neuropeptides—*Endorphins, Enkephalins and Dynorphins.* It is the levels of these neurotransmitters in your brain that governs your mood and degree of compulsive behavior. Anything that disrupts their natural balance will interfere with character, will, morality and resolve. Insufficient enzymes available for the manufacture of these neurotransmitters will reduce their number in the brain. An increase in blood acidity decreases the permeability of the Blood Brain Barrier, this reduces the supply of the amino acids that are the precursors to these neurotransmitters. Remember body acidity rises with too much animal protein, fats and processed foods, too much coffee and soda, too little vegetables and alkaline mineral reserves, too little exercise and oxygen. Fear, anger and other negative emotions also increase body acidity. Positive ions (H^+) in the air such as during a thunderstorm, in urban environments and in hot winds like the Santa ana or Chinook also increase body acidity, this explains the increase of violent behavior under these conditions.

Genetically obese people and binge eaters release abnormally large amounts of these opioid neurotransmitters in response to food. These opioids mediate the cravings for foods high in fats and sugars. The opioid receptors in the brains of

these people are probably working overtime resulting in an artificially high need for these opioids. Like heroine these opioids are addictive. Substances which block the opioid receptors or prevent the breakdown of the opioids can help reduce the craving for foods high in fat and sugar. Very high doses of vitamin C such as 6–8 g per day may reduce the addictive withdrawal symptoms of dieting or caffeine because it slows down the breakdown of the opioids in the brain. The amino acids D–phenylalanine and D–leucine both retard the breakdown of opioids in the brain so can be used to reduce food cravings and drug addiction.

I wish to add a caution against using cannabis while in active kundalini. Using dope on top of the huge increase in opiates would probably add to the general anaesthetization. Leading to an inability to form a self-center of focused-ego and personal-drive. Personally I think there is so much unusual stuff going on in the transmuting body I would want to get a clear witness to the natural phenomena and unfoldment of symptoms. I however still drink coffee, which is grounding and helps the energy to return to the egoic-prefrontal lobe function in order to "fend" for oneself in the world. But even coffee on a nervous system that is in sublime reconstruction is not a good idea because of the extra cortisol production, and the many destructive compounds within coffee.

Until we stop resisting the Kundalini we may try to stimulate ourselves with sugar, caffeine and/or drown ourselves in fat and protein. Because we are more limbicly and sensually activated we could have problems with run away urges. The increased compulsivity is the result of both the egoic self-seeking comfort for the loss of "self-ground" and running from the larger sense of being; but it is also caused by the changes that go on in the brain. We need to study this intently and work out what needs to be done in order to support our growth without becoming radically compulsive. Deliverance of our appetites to a higher power and purpose like the 12 step program might work. When we stop resisting we learn to thrive on the pure energy of our Self, and to clarify, purify, and deepen our experience of Being.

ERASING FEAR

Endocannabinoids made by the body, extinguish the memory of adverse stimulation. Studies found that a process involving activation of endocannabinoid receptors is essential in the extinction of conditioned fear. The release of such opiates during the excessive firing of kundalini is one of the main ways that the brain is eventually rewired to a less hypertonal and less defensive (reptilian) nature. The synaptic plasticity to change fear related memories requires activation of ***NMDA receptors.***

The 'endocannabinoid' system is involved in the *extinguishing fear-related memories*. The amygdala, is crucial in acquiring and, possibly, storing the memory of conditioned fear. The extinction of the memory of fear requires neurons in the basolateral amygdala, and changes in the strength of their connection with other neurons ('synaptic plasticity') that depend on the NMDA glutamate receptors. There seems little doubt that activation of these glutamate receptors in the basolateral amygdala is somehow required for extinction.

The receptors for the endocannabinoids *anandamide* and *2-arachidonylglycerol*, are some of the most abundant neuromodulatory receptors in the central nervous system and are expressed at high levels in the limbic system, cerebellum and basal ganglia. The classical behavioral effects of exogenous cannabinoids such as sedation and memory changes have been correlated with the presence of these receptors in the limbic system and striatum. Endocannabinoid release serves to increase synaptic plasticity and inhibition of neuron firing.

The depolarization of neurons by repetitive activity led to the release of endocannabinoids, which diffused to the terminals of other neurons and inhibited neurotransmitter release. This effect was found to be transient in the hippocampus and cerebellum and long lasting in the striatum. The endocannabinoids reduce GABA release in *interneurons* of the basolateral amygdala, thereby helping to extinguish the fear-conditioned response. Not sure why inhibiting GABA release will reduce fear memory, although GABA which is normally inhibitory, sometimes works in cahoots with glutamate as an excitatory neurotransmitter. GABA release is active in the immobilization of the freeze mechanism, and the calming down after fight-or-flight, so GABA might serve to lock nerves into a certain fear conditioning and reduce synaptic plasticity.

ANANDAMIDE THE SELF TRANSCENDENCE CHEMICAL

One of the most significant finds I made from self-observation is that the ecstasy of kundalini is generated not only by the central nervous system but also generated at the cellular level in every cell of the body. The theory being that the biophotons from high kundalini flow produce the opiate anandamide from the fatty acids in the cell membranes. Similarly the increased production of eicosanoids and prostaglandins would mean heightened cell-to-cell communication, which would translate into greater psychic abilities, supersensory perception and the opening of spiritual levels of consciousness. Not to mention that the biophoton field itself represents the most profound form of communication and integration in the bodymind. The sections that are related to the cellular ecstasy theory include this piece on "Anandamide" and also the Biophotons and Eicosanoid sections.

Anandamide is a recently discovered messenger molecule that plays a role in pain, depression, appetite, memory, and fertility. Its name comes from *ananda*, the Sanskrit word for "bliss." Anandamide is synthesized enzymatically in areas of the brain that are important in memory and higher thought processes, and in areas that control movement. This implies that anandamide's function is not just to produce bliss.

The ability of brain tissue to enzymatically synthesize anandamide and the presence of specific receptors for it, suggest the presence of anandamide-containing neurons. Anandamide is an eicosanoid, that is it belongs to a group of substances that are derived from arachidonic acid, including leukotrienes, prostaglandins, and thromboxanes. Anandamide is basically a compound that reduces activity, such as reducing the formation of many stimulatory neurotransmitters. The human brain muscarinic acetylcholine receptor (mAChR), which is involved in memory function is inhibited by arachidonic acid and is also inhibited by anandamides

Anandamide's long hydrocarbon tail makes it fat-soluble and allows it to easily slip across the hydrocarbon-rich blood-brain barrier. Its shape strongly resembles that of THC (tetrahydrocannibol, the active ingredient in marijuana), but unlike THC, anandamide is fragile. It breaks down very quickly in the body, which is why anandamide doesn't produce a perpetual natural 'high'. Scientists reasoned that since THC is not naturally present in the body, there must be a natural key molecule with a very similar shape that activates this receptor. The key was isolated by Israeli scientist Raphael Mechoulam in 1992 as being arachidonyl ethanolamide, later called 'anandamide':

Learning and memory is established by connections between nerve cells by either making new connections or breaking old ones. Repeated use of a connection makes it grow stronger while lack of use can cause the connection to be lost**.** Some biochemical evidence suggests that anandamide plays a role in the making and breaking of short-term neural connections. Anandamide might be one of the bliss making chemicals that helps to produce a self-forgetfulness by which we can separate more fully from our past. Animal studies suggest that anandamide induces forgetfulness and calm. Animals treated with anandamide walk less and lay down more; they have reduced body temperature and slower respiration.

Three anandamide-like compounds were found in dark chocolate by Daniele Piomelli and co-workers at the Neurosciences Institute in San Diego [Piomelli, 1996] www.nsi.edu. Eating chocolate is not advisable due to the negative effects of sugar on protein structures, the feeding of candida, and fermenting GI Tract contents. However raw cacao beans and cacao powder might be just the thing for overcoming down-cycle blues. They can be purchased at www.rawfood.com as Cacao Nibs (peeled raw/organic cacao beans). Apparently raw cacao beans provide MAO inhibiters, which increase the serotonin and other neurotransmitters circulating in the brain. Cacao beans are said to help reduce appetite, however we all know that marijuana increases appetite, so I don't know the role these endogenous cannabinoids have on appetite.

Anandamide is not the only THC-like molecule used for signaling in the brain. Piomelli's group has found a new molecular key that closely resembles anandamide [Piomelli, 1997]. Naturally produced sn-2 arachidonylglycerol (2-AG) can also lock into the bliss receptor. 2-AG is present at 170 times the concentration of anandamide in some regions of the brain. PiomellI thinks that 2-AG and anandamide perform complementary functions.

The endogenous cannabinoids anandamide and 2-arachidonylglycerol maybe produced under distinct physiological conditions or in distinct brain regions. Anandamide activity was found to be highest in the **hippocampus**, followed by the thalamus, cortex, and striatum, and lowest in the cerebellum, pons, and medulla. Thus it has more of a direct effect on emotional tone and cognition, than as an inhibitor of autonomic and motor function.

Outside the brain, anandamide acts as a chemical messenger between the embryo and uterus during implantation of the embryo in the uterine wall. Thus it's one of the first communications that occurs between mother and child. In

animal studies the highest concentrations of anandamide were found not in the brain, but in the uterus just before embryo implantation. Anandamides play a survival role for young mammals in their instinctive suckling behavior and lack of anandamide levels can cause spontaneous abortions in mammals.

There are important functional relationships between endogenous cannabinoid and opioid systems. Levels of the endogenous opiate anandamide in the hypothalamus regulate compulsivity and appetite initiation. Research found endocannabinoids are involved in **retrograde synaptic inhibition** in the hippocampus, in long-term potentiation and memory, in the development of opiate dependence, and in the control of appetite and food intake. They also suggested the existence of as yet unidentified cannabinoid receptors in the cardiovascular and central nervous systems and in macrophage-mediated helper T cell activation.

A decrease in GABA inhibition both facilitates the induction of long-term potentiation (**LTP**), and promotes the hyperexcitability of epileptic seizure. Scientists investigated how the nervous system maintains its discriminating control on GABA's inhibitory effect, in order to promote memory by LTP and prevent seizure. They found that pyramidal cells, the ones towards which inhibition is directed, may regulate their own state of inhibition by sending a signal backwards across the synaptic junctions (retrograde synaptic inhibition) and thereby causing the inhibitory interneurons to stop releasing GABA temporarily. This signal from the pyramidal cell to the interneuron is the endocannabinoid molecule anandamide.

The cerebellum is a brain structure vital to many functions including learning and memory. These functions are controlled by ion channels in the Purkinje cells of the cerebellar cortex. This is a specific type of nerve cell with more branches than any other kind of nerve cell, which carries information output by the cerebellum and possess a great deal of control over the refinement of motor activities. It was found that Purkinje cells release endogenous cannabinoids in response to elevated calcium, thereby inhibiting presynaptic calcium entry and suppressing transmitter release.

These endogenous cannabinoids mediate retrograde signals from postsynaptic neurons to presynaptic terminals in the CNS. Endocannabinoids can be released from postsynaptic neurons following depolarization-induced elevation of intracellular Ca2+ concentration. The released endocannabinoids act retrogradely onto presynaptic cannabinoid CB1 receptors and suppress inhibitory or excitatory neurotransmitter release. This type of modulation has been termed depolarization-induced suppression of inhibition (DSI) or depolarization-induced suppression of excitation (DSE).

The endocannabinoid-mediated retrograde modulation is an important and widespread mechanism for the regulation of synaptic transmission in the CNS. Endocannabinoid release and resultant retrograde suppression of transmitter release are also triggered by activation of certain glutamate receptors (mGluRs) or acetylcholine receptors (mAChRs) in the postsynaptic neurons. This pathway can work independently or cooperatively of the depolarization-induced mechanism. It

is shown that DSI is enhanced significantly when these glutamate and acetylcholine receptors are activated simultaneously, and that this enhancement is much greater than expected and cannot be attributed to mere increases in Ca2+.

MORPHINE

Nerve cells communicate by releasing special 'key' molecules that are intercepted by other nerve cells downstream. When the key molecule at right locks into the receptor on the surface of a nerve cell, it opens a door in the membrane that allows chloride ions to flood into the cell. This equalizes charges inside and outside the cell and prevents the cell from firing. The keys must be removed again from the lock somehow, or the nerve cell will be permanently prevented from firing. Certain enzymes are produced that remove (by degrading and destroying) the keys after a certain amount of time, so that the nerve cell can go back to work.

Drugs that have a powerful effect on the central nervous system often mimic natural molecular keys. For example, morphine is a potent painkiller that was found to lock into an 'opiate receptor' present on nerve cells and blocks enkephalins out. The body's key removing enzymes can't pry it from the receptors. The endogenous equivalent to morphine are **enkephalins**. Although morphine is just a forgery of enkephalins, it's much more powerful (and more addictive) than the enkephalins because the key-removing enzymes can't pry it from the receptors.

Christina Grof had an experience of morphine stopping kundalini during childbirth. *"During the birth of my first child, for which I had prepared with the Lamaze method of breathing (very much like yogic pranayama), this enormous spiritual force was released in me. Of course, I didn't understand it and was given morphine to stop it as soon as the baby was born.... Then the same thing happened when my second child was born. This all led to more and more experiences. I threw myself into yoga, although still not acknowledging it as a spiritual tool. My meeting with Swami Muktananda really blew the lid off everything. He served as a catalyst to awaken what I had been resisting, which was kundalini (the universal life force). I felt something snap inside me. A powerful force was unleashed in my body, and I began to shake uncontrollably. Electrical tremors ran from my toes and legs through my spine to the top of my head, where brilliant mosaics of white light exploded. A new, involuntary breathing rhythm overrode my practiced Lamaze pattern. I was excited and terrified. As soon as my son Nathaniel was born, I was given two shots of morphine, which returned me to normal. I felt fearful, and very embarrassed that I had cost control of myself. A more powerful version of the same thing happened two years later, when I delivered my daughter Sarah."* Christina Grof http://www.creativespirit.net/learners/counseling/docu35.htm

PHENYLETHYLAMINE

Increase in vasopressin during the heart expansions and inner-conjunctions might be one of the factors involved in cortical shutdown during extreme kundalini events. Vasopressin (VP) is a peptide neurotransmitter in the limbic system synthesized in the medial amygdaloid nucleus in the presence of sex steroids, transported to other limbic structures such as the hippocampus and septum and secreted there by a calcium-dependent process. Its excitatory action on the

inhibitory interneurons produces near-total shutdown of electrical activity of the efferent fibers of pyramidal cells, the projection neurons of the hippocampus.

During the Inner-Conjunction/silver cord when massive orgasmic energy streams through the body (what I call the peak of the influx stage), the dominant hormone might be the amphetamine-like love chemical **Phenylethylamine (PEA).** This neurotransmitter occurs during the infatuation state of romantic love to promote elevated mood, promotes alertness, confidence, openness to risk, essentially leading to a state of excitement. The levels of this stimulant also spike at orgasm and ovulation.

The drug **Ecstasy (MDMA)** is a phenylethylamine, and there are similarities in the symptoms of kundalini and use of Ecstasy: expanded heart, feeling of love, oneness with others, amplified senses and increased energy. Phenylethylamine along with dopamine no doubt propel us into the "super-sensoral realm" associated with the peak of awakening. When all senses are greatly heightened, one has transcendental vision, celestial music plays in one's head and the muse is practically sitting on one's shoulder. The incredible love and heart expansions that occur during the influx and transmutation are similar to the heart opening that happens on Ecstasy. Nitric oxide, oxytocin and vasopressin are probably key in the dilation of the vascular system that occurs during heart expansions.

Levels of PEA are increased by monoamine oxidase inhibitors. Moderate exercise raises PEA levels for most people. Interestingly PEA might be the agent of bliss associated with Eureka experiences, profound insight, thrill seeking and risk. As such geniuses and daredevils no doubt produce more than the average person.

Our bodies can convert the amino acid phenylalanine to tyrosine and PEA. Tyrosine is a precursor to norepinephrine and dopamine. D-phenylalanine, which does not normally occur in the body or in food, is metabolized to PEA. Although L-phenylalanine can be converted to PEA it is preferentially converted to L-tyrosine. Since D-phenylalanine is not widely available the mixture DL-phenylalanine is most often used as an anti-depressant. Because other amino acids compete with phenylalanine for entry into the brain it needs to be taken on an empty stomach. This shortens the time it takes for the brain to convert it to norepinephrine. (See Neurotransmitter Food Formula.)

The "living water" or amrita is connected with the alchemist's Philosopher's stone. Amrita is both produced when the conventional consciousness of the ego is offline and continues to dissolve the myopia of the egoic self-sense by radically restructuring the brain and body. The Elixir of Life is none other than the amrita produced by the glands in the crystal chamber (circumventricular organs) that is the Solutio which turns a solid into a liquid, back to the prima material. Solve et cogula—to dissolve the current limited sense of oneself and re-form it within a cosmically expanded template...in response and response-able to the vibe of the Universe. A sublime unwinding.

The opiate substance secreted from the pineal gland during Samadhi has been variously called Nectar of the Gods, ambrosia, amrita, and the Living Water. Gurus like Sai Baba claim to materialize amrita and can shaktipat others into generating their own nectar. It is said that to experience amrita is to be bestowed with immortality, that is to be freed from the cycle of birth and death...hence liberated. The term *Amrita* is Sanskrit for "elixir of immortality," it literally means "deathlessness". This has obvious parallels to "ambrosia" the name of the classical Greek "food of the gods" which means "no death."

During shaktipat, inner-conjunction or through initiation in meditation this nectar is produced and drips down the back of the throat. Perhaps an associated phenomena to the generation of the nectar, is the intense light of a Thousand Suns that occurs sometimes during its "manufacture." This secretion gives one the experience of Timelessness, and being a divine God or Goddess. It is "sweet" in taste and in sensation—it is described as nectar, honey, gold dust, euphoric, ecstatic, intoxicating and gives the feeling of being imbued with holiness.

"My own experience of amrit is that it started to occur to me during times of very concentrated, long periods of sitting meditation, and usually happened while practicing the Khedari Mudra (tongue upward on palate). It would then occur spontaneously without the mudra and at times during the day for no apparent good reason. There is a definite sweet taste involved with a sort of swell of ecstasy experienced as well that can last for hours, perhaps days. It is always extremely pleasant and 'heightening'. The subject/object perspective can stay largely intact while experiencing 'Amrit' and one can remain highly functional (as opposed to a samadhi that transcends all body awareness). I do not recall ever being aware of amrit during a heightened experience of inner light (which tends to drown out and overwhelm any other perception)." Michael Roark

Here is an account of amrita produced as a result of shaktipat from Sai Baba. From this it is apparent that one can receive shaktipat without any devotion or interest in the Guru… *"In about 1971-72 I had reluctant darshan of Sai Baba. I say 'reluctant' because I had pretty powerful prejudices against him. Anyway, to make a long story short, he came up to me, tapped me on the top of the head and said, "Acha, very good" and I went immediately from a state of lethargy, sunstroke and just plain bad mood to (I assume) samadhi. I'd experienced it before in meditation, but not nearly so deeply or suddenly. The physical symptoms included my tongue sticking to the roof of my mouth, my saliva becoming very light and sweet and almost total suspension of breath. Another physical symptom was that I went spontaneously from sitting slumped over to bolt upright. What breath there was seemed to feed straight into my brain and bliss traveled from my brain through my whole being. That's what I remember, but mostly I just remember bliss. When I came to, the sunstroke was gone. Remarkable as that experience was, I never felt drawn to hang around Sai Baba. I find it noteworthy that the one who transmitted 'shaktipat' or 'amrita' (not sure which came first) was the one I felt absolutely no desire to surrender to."* Rob Schneider

I interpret Robs experience as simple biophysics...kind of like being plugged into a light socket and getting a jolt of electricity. And this occurs quite apart from the secondary layer of our belief, intention and projection. It shows that although transference/projection often occurs with Gurus, it is not necessary in order for the organic physical response of Shaktipat to occur. That is the energetic "electrocution" occurs regardless of the contents of the conscious or subconscious mind. The point I want to stress here, is that the physical chemistry is occurring often quite apart from the contents in our minds, and yet will amplify and affect those contents. Nothing shows us the transpersonal nature of our own existence as well as a kundalini awakening, for we become intimately aware that we "know not who or what we are" and that an enormous Spirit is living within and around us.

The pineal gland is not protected by the blood brain barrier and has a very high perfusion rate of blood, second only to the kidney. The main function of the pineal gland is its role in mediating circadian rhythms of the animal through the production of the hormone melatonin, from its precursor amino acid tryptophan. The pineal gland is most active in early morning hours…hence meditation is often undergone at this time. The pineal gland is the only singular organ in the brain and is located near the upper end of the spinal cord, which ends or terminates in the oldest anatomical region in the brain. Taoists call the center of the brain between the pineal and the pituitary "the Crystal Palace." It's between the old brain at the back and the new brain at the front of the head, between the left and right hemispheres, sitting above the two wings of the mysterious ventricles. It rests between the two large cerebrums at the anterior end of the cerebellum. The cerebellum is one of the oldest features of the brain, involved in coordinating muscular activity in the body. It's said that when the pineal gland is activated it becomes illuminated like a thousands suns. The tangible sense of white light flowing within and without maybe when the pineal gland is highly activated producing DMT type chemistry during the height of the peak.

When the Crystal Palace lights up a secretion from the area might be released into the back of the throat. "The White Drop" or Pearl is an intense opiate rich solution that acts to open the heart and completely synchronize the brain with the Heart. "*In Tibetan Buddhism, this is the source of the "White Drop" that descends to the heart center, where it mixes with the ascending "Red Drop" attain an enlightened body and mind. All this activity is seen as a cosmic sex act in the head. The phallic-shaped pineal gland releases a pure white liquid light that impregnates the nearby bi-lobed pituitary gland, which then releases hormones in the blood that inaugurate a Second (Spiritual) Puberty in the body."* www.alchemylab.com/circulation_of_the_light.htm

The pituitary gland is located inside a round bony cavity that is separated from the **sphenoid sinus** by a thin bone that forms the roof of the sphenoid sinus. The sphenoid sinus is the most posterior sinus. The drainage from the sphenoid is almost directly down the throat from an ostium (hole) that opens into the posterosuperior part of the nasal cavity. The sphenoid sinus is adjacent to the main nerve that is responsible for vision, the optic nerve. The main artery that goes to the brain, the carotid artery, travels along the wall of this sinus.

Also nerve impulses from the eyes and ears pass through the colliculi with the pineal directly overhead separated by CSF. Thus secretions from the pineal would have a direct impact on the colliculi. The **colliculus** is part of the brain that sits below the thalamus and surrounds the pineal gland. It is involved in the generation of eye movements and hand-eye coordination. The colliculus receives visual, as well as auditory inputs, and its deeper layers are connected to many sensorymotor areas of the brain. The colliculus as a whole is thought to help orient the head and eyes toward something seen or heard.

During initiation of the Crystal Palace hormones including oxytocin and vasopressin are released from the pituitary into the blood stream to facilitate the metamorphic birth. The fact that the nerves and blood vessels that feed the eyes and middle ear pass through the cavernous sinus either side of the sphenoid sinus leads us to speculate on the mechanisms behind both Celestial Music that is heard when the Crystal Place is lit up, and changes in the eyes such as light emerging from them, changes of consciousness seen in the eyes and faculty of transcendental vision itself.

When the Crystal Chamber is lit transcendental vision occurs. **Transcendental vision** probably occurs due to increased kundalini flow raising dopamine and phenylethylamine etc... All kind of changes happen in the retinas and occipital lobes, including increased ATP production acting as a neurotransmitter and histamine increasing blood flow in the brain, and increase in nitric oxide metabolism. The end result being that one has an increase in visual acuity, inner visions, inner lights, seeing auras and vivid dreams. Dreams do not trigger awakening so much as are co-emergent with them. Because of the malleable nature of the psyche while we sleep we tend to have more spiritual initiatory and growth chemistry while we sleep than we do in our waking experience. Having a dream life that is precognitively intimately tied into waking life, is a very common phenomena with kundalini awakening. In fact one is not really awakening or really "alive" without this merging of levels phenomena. If you try the drug Ecstasy you are likely to see auras, and have transcendental vision so there must be some similarity in the chemical mechanism between Ecstasy and kundalini. (See Superfluidity)

Here is a description of the release of amrita during sex while undergoing a kundalini awakening initiated by LSD: *"During continued sexual activity, at the minutes just prior to orgasm, I became aware that there was a fluid being secreted from the upper, forward part of my throat/nasal cavity, roughly at the height of the nose (amrita). It seemed closely related to the extended sublimation of semen, which I had been practicing for some time.*" Mahan Atma
http://www.erowid.org/experiences/exp.php?ID=10774

I suspect that **amrita** is a mixture of endogenous cannaboids, enkephalins, glutamate, oxytocin and vasopressin and Ca2+ ions and polarized water that have been generated by glial and neurons, accumulated in the cerebrospinal fluid and collect in the ventricle underneath the pineal gland (possibly finding its way to the sphenoid sinus under the pituitary). At a point of maximum excitation, very much like an orgasm, this fluid is excreted out from the sinuses and into the back of the

throat. In a similar fashion amrita is excreted out of the G-Spot area of women during sex. It would be interesting to compare the chemical constituents of these two forms of amrita.

In order to be extruded from the brain during what amounts to a brain orgasm, the likely properties of Amrita are: Small molecular size, lipid soluble, hydrogen bonding increasing the H+ positive charge, affinity for carrier mechanisms, produced in high concentration during maximum excitation. The amrita is forced out of the brain at the peak of ecstatic charge, not for any purpose in itself perhaps, but because there is simply too high a hydraulic and ionic pressure within the Cerebrospinal Fluid (CFS) that it is forced out of the ventricles, and into the sphenoid sinus. In the joint Samadhi of tantric union however this secretion would act to bond the individuals in an indescribable union of mind, body and soul. (We need an anatomist to tell us whether in extremely altered conditions whether a transfer of CFS from the ventricles to the sphenoid sinus is possible.)

Factors of kundalini and tantric initiation that might influence the efflux of a potent secretion of CFS that has been altered through hyperactivation of the pineal and pituitary and other circumventricular organs include: •Increase in temperature, release of histamine which increases the pore space between cells in the vessel membranes and possibly increasing the permeability between ventricles and sinuses. •A higher concentration of ions in the CSF increases the electrochemical gradient with the membrane of the opposite charge increasing diffusion. •Ionized water molecules with changes in the bonding angles. •Increased cerebral blood-flow, blood pressure and oxygen content of the blood, from HPA axis activation and increased breathing. •Increased production of CSF itself creating greater hydraulic pressure. •Facilitated diffusion through a change in transporter molecule in the membrane by specific amino acid, peptide or opiate. •The negatively charged membrane surface maybe triggered into absorptive-mediated transport by electrostatic interaction with positively charged substance (Ca 2+ or H+).

As far as the primary active ingredient of amrita goes besides the opiates which give a profound analgesic effect, the "wakefulness" chemical is probably a tryptamine, phenethylamine or **phenylethylamine**, a chemical related to amphetamines and raises blood pressure and blood glucose levels. Research will probably find that many secretions from about five different organs including the pineal and pituitary may contribute to the mixture. That is the production of amrita maybe a joint effort of the circumventricular organs secreting into the CFS. High levels of opiates, oxytocin, vasopressin, phenethylamine, phenylethylamine and tryptamine would render the individual into an extreme heart expanding unitive experience, ie: Samadhi or Cosmic Consciousness. One becomes lucid within the dream of life and life is revealed to be a dream.

"I hypothesize that performing various breathing techniques, while concentrating on the third eye (pineal pseudo-location), will inevitably and imperceptibly stimulate the pineal to produce less melatonin and serotonin, which in turn brings about a change in consciousness, creating naturally the dynamic somatics of a truly religio-spiritual experience." Russ McClay, *The Pineal Gland, LSD and Serotonin.*
www.serendipity.li/mcclay/pineal.html

The pineal produces melatonin and serotonin. The amino acid percursor of serotonin (5-hydroxytryptamine, 5-HT) is tryptophan. Adequate levels of vitamin B6 are necessary for the synthesis of serotonin. Within the pineal gland, serotonin is acetylated and then methylated to yield melatonin. The highest density of melatonin receptors are found in the suprachiasmatic nucleus of the hypothalamus, the anterior pituitary and the retina. Melatonin is a hormone that communicates information about light and entrains biological rhythms including sleep-wake cycles and reproduction. The light-transducing ability of the pineal gland is why some call it the "third eye." Melatonin inhibits the secretion of the gonadotropic hormones luteinizing hormone and follicle stimulating hormone from the anterior pituitary. Much of this inhibitory effect seems due to inhibition of gonadotropin-releasing hormone from the hypothalamus.

As well as melatonin the pineal secretes other neuroactive peptides. Melatonin has the same indole structure as LSD but neither melatonin nor LSD is the psychoactive substance in amrita. More likely it is some form of tryptamine that the body produces, perhaps similar to 5-MeO/DMT. Or it could be a phenethylamine similar to Mescaline (3,4,5-trimethoxyphenethylamine). Mescaline made from the peyote cactus is one of the oldest psychedelics known to man and is used in spiritual ceremonies. Curiously it can produce a bright internal light. Phenethylamine is a natural compound biosynthesized from the amino acid phenylalanine that is believed to function as a neuromodulator or neurotransmitter.

Tryptamine is a naturally occurring compound found in both the animal and plant kingdoms and is an endogenous component of the human brain. The amino acid phenylalanine is the precursor for phenethylamine and the essential amino-acid tryptophan is the precursor for tryptamine, which is slightly psychedelic. Tryptophan when administered with methionine (another amino-acid known to methylate things) it produces methylated tryptamines, the two best studied being N-methyltryptamine (NMT) and N,N-dimethyltryptamine (DMT). Tryptamine and LSD have a common mode of action. Our bodies can convert the amino acid phenylalanine to tyrosine and phenylethylamine (PEA). Tyrosine is also a precursor to the excitatory neurotransmitters norepinephrine and dopamine.

Endogenous *Dimethyltryptamine* **(DMT)**, the naturally occurring chemical cousin of serotonin, is a widespread and essential brain neurotransmitter. Rick Strassman proposed that the pineal gland is responsible for manufacture of DMT. The pineal gland has the highest levels of serotonin, as serotonin is the precursor to melatonin. Melatonin is the primary pineal hormone, but Strassman thinks that the gland also creates DMT. *"Because it possesses the highest levels of the necessary enzymes and precursors, the pineal gland is the most reasonable place for DMT formation to occur."* P. 67 He says DMT maybe released during dreams, near-death, death, birth, and during meditation and mystical experiences.

DMT increases all pituitary hormones and beta-endorphins, vasopressin, prolactin, Growth Hormone, and corticotrophin (cortisol). It is proposed that DMT induced surge of beta-endorphins creates euphoria. Serotonin receptors are activated by DMT and Serotonin receptors regulate heart rate, blood pressure,

body temperature, pupil diameter. Apparently DMT is a small molecule not much larger than glucose and Strassman says that it is like brain food that is rapidly transported across the BBB.
DMT: The Spirit Molecule: A Doctor's Revolutionary Research into the Biology of Near-Death and Mystical Experiences by Rick Strassman MD.

CIRUMVENTRICULAR ORGANS

The term "circumventricular organs" refers to the highly-vascularized, specialized tissues distributed principally along the midline of the ventricular system from the forebrain to the hindbrain, bordering the 3rd and 4th ventricles. The CVO's include the pineal gland, median eminence, neurohypophysis (posterior pituitary), subfornical organ, area postrema, subcommissural organ, organum vasculosum of the lamina terminalis, and the choroid plexus. The intermediate and neural lobes of the pituitary are sometimes included and note the posterior pituitary releases neurohormones like oxytocin and vasopressin into the blood.

The subcommissural organ contacts the third ventricle covering the posterior commissure. It comprises a complex of neurosecretory ependymal cells known to secrete various glycoproteins into the CSF. The functional significance of these glycoproteins has not yet been determined. Except for the SCO all the circumventricular organs *lack a blood-brain barrier* and are recognized as important sites for communicating with the CSF, and between the brain and peripheral organs via blood-borne products. They have a high capillary density and it is through the CVO's that the brain is able to monitor the makeup of the blood. They all contact the cerebrospinal fluid of the ventricles or subarachnoid space. These organs have common morphological and endocrine-like characteristics that distinguish them from the rest of the nervous system and neural connections with strategic nuclei establishing circuitry for communications throughout the neuraxis.

The amrita secretions of the circumventricular glands are collected and released into the body through the third ventricle of the brain, which represents the **Holy Grail**. The quest for the Grail is the lifetime search for one's immortal nature—not for living eternally, but for living the eternal Presence Now! To drink from the Grail is to enter the state of primordial, transcendental vision. Although the myth of eternal youth is a hopeful exaggeration, the permeation of the blood with amrita does support the growth of a superior body of vitality and strength. Aging is slowed and the natural body (adhibhautikadeha) is slowly transformed into the divine body (adhidaivikadeha).

CEREBROSPINAL FLUID

Ventricles are hollow cavities within the brain that produce cerebrospinal fluid (CSF) from their lining, known as the choroid plexus. The choroid plexus consists of many capillaries, separated from the subarachnoid space by pia mater and choroid ependymal cells. Liquid filters through these cells from blood to become CSF. There is also much active transport of substances into, and out of, of the CSF as it's made. CSF normally contains no red or white blood cells and

little protein; all constituents of CSF are reabsorbed, including small molecules, proteins and microorganisms. There is a higher concentration of most molecules in the brain than in the CSF, this creates a chemical gradient between the two compartments. CSF allows for distribution of neuroactive substances, and is the "sink" that collects wastes produced by the brain: the main ones being C02, lactate and excess hydrogen ions (H+). It also serves as a heat sink.

The specific gravity of the cerebrospinal fluid is 1.003, as compared to 1.028 for the blood-plasma. Cerebrospinal Fluid CSF is higher in salt and lower in protein than blood plasma. CSF is a clear, colorless gel containing small amounts of protein, glucose, potassium, silica and relatively large amounts of sodium chloride. CFS passes through ventricles and into the fourth ventricle from which it escapes into the subarachnoid space through the median and lateral apertures. From there it circulates via *hydrostatic pressure* through the subarachnoid cisterns at the base of the brain, and then is directed up over the hemispheres and down around the spinal cord, flowing down to about the second sacral vertebrae. After it is reabsorbed into venus sinus blood via arachnoid villi; note that arachnoid villi become hypertrophied and calcified with age (arachnoid granulations). Arachnoid villi are small protrusions of the arachnoid (the thin second layer covering the brain) through the dura (the thick outer layer). They protrude into the venous sinuses of the brain, and allow cerebrospinal fluid (CSF) to exit the brain, and enter the blood stream. The arachnoid villi act as one-way valves. Normally the pressure of the CSF is higher than that of the venous system, so CSF flows through the villi and granulations into the blood. It has been suggested that the endothelial cells of the venous sinus create vacuoles of CSF, which move through the cell and out into the blood.

The CSF is moved under the influence of hydrostatic pressure generated by its continuous production and its circulation allows for homeostasis of the environment that surrounds the brain. CSF movement allows arterial expansion and contraction by acting like a spring, which prevents wide changes in intracranial blood flow. It is expected that the brain tissue and the CSF would have the same hydrostatic pressure in any part of the brain. The cerebrospinal fluid fills the cavity of the ventricles and the subarachnoid spaces. The subarachnoid space extends caudally around the spinal cord and ends in lumbar-sacral dural sac where it surrounds the cauda equina. The lining of the tube is composed of ependymal cells and cili, the beating of which is required for normal CSF flow. Cilliated cells are common throughout the respiratory and genital tracts and also in the *tympani*-the cartilaginous and bony margins of auditory tube, *Eustachian tube* connecting the back of the nose to the middle ear and *ventricals* of the brain.

The fluid is made at the rate of 21ml/hr is completely changed every 6-7 hours. It is believed that CSF takes one to two hours to reach the basal cisterns, 3 to 4 hours to reach the sylvian fissure and 10 to 12 hours to spread over the cerebral subarachnoid space. By 24 hours it started to be cleared into the superior sagittal sinus. As much as the brain tissue is protected by a blood brain barrier from changes outside the central nervous system, the CSF has the same protection and does

not change biochemically as a result of changes in the systemic circulation. These barriers are at the level of the endothelium of brain capillaries, at the level of the epithelium of the choroid plexuses and the outer layers of arachnoid matter. These barriers protect the brain and the subarachnoid spaces from damaging influences outside the brain. Along with the other circumventicular organs the pineal lies outside of the Blood Brain Barrier (BBB).

The pineal gland is located above a crucial byway for CSF. The pineal gland can influence the rest of the brain via circulation of CSF. It is close proximity to the limbic and sensory centers of the brain. In the fetus the pineal gland develops from specialized tissue in the roof of the mouth and migrates to the center of the brain. This is perhaps so because both the pineal gland and the intestinal tract produce serotonin. Blood vessels surrounding the pineal gland transfer melatonin to the rest of the body, but it is circulated directly in the brain via CSF. CSF serves as a route for the conduction of neuroactive peptides and hormones and may serve as a reservoir of neuroactive substances that can be transported outward by **glial tanycytes.** These are specialized ependymal cells with long basal processes, rich in mitochondria which serve a transporter role in the brain.

Glial cells form a layer around brain blood vessels, however they do not contribute to the BBB, rather they maybe important for the transport of ions from the brain to the blood. The **Blood Brain Barrier** has many fascinating physiological components and one of the most interesting is that there is an estimated 5-6 times *more mitochondria* in BBB endothelial cells compared to muscle tissue. This increase in mitochondria and consequent increase in energy potential, is thought to be required for *active transport* of nutrients from the blood to the brain. (See Superfluidity for more on the CSF connection to kundalini)

THE GRAIL

If you watch John Boorman's *Excalabur*, 1981 you will see the wording around the grail legend to be a perfect description of the inner alchemy. The King and the Land are One—if the Grail is found one recovers their soul by which the land and society are made whole (healthy). "I didn't know how empty I was until I became full." And whom does the Grail serve? It serves the Universal King of Soul, but not the Wounded King of ego. One could call Amrita the Elixir of Soul and the crystal palace in which it is formed is the sacred chalice itself. Dionysus, the Greek God of wine and revelry is associated with the wine cup or chalice—this is a material version of the metaphysical meaning: for the contents of the Grail is The Elixir of the Gods, "Amrita," the Essence of Soul…it is the key to our enlightenment or our "already full state." It raises us to the spiritual level which is generous, regenerative, radiant gratitude. NO longer searching, we don't need anything because we are already full.

The expanded heart, endorphins (Amrita) and revelatory chemicals (tryptamines) allow the individual to stop the sense of clinging, searching, needing and hollowness...but a person in enlightenment chemistry still has goals and desires, they might even be "driven," and yet they are simultaneously in satiation and wholeness. This background bliss allows the individual freedom from craving

for distraction, substitute gratifications, placebos, rewards, compulsions and addictions—if the person has the discipline or passion to fulfill a spiritual vocation and larger life plan. That which is in us and we don't bring forth, will kill us. That is Eros not given full reign turns to Thanatos. Serving the world comes through the simple act of Being, at that level. Basically we fill up and supplant our deprivation state with Essence. They say about the Christ-Fire, or the energy up the Sushumna, that all sin (deprivation) is burned clean and absolved in the Christ-Fire. This is directly pointing to the tendency of kundalini to burn through the pain-body and change the amygdala and other parts of the limbic and emotional response system helping us to transcend our wiring that was built in response to "this cruel world."

The Crystal Palace is the "upper alchemical vessel" in which the conjuncto, or union of the opposites takes place. In Taoism these areas or cauldrons in which the elixir is cultivated are called Tan Tiens or Medicine Fields. The solar plexus is the Middle Tan Tien and below the belly button is the Lower Tan Tien. In the fetus the neural crest splits in two and one half develops into the central nervous system, while the other becomes the Enteric nervous system or "stomach brain." In the Eastern world internal alchemy was developed to educate this stomach brain to produce the Elixir and resonate in perfect harmony with the head brain.

In the mystic tradition of inner alchemy the philosopher's stone is said to be a magical diamond, "the jewel of the mind" that is the universal medicine or panacea for all ills. It is said to have the power to transmute poison into medicine. This refers to the Mirror-like Wisdom of clear-nondual-consciousness to remain unaffected by that which is harmful and its ability to turn the dark and difficult into that which is beneficial to life. By virtue of Lapis Exilis, a fabulous precious stone, the Phoenix is burned to ashes, and regains her youth through rebirth. To alchemize the good life.

VITRIOL - Visita Interiore Terrae Rectificando Invenies Ocultem Lapidem is latin for "visit the interior parts of the earth, by rectification thou shalt find the hidden stone." This could mean the stone represents the divine spark arising from zeropoint which gives life to matter and it could also refer to the traditional practice of undergoing die-offs and rectification in caves. The Philosophers Stone—the Lapis Exilis or Hidden Stone represents the divine spark which gives life to matter and it is through this divine spark that the spiritual alchemist turns the Prima Materia of trauma, negative energies and negative karmic mass (energy blockages) into spiritual gold. Through the ecstasy produced by Amrita the alchemical fires are fed, burning away the dross and leaving the spiritualized bodymind.

Western Alchemists, through the hierosgamos or sacred marriage hoped to produce *lapis philosophorum* by which the aspirant achieved "Know Thyself" status. The **Philosopher's Stone** promotes utopian qualities, cures all ills, ensures immortality, bestows wisdom, resolves all conflict and establishes peace, harmony and equanimity. In psychological terms this represents the union of the conscious self with the unconscious (sub/trans) in forging the Self or the realized Whole Human. The initiate learnt from within to know all that is heaven and earth. That is they discovered "what" rather than "who" they are. The sacred marriage

or **Mysterium Coniunctionis**, is none other than the play of yin and yang represented in the Tao. The goal of the Great Opus of both East and West was the integration of the Whole Human with the *unus mundus* or "the world in which all is one"…the Eternal Ground of Being. Such merger of the personal will with the transpersonal or Universal Will meant the embodiment of the impulses of Spirit in one's daily life…that is Divine Illumination. To this end the *caelum, lapis, ambrosia or amrita*, which connotes the sublimated quintessence extracted from the body, the unconscious and the world, was achieved through various alchemical operations (eg: mortification, coagulatio, sublimatio, coniuncto).

The Elixir of Life was manufactured to the greatest degree in the Crystal Palace…and the "product" of this process of crystallization of primal Spirit through the circulation and lasering of the Light was referred to as the **Golden Flower**, or the Golden Ball. But after this generation at the third eye the Divine Influx must then be drawn down into the lower abdomen (lower tan tien) if the "fruit" of the Golden Flower is to be made. If the Golden Flower is not thus brought down into the abdomen, then a true integration of the Self with the unus mundus is forfeited along with the synchronicity, self-reliance and affirmative action needed for constructive change. That is the individual is still a "Wounded King" rather than a Universal King.

Only when the Elixir Pearl forms in the crystal palace can the "holy embryo" then be formed in the belly. The final stage is Samadhi or satori, that is the union with the unus mundus. Where the embryo that was formed in the lower Tan T'ien now emerges through the crown of the head and leaps into the "great emptiness." *"The final stages require the practitioner to help the primal spirit emerge from the fetus and leap into the "great emptiness" through the heavenly gate at the top of the head (the sahasrara chakra)."* 151, Walter Odajnyk, *Gathering the Light.*

The book *Taoist Yoga and Sexual Energy: Transforming Your Body, Mind, and Spirit* by Eric Steven Yudelove must be one of the very best available descriptions of cultivating energy and the Elixir. Strangely this book with its emphasis on the practice of **Bone Marrow Breathing** is tied into histamine and water regulation and the immune system. If there were two books I would recommend for anyone actually undergoing a full kundalini awakening it would be this Taoist energy practice book by Yudelove and F. Batmanghelidjs' book *Your Body's Many Cries For Water.*

In *Yoga and Ayurveda* Dr. David Frawley says that the Vedic Hindus referred to "**Soma**" as the healing pranic essence of various plants. The soma plants were first crushed then mixed or cooked with milk, ghee, honey, yogurt, barley or sugarcane juice. These preparations were sometimes mixed with metals like gold. "Soma" in a sense was used to quicken "Prana." Soma, the elixir that was said to be the earthly precursor to Amrita or the Elixir of the Gods was made from the bitter Milk Weed, according to Julius Evola in *The Yoga of Power*. The reputed origin of the famous soma is **Asclepias acida** not the common milkweed, Asclepia aecidum. This drink provided the intoxication necessary to enter a luminal state to pass through the threshold to higher states of consciousness. Granted that there was a preparatory cleansing and the drink was taken as a sacrament in ritual setting.

The preparation of A. acida from which the intoxicating milky juice is squeezed, is a very old, sacred ceremony. Soma was said to be a medicine which gives health, long life and removes death. In Hindu mythology, the Indian Bacchus Soma is a regular name for the moon, which is regarded as being drunk by the gods and so wanes, until filled up again by the Sun.

LIVING WATER AND PRECOGNITIVE CHEMISTRY

Note that in the movie *Minority Report* the precogs "live" in a pool of water with brain chemicals in it for amplifying precognition. Precognitive and revelatory chemistry can really blow-out ones brain. I found that taking **plenty of baths** during periods of hyper-noetic revelatory conditions is essential, perhaps due to extra water absorbed by the body to help process the radical chemistry of these altered states. Or the bath might serve other normative regulatory functions as well such as increasing parasympathetic rest and recovery; and the release of "water holding for emergency." Anyway the insight the makers of Minority Report had to put those precogs in neuroactive water was a stroke of genius.

Baths are essential both for generating revelatory chemistry and for metabolizing and integrating this extreme chemistry as well. The effectiveness of baths is partly due to the increased levels of water in the blood through absorption by the skin. Partly due to the antigravity, floating effects reducing "metabolic work" of merely existing in the body, conserving energy for the acute coherency needed for revelation. Also the body can relax into a theta state which produces serotonin... and this allows greater communication between the stomach brain and head brain, between the two hemispheres of the brain, and also amplifies communication within the hierarchical strata between the brainstem, limbic brain and neocortex. Thus we see that it is complete relaxation that promotes greater coherency and synchronization of consciousness between body, mind and spirit, which allows us to delve into deeper visionary states and the deeper layers of human experience.

Channeling involves tapping into our own latent potentials for knowledge and genius. One "gets out of the way of oneself" not through declaring the Muse to be an alien from another planet, but by honoring oneself as a vehicle for that which transcends us. When we get into very high-energy states, information seems to come together in ways that we only had fleeting glimpses of before. These revelatory states have specific chemistry...tryptamines, DMT, and opioids which put the brain into conditions where time is penetrated and doubt removed. Remote viewing occurs in this way through the chemistry of coherency, as does prophesy, artistic vision, divination of music, the high art of philosophy, invention, telepathy and even navigation for sexual and creative relationship.

"In the Jungian reading of the alchemical tradition, the philosopher's stone is understood as the "water" from which all comes and in which all is contained. Solutio is to turn a solid into a liquid, back to the prima material. Solve et cogula—to dissolve the current limited sense of oneself and re-form it with an expanded sense of self—is the purpose of meditation in what is called an alchemical retreat process: dissolving allows the death of unwanted aspects of the ego and is followed by regeneration." 81, The Divining Heart, Patricia C. and Richard D. Wright

THE AMRITA-HEART CONNECTION

Besides meditation, visualization, projection, toning and energy circulation through the microcosmic orbit, the amrita-heart connection shows how the brain and body naturally coordinate to build the diamond body or the resurrected body. Studies show that about one-half of cerebrospinal fluid (CSF) removed from the cranial vault is cleared by extracranial lymphatic vessels. Transport of CSF through both the lymphatic drainage and arachnoid villi routes increases as intracranial pressure is elevated. Although the ambrosial liquid excreted from the sinuses is the most potent form of amrita, during max kundalini all the CSF is highly charged and can also be classed as amrita, when it is thus superionized by the superfluid state of the activated central nervous system (CNS). There are three main methods by which the amrita that is generated by the CNS is transported around the body:

Digestive System— Excretion of amrita down the back of the throat. This amrita is super potentized with secretions from the circumventricular organs including the pituitary and pineal glands. One can speculate what effects this might have on the digestive system, first through direct contact of mucus membranes with the liquid and then throughout the rest of the body via absorption into the blood and lymph at the small intestine.

Lymph—There would also be uptake of the supercharged CSF by the lymphatic vessels in the head. The lymph then enters the bloodstream at the left and right subclavian veins at the top of the chest. From there the blood flows into the superior vena cava and right atrium of the heart. Lymph should be considered as a major vehicle for kundalini chemistry, especially of fat-soluble components, because it comprises of 80% of the total body fluid and the lymphatic system is 4 times larger than the blood circulatory system.

Blood— Blood from the head enters the superior vena cava and along with other deoxygenated blood from the rest of the body, enters into the right atrium and ventricle of the heart and on to the lungs for reoxygenation. After which it returns to the left atrium and ventricle of the heart to be circulated throughout the body. Thus the right chambers of the heart and the lungs would be the first organs to be in contact with the amrita-charged blood coming from the brain. After that it is the heart that is first to receive oxygenated blood for its own use.

This leads one to suppose a direct blood circulation route whereby the supercharged nervous system could impact the function of major organs above and beyond the normal means of communication via nerves and EMF. All three mechanisms for amrita circulation are probably in effect during most if not all peak events: Inner-Conjunction, Sex with Eros, Samadhi, Tantric Union-Joint Samadhi and the Heart Nova or Solar Heart.

The **Heart Nova** is when the heart-brain connection is so acute that the experience of a prolonged brain orgasm occurs. For me this happened for an hour or so every night for a week in October 2002. One morning I awoke from a dream in which I was playing with Mr. Universal's penis, although it was many times more sexually potent than one could ever experience in real life. Either the dream instigated this phase of the alchemy or the alchemy instigated the dream

for throughout that day my prefrontals were very heavy and stoned. Strangely that afternoon I thought I walked right by Mr. Universal sitting outside a coffee shop. Then that night and for at least 7 nights after that I experienced an ecstatic trance that I call a Heart Nova. This is when amrita entering the blood and lymph makes a sublimely coherent and profound link between head and heart. Thus the mechanism of increased heart-brain entrainment is not a mere *neural* connection, but is also facilitated by an exquisite feedback relationship between the circulatory systems and the nervous system.

If you get my drift that copious amrita flowing from the CNS and impacting the physical heart...is the MAIN PHASE of a spiritual awakening, then you will see that the term Heart Nova is an apt description of this cumulative event. At the time of my peak 2 years prior to my Heart Nova event, I was calling this subterranean intuition of the Heart Nova...a Global Nova...not knowing what I was really talking about for it hadn't happened yet; but the energy of future events always promotes an felt-sense intuition of what is in store. Thus we might use archetypal symbols or irrational terms to try and describe the direction and process that is unfolding within us. Only well after the fact do we understand the full meaning of this unfathomable submerged language that is bubbling up from the infinite depths of our being. I am convinced that the effect of this amrita-modified blood on the heart is what is historically called the **Solar Heart**. It is also undoubtedly the specific alchemy behind spiritual sovereignty or the growth of the soul of the individual.

Here is a similar intuition of the Heart Nova from the Adi Da camp: Consciousness has traditionally been understood to have three basic states, or "*avasthas*" in Sanskrit. These are the states of waking, dreaming, and deep sleep. In chapter forty-three of The Dawn Horse Testament Avatar Adi Da Samraj says that:

- The *left side of the heart* is the seat of the **waking state**, and bodily experience. (Body)
- The *middle of the heart* is the seat of the **dreaming state**, and all that is the deeper psyche or subtle dimension and higher mind. (Mind)
- The *right side of the heart* is the seat of the **deep sleep state**, and the seat of the sovereign Self. (Soul)

Da says that in the sixth stage of life, the right side of the heart becomes awakened as the root-origin of attention, and the seat of the Witness-Position of Consciousness. He says that at the culmination of the ascending process, the Spirit-Energy comes to rest, in the right side of the heart. Substantiation or the Solar Heart would be Da's seventh stage of life where the Spirit-Current rises again in the "regeneration" of **Amrita Nadi**, from the right side of the heart to the matrix above the head. In this process he says the body itself is infused with the Divine Spirit-Current in the Circle of the body-mind. Thus, the right side of the Heart is abidingly substantiated as the "root-organ" of Divine Self-Realization that is the "Amrita Nadi."

I don't know how much this description of Adi Da Samraj is traditionally inspired, but it exactly corresponds to my present understanding of the connection between amrita, cerebrospinal fluid and the heart. Note the words "*Divine Spirit-Current in the Circle of the body-mind"* refers to the self-reinforcing feedback relationship between the coherent nervous system, which produces amrita, that induces the organs to further enhance the nervous systems production of amrita, creating a profound corroboration of body and mind. Resulting in a self-perpetuating cycle of bliss generation, that will only be interupted through extreme dissonance in environment or living habits.

Let me tell you how freaky Spirit is. Saniel Bonder is an ex devotee of Adi Da whose Waking Down Workshop I attended in 2000. During that weekend I did Cardiomuscular Release (CMR) on Saniel's wife Linda. As soon as I had gone into position 2, (where her head was turned to the right, and I have one hand on the right side of her heart and one hand on her origin of the sternocleidomastoid on the neck under her ear) her heart went into an immediate Nova. I could feel the bliss through my hands and the intensity of it gave me such a shock that I pulled my hands away and exclaimed "Ah! You feel so beautiful." From this it is apparent that amrita affects the heart "as soon" as it reaches the right chamber, and also no doubt when it returns from its journey from the lungs back to the left side of the heart. The mere turning of the head aids in the draining of amrita in the blood and lymph and its most powerful impact is to propel the heart into an Nova of bliss. I must point out that Linda was already in a superfluid state prior to my doing CMR on her; she was the most physically "opened" individual I have ever worked on. The CMR just provided a releasing mechanism for a surge of amrita and the heart responded in an explosion of ecstasy.

Kundalini is *God's narcotic*

THE DOWNSIDE OF BLISS

The depressing effect of too much bliss!

"In stress, several hormonal overrides become operative. The body assumes a crisis situation and will begin to mobilize for a 'fight-or-flight' response…Several strong hormones become secreted and will remain 'triggered' until the body gets out of its stressful circumstances. These hormones are mainly Endorphins, Cortisone Release Factor, Prolactin, Vasopressin, and Rennin-angiotensin." Page 57,
F. Batmanghelidj, M.D., Your Body's Many Cries for Water

ENDORPHINS AND DEPRESSION

The term "Endorphin" means endogenous morphine, so named because it affects the body like morphine does. In fact beta-endorphin was found to be 48 times more powerful than morphine and even more addictive. The main role of endorphins is as a neurotransmitter and neuromodulator, with physical, psychological and behavioral effects. Like opiates, endorphins are known for their painkilling, sedating, anti-anxiety properties and for producing euphoric, trance and dream-like states. Endorphins are involved in a wide range of processes such as: motor coordination, learning, memory, seizure control, sexual behavior and reproduction, thirst and hunger, gastrointestinal function, water and salt balance, temperature control, grooming, tolerance development and physical dependence (addiction).

Endorphins can be found in many areas of the body including the pituitary glands, the hippocampus, pineal glands, kidneys, pancreas, GI tract and adrenal glands. So far 20 different types of endorphins have been found for three types of receptors m, k and d. Included in these 20 endogenous opioids are enkephalins and dynorphins, plus alpha- and beta-endorphins. B-endorphin selectively binds m receptors, which is the same one morphine binds to with high affinity. The m receptors are mostly localized to the limbic system and hypothalamus. Co-released with ACTH from the pituitary, b-endorphin is also produced in the medial-basal hypothalamus and widely distributed in the brain.

Neurons containing endorphins or having endorphin receptors are found in many sensory relay nuclei in the midbrain, pons, medulla and periaquaductal gray matter. This endorphin system produces analgesia in response to painful stimuli by inhibiting the release of substance P. Painful sensation are carried to the brain by thin afferent fibers that use the peptide Substance P as a transmitter.

As neuromodulators endorphins act as "inhibitory middlemen" in many excitatory pathways, including acetylcholine, the catecholamines, serotonin and substance P (pain). (About four-fifths of all neurons in the cortex are excitatory.) Because of their role as potent neurochemical regulators, modulating the activity of other transmitters, endorphins have been studied as causative agents in various psychiatric illnesses such as depression, anxiety, anorexia, stress and other affective mood disorders. It is the biological and biochemical basis to our personality and behavior that determines the success and problems that we have, and our circumstances and experience in turn determines that biochemistry.

The search for the link between endorphins and depression began when it was found that both enkephalin and opioid receptors are located in mood-response areas of the brain. A large debate has emerged within endorphin research over whether depression is caused by an excess, deficiency, or static levels of endorphins, and even that endorphins may not be a factor in depression at all. Considering the disputing testimony it is premature to conclude how the endogenous opioid system is involved in depression. It is thought however that endorphins are likely to modulate the nervous system activity over the long-term rather than moment-to-moment. Because the normal mechanism of neurotransmitter reuptake for the recycling of endorphins doesn't exist for endorphins, a new precursor must be made each time. Plus their effective lifetime is limited by their enzymatic breakdown; so these factors make endorphin manufacture and use rather expensive for the body.

Logical Assumptions To the Link

Endorphins are released in shock, freeze, fight-or-flight, trauma, physical pain and in all stress, including psychological stress. They serve as an analgesic (pain killing), anesthetic and cause dissociation, immobilization and loss of self. We may not know exactly how endorphins are involved in depression, however we can readily intuit how they might be involved in ennui, detachment, disinterest, dispassion, disregard, dullness, numbness, emotionlessness, lethargy, listlessness, satiety, apathy, contentment, peace and fulfillment.

Depressives often have elevated stress hormone levels in their blood and since endorphins are released along with ACTH in response to any stressor, depressives are also have "elevated" endorphin levels as well. Another reason why endorphins are involved in depression is that they serve the role of an inhibitory brake on the excitatory neurotransmitters. It is apparent that dendrite regrowth and receptor recovery needs to be one of the primary focuses of the exhaustion phase in order to recover our vivid edge, creative potency and avoid the swamp of dull affect. Besides the influence of endorphins, learned helplessness, anhedonia and depression are associated with a depletion of norepinephrine and dopamine.

TOO MUCH BLISS

Endorphins are neuroinhibitors which lower arousal. When we have a low arousal level, the nervous system has a decreased reaction to the sensory input coming in and therefore doesn't react or respond as quickly or as strongly to the input. With a low arousal level find it hard to remain interested and focused, and so we tend to seek out greater stimulation in order to register and respond to it. Imagine being caught in a condition in which pleasure is no longer pleasurable because one is buzzed out of ones tree on a permanent high. This can be the state we find ourselves in at the tail end of a kundalini awakening when endorphin levels are permanently elevated and yet the emotional storms of limbic reconstruction are finished. In this condition pain and suffering no longer really "touch" us, but neither does passion or excitement. The mechanism by which we have steered our life till now is now jammed and the territory has the same bland value everywhere we look.

Usually in life our animal heritage drives us after this or that need or want, and our emotions go up or down depending on the quality of our perceived quality satisfaction level. But when endorphins are permanently gumming up the works we are not particularly driven anywhere, and our value system becomes more abstract and divorced from happenstance and phenomena. It's as though we were permanently bathing in the exquisite turquoise lagoon—we are completely wet. We want to get even more wet so we can feel something, but we can't get more wet than we already are. If we are already in background pleasure and bliss, how can we experience the "pleasures" of life? Our emotional landscape is reduced to a tropical island of perpetual sunny days in which nothing really happens. Bliss can be depressing when nothing touches us, even depression. With a perpetual tropical buzz going on we do not even register that we are depressed.

If everything is blissful then nothing is particularly pleasurable and so to actually experience "pleasure" while in a perpetual pleasurable state we have to become deeply "mindful" of the nuances, flavor and qualities of our experience. We must hone our sensory and perceptive senses to delve into far greater subtleties. With an even emotional playing field we lose both passion, motivation and navigation. It appears that a sustained high level of endorphins causes one's affect to become somewhat "flat." In my experience years of high endorphin levels creates a slow decline in passion and we then have to do something extreme that will counteract the eternal buzz, and bring more "excitement" to our nervous system. One thing I have noticed with my steady decline in passion is that I can no longer readily conjure feelings-thoughts-images of inner worlds, future visions and potentials like I used to when my soul felt more alive, though I still have a vivid dream life it too lacks potency and purpose. Even food looses its vivid quality as one of life's simple pleasures and the intensity and sensation of sex and touch is muted…even orgasms are rather flat except on special moon cycles.

PSUEDO-EQUANIMITY

During the awakening itself we tend toward a more amplified response to attraction and aversion...and so after being pulled around so obviously here and there for many years we tend to gravitate to the middle and gain distance from external and internal phenomena. In this way equanimity is born from the exaggerated consciousness, sentience and sensation of kundalini. This amplification of being coupled with the background endorphins that make both pleasure and pain less distinct gives us equanimity.

Unless this later stage of awakening is undertaken with eyes wide open the chances are that this ambivalence-chemistry will become a pathological state with symptoms including: detachment, apathy, disinterest, dispassion, disregard, dull affect, emotionlessness, noncommittal, heedlessness, indifference, insensitivity, lassitude, lethargy, listlessness, passivity, stoicism, unconcern, unimpressed, unresponsiveness, lack of dedication and zest. So we could call this condition of the chemical neutering of our libido a pseudo-equanimity. It's a wonder anyone ever gets enlightened, there are all these pseudo states that one has to experience, learn about and transcend through enlightened application first.

Hence the paradox here is that too much bliss creates anhedonia. **Anhedonia** that is the absence of pleasure or the loss of the ability to experience it. Another less known term is **acedia**, which is a sense of indifference created by the loss of feeling and a gradual closing down and withdrawal from the world. With anhedonia and acedia we avoid risk and stimulation and cut ourselves off from anything that might trigger or stimulate us. In time we will find the correct language and metaphors for the subtle nuance of this post-awakening lull, to distinguish it from our normal ideas on depression and anhedonia. The post-kundalini slump is not really clinical anhedonia because there is still diffuse pleasure and permanent background bliss, but there is also the inability to suffer. Life's peaks and valleys have been bulldozed down into the horizontal plane of endless nothingness…and where does one find "meaning" without the value discrimination of passion and emotion?

The kundi-blues is not really depression in the normal sense, it more like a vacuum of meaningful circumstance, a **Spiritual Catatonia**. This must be a very common condition of the kundalini exhaustion phase. And if one "tries" to create meaningful circumstance in the world with other human beings it often becomes some kind of comical or traumatic farce. Without meaning of course there is no motivation, and our sense of meaning is determined by our passion—so when passion goes, so does meaning in any real sense of the word.

I went through years of apathy and loss of proactive-drive related to coming down from the extremes of kundalini. As I have said before it is paradoxical that this condition is related to an excess of endorphins and a permanent background of bliss. It is as if it were a biochemical existential malaise that leads to this loss of the sense of self and brings about a crisis of meaning. Since there is a loss of meaning at this time we can assume that the brain areas and neurochemicals that are hypofunctioning, are those that are involved in the phenomena of meaning making. When this neurology and hormonal underfunctioning is returned to normal our sense of meaning and self will return.

Of course a metabolic slump and loss of meaning is not a given after the honeymoon of a kundalini peak, it just depends on things like ones emotional constitution, how one frames the experience and the quality of ones support. Basically to move out of this biochemical existential hole it takes a resensitizing via whatever means that excites you…it could be a change in your environment, a new romantic love, travel, sailing across the ocean and or fasting. To reestablish quality of life it is essential to break out of this anhedonia for if there is little pleasure in things, there is little drive and will to live. While in the middle of it there seems no way out, but there is and eventually things swing around the other way to a new zest and appreciation of life.

In Transpersonal Knowing: Exploring the Horizon of Consciousness by Tobin Hart, Peter L. Nelson, and Kaisa Puhakka say that much of human consciousness is transitioning through a significant epistemic shift: that is our "knowing" is becoming increasingly aware of its own process. Moving out of the existential vacuum, created by the death of the ego and the extinguishing of the painbody's life, cannot be done using the convention means through which we have lived up

till now. Hence we need to reinvent ourselves beyond circumstance and culture, and figure out ways of cultivating change. But before we do that we need to taste the limbos more deeply, to keep doing what we are doing until we hit saturation point. To go directly into the Spiritual Catatonia instead of trying to run away from it.

"And, rather than trying to manipulate your way into increased passion, put some energy into directly facing the very deadness, stuckness, or pain that your desire for more passion is an escape from. Instead of trying to generate passion, make room for it to emerge. If you want to invite even more passion, get more vulnerable, more transparent, more open to all that constitutes you." Robert Augustus Masters.

To get out of the intermediate state of purgatory—the strange limbos "between" heaven and hell—we essentially have to move beyond the life of the mind and body, while putting them to even greater and deeper use. To transcend spiritual catatonia we must learn to create a life of the soul, and for this we need to use the "Imagination." *In Facing the World With Soul: The Reimagination of Modern Life*, Robert Sardello talks of the making of the world by bringing attention to it and insists on consistently exercising the activity of imagination. With imagination we can avoid being locked into our view of ourselves and society to live out a life of the soul: turned on, enthusiastic, curious and intentionally interested.

The Sacred Marriage is not "transcendent" of emotion it IS the full exploration and illumination of emotion. Anhedonia is the opposite of this—when the inner kinesthetic, felt-sense is anaesthetized, resulting in a loss of meaning-association, personal-affect, and loss of purposeful relationship with oneself and others. The extreme amplification of the emotional biochemistry during the peak of an awakening often or invariably leads to a down cycle of the loss of feeling, emotion and sensation. If we are not aware that this is an inevitable swing of chemistry, we will lump secondary depression through distress over our condition onto the already deflated chemistry. Those that didn't have fluid emotional wiring through a healthy bond with a happy emotionally fluent mother in childhood, are likely to have a harder time dealing both with the emotional inflation of the peak, and the emotional deflation of the valley. Even the anhedonia (loss of pleasure) associated with the numbness of endorphins is a stage, through which emerges even greater riches, transcendental vision and insights. The thing is to recognize, accept and explore whatever state or condition we find ourselves in and this helps us move onto the next thing. (See Dealing With Torpor in the Skills section.)

LOSS OF CREATIVE LIBIDO

"I've learned that real intuition requires skills and attitudes that are more demanding than those of the mind; it demands some concrete object, image or ritual procedure, and it doesn't act in a vacuum. It presents no sure knowledge, but rather offers information that is poetic in nature, and often ambiguous, ambivalent, paradoxical and elusive. Its answers to our problems are neither immediate nor fully conclusive, but rather take time to unfold and may never stand fully revealed." Thomas Moore

The life of the creator or artist is perhaps the hardest to undertake because you have to keep true to yourself, when as a culture we are encouraged to betray our soul for survival. To be a true artist demands that we do what it takes to keep our soul alive. It is also a practice in personal sovereignty and self-expression beyond the cultural wave, but through the cultural tide. Of course the illumination of true art runs off the libido, but if the culture at large is operating at a lower-spectrum libido level due to chronic ongoing stress and sense of hopelessness, then the hormonal juices necessary for genuine art do not flow. As soon as things turn around though, they turn around in the collective psyche and so all the artist will undergo a revolutionary renaissance overnight.

The thing is many of us including me are "waiting" for the renaissance to arrive, hanging out for creative potency and purpose. But that kind of "on-hold" behavior of waiting for Grace to magically arrive is why we are in this imagination-desert in the first place. If we all did the work of calling in grace and illuminating our own lives with the Presence of spirit, then it is this action that will bring on the change we so seek in the collective psyche...and we can all get juiced up together, excited, inspired, divining and Alive. If we fail to light our own creative fire we are complicit in the problem instead of being part of the solution.

"Libido" is life energy, desire, the source of human striving. I think creative-libido or "creative-potency" are apt terms to describe the sex hormone basis to consciousness. "Potency" correlates with the idea of energy, potential, ability, effectiveness, efficiency, validity and zeal. It is really the zest or will for Life. Here are some synonyms for *the fertility* aspect of the word **potency**: abundance, copiousness, fecundity, fruitfulness, luxuriance, plentifulness, pregnancy, productivity, prolific, puberty, readiness, richness and virility.

"Since ACTH release is increased by stress, and ACTH production correlates with increased b-endorphin production, and increased b-endorphin decreases GnRH and then LH, and decreased LH correlates with decreased fertility, stress via increased b-endorphin production contributes to infertility in both men and women." http://www.neurosci.pharm.utoledo.edu/MBC3320/ACTH.htm

The above is one of the main chemical pathways by which stress chemistry can produce a loss of fertile artistic imagination and creative zeal. There are probably many reasons for artistic impotence...even including prolonged stress hormone release contributing to the loss of synapses and dendrites in the prefrontal lobes, hippocampus and hypothalamus. Since art is one of the main "stress relief" mechanisms in culture, this drying up of our creative juices means that we fall into a perpetual feedback loop of lack of imagination, which produces stress which produces lack of imagination etc...and if we do this collectively it is very hard to get genuinely inspired by the inferior "impotent" quality of the spiritual "artifacts" of others in order to break the impotency cycle.

It is clear that perpetual stress and its effects on the body, mind and behavior create a vicious cycle of perpetual stress. By destroying the neurological hardware for visionary and psychic foresight and illumination, stress neuters our potential for an inspired life and right livelihood. This brain damage produced by stress

chemistry is one of the primary reasons for the poverty trap as well. In this way we are then likely to be caught in a trap of perpetual stress because we then have to survive in a servile, subsistence or flatland-conformist way…that is "stressful," thus locking us into an endless recurring feedback loop of stress, impotency and poverty.

Perpetual stress is like a tiger that won't go away but that prowls around us 24X7 even if we are not consciously aware of it, we are always on alert for that tiger. To break out of the quicksand of the stress trap we need to do something different—what Dr. Richard O'Connor calls an adaptive spiral. That is a progressive path in which the changes we make in how we think, feel, act and treat ourselves all reinforce each other to catalyze lasting change. So instead of being caught up in the stress trap, we can learn to generate an abiding recurrent creative potency cycle instead.

John Pierrakos says that zest for life (Eros, libido) is rekindled through self-revelation as we disclose ever deeper truths about ourselves, we open our body, mind and soul to the divine. He says that everything we need for pleasure and fulfillment resides in the core of our being and as we activate the core we bring out the higher self. Meditation, especially sunlight meditation lights up the crystal chamber, or central hormonal activation center in the brain. Hence it is only logical that meditation should increase creative libido and artistic potency through stimulating and balancing hormonal health. Even eight weeks of regular meditation builds up the prefrontal cortex, especially on the left side, thus increasing our potential for happiness.

Since it is stress and danger that often produce great artistic advances, it cannot be simply stress itself that produces a decline in the productivity of the muse…but perhaps it is the unrelenting aspect of it, the fact that we do not undergo the rest and recovery phase of the stress cycle to a significant degree. The ongoing slow ebb of our creative juices with little recharging and regeneration is perhaps the culprit in the demise of imagination in modern man by producing a somewhat permanently creatively neutered society and a perpetual creative-impotency-loop.

I am not referring to the sporadic triggering of stress response cycle, but a permanent stress chemistry feedback cycle that atrophies neurons and organs and perpetuates itself through its debilitating effects on behavior, enjoyment, relationship and circumstance. I think to a certain degree our entire western culture is suffering from chronic ongoing stress—such that we do not even recognize that we are stressed because that is who we are, and we feel things are under control as long as we can keep up with our various addictions (i.e.: negative stress management techniques).

The stress factor of relationship tends to have more immunosuppressing power than non-relational stressors. So if we have a community, society or culture that is in chronic perpetual stress, then the stressed relationships will reinforce this condition. Whereas in healthy mammalian collective life, relationship is a major source of stress "relief." What this means in terms of integral art is that the reduction the sex hormone production, coupled with damage to the hippocampus (memory/symbol) and the hypothalamus (emotional-governance) will mean that ones consciousness

is cut-off from the Muse/Eros itself or is operating at a mere fraction of its potential. Coupled with that when the stress hormones cause damage to the prefrontal lobes it means even less communication with the limbic-emotional brain and motor coordination—this interferes with the transfer/translation of the artistic impulse and with the dexterity and ability to execute the art itself. Thus the perpetually stressed brain is not Integral it's "divided" and the only art that can come from this is copied material, symbol juggling, realist, and prefrontal cleverness dressed up as "cool." It is not real art in terms of being relevant to cultural progress…but it is a sign of the deprived state of our contemporary cerebral condition.

Kundalini with its amplified metabolism and nerve activity, and increased oxidation, will tend to down-regulate neural and hormonal receptors and rewire the nervous system. However even if we are in the between-slump, when the hyper-functioning has backed off, but our receptors have not yet regrown, we cannot really consider kundalini as being "brain damaging." We must see all phases of metamorphosis as necessary allostatic changes in the transformation of our organism and the human collective. The atrophying effects on synapses, dendrites and receptors of prolonged perpetual stress chemistry on the body, coupled with excessive perpetual endorphin production is probably why we tend to loose our **psychic powers** that were so very vivid and pronounced during the peak. Fasting may be one of the main methods for us to recover our higher capacities. Since the senses go dead in anhedonia it makes sense that we can help cut through this condition through applied sensory deprivation and sensory maximization methods.

Undoing Depression by Richard O'Connor (1999) and *Undoing Perpetual Stress: The Missing Connection Between Depression, Anxiety and 21st Century Illness* (2005). www.undoingdepression.com

Robert Sapolsky's book *Why Zebras Don't Get Ulcers,* Third Edition (2004). is I think the best book to understand the subject of stress-damage.

For receptor recovery see Ward Dean's articles *Neuroendocrine Theory of Aging Chapter 7: Restoring Receptor Sensitivity* Parts 1-V at http://vrp.com

Also for receptor recovery see *Neuroendocrine Theory of Aging* in this book, and *Choline*, *Hyperzine* in the Supplements List for dendrite regrowth. And *Receptor Recovery* plus *Nerve Regrowth* in the Exhaustion Phase BOK-2.

FASTING

I wrote elsewhere in the book that fasting during an awakening is not a good idea because of kundalini's huge energy demand, and because the tissues need protection by plentiful antioxidants. Releasing toxins into the system when the immune system is already compromised, and when ones antioxidant reserves are already being used to the full is not a good idea. However fasting after an awakening, especially at some point during the exhaustion phase might be absolutely essential to reestablish physiological function and hence higher emotional, mental and behavioral performance. To overcome anhedonia, acedia and a general dissociation from life we may need to do an extensive fast or series of fasts to reinstate our neurotransmitter and hormone receptors.

"Prolonged exposure of receptors to hormones leads to down regulation of receptors. This decrease in the number of gonadotropin receptors in the plasma membrane of ovary or corpus luteum cells can result from either an **internalization (endocytosis)** of existing receptors, a decrease in their rate of synthesis or both." MBC 3320 Pituitary hormones II
http://www.neurosci.pharm.utoledo.edu/MBC3320/ACTH.htm

Formerly medicine was based on the concept of **homeostasis**: the maintenance of the internal physiological environment of an organism within tolerable limits of a "set-point". Now however, evidence shows that the parameters of physiological regulation of the "set point" are not constant and the new concept of allostasis is emerging. **Allostasis** is a term used to describe the idea of 'viability through change' and explains how regulatory events maintain organismic viability, or not, in diverse contexts with "varying set-points" of bodily needs and competing motivations. With allostasis the body adapts to changing circumstance through the activation of neural, hormonal, or immunological mechanisms.

In understanding the phenomena of allostasis the basic concepts of physiological homeostatic protection are integrated with damaging effects of the mediators of stress and adaptation disorders like depression, stress, anxiety and addiction. The key point in the evolution of the theory of adaptation from homeostasis to allostasis suggests the goal of regulation is not "constancy," but rather fitness under natural selection to promote efficiency, prevent errors and minimize costs. Find more reading on allostasis in *Allostasis, Homeostasis, and the Costs of Physiological Adaptation*, Edited by Jay Schulkin, Georgetown University, Washington DC

If we did not gain complete equilibrium between the intensity of the kundalini alchemy and our body's allostatic ability to respond to the rapid changes, then chances are we have some rehabilitation work to do to reestablish the potency of our messengers and receptors. Besides the sex hormones we need to revive the insulin receptors so that our metabolism supports allostatic efficiency, for the radical metabolism of the awakening may have produced insulin resistance and possible atrophy of the pancreas. Fasting will allow greater efficiency in metabolism, minimize error, dysfunction, fall-out, malformation and reduce the "costs" of ones physiology. Fasting will also allow the body's negative feedback mechanisms to be better heard and thus bring about a strong allostatic efficiency.

I assume that fasting coupled with supplementation for receptor repair will help reverse the internalization (endocytosis) of receptors, that is receptors that have retreated into the cell membrane and become non-operational. To regrow the dendrites of nerves in atrophied areas of the brain we will also need nutritional, behavioral and social attention in order to regenerate nerves and brain areas to full capacity. Satisfying social interaction and especially intimacy, positive genuine communion of spirit may also be essential to pulling an individual out of inner/outer desensitization (dissociation) and back into engagement with the world.

Since digestion itself can take up to 23% of our energy and generates toxins and free radicals, it makes sense to stop eating during certain periods of profound healing to provide energy and conditions for deep detoxification. With detoxification space and resources are made available for metamorphic transformation of tissues (transmogrification). Fasting may also be necessary to give the digestive system a break in order to heal. I myself got irritable bowel syndrome one year into my awakening and I never did anything about it until 5 years later when the pain had become so bad I decided enough was enough and I needed to fast in order to heal.

If you have the irritable bowel/candida complex and have even a mild sugar addiction (be it fruit or any other sugar/carbo), you might find that using the Master Cleanser on your fast makes you feel raw, edgy and interferes with intelligence. Even just one tablespoon of maple syrup/day in the Master Cleanser will create problems because it is a refined sugar and people with sugar addiction and irritable bowel are likely to be glucose intolerant. If you want to use the Master Cleanser then just use a fresh squeezed orange instead of lemon and this will provide enough sugar to leave the maple syrup out.

Fasting is very important, for discovering how we have built ourselves and why; nothing brings us faster to the basement of our psyche than fasting and the skins of the onion peel away. Fasting brings us rapidly to the heart of our psychological issues especially regarding abandonment vs. nurturing and the degree to which we love ourselves and have been loved. The ultimate book that covers these fundamental food issues in association with fasting is *The Fasting Path* by Stephen Harrod Buhner. *"Deep fasting puts the body into a state that is normally only experienced during sleep, one in which the liver and other detoxification systems can focus exclusively on detoxification, repair, and regeneration."* 66, Stephen Harrod Buhner

Necrosis and detoxification is an essential part of growth and the main thing we have to purge is relationships, plus ideas and behaviors that we have picked up from others. Thus time in the metaphorical desert is essential. How can we be our Self if everyone is still telling us who we are? During the "germinating" time of Spirit we must care for our psychological space as though we were pregnant with a new life—for that is indeed the case.

Be wary of consuming too much of seemingly healthy fruits like Wolf Berries (Goji or Lycium), for these are pretty high in sugar, and the more high glycemic foods you eat the more muscle and nerve pain you will feel. Also because many of us have candida and disrupted intestinal flora, the toxins produced by these

pathogens when we feed them with this sugar also causes us pain. Olive Leaf and Neem Leaf will reduce nerve and muscle pain...they work as a broad spectrum cure-all that will address everything from pathogens, detoxification, to nerve coatings.

RAW and GREEN is the secret of Life! For detoxification think GREEN. Grow wheatgrass if you are really serious, otherwise explore the realm of green salads or even dried cereal powders and bluegreen algae. The key to health is "**nutrient density**" and the foods most dense in nutrients are raw greens—mix greens with buckwheat goop and some Thai coconut meat and you have got a winning raw soup combination. Kale being the most nutrient dense food, then collards and spinach. Spirulina, green magma and kelp provide the minerals for taking toxins out of the body and to remineralize. Are there any local herbs like burdock, dandelion, plantain, nettle and echinacea that you could grind up and put into capsules or make into tea for baths?

Although juice fasting is necessary before and after a water fast, it is through prolonged water fasting that we can really make physical and spiritual gains. Contrary to popular belief water fasting is actually easier than juice fasting because once the body's energy metabolism changes over to burning fat (ketosis) then the appetite generator shuts off. Definitely to break the exhaustion phase and reset the body's homeostats, to increase vitality, motivation, navigation ability, psychic abilities and sensory awareness nothing beats a water fast of 21 days or more. Perferably with complete rest, and camping out in nature.

"[The body] is the first and best friend that the Universe has given to us, and it is through the body, not in spite of the body, that we find the luminous and the ineffable that our souls need to be whole." 107, Stephen Harrod Buhner, The Fasting Path.

The Tao of Detox: The Secrets of Yang-Sheng Dao, Daniel Reed

HIGH PRESSURE SYMPTOMS

Occasionally HPA axis activation, high blood pressure and inflammation align to create some of the more extreme kundalini symptoms such as the sweating of blood or temporary loss of eyesight. I assume headaches and loss of eyesight during kundalini are largely due to high blood pressure, which occurs during acute stages of "sympathetic" nervous system activation. Kidney cells produce the enzyme renin, which causes a cascade that eventually results in hypertension caused by the peptide angiotensin. Studies found that people with hypertension or non-insulin dependent diabetes had higher levels of intracellular calcium and lower levels of intracellular magnesium. Excess calcium in the cells and depleted magnesium is associated with insulin resistance, resulting in obesity, diabetes, arteriosclerosis, hypertension and aging. Low magnesium can result in opening of calcium channels, increased intracellular calcium, glutamate release, and increased extracellular potassium. High blood sugar increases serum alderhyde levels, which raises blood pressure. Vitamin B6 lowers aldehyde levels, thus is an effective anti-hypertensive.

Sweating Blood—Increased histamine is probably common throughout an awakening, but if there is also a threat to life or massive stressor, then a greater amount of histamine might be suddenly released. This could contribute to the kundalini symptom of sweating blood**,** such as when Jesus was in the Garden of Gethsemane on the night prior to His crucifixion. Undoubtedly this phenomenon is due to the increased release of histamine and prostaglandins and leukotrienes during extreme stress. This condition known as **hematidrosis**, occurs during great emotional stress when the tiny capillaries in the sweat glands can rupture due to high blood pressure and inflammatory agents thus mixing blood with perspiration. If ongoing bleeding is a problem you may need to increase the integrity of your collagen structures with silicon (Biosil), Vitamin C, zinc, hyaluronic acid and the amino acid lysine. Collagen is strong white fiber network held together with macropolysaccharides, which constitutes the connective tissue that holds our bodies together. Vitamin C is essential to the manufacture of collagen, blood vessels would be better protected if an abundant environmental supply of this vitamin were available in the circulating fluids that bathe the tissue cells.

If you are bleeding from the skin during kundalini your histamine levels are too high. Or you may have a hypersensitivity to histamine, which makes your blood vessel walls more permeable. Probably you were exposed to an allergen from food, environment or infection, which added to an already hyperhistamine condition. The bioflavonoid quercetin is an antihistamine, with twelve times more antioxidant power than Vitamin E. The following substances "increase" bleeding risk: Danshen, Devil's claw, Dong quai, Papain, Vitamin E.

Adrenaline (Epinephrine) is the only chemical that can quickly eliminate histamine. To aid your adrenals I suggest that you gently tap your adrenal glands with your fists for 10 minutes. Then tap your thymus between your breasts for another 10 minutes. An increase in water intake will reduce histamine levels, so sip regularly on water up to 4-5 quarts a day. Take a warm bath and soak a long time

but make sure it is not a steaming hot bath. As well as using Biosil in your drinking water, make a strong infusion of horsetail and cornsilk to apply topically to provide the silica to strengthen the skin's collagen. Vitamin K, found in dark green leafy vegetables and cabbage is necessary for normal clotting of blood. Vitamin K plays a critical role in maintaining healthy bone density by facilitating the transport of calcium from the bloodstream into the bone. It is also required by calcium-regulating proteins in the arteries to prevent arteriosclerosis. *Vitamin K Sources:* Green tea, cheese, yogurt, liver, meat, fish liver oils, egg yolk, blackstrap molasses, oats, soybeans, alfalfa, cabbage, cauliflower, spinach, tomatoes. Bacteria in the intestines also make Vitamin K.

Partial loss of eyesight—can also occur with a hyperactivated sympathetic nervous system—possibly due to high blood pressure. Sometimes the "light" from kundalini flows through the optic nerve making everything refracting beams of light, especially the computer screen. It is like the eyes cannot see for being blinded by the light. Don't worry about the loss of eyesight, focus on changing your life to reduce stressors and actively cultivate stress reduction to bring down your blood pressure.

Headaches—During the fight-or-flight response when the body is preparing for danger, it holds onto its fluid content by reducing urination in case of injury or starvation/thirst. I think what is occurring with head pressure is a hypertensive, high blood pressure situation that is fueled by stress hormone activation, causing the release of vasopressin and histamine and the retention of salt, in an effort to retain water. Of course the distress caused by the high blood pressure and headaches, just feeds back into keeping the stress hormones pumping and so the cycle continues until some radical life change occurs which allows you to de-stress and come out of hyperdrive. This phenomenon is very common to kundalini especially in the peak phase when our nervous system is volatile and fluctuating wildly. You will notice that your high-pressure periods follow a lunar and annual cycle. To get rid of hypertensive headaches and head pressure there are several things you can do. First increase your water intake (and start making bioactive water) to insure you do not get such a high release of renin, histamine, vasopressin and angiotensin, which increase the blood pressure. (See Fire and Water BOK-2)

Vasoactive Amines—Vasoactive monoamine may be involved in migraine headache. These nitrogen containing substances that dilate blood vessels, include histamine and serotonin, which are strongly vasoactive; and tyramine and dopamine which are also quite vasoactive. Amines are normally rapidly deaminated after they enter the body by monoamine oxidase (MAO), which is present in many tissues. This mitochondrial enzyme catalyses oxidative deamination of almost all vasoactive amines and so normal consumption of dietary amines is not normally a threat. But as little as 20g of tyramine containing cheese can cause a life threatening rise in blood pressure when MAO has been inhibited. Mood elevating Ginkgo Biloba increases the brain uptake of serotonin. Serotonin (5-HT) is a vasodilator, therefore a deficiency of serotonin decreases blood flow due to relative vasoconstriction.

NITRIC OXIDE HEADACHE CONNECTION

Overproduction of NO has been linked to chronic tension headache and migraine, through a L-arginine-NO-cGMP pathway. Substances capable of inducing vascular headache do so with nitric oxide as the common mediator. There is significant increase in cyclic guanosine monophosphate (cGMP) level was observed in patients during a migraine attack.

Histamine liberates nitric oxide from vascular endothelium. Histamine plasma levels are chronically elevated in those who get migraines, reflecting chronic stress. Histamine is known to liberate NO from the endothelium via stimulation of the H1 receptor, which is present in the large intracranial arteries in man. Structural alterations of NOS axons innervating blood vessels of the dura mater support the idea that nitric oxide (NO) is involved in the induction of headache, a well-known side effect of taking coronary vasodilator agents. Excess excitatory amino acid glutamate in spinal and supraspinal structures also is involved in headaches. It was found that there is a significant increase in glutamate, nitrite and cGMP levels in the Cerebrospinal Fluid of migraine suffers. Nitric oxide dilates the blood vessels, generating a blood surge which gives a "pumped" turgid pressure feeling. Inhibition of nitric oxide synthase (NOS) may become a novel principle in the future treatment of chronic headache.

Changes of serum levels of complement and immunoglobulins, histamine, cytokines and immune cells were found in some migraine studies. The inflammatory cytokine interleukin-1 (IL-1) induces nitric oxide synthase (iNOS) with an increase in nitric oxide and Tyrosine kinase plays a central role in IL-1 beta signaling to induce iNOS.

Herbs that decrease NO: Chinese herbal remedy Tripterygium wilfordii, Huang Qui, Scutellaria baicalensis, Ganoderma lucidum, Quercetin, Licorice Root, Rosemary, and Zinc is also a very potent inhibitor of nitric oxide synthase (NOS). Taking these NO inhibiting herbs will also reduce the septic shock after acute kundalini events like inner-conjunctions. Melatonin has also been reported to inhibit nitric oxide synthetase, thus might be used to reduce hypertensive headaches.

Herbs that increase NO: which need to be avoided during hypertensive head pressure include Ashwagandha, Ginseng, Horny Goat Weed, Gynostemma pentaphyllum, also called Jiaogulan, other aphrodisiac herbs and the amino acid L- Arginine.

Loss of Mental Faculties—Don't worry about loss of cognitive functions or the left-brain not working well. Work on calming down your hyper sympathetic nervous system and focus on reducing your blood pressure with walks in nature, laughter, having fun. Take some nootropics if you feel you need more mental focus (see Five formulas section of BOK). Tryptophan gets used up during prolonged stress so taking the Calm Formula should help eliminate these tension headaches and might reduce blood pressure by reducing your hypertonal nervous system and HPA axis hyperactivation.

Edema on the Brain—One cause of head pressure might be an excess of the excito-neurotransmitter glutamate in and around the glial cells in the brain due to inadequate reuptake. This glutamate would create edema swelling by holding onto excess water. You might try taking D-Mannose powder in your Superfood smoothies or in capsule form to see if the extra energy provided by this special type of sugar will help your brain cells to reuptake glutamate. The amino acid L-carnitine prevents acute ammonia and glutamate neurotoxicity. To stop the inflammatory cascade and take the body out of emergency mode you might also consider changing to a low inflammation diet such as the Zone Diet. *The Anti-Inflammation Zone: Reversing the Silent Epidemic That's Destroying Our Health* by Barry Sears. Daily consumption of fish oil is highly effective at reducing blood pressure, lowering triglyceride levels while increasing "good" cholesterol, lowering platelet aggregation and improving glucose tolerance. (See Keystone of BOK)

Insomnia—Sometimes with kundalini we go through these periods of sympathetic activation when blood pressure is so high we get insomnia, and there is a tingly feeling all over the body and the nerves are raw and irritable. One more pressure from the world and we think we are going to blow. Some of the ways to flip out of this chemistry include lying next to a river, exercising, orgasm and toning. If you are lying in bed at 3am and can't get to sleep because of this intense pressure, then turn your minds-eye into and *drop your felt-sense deep into the pressure*, while breathing slowly into the solar plexus. You can often lower the intense pressure in this manner, however you are probably going to have to make life changes to reduce the stressors in your life.

Lowering High Blood Pressure—With a right hemisphere headache you could also start putting gratitude into your liver, and focusing your mind's eye and energy into this region with your hands. If it is a left hemisphere headache do this with your spleen. Also use a heated electric massage tool to open up the neck, especially on the side where your headaches are occurring. Try also the "Pot of Gold" and "Opening the Mouth of God" in Psychosomatic Release section. Also when you get these headaches or pressure you might try putting your feet in a hot footbath to draw blood away from the head. Take plenty of baths to reduce renin production, while focusing your breathing into your solar plexus. Use an ostrich feather to slowly and gently caress the skin, around your face, neck, chest, the inside of your wrists and the backs of your knees especially.

Vasodilators are used to treat high blood pressure (hypertension). By widening the arteries, these drugs allow blood to flow through more easily, reducing blood pressure. Two or three grams per day of Arginine should help with weight loss and blood pressure control and balancing of blood sugar and insulin. But do not take Arginine if you are prone to headaches for it will increase nitric oxide production. You might want to add the Thai spice Galangal (Alpinia galanga), a close relative of ginger to your diet to help reduce high blood pressure.

To stabilize blood pressure Dr Nelson Kraucak suggests hypertensives take 500 mg of magnesium, 3 times per day up to bowel tolerance. L-carnitine (250 - 500 mg. once or twice per day) and CoQ10 (30 milligrams once or twice per day). He

says that a combination of the medicinal mushroom Cordyceps sinensis and shark cartilage gives significant improvement in blood pressure.
"*Anti-Hypertension Protocol Using Shark Cartilage and Cordyceps Sinensis*, Nelson Kraucak, MD, ABFP http://vrp.com/

REDUCING EXCESS HISTAMINE

Histamine is known to worsen asthma and eczema and to cause headaches, stimulate gastric secretion and cause dilation of capillaries, constriction of bronchial smooth muscle and decreased blood pressure.

Skin Inflammation—Mix 1 tsp caster oil with tea tree oil and rub this into your skin this will reduce histamine induced skin inflammation. For acne, hives, eczema induced by inflammatory cytokines and histamine I suggest zinc tablets and topical sea buckthorn oil. Horsetail is the ultimate herb for healing any kind of skin condition whether it be acne, eczema, chapping or burns. Bioflavonoids, the natural pigments in fruits and vegetables reduce histamine production. Oligomeric proanthocyanidins are a class of flavonoid antioxidant complexes found in Grapeseed and sea buckthorn oil which also reduce histamine. Purchased from www.mountainroseherbs.com

Topical antihistamines include the oils of caraway, cardamom, chamomile, clove and lemon balm. Frankincense essential oil is also good to apply topically as an anti-inflammatory agent, which doesn't burn the skin like teatree oil can. You can also apply harp seal oil to skin inflammation as it is a great source of Omega 3 long-chain polyunsaturated fatty acids (DHA, EPA, DPA), Squalene and Vitamin E. You might also try mixing fresh wheatgrass juice with bentonite or pascalite clay and making a face pack of this...leaving it on the skin for about 40 minutes.

Sulfur Sensitivity—Asthmatics sometimes have a sulfite sensitivity because of an enzyme deficiency of sulfite oxidase, that normally helps break down sulfur dioxide. Occasional patients exposed to sulfites, will experienced symptoms similar to anaphylaxis with flushing, fast heartbeat, wheezing, hives, dizziness, stomach upset and diarrhea, collapse, tingling or difficulty swallowing. A sulfur sensitivity usually results in either a true allergic reaction or respiratory discomfort, not a headache; a headache say from drinking red wine is actually attributed to the tannin in the wine, not the sulfur dioxide.

ANTIHISTAMINES:

Anti-histamine substances which naturally reduce inflammation and associated symptoms include: Vitamin C, vitamin E, sulfur, pancreatic enzymes, alpha lipoic acid, glucosamine sulfate, proanthocyanidins and NAC. Fish oil-Omega 3 and GLA omega-6 fatty acid from evening primrose and borage oils. SAMe (S-adenosyl-L-methionine) has been shown to reduce inflammation. Dr. Batmanghelidj says that salt is the best antihistamine there is.

MSM—(Methylsulfonylmethane) is a sulfur-based compound that blocks cell receptor sites for histamine, lowering histamine levels, reducing allergy-induced symptoms, which may contribute to inflammation. Sulfur is a component of

amino acids (methionine cysteine, taurine), some vitamins (e.g. B1, biotin), hormones (insulin), coenzymes (coenzyme A), and antioxidants (glutathione, N-acetylcysteine, alpha-lipoic acid). Because sulfur is necessary to build "disulfide bonds," which hold together tissue, it forms part of the body's physical structure, including protein, collagen, glucosamine, skin, and nails. With adequate MSM cells become more permeable, enabling detoxification of any undesirable foreign particles. If you body is sulfur deficient, the cell walls become hard and stiff, hindering the flow of fluid through the cell walls. Thus MSM softens the cell walls, allowing allergens, foreign proteins, and any free-radicals to be moved out of your system.

Zinc—stabilizes the cell membranes and inhibits the formation of free radicals. Zinc also strengthens the integrity of blood vessel walls by reducing the membrane permeability and stopping bleeding. Zinc has an inhibitory effect on the release of histamine from mast cells due to its stabilizing effect of the mast cell membrane. Bromelain (quercetin) reduces histamine. Vitamin C also helps reduce histamine release. Selenium reduces immunoglobulin action on mast cells and, therefore, also reducing histamine.

Resveratrol is a phytoalexin found in the skin and seeds of red grapes, is an antioxidant, antimutagenic, antiviral and anti-inflammatory. It is also a powerful phytoestrogen that can help maintain normal estrogen activity. Resveratrol is also found in raspberries, mulberries, peanuts, blueberries, bilberries, and cranberries, Scots pine and eastern white pine, and the roots of Japanese knotweed (hu zhang).

More antihistamines: Alternate chamomile tea with peppermint tea but do not drink any caffeine or this will contract your blood vessels and raise your blood pressure. Nettle Tea (Urtica) are extremely helpful, especially if you have the high histamine levels indicated by sensitive skin and frequent 'prickly heat' type symptoms. Nettles reduce histamine levels and act as a blood tonic. If you have dandelion in your garden, slowly chew on one dandelion leaf an hour for stimulation of diuresis (urine flow).

Other antihistamine herbs include wild oregano, rue, basil, echinacea, fennel, fig, ginkgo, grapefruit, passionflower, tarragon, tumeric, skullcap, berberine, thyme and yarrow, papaya, amaranth seeds and ginger. The combination of quercetin and bromelain helps maintain the proper functioning of the body's histamine response. Frankincense (Boswellia) inhibits pro-inflammatory mediators in the body, and maybe helpful for ulcerative colitis. However the tree resins will tend to increase blood pressure and need to be avoided during hyper-sympathetic activation.

PROHISTAMINE FOODS:

Histamine occurs in food as a result of microbial enzymes converting the amino acid histidine (present in all proteins) to histamine. Thus foods containing histamine include aged protein containing foods and fermented foods such as fermented cheeses (e.g. Camembert, Brie, Gruyere, Cheddar, Roquefort, Parmesan). The foods most commonly reported to induce a histamine reaction

(hives, allergies, headaches) are shellfish, fish, egg, chicken, processed meats, milk, nuts, chocolate, berries, tomatoes, wheat, strawberries, pineapple, brewer's yeast, tomato, spinach, red wine (especially Chianti), beer, fermented soy products and all fermented vegetables, such as sauerkraut. Folic Acid, Niacin and B12 are used to make histamine. If you are sensitive to these foods you may have a panic attack or dizziness attack around two days after consuming them when water is extracted as the feces pass through the colon.

MAGNESIUM

The average American consumes only 40% of the recommended daily allowance of magnesium, thus apparently 90-95% of the population is magnesium deficient. Because of the processing and refining of foods and insufficient remineralization of soils magnesium deficiency is becoming common. Cancer rates increase in areas where food grows on less favorable soil, lacking in magnesium. RDA for Calcium over 18 years is 800mg-1500mg and for Magnesium is 300-400mg. Magnesium is an essential mineral that activates over 300 different biochemical reactions. The chief function of magnesium is to activate certain enzymes, especially those related to carbohydrate metabolism. Another role is to maintain the electrical potential across nerve and muscle membranes. It is essential for proper heartbeat and nerve transmission.

Magnesium is required to regulate calcium, potassium or sodium. Calcium needs magnesium in order to assimilate into the body. However, when too much calcium is consumed, it will pull magnesium out of the body parts in order to assimilate. If the level of magnesium is not maintained the excess calcium may become a toxin, resulting in arthritic calcium deposits on joints. Magnesium is a natural calcium channel blocker to protect the body from getting too much calcium. Magnesium does not build up in the body but the excess is eliminated while excess calcium builds up. Taking equal amounts of magnesium supplement as calcium has been used to slowly remove arthritic deposits and bone spurs. Spurs form at joints in calcium deficient conditions. When the calcium is being leached, it forms an eruption. This eruption is the bone spur. By allowing elimination of uric acid, ammonia and acid toxins, and relaxing muscles Magnesium is a major pain relief mineral. Magnesium increases the solubility of calcium, phosphate and possibly oxalate thereby helping to prevent and eliminate stones in the body.

This mineral imbalance of excess calcium and a deficiency of magnesium in the cell is a sign of aging and degenerative disease. A British researcher found that 80% of fatigue patients lack magnesium. Fatigue can lead to a cycle of addiction to addictive stimulants in an attempt to gain more energy. You need to ingest levels above the government's recommended daily intake 400mgs of water-soluble magnesium a day or energy production is inhibited, resulting in fatigue and weakness. Magnesium is essential to regulating potassium levels and functioning of the adrenal glands, which are both important to maintaining high energy levels. An energy crisis in the cell through the lack of ATP generation occurs in the presence of excess glucocorticoids, prostaglandins and cytosolic calcium, cAMP.

Permeability of the cell wall due to the membrane hardening effect of oxidation reduces the assimilation of nutrients, and wastes are not as easily excreted. Then cells no longer function or communicate well with other cells and cell-systems. Aging is associated with cellular dehydration causing a disintegration of the cell framework. Remember 60% of cell water is bound to molecules within the cell forming the cell structure and integrity**. Dehydration** creates increased cytosolic calcium turnover for cation regulation. Since the active transport of cations

requires energy, histamine also liberates energy for this function. The conversion of the energy fuel ATP to its spent cAMP produces both energy and Ca2+ release. Dehydration increases acidity and oxidation reducing receptor sensitivity, cell membrane permeability, and the generation of ATP in mitochondria.

Magnesium is called the "anti-stress mineral" as it aids in calming nerves, relieving tension and relaxing muscles. Cortisol production makes you put on visceral fat and magnesium lowers cortisol levels—thus it can contribute to reduced silent inflammation. Magnesium also helps your body convert fatty acids into the anti-inflammatory prostaglandins. A new study showed that adults who consume less than the recommended amount of magnesium are almost twice as likely to have chronic inflammation. Inflammation plays a role in the development of atherosclerosis, cancer, Alzheimer's disease and the aging process in general. Daily oral magnesium therapy can prevent subsequent heart attacks and improve quality of life in people with stable coronary artery disease. In an article at Bill Sardi's website *The Mineral That Could Have Saved 4 Million Women*, he says that Epsom Salts (magnesium sulfate) is remarkably effective at reducing the risk of life-threatening seizures (eclampsia) due to the high blood pressure associated with pregnancy. This is very important to know for kundalini actives whom may go through intense periods of hypertension, seizure, convulsion, insomnia, muscle spasms and irregular heartbeat. Also if you are ingesting tree resins or tree bark you may need to increase your magnesium and water intake to avoid increased blood pressure, heart palpitations and hypertension-insomnia.

Magnesium is effective at lowering high blood pressure. People with hypertension or non-insulin dependent diabetes have higher levels of intracellular calcium and lower levels of intracellular magnesium. Excess calcium in the cells and depleted magnesium is associated with insulin resistance, resulting in obesity, diabetes, arteriosclerosis, hypertension and aging. Low magnesium can result in opening of calcium channels, increased intracellular calcium, glutamate release. Asthma, headaches, migraines, seizures, depression, fibromyalgia, anxiety, ADD, arthritis and kidney stones get worse when insufficient magnesium is consumed. Higher intake of magnesium appears to improve glucose and insulin homeostasis. Magnesium has been found to improve insulin's response to dietary sugar and improve the action of insulin in regulating blood sugar levels.

Magnesium supplementation during kundalini awakenings is imperative due to the long periods of HPA-axis hyperactivation and increased utilization of fat stores. Ketosis is the toxic waste products from fat mobilization, which raises blood acidity and causes the body to lose vital alkaline minerals such as potassium, calcium and magnesium. Plus magnesium will help deal with the ammonia from the breakdown of protein during catabolysis, because Magnesium activates glutamine synthetase, a key enzyme that helps cells dispose of ammonia.

Excesses of nutrients that interfere with the absorption or increase the excretion of magnesium-such as fat, phosphate, sugar, and vitamin D-can contribute to long-lasting relative magnesium deficiency. **Magnesium Depletors** include: coffee, sugar, mental stress, alcohol, sodas, fluoride, high sodium diet, tobacco, medical

drugs, birth control pills, high perspiration, low thyroid, diabetes, diuretics, chronic pain, a high carbohydrate diet, a high calcium diet.

Ideally supplementation should be in Ionic Liquid Magnesium form, for water-borne magnesium is more readily absorbed by the gut than is food-borne magnesium. Magnesium supplements that are not water soluble or available in ionic form it will literally pass through the digestive track. Ionic Liquid Magnesium can be made by dissolving in water any soluble magnesium salt such as Magnesium citrate (10% Mg), Magnesium glycinate (15% Mg), or Magnesium malate (15% Mg). Even prolonged soaking in Epsom salts increases blood magnesium. If you have painfully tight neck and shoulders, make up a concentrated foot bath of Epsom salts in a container with a lid and soak your feet for 5 minutes a day. Two teaspoons of NOW 2:1 Cal/Mag powder provides 100% RDA of magnesium. You can put say ½ teaspoon Cal/Mag into your Superfood smoothie. Calcium can cause constipation, so it is necessary to take magnesium along with it. Too much magnesium may make it difficult for the body to absorb calcium. A quarter to a half a teaspoon of Magnesium citrate prior to bed with glass of water, is a way of getting magnesium while avoiding constipation.

Magnesium ions (Mg^{2+}) are absorbed 30-40% through the intestines, and the rest of the ions remain in the colon causing water to be drawn into the colon, softening of the stool. This osmotically mediated water retention subsequently stimulates gastrointestinal motility (peristalsis). In addition, magnesium ions may also stimulate the activity of nitric oxide (NO) synthase, which promotes colonic secretion. Furthermore, Mg^{2+} ions somehow cause the release of CCK, which causes intraluminal accumulation of water, electrolytes and intestinal motility. If the colon is doing its work well, it means that detoxification at the cellular level can also be expedited, thus the importance of magnesium in regulating the "flows" of the cells and body-total. To rectify the aging and disease process we need to increase the integrity of our cell membranes and receptors, and reverse magnesium deficiency and overcome cellular dehydration. Thus we need fish oil and other fat-soluble antioxidants to build and preserve cell membranes.

Methylsulfonylmethane (MSM) is an organic sulfur compound which softens cell walls so it may help reverse the effects of membrane hardening due to oxidation. It makes the walls of individual cells more "permeable." This means that the cells can more easily get rid of toxins, and the cell can also absorb nutrients more easily. This characteristic of "increasing permeability" of cells explains its ability to relieve pain. Inflammation of joints is often also caused by toxic accumulation—MSM is a powerful detoxifier. The amino acid creatine increases the water retention of the cells. We can add small amount of MSM and Magnesium citrate along with the Himalayan Salt to our drinking water. Also we must adopt a magnesium rich "raw" diet, because magnesium is generally lost in cooking.

The main thing to remember is that green vegetables are good sources of magnesium because the center of the chlorophyll molecule contains magnesium. Half a cup of spinach is 80 milligrams of Mg. Other magnesium foods include almonds, brazil nuts, wheatgerm, wheat bran, seeds, millet, seafood, fruit (especially

the skins) and hard water. Raw cacao (**chocolate** powder) contains the highest magnesium of any common food. Besides lowering blood pressure and increasing blood supply to the brain, cacao also alieviates depression by increasing serotonin, and it is a powerful antioxidant. David Wolfe's "Nature's First Law Raw Organic Chocolate Powder" is the best on the market because it is cold-pressed to make sure the processing occurs at a low enough temperature to keep taste and nutrition at an optimum!

Sprouting and Growing—I am a big advocate of adding the minerals to our sprout/wheatgrass system to maximize assimilation, with the least amount of stress on the kidneys. We might focus on increasing the Magnesium in our food growing arena because the chlorophyll of plant protoplasm has magnesium that is the most readily available to the body. For gardening the most common magnesium fertilizer is **dolomite** lime that provides both Ca and Mg and neutralizes soil acidity. Epsom salts (magnesium sulfate) is also a Mg fertilizer but tends to acidify the soil. Researchers show that phosphorus (P) is crucial for Mg uptake by roots, and even if roots can absorb the Mg from the soil, it is not carried to the higher plant-parts if the plants are deficient in P; so you might want to add some rock phosphate to your soil. Organic banana skins and potash can be added to the compost for potassium.

www.knowledgeofhealth.com/ —In Search of the World's Best Water, by Bill Sardi

www.carolyndean.com/ —The Miracle of Magnesium, Carolyn Dean

www.mgwater.com/ —Great Information on Magnesium

PART V
MECHANISM OF KUNDALINI

ZERO TO 3 YEARS

The primary matrix of brain development from zero to 3 years has a huge impact on our entire lives. **Allan Schore** suggests that the core of our sense of self lies in the patterns of emotional response (affect regulation) experienced in infancy and that this regulatory capacity is responsible for the maintenance of the continuity of the sense of self. Once laid down in the first few years of life, this original non-verbal, prerational stream of emotion resulting from the infant-caretaker bond continues throughout our life to be the primary unconscious motivator in our relationships, having profound impact on our self-esteem and ability for intimacy, trusting and bonding.

"It is the experiences of early childhood that create the foundational organization of neural systems that will be used for a lifetime… While many more well-controlled studies are needed, it is likely that certain brainstem catecholamine systems, for example, the locus coeruleus nora adrenergic, the limbic areas, the amygdala, and the neuroendocrine hypothalamic-pituitary-adrenal axis, and cortical systems involved in regulating stress and arousal, maybe altered in traumatized children". Dr. Bruce Perry

Allan Schore stresses the role of the attachment processes in the infant-caregiver interactions in determining the "neurological bridge" between emotion and reason built as the infant develops. The physical and social context provided by the caregiver to the infant is an essential substratum of the assembly of the brain's primary matrix (zero-3 years). Schore states both the obvious and the ineffable when he says that a brain can only develop in the context of another brain and if isolated would become very atypical.

Lack of loving emotional regulation in the infant from insufficient mother-child bonding reduces the lush development of the connections between the **right orbital complex** and the limbic brain (Scaer) and interferes the perfection of the pleasure circuitry between the cerebellum and prefrontal lobes (Prescott). These attenuated neural networks mean that kindling in the amygdala and temporal lobes is more likely to occur since the control of emotion by the cortex is not as impactful as it would be in a brain that is developed under loving primal mothering. The result being that those who experienced neglect, trauma, abandonment in dysfunctional homes as a child are more likely to get epilepsy, seizures and kundalini awakenings.

"Timing is everything. Bonding experiences lead to healthy attachments and healthy attachment capabilities when they are provided in the earliest years of life. During the first three years of life, the human brain develops to 90 percent of adult size and puts in place the majority of systems and structures that will be responsible for all future emotional, behavioral, social, and physiological functioning during the rest of life. There are critical periods during which bonding experiences must be present for

the brain systems responsible for attachment to develop normally. These critical periods appear to be in the first year of life, and are related to the capacity of the infant and caregiver to develop a positive interactive relationship." Dr. Bruce Perry

Myelination of the smart vagus occurs throughout the first year after birth, thus the neurology that governs ones potential for bonding, communication and relationship is determined by the quality of mother-infant interactions. The growth of the baby's brain literally requires interaction with the brain of a caregiver the context of a positive relationship. When this need is thwarted dysfunction expresses itself primarily in the sphere of relationships, and this sphere is anchored in the function of the right-brain. Maturation of the **adaptive right-brain's** regulatory capacity is experience dependent, and this experience is embedded in the attachment relationship between infant and primary caregiver. The early right-brain capacities are not only central to the origin of the sense of self, they are required for the ongoing development of the self over the lifespan.

The nervous system of newborns lack the ability to buffer sensory signals, thus over-stimulation of any kind will be experienced as pain; and stress hormones further increase the perception of pain. High stress from abuse and neglect is toxic to the infant's brain, and neglect maybe even more detrimental than abuse. Because a brain grows in association with another brain, caregiver induced trauma is more harmful than any other stressor. Relational trauma in infancy interferes with the maturation of the brain's coping systems, and has an enduring negative impact on developmental processes.

Since limbic regulation between parent and child directs neurological development, social contact is necessary for evolving behaviors to assemble into a functioning animal. Without parental guidance, neurochemical disjunctions accumulate and budding behaviors coagulate into a mess with scant resemblance to a healthy coherent organism and functional self. Thomas Lewis in *A General Theory of Love*, says that rhesus monkeys reared in isolation, having been deprived of early limbic regulation, become irretrievably neurologically disorganized and lose the ability to modulate aggression, which prevents social cohabitation. He points out that attachment IS physiology!

The development of infant-attachment and healthy socio-emotional functioning depends on the presence of consistent, responsive, attuned, and nurturing caregivers whose central task is to keep the child "safe." Because the mammalian nervous system cannot self assemble an initial optimal relational environment is needed for proper cognitive and emotional brain development. To establish a coherent and cohesive neural structure the mammalian nervous system requires interactive coordination through synchronization with Attractor Figures.

"Nature appears to have built our abstract and rational apparatus not just on top of that of biological affect regulation but also from it and with it. Our rationality is flavored inextricably with the patterns of our emotions. Thus rationality results from the seamless combined efforts of the neocortex and the older brain core." Alan Schore

The adaptive capacity to cope with change and stress is a right-brain function, which is built up over time. The early postnatal period represents a crucial period

of limbic–autonomic circuit development of the **amygdalaorbitofrontal** tract. At this time the primary stimulation required is loving skin-to-skin contact. These tactile interactions are vital to optimal development and participate in shaping ongoing synapse formation. Violations of the innate agenda for infant development needs, such as separation from the mother, generates a protest-despair response commonly referred to as "hyperarousal and dissociation".

Hyperarousal— The hypermetabolic "protest" response is one of intense activity to reunite with the mother. The sympathetic autonomic nervous system is suddenly and significantly activated, increasing heart rate, blood pressure, tone and vigilance; frantic distress is expressed in crying then screaming. This state of autonomic ergotropic arousal produces excessive levels of stress hormones resulting in a hypermetabolic brain state.

Dissociation—After hyperarousal the hypometabolic "despair" response occurs involving numbing and detachment. Dissociation is similar if not identical to the freeze response. This is an automatic parasympathetic regulatory strategy that occurs in hopeless situations to foster survival by the risk of feigning death. In this passive state of profound withdrawal, endogenous opiates are increased to produce analgesia, immobility and inhibition of cries for help. The individual passively disengages to conserve energies, temperature, heart rate and blood pressure decreases, and there is a massive rise in stress hormones.

Intense relational stress exposes the nervous system of the infant to hyperarousal and dissociation which then increase the risk for developing severe psychopathologies and health problems later in life. Since both the sympathetic and parasympathetic sides of the infant's developing brain become hypertonal this leads to conflicting biochemical alterations. The HPA axis and vagal tone increases dramatically and toxic neuroendochrine chemistry develops with associated alterations in calcium metabolism and apoptosis. Thus truncated and deficient wiring occurs which shows up as neurosis, ineptitude for lasting relationship, and various other mental, emotional and behavioral pathologies.

The **hippocampus** nerves are not myelinated at birth and gradually undergo myelination during our social environment in the first few years of life, this probably accounts for our lack of consistent conscious memory of infancy. Pain and distress, whether it be from physical or from relational trauma, changes the NMDA receptors allowing them to open more easily and stay open longer. This in itself would be a factor in the excitability of hyperarousal and the shutdown and atrophy of dissociation through over activation of NMDA receptors (glutamate toxicity).

Research in the last few years has shown that new nerve cells may even develop in areas of the adult brain, including the hippocampus, the area that is important for making new memories. Recent evidence suggests that one factor leading to new neuron growth maybe physical and mental activity. So the hippocampus nerves can be enrichened by use, and can be impoverished by lack of use, trauma and stress. *Trauma affects our capacity for cortical control over the limbic system to regulate bodily homeostasis.*

When our HPA axis is permanently fired up, the stress hormones inhibit and cell division and growth in the hippocampus and prefrontal cortex. Thus our brain areas for rational thinking and memory atrophy and shrink leading to withdrawal and depression. The big picture view of this shows an organism in defensive retreat from life such that it reduces its organs of conscious perception and memory. Modern life, with the Tiger permanently at our backs is depressing and repressing us into living on the surface of our cognitive capacities. This hypertonality of the autonomic nervous system constitutes what Wilhelm Reich called "**armoring**" with infinite implications to the quality of the individuals life, and to our collective culture as a whole. "We know that neurotic armoring impairs both biological regulation and integrative intelligence, and so the self in this circumstance has less cognition of its various intelligences and cannot draw from the full depth of evolutionary heritage."

Because sustained hypervigilance is so stressful, wasteful, enervating and toxic, not to mention "brain damaging," I believe kundalini is natures method of giving us a second chance. It is my opinion that kundalini awakens in an attempt to throw off this truncated wiring to allow the organism to become more contemporarily responsive to its current environment, and to mature in a fashion that is transcendent of its circumstances of origin. As such a kundalini awakening constitutes an amazing act of Grace by the universe for the redemption of individual lives. However in societies where kundalini is actively cultivated such as the Kung!, or Eastern Cultures or Shamanistic lineage the potential for triggering kundalini is obviously not determined by childhood malformation of the brain. The anomalies, paradoxes and contradictions of kundalini can all be explained by the complexity of the phenomena and the human organism and its function in general.

Considering that our first few years of life are as radical dependents, if we not given adequate heart-eye engagement at this point I think that a "hole" in the self develops which makes us play out codependent, addictive, power games later on. When the primary matrix is left wanting then we beget a society of two years olds, having two years olds ad infinitum. People normally look at the symptoms (excess weight, ADD, alcoholism, codependency etc...) without addressing the cause. Much better to go directly to the original wiring that was "abused or deprived" and address that. For example I see the main causes of obesity to be lack of breast feeding and primal mothering messing up the pleasure centers in the limbic brain. Coupled with urban living and TV-sedentariness. Dismantling the autonomic pain-machine can take a long time. Witnessing it is good, but kundalini, raw diet, breathing, exercise, intimacy etc... make the pain-body go away. I don't have much pain-body left myself, but I would like to live a lifestyle that is essentially an anti-pain-body lifestyle. Everything good must come out of that, and nothing good would come out of driving ones organism like an old mule day after day without giving it what it needs.

A lot of the damage that fetuses and infants undergo is not through human evil but through deprivation out the ignorance of timing and development needs. That is why I think a serious extended educational program via TV is essential, for the general population will not get conscious child raising of their own accord,

hence education is vital. We must be retaught through community and experience what it takes to make whole human beings. The pain-body results from lifestyles and circumstances that are contrary to the natural laws of life. Whether that be deprivations, abuses, traumas, absences, excesses, non-inclusion, toxicities or negativities. Without primal mothering the inadequate development of neural connections between the old (limbic and hind) brain and the new (prefrontal lobes) means that we have to spend the rest of our lives fighting to recover our soul. A soul and creative genius, which would have been innately ours had we been carried around and given adequate loving eye contact and touch for the first couple of years of our life. In his book *Radical Knowing* Christian de Quincey says that relationship comes first, and then our individuality grows out of our relationships—not the other way around.

We are "shaped" by our early relationships, not "determined" by them. Between infants there would be a large range of possible response to our social environment depending on the individuals social immunity, emotional wiring and capacity for self-destruction. The perfection organizing in the brain and the maintenance of homeostatic mechanisms in the body, is "aided" by the presence of loving bonds. Dysfunction occurs with the absence of love, or the presence of toxic caretakers…how badly this impacts the development and consequent life of the individual depends on innate qualities that the individual him or herself has. Thus our subjectivity does determine our intersubjectivity, but our intersubjectivity is determined by our subjectivity. Belief and intent of the individuals within relationship determines consensus reality, but we must never forget we are not victims and that we also have a say in that reality.

Due to the neuroplasticity of the brain we can help overcome insufficient development of the right orbital cortex, and thereby reduce the hypertonality of the threat response. We can also overcome the damage of stress hormones to the amygdala and hippocampus through such things as meditation, hydrotherapy and retraining the nervous system. I find it good for health and well-being to do some emotional reparenting self-talk just before sleep each evening. Psychosomatic therapies and practices like Hakomi, bioenergetics, Tai Chi, martial arts, yoga and sports in general will help to develop more advanced wiring patterns in the brain. There are some self-help things one can do to regrow the primary matrix, but we have to be consistent (daily), loving and conscious!!! *Some of the practices in Kundalini Skills that would directly "touch" the primary matrix are:* Solar Plexus Breathing, Full Already Breathing Meditation, Spinal Rebirthing, Healing the Heart Hole, Spinal Shower, Loving Self Talk, Cultivating Emotional Equilibrium and Welcoming Belonging Therapy.

For information on primal mothering read *The Continuum Concept*, by Jean Liedloff. Also *Magical Child* by Joseph Chilton Pearce.

"Affect Regulation and the Origin of the Self: A Neurobiology of Emotional Development," and *"Affect Dysregulation and Disorders of the Self"* by Allan N. Schore, 2003

POLYVAGAL THEORY

The researchers at Howard Hughes medical Institute, led by Bruce Lahn have found evidence that the pressure of natural selection has lead to dramatic changes in two genes known to control brain size in humans. Brain size or intelligence is naturally selected for in evolution for obvious survival reasons, and larger brains require more oxygen. Although the brain represents only 2% of the body weight, it receives 15% of the cardiac output, 20% of total body oxygen consumption, and 25% of total body glucose utilization. The larger the brain, the greater the demand of oxygen and hence the more sophisticated the nervous system needed to provide that oxygen…the evolutionary payoff for larger brain size of course being survival. As a natural extension of mammalian evolution we can see that the human neocortex was an inevitable consequence of evolutionary pressure.

According to the Poly-Vagal Theory during evolution the mammalian nervous system developed two vagal systems. Built onto the relic of amphibians and reptiles is an evolutionary modification unique to mammals. Looking at the history of evolution Poly-Vagal Theory notes the importance of the need for oxygen in evolving the mammalian nervous system. During evolution as the mammalian nervous system got more complex than its amphibian and reptilian brothers, there was a greater demand for oxygen. Porges says that it was this need for extra oxygen that may have provided the evolutionary pressure leading to the development of the highly adaptive and sophisticated autonomic nervous system found in mammals; and that behaviors such as orienting, attention, emotion and stress are by-products of the **evolutionary pressure** to optimize oxygen resources. The Polyvagal Theory addresses the relative roles of the vagus nerve in energy conservation and survival.

*In Stephen Porges's Polyvagal Theory he uses the term **Polyvagal** to distinguish between the two main branches of the vagus nerve:*

1: **The Vegetative Vagus**—originates in the dorsal motor nucleus (DMNX), descends visceral efferent fibers regulating smooth and cardiac muscle and is associated with passive reflexive regulation of visceral functions: peristalsis of the GI tract, sweating, lungs, diaphragm, stomach. At the heart it is connected to stretch receptors of the aortic arch and chemoreceptors of the aortic bodies and is responsible for heart rate**,** dilation of blood vessels and blood pressure. The output from the dorsal motor nucleus does not convey a respiratory rhythm. The most primitive function of the vagal complex is the **freeze response**, which is dependent on the unmyelinated vagus that is part of the reptilian system.
2: **The Smart Vagus**—which originates in the medullary source of the nucleus ambiguus (NA), serving efferent fibers regulating the somatic muscles of speech and eating: the larynx, pharynx, and esophagus. The ventral vagal complex (including NA) related to processes associated with attention, motion, emotion and communication. The functional output of the NA-vagus on the heart is part of a common neuronal network producing a cardiorespiratory rhythm. The most evolutionary recent component—the communication system functions through the new-mammalian or myelinated vagus that regulates the heart and the bronchi to promote calm and self-soothing states.

In mammals the two vagal systems are neuroanatomically distinct, have different origins, and are programmed with different response strategies and may respond in a contradictory manner. Thus Porges attributes various medical disorders to competition between DMNX and NA originating fibers. The different vagi may have oppositional outputs to the same target organ. The vagus is a complex of neural pathways originating in several areas of the brainstem. The vagus nerve consists of afferent and efferent parasympathetic (acetylcholine) fibers that run from the brainstem (medulla oblongata) down to the traverse colon and urinary organs; providing both motor and sensory parasympathetic activation for everything from the neck to the G spot. Efferent fibers originate primarily in two medullary nuclei (NA, DMNX). The vagus is not solely an efferent or motor pathway, at least 80% of the vagal fibers are afferent; that is they conduct impulses from the periphery of the body to the brainstem.

According to the Polyvagal Theory the growth of the autonomic nervous system evolves through three stages:

1. **Freeze**—First a primitive unmyelinated visceral vagus that fosters digestion and responds to threat by depressing metabolic activity eg: freeze response.
2. **Fight-or-flight**—The mobilization or fight-or-flight is dependent on the functioning of the sympathetic nervous system; increasing metabolic output and inhibiting the visceral vagus to foster mobilization behaviors necessary for fight-or-flight.
3. **Communication**—The third stage, the mammalian myelinated vagus, can rapidly regulate cardiac output to align with the environment and is associated with cranial nerves that regulate sociability via facial expression and vocalization.

Stephen Porges points out the phylogentic hierarchy of response to challenge: *"The hierarchy emphasizes that the newer "circuits" inhibit the older ones. We use the newest circuit to promote calm states, to self-soothe and engage. When this doesn't work, we use the sympathetic-adrenal system to mobilize for flight and flight behaviors. And when that doesn't work, we use a very old vagal system, the freeze or shutdown system."*

Stephen Porges suggests that the true freeze response is dangerous to mammals. For example, high tone in the dorsal motor nucleus vagal system maybe lethal in mammals through an overdose of the immobility response overdose. Whereas high tone from the NA-vagal system maybe beneficial in adaptive significance of mammalian affective processes including courting, sexual arousal, copulation, and the establishment of enduring social bonds. In the development of enduring pair-bounds the mammalian vagus communicates safety and trust, via oxytocin and vasopressin, between the hypothalamus and the medullary source nuclei of the viscera vagus.

Porges suggests that we use our higher cognitive processes to calm the stress response and establish effective connections with others by using our facial muscles, making eye contact, modulating our voice and listening to others. In this way we increase the influence of the myelinated vagus, which calms us and turns off the

stress response and makes us more metabolically efficient. He says the social neural circuit supports our health through its calming influences on the heart and lungs and its reduction of HPA axis activation.

The vagus is asymmetrical with the left and right sides performing different tasks, with the right vagus most active in the regulation of the heart. Primary emotions are related to autonomic functioning since they are often survival related, they must be integrated into the regulation of the heart and lungs. **Emotions** have a right limbic bias, as does the brainstem medullary structures controlling visceral function. Only when the environment is perceived as "safe" is there cortical regulation of the visceral pathways, because while under threat, cortical control of brainstem structures would compromise the individual's ability to mobilize. Therefore when stressed or in danger, cortical control of brainstem is "inhibited" and the brainstem structures are "disinhibited" to allow the sympathetic nervous system to efficiently increase metabolic output.

Stimulation of the ascending fibers of the vagus releases **norepinephrine** into the amygdala strengthening memory storage in regions of the brain that regulate arousal, memory and feeling responses to emotionally laden stimuli. These ascending fibers is how the peripheral epinephrine from the adrenals released into the blood during the fight-or-flight response activates the release of norepinephrine in the limbic system sharpening memory of the events. Since the adrenal hormone epinephrine cannot cross the blood brain barrier it activates the vagus nerve, which in turn stimulates neurons in the brainstem known as the "Nucleus of the Solitary Tract (NTS). This third medullary nucleus, located near DMNX, is the terminus of many of the afferent pathways traveling through the vagus from peripheral organs. Vagus afferent sensory fibers carrying information to the brain from the head, neck, thorax, and abdomen relay information to the NTS. These NTS neurons release norepinephrine into the memory processing areas such as the amygdala and hippocampus to activate long term memory storage of emotionally laden events. This explains why vagus nerve stimulation was found to improve memory consolidation of recent events. Researchers found that by microinjecting the NTS with either GABA agonists or glutamate antagonists, they thereby increased GABA or decreased glutamate in the NTS and this blocked seizures.

Stephen W. Porges, Ph.D. found that he could improve autism by stimulating the newer structures and prompting the social engagement system with the use of acoustic sessions using frequencies associated with the human voice. Check out Stephen Porges's fabulous papers on the web.

VIVA LA VAGUS

Vagus Nerve Stimulation (VNS) is now being used for depression, seizures and eating disorders. Although the precise mode of action of VNS is not known, researchers suggest that VNS increases seizure threshold by causing widespread release of GABA and Glycine in the brain. Reported changes in blood flow in the cerebellum, thalamus and cortex might activate inhibitory structures in the brain reducing seizure kindling. One VNS study showed mean seizure frequency

to decrease by 25%. Altered synaptic activities at sites of persisting VNS-induced cerebral blood flow changes may reflect antiseizure actions.

Depression affects some 340 million people worldwide and there is a correlation between depression and the likelihood of developing seizures. VNS increases cognitive skills reflecting a reduction in depression. Areas of the brain that are affected by Vagus Nerve Stimulation include the medulla, cerebellum, parabrachial nucleus, locus ceruleus, hypothalamus, thalamus, amygdala, hippocampus and cingulated gyrus. Noradrenergic and/or serotonergic deficits, may contribute to predisposition to some epilepsies and depressions. Evidence suggests that vagus nerve stimulation exerts at least some of its anticonvulsant and antidepressant effects through its capacity to increase noradrenaline and serotonin transmission.

The vagus is responsible for keeping the larynx open for breathing and also feeds the lungs and diaphragm. **Deep breathing** stimulates the vagus nerve bringing balance between the parasympathetic and sympathetic nervous systems. Since a VNS device and its surgical implantation will run at nearly $30,000 it's an expensive treatment for seizure, compulsiveness and depression…breathing however does a similar job of activating the vagus nerve and it's free. The sense of contraction and pain in the core of ones torso and neck during the heating phase prior to popping is obviously the vagus nerve making a valiant effort to counter the revving up of the pituitary-adrenal-axis, and the sympathetic nervous system. The vagus is trying to keep the emotional-memory arousal faculties of the body repressed; hence we feel this conflict as a persistent tension in our core for up to 2 years prior to awakening.

Besides breathing it is also possible to stimulate the vagus into relaxing the body-core by turning the minds eye into ones center and actively warming and purposefully letting the area go. All thoughts, emotions and phenomena are drawn into ones core as though one is an atomic karmic disposal unit. We could call this practice **Melting In The Core**—turning the minds eye into actively stimulating the vagus nerve into relaxing the viscera. This alleviates depression, increases coherency, lucidity, makes for a more vibrant personality and improves health and well-being.

Scientists are investigating the existence of non-genital orgasms suggesting a more pervasive orgasmic process and its role in neuroendocrine and psychological health. There are vaginocervical sensory pathways to the brain that can produce the absence of pain without loss of consciousness (analgesia), release oxytocin, and bypass the spinal cord via the vagus nerve. That is a paraplegic woman can still have cervical and G spot orgasms because the vagina is fed by the vagus nerve while the clitoris by nerves that come out of the spine. This gives weight to the necessity of sexual intercourse for maintaining healthy balance of the nervous system. Also there might be something to the validity of having sex during an awakening to help the parasympathetic nervous system to maintain its own. **Orgasm** has been described as a mini-seizure of the limbic system and tends to release or lessen deep limbic activity. Dr Amen noticed that depression, sadness, feelings of hopelessness, and automatic negative thoughts correlate with a hyperactive limbic area. The

supplements that seem to help limbic hyperactivity best are DL-phenylalanine (DLPA), L-tyrosine, and S-Adenosyl-Methionine (SAMe).

I find it fascinating that the parasympathetic off-switch vagus turns on activating neurotransmitters in the emotional memory systems...obviously this is a big factor in the reward/punishment building of our response system. One of the contributors to the tenacity of PTSD as well no doubt, and you know they give norepinephrine blockers to trauma victims to block the vividness of their memory. Because stimulation of the vagus nerve activates the memory centers in the brain it is apparent that sex would be good for improving memory ability. Since memory is primary to our sense of meaning and to cognition in general, it is apparent that sex has the potential of improving intelligence and quality of life through improved brain function and freedom from depression. The counter argument to this is that the endorphins produced during sex would reduce mental alertness.

Retraining the Vagus—Lie flat on your stomach with your head to one side. Progressively relax your jaw by imagining it dropping down toward your feet. Feel the sense of your tongue dropping into your belly. You will notice that this stimulates breathing, for you get the sense of oxygen hunger. Obviously a tight jaw is tied into the neural circuits for the suspension of breath and shallow breathing. Repeating this exercise and making this more jaw-contraction more conscious will help to retrain the medulla and vagus toward deeper breathing and change the set point of the nervous system toward greater relaxation.

Mechanism of the Freeze—Animal hypnosis, catalepsy, tonic immobility or the freeze response, is an inborn defensive behavior characterized by a temporary quiescencent state of profound and reversible motor inhibition elicited by danger. Cholinergic stimulation of the dorsal periaqueductal gray matter (PAG) decreases the duration of the Tonic Immobility episodes, while stimulation of the ventrolateral region increases it - lesions of the ventrolateral PAG can greatly reduce conditioned freezing. PAG is the midbrain grey matter that is located around the cerebral aqueduct within the midbrain. It plays a role in the descending modulation of pain, in the ascending pain and temperature fibers. Neurons of the PAG are excited by endorphins (endogenous opioid neurotransmitters) to produce analgesia. Stimulation of the periaqueductal gray matter of the midbrain activates enkephalin releasing neurons that project to the raphe nuclei in the brainstem. Some animal studies indicate that alterations in the levels of cerebral serotonin modulate the analgesic effect of the dorsal periaqueductal gray matter (PAG) stimulation. The EEG activity in animal studies of tonic immobility was characterized by low voltage fast activity. Tonic immobility was always preceded by long bursts of both cortical and amygdaloid alpha range EEG activity which characterized an “awake-alert-fixation” state of behavior. This alpha activity may be a necessary but not sufficient condition for the onset of tonic immobility.

CRISIS MANAGEMENT

We do not have metamorphosis, metamorphosis "has" us. It is Kundalini itself that is the Guru and teacher, question and the answer. You "make way" for Kundalini, you get out of the road, you stop resisting, you learn to ride the power... but the idea of controlling it is naive. In pure Necessity, kundalini will only take you through events and intensity essential to the development of the Self. Kundalini is a runaway train that one spontaneously has to learn how to drive. However the more one learns how to drive the train the faster it goes. But if one defaults and resists learning how to drive the train, it ends up derailing in a crash. Friction and difficulty occur not so much from the process itself but from our conscious and unconscious interference with it due to not understanding what is going on or where we are going.

Because metamorphosis assumes precedence over all other life processes it will continue by drawing energy from other functions. This loss of normal function could pose as a crisis for those whose circumstances cannot accommodate such a shift. A steady increase in the difficulty of meaningful work is perhaps one of the most essential components of navigating the storm of awakening successfully and re-integrating oneself into purposeful relationship to the world. The fact that we are most often forced to make a living is a saving grace to those recovering from kundalini for it forces us out in relation to the world. Studies show that doing complex work as a main occupation lowers our risk of Alzheimer's disease. The researchers theorize that performing complex tasks may have an exercise-like effect that builds up the "cognitive reserve" in the brain. This is reinforcement for the old axiom "what you don't use you lose."

If we have had a trauma background there will be a need to do more orbitofrontal-limbic neural networking by engaging in such activities such as bonding, playing with kids, animals, martial arts and coordination, motor skills, sensory stimulation work etc.... BEFORE you do any primal therapy and de-repression work. Normally emotional regulation and the orbitofrontal-limbic link are built within the course of healthy family life. But if there was abuse or deficiency in this you must build up your container yourself as an adult. Then you can go do peyote, rebirthing, holotropic breathing and other primal therapies. First build then regress, build, regress and then all that terror (protest-despair) contained in your original wiring will be released in a manageable fashion. If you do the primal therapies without doing the orbitofrontal work as well, (when normal consciousness is perturbed by whatever means) your limbic brain and brainstem will just take over and act out, for they are trying to purge your original traumatic memory.

Because the activity of the limbic brain and brainstem is greatly activated during Kundalini awakening, this offers the perfect opportunity for old neurology to take wholesale control over your normal cognitive functions in order to express its "protest". It does this because our normal repressive mechanisms are usually very strong and keep it "down." The stronger your repressive mechanism

(despair-freeze) the more powerful the force below needs to be to knock it out of commission in order for it to be heard. And one way or another that traumatized infant and child WILL be heard. Perhaps you could find some compassionate, creative, playful and "safe" ways for the child to be heard, without having to give your life over to that infant to do so. That is to consciously go "towards" the child with open arms, rather than locking it up in the dungeon and treating it like a dragon. You know how when you stop running from the demons in your dreams, they turn out to be allies.

If you are in complete biological crisis you may need a temporary surrogate mother or father figure to help you to learn to self-regulate your autonomic nervous system. Any compassionate person with a reasonably well-developed, coherent nervous system and vast understanding can serve as a ballast. By undergoing the crisis in emotional tandem you will probably avoid things escalating to madness, prevent brain damage through panic and avoid becoming prone to seizure. If you are in crisis go immediately to the foundations of biological existence and pay close attention to things like the following:

BIOLOGICAL IMPERATIVES TO SELF/UNIVERSE UNIFICATION

These factors need to be available on a daily basis—

- At least a half hour a day of unfiltered sunlight on the entire body.
- Natural light source throughout the day.
- Exposure to the energy fields and emissions of trees and plants.
- At least half hour of lying and sitting on the ground/grass.
- Negative ion rich air from flowing water sources.
- Bioactive vortexed solar/lunar negative-charged drinking water.
- Raw-remineralized, colorful, varied biodynamically grown food.
- Aerobic and strengthening exercise in nature.
- Sun meditation on setting and/or rising sun.
- Freedom from pollution, noise, traffic vibration.
- Freedom from electronic EMF's, Xrays, artificial lights.

Any deprivation of these conditions will mean suboptimum biology for spiritual realization and chronic deprivation leads to breakdown of the organism and following generations. Stay focused on something to look forward to, something you want to do, build the image of that up in your mind, write it out and start making plans. As soon as you engage yourself into some future fun thing, your body-mind-spirit will come together. Your energies cannot ascend coherently unless you are using active imagination in all five senses to visualize where you want to go, who you want to be, and what you want to do. Kundalini "does us," we do not do it...the more we realize this, the further along we get with it.

- Don't panic, the energy of your state will tell you exactly what to do if you listen deeper and deeper. Long walks in nature will dissipate the most tenacious panic attacks.
- Drink two glasses of water and lie on the grass under a tree. Breathing "harmony," "order," "peace" through the heart and into your solar plexus.

- Focus on something specific to look forward to, something you want to do, even if it is just daydreaming, in order to move your body-mind-spirit into coherent clarity.
- Try and get some sun on your naked body about half an hour a day sunbathing either early or late in the day would be ideal.
- Get someone to massage you regularly, or massage and stretch yourself and take long Epsom salt baths.
- Do the Inner Arts and especially the Pot of Gold, dropping further into the felt-sense intelligence of the body. Placing what you think is the antidote state or emotions into your organs.
- Play soothing music such as Byron Metcalf's Wachuma's Wave, Steve Roach, Deuter, Amethystium, Enya, Liquid Mind, Evanescence. Hearts of Space Radio

Responsibility is the ability to respond to Truth...an openness and sensitivity to the Real. One of the most useful psychology books is "*Reality Therapy, A New Approach to Psychiatry*" by Dr. William Glasser. You might find relief in the idea of increasing ones sense of responsibility as being central to improving mental-emotional health and the potential for happiness in life. Glasser says that we are irresponsible and behave badly not because we are mentally ill, but that we are mentally ill because we are irresponsible. He also wrote "*The Identity Society*" and "*Choice Theory*."

"Magic individuals who create their own destiny and are masters of their fate draw from the strength of the positive current." The Magic of Everyday Life, Maria Szepes. Perhaps my very favorite book.

Thriving in Transition: Effective Living in Times of Change, Marcia Perkins-Reed

Osho's lateral mind and all embracing permission are the perfect antidote to the punitive spirituality and repressive social structures of Western society. Thus Osho's spoken voice and writing is very reassuring to anyone in crisis mode. Especially his *Autobiography of a Spiritually Incorrect Mystic, and Body Mind Balancing*

INSPIRING MEDIA: When in crisis seek out good news

http://my.harvard.edu/ —Positive Psychology lectures by Tal-Ben Shacher.

http://www.tributariesradio.org/ —Interviews with inspirational people

http://worldonenetwork.info/oasis/ —John-Michael Dumais www.thinkingallowed.com —Jeffery Mishlove's inspiring series

www.zentertainment.org/podcasts.html —Progressive podcast programs

http://worldonenetwork.info/oasis/ —John-Michael Dumais audio

KUNDALINI AND SCHIZOPHRENIA

Factors that trigger both schizophrenic breaks and kundalini awakenings include circumstances of impossible dilemmas, double-binds, and avoidance/attraction, no way forward-no way back etc... That is situations in which we cannot proceed in a logical-prefrontal manner, but which force us to spin our wheels and to experience angst, perplexity and frustration. Since energy is not utilized in a normal fashion it builds and leads to a psycho-energetic crisis—the energies of flight fight, having no resolution basically kick off either a psychotic breakdown or breakthrough—usually a bit of both. Koans, of course operate in a similar fashion to confound the normal rational thinking process leading to the overload of the nervous system and the sudden progress to a new level of awareness.

Symptoms of schizophrenia include: thought disorder, withdrawal-retardation, hallucination, estrangement, psychosis, sensory gating deficits, voices, delusions, obsession, paranoia, feels out of time, out of space, loss of body boundaries, and non-existent as a person. The perturbation of everyday consciousness reduces the filtering system and presents a scale of consciousness that spans from schizophrenic to mystic. This transnormal impact of consciousness if interpreted adequately by the rational mind is then called mystic revelation. If however the rational mind is off kilter then ones interpretation is called schizophrenic.

When we penetrate beyond everyday consciousness we are both more animal-essential and more Godlike-omnipotent. We experience a range and subtlety of interconnectedness that would be simply frightening and crazy-making to our normal socio-conditioned repressed mode of being. Thus we only get to sense the true nonlocality of consciousness during peak events—either awakenings or breakdowns. That is not to say that our super-senses are not there in ordinary life, it is just that we simply filter out the information in order to cooperate with the dumbed down operational level that society adheres to. There is an enormous "leveling" system that goes on unconsciously in communities where no one is "allowed" to be more awaken than the others, and we are subtly or overtly punished if we are.

It seems like embeddedness (attraction/aversion) in duality leads to nonduality. For if were not "affected" by the symbols, myths and archetypes that we use to give "story" to our lives, no **psychic tension** would arise to propel us out of the vice of "normal" consciousness. As the subtle-psychic levels arise we become hyper-affected by the imagery and our story of "me and them" and this builds up such a psychic tension that a kundalini awakening is sparked off. After an awakening we become more distanced and differentiated from the images, symbols, myths, stories and personal identity that we were so entranced by before. Thus awareness has become separated from the contents of consciousness. Perhaps this is the difference between a schizophrenic and a mystic. The mystic is emancipated from the persuasions of psychic content, while the schizophrenic has become lost in them.

The perturbation and removal of normal consciousness and the consequent disruption of egoic-metaprogramming is not *regression*—it is not going backwards—but merely the *removal* of adaptive/repressive functioning in the

present. This creates an entirely new consciousness that has never occurred in ones history, yet may have features similar to infantile being. This loss of the sense of the known self (ego) is standard procedure in many of the extreme kundalini events and in the overall metamorphic process itself. Contributing to this perturbation of consensus-adaptive consciousness is both the extreme amplification and expansion of consciousness during peak events and the consequent damage done by neurotransmitters, free radicals and metabolites. The higher we climb above the "norm," the further we thus fall into the downside of these acute neurological events. This is the shamanic journey into the heavens and then into the hell realms. Both extra-normal conditions could be classed as regression by an ignorant observer; but both high and low are equally part of the path toward the emergence of the life of the Soul. There must indeed be a suspension or cataclysmic breakthrough of the norm for the infinitely larger soul's life to be born. So rather than "regression" in the service of the ego, we could more aptly state that during a kundalini awakening we undergo "suspension" of the ego in the service of the soul.

For those that are breaking out of consensus mind and who are leaning toward inflation or the schizophrenic end of the scale, this vulnerable condition is NOT the time to be intensive meditation, shadow work or primal processing. For these people stabilizing and structure building is needed more than uncovering therapies as the interpenetration of the levels of consciousness proceeds. Humor, because of its trickster element is a great tool for establishing rationality, because laughter builds up the prefrontal lobes. The practices for the periods of unstable integration between the levels of consciousness should be of an *embodiment* and *boundary* building nature—of self-definition through internal exploration via neo-shamanistic practices of a self-originating nature. The work of Miguel Ruiz, Byron Katie and Alberto Villoldo would be valuable at this stage to establish the self/other boundary and build up the core-self.

Therapists attending to people undergoing kundalini awakenings could benefit from reading Ken Wilber's writings on schizophrenia such as Chapter 17 of The Atman Project entitled Schizophrenia or Mysticism. He says that in his opinion the perturbation or derepressive mechanism of a schizophrenic break comprises of a dual process, whereby the conditioned self begins to regress to lower levels of consciousness, while simultaneously being flooded by aspects of higher "subtle" realms. That is as he drops into the lower submergent subconscious the higher emergent superconscious invades him. Wilber stresses that there is both a disabling of the adaptive functions and cohesiveness of the ego structure, as well as an influx of the spiritual dimension. Perhaps the rationality and ego structure of the schizophrenic is not developed or strong enough to fully integrate this bidirectional expansion of consciousness.

I think that awakening from "normal" consciousness runs on a scale between schizophrenia and mysticism and each of us has a gravity to a particular point on that scale. But throughout the duration of an awakening we may sometimes be closer to the schizophrenic end of the scale and sometimes closer to the Mystic end of the scale depending on how stable and adaptable the rational faculty is at the time.

Some of the chemistry could be similar between kundalini and various mental illnesses, because of kundalini's perturbing revelatory quality, nothing is left unseen and unfelt within one...there is no where to hide. The former repressive hold of the ego is released by the dissolution and so the psychic tension is let fly...in whatever form we have stored within us. Relationships are particularly good at triggering kundalini awakenings because our brain's **primary matrix** is constructed in relationship to our primary caregiver in infancy—thus relationship later in life can trigger the release of incredible psychic forces bound up in such complexes as avoidance/attraction, double-bind, relentless dilemma, rejection and abandonment. Complexes, are webs of associations created by intense or repeated activation of an archetype. Psychic storms based on these kinds of primary archetypal patterns build slowly over the course of a life, underneath the repressive lid of our ego's coping mechanisms and defenses.

One wonders what is left after all our compensations and camouflages are penetrated; is there a life at all if we are not doing all this secondary work of trying to prop ourselves up, defend ourselves or kill ourselves? But unless things build up to popping point, unless kundalini sparks up, we will remain in the clutches of the vice that we built to protect ourselves from the reality we were born into. The ego will not voluntarily go into that "hole" in our primary matrix...spirit however willingly goes there in equanimous embrace to find light in the dark. Kundalini is a spiritual force that arises spontaneously to save ourSelf from our self.

If you are intent on cultivating kundalini and you have experienced abuse, neglect or abandonment in childhood, or exhibit borderline personality disorder or PTSD symptoms, it would be advisable to first work on removing body armor, undergo structure building for the identity, and group gestalt and relationship work. If you have any form of unstable psycho-emotional condition, symptoms will inevitably be exaggerated during a kundalini awakening. One reason could be due to reduced central serotonergic neurotransmission which may inhibit the prefrontal lobes from acting to damp the activity in the limbic brain, reducing the ability to suppress negative emotion, plus the impact of our conditioning is reduced during kundalini resulting in less psychological "structure."

If you are congenitally **schizophrenic**, or interpret events in a mythic or highly personal way then it is best to steer clear of trying to raise kundalini, because the "self" is just not strong enough to ride out the dissolution of self and the intensity of archetypical psychic contents that arise during an awakening. Kundalini is a radical amplification of our subjective eye and subjective experience that is why those with unstable neurology can be driven over the deep end. I think this is probably what happens in the majority of mental breakdowns. Under kundalini's insidious power even the strongest brains can fall into morbid-grandiose-hypersubjectivity and think that the universe is made for them and that they control the weather and the stars.

I think this state of pathological grandiose inflation is the fate of many a Guru and rather than true transcendence it represents infantile fusion and **indissociation**, that is magically and mythically charged (e.g. the purple and red in spiral dynamics). Indissociation is the term used by the Swiss psychologist

Jean Piaget (1896–1980) to refer to the failure of young children to differentiate themselves from their environments or objects from one another. This subjective-fusion with manifestation is similar to an infant's magical uroboric perspective; a state of oceanic indissociation or egocentric fusion, which is undifferentiated or "one with" local environs. This infantile indissociation also lies at the root of mythic religion as the following quote from Joseph Campbell illustrates.

"We have noted that in the world of the infant the solicitude of the parent conduces to a belief that the universe is oriented to the child's own interest and ready to respond to every thought and desire. This flattering circumstance not only reinforces the primary indissociation between inside and out, but also adds to it a further habit of command, linked to an experience of immediate effect. The resultant impression of an omnipotence of thought—the power of thought, desire, a mere nod or shriek, to bring the world to heel—Freud identified as the psychological base of magic, and the researches of Piaget and his school support this view. The child's world is alert and alive, governed by rules of response and command, not by physical laws: a portentous continuum of consciousness endowed with purpose and intent, either resistant or responsive to the child itself. And, as we know, this infantile notion (or something much like it) of a world governed rather by moral than by physical laws, kept under control by a super-ordinated parental personality instead of impersonal physical forces, and oriented to the weal and woe of man, is an illusion that dominates men's thought in most parts of the world—to the very present. We are dealing here with a spontaneous assumption, antecedent to all teaching, which has given rise to, and now supports, certain religious and magical beliefs, and when reinforced in turn by these remains as an absolutely ineradicable conviction, which no amount of rational thought or empirical science can quite erase." Joseph Campbell, The Masks of God, Volume 1: Primitive Mythology

Schizophrenia maybe a hypo-glutamatergic illness: excessive glutamate metabolism leading to the damage of receptors and exhaustion of glutamate as a neurotransmitter. Studies found that high levels of glutamate antagonists were present, and glutamate levels decreased in the prefrontal and hippocampal regions of schizophrenics. The limbic regions especially the hippocampus contain high concentrations of NMDA and AMPA glutamate receptors, however in schizophrenia these are reduced. Some researchers speculate that over activity of the brain's cannabinoid system may contribute to schizophrenic symptoms

Glycine is essential at the NMDA receptor site, it was found that there were an increase in glycine receptors possibly as compensation for the reduced glutamate activity. Increasing NMDA function with glycine agonists maybe a potential new strategy for the management of schizophrenia. High doses of glycine at 30 g/day gave significant antipsychotic results. Schizophrenia and Glutamate, B. G. Bunney, PhD., www.acnp.org/g4/GN401000116/CH114.html

Some of the schizophrenic type symptoms of kundalini awakenings could be due to hypertonality of the nerves activating the release of Ca2+ thereby killing off neurons, axons and reducing the number of NMDA glutamate receptors. That is during the peak kundalini stage first there is an abnormally high concentration of

glutamate and over excitation of nerve cells, followed by a hypo-glutamate period of burnout and recovery until the glutamate receptor systems have reinstated themselves. Thus glutamate toxicity leads to a glutamate deficiency. Pyruvate and malate inhibit glutamate toxicity by increasing cell energy generation and therefore increases the reuptake of excitotoxins.

The NMDA receptor is activated by the neurotransmitter glycine as well as glutamate. It appears that it might be advisable to take glycine supplementation during awakening as it has calming rather than excitatory properties and is used in bipolar treatment and for hyperactivity. Also to reduce kundalini it might be worth investigating inhibitors such as L-lysine which functions as antagonist to glutamate receptors. Since lysine blocks the NMDA receptors it might protect them from damage during radical kundalini events. It is likely that it will also reduce the severity of such events. Histamine protects against NMDA-induced necrosis in cultured cortical neurons. It has been found that about half the patients classified as suffering from schizophrenia have low histamine levels in the blood, and as histamine levels were increased, their health improved. (See Histamine for more on this.)

In his book *What Really Causes Schizophrenia*, Harold Foster proposes that schizophrenia is not caused by excess dopamine but by excessive levels of a metabolite of adrenaline—adrenochrome. Adrenochrome acts as a hallucinogen, free radical generator and neurotoxin that interferes with biochemical systems and damages the thyroid. Dr. Foster suggests that treatment should include methods to reduce adrenaline producing stress and slow down its metabolism to adrenochrome. Sugar consumption and allergen exposure should also be reduced. Coupled with a supplemental program that includes high doses of niacin, thiamine or coenzyme Q10 along with desiccated thyroid to help thyroid damage. www.hdfoster.com

"The experience and behavior that gets labeled schizophrenic is a special strategy that a person invents in order to live in an unlivable situation...Insanity is a perfectly rational adjustment to an insane world...Madness need not be all breakdown. It may also be break-through." R.D. Laing

Our personal filter of consciousness is "constructed" by genes, nutrition, nurture, culture and experiences. The ego/superego could be "explained" through terms of chemistry and physics associated with this internal/external development. Did you know that with children born around a very large solar max, such as in 1958...that a larger % tend to be schizophrenic. This perhaps shows that the physical framework of their filtering system is somehow loosened, thwarted in its solidification. Reality is relative. The perception of reality is determined by the lens that sees it.

"It is understood of COGNITION that people can suffer cognitions only with regard to their "cognitive capacities." These capacities are understood as being bounded within the LIMITS of an individual's knowledge, understanding, or familiarity...with the exception of DREAMS which frequently exceed the one's cognitive capacities."
Ingo Swann www.biomindsuperpowers.com

ARCHETYPAL MATRIX

"The Dreamer who dreams our dreams knows far more of us than we know of it."
R.D. Laing

There are common themes in the symbols and archetypes that arise during the energy flux of both kundalini and schizophrenia. As these images arise biochemically within us they themselves become the resonant filter via which we find synchronous information and events in the outer world to reinforce the energetic power of the archetype we are preoccupied with. This process of alchemy via correspondence between the inner and outer worlds is highly geared into the visual cortex. We project our interiors and this adds fuel to the heat of our internal flame. During high kundalini flow and in dreaming the repressive mechanism of the prefrontal cortex (Superego) is reduced and we have more access to potent dream visuals, visions and the full spectrum of psychic supersenses—including precognition (temporal penetration) and bio-telepathic-navigation (nonlocality/spatial penetration).

Dreams are reflections of the archetypal psyche. We cannot fail to notice that our dream life is inclusive but transcendent of who we are as conditioned beings. Dreams offer us a deeper human experience and understanding than we can arrive at during our waking state. They have originality, depth, genius, profundity and transpersonal meaning way beyond anything arrived at via the intellect. Dreams impact us at a species level to affect alchemical transformation via emotional-cellular retuning and processing. Since dreams are our greatest teacher, that means that the archetypal layers of the psyche are actually superior to the intellect and the rational, associative mind is a mere student or tool of this mind beyond the mind which is inconceivably vast and unfathomable. If we were exposed to the full impact of this greater mind without our normal restrictive filters we would probably never return to the limited state that we call sanity. Because the complexity, interrelatedness, exquisite beauty, portent and love of the archetypal realm of the Gods would be such a shock to our habituated dissociation.

SYMBOLS OF THE COLLECTIVE DREAM

Positive Images—Center, return to beginnings, lost paradise, logos of origins, the egg, new society, new humanity, New Jerusalem, new earth, new birth, Divine child, Mary and child, sacred marriage, androgyne, apotheosis as God or Goddess, king or queen, deity or saint, hero or heroine, messiah, one chosen for leadership. Quadrate fourfold structure to the World, law of One, play of the opposites.

Negative Images—Fire, the snake, chaos, lost, no nurture, decay, dismemberment, death, dissolution in the Void, dangerous abyss, falling, cosmic conflict, Armageddon, world domination, triumph of the Antichrist, evil ruler, threat of the opposite, supremacy of the opposite sex, fool, clown, ghost, witch, puny outsider, stranger danger, UFOs, alien invasion, abduction, stuck, suffocation, possession, malevolent entities.

These various symbols also arise in the collective daily consciousness as impulses of joint active imagination…there is indeed probably a progressive spiral pattern

to the successive emergence of these various inspirational symbols above and beyond the interference of media. They are contagious chemical, quantum, and visionary impulses that arise during certain periods, as nested archetypal memes arising spontaneously from the Void impacting us all. They are probably keyed into cosmic and annual solar/lunar cycles also. It is through the madness of this kind of collective waking-dream that events like the holocaust or wars in general are undertaken.

We can run into trouble with patterns of cyclic metabolic disturbance if the interpretation the subjective experience of our awakening remains in the mythic-archetypal realm, by being possessed by the figments of our alchemical imagination. With the perturbation of consensus mind and the sometimes instantaneous new levels of sensing and consciousness, we must then learn to recognize this newfound awareness in rational, Higher-Self accepting terms. To avoid spiraling into prolonged metabolic and cognitive chaos we must accept these new levels of awareness and physiological condition as coming from "us" and not from an alien entity or God. That is we must claim responsibility for our Self as it incarnates at an accelerated pace and not project the cause of our condition onto external people, entities or events, thereby giving away our power.

Schizophrenia, in a way, is the inability to awaken to the dream through wholesale embeddedness in the content of the symbolic nature of the mind itself. We are not really rational (sane) until we can rise above and witness our own mental content objectively and disembed from our archetypal matrix. "Mind content" seeks loving self recognition, thus if we apply meta-consciousness to our thought processes and say something like "I see you" to acknowledge our thinking (states), then we have more self-determination over our sense of well-being. This is what Michael Brown does in the Presence Process. If you look at relationships in terms of their archetypal meaning and in the context of the Hero's Journey, you can generally work out what needs to be done to gain mastery in the situation. How is the way you use your mind going to serve yourself AS the world?

As an integrated human we can still "have" our story, but we must keep it in its place by running it through a progressively rational interpretation. For it is this rationalizing process that integrates the archetypal imaginal world (reptilian/old mammalian brain) into the 21st Century prefrontal lobes. In schizophrenia the individual has no objective distance between him and the objects or contents in his mind and by being perpetually and totally engrossed in the internal drama his biochemistry spirals out of control leading to catabolic breakdown of tissues and affecting long term cellular and neurological processes and structures.

Chronic illness can occur due to the presence of self-generated biotoxins which the body is unable to eliminate. These biotoxins can be cause and effect in cyclic periods of mental illness as well as physical disorder. Endogenous toxins are produced like ammonia, methylmalonic acid, free radicals; and an acid pH generates a different kind of metabolism. Studies in rats show that all catecholamines (excitatory neurotransmitters) including norepinephrine (NE), dopamine, and epinephrine, are toxic to neurons as well as glial cells. Plus neuron excitotoxicity

also occurs with excess glutamate and nitric oxide. Biochemists and physiologists are now recognizing that these regulators or products of their metabolism as potential endogenous toxins. Other potential endogenous neurotoxins include: tetraisoquinolines, beta-carbolines, methylimidazoles, tryptamines, and biotoxins produced by intestinal bacteria and these are just a few.

Certain levels of these compounds exists in a healthy organism, but when they are over produced they can generate pathogenic toxic products under the action of certain conditions such as mental disorder, stress, infection, alcohol or exposure to drugs or exotoxins and pollutants. Using our mind in ways that perpetuate metabolic toxicity creates **enterometabolic** disorders which have a relationship to inflammation, musculoskeletal pain and degeneration, suppressed immunity, autoimmune disorders and lowered fertility. Using our mind in healthy ways lowers the body's burden of metabolic toxins, which in turn reduces the inflammatory cascade.

(See Toxic Brain Syndrome and The Ammonia Hypothesis in BOK-2)

www.chronicneurotoxins.com/info/research.cfm —The connection between pathogens, biotoxins and inflammatory and immune disorders.

ARCHETYPAL FIXATION

If we lack powerful connection to our Muse's higher art and purpose, this can lead to the energy of awakening remaining in the symbolic phantoms of our archetypal matrix. The elevated energetic activation of the autonomic-medulla and emotional-limbic brain can hold us captive, running out their own dramas. In a sense these captivating figments are not us, but programs entered into us via our origins and our position in the collective unconscious. If we can objectively gain distance from the content of our mind and emotions, we can then be still enough for our higher purpose and spiritual vocation to emerge from the maelstrom. Human life is all symbols. It's all just plastic mind-stuff. We live in a mind soup of psychoconfabulation. The art to life is to disembed from the symbols of mind-stuff so that we can use them, instead of being "used" by them. Archetypal fixation is a major roadblock to transpersonal growth.

Because there is an amplification of our archetypal matrix when we are running high kundalini, we need to develop greater myth witnessing skills and become a more conscious observer of our movie, and therefore be a more conscious director. You can flesh out the nature of your specific archetypal matrix by looking into the dynamics of your parents, your family role, fairytales you were attracted to as a child, favorite icons, Theocosm of the Gods, angels, deities, the Tarot arcana and your dreams. By doing this you can more clearly see the reason for the dramas, people and situations you attract while in your peak kundalini energy and more resourcefully deal with the sociobiological aspects of your awakening.

The mystic is an occultist who has dis-identified from form and symbolism. The mind you see is an archetypal imagery device, but the mystic is "identified" with the process or "context" of consciousness not its contents. The mystic sees through the archetypal forms of reality to the "process" of life itself. The content of

the mind is entirely a reflection of "how" the mind works. The purification process of kundalini reveals this "how" of the mind and in this we are released from its "contents."

My interpretation of archetypes is mostly through going through my own amplified archetypal matrix during the second awakening, and through the mystical dissection of my dream life. I am the world's foremost advocate of consciously working "with" the archetypal matrix and not being unconsciously embedded "in" it. In this way we rise above problems of projection, myopia, lack of **farsight** and interpersonal problems that hold us back from our growing edge. This present hydrocarbon civilization is coming to an end through its own undoing because it lacks the ability of farsight. The systemic and interconnecting problems, the solutions which just create more problems...these are generated from a culture that is not set on a strong foundation of logic, of causal origins, universal morality, farsight and long range planning. Without the humanizing principle of farsight, humanity can only be predatory, parasitic and pathological.A great book on how archetypes play into spiritual alchemy is *Tarot and Individuation: A Jungian Study of Correspondences with Cabala, Alchemy, and the Chakras* by Irene Gad.

ARCHETYPAL VALIDATION

Validation allows completion of archetypal pattern cycles, because you can't complete what you negate. So we must honor the symbolic nature of the mind and work "with" its story making functions to our best advantage, to arrive at mythic resolutions to our life-themes. However subjective fixation on archetypal symbols and patterns themselves, amounts to a stagnation of the flow in the alchemical psyche and the cessation of growth toward spiritual maturity and deeper humanity. Thus we must embrace and validate in order to complete.

For the initiate there is a lot of support out there nowadays, through various kundalini institutes and Spiritual Emergence Network SEN in various countries. The psychotherapy industry is slowing addressing the issue of spiritual awakening. But there is a danger that because psychotherapists are trained in pathology not human excellence and evolution, that they will treat kundalini as though it is a disease. Believe me when one is studying pathology one takes on a bit of the stigma and paranoia of the pathology. While individuals in the throes of an awakening are as sensitive and vulnerable as they will ever be, great care should be taken to reassure them and not drive their chemistry into a paranoiac downward spiral. Also the energy and cyclic flow of the awakening should be honored, if the process is countermanded, contested and stopped this can cause grave danger to the individual.

The archetypical content should be respected and perhaps seen through various lenses, but it should never be dismissed as delusion or mere projection. If this happens then the whole cascade of chemistry that packs enormous energies and psychic forces can be prematurely deflated and then it turns into a self-destructive bomb in the bodymind of the awakener. Consequently this can lead to such a devastating production of free radicals and catabolic agents that the mind

of the individual can be permanently damaged. Hence professionals that deal with kundalini have to be of a post-conventional, humanist bent. They need to specialize in self-actualization, with a thorough understanding of the nonordinary nature of this chemistry, the physiology and the larger picture of the evolution of the human species and life in general. They will be effective to the extent that they too participate in the Mystery along with their clients.

Erich Jantsch, coined the term "self-organization." The science of self-organization concedes that the most interesting structures in nature are not caused in the usual sense but, rather, cause themselves to come into being. They "self-organize." Another term for this is **Autopoiesis,** the process whereby an organization produces itself. Like physical formation and birth of a child, kundalini is autopoietic. That is it occurs under its own innate chemistry. It is a cosmic birth—the Universe is birthing itself through us. But just as the environmental conditions (physical, mental, emotional and spiritual) may not be conducive to the true well-being of a human birth, so too the conditions for a spiritual birth may not be constructive and alchemically-cocreative with the universe to bring about the spiritualized individual. The only reason why this is so is Ignorance!

Because an awakening involves mechanisms that lead to the death of old mental pathways, the necrosis of neurons and axons and inferior cells throughout the body—if this is not undertaken in life-affirming circumstances then much more extensive die-back can occur—and if conditions are not suitable during the rehabilitation phase then the time specific period for retraining the brain in preferred pathways and states is forfeited. Can you not see then the potential for brain damage coupled with circumstantial dehumanization through environmental deprivation. And all because of our wholesale ignorance over this natural process of spiritual death and rebirth.

Bruce MacLennan in his chapter in the book *Neurotheology* P305-14 says that **archetypes** as described by Jung, provide the crucial link between the material and spiritual worlds; shaping the conscious contents by regulating, modifying and motivating them. He says the archetypes (inherited patterns of behavior) are objectively real and crucially important for meaningful human life. This might be the best material out there on the impact of the archetypes on the psyche. I cannot recommend *Neurotheology: Brain, Science, Spirituality, Religious Experience* highly enough. Some of the authors contributing to this book include: Rhawn Joseph, Andrew Newburg, Michael Persinger, William James, Eugene d'Aquili, and many more. Follow the works of John Weir Perry for an interesting look into the archetypal symbols that arise within the psyche during awakening. There is an interview with Jeffery Mishlove—Visionary Experience or Psychosis with JOHN W. PERRY, M.D. http://www.intuition.org/txt/perry.htm

EMERGING FROM THE ARCHETYPAL MATRIX

Rationality is the ability to objectively witness the symbolic content of the mind from the impartial spectator perspective. In my experience human consciousness is 99% archetypes. We are fundamentally symbolic creatures. All words, thoughts,

pictures, even feelings in a way are symbols...symbols of meaning we use to try and discern a reality. Consciousness presents (communicates) itself in symbols—whether pictures, words or sounds. Prior to the symbol there is just pure awareness itself. Witnessing is the ability to be attentive to pure awareness, while watching the stream of symbols float by.

I don't think the archetypal matrix can be risen above, that is made conscious, without successive shamanistic death/rebirth, major crisis, drug perturbation and various other forms of awakening that most people strenuously avoid. We have spent so much time and energy in the development of our reality framework that most of us cannot get outside of the prison of the archetypal matrix without a serious degree of suffering. Thus in default mode we tend to unconsciously play out preprogrammed patterns largely in response to our parents and society. But without becoming self aware, how can we be Self determined?

At the beginning of the alchemy the *prima material* is chaotic, whereas at the end the *lapis* is perfect. Our mind must transform that which we are into the celestrial quintessence of spirit. The Divine Spark is found only by descending into the abyss of the unconscious. The judgment of the **Void or Choronzon** must be faced for the past level of consciousness to transcended, for unless there is dissolution, there is no growth period. There is only tack ons or an accumulation of conditioning with little integration or depth. Which might be more cunning and successful in the world, but that is not spiritual evolution, it is merely worldly adaptation. Those who have experienced the dramatic forms of dissolution are at a distinct advantage, in that they no longer fear anything the world can throw at them, and they no longer project their own demons on others. As such Dark Night events are the primary means of disengaging from the Archetypal Matrix of the mind.

"On the brink of mystery, the spirit of man is seized with giddiness. Mystery is the abyss which ceaselessly attracts our unquiet curiosity by the terror of its depth." Eliphas Levi, The Key of the Mysteries

Unless a psychotherapist or shaman has been on the journey to the void and back and has detached from the mythic mind, they will not be able to help you navigate your own maze, but instead will tend to "reinforce" your story. I suspect that only someone who has had a kundalini awakening, and has been on the death-rebirth/heaven-hell journey, and has succeeded in pulling their witnessing-eye beyond the symbolic nature of the mind, can really help another through this Self-birthing process. I think the greatest benefit can be derived not from dismissal, clinical appraisal or materialistic interpretation, but by working-with the psycho-dramatic contents toward the successful completion and resolution of that particular chapter in the life-story of the individual.

Meaning is interpretation of Maya (experience). All Maya and meaning is contrived, constructed and construed. No matter how orthodox, or stamped with a badge of authentication, no matter what the credentials...Maya, our psychosphere is always contrived, constructed and construed. Remembering this is hard unless one had a history of experiences like a rapid succession of progressively lucid

dreaming, successive radical state changes during a kundalini awakening, or sharp perturbation in consciousness through drugs or shock. Ultimately we give up trying to painfully pin truth down and accept the infinite depths of Mayas deception and mystery. The Real is so much larger than any truth. Only the rational mind that wants to possess knowledge or truth as through it were a material object cannot see the vaster sea of infinite consciousness beyond. Truth is changing by the second depending on the information, mood, and circumstance.

By remaining embedded in the archetypal matrix without an objective view of the way we are using our mind, we can easily generate a neurotoxic belief system by pathologizing our kundalini. The uninformed may interpret the symptoms of kundalini through a mythological, archaic lens and think that their emerging spirit is an invading alien, walk-in, demon, animal, angel, God, spirit, Guru or spirit-lover. Then on already pathologizing or inflating their process, they may go to a shaman or exorcist to be "healed" of their own emerging spirit. The outcome of such an attempt is determined by the intermingling of belief systems and the balance of love vs. fear that is generated. But since neither is privy to what is really going on, that it is actually kundalini and not some foreign entity, the enormous learning curved needed to navigate kundalini with skill and illumination is aborted. Because of the neurotoxic effect of fearful medieval and primitive belief systems, there is grave collective danger in carrying on these mythic interpretations of spirit into a so-called enlightened age. As long as these damaging thought systems exist, there can be no actual enlightenment, because we are physically destroying the hardware of consciousness (the Heart and brain) with our figments and phantoms.

Until we fully enter the Abyss we remain a mere conditioned being who cannot "penetrate" the veil of Maya and its matrix of symbols. But once the false safety of consensus trance is penetrated you cannot go back to the humdrum of the crowd without sacrificing your spiritual self. With vision, intention and a priori state generation we elevate ourselves beyond the mere reactivity of the socialized being. Thus through sympathetic resonance we gain the power of absolute faith to effect change. However, a faith that stems from the deepest source within, must first be subjected to absolute "doubt" in order to be truly our own. But this absolute doubt is not a clever nihilistic intellectual argument; it is a biochemical cataclysm of our former brain set-point and worldview. This alchemical severance with our past operating mode is what allows a new and more authentic consciousness to emerge. The Abyss is only painful to the degree that we strenuously try to hold onto our former condition.

I am concerned that many people are popping within a mythological interpretation without even knowing that it is kundalini they are experiencing. I met a young girl who was looking for a shaman to cure her of a watery alien walk-in spirit. I told her it was kundalini—it was HER spirit that was incarnating and that she was causing herself secondary psychosomatic damage and escalating her suffering by adopting a pathological interpretation of what is a "natural" process. It is absolutely amazing to me that we still live in such a dark and ignorant age, where our own evolution is so blindly misunderstood. Maturity is the faith to doubt our

reality and so spontaneously grow an ever new reality. As Jacques Derrida says, *"In order to authentic, one's belief in God must be subjected to absolute doubt."* Thus we grow a core self and self-esteem that is not based on idealism and fear, but generated from a union with truth itself. The word "*Satnam*" means that "God's Name is Truth. Shaping our fate is a constant battle with determinism. Our only chance to liberate ourselves exists in the penetrating the truth of our present reality, recognizing it, taking action, struggling to attain.

You can get to the heart of your archetypal matrix (life-story) and your stance in the world by figuring out what your primary desire and primary aversion is. Your entire experience, both internal and external, will be a reflection of these two opposing aspects. Once these are brought to the forefront of the mind, you can then learn to befriend them, stop resisting them and creating more playful space and a laissez faire attitude around them. Also be aware that we tend to turn into that which we resist, so you will have to accept and love through that hardness in you that has developed around your primary desire and aversion. Through emerging from embeddeness in ones archetypal matrix, the dream of our waking life and the waking of our dream life are revealed.

Trials of the Visionary Mind: Spiritual Emergency and the Renewal Process; by John Weir Perry

The Living Labyrinth: Exploring Universal Themes in Myths, Dreams, and the Symbolism of Waking Life, Jeremy Taylor

Also Volume 5 of Carl Jung's Collected Works: *Symbols of Transformation.*

The Unfolding Self: Varieties of Transformative Experience, by Ralph Metzner

The Myth of Meaning in the Work of C.G. Jung by Aniela Jaffe

Ego And Archetype by Edward F. Edinger

www.nwbotanicals.org/books/pantheon.htm —*Pantheon:Archetypal Patterns in Nature and Man* by Richard Alan Miller

The matrix is becoming cognizant of itself
Past present future as one
Threads interwoven throughout eons
Inevitabilities and synchronicities
Moving to loves beat
Allowing the unfolding of the hidden
The vague horizon beacons
Drawing us forth to the precipice
Lemmings to the opium ocean
Awakening in the dream

THERAPEUTIC FACILITATION

PRIMAL THERAPY

Primal Therapy covers the basic needs aspect of development—if such needs go unmet pain is laid down in the brain and pathologies develop. Work on the primary matrix of our initial neural development always has to be returned to prior to any significant movement ahead in development. As such one cannot even really say that it is regressive; it is more like overhauling and shoring up our foundations. I like to think of it as contemporary dissolution to provide the space for new patterns of growth. The old must be "released" for the new to be born.

"The memory of birth represents an important reservoir of difficult emotions and physical sensations that can contribute later in life to the development of various forms of emotional and psychosomatic disorders. Reliving and integrating pre- and perinatal traumas can have very beneficial effects; it can result in healing and profound psychospiritual transformation…And a difficult birth and poor postnatal circumstances can constitute a profound trauma that colors the entire life history of the individual." Stan Grof primal-page.com/grofken.htm

The only contraindication for conducting primal therapy during kundalini awakenings is to not do so during either radical high or low events. Besides chemical and diet intervention there are many behavioral activities one can undertake to increase neural detoxification and speed recovery such as: any exercise, hanging, alternating hot and cold, dancing, breathing, singing, toning, drumming, spinal shower, hydrotherapy, cathartic emoting, gestalt and voice dialogue role playing, rebirthing, bodywork, tantric sex and enjoyable social events. I would like to add shopping, but I think this errs on the side of being just a temporary fix.

Someone who has been bound in chains their whole life can never know what it is to experience psychosomatic freedom, and such freedom must be reached before forgiveness or en-lightenment is possible. The deprived child doesn't know what is it is missing, it only knows there is "pain." Arthur Janov a leading proponent of Primal Theory says that repression of pain is the hidden force behind illness and that feeling this pain is the end of suffering. This primal work always has to be returned to prior to any significant movement ahead in development. As such one cannot even really say that it is regressive—I like to think of it as **contemporary dissolution** to provide the space for new patterns of growth. The old must die for the new to be born.

Dr. Arthur Janov believes that repressed pain splits the self into two warring factions, which represent the neurotic or divided self; creating the menial mind of compartmentalized man. On the inside is the real but hidden self loaded with needs and pain that are repressed and on the outside is the unreal "coping" self that attempts to deal with the outside world by trying to fulfill unmet needs with neurotic habits or behaviors such as obsessions or addictions. Primal pain is the result of needs and feelings that have gone unfulfilled in early life. Trauma, neglect or feeling unloved as a child are examples of such pain. Because the child is ill equipped to deal with such pain it is anaesthetized, repressed and stored away.

It is this stored pain that makes us lose access to our feelings and become numb and neurotic.

Janov found that even though it is not felt, a biologically charged memory still remains in the system, reverberating on lower brain levels and arising as a set of difficult symptoms whenever stressors are encountered. He found that irrespective of whether the pain is manifest in the body or in the mind, the person is not himself; there is a dissociation and dis-integration which is global. Both emotional and physical pain deform cells and cause alterations which show up in body function, body structure, health, personality and behavior. The subliminal memory of pain shapes our interests, values, motivations and ideas. Janov found with Primal Therapy that by reliving these traumas, patients can return back to early events and know how they formed certain behavior and symptoms. Having addressed the reality of the pain and released the charge individuals where better able to move beyond their wounds and integrate their true self. Dr. Arthur Janov's new book *Primal Healing*. And *Why You Get Sick—How You Get Well* by Dr. Arthur Janov, and reviews some of the basic theory behind Primal Therapy. www.primaltherapy.com

HOLOTROPIC BREATHWORK

Holotropic Breathwork™ is likely to offer a similar perturbation of the compartmentalized-neurotic ego that drugs like ibogaine would, plus raise energy, and metabolism necessary for neural restructuring to resolve the hypertonality of the vagus and Hypothalamus-Pituitary-Adrenal Axis. I am not saying that breathing is a form of drug, but that a benign intervention such applied breathing is likely to heal the cerebellum area and reset/rewire the vagus breathing neurology. Pranayamic breathing is one of the main keys to successful navigation and integration of a kundalini awakening, and also key to purposefully bringing on increased kundalini if so desired. (See Polyvagal Theory)

"Our experiences with Holotropic Breathwork have validated the concept of spiritual emergency both theoretically and practically. They have confirmed that the phenomena that occur spontaneously during transformative crisises are normal constituents of the human psyche and not artificial products of some exotic pathological process. The spectrum of holotropic experiences is practically identical with that of spiritual emergencies; the fact that such simple means as an increased rate of breathing can induce them certainly takes away much of their pathological sting. And indirectly, the therapeutic and transformative potential of Holotropic Breathwork is in full accord with the with the assumption that the same is true for most spiritual emergences." 263, Christina Grof and Stanislav Grof, MD, *The Stormy Search For The Self.*

Stan and Christina Grof have a lifetime of research into the therapeutic, transformative, and evolutionary potential of kundalini and spontaneous episodes of non-ordinary states of consciousness or "spiritual emergencies." With the current global spiritual crisis we are in a dramatic race for time with nothing less at stake than the survival of humanity and life on earth. Grof states in his speech that if a sufficient number of people undergoes a process of genuine inner psychospiritual

transformation and attain planetary humanitarianism, we might in the future reach a situation where we will deserve the name which we have so proudly given to our species: Homo sapiens sapiens. For inspiration and sense of purpose and direction of the kundalini transformative process I highly recommend Stan Grof's Vision Award Speech. www.realitysandwich.com/node/655

www.stanislavgrof.com/ —Professor Grof's many books include: *Beyond the Brain, Psychology of the Future, The Cosmic Game, When the Impossible Happens, The Holotropic Mind, Spiritual Emergency.*

Exploring Holotropic Breathwork: Selected Articles from a Decade of the Inner Door by Kylea Taylor (Editor) has a section on breath work and kundalini.

PROCESS WORK

Process Work developed by Arnold Mindell is based primarily on Taoism, Jungian therapy and shamanism. Process work fits right in with the potential for therapeutically and developmentally guided kundalini awakenings. Since kundalini, either raw or cultivated, represents a more colorful and energetically charged cycle of detoxification/dissolution/resurrection, the potential for growth during an awakening is enormous. Because the archetypes that arise during an awakening have greater sway over our rational faculties due to the overpowering of the prefrontals during peak kundalini flow. Going-with the contents that are arising allows a greater depth and roundedness of human experience and self knowledge... we can get further INTO ourselves as "process" during kundalini than at any other time, when the constraints of ego and culture have greater hold over us. That is we have greater potential to open to grace and rise above conformity.

Process work and uncovering work such as holotropic breathing or Rosen Method are an essential part of the mix to a "lived" experience of what it is to be human, rather than a rational thinking machine. Since we are so conditioned to not rock the boat and so live false lives in the name of a stagnant peace, I am wondering if it is not very hard to actually allow "madness." Madness, that is breaking away from the constraints of consensus reality, often has far greater "sanity" than pernicious codes of social repression and silence. The "process" of the unraveling these insane repressive mechanisms and of addressing what is truly real, is a spontaneous journey of soul recovery and the revelation of the life of soul. One could say that whatever arises on this hero's journey is not mysterious, but an inevitability of Necessity, for nothing can remain hidden from the soul. http://www.processwork.org/

Voice Dialogue—One of the most holistic and comprehensive forms of process work available is Voice Dialogue. According to the founders of this system, Hal and Sidra Stone, we have a myriad of selves within us, each with their own interests, thoughts, feelings, opinions and energies. These sub-personalities, voices, or aspects of our consciousness, often have a great influence on our lives and our daily choices. Our selves are born at various stages in our developmental process to interpret and adapt to the demands and desires of our family environment, with the ultimate goal of protecting us and helping "The Whole Self" survive.

Voice Dialogue is a non-judgmental communication process between these various selves—the more dominant (Primary Selves) and some parts less so (Disowned Selves), with the Aware Ego as a conscious moderator engaging our various selves. Through this process we distinguish between the "Self" and our "sub-personalities," and build up the viewpoint of the Witness. In this way we are now free to have our various subpersonalities, while not getting lost in them any longer. Voice Dialogue draws on a vast information and skill base including dream work, Jungian archetypes and symbolism, enneagram, myth, gestalt, bodymind and energy work. This methodology can be beneficially applied to relationships in the family, community, work place and even in international politics—and especially to our relationship with our Self. A book that presents a good overview of the work is: *Embracing Our Selves: The Voice Dialogue Manual* by Hal and Sidra Stone.

http://delos-inc.com/ —Hal & Sidra Stone

www.voicedialogueconnection.com —Judith Tamar Stone

Big Mind - Big Heart: Finding Your Way by Dennis Genpo Merzel

BIOENERGETICS

"A totality of response to any situation is unusual in our culture. We are all in too much conflict to surrender fully to any feeling." P.245 Alexander Lowen, Bioenergetics.

Bioenergetics, a form of bodymind therapy developed by Wilhelm Reich and Alexander Lowen is another method of approaching the body armor and consequently releasing toxic repression. One would assume that if we are directly touching and expressing the tension held in our body armor that neurological changes reflecting this release must occur within the brain. Thus I assume that if we lovingly address our muscular armor, our brain will recover from toxic repression, and there is no better time to do this than when our nervous system is already perturbed, and our connective tissue already dissolving during active kundalini. By adopting these "unlocking" practices while kundi-active we help to facilitate rewiring and we are less likely to snap back to our old repressive cocoon once with awakening is over. This point is vitally important for anyone going through kundalini, and is the reason why yoga is an integral part of Eastern spiritual practice. Flexibility and fluidity are essential to living organisms. Aging and disease are symptomatic of life losing its plasticity. Good heart rate variability is a sign of a youthful heart and the saintly maverick Osho reminded us that we are as young as our spine is flexible.

Wilhelm Reich says that few of us experience a full sexual response in orgasm. This is partly due to the devitalizing, neuro-clogging cooked diet, but also due to the general devitalizing process of generations of Western Living. A full orgastic release implies that one is in full possession of oneself first. That is in order to fully "lose" yourself in orgasm you must first be fully embodied as a sovereign spiritual entity—mind, body and soul. But if we have been conditioned into repressing the best and the worst in us to fit into our cultural program, there is no way that we are either going to be fully ensouled, fully sexed or even in touch with our

shadow. This is where the neurodetoxification of fossilized repression comes in as a method of both soul and sex retrieval. For our soul is limited in its expression by the influence of our conditioned defense system, and the shadow we fail to process gets reflected back to us by the world. We need to deal with shock, fear, anger, stress and grief by skillful means to avoid the tendency toward cumulative neurotoxic repression. As we evolve we need to honor our 4F animal-responses in order to not become rigid, suppressive and enervated, for what is not lived within us will destroy us.

Charles Konia M.D. is author of a bioenergetic book called, "*The Emotional Plague: The Root of Human Evil."* Dr. Konia is Vice President and Fellow of the American College of Orgonomy. His book explores a pervasive illness of destructive human behavior and "lack of care," that he has termed "the emotional plague." He explains how it existed throughout history, how to recognize it, treat it, prevent it, and understand it. This neurosis has been transmitted from one generation to the next throughout human history. Recognition is an essential first step in eradicating its destructiveness. You could engage in Bioenergetics by seeing a therapist, learning the exercises, or reading Wilhelm Reich or any of the fourteen books written by Alexander Lowen, such as *Pleasure, Honoring the Body, The Voice of the Body and Bioenergetics.* And Wilhelm Reich's prestigious works including: *The Bioelectrical Investigation of Sexuality and Anxiety, Character Analysis, and The Function of the Orgasm.*

www.bioenergetic-therapy.com —International Institute for Bioenergetic Analysis
http://orgonomy.org/ —The American College of Orgonomy

SOUND FOR THE BRAIN

Sound can alter vibration, coherence and communication between the different levels of our existence from atom, to cell, to our body, mind and soul, altering and enhancing consciousness. In *Food of the Gods*, Terrance McKenna says that speech helped to vibrate the brain in the skull, cleansing the brain via the movement of cerebral spinal fluid. This vibration and cleansing helped to evolve us faster say than the Neanderthals because they had thicker skulls and so did not receive such resonant vibrations in the brain from their speech. Besides increasing social cohesion and heart openness, this detoxifying capacity of sound is perhaps why most if not all religions exhibit some form of chanting, toning or singing.

"Vibrations of human skull, as produced by loud vocalization, exert a massaging effect on the brain and facilitate elution of metabolic products from the brain into the cerebrospinal fluid (CSF)…The Neanderthals had a brain 15% larger than we have, yet they did not survive competition with modern humans. Their brains were more polluted, because their massive skulls did not vibrate and therefore the brains were not sufficiently cleaned. In the evolution of the modern humans the thinning of the cranial bones was important." Julian Jaynes, *The Origin of Consciousness in the Breakdown of the Bicameral Mind, Houghton Mifflin 1977.*

Few things are more "normalizing" to brain function than toning, mantra, Huuuing and singing. Even meditation doesn't clear the cobwebs and normalize brain function as fast as sound vibration in the brain can. Nothing seems to return

"off" chemistry to normal faster than toning, probably due to increased oxygen, plus the extra movement of CSF and increased glandular and ionic influence on this fluid that baths the central nervous system. Coupled with the sound vibration entraining brain syncopation between the hemispheres and various regions of the brain.

Garwin Redman says that the more the heart is put into the toning the better the results, thus "Intention" while toning magnifies its effect. It's putting the heart into the sound that really wipes the slate clean, although sometimes it's hard to put the heart into it, or stay conscious while toning depending on how off (discordant) we are when we do it. Persistence will bear fruit because toning is one of the fastest ways of recovering deep alignment. Toning is also a significant way to stabilize our courage and heart opening and overcome the magnetism of Thanatos and addiction. One can just imagine that the sound vibration is acting to clear metabolic detritus out of the synapses, increasing syncopation of neurons and tuning the brain to optimum functioning. Toning allows the brain to "let go" and the heart to entrain the brain in its frequency. (See Vibrational Universe p.290)

Lack of inner division creates the Nectar of Grace as a consequent of sympathetic resonance of syncopated nerve activity. When the brain is "undivided" it no longer goes through its cycles of neurotoxic build up, one is thus able to transcend *ones reptilian reactivity to society* and the world is made sweet around one. Any real transformation or evolution is a leap in the dark. On Whole-Seeing, the unified mind can see things whole and we no longer fear the Unknown. According to Hans Jenny toning the vowel sounds of ancient languages such as Hebrew, Sanskrit, Egyptian, Tibetan and Chinese may have a greater effect. It's not the words, but the intent, vibration, coherence or degree of sympathetic resonance created in the body via the use of sounds.

SOUND TECHNOLOGY

Because of the power of brainwave technology to change brainwave frequency, increase synchronization and decrease hemispheric lateralization, there is great potential with sound to facilitate stabilization during an awakening and bring about a more speedy and enduring higher homeostasis. With such binaural beat sound programs as Holosync, Brainsync and Hemi-sync we might be able to bring about even greater benefits than a radical kundalini crisis, without the "crisis." With such sound technology new neural pathways are developed which facilitate the "awakened mind state." That is similar degrees of Beta, Alpha, Theta and Delta occurring simultaneously and in relative balance between the left and right hemispheres.

We produce less of the hormone precursor DHEA as we age, and DHEA acts as a buffer against stress-related hormones such as cortisol. Research at Centerpointe Holosync found that their binaural brain wave technology reduces cortisol, while increasing both DHEA and melatonin. As the brain waves slow to delta, alpha and theta the hemispheres synchronize and the brain balances, resulting in whole-brain functioning. Whole-brain functioning is associated with increased creativity,

insight, gnosis, learning ability, problem solving ability, memory and vision. Whole-brain functioning is the opposite of "stress." See Quantum Mind BOK-2 for more on this.

Since the chemistry created by such "brain tuning" reduces cortisol, increases DHEA and increases melatonin, it is apparent that use of such sound programs during kundalini could act as a buffer to reduce the intensity of the extreme highs and lows. It seems to me that the ecstatic peaks would be more grounded in everyday consciousness (Beta) and with a more stable Hypothalamus-Pituitary-Adrenal Axis we would not have to endure extreme versions of panic or Dark Night experiences. Plus use of the Alpha-Theta band that gives us the increased psychic activity during the peak, would continue its presence after an awakening, so we will not have to endure the feeling of falling from Grace. Plus Delta frequency associated with deep dreamless sleep, witnessing and unity consciousness would remain somewhat consistent throughout and thus the intensity of the exhaustion phase may be reduced, with its alienation, separation and depression that often arises on the deflation or down-cycle of an awakening. Using Beta wave may help reduce certain kundalini symptoms such as confusion, lack of attention and inability to spiritually navigate.

"The greater the lateralization in the brain, the greater the feelings of separation—and the greater the feelings of separation, the greater the fear, stress, anxiety, and isolation." Bill Harris. *Thresholds of the Mind.*

BRAINWAVES

GAMMA 40 HZ, BETA 14 - 40 HZ, ALPHA 8 - 14 HZ, THETA 4 - 8 HZ, DELTA 0.5 - 3 HZ

In Eric Braverman's book "*The Edge Effect*," he has developed protocols for balancing the four main brain neurotransmitters largely by nutrition, behavioral and lifestyle changes. Balancing the brain thus affects practically everything in human life: aging, intelligence, behavior, relationship, physical health, spiritual attainment and creative output. With Braverman's model we can see that our personality is determined by our balance of the four neurotransmitters which dictates the speed, voltage, rhythm-(calmness) and harmony of our brain. Going with Braverman's model of the four quadrants of the brain relating to the four neurotransmitters:

Serotonin---Occipital lobe---Delta---Increased harmony

GABA---Temporal lobes---Theta---Increased calmness, rhythm

Acetylcholine---Parental lobe---Alpha-Beta---Increased brain speed

Dopamine---Frontal lobe---Beta-Gamma---Increased voltage

The drug Ecstasy is a Dopamine drug known for its pronounced heart-brain effects and increased visual acuity (transcendental vision). Dopamine is associated with gamma wave. Dopamine is a reward chemical associated with pleasure, movement, appetite and motivation. Dr. Daniel Amen says ADHD and ADD is mainly a dopamine deficiency problem. Dopamine is related to Gamma, and Gamma 40Hz--60Hz is the binding frequency that helps to synchronize the whole

brain. I do know that Beta-wave is used to treat ADHD, and that fetus and babies have lots of theta wave. Obesity is also linked to deficiency of dopamine due to lower levels of dopamine D2 receptors.

In the book *SQ, Spiritual Intelligence* by Danah Zohar and Ian Marshall they talk about gamma-wave (40Hz) as being the binding resonance that coordinates the different receptor/thinking functions of the brain, producing a cohesive picture of reality. Researchers have found that schizophrenics lack this gamma range from 30 to 100 brain waves per second-that healthy brain cells use to exchange information about the environment and form mental impressions. The people at brainmachines.com say that gamma 120-500Hz is related to PSI, elemental transmutation and transmutation.

Research shows that monks in active-compassion show high gamma in their left prefrontal lobe produced by Heart-Brain synchronization. Richard Davidson, neuroscientist at the University of Wisconsin, has found that Tibetan monks who are advanced meditators produce high-frequency gamma waves in their left prefrontal cortex when focused on unconditional compassion and readiness to help living beings. Previous research by Davidson showed the left prefrontal cortex as a region associated with happiness and positive thoughts and emotions. Whereas the right prefrontal is associated with threat response, negative emotions and anxiety. There was much greater activation of fast-moving and unusually powerful gamma waves and the movement of the waves through the brain had greater organization and phase-coherence. These intense gamma waves have been associated with knitting together disparate brain circuits and so are connected to higher mental activity and heightened awareness. It is not surprising that it was the advanced monks who had spent the most years meditating who had the highest levels of gamma waves and phase-synchronization even when not meditating.

Epsilon and Hypnogogia—The lowest frequency brainwaves so far discovered are Epsilon measured at 0.5Hz or below. I suspect that Epsilon represents the state of hypnogogia and gnosis. The wave works with a carrier Theta Wave to promote healing and shamanic trance states, OBE's; it coordinates left and right-brain activity, produces nirvana, samadhi and gnosis or spiritual insight. In the epsilon state self-centric awareness disappears, body sensation is reduced, with sensory impressions diminishing as you descend to deeper levels. In general, the deeper your brainwaves, the greater your psychic abilities will be. Psychic data gathered in epsilon tends to be correct, allowing high quality psychic performance levels. Delta and Epsilon states are used when you need high-level information or wish to "effect things" via the Law of Attraction. While the majority of daily living must still be done in higher brainwave states. Ten seconds of delta waves in the temporal lobes of a Transcendental meditator correlated with the meditator's peak experience.

www.neuroacoustic.com —Dr. Jeffrey Thompson. The Theta, Epsilon and Lambda meditation CDs are in the Meditation section of his product list. Also check out the NASA sounds of the planet CDs in the ambient sound selection.

PART VI
META~PHYSICS

SUPERFLUIDITY AND KUNDALINI

In my opinion kundalini awakenings are associated with a tumescence of the "blueprint" of the bodymind. Within this amplified morphogenic field the cells set about changing and reorganizing themselves to convey the upsurge of consciousness or Spirit. During this period of increased spiritual field there is greater vibration, rhythm, correspondence and communication between atoms, cells and organs. This is tacitly undeniable to anyone going through a kundalini awakening through an amplified sense of aliveness, feeling and senses. In fact it is this intensification of sensation and function coupled with the abrupt breakthrough into expanded states of awareness that is most disturbing about the experience of kundalini, for we are so used to living in the half-death of collective conditioned fog. This higher integration is concurrent with increased psychic, extrasensory abilities, such that as we integrate our internal organism, we delve more deeply into the collective interiors of the human race and the globe. Through the elevation of the personal we access the transpersonal and tune into the Global Brain.

A good word to describe this amplified of being during metamorphosis is **superfluid**. We can assume that cell membranes become more permeable, including the blood brain barrier. Polarities become more pronounced, increasing the ion exchange and current flow between them. The fields of the organs, plexuses, brain and the body must be greatly expanded and magnified. There must be increased nutrient and waste product exchange coupled with greatly increased enzymatic action and oxygen usage. ATP and glucose metabolism must be at an all time high, as on every level we become more "alive and awake."

The cavity within the center of the spinal column itself both makes and contains cerebrospinal fluid. The super-charged body and expanded heart-field must act like a cyclotron (particle accelerator) on the spine. The cerebrospinal fluid probably becomes supercharged with ions and laden with neuropeptides, during activated periods, cumulating in a crescendo with inner-conjunctions. At the height of the awakening I imagine that the cerebrospinal fluid becomes laden with **Amrita**, or nectar of the Gods, that is saturated with ions, endorphins, glutamate, NO and various neurotransmitters.

Along with circulation of this fluid up the spine and around the brain cavities, the increased permeability between the cerebrospinal fluid and the blood following histamine release, could allow the elixir to flow within the bloodstream as well. After it bathes the brain and spine CSF is reabsorbed into venus sinus blood via arachnoid villi projecting into the superior sagittal sinus. This amrita in the blood then would hyper-relax the entire bodymind and thereby energy is conserved and accumulated for the **inner-conjunction**. Supplanting the normal laborious flow of energy through nervous tissue this "spark," reminiscent of lightning, zaps many

volts through the organism. Like lightning the spark could comprise of wave pulses of energy between the positive and negative poles, but moving so fast as to be perceived as one ongoing current.

Changing the voltage across a neuron membrane opens channels that allow various kinds of ions (including calcium ions) to enter and leave the neuron. The membrane's conductivity to ions is voltage dependent. The movement of ions (which constitutes an electric current) then causes further changes in the membrane and so on—thus perpetuating a superfluid, supercharged state. With kundalini it feels like ones atoms are spinning faster and the body is more "spacious."

There are references in the texts, especially those on Tantric Kriya Yoga on the magnetizing and ionizing of the cerebrospinal fluid (CSF). This ionized fluid then awakens and transforms the brain and broadens the range of conscious and sensory perception. Apparently even breathing ionizes the CSF. According to Ipsalu Tantric Kriya Yoga a technique called the **Cobra Breath** pulls magnetic energy into the spine, ionizing the spinal fluid and allowing the kundalini to rise, bathing the brain in magnetized fluid and transforming consciousness. Check out www.Tantrabliss.com for more information on this. All breathing, chanting and toning techniques will aid in elevating and integrating consciousness through increased ionization and energy, thereby deepening and expanding levels of perception.

Besides changes in the cell receptors other changes in the cell membranes would fuel the conflagration of superfluidity. Changes in the bio-chemical and EMF environment of the cell, along with increased temperature, hydrostatic pressure and osmotic pressure would lead to changes in the lipid composition and permeability of the cell membrane. This change in the cell membrane would in turn contribute to an upsurge in the rate/activity of cellular energy generation and metabolism. Thus creating a feedback relationship that would maintain hyperactivation until the resources necessary to perpetuate this contagion are depleted. If however lifestyle is such to maintain high cellular energy levels without damage to the cells themselves, then the alchemy of transmutation could proceed at a quickened pace indefinitely. By feeding the life harmonic—we feed our Spiritual attainment.

The radionics genius George Lakhovsky (1925) says that the amplitude of cell oscillations must reach a certain value for the organism to be able to repulse the destructive vibrations of pathogens. He proposed a universal law of healing which states that healing is achieved by reinforcing the healthy oscillations of the cells, rather than attacking the pathogens themselves. In Lakhovsky's words "*...the cell, essential organic unit in all living beings, is nothing but an electromagnetic resonator, capable of emitting and absorbing radiations of very high frequency.*"The medicine of the future, and indeed all aspects of culture (technology, housing, transport, energy, agriculture etc...) will be primarily focused on generating the most biophilic vibrations and conditions. If we create a biophilic culture we eliminate the conditions that breed disease, crime and war...in this way we free up our minds, hearts and resources to build a sane global village that enhances and liberates the spiritual potential of each individual.

ELECTROMAGNETICS OF KUNDALINI

"If you wish to understand the secrets of the Universe, think of energy, frequency, and vibration." Nikola Tesla

The body's EMF requires ions in the air through which to flow. The higher the ion count the higher the flow in the EMF. The higher the EMF flow, the higher the energy generation of the cells and the higher the energy of the nerves, which means a correspondingly higher EMF flow as well. The EMF or nadi egg comprises the sum total of the body's energy generation and conductivity. This explains why we are automatically more connected, awake, intelligent and spiritual in high negative ion environments. That is around moving water, in forests, in the country, the mountains and in sunlight. Our EMF has more of a medium in which to flow and this ups all the energy exchanges in the bodymind. Modern cities, deserts and much of our technology, transportation and architecture are anti-evolutionary for this reason, for they lower the ion count of the air and increase the % of positive ions we are exposed to. (see *The Ion Effect* by Fred Soyka and my book on regeneration for more ion info).

Remember that the heart cells are the first cells to form in the embryo, so the body grows and is organized in the heart field. The heart has a much larger EMF than the brain, so one can imagine that during metamorphic heart expansions the heart has a radically increased field. This increased heart field would reorganize the matter and energy in the body (transfiguration). Key to the transmutational ability of kundalini is that DNA is EMF sensitive, as is RNA and protein synthesis in general. EMF's induce cell differentiation and morphogenesis.

Blood moves through the heart and vessels in a vortex-flow. Joseph Chilton Pearce in *Biology of Transformation* p.57, mentions that inserting a single ion into such a vortex will create a powerful electromagnetic field. During kundalini the blood and cerebrospinal fluid are laden with extra ions, thus these ions in the flow of blood would increase the EMF of the heart and blood vessels. This increase in the heart EMF of the expanded heartfield is most certainly involved in the increased supersensory, telepathic and empathetic awareness that occurs with awakening. The stabilization of this increased heart EMF propagates substantiated evolutionary and transmutational changes in the bodymind, for the body "grows" within the field of the heart.

The crown and root poles meet in the inner-conjunction through a rhythmic attunement of all the oscillating systems at a certain frequency, and perhaps in a certain sequence of frequencies. All complex electric systems in the body have their own field systems because a current creates a magnetic field. So that means that nerves, ganglia, plexes and the brain itself all have their own field systems that combine into the meta-field system of the body. The power of the inner-conjunction literally pulls all of the oscillating systems into sync, thus feeding its own flame. Normal waking consciousness and ego activity prevents the syncopation needed to let all the bodymind systems fall into this higher alignment.

As the vibratory systems go into sympathetic resonance, the heightened fields restructure matter to accommodate the increased field. The more this occurs the

more the heightened spin and vibration is stabilized thus we achieve stages, rather than passing states. This process of field amplification and matter restructuring is known as "eating one's soul." Other terms for it are metamorphosis, transmutation, substantiation, and transfiguration. We know something is going on in the subatomic/atomic realms and at the cellular level but we don't yet know what this alchemy is.

Since during peak kundalini awakening the body is digesting itself to provide the energy for transformation and to rebuild the organism…there is energy available for the transmutation of elements. Normal level nervous system operation and gastrointestinal tract digestion would not provide either the quantity or quality of energy needed for this process. But at a certain point of readiness the body just naturally falls into the groove, the flame ignites and we become a transmutation machine!

Robert Becker found that altered states produce measurable electrical changes in the body; and he discovered that voltage patterns in the life-field changes with the change of a single gene. Our mental states affect all our cells and through EMF changes, no doubt affect gene expression. Becker and others found that most cells in the body act as semi conductors, carrying weak electric currents over long distances as well as within the cells themselves. Another interesting finding Dr. Becker made was that disintegrating tissue has a positive electrical charge and regenerating tissue has a negative charge.

THE VIBRATIONAL UNIVERSE

From the quantum perspective the universe is a meshwork of interconnecting interference patterns of energy fields. Because our own energy field is amplified during kundalini we have a far greater sensitivity to the vibrational universe. Energy waves are a more effective and efficient method of information transmission than the locks and keys of physical matter. After all radiant energy travels at the speed of light. The energy ocean both informs and creates our physical matrix. Some of waves that affect life include, light, sound, radio, microwave, extremely low frequency waves, gravity waves, scalar and cosmic rays.

In *Biology of Belief*, Bruce Lipton says that receptors read vibrational energy fields such as light, sound and radio frequencies, and if the receptor is attuned to the particular frequency it can alter the proteins and change the shape of the receptor. This is one of the ways our cells are impacted by the vibrational Universe. "Thought waves" and "emotional waves" being of obvious importance in the field effect on biology. We are immersed in living fields of vibrational information.

"Specific frequencies and patterns of electromagnetic radiation regulate DNA, RNA and protein syntheses, alter protein shame and function, and control gene regulation, cell division, cell differentiation, morphogenesis (the process by which cells assemble into organs and tissues), hormone secretion, nerve growth and function." 111, Bruce Lipton, *Biology of Belief.*

Considering that the body's energy field, and the heart in particular is greatly enhanced by the extra nerve flow and metabolism of kundalini we can assume that there is increased informational communication via energy waves and the

alteration of receptors and all body processes. This amplified energy field effect is the foundation of the metamorphic process. And because there is a self-reinforcing feedback loop between the generation of increased field and the supernal alteration of body tissue, this is why full-on awakenings last for such an extended period.

The sensory organ that perceives "soul" is the heart. The heart sense works by aesthesis, or by "breathing in." Thus the term aesthesis is similar, if not identical to Robert Heinlein's word "Grok." That is, the direct perception and understanding of the world via "Whole-Seeing." That is, when the heart entrains the brain we become sensitive to Depth or the spiritual dimension. **Aisthesis** is gnosis of The Good, The True and The Beautiful through the empathetic direct perception of the heart. Only the Heart can grok the ineffable through direct perception.

The Nondual Jung termed "Pleroma," where nothingness is the same as fullness"…an Absolute in which there is no division between subject and object. Jung intuited this nondual Pleroma to be a collective transpersonal reservoir, an ocean of collective unconscious. From this omnipotent universal Pleroma our individual psyches coalesce around "attractor archetypes." In this sense Jung was approaching the Buddhist axiom: "Emptiness is Form, Form is Emptiness." Although we only vaguely know what we are talking about, today we refer to this storehouse of consciousness as the Universal Mind or Global Brain.

"The heart generates the strongest electromagnetic field of the body, and this field becomes more coherent as consciousness shifts from the brain to the heart. This coherence significantly contributes to the informational exchange that occurs during contact between different electromagnetic fields. The more coherent the field the more potent the information exchange." 108, Stephen Harrod Buhner, *The Secret Teachings of Plants, the Intelligence of the Heart in the Direct Perception of Nature*;

During heart entrainment when the brain wave patterns are embedded within the larger field of the heart, information processing is very different. With entrainment the heart and brain oscillating together. When neurons in the brain entrain to the heart, their firing timing alters, and this timing of neuronal firing conveys several times more information than the firing count. Hippocampal activity increases significantly when the heart becomes the dominant oscillator. Increased demand on hippocampal function from feeling the world through heart-centered cognition stimulates stem cells to form new neurons in the hippocampus. Heart coherence also reduces cortisol production thus enhancing hippocampal activity as well as boosting the immune system. With heart entrainment, brain chatter is reduced and there is more connection between brain and body.

However when the brain becomes the dominant organ and the heart is entrained to the brain, the heart begins to lose its coherence. The more the heart entrains to the brain and the longer it does so, makes the heart less sensitive, less variable, more dissociated and basically less intelligent as an organ of gnosis. The focus of consciousness in the brain leads to an increased disconnection between brain and body. Since the heart's entrainment of the brain gives us the widest range of consciousness, sensitivity and health it is obviously "supposed" to be the dominant oscillator. It is after all the seat of the soul and the organ for "Whole-seeing."

Spooky Action at a Distance

The maintenance of connection and coherence between separate objects at a distance is perhaps the most profound phenomena discovered by science. David Bohm called it quantum interconnectedness or non-local correlation. It is becoming apparent that the nonlocal nature of the Universe itself is the causal mechanism behind ESP, primary perception and instantaneous empathetic communication in life. Because of their supersensoral abilities, kundalini actives would make ideal participants in telepathic communication studies. We all are a tuning fork for the cosmos... it is just that with the amplified field and energy of K...and the fact that the tissues are opened, resonant and receptive, we pick up everything to a far greater degree, especially during the peak.

Investigation of the nonlocal nature of consciousness is the most intriguing and perhaps the most sacred subject in science. Back in 1957 physicist John Wheeler suggested that the mechanism of PSI lies in the geometry of spacetime itself, not in electromagnetic fields. In his view chemistry and physics that is "matter, charge and electromagnetism" are merely the bending of space! He called his theory of the systematical identification of matter with space, "Geometrodynamics." Wheeler however abandoned his theory in the early 1970s when Geometrodynamics failed to explain some important physical phenomena, such as the existence of fermions or that of gravitational singularities. In 1979 Wheeler spoke to the American Association for the Advancement of Science (AAAS), asking them to expel parapsychology, which he deemed to not be a proper science. But with the new work of Nassim Haramein we may yet see how aspects of Wheeler's "Geometrodynamics Theory" and the spacetime foundations of Psi could be accepted as the next great paradigm in science, philosophy and theology.

Nassim Haramein is a brilliant contemporary physicist working on a geometric model of the Grand Unified Theory. Along with E. A. Rauscher, Ph.D., Haramein set out to find the fundamental forces necessary for "spin" and claim to have bridged the macro and the micro by adding "spin" to the Theory of Relativity. They say space-time curvature generates gravity as a density increase in the presence of matter-energy. With the torque force of the curvature of space increasing as density increases. Thus spin comes from a change in the density or gradient in the geometry of spacetime. If we could more fully understand how consciousness is tied into the fabric of the Universe, the human species could be transformed by this knowledge. Delving directly into the mysterious force that we have intuited as God, Allah or Buddha, we could develop technologies of soul which would unveil the mind-blowing enigma of life and consciousness. Through this ultimate investigation we would realize greater respect for the earth, all that is living and ourselves.

Limitless Mind, A Guide to Remote Viewing and Transformation of Consciousness by Russell Targ.

www.theresonanceproject.org Beyond the event Horizon book by Nassim Haramein coming out this year. Also see DVD.

BIO-LIGHTNING EFFECT

This is a preliminary piece on the strange phenomena of human lightning that is associated with kundalini energy.

Louis: "A few days ago at about 5AM, while in my bed, lightning struck my right hand. It was the most pain I've felt all at once, truly like lightning. It wasn't from the sky and it wasn't of God. This was not Love. When this thing hit me I immediately got to my feet, reeling, and flung myself out of my room crashing hard into the door-frame, cutting myself and smashing into the walls and a chair fighting with everything in me for my soul. I swear to you this is how it felt. I was overcome by a malevolent spirit that meant to harm me. I think for a few minutes I was dead, not alive because when I tried to feel my heart there was nothing beating in my chest. I went to the hospital just to be sure there was nothing wrong with the body and of course they said "you're fine."

There was no appliance to electrocute me in my room and I have caps on the outlets. I have been happy lately, really happy, and I'm not on any drugs either. I'm very skeptical and nothing like this has ever happened. At first I thought it was I who had crossed some line with God, and I got zapped, but now I think it wasn't anything I did. God doesn't do THAT."

Kundalini shows up in the weirdest of ways and human lightning is one of the strangest. What must have happened to Louis is his body built up a charge, static electricity is actually composed of "separated" opposite charges. The polarity in his arm might have switched over at 5 am as the pituitary gland proceeded to set the body for the waking state. The ions in the air in his bedroom must have provided the means for the Zap, as the charge was trying to ground itself. So he was rather like his own thunderstorm.

When these massive events happen we invariably think that it is some outside entity, because we are so habituated to being our normal everyday self. No way are we prepared to suddenly be awoken and struck by God, or anything else to such a degree. When I had my first spontaneous 10,000 orgs up the spine I thought I had been struck by God—there was no precedent—I immediately entered a "new" universe so to speak. The white-shock effect to part or all of the body, is the result of self-electrocution. It is I think for want of a better name "septic shock." My whole body was in that state the morning I woke up from Sex with Eros.

When Louis when to the hospital and was asked for his address he couldn't remember it, so that might be the left-brain that carried most of the charge from the shock to the right arm. However loss of left-brain (directionality) would probably occur with any kind of electrical shock. We might be able to tell which hemisphere took the charge by looking at the size of the pupils are they the same size when in the same light. Left-brain dominance is generally reduced during an awakening, thus we feel a new Presence (the right-brain consciousness) with its heightened emotional, sensoral and supersensory awareness. Over stimulation of the left-brain to the point of incapacitation, thus permits a "disinhibition of the right-brain.

I offered the following advise to Louis to help him recover from the event: Rehabilitation will come a little faster if you do hand scrunches with a hand squeezer. Push your arm against a wall or both arms against a doorframe...also put

your arm alternatively into hot and cold, but not too extreme. Get some Epsom salts for your bath for the magnesium to relax those shocked muscles...and eat a big green salad or wheatgrass every day till symptoms disappear. Take some lecithin and Vitamin B complex. You may also might need to do some bilateral therapies such as walking, swimming, dancing, tossing a ball from hand to hand, and boxing perhaps, to help your rehab your right-brain.

Get some bodywork ASAP, and do some hot-tubing/water therapy if possible. I recommend that you go bare foot as much as possible, especially outside at this volatile time of year (midsummer) when the air is charged with electricity right across the United States. Go lie on the grass once a day for 1/2 an hour and put all parts of your arm on the grass. And drink lots of water to facilitate metabolic recuperation. One of the possible causes of the shock might have been too many H+ ions in the body (acid) due to dehydration. To avoid shocking yourself again I would suggest either getting a negative ion generator or an indoor waterfall for your bedroom and change all your surfaces over to natural products...cotton, wool, wood, wool carpet etc... Put some leafy potted plants in your room also.

The phenomena of getting shocked by self-lightning is bioelectricity—bioelectromagnetism to be exact. Biophysics in itself is what is interesting, more so than our symbolic/mythic interpretations. However it is good to see if and how our brain is wired for victimhood under extreme conditions. To gain distance we need to see that psychic and bioenergetic phenomena doesn't actually "mean" anything other than the meaning we give it.

- We have to understand the power of spontaneous alchemical imagination in both creating and interpreting these extra-normal events and for this we need a thorough grasp of Jungian archetype and projection.
- Dreams, visions, lightning Zaps and visitations by apparent entities occur simultaneous with peak alchemical events and cannot be phenomenally separated from the event. Thus a chicken and egg situation occurs...and the question arises of whether the dream/vision/zap creates the chemistry or does the chemistry create the dream/vision/zap?
- These events usually occur in the service of greater integration. If there is a lot of damage/deficiency in the limbic brain and brainstem then the archetypal imagery, and entity-sensation will likely be scary, as the charge works through the fear-response areas.
- These events are real in of themselves, and the way to deal with them is to go through them. That is to treat the apparition, feeling or archetypal-mythic complex "as if it were true" and play in a gestalt manner with the drama of it, as if in a Greek play. In this way the chemistry is resolved and the nervous system is grown and stabilized.
- While I say to play with it "as if it were true" if you really believe in the reality of the scary entity without prefrontal-lobe detachment as well, then you may propel yourself into a perpetual stress response which will be very hard to get out of, and will ultimately lead to neuron damage and depression.

- If we persist on indulging in superstition (neomedieval imagery) it will mess up our chemistry, keep our fight-or-flight going which may perpetuate a futile downward spiral.

Another example of kundalini lightning energy from Pie, the most "electrically talented" of the kundi-actives that has contacted me:

"All my life I have interfered with radios, cell phones; TV's at times all those would go static etc... I have a box of light bulbs in my room because I blow them out so much. Everyone in my family knows Pie shouldn't change bulbs and Pie shouldn't really fix things that require sockets or fuses. I have blown my car battery with a static shock by just touching my car. I have blown fuses in my car again by static shocks. This happens when I'm excited about something and then I go to get into my car and I feel the shock and something has shorted out. The electrical distortion was always quite funny growing up. Sometimes when I used the microwave, (I don't use one now) I used to short the whole house out.

My mother last year witnessed something very strange. I was in the kitchen pouring a glass of wine (I don't drink anymore) my mom was letting the dog out. She saw one of the bulbs in the ceiling fan go dark—but the energy arced and hit my right shoulder... went down my arm... through the wine bottle into the wine glass—and in the glass the spark blew and shattered the glass. I saw the energy leave the light bulb into my arm through the corner of my eye and my mom saw it too. She quietly told me to go lie down. I didn't question anything, I was scared, I just went and lay down. This was by far was the strangest energy transfer I was a part of."

I am sure I must have seen this on a movie, but this is a real life account of a truly unreal phenomena: *"I started noticing around ten years ago that street lights would go out as I drove underneath them. Not all them mind you, but enough to notice. I thought it was weird, then I thought it was a coincidence. Now, I just accept it. It happens a couple of times a week."* Vortex

Kundalini makes the eyes incredibly shining, also the skin during high states of kundalini ecstasy is shining, luminous and dewy. You can actually see there must be extra photons moving through the optic nerves and the brain...the inner light makes the eyes very bright and colorful and it's almost like there are beams coming out of them. My friend Jim said that when he was around 23, he was meditating in a darkened room, and when he opened his eyes **forked lightning** shot across the room from his eyes. Rather interesting.

I will attempt a preliminary hypothesis to explain human lightning, note however that this needs to be verified by biophysicists. The obvious difference between kundalini lightning bolt events and normal electrostatic discharges is that the kundi-actives may not necessarily be building up static charge in the normal manner through the friction of materials. For kundi-actives already have a higher charge and higher electromagnetic field, which can without frictional provocation, cause a spark toward various charged objects or electric devices. The fact that kundi-actives can pull a spark of lightning out of an electric light bulb is fascinating, and I

would like to meet the physicist that could explain that one. The highly energized body must exhibit an opposite current and electromagnetic field powerful enough to cause the current to alter its course and to leave the wire filament and arc out through the air.

A charged atom is called an "ion." An atom that looses electrons has more positive charges (protons) than negative charges (electrons), thus it becomes a positively charged ion. Conversely an atom that gains electrons has more negative than positive particles, that is if it picks up extra electrons it is a negatively charged ion. Opposite or different charges (a positive and a negative) will attract, or pull towards each other, while ions of the same charge will repel. The **triboelectric** effect is a type of contact electrification in which certain materials become electrically charged through friction. The amount of charge generated by the triboelectric effect depends on the area of contact, the speed of separation (friction), relative humidity, and other factors. During the summer when the air is more humid, the water in the air helps electrons move off us more quickly, so we do not build up as much electrostatic charge.

Static electricity is defined as an electrical charge caused by an imbalance of electrons on the surface of a material. This imbalance of electrons produces an electric field that can be measured and that can influence other objects at a distance. Once the charge is created on a material, it becomes an "electrostatic" charge which may be transferred from the material, creating an electrostatic discharge event. **Electrostatic discharge** (ESD) is defined as the transfer of charge between bodies of different electrical potentials. The most spectacular form of ESD is the **spark**, which occurs when a strong electric field creates an ionized conductive channel in air. Electrostatic discharge lightning can cause minor discomfort to people, severe damage to electronic equipment, and fires and explosions if the air contains combustible gases or particles.

The best known example of a spark is a lightning strike. The earth is positively charged and the bottom of a cloud is negatively charged. When the EMF of the cloud is at a certain threshold, a bolt of lightning occurs. The spark is triggered when the electric field strength exceeds a certain threshold value in the air, causing a rapid increase in the number of ions in the air (electrical breakdown), and these free ions temporarily cause the air to become a conductor. Scientists don't know what causes the air, which is normally an insulator, to collapse in electrical breakdown and carry the charge of a lightning bolt.

The main effects produced by electric current are magnetism, heating, and voltage drop across resistive conductors. Any flow of electrons sets up a combined electric and magnetic field around the current, which in turn affects other electrons nearby. Electrons and protons carry electric charges of equal strength. When electrons move away from an area, it becomes positively charged, and the area to which they move becomes negatively charged. Direct current is a more or less even flow, as opposed to the instantaneous discharge of static electricity as sparks or lightning, or the alternate currents that power most our appliances. If there is no conductor the electric potential between two objects can build until a violent burst of current equalizes the charges, such as when bio-lightning strikes.

"Static" or imbalanced charges can be created by removing electrons from a neutral atom. They can also be created by adding or removing charged atoms from an object, and the atoms being removed can be negative or positive ions. It is even possible to add or remove bare protons from some materials (after all, protons are the same as positively charged hydrogen atoms.) If you have a positively charged human body then you probably have too many bare protons (that is too many H+ ions which increases acidity.)

The electric currents in living organism flow simultaneously in two opposite directions because there are both positive and negative charges. During Louis's nocturnal electrocution the electric current in his body was produced by the flow of positive sodium and potassium atoms, negative chlorine, and numerous other more complex positive and negative molecules. During the electric current, the positive atoms flowed in one direction, while the negative atoms simultaneously flowed in the other. The negative atoms behave like electrons, which drag an entire atom along with them, while the positive atoms behave like a proton, but a proton with an entire atom attached. The flowing negatives and positives are usually not equal, and the speed of the positives in one direction is usually not the same as the speed of the negatives in the other. *When we receive an electric shock, no electrons flowed through our body, only charged atoms flowed.* A moving electron does not "carry energy along", any more than a moving air molecule carries a sound wave with it. The charges wiggle back and forth, but the energy moves continuously forward. This is analogous to the way that sound waves move continuously forward through the air, while the air itself wiggles back and forth.

For those who want to look further into life energy and phenomena such as human lightning, the field is called **Bioelectromagnetism**. Bioelectromagnetism examines the electric, electromagnetic, and magnetic phenomena that arise in biological tissues. It refers to the static voltage of biological cells and to the electric currents that flow in living tissues, such as nerves and muscles, as a result of action potentials. Bioelectromagnetism is the electric current produced by action potentials along with the magnetic fields they generate through the phenomenon of electromagnetic induction. Bioelectromagnetism is associated with biorhythms and chronobiology, or the study of periodic (cyclic) phenomena in living organisms. In bioelectromagnetism Resistance, Voltage & Current are treated as a single homogeneous object.

Besides bioelectromagnetism the body (and all life) superconducts energy/consciousness, but with kundalini the flow is amplified and this slowly removes the blockages (resistance) from the bodymind...if the individual cooperates and doesn't weigh themselves down with addictions (resistances) or negative will (bad-faith) that is. A **Super Magnetic Anomaly** resulted from one intensely Kundi-active guy's field that was causing pigeons to crash into the windscreen of his car. He also magnetically attracted and excited both men and women when he walked into a room. He had a pituitary tumor and so his electromagnetic siddhas were far more extreme than usual, blowing up this energetic experience to occult proportions.

The rhythm of life is Charge, Discharge, Recharge. Understand this and we can Grok life. Walter Russell (1871–1963), an American genius, artist, sculptor, architect, and a controversial figure in physics and cosmogony, stated that in the wave lies the secret of creation.

"That which man calls matter, or substance, has no existence whatsoever. So-called matter is but waves of the motion of light, electrically divided into opposed pairs, then electrically conditioned and patterned into what we call various substances of matter. Briefly put, matter is but the motion of light, and motion is not substance. It only appears to be. Take motion away and there would not be even the appearance of substance." Walter Russell

Online book: *Bioelectromagnetism,* Jaakko Malmivuo and Robert Plonsey

Magnetism and Its Effects on The Living System, Albert Roy Davis and Walter C. Rawls, Jr; Acres U.S.A., 1996

The Rainbow and the Worm: The Physics of Organisms by Mae-Wan Ho; World Scientific Publishing Company 1998

The Body Electric: Electromagnetism and the Foundation of Life, Robert Becker and Gary Selden; Harper, 1998.

Bioelectromagnetic Healing: A Rationale for its Use, Thomas Valone; Integrity Research Inst, 2000

Primary Perception: Biocommunication with Plants, Living Foods, and Human Cells, Cleve Backster and Flora Powers, 2003

The Secret Life of Your Cells, Robert B. Stone; Whitford Press, 1994

Life Force: The Creative Process in Man and in Nature, Charles R. Kelley; Trafford Publishing, 2004. (Reichian)

Energy Medicine: The Scientific Basis by James L. Oschman

Living Energies: Exposition of Concepts Viktor Schauberger by Callum Coats

In The Wave Lies The Secret of Creation: Paintings and Scientific Writings of Walter Russell by Dr. Timothy Binder

Viktor Schauberger's motto was "Understand nature, and then copy nature."

LIGHT

"The biophysicist Fritz Popp has pointed to the conditions which must be fulfilled such that all these complex processes occur in a controlled way. There must be an intimate coupling of cell-to-cell-communication, which, according to his calculations, can only be possible when the key control processes occur at the speed of light. Any other means of "information" transmission, including biomolecules, chemical messengers, and so forth, would not be sufficient. They would be too slow to guarantee the integrity of the organism." Wolfgang Lillge, M.D., *Vernadsky's Method: Biophysics And the Life Process*
www.21stcenturysciencetech.com/articles/summ01/Biophysics/Biophysics.html

During certain phases of metamorphosis the entire skin of the body radiates, it seems to shine with an inner light. Some of the causes of **light** emerging from the skin of those illuminated with kundalini is the UV from extra cell division, microwaves from tissue under stress, more electrons transmitted through proteins resulting in photon emission and an increase in scalar waves due to the higher morphogenic field/EMF.

Directly following an Inner-conjunction the body looks like it has been fried or electrocuted; probably due to the fact that NO is a free radical gas. The body is so electrically charged that one's hair sticks out. Plus the irises of the eyes are lit from within by an internal light. It might be due to extra cGMP from the radical NO metabolism of the inner-conjunction, for cGMP is involved in retinal **phototransduction.** This is perhaps due to free electrons or photons generated within super-charged proteins (*see quote by Stuart Hameroff). This heightened flow of electrons through the interiors of protein molecules could be the source behind the luminous glow (aura, halo, aureola) of spiritually lit individuals. When kundalini and bliss is up, there will always be an associated glow to the skin.

"*According to the biophoton theory, biophoton light is stored in the cells of the organism - more precisely, in the DNA molecules of their nuclei - and a dynamic web of light constantly released and absorbed by the DNA may connect cell organelles, cells, tissues, and organs within the body and serve as the organism's main communication network and as the principal regulating instance for all life processes."* Marco Bischof, *Biophotons: The Light In Our Cells*, http://www.marcobischof.com

The consciousness-like coherence properties of the biophoton field are closely related to its base in the properties of the physical vacuum and indicate its possible role as an interface to the non-physical realms of mind, psyche and consciousness. *"The enlightened one inhering in the Heart, sees the light of the mind merged in the light of the Heart, like the light of the moon in the daylight."* Ramana Maharshi. Ramana says...enlightenment is the merging of the light of the heart and brain...this is when the protein molecules are lit with energy, ie: with electrons being conveyed through the central channel of the protein...the whole body thus becomes a radiant quantum sun. Hence the shine of people in the height of metamorphosis...the hyper-merger of the heart-brain, stomach-brain and the head-brain is just symptomatic of the whole bodymind going into this synergistic, amplified communication, superconductivity, bliss buzz we call enlightenment.

According to Hameroff we produce light and are lit up like a light bulb. The following quote by Stuart Hameroff is key to the whole metamorphic process, and the reason why people going through certain stages of metamorphosis shine light.

"As Conrad describes it, proteins and nucleic acids are extremely complicated nonlinear systems, each with tens of thousands of electrons, protons and neutrons (Conrad, 1996). Some intra-protein electrons are very delocalized and are now known to tunnel long distances through hydrogen bond pathways. Electron delocalization also occurs in surface electrons (which cannot closely follow any specific nuclei) and in aromatic (electron resonance) ring structures in amino acids tyrosine, phenylalanine, tryptophan and histidine. These comprise water-free "hydrophobic pockets" within protein interiors, precisely where general anesthetics act (apparently by limiting electron delocalizability). Conrad observes that significantly delocalized electrons which accelerate relative to their nuclei must then absorb and emit photons whose frequencies cannot be precisely accounted for by the rotational and vibrational transitions of the nuclei. Conrad's model of quantum protein computing argues that superposition of electron states contributes to interference effects that "jiggle the nuclei," in particular the hydrogen bonds, and thereby open up new pathways of conformational self-organization. Parallelism of the electronic wave function is thereby converted to a speedup of protein conformational dynamical function. " Stuart Hameroff www.consciousness.arizona.edu/sonoran.htm

"At any rate, living cells produce coherent light with a laser like activity. This coherence serves as a control for the metabolism of the cells, regulates growth, and fixes the reproduction rate. Further, the cell exhibits superconductive behavior. Popp found that a living organism in fact possesses a living aura, a virtual electromagnetic field that pervades the entire organism with a virtual photonic flux. In this field, virtual photons are stored. The field continually receives inputs (virtuals) from the environment and is continually outputting biophotons, particularly in the near ultraviolet. This field, in which all cells are bathed and with which they all continually intercommunicate, tends to stabilize and cohere the organism."
Tom Bearden www.cheniere.org/books/excalibur/biophotons.htm

"Fire, the inner fire, is the most potent of all forces, for it overcometh all things and penetrates all things of the Earth." 14, Emerald Tablets of Thoth the Atlantean by Doreal

The Secret of Light by Walter Russell

The Electric Nature of the Universe by Walter Russell

www.philosophy.org/ —Walter Russell's correspondence course

The Healing Fire of Heaven by Joseph Michael Levry

PRANA

"As the nadis become filled with prana, the body becomes rejuvenated from within. It becomes strong and firm, with all the suppleness of a child." P.28, Swami Muktananda, Kundalini, The Secret of Life.

Prana is a Sanskrit word literally meaning 'life force' the invisible bio-energy or vital energy that keeps the body alive and maintains a state of good health. Prana is similar if not identical to Wilhelm Reich's **orgone** energy, which he believed to be in constant motion, nonentropic and responsible for the creation of matter, and serves as a medium for electromagnetic and gravitational phenomena. There are many terms for subtle energy, including Od, orgone, scalar waves and tachyon and etheric energy. In various places around the world the life force has been called: Japan—*Ki*, China—*Qi or Chi*, Greece—*Pneuma*, Polynesian—*Mana*, Hebrew—*Ruah*, Egypt—*Ka*, Hindus—*Prana*, Druids—*Nwyvre*, North African—*Baraka*, Pueblo Indians—*Po-wa-ha*, Iroquois—*Orenda*, and to the Sioux—*Waken or Wakonda*.

In Hinduism, Prana is the infinite energy of which matter is born. Also interpreted as the vital, life-sustaining force of both the individual body and the universe. The word first arose in the Upanishads, where it is part of the worldly, physical realm, sustaining the body and is the mother of thought and thus also of the mind. Prana, as the fuel for all energy and motion, is said to be what distinguishes a living body from a dead one. In the Yogic tradition a period of increased Prana is known as **Pranotthana**, this refers to a kundalini awakening.

Prana suffuses all living form but is not itself the Atma or individual soul. According to the Eastern worldview prana is understood to flow through a network of channels or meridians, called nadis. The three main channels are: the ida, the pingala, and the sushumna. The ida and pingala channels are said to correlate with left and right uni-nostril breathing. The control of Prana is achieved (initially) from the control of one's breathing (Pranayama). In yoga, pranayama techniques are used to control the movement of these vital energies within the body, which is said to lead to the increased vitality of the practitioner. Self or Atman is the eternal center of consciousness, which was never born and never dies. It is the deepest light shines through the koshas, and takes on their colorings. Prana constitutes the second sheath (kosha). Kundalini is energy but it has an impact on and is generated by (cause and effect of) all the koshas:

1. Annamaya Kosha – Physical (Gross Body)
2. Pranamaya Kosha – Energy (Vital Air Sheath)
3. Manomaya Kosha -Mind (Mental Sheath)
4. Vigyanamaya Kosha - Wisdom (Intellectual Sheath)
5. Anandmaya Kosha – Bliss (Causal Sheath)

In his book *Yoga, Immortality and Freedom*, Mircea Eliade said that in the Shamanistic, Hindu and Buddhist traditions there is emphasis on generating the "inner fire" by various means—"one of the most typical yogic-tantric techniques consists of producing mystical inner heat." One of the ways this is achieved is through both breathing (pranayama) and the suspension of breath (kumbhaka).

Another is through meditation on the very nature of the "fire." By insight meditation on glowing coals and seeking deeper meaning of fire on the physical, astral and causal planes—one gets the sense that ones own internal fire is not separate from the manifest fire of the universe. The ancients knew that life itself is a process of burning or of oxidation. Through fire meditation the aspirant gains lucid penetration into the essence of fire beyond symbols, imagination and associations. We would call this the breakthrough epiphany of going from doing/thinking to Being/Presence.

Eliade talks about Tapas (heat or ardor) through which the acetic becomes clairvoyant and even incarnates the Gods; for when the small self is transcended we see with the Eye of the Universe. Eliade tells us that Kundalini moves in the central channel of the spine (sushumna) by the force aroused by the mind, the prana is draw upward through the sushumna as a needle draws a thread. Kundalini is awakened by yoga positions and breath withholding until the prana becomes absorbed in the **Void** (Sunya); that is in mahasukha, the Great Bliss which destroys all sins. The Mahayana Buddhist scripture, The Heart Sutra, explains that all things are **Sunya** or Emptiness because they are unborn, uncreated, unproduced, not annihilated, not impure, and not pure, not increasing and not decreasing.

Obviously here the Hindus and Buddhists are not saying that energy (prana) is absorbed back into the vacuum (Void), but that consciousness enters **Absolute Unity Being**—otherwise known as Samadhi. Atoms in a high spin state do change their relationship to spacetime and zero point energy, so there is probably some profound quantum changes at this most extreme of all bio-conditions. Other meanings for **Samadhi** are: union, totality, Absolute Unitive Being, meditative absorption or enstasis and conjunction; subject and object become One. There is an excellent article by Michael Comans on Samadhi here:
http://sped2work.tripod.com/samadhi.html

The one thing that does have to be elaborated is the difference between the physical Void and subjective Emptiness...while they are metaphorically similar they are not the same thing. And yet the highest states of consciousness may indeed be drawing on zero point energy. When in Samadhi one is not "contacting" the zero point energy void so much as transcending thought because a brain so lit up with energy is not capable of thinking...with the thinking mind gone, then the Witness comes to the fore, and one realizes that there is Consciousness Without Thought. This consciousness of course is unbounded, infinitely spacious, completely without identification and encompasses total freedom, and so is spoken of as Emptiness.

However while in Samadhi or inner-conjunction one's physical form is in its highest rev state and has a different orientation and interaction with the physical Void/Zero point energy. The quantum realm cannot be denied in any kundalini theory, and we can say things for sure like proteins are rapidly ordered by quantum tunneling processes. It is apparent that the physical world is the encrustation of quantum reality. And so we can say that we are going back to our SOURCE within during inner-conjunctions/Samadhi. We are in a sense experiencing as far as the human organism is possible to experience both the impact of the physical Void and subjective Emptiness.

Prana (coherent superconducted light) is the contagious energy of the living creatrix intelligence of the Universe. If a Meisner field is created by high level of coherency (superconductivity) in a yogi's body, this would explain the phenomena of levitation by monks. It also explains why advanced meditators have greater immunity to external EMFs. *"Around the superconductor a Meisner field is formed. The Meisner field has no north or south pole; it's just a field, but it's unique in magnetism in that it has no north or south pole. The size of the magnetic field is proportional to the amount of light that is flowing within the superconductor."*
www.geocities.com/natureoflight/pg9.html

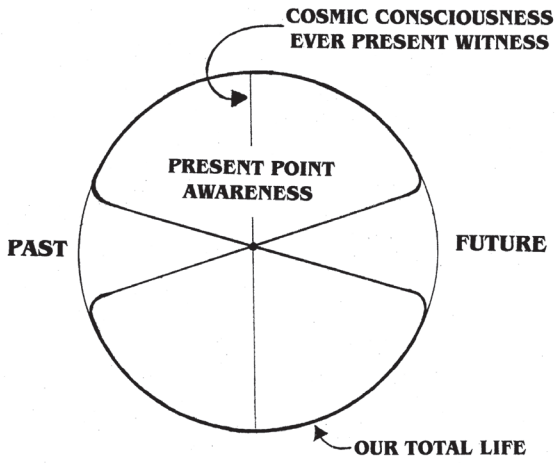
If an atom loses or gains electrons, it becomes ionized, or charged. Electrons do not stay in excited ionized states for very long, so they soon return to their ground states, emitting a photon with the same energy as the one that was absorbed. In *Psychic Discoveries Behind the Iron Curtain*, Sheila Ostrander and Lynn Schroeder say that the Russian's describe the aura or energy body as "*some sort of elementary plasma-like constellation made of ionized, excited electrons, protons and possibly other particles… But at the same time, this energy body is not just particles. It is not a chaotic system. It's a whole unified organism in itself."* As Mary Coddinton mentions in *Seekers of the Healing Energy,* the Russians call the subtle body the biological plasma body, or bioplasma for short, and they say that this energy permeates all space.

Prana might also be connected with the Orbitally Rearranged Monatomic Elements ORMUS. Eventually we will probably find that the way in which life uses exotic m-state elements is intimately tied to kundalini, higher states of consciousness and spiritual experience. The study of m-state physics in biology may reveal a mechanism of biological interaction with zero point energy. This, if nothing else, will be an interesting metaphoric correlate to Unity Consciousness.
www.hbci.com/~wenonah/new/hudson.htm —M-state, Transition Group

Moray King thinks that zero-point energy is not a passive system, but actually is a manifestation of an energy flux passing through our space at right angles from higher dimensions. An interesting analogue to the gravity warping sensation of peak kundalini is Tom Bearden's idea that violation of local energy conservation by a powerful free energy device can produce a local curvature of spacetime in and around the operating device. This spacetime curvature alters the local rate of flow of time, thus affecting the mind, thoughts and memories.

"There is only one creative energy—logos—which manifests itself from its lower form—sexual energy—to the supreme spiritual or divine power." Richard Alan Miller

TIME



Terrence McKenna said that time is composed of elements, nested fractal elements and that synchronicity is the fractal nesting of interior and exterior events. Perturb our present point awareness and "depth" of consciousness percolates to the surface. Or deeper layers of consciousness percolate to the surface and perturb our present point awareness. This loosens our sense of linear time. Through Kundalini with its expansion of consciousness and increase in communication between the brain hemispheres, our life comes to a conjuncture. The time current from the past and the future seem to collide in an experience that is "*out of time.*" In Kundalini our awareness and senses are greatly expanded. Our emotions and experiences are more extreme than we could possibly imagine. It truly is the realm of miracles, when our life reaches that critical apex where the past and the future touch infinity. They say on a quantum level time runs in both directions, but this experience of the nexus of our lives cannot be expressed in words.

A kundalini awakening is an endogenous, automatic, autopoietic cascade of happenstance and chemistry. It is a pre-destined Great Attractor that our lives inevitably lead up to and are resolved away from. As such it is a huge blip on the radar screen of our life. With heightened kundalini something strange happens to time...this ineffable sense of timelessness, or the penetration of the illusion of time, is the nexus of ones archetypal psyche. The depth-psi mind is trans-space and time...it operates in multi-layered metaphor that extends into our linear mind through time like the progressive opening of Russian nesting dolls.

With spiritual acceleration our sense of self expands along the umbilical cord of Cosmic Consciousness, through which inapprehensible Timelessness is sensed. The Ever Present Witness "at" the ground of Being shines brighter encompassing both more of the past, present and future. It is this that gives us the sense of Timelessness. The inner alchemical marriage seems to expand our Present Point of Awareness to encompass the tacit sense of our Total Life. In the Absolute sense our entire life occurs in this instant and throughout Eternity. We are not aliens lost in the unknown, we are the Absolute unfolding Universe. Time and Timelessness,

relative and Absolute are one in this great passion, as we awaken to the Great Spirit within.

Heightened kundalini gives us a translinear experience of time, through which we realize and build our transrational faculties. With the heightened sensibilities of kundalini we learn that our body-soul knows what is coming up in future time even when we do not consciously know. Whatever stage of the alchemy we are experiencing "now" is because in the future there will be this next inevitable sequence of the alchemy arising. At all times our physiology is preparing for the next event. Whatever is happening "now" is due to that which is preordained to happen in the future.

Throughout the awakening ego-function is less solid and there is a dissolving of the sense of "I." This conserves the energy that would have gone into daily life for the metamorphic chemistry itself. Perhaps our ego becomes more indeterminate because our normal conscious range is amended with extra bandwidths from the subconscious and transconscious. Until we have integrated these new levels we feel somewhat like a fish out of water, and at the same time never more ourSelves. While the ego structure is "less solid" it is also more reactive—and this serves to speed processing, detoxification and conscious recognition of things we normally would be oblivious to.

The ego completely disappears during states of extreme kundalini, but then it comes back hours or days after. What is really interesting is that when the ego does disappear and only witness remains, we are paralyzed and we lose our sense of **time**. Ekhart Tolle said when you negate ego you negate time. Perhaps there is a pre-egoic uroboric loss of time, and a trans-egoic Cosmic loss of time. Pre-egoic time loss constitutes *oblivion* and trans-egoic is *nirvana*; different brain chemistry on the one hand leading to a diminishment of consciousness and on the other an expansion of consciousness. *"To be conscious is not to be in time."* T.S. Elliot

If we consciously incarnate or witness our Presence Now then the psychological need for external security lessens. Fear for our security is related to past memory and future time. The time-bound ego is simply one that has not adequately delved into states of trans-egoic loss of time and come back to loosen its obsession with the past and future. The quality of a human life is reflected in how deeply Infinity is experienced Now.

Fasting increases depth penetration of consciousness, by increasing the perception of conscious-bites/second, this slows our subjective experience of time. This increase in conscious-bites/second is what makes reality more vivid with kundalini, drugs, or falling in love etc... Basically fasting reduces the "noise"... one can talk about chemical interference of toxins and metabolites, but really it is also evident on the quantum level, with reduction in **quantum interference**. Whenever élan vital rises we register more conscious-bites per second.

"Movies seem continuous, but they are actually sequences of frames. The notion of consciousness as a sequence of discrete moments is consistent with Buddhist reports which counted events occurring at around twenty millisecond intervals. That's actually close to the 40 Hz activity which Crick and Koch (1989) portray as the neural correlate of consciousness. The frequency of conscious events could determine subjective sense of

time. For great athletes like Michael Jordan, time slows down. To him, the other players are in slow motion. Michael may just be having more conscious events per second than the rest of us. "Stuart Hameroff consciousness.arizona.edu/

One of the best books out there on the perception of time and precognition is *An Arrow Through Chaos: How we see into the Future* by David Loye.

SYNCHRONICITY

Some wise person once said that "Isn't synchronicity just increased conscious awareness?" Enjoy synchronicity while it's happening because the intensity of it will come and go, and other forms of weirdness may arise. For example when a friend was visiting for the first week we saw nothing but paradox everywhere...so we coined the term God-Damn-Paradox. Synchronicity does make life seem like a drug trip some days.

How to make sure ones actions are correct? To a certain extent we only know if we have acted correctly in hindsight. If you are in the flow with your brakes off your actions will be correct to the circumstances. Our primary programming can show its head and interfere with our ability to get into flow...but if we are observant we can catch these neurotic ticks, and work to do better at staying in flow next time. Keeping the body pumped up energetically with wheatgrass/spirulina and opened up with hot/cold water and yoga, and the brain pliable with meditation/toning and we are more likely to be openly responding to flow in the moment.

Also with synchronicity the little-mind that normally associated with ourselves, seems to make all these apparent mistakes, which it turns out that Bigmind is making...and which turn out to be the correct moves. That is as we start to operate from the larger mind, we start to see the insufficiency and finitude of the habituated mind...and yet we are not quite at the point where we can claim this larger consciousness as us, but it feels like a holy visitor showing us around and making our usual self look like a fool or very inept and limited. This is the main function of dreams and psi activity I think...as a stage leap into deeper dimensions of ourselves and the Kosmos. Psi and dreams seem mostly to occur to show us that a profoundly deeper experience of reality is possible.

There are temporal distortions related to longing and search mode. As consciousness brightens we feel things are speeding up because we gain a greater perception of the inertia (grossness and resistance) we still embody, which is now being brought to awareness. We have the sense of "waiting" or "urgency" because we are not registering the patience (non push/pull) that you can only get with Presence. Deprivation mode is simply a lack of Presence, and so Presence is the only thing that satisfies. Presence is a prior necessity to success in life. The more work we do to clear out the bugs in our emotional and rational processes that weigh us down and keep our inertial gravitation around the conventional-conditioned consensus mind...the more we stabilize this higher level where both timelessness and nonlocal consciousness, dream and awaking seem to be interpenetrated. The more people in a community that are acting in flow, the more synchronicity happens. You might want to start documenting the synchronicities and formulating theories on time and nonlocal consciousness.

As the potential for enlightenment is infinite there must always be an interference pattern on the sector boundary in moving from a former state/stage to a new and higher state/stage. When we are not used to witnessing this shift it would appear first as "disorientation." But as we get used to moving into deeper layers, it would be felt more as a "reorientation" and then a "proorientation" and eventually a "prioriorientation." Essentially following the path of Self remembrance, an anamnesis that is the Passion of the Muse. The "tension of transformation" is the proprioception of moving from acceleration to synchronization, synchronicity or "Kairos."

KAIROS

The idea of Kairos or "God's Time" is perfectly explained by this quote by Jose Arguelles in "The Mayan Factor." *"A resonant frequency juncture can be defined as the synchronization of two or more tonal spectrums which join momentary need with universal purpose."* 56

As a deeper state of witnessing occurs it is centered in consciousness itself, not in the objects or contents of consciousness. When we are no longer identified with our thoughts or objects in the phenomenal world, we are essentially free to consciously choose between them, rather be determined BY them. At that point we start to get into Brezney's pronoia...where we observe the universe is conspiring in every way to aid and support our awakening and wellbeing. As we learn to "obey" Spiritual Eros and the Grain of the Kosmos we are graced with the fruits of conscious development that are patterned into the fabric of the Universe itself. We learn more fully to obey through our pleasure/pain circuitry by which Kosmic-Nature has built us. Timelessness, or synchronization with God's time is the ultimate pleasure.

In "**Kairos**" or God's time, the Omega is the ground out of which "Chronos" arises. That is infinity and timelessness ARE the womb out of which temporal unfolding emerges. The Omega is not over the event horizon, off in an infinity that can never be reached. This Omega is the omniscience, The Unified Field, the fecund plenum—or infinite potentiality. Since mind exists in a temporal world, we tend to banish the Omega beyond the threshold of conscious into never-never land. But the Omega is closer than our nose—The Omega is US.

This Omega, this enlightenment is the Fourth State! However, this Fourth State is "spiritual lucidity" or Awakeness or Muse-embodiment itself, it is not really a "state," but the "ground" of all states. Integral-Integrity or enlightenment is the Witness within all states of Waking, Dreaming and Deep Sleep. I like to say that it is integration (communication/communion) between the hierarchy in the brain (sub, conscious, trans) from the reptilian/old mammalian/neocortex and the two hemispheres of the brain. The sacred marriage of the sexes, poles, charges, and hemispheres. You could also say that Enlightenment is the Kosmos perfectly ovemaking itself. To achieve this we simply stop our resistance and dissonance and get into sync with the largest possible destiny...that of the Universe in the making.

SOUND

Brain Frequencies and Predetermination

In considering light to be a means of information transfer in the body, we must consider sound as a cellular communications device also. A team of Danish physicists including Thomas Heimburg consider the idea of nerve impulse transmission by electricity to be incorrect because nerves do not generate heat. These researchers theorize that is more likely to be a sound pulse or "soliton" that can propagate without losing strength or spreading out, due to the gel like medium of the nerve sheaths. semi rigid gel at physiological temperatures.

Myelin is an electrically insulating phospholipid layer, composed of about 80% lipid fat and about 20% protein. that surrounds the axons of many neurons. Oligodendrocytes are glial cells that form the myelination of axons in the central nervous system, while Schwann cells myelinate neurons in the peripheral system. The nervous system of mammals depends crucially on the myelin sheath for insulation as it results in decreased ion leakage and lower capacitance of the cell membrane and faster impulse speed.

MUSIC OF THE EARTH'S SPHERE

"My observations of Monatomics is that is causes a deep cellular theta state to be acquired by the cells themselves allowing the field singularities to pulse unobstructed, giving the DNA a pure signal around which to further organize itself around the sine wave of consciousness itself. Many benefits health-wise accrue from this harmonic. One doesn't "need" monatomics persay, but they are a wonderful tool of centering. The Source may be acquired multiple ways. The Sound Current is my preferred method of connection wit the Divine or Source. Its benefits accrue and amplify. I am of steady faith in this."
Garwin Redman

The word *Hypnogogia* is composed of *hypnos* (sleep) and *agogos* (conduit). During the twilight of hypnogogia with our critical reason suspended our subconscious is very easily affected. Hence theta states usefulness for telepathy, channeling, clairvoyance, astral projections and hypnosis. Also for suggestion, mind control, seduction and political control. The setting of intention and the receiving of resolution and answers apparently occurs in **Theta** brainwave frequency 4Hz to 8 Hz.

Generally human cells oscillate and resonate at 7.83 Hz with the Schumann Resonance of the Earth's EMF, in mid-range alpha and theta at 6-10 Hz. There are daily changes in the Earth-ionosphere cavity resonance due to variability of the solar short wave radiation, which ionizes the atmosphere at 90-100 km height. Theta brainwaves are active during dream sleep, deep meditation, trance, hypnagogia and are particularly strong during peak experiences, gnosis and creative-artistic reverie. Theta brainwaves engage inner and intuitive subconscious, where you hold memories, sensations, secrets and emotions. Prior to and during hypnagogia the sleep hormone melatonin is released causing the body organs to slow down and our state to become groggy.

Ecstasy occurs in theta at 3-6 cycles per second and low alpha at 6-8 cps. This activates the limbic brains **serotonergic** circuits to the lower brain, resulting in synchronous brain wave discharges through the nerves linking the hierarchical strata of the brain. These strongly coherent frequencies synchronize the frontal areas of the brain, integrating nonverbal information into the frontal cortex—thus producing insight, intuition and ESP. Telepathy or ESP are accessed in theta due to increased interhemispheric penetration between the sides of the brain and hierarchical strata communication via serotonergic nerves. **Theta wave** links us both into the Earth's resonant frequency and the deeper layers of the psyche.

Greater synchronization and coherency within the brain makes for "Whole Brain" thinking. This revelatory chemistry and its higher information flow arises in hypnognia or Theta wave…through synchronization of the enteric and head brains via the Schumann resonance. I notice I go into ecstasy and revelatory chemistry during hurricanes in other parts of the globe and during high pressures and storms. The stomach's serotonergic nerves are stimulated producing a bubbly bliss in the region, and the jaw becomes red hot as kundalini moves through it as well. Thus we can see that Theta wave will simultaneously relax the jaw and increase creativity, which it does. This means that Theta wave binaural CD's such as Kelly Howell's *Secret* meditation should relax the jaw and be useful for people with TMJ (Temporo-Mandibular Joint). Indeed this CD does relax the jaw and the solar plexus and stomach; from this we may also deduce that alpha/theta wave may enhance digestion and prevent ulcers. We see later on in "*Biological Relation to Zero Point*" that ingestion of m-state monatomic elements also produces the "Whole Brain" state of 4 quadrant synchronization in the brain and an increase in Alpha and Theta wave. So M-state elements could be used as a means of enhancing creativity, improving digestion and healing TMJ. On occasion an extreme version of enteric serotonergic activation acts to disrupt digestion by fermenting the stomach contents, however under more normal less intense circumstances, digestion would be enhanced by initiation of parasympathetic dominance and the nitric oxide dilation of the digestive blood supply.

Ecstasy represents heightened coherent communication between the cells (cellular communion) plus entrainment with the Schumann Resonance of the Earth (Earth communion). Thus cellular and Earth communion result in maximizing sense of well-being and intuitive genius—we thus live and express Earth-soul or Cosmic Consciousness. Shamanic practices tend to produce a theta wave synchronization across brain systems, which heightens the adaptive-integrative mode, resulting in higher socioemotional intelligence. Research shows that drumming induces relaxation, enhanced theta-wave production and brain-wave synchronization. Serotonin, is crucial to feelings of well-being. Social status also plays a part in our digestive health and sense of well-being, for there is some evidence of high serotonin levels in leaders and Type A personalities.

The Pineal Gland is affected by changes in the Earth's magnetic field thereby regulating our hormone production. The pineal gland produces the sleep hormone **melatonin** in the presence of a negative magnetic field, enhancing deep restorative

sleep. Melatonin (antioxidant, anti-aging and cancer suppressor) is not produced in the absence of the Schumann Resonance and its production is diminished in the presence of electromagnetic pollution. Melatonin seems to have a very close link with the "Optimum Biological Frequency Resonance." Also since melatonin is not produced in the presence of light, remember to turn your lights off in your bedroom at night, and don't sleep around electrical equipment. Us moderns with out artificial lighting, might be depriving ourselves of the optimal dosage of melatonin for health and longevity, by staying up all hours. Supplementation with melatonin is used for sleep disturbances, seasonal affective disorder, neuroendocrine disorder and cancer therapy. Vitamin D slows the age related decline of melatonin. Melatonin is a potent antioxidant, it also stimulates the main antioxidant enzyme of the body, glutathione peroxidase.

The Schumann waves are not present all the time, but have to be "excited" to be observed. They seem to be related to electrical activity in the atmosphere, particularly during times of intense lightning activity. They occur at several frequencies, specifically 7.8 (strongest), 14, 20, 26, 33, 39 and 45 (weakest) Hertz, with a daily variation of about ± 0.5 Hertz. So long as the properties of Earth's electromagnetic cavity remains about the same, these frequencies remain the same. The Schumann resonance changes along with the solar sunspot cycle as the Earth's ionosphere changes in response to the 11-year cycle of solar activity.

The Schumann Resonance is detected by human brains and is used to synchronize diurnal and ELF brain rhythms. This is the key element in why sunspot numbers are correlated with serious human health effects. The Schumann Resonance intensity is highly correlated with solar activity and the electron concentrations in the lowest layers of the ionosphere. Higher or lower solar activity moves the Schumann Resonance frequency outside the normal homeostatic range and through the Melatonin mechanism, this causes health problems and enhanced death rates in human populations. The **Sunspot Number** emerges as the strongest factor in determining death rates in those mortalities associated with Melatonin reduction, including cancer, cardiac and neurological mortality.

Serotonin, the immediate precursor of melatonin in the tryptophan metabolic pathway in the pineal gland. The effect of stimulating the right-brain, or the left side of the body, causes an increase in theta brainwaves, in most individuals. lower brainwaves, such as theta brainwaves, tend to cause the release of **serotonin** (calming). While stimulation of the left-brain and right side of the body increases beta wave and **dopamine** (stimulating). Interhemispheric integration refers to the communication between the left and right cerebral hemispheres. To function efficiently, we need to integrate information from various specialized centers to coordinate a planned response. Thus the brain must be well differentiated, and integrated. Without the theta of REM sleep we become increasingly unstable and irrational.

About 95 percent of the body's serotonin is to be found in the stomach or enteric brain. The gut wall has at least seven types of serotonin receptors that facilitate the digestive process. Serotonin also acts as a go-between, keeping the

brain in the head up to date with what is happening in the brain in the stomach. Such communication is mostly one way, with 90 percent traveling from the gut to the head. Serotonin is perhaps the major neurotransmitter responsible for communication between the enteric and the head brain. Information from our enteric brain, "gut intuition," is no doubt re-collected via the serotonin, relaxation, meditation and contemplation of the theta brainwave state. Thus we might say that gnosis is a two-brain phenomena working in sync.

The twilight zone of **hypnogogia** produces brief, fleeting visions, feelings that the bed is moving, rocking, floating or sinking, electric buzzing sensations and inner voices. Typically meditation promotes a slowing down of the brain waves to alpha, with intermittent theta waves—which usually appear only during light sleep. During meditation released tensions increase skin resistance, lower blood lactate, reduce heart rate and slow down breathing. Taken as a whole, the entire metabolism slows down, with the person remaining in a state of peaceful relaxation.

Kenneth Blum et al proposed that serotonin is the neurotransmitter which initiates the reward cascade. The reward cascade begins in the hypothalamus, which is a principle site for emotion and reward. Neurons in the hypothalamus release serotonin (5HT) which activates the opioid enkephalin. The **hypothalamus** controls the border zone between the conscious and supra-conscious levels of awareness. The biochemical process through which this is accomplished involves **serotonin**, one of the two primary hormones released by the pineal gland. As levels of serotonin to the hypothalamus are increased, certain neurons fire more easily, enabling sensory information that was previously being processed at a supra-conscious level to be shifted into the domain of our conscious awareness.

Studies on the phenomena of memory, emotion, plasticity, sleep, meditation and hypnosis all draw connections between theta waves. At the localized level, theta wave seems to be involved in short-term memory—individual memories are refreshed in gamma (40Hz) while the whole salient refresh cycle occurs in theta (6Hz). The links between theta frequency memory, emotion and local neural plasticity point to why hypnogogic visualizations in theta involve such intense subjectivity and create a lasting vivid impression. Indeed theta phenomenology can create lasting changes in the brain, spiritual perception and our sense of self—tuned as it were to the music of the Earth's sphere.

Mozart's brain must have been quite different from the ordinary humanoid. How many of us can say that we receive instantaneously whole symphonies and operas in our head. Therefore one would assume that Mozart had a great deal of Theta wave as a normal living state. Thus producing the kind of wholism and synthesis of consciousness known to all geniuses. Remember that focused (digital) remembering of individual facets of consciousness are refreshed in gamma (40Hz) while the whole salient refresh cycle occurs in theta (6Hz). Theta therefore must represent a large component of what I call the "Quantum-mind." Which is a gestalt of gnosis comprised of the entirety of a theory, idea or art form, which then needs to be "unpacked" temporally with the digital focused mind.

To feel into and connect with the future sense, the cells have to be made more efficient and cohesive. It is like the global brain or noosphere is syncing faster than ever, one has to increasingly get out of the way (theta brainwave) in order to keep up. It is an interesting concept to contemplate is the slower your brainwaves the faster your consciousness...consider millisecond dreams that seem to last hours. The slow wave packs more consciousness bites per second. Modern humans think that you go faster by stimulation, actually you just fry your nerves. After a prolonged period of Beta state the ratio between potassium and sodium is out of balance, creating mental fatigue. Theta state resets the sodium & potassium ratios in the brain cells. The sodium & potassium levels are involved in the osmotic process that transports chemicals into and out of your brain cells. A brief period of 5-15 minutes of Theta restores the ratio to normal resulting in mental recharging.

The Guru principle relies on theta trance in order to establish a cohesive sangha. Osho had a permanent strong theta wave thing going, I mean look at those eyes, either that or he smoked a lot of weed. Listening to CDs of his voice would thus be a great vehicle for stabilizing theta. I got my first real taste of stabilized Spacemind or Quantum mind while listening to Osho in the bath. Studies at the Center for Neuroacoustic Research have revealed ultra-slow frequencies patterns below the traditionally accepted lowest Delta rhythms of 0.5 Hz. These ultra slow frequencies of one quarter cycle per second, one frequency per 10 seconds, per one minute, or even longer have been called Epsilon. Epsilon states seem to be associated with very high states of meditation, ecstatic states of consciousness, high-level inspiration states, spiritual insight and out-of-body experiences. Dr. Jeffrey Thompson has investigated the left/right hemispheric synchronization of Eureka consciousness and surmised that the extremely slow Epsilon brainwave patterns might have extremely fast HyperGamma/ Lambda brainwave patterns modulating within them - just as the HyperGamma/Lambda (200 Hz) brainwave patterns are "riding" on a super slow Epsilon modulation.

In the book *Song Of The Spine*, Dr. Wieder on the neurobiological basis of vibrational healing describes how sound creates form. She says each bone of the spine has its own tone and frequency, and that applying specific vibrational frequencies to the vertebrae generates a sympathetic vibratory resonance that activate harmonics which maintain health. Joachim-Ernst Berendt also tells us the foundations of all form is sound: *"The science of harmonics knows that any form of organic life—a fish, a flower, a leaf, a fruit, a beetle, any creature at all—is sound, that in fact even the "most beautiful" forms of the inorganic world, the crystals, are sound."* 80, *The World is Sound: Nada Brama*

Overtoning: The Complete Guide to Healing with the Human Voice by Wayne Perry
Deep Listeners: Music, Emotion, and Trancing by Judith Becker
www.neuroacoustic.com — Dr. Jeffrey Thompson. Theta, Epsilon CDs
Kelly Howell's "*The Secret*" CD provides remarkable Theta balancing of the head and enteric brains, and dropping of jaw tension if the CD is used regularly. Also try her*Awakening Kundalin*i for integration and energy circulation.

BIOLOGICAL RELATION TO ZERO POINT ENERGY

The elixir of life, the universal medicine, The Philosopher's Stone possesses corpus, anima, spiritus and supernal powers.

At the ground of Spirit there is Sunyata, Emptiness, Void, Absolute Unity Being. At the ground of matter there is the Quantum Field, or Void, Vacuum, Zero point Energy. The "emptiness" of empty space is in fact not empty, but a great ocean of seething energy. Tom Bearden refers to this ocean of energy as being of the "time domain." Energy out of time—time itself he says is actually compressed energy; and it is energy which is compressed by exactly the same factor by which matter is considered compressed energy: the speed-of-light-squared!

"We live in a vital, pulsing, living, breathing, bioenergetic cosmos, and life is everywhere. Patterns of life are riding in the light from the distant stars, from our sun, in the neutrino flux from the cosmos, in the graviton flux from the cosmos, in cosmic rays, etc. And so it is small wonder that living cells that form, reproduce themselves, and die can be induced in the proper primordial soup of nutrients when that soup of matrix forms and chemicals is bathed in ultraviolet light (one of the magic windows which contains a greatly enhanced transmission factor for bioenergy, hyperspatial energy, life energy), and stimulated by electrical spark discharges." Tom Bearden, Excalibur Briefing, Bioenergy Collectors

David Hudson was one of the first to rediscover monatomic white powder of gold or m-state elements in the current era. In the late 1970s the Arizona farmer David Hudson found some strange materials during gold mining on his land. Over the following decade Hudson dedicated himself to figuring out how to obtain and work with these strange materials. When the substance was given to people to ingest, he said it propelled the individuals into a kundalini awakening and Christ Consciousness, when they took it as an sacramental initiation after preparing the body with fasting. Through analysis of the brains of cows and pigs, it is likely that 5% of our nervous system is composed of monatomic elements. *"Over 5% of the brain tissue by dry matter weight was Rhodium and Iridium. But no one knows it, because it can't be directly measured. The elements are flowing the light of life in your body."*

David Hudson called the strange materials Orbitally Rearranged Monatomic Elements or ORMEs and monatomic elements in a high-spin or m-state. These ORMUS elements are stealth elements that scientific instruments cannot detect, yet can be seen, felt and used for regeneration of cells and DNA repair. They are abundant in seawater, dirt, rock, plants, fresh water, and the air. Monatomic elements can be uptaken from food, especially from plant material grown in certain volcanic areas. ORMUS applied to crops yields greatly increased health, nutrition, pest resistance and the food holds up longer in storage after harvest. In fact ORMUS and orgone could be the same thing as the **fructigenic energies** of nature that Viktor Schauberger talked about. Any plants fed ORMUS uptake the elements and show remarkable quality improvement in size, taste, sugar content and disease resistance.

The relative abundance of m-state elements makes them easy to extract and concentrate using relatively simple chemical and mechanical methods (see Barry Carter's site for methods). Modern ORMUS researchers relate these strange materials to ancient alchemy, Philosopher's Stone, or the Elixir of Life. the Biblical manna, shewbread, King Solomon's gold and the Egyptian mfktz discussed in the book *Lost Secrets of the Sacred Ark : Amazing Revelations of the Incredible Power of Gold* by Laurence Gardner. "Shemanna" or Firestone was a sacramental bread use for spiritual initiation by the ancient Egyptian priesthood. It was made from monatomic gold powder and frankincense, and was said to be food for the "Ka" or lightbody. It is thought that ORMUS elements could be the connector between matter and spirit.

The ORMUS elements are the palladium group precious metals (also known as the transition or noble metals) in a natural non-metallic form. These deformed nuclei in a high-spin state, M-State or ORMUS state atoms don't form metal-metal bonds with their own kind. In this form they are called "exotic matter" and exhibit strange properties, such as disappearing, levitation or passing through solid objects, anomalous responses to gravity, superfluidity and tunneling through solid objects. They can explode in a flash of white light in the sun, weigh more or less depending on their temperature and can disappear into other dimensions. We can humorously refer to the "m" in m-state, as "mystery-state," whereas in actuality is refers to "monatomic." The understanding of exotic matter by Barry Carter and his colleagues starts with Hudson's theory but is more comprehensive. He says, *"In order for these atoms to be superconductors in the m-state, they must be at least "diatoms" and since they are superconductors, they can be manipulated by magnetic fields. As yet we do not know if the ORMUS elements are monatomic or not. We also do not know if they are in a "high spin state"."* You can read more about ORMUS at Barry's website. www.subtleenergies.com

In the monatomic state an atom oscillates in 2 dimensions not 3, weighs only 56% of its normal weight and does not ionically bond with the surrounding atoms—hence the term mono-atomic. In a monatomic state an atom is larger ie: it has more space between the particles. In a high spin state the atom interacts with the **zero point** and space-time differently. (Investigation of this monatomic phenomena maybe the key to The Grand Unified Theory.) According to monatomic theory these atoms in a high spin state are used by life to superconduct consciousness and energy. Superconductors and lasers are the best known examples of quantum coherence—communication between atom and atom proceeds via state resonance. Quantum coherent properties have been observed in biological systems and in fact that quantum coherence in the microtubules of every cell may be the key to consciousness itself. The soul-field runs on these m-state atoms, maintaining the intelligence and integrity of everything we are and ties us into the All. Monatomic science could lead us into a new understanding of Enlightenment and a reassessment of our highest spiritual capacities. Bearden says that bioenergy propagates along superluminal deBroglie waves, moving much faster than light. Monatomic superconduction might also be the key to precognition, and our

ineffable spiritual perception of Timelessness—the Eternal Present. That is the weird ability to transcend both time and space with consciousness, such as remote viewing, telepathy, precognition and the supercognitive capacities of dreaming.

During metamorphosis the cellular reconstruction of the body is done via the macrophages with the aid of free radicals to oxidize the "inferior" cells to death. The cell renewal rate increasing, is one of the reasons transmuting individuals glow with light, because mitosis gives off ultraviolet light. Barry Carter et al believe that the ORMUS elements differ from their metallic counterparts in that they have some or all of their electrons paired up in Cooper pairs. Thus allowing them to resonance couple with other ORMUS atoms and form a Bose-Einstein condensate at biological temperatures. The main mechanism of ORMUS is to open key neural pathways latent in the configuration of the soul template, via cooper pairs within the monatomic elements. Biophotonic information is delivered to the neural pathways via photonic radiation from the cooper pairs, which transmute to mitogenic radiation.

"Another collector for bioenergy in a living system is the mitogenic radiation between the cells in tissue. Taken as a flux, this mitogenic radiation would seem to have both a photon nature and a non-photon nature. The cells, in their membranes and fibrous internal structures, are continually collecting and kindling bioenergy into electron currents and photons. The electron currents represent collections from the virtual state into observable state, and may in one sense be regarded as the lifting of electrons out of the Dirac sea by direct kindling (coherent superposition of virtual state energy into observable state energy). These kindled currents are thus superpositions or modulations on the ordinary electrical activity of the cells, fibers, and membranes. The mitogenic photons are also produced by direct kindling of the virtual state into observable state, in this case, by kindling virtual state photons into observable state photons." Tom Bearden, Excalibur Briefing

The Alpha Learning Institute of Switzerland found that these m-state, monatomic elements improve nerve coherency and hemispheric synchronization, thereby raising intelligence, creativity, bodymind coordination, agility, eliminating depression and reducing stress! There may be great potential for taking ORMUS during awakening as a means to speed the adaptation, reduce nerve damage, provide free radical protection and detoxification, for evening out the brain activity and strengthening **brain wave** frequency **coherence**. Channeling the Overmind requires using the right brain and left brain simultaneously, in a kind of telepathy with our higher Self, through coherence at the neuron and quantum level. This must create a certain photon flux and increased superconductivity of communication between cells which allows for vastly increased levels of consciousness. Producing a type of quantum jump in consciousness and union with the Overmind that we normally only experience in the dreamstate. Kundalini awakening therefore can be rather like lucid dreaming, and becoming lucid "in this world" is not always a bunch of roses. Nature's safety valve for the shock of this amplified lucidity and sensoral awareness is massive amounts of endorphins produced by kundalini which tends to buffer the harshness of bare reality. These latent, largely unused capacities of

Overmind, are what will save us from our present human created chaos, thus both ORMUS and kundalini awakening are vitally important to the survival of the a noble humanity and well-being of the living world.

M-State and the Future of Humankind

Looking into David Hudson's work I came up with the wild idea that the increased heart field and EMF of the nervous system during the peak kundalini, might act like a biological synchrotron to actually change certain elements in the central nervous system into their high spin monatomic state. It maybe that during heightened activation the body can transmute certain palladium group elements such as iridium and rhodium into their **high spin state** by adding energy in the form of photons to the atoms. Thus through the transmutation of these elements the body makes its own monatomic atoms on which the causal and subtle fields of the organism are organized. Matti Pitkanen says there is evidence for nuclear transmutations in living matter and that cold nuclear reactions occur also in living cell and produce metabolic energy. Transmutation is occurring subatomically with the transmutation of elements.

Increased causal level hardware is laid down in the high power monatomic matrix and consequently we amplifying our own soul—a transmutation of spirit. The fine network of these high spin atoms throughout the central nervous system acts to superconduct energy and consciousness. The causal nervous system is such that the working parts (the high spin atoms) do not need to touch, but communicate instantaneously through sympathetic resonance of quantum coherence, with space being no obstacle—ie: they superconduct energy and consciousness. According to this theory it is through this high spin atomic nervous system that we achieve cosmic consciousness, Christ-Buddha mind and all ESP and spiritual phenomena. NASA and the biophysicist Mae-Wan Ho suggest that life superconducts consciousness, and yet it's not known yet exactly how this is done.

"The study of the ORMUS elements promises to change what we know in every scientific field including meteorology, astrophysics, quantum physics, chemistry, medicine, psychology, parapsychology, geology and all aspects of technology." Barry Carter. More information on brain coherence and ORMUS at Barry Carter's site under "Coherence."

Sun meditation will tend to activate the heart, one reason being that the body hungers for natural radiation. But by Solar Heart I am referring to heart-entrainment...where the Heart wakes up and synchronizes the entire cells and atoms of the body. The Solar Heart is really the only thing that "spiritualizes. It is the transducer that catalyzes transmutation. Whole-brain synchronization is probably associated with the Solar Heart.

M-state elements like acemannan and Etherium Gold produce increased alpha and theta brainwaves and hemispheric synchronization—both left and right and front and back of the brain fall into sync. In fact these materials tend to increase psi, super-senses and consciousness in a similar fashion to kundalini itself, so perhaps they might be used to generate a "perpetual" awakening. Delta wave (deep sleep) indicates that the pineal gland has become active. It takes years of

meditation to maintain delta (with Gamma wave prefrontal spikes) in the waking state. But apparently m-state materials can create this meditative brain-state within 10 minutes of taking them. Barry Carter suggests that m-state elements may be the most important substance and means by which we can transform as a species. Possibly m-state elements might make us more real and enlightened, or they could just generate even greater spiritual hubris. Whatever means of spiritualization we use, it is only as good as the purity of our heart and our intention.

www.subtleenergies.com —Barry Carter's website is the main hub for learning about ORMUS. In fact serious kundalini researchers might like to start here.

http://matpitka.blogspot.com/ —Matti Pitkanen, TGD and Quantum Biology, "Exotic atoms and a mechanism for superconductivity in biosystems."

www.asc-alchemy.com./hudson.html —David Hudson Lectures

www.cheniere.org/books/excalibur/bioenergy_collectors.htm —Tom Bearden, Excalibur Briefing

www.nonlocal.com/hbar/qbrain.html — Rhett Savage, The Quantum Brain

PHYSICS OF CONSCIOUSNESS

"Laszlo proposes that it is scalar waves that encode the information of space and time into a timeless, spaceless quantum shorthand of interference patterns. In Laszlo's model, this bottom-rung level of the Zero Point Field—the mother of all fields—provides the ultimate holographic blueprint of the world for all time, past and future. It is this that we tap into when we see the past or future." 174, The Field, Lynne Mc Taggart. www.thefieldonline.com

Glen Rein, a biophysicist at the Institute of HeartMath, California, has been working on detecting subtle energies he calls non-Herzian or scalar energy. **Scalar waves** (non-Hertizian or Tesla's "Radiant Energy" waves) are hyperspatial vortex ring in structure arising from abruptly bucking magnetic fields wound into a caduceus (bifilar) coil. Scalar energy or healing energy has been shown to be not part of the electromagnetic spectrum as we understand it. He found that by exposing neurons in a petri dish to healing energy this caused them to fire at their synapses. That is action potentials passed along the nerves from one nerve to another when they were exposed to the scalar energy. This leads one to presuppose that if the energy of nerve transmission is increased during an awakening that this would create a field in which extra nerve energy would be naturally kindled. Thus explaining the phenomena of both romantic love and shaktipat, and why we feel elevated and sparked in the presence of individuals of genius.

Scalar waves might be the point of fundamental intersection where matter and consciousness can influence each other. Their effect is independent of distance and time and is 3-5 times stronger than that of electromagnetic fields. They are prior to, that is more fundamental than magnetic fields and they transmit information, not energy. The transmission of scalar information creates consciousness fields—which are probably Rupert Sheldrake's Morphogenic Fields. They cannot be detected by

the usual instruments for measuring electric and magnetic fields, which work by interacting with electron flow and energy transmission. For this reason they are still considered theoretical.

Kundalini energy may have scalar wave origins, for there is no doubt that kundalini and healing energy are one and the same. According to Robert Jacobs scalar waves are capable of acting on living organisms at a sub-atomic level, and certain frequencies of scalar have been shown to destroy viruses and bacteria. The work of Cleve Backster on the primary perception of cells might be attributed to scalar waves. And since telepathic messages between organisms seem to be able to pass through lead enclosures, such ESP may not be communicated on the electromagnetic scale, but through scalar waves. Scalar waves propagate at faster-than-light speed except when transmitting scalar information on electromagnetic carrier waves. If something travels faster than light, it means that it can penetrate any matter as though it wasn't there. Therefore scalar waves pervade all matter and cannot be shielded against by Faraday cages.

"Quantum mechanics shows that every point in the vacuum possesses an infinite amount of energy, unmanifest, unformed energy." Dean Brown, Cosmic Law, Patterns in the Universe. www.fmbr.org/cosmiclaw/

The vacuum is in fact not empty, but is a vast ocean of scalar energies (as opposed to vector energies) that underlies all physical reality. The scalar energy ocean is sometimes called **zero point** energy—the all-pervading energy that fills the fabric of space. The term "Zero point" refers to **zero degrees Kelvin** and it means the energy is not thermal in nature. Quantum electrodynamics theorizes that all particles are intertwined in a vacuum polarization interaction with zero point energy. Ordinary electromagnetic waves are called *transverse* electromagnetic waves, to distinguish them from the new scalar *longitudinal* electromagnetic waves. Strangely these scalar waves do not actually exist in our "material" world, but exist only in the vacuum of empty space, or the time domain. Tom Bearden refers to this ocean of energy as being of the domain of "Energy out of time."

The vacuum is filled with ghost particles and phantom fields that rapidly wink in and out of existence. Under certain circumstances however, these virtual particles and fields can become real. Though it sounds more like mysticism than science, it is said that the vacuum is a universal field of information or consciousness. It forms the matrix of all manifestation, like an ocean out of which matter arises and then disappears into once again. We must remember that this vacuum of space we speak of exists all throughout everything even our bodies. So the **Gateway to the Void** is accessed at every point in the universe. Could Kundalini be the 'channel' that connects the unmanifest void, with the manifest world of subatomics, atoms, molecules and cells? Could kundalini be the cellular expression of energy generated from the vacuum? Perhaps this is why kundalini exhibits such pronounced psychic and trans-temporal effects.

"The substructure of matter probably contains energies that are as far beyond nuclear energies as known nuclear energies are beyond chemical energies…[zero point] energy provides a constant background which is not available at our level under present

conditions. But as conditions of our universe change, a part of it might be made available on our level." David Bohm

Tom Bearden says one can freely and inexpensively extract enormous electromagnetic energy flows directly from the active vacuum itself. Wherever there is a dipole there is already immense scalar EM energy ushering out of and back into the vacuum. The polar differential of the body's dipoles goes up during a kundalini awakening, possibly increasing the transduction of longitudinal scalar waves into ordinary transverse electromagnetic energy.

The spinal core with its outlying sympathetic trunks and their ganglia create a structure capable of generating a caduceus wound double helix magnetic field. The **vortex ring** is an archetypal form for self-organized coherence in zero point energy. It appears in all levels of nature from galaxies to elementary particles. The brain, with its spiral grown neuroglia is an acoustic resonator set to function most efficiently at the love frequency of "peace"...the neutral center...the sympathetic vibratory resonance of with zero point. At which point biophotons are conserved due to coherency, atomic spin rates maintained and harmony with the HUM of the universe occurs.

"Synchrotron radiation occurs when electrons spiral into a magnetic field. Neuroglia (connective tissue of the central nervous system) are actually tightly wound spirals, helixes and vortices." Dan A. Davidson, *A Breakthrough in New Energy Sources.*

When the pulsed charge in this system meets a certain threshold where the excitation signal matches the resonant frequencies of the water molecule's bonds, this would induce ion oscillation. This electrolytic ion motion could produce a self-organizing interaction with the zero point energy. When sufficient energy from an electric impulse is added to a "gas" it ionizes into a plasma, and as the energy increases more ionization will occur. At a certain point I think the cerebrospinal fluid becomes superfluid and saturated with ions enabling it to carry a massive electric current. The caduceus wound magnetic field with the ionized cerebrospinal fluid core appears to have both electromagnetic and quantum properties. This massive energy generation can occur in a living system because the nervous systems of organisms contain a monatomic lattice, and this affords the superconduction of vibration so that total syncopation of atoms is possible for building the bucking caduceus magnetic fields and massive charge.

The charge of the 10,000 org inner-conjunction might very well be due to the ionization of the cerebrospinal fluid in the center channel of the spine, when the double helix magnetic fields are at their maximum coherency, creating a bio-plasma lightning effect. A toroidal electromagnetic field activated by the caduceus coil of the spine may generate a tempic field which would alter the pace of time for objects in it. Given sufficient energy to the abrupt bucking fields the bending of the fabric of spacetime would occur. If the bending becomes extreme teleportation would result. A farout concept that is hard to imagine the human body capable of such a thing, but we really have little idea of the huge energy potentials we embody.

"Opposing magnetic fields have been associated with ball lightening production. Tesla launched fireballs from his large coils when the oscillations were phased to create opposing magnetic fields. Perhaps the most efficient coiled structure to create such opposing fields is the "caduceus" wound coil. Here the double helix symmetry of the windings allows for perfect opposition of not only the magnetic fields but their higher order time derivatives as well. Could then opposing magnetic pulses maximize their stress on the fabric of space causing a "hyperspatial involution" that orthorotates the zero point energy flux. Abrupt opposing magnetic transients could be important for ball lighting creation." Moray B. King, *Tapping the Zero point Energy*, 2000

Zero point energy machines could be developed on the biological model of the caduceus coil and central ion/plasma channel. Then our energy generation could actually enhance human spiritual evolution rather than harming ourselves and the planet as it does now. Similarly if we construct superconducting solar architecture with a monatomic lattice in manmade stone, then the energy emanating from this energy generator will also enhance the consciousness of life around it. In our understanding of sacred architecture we need to deeply reacquaint ourselves with the consciousness basis to manifestation. As Astrophysicist Sir James Jeans wrote that "the universe begins to look more like a great thought than like a great machine."

David Loye author of *The Sphinx and the Rainbow* suggested that all material form is simply coagulated energy. Thus it appears that the fundamental creating and animating force of Eros in the universe is prior to matter and is in the process of constantly creating and transforming matter. To give you a sense of the "space" from which matter emerges I would like to turn you onto the mystical writings of John Worrell Keely (1827-1898) reveling in the glories of the primordial ground. He calls the Void or Zero point energy the Neutral Center.

"There is a celestial mind-force, a great sympathetic force which is life itself, of which everything is composed…Every molecule, every mass, every moving body in space, every solar system, every stellar system, EVERY ROTATORY SYSTEM, is built about A NEUTRAL CENTER. It is the indestructible unit around which all that we recognize as matter is built. Immovable itself, it moves all things. Indestructible itself throughout infinity of time, it creates all things. It produced and preserves the incalculable energy of motion of the entire Universe. It bears the unthinkable burden of the mass of the Universe. It is the most wonderful thing Man has discovered in the Universe since he discovered fire.

The sympathetic conditions that we call mind are no more immaterial in their character than light or electricity. The substance of the brain is molecular, while the substance of the mind that permeates the brain is inter-etheric and is the element by which the brain is impregnated, exciting it into action and controlling physical motion. In order to trace the successive triple impulses, taking the introductory one of sympathetic negative outreach, towards the cerebral neutrals, which awaken the latent element to action, we find that mind maybe considered a specific order of inter atomic motion sympathetically influenced by the celestial flow and that it becomes when thus excited by this medium a part and parcel of the celestial itself." More information on Keely, Dale Pond and others is at Sympathetic Vibratory Physics! www.svpvril.com

We can use **quantum metaphors** as a rich source of healing and inspiration. Dr. Arnold Mindell's book *The Quantum Mind and Healing, How To Listen To Your Body's Symptoms*, offers profound assistance for integration for kundi-actives, with many practical exercises for exploring the bodymind-soul connection. The non-physical "subtle energy" fields of the vacuum, in turn generate corresponding electromagnetic fields (e.g. biophotons) by imparting the potentials. Kundalini might have the effect of stimulating an increased flow of ions upping the body's dipole and increasing the EMF. The biomagnetic field of the body generates micro-electric currents that determine the normal differentiation of cells and their final shade and size. The increased energy flow through the areas where there is blockage restores healthy resonance and energetic order—higher order equals higher synchrotronic lasering of consciousness and energy. In 1935 Lakhovsky discovered that a cell possesses two characteristics—capacitance and inductance—which are the elements of a tuned circuit like a radio. He found the cell must be tuned to the desired frequency needed to sustain life. The constructive interaction of coherent oscillating fields means there is greater information exchange between cells leading to increased spiritual presence or incarnation.

Besides scalar waves that permeate the matter of our being, the ways that kundalini energy maybe conveyed around the body include: changes in receptors due to the body's light generation and EMF, •increased cellular charge—ATP production and changes in hormone and neurotransmitter spectrum, •magnetizing the blood via the iron content of hemoglobin, superfluidity of membranes and heightened polar charge differentials, •the ionic current created by the electrolytes in the plasma of the blood (sodium, chloride, potassium, bicarbonate), •ionized cerebrospinal fluid, •proteins serving as semi-conductors, •heightened action potentials in nerves, •the fascia (connective tissue and sheaths surrounding the spinal cord etc.), •changes in the bonding angles of water, •superconduction of energy/consciousness within the monatomic lattice, hence sympathetic resonance of atoms and neural nets.

Roger Penrose considers consciousness to be a subatomic phenomenon of wave function self-collapse via quantum gravity, whatever that means. Quantum gravity describes the interaction of gravity with the three other fundamental forces: electromagnetic, strong nuclear force and weak nuclear force. Cells communicate with each other, and the vibratory energy reaches within the cell via the cytoskeleton and **microtubules**. Microtubules are structural components that are part of the neuron cell cytoskeleton and brain cells are particularly rich in them. They are cylindrical protein lattice assemblies of tubulin molecules in which the "quantum computations" of consciousness are reputed to take place.

The Penrose-Hameroff model proposes that internal quantum events occurring within tubulin in cooperative interaction with each other, are the bridge between subatomic quantum events and molecular "classical" reality. Stuart Hameroff says consciousness exists on the edge between the quantum and classical worlds. He believes that we plug into the universal proto-conscious mind through this quantum activity in the microtubules.

"*I think more like a quantum Buddhist, in that there is a universal proto-conscious mind which we access, and can influence us. But it actually exists at the funda-mental level of the universe, at the Planck scale."* Hameroff. Neurotransmission provides input and out put from the quantum processes in the microtubules of neurons. Like Stuart Hameroff I think that consciousness at its most subtle material form is conducted within quantum processes. This is then translated into the classical chemistry of nerves, synapses, receptors, neurotransmitters, hormones and the like. And so the endless variety of thought, behavior and experience of manifestation unfolds.

"*Pre-conscious (unconscious/subconscious) information exists as quantum superpositions - multiple coexisting possible actions or experiences - which, upon reaching a specified threshold at the moment of consciousness/self-collapse, choose a particular action or experience."* Stuart Hameroff
http://www.dailygrail.com/archive/2005/01/21

In spirituality "enlightenment, peace or Nirvana" you could say is a harmonization of the sympathetic resonance of the male and female forces to harvest zero point energy. The One is divided into Three:

- The Female, left-spin, negative-charge, implosion, contraction, centripetal, absorption
- The Male, right-spin, positive-charge, explosion, expansion, centrifugal and radiance
- Plus Neutral, which is composed of both the male and female force combined.

Quantum Enigma: Physics Encounters Consciousness by Bruce Rosenblum, Fred Kuttner

The God Theory: Universes, Zero-point Fields, And What's Behind It All, Bernard Haisch

Supersensonics: The spiritual physics of all in vibrations from zero to infinity, Christopher B Hills

Occult Ether Physics: Tesla's Hidden Space Propulsion System and the Conspiracy to Conceal It by William Lyne

Opening to the Infinite, Stephan A. Schwartz (On the nonlocal nature of human consciousness)

Science and the Akashic Field: An Integral Theory of Everything, Ervin Laszlo. www.clubofbudapest.org/

Google Videos: Secret of the Lost Ark by Laurence Gardener; ORMUS overview by Barry Carter. Also look for Tom Bearden, John Hutchison and Tom Valone on zero point energy; Nassim Haramein on GUT, Sacred Geometry and Spin; Dale Pond on Keely's Sympathetic Resonance.

THE KEYSTONE~BIOPHOTONS

All living organisms emit certain electro-magnetic waves called "biophotons." The spontaneous radiation of coherent 'biophotons' by DNA has been revealed earlier by Gurvich (1977) and Popp (2000). The Ka, or lightbody, is the biophotonic radiation of the DNA and protein structures. The biophotons themselves may be the product of the DNA's orientation to zero point energy (ZPE). For all we know DNA might be a crystalline transducer of ZPE. John Worrell Keely said that Ether (ZPE) is the densest medium; that matter is bubbles in the ether that flip in and out of materiality at 4 quadrillion times a second. Apart from energy a photon has zero rest mass, therefore, it travels (in vacuum) at the speed of light, carries momentum and has a polarization and both wave and particle properties. Sound and light, or phonons and photons, comprise an elaborate communication network that extends out into the EMF of the body and throughout the cellular and subcellular levels.

The coherency of intact healthy DNA and proteins might mean less photons escape during their quantum tunneling through the molecule. Health represents a harmonious sympathetic resonance with the Zero Point Energy, more energy conservation and less biophoton emission. The "equilibrium condition" or health vibration exhibits more synergy rather than entropy within the healthy DNA structure, which represents vibrational harmonic attunement with the "Mind of God"—that is the frequency of the universe. The EMF and Schumann resonance of the Earth resonates with our DNA; so if humans mess with the ionosphere and the vibratory energy of the planet, we directly interfere with our DNA. Biophotons from other organisms in our environment would also affect our DNA health and expression, thus it pays to live in an organically rich and healthy ecosystem. The possibility of genetic information exchange between different organisms by means of polarized EM waves, may drastically change our current paradigm of genetics and biological evolution.

A dynamic web of light and sound is perpetually being released and absorbed by the DNA, may connect all cells and serve as the primary means of communication in the body, regulating all life processes. Thus the biophoton and phonon emissions from the DNA may be an instantaneous communication device and that is prior to all other metabolism. Bio-radiation might activate is the short-lived hormone like messenger molecules eicosanoids and prostaglandins which in turn generate all metabolism. This theory has profound implications for kundalini, because we all know that active kundalini means an "increase" in bio-light. Thus we can play around with the idea of activated DNA giving off increased biophotons and how alchemical transmutation of the flesh might proceed from the physics of coherent biophoton radiation to biochemistry. The transmuting body has a higher rate of cell growth and division and so photon emissions are higher. Yet unlike illness or cancer this higher frequency of emissions is likely to be more coherent and exhibit a particular morphic resonance.

We can intuitively get the sense that **cellular ecstasy** represents heightened coherent communication between the cells (cellular communion), through the

light flow itself and the generation of the endocannabinoid neurotransmitter **anandamide** and its analogs at the cellular level. I suspect the reason why every cell of the body is in ecstasy when the kundalini light is flowing, is because the highly activated DNA emits extra biophotons of a particular harmonic. These photons interact with cell contents and especially the fatty acids in the cell membranes, the densest part of the cell. **Eicosanoids** are the major products derived from the cellular metabolism of arachidonic acid by the enzymes cyclooxygenase and lipoxygenase. The eicosanoids comprise prostaglandins, thromboxanes, prostacyclins, leucotrienes and lipoxins. (See "Eicosanoids" for more on cellular ecstasy and anandamide).

Eicosanoids are cell-to-cell hormonal messengers that never enter the bloodstream, as they are extremely short-lived with a half-life in the tissues of only a few minutes. These messengers must be produced in greater numbers by the increased light flow, which in turn leads to increased activity of all cellular processes. Thereby beefing up metabolism, protein generation, cell reproduction, hormones and consciousness itself. Thus the increase in light IS consciousness, which catalyzes greater or speeder consciousness. This overall heightened transmutational metabolism leads to the generation of amrita (the Elixir of the Gods) in the illuminated central nervous system and crystal palace (circumventricular organs) of the brain. This elixir subsequently enters blood and lymph to enter the right chamber of the heart and ignites the Solar Heart or Spiritual wisdom.

I thought of this possible mechanism of biophoton generated metabolism after regularly taking Omega 3 oil, for I discovered I could smell the fish oil through my skin when the "light" was up and the cells were burning with kundalini. I thought the smell might be coming through the sweat glands but I wasn't sweating at all. So on second thoughts I realized it must have been the increased biophotons from high kundalini flow hitting the fat molecules in my skin cell membranes and aspirating aromatic molecules of the fish oil incorporated in my tissues. This, combined with radically heightened senses to perceive such subtle phenomena. After ingestion, fish oil is easily incorporated into cell membranes which changes the cell membrane composition. This alteration will change the cell's response to growth factor, hormones, antibodies, etc.

Fritz-Albert Popp found the kinetics of the decay curves of biophoton emissions to drop off in a **hyperbolic** fashion because they are coherent. Whereas an incoherent source of photon emission relaxes according to an exponential relationship between light intensity and time measurement. We could look to the light emissions as leading the hyperbolic nature of consciousness, emotions and chemistry...almost as though light was the matrix or fabric on which our matter and consciousness was formed. www.rense.com/general50/buiop.htm

Looking deeper into this, I think we are talking about the way that all atoms interact with the fabric of spacetime and zero point energy...each particular configuration of an atom, collection or combination of atom types has a different electromagnetic-gravitational-light-sound effect on the fabric of the universe. The structuring and regulating activity of the biophoton field (*lightlike 3D-surface)* may

be the means whereby DNA communicates information to protein molecules in the process of morphogenesis.

"The notion of lightbody has direct counterpart in Topological Geometrodynamics (TGD) as lightlike 3D-surface. This discovery made possible finally solve some fundamental problems related to the formulation of quantum TGD: both conceptual and technical." Matti Pitkanen

The highly coherent light that forms the spiritual lightbody requires cells that are built from raw remineralized food and living-water. During the morphogenesis of kundalini we need to help the light transform our cells and prevent tipping the chemistry toward the morbidity, oxidizing, blackening, putrefaction end of the scale. Therefore we must have enough "resources" in the form of minerals, enzymes, bioactive water and nature's energy entering our system to offload the "sludge" of the former body, so that it does not damage the newly emerging spiritual body, or stick around to be reassimilated back into the tissues. If the body is made from inferior and toxic materials and is highly oxidizable and inflammatory then the increased light/metabolism of kundalini may speed the aging and breakdown of cells—but only in an "effort" to reinstate the cosmic integrity of the organism and bring it back into the fold of the intelligence of the Universe....if given appropriate resources and half a chance. That is the rate of detoxification and removal must balanced with the speed of transmutation, to avoid compromising the birth of the spiritual bodymind.

Kundalini and morphogenesis is a natural, necessary process and it is not meant to be dangerous or unpleasant. We can make it the most awesome trip of a lifetime by deepening understanding and submission to its demands on us. In the transformational process kundalini elicits catabolic gluconeogenesis or self-consuming energy generation, which uses energy from the body's cells and stored resources. The liberation of fatty acids, plus the extra radiation from free radicals and higher light flow produces not only the opioid bliss chemical (anandamide) but also proinflammatories. We have to therefore adopt a highly anti-inflammatory and antioxidant diet, which largely means remineralized rawfood.

The body must be treated as if undergoing an "atomic process," in that the catabolysis (putrefaction, coagulation and death of the tissues) must be allowed to proceed as the deepest form of detoxification there is, without overloading or depressing the process with say heavy foods, drugs or separation from nature's vital energies. For if this building of the new body around the "light" is opposed or suspended through "normal-cooked-urban" lifestyle then you end up with a half butterfly, half pupae. With perhaps a lot of tissue damage from the liberated toxins and the abortion of the natural timing and process of metamorphosis. Then because the biochemical process cannot proceed as nature intended there are emotional, psychological and spiritual blowback repercussions from such an abortion of the evolutionary process.

The enlightenment process is a purification and increase in the efficiency of energy use in the bodymind, and some variation on cellular respiration that actually produces more energy than the uninitiated state. We measure lightbody

levels by the cells ability to metabolize light. The metabolic marker for this light transmission is adenosine triphosphate (ATP). In normal biochemistry 1 kilogram of ATP is manufactured per hour as the bodymind's energy currency. It could be that the extra kundalini biophoton generation triggers more ATP generation in the mitochondria, which in turn increases the biophoton generation. As more light is carried in the system the morphogenic field amplifies, producing greater information exchange and thus the metamorphosing body dismantles, detoxifies, restructures and establishes metabolism and consciousness at a higher frequency rate. Light being the means and the goal of this process—the body structure can be analogist to a crystallization seeded around the biophotons emanating from the DNA.

A new type of anti-aging therapy called "Quantum Reflex Analysis" is a cellular resonance nutritional therapy born out of quantum physics. This new paradigm in quantum bio-energetics involves restoring quantum coherence to the body's biofield. The biophotonic field around each molecule creates a "body of light" which surrounds all living substances. Incoherent interference fields may be produced by anything that disrupts the normal flow of bio-energy in the body, suppressing the body's biofield and physiology. Due to decades of research by Dr. Fritz-Albert Popp and others, has proven that the biofield is pre-eminent over the body's biochemical processes. This explains why even extensive treatment interventions at the biochemical level can often only provide minimal help for chronically ill patients. According to Dr. Popp only nutrients derived from "once living" sources (neutraceuticals) are capable of upgrading cellular DNA. Dr. Robert J. Marshall and Premier Research Labs are world leaders in cell-resonant nutrition. www.prlabs.com/

Energy Medicine: The Scientific Basis by James L. Oschman and Candace Pert

Blueprint for Immortality by Harold S. Burr

A Practical Guide to Vibrational Medicine: Energy Healing and Spiritual Transformation by Richard Gerber

Living Energies: Exposition of Concepts Viktor Schauberger by Callum Coats

Consciousness, Bioenergy and Healing: Self-Healing and Energy Medicine for the 21st Century by Dr Daniel J Benor

BIOPHOTONS AND CANCER

The German theoretical biophysicist Fritz-Albert Popp discovered how cell biophoton emissions relate to cell repair and cancer. In reading the scientific literature Popp came across information about a phenomenon called **photorepair**. It is well known from biological laboratory experiments that if you blast a cell with UV light so that 99 per cent of the cell, including its DNA, is destroyed, you can almost entirely repair the damage in a single day just by illuminating the cell with the same wavelength at a much weaker intensity. Popp found that in every instance the compounds that were carcinogenic took UV light, absorbed it and

changed its frequency. Each of the carcinogens reacted to the light of a specific wavelength—380 manometers. Popp was struck by the fact that photorepair works most efficiently at 380 nm - the same frequency that the cancer-causing compounds react to and scramble. He theorized that the body must produce light at this frequency in order to facilitate photo repair. And a cancerous compound must cause cancer because it permanently blocks this light and scrambles it, thereby disrupting the photo repair mechanism.

Popp theorized that biophoton emissions allow the superconduction of information to all parts of the body instantaneously. Cells or cellular systems organize their mutual distance and orientation by means of the interference pattern that is created after mutual emission and reemission of coherent biophotons. He found DNA emits a consistent stream of coherent biophotons in the visible bandwidth, from infrared to ultra violet, at around 100 units/second. The light contained in protein and DNA structures must operate like a tuning fork to the body's organization and instantaneous communication. It would strike a particular frequency and certain molecules would follow.

Popp contemplated light in nature, and how photosynthesis in plants must take up photons and store them. Then when we consume this food the energy of these photons dissipates and becomes distributed over the entire spectrum of EM frequencies, from the lowest to the highest. This spectrum of light energy is the driving force for all the molecules in our body. Photons switch on the body's processes like a conductor of a symphony. Popp found that particular molecules in cells responded to certain frequencies, performing different functions and caused a variety of frequencies in other molecules by sympathetic resonance. Biological phenomena like intracellular and intercellular communication, cell growth and differentiation, interactions among biological systems (like "Gestaltbildung" or swarming), and microbial infections can be understood in terms of biophotons. With these biophoton emissions being the one central orchestrator providing an ideal transfer of information, coordination and communication across the organism—which only could occur in a holistic system. (reminiscent of Rupert Sheldrake's morphogenic fields.)

Popp thought of biophoton emissions as a sort of correction by a living system of Zero Point Field fluctuations. That living organisms emit photons in a compensatory gesture to stop this disturbance of ZPE fluctuations and attempt a sort of "energy equilibrium." Any disturbance or "nonequilibrium" in the system increased the production of photons. The healthiest body would have the lowest light and be closest to a zero state, the most desirable state of maximum energy efficiency. The body's communication system is thus a complex network of resonance and frequency and we become ill when our waves get out of synch. Popp found that cancer patients had lost their biorhythmic periodacy (circadian) of light emissions, suggesting that the synchronization of their internal communication was scrambled. The intensity of "delayed luminescence" of tumor tissue increases in a nonlinear way with increasing cell population density, while that of normal tissue, after having arrived at a definite cell mass, decreases with increasing cell density.

Popp found stress and ill health to increase the rate of biophoton emission also and suggested it was an attempt to restore energy **equilibrium with zero point**. The radionics genius Georges Lakhovsky in his book "The Secret of Life" also relates how he discovered that cellular oscillation is maintained by cosmic radiation and that disease was due to a dis-equilibrium of oscillation to an excess or deficiency of cellular radiation. Lakhovsky's work is detailed in *The Waves that Heal* by Mark Clement. Regarding biophotons and spiritual luminosity, researchers found that extra biophotons are released from damaged, diseased or dying lifeforms and they explained this as an attempt by the organism to heal itself. The higher metabolism generated from this healing resulted in an observable increase in biophoton emissions. Since the metamorphic biology of kundalini constitutes greatly amplified healing (wholing), this increased metabolism is the reason for the brightening of the lightbody and the "glow" of transmuting individuals. (Hence the Shining Ones). Until further research in energy medicine might prove differently, we an assume that the increase in kundi-biophotons is due to the "healing state" of metamorphosis.

The applied field of "Biophotonics" provides a new powerful tool for assessing the quality of food (like freshness and shelf life), microbial infections, toxicity and environmental influences and for substantiating medical diagnosis and success in healing therapy. Popp established that the highest quality health in an organism or in food has the lowest biophoton emissions and the most coherent intensity of light. The number of photons emitted seemed to be linked to the organisms evolutionary complexity. Rudimentary animals and plants emit around 100 photons/cm2/sec at a wavelength of 200-800 nm, corresponding to a very-high-frequency EM wave well within the visible range, whereas humans emit only 10 photons/cm2/sec at the same frequency. Popp discovered that photon wave resonance was used in communication "between" organisms as well as within organisms. Two organisms engaged in resonance absorption or photon sucking, as he called it, by exchanging photons. Con-structural interference patterns or zones of constructive interference in the intracellular space may be responsible for communication and organization effects in and between living organisms, including cells in tissues. This means from the energetic point of view that growth regulation and health originates from a **balance equation**.

While normal tissue increases the degree of coherence of the biophoton field with increasing cell density, tumor tissue decreases the degree of coherence of the biophoton field. Tumor cells and unhealthy cells/organisms display a higher emission rate than normal ones owing to their loss of coherence. The inhibition of cell growth is strongly linked to the degree of the coherence of the field. Consequently, a definite loss of coherence is a necessary and sufficient condition of cancer development. Leading not only to quantitative, but also to qualitative differences between "normal" cells and "tumor cells" without any exception.

Popp's approach to cancer therapy involves stimulating the normal cells always present in a tumor, to become activated to remove or suppress the tumor cells. Thus instead of killing tumor cells (and the connected normal tissue), he stimulates the

normal tissue to overcome malignancy of the whole cell population. Popp showed that cancer is a problem of energy distribution, transparency and coherence rather than of a causal energy deficiency. Thus cancer therapy must reinstate coherent electromagnetic energy and repair the communication system between cells.

In studying plant extracts to find one that helped return cancerous tissue's photon emission back to normal Popp found that Mistletoe extract was the only one which helped to resocialize the photon emission of tumor cells back to normal. However he probably did not try exotic things like Neem, Agaricus mushrooms, Graviola, Pau d'Arco and some of the recent phytoceuticals discovered in the Amazon. The way healing might work is by having our proper light restored by taking particular herb which attracts and then absorbs the abnormal oscillations, allowing the body to return to normal health. Or a substance might resonate at the perfect frequency to cancel out the frequency of the cancer cells causing their apoptosis. Fritz-Albert Popp's research leads us to the conclusion that perhaps the best form of acute cancer therapy would involve light and sound radiation machines, coupled with the energies of nature, to reinstate the photorepair mechanism of the cells. This at least, while still a "treatment" and not a cure, would allow people the "time" to change their lifestyle over to a more prolife permacultural mode…which is the only solution to supra-generational disease.

"If a particular human activity cannot produce lasting benefit within the individual's life span, even less so can it do so as new generations come and go." Thomas Frydrych

Vibrational Medicine: The #1 Handbook of Subtle-Energy Therapies.
Richard Gerber

The Field: The Quest for the Secret Force of the Universe by Lynne Mctaggart

The Energy Healing Experiments: Science Reveals Our Natural Power to Heal,
Gary E. Schwartz, William L. Simon, and Richard Carmona

www.rense.com'general50/buiop.htm —Biophotons and the Universal Light Code, William F. Hamilton

www.lifescientists.de/publication/pub2002-05.htm —Popp's basic theory of cancer development and defense

REGENETICS

The Greek word "*therapeuein*" (to heal), originally meant "to serve the Gods." Thus all healing is spiritual healing. Those who increase their soul voltage during their lifetime get to experience "heaven," not after they are dead, but while they are living. A revolutionary new development in "wave-genetics" uses noninvasive DNA activation with radio and light waves based on human language frequencies. Human consciousness, specifically unity consciousness or unconditional love, can stimulate the genetic code—to "reunify" body, mind and spirit. Words are used with "intention" to activate DNA and stimulate healing at the cellular level. The Wave Genome theory is being developed by a group conducted by **P.P. Gariaev** in Russia; they are experimented with repairing damage to chromosomes done by

radiation. Gariaev's team developed sophisticated devices capable of influencing cellular metabolism through sound and light waves keyed to human language frequencies, by simply applying vibration and language, or sound combined with intention, or "words," to DNA. In crafting the human spiritual body there is no substitute for the live human consciousness and voice. Gariaev found that chromosomes assemble themselves into a holographic grating or lattice designed to generate and interpret highly stable spiral standing waves of sound and light that direct all biological functions. Thus the DNA's code is translated into the structure of the body, guided by photons (light) and phonons (sound) signals.

Through light and sound Regenetics has the potential: to "reset" our biology, generate energy and creativity, and essentially to consciously assist in building the spiritual bodymind. DNA directs cellular metabolism and replication not just biochemically but electromagnetically through a chromosomal mechanism that translates sound into light waves, and vice versa. DNA activated by particular light and sound broadcasts these genetic instructions into the Unified Consciousness Field, which then routes "torsion" energy toward the area of focus. Without creating a harmonious equilibrium with the Unified Field and bridging duality at the level of the human electromagnetic fields, it is impossible to build a higher energy body because there is not enough coherence in the system to stabilize higher consciousness.

Any dissonance will automatically generate less coherent biophotons which will in turn disrupt DNA and cell metabolism, not to mention mental, emotional and physical functioning. Thus spiritual mastery is manifest destiny through creating a stable balanced equation (balance of chaos and order) at the quantum level. Because "evil" creates dissonance at the quantum level in relationship to ZPE, human evil represents a profound state of ignorance (denial and resistance) of how the universe actually operates. To perpetrate or contemplate evil, is to set oneself at odds with the very principle of manifestation itself, and the stabilization of the noble-holy-whole condition. In this sense even something as inane as barbeques, constitutes a form of evil (ignorance) because of the lung pollution, the carcinogens and the free radial impact of charred meat on the body's atomic structure. Barbeques have a direct impact on the genetic integrity of future generations and their ability to achieve the "noble estate."

In looking at things through the lens of a benign organizational principle, and considering human spirituality to be synonymous to the ability to work "with" and not "against" cosmic design, we can see how off base and destructive present human culture is. Anything that defiles the genetic code in particular and cellular health in general is a form of evil—atom bombs, depleted uranium and the new wave weapons constitute the greatest evil to ever arise in this part of the universe, and no "good" could possibly come from their deployment.

In this material and descended culture we have to "consciously" or intentionally create a spiritual body, which in fact would be a priori condition, if we lived in an enlightened society. The appearance of a substantial lightbody occurs only in those who have attained spiritual mastery. Spiritual mastery involves the purity of the

Solar Heart in being a transducer for the Merkabah or lightbody. In the antiaging section I mention that reducing calorie intake was the only effective method found to repair DNA, perhaps because reduced food processing gives the body "time" to develop greater coherency, plus there is less toxic interference patterns from the byproducts of metabolism.

Transposons or "jumping genes" are DNA sequences that can move around to different positions within the cell's genome, a process called transposition. In the process, they can cause mutations and change the amount of DNA in the genome. In what seems like future science, the Regenetics Method takes people through stages of bio-spiritual enlightenment in which transposons are incrementally stimulated in preparatory phases—culminating in a "synchronized, non-random transposition burst" for which the individual is consciously prepared. Results are said to include increased psychic activity, deepened connection to the Muse and the ability to act in a more forthright fashion without fear.

Dr. Bill Deagle calls the DNA's laser radiation a phonon maser. The DNA instructs the cell via *phonon maser coherent sound waves*; the cells then go on to create us through a protein-assembly process known as transcription. P.P. Gariaev and his group have demonstrated use of specially constructed He-Ne laser for creating polarized radio wave radiation (RR), which can store "correct" genetic information of the healthy donor sample and transfer that healthy bioelectromagnetic DNA signature to the acceptor tissue.

"Superposed coherent waves of different types in the cells interact to form diffraction patterns, firstly in the acoustic [sound] domain, secondly in the electromagnetic [light] domain." Richard Alan Miller, "The Holographic Concept of Reality" appearing in Psychoenergetic Systems, 1975.

Scientists have discovered that DNA emits and receives both phonons and photons, or electromagnetic waves of sound and light and that the primary function of DNA lies not in protein synthesis, but in the realm of bioacoustic and bioelectric signaling. At the genetic level, sound gives rise to light and every "biochemical reaction is preceded by an electromagnetic signal, thus cells communicate both electromagnetically and chemically.

The Consciousness torsion field must have an effect on the nature of the "spin" of particles, the torque of gravity and the balance equation of matter with regards to ZPE. Thus consciousness will be included within future theories of everything, especially perhaps with the work of Nassim Haramein on the Grand Unified Theory.http://resonanceproject.org/ Even as far back as the 1950's the Russian scientist Nicolai Kozyrev demonstrated that Zero point itself, like time, flows as sacred geometric spiral torsion energy that has been called phi, the Golden Mean, and the Fibonacci sequence. (Both Walter Russell and Walter Schauberger put light and sound into a Fibonacci sequence. Smells and the Elements can also be classified in the Golden Mean.)

"You cannot separate consciousness and torsion waves–they are the same thing. When we use our minds to think, we are creating movements of electrical impulses in the brain, and when any electrical energy moves, torsion waves are also created…In order for this vibration to occur, an atom must be constantly absorbing and radiating

aetheric energy at the same time. As this vibration continues, the atom will throw off torsion waves into the surrounding aether. This means that every atom is a torsion generator, and depending on its overall "spin polarization," i.e. whether there is a greater amount of right-handed or left-handed spin in its electron clouds, the object will either generate left-handed or right-handed torsion waves." David Wilcock, Divine Cosmos - Chapter 9: Harnessing Torsion Waves and Consciousness www.divinecosmos.com/ Watch for David Wilcock's Movie "Convergence" in 2008

Others working on this new genetics include Stephen Lindsteadt, and Bruce Lipton, Gregg Braden, Leonard Horowitz, Richard Alan Miller, Jeremy Narby, Peter Gariaev and Vladimir Poponin.

Conscious Healing: Book One on the Regenetics Method by Sol Luckman

www.phoenixregenetics.org/ —Regenetics Method by Sol Luckman

www.emergentmind.org/kaivarainen_I.htm —Hierarchy of condensed matter

www.emergentmind.org/gariaev06.htm —P.P. Gariaev, Wave Genetics

ACCIDENT OR DESTINY

Accidents happen unexpectedly without deliberate plan or cause. It is the social conformist that is created more by default or "accident." Whereas the true individual is self-created through "meta-adaptation" to inner and outer conditions. Meta-adaptation is the creative transcendence of apparent present reality, that is Mastery of circumstance. Autogenic morphogenesis occurs via proactive transition through the cycle of Discontentment, Crisis, Shorting-out, Vision, Action and Reevaluation. Thus the creation of the Universal Self is self-determined through applied intent, vision and a priori state resonance with the desired outcome. In essence the Self is master of time, space, light, sound and consciousness. Thus a trinity is formed through coherent communication between the Self, Universal-Spirit and the DNA.

Reality is a convergence of intention. According to Robert Gerard in *Change your DNA Change Your Life*, imagination and intention are the two critical components of consciousness, which can be actively used to promote gene expression for self-empowerment and healing. When we raise our intent, by lasering and directing consciousness to the highest energy levels (Gnostic), we enter into the creative unified state of conscious determinacy. With vision, intention and a priori state generation we elevate ourselves beyond the mere reactivity of a socialized being. Thus through sympathetic resonance with the Universal we gain the power of absolute faith to effect change.

Researchers consider biophotons (electromagnetic waves) as a method of communication between cells and organisms. Fritz Albert Popp even goes as far as to say that consciousness could be the EMF comprised of the sum of the emissions of biophotons. So in a sense you could say that it is the DNA that emanates both Presence and potential for thought. Coherency of brainwaves and synchronization of the hemispheres, provides "depth" or range of perspective or aperspectivism.

Thus the multidimensional property of the Witness. I like the idea that the left-brain is a machine for measuring time, and the right-brain is a machine for measuring space…put them together an you can navigate spacetime as a "whole" individual.

Genius is in the genes. Each person is a holographic-temporal-display of the route their genes took from the very beginnings of life on earth. The ultimate meaning of this is that the entire physiosphere, biosphere and noosphere, that is the Kosmos itself, is one giant superorganism, which is glued together with light. Light is the communicating vehicle of Spirit, a dynamic web of information exchange within and between organism. Biophotons may be the agent that is behind psi phenomena, primary perception and spiritual power. The causal nexus state in which matter, energy and spirit come together to reflect the greatest power of Spirit, Heart-intelligence or depth or quality of consciousness. This essentially is impeccability, energy efficiency, no-resistance, integration, integrity or the Fourth State. Order in the universe is this ability to stabilize higher energy. Synergy, syntropy or creativity is to make a distinction, refinement or discernment resulting in the increase of order, quality and depth. This is the true nature of spiritual power.

The space, emptiness and fluid flow created by the light of pure Presence, accommodates everything without effort, integrating and substantiating with the ground of being. The causal nexus state in which matter, energy and spirit become amplified through increased coherency is traditionally referred to as the **Merkabah**. This "Star Tetrahedron", or energy field analogous to a three dimensional Star of David, which is allegedly the "Chariot" used by ascended masters to tune into higher realms. "Mer" means *Light*. "Ka" means *Spirit*. "Ba" means *Body*. Merkabah means the spirit-body surrounded by counter-rotating fields of light, or spirals of energy as in the DNA, which transports spirit-body from one dimension to another. The DNA possesses a biophoton vibratory infrastructure that parallels the molecular structure.

To say that the outer-environment Total determines the inner-environment Total, is in line with Bruce Lipton's remarkable insights on gene expression being determined by what occurs at the cell membrane. However we also have to take into account that we are each unique filtering and selection systems, from our DNA to our soul. That is, on all levels we filter and select and in this way we determine our reality and our fate. Thus to expand on the statement that we are a reflection of the outer environment...we should add that we are the result of the selective interpretation-uptake-response of our environment total. Determinacy is the result of a prior predilection and capacity which reflects our unique individual being...thus we can change our destiny by changing the way that we filter, select, incorporate and enact on our environment.

Change Your DNA, Change Your Life! by Robert V. Gerard

The Genie in Your Genes: Epigenetic Medicine and the New Biology of Intention by Dawson Church

Cell-Level Healing by Joyce Whiteley Hawkes

I have tried to explore biophotons and light in BOK but the research at this point is rather sparse...in the next 10 years though a profound theory of light in biology and spirituality should arise through the marriage of the physicists and biologists. Howard Burr, Wilhelm Reich, Alfred Popp, Glen Rein, Stuart Hameroff, Walter Russell...and zero point researchers such as Tom Bearden, John Hutchison, Tom Valone are a few of the luminaries that will help us arrive at a quantum mechanic understanding of biolight. At this point it seems that light and sound are the primary means of communication and coordination within and between cells and organisms. Every atom and molecule is radiating photons and can be interpreted as a transducer of zero point energy. Hameroff says the quantum tunneling of photons within a protein molecule is how proteins can rapidly form themselves. Thus the light is involved in the quantum computation of the molecular structure of proteins, DNA and perhaps all matter living and non-living.

Of course radiation, pollution, toxicity and deficiency of molecular resources can create interference patterns (miasmas) that reduce the coherency of biological formation and maintenance within the sea of zero point. This quantum approach is what any serious anti-aging technology will have to look at in maintaining "form" within the entropic, dissembling forces of the universe. Popp in particular found remarkable insight into the stabilization of biology (health) through studying biophotons. Neurosis and illness constitutes the sum of the interference patterns or miasmas contained within the individual bodymind that prevent a perfect synchronization between all the levels of matter, energy and consciousness from Zero Point to the Soul.

What you are seeing in the spacious, open, soft, fluffy aura of a meditator is coherence in light vibration...the biophotons given off by a practiced meditator are more coherent than a non-meditator and any observer can both see and feel this coherency. The effect is arising at the quantum and atomic level, but we see the effect of this subatomic coherency in our normal 3D hologram. A meditators biofield is also more resilient and resistant to interference from external fields and radiation...therefore they are able to maintain the integrity of their energetic stabilization better, which in turn also contributes to their increased coherent biophoton field. Basically with meditation you are retuning the nervous system to burn less hot jet fuel (HPA Axis) while becoming more efficient. Taking advantage of the lower frequency ranges (theta, alpha) that can hold more information bites, reducing stress hormones, and preventing nerve receptor resistance, reducing neurodegeneration from excitotoxicity, lowering free radical generation, plus tuning into earth frequencies so there is less dissonance and friction in the system.

LUMINALITY…or spiritual consciousness is the result of the heart-field taking precedence over the brain-field…such that all thought is in-formed by this much larger field of the opened heart…a field that is one with all life and the cosmos. Thus heart in-formed thought forms are coherent, stabilized thought forms representing "Truth." Truth is thus "Universalized" through the correspondence between heart-

field and brain-field. Truth then becomes a higher frequency "attraction" which leads to subtler more evolved forms of gene expression and consequent "sense of being" and behavior. Luminality is the homecoming of the head brain into the heart brain. The luminal sacred marriage involves the amplification of the play of the poles, charges, hemispheres and sexes—a quickening of the energy that drives the Kosmos itself.

LIVING WATER AND LIQUID CRYSTAL

"The cell is immortal; it is merely the fluid in which it floats that degenerates. Renew this fluid at intervals, give the cells what they require for nutrition, and as far as I know, the pulsation of life will go on forever." Dr. Carrel

Viktor Schauberger studied the life-enhancing energy in nature, which manifests in water or air as vortices and coined the term "Living-water." Generally Living-water is made in pristine, vital natural environments and has properties that include dynamic vortex flows, aeration, ionic charge in relation to minerals in it, solarized by sunlight, imbued with plant, soil and microbial components from a vital catchment area, and magnetized by earth currents and rocks/river sand. Schauberger said that water, a living, naturally spiraling substance can also die. Viktor considered water at +4°C (39°F) to be an anomaly point where water was its densest and heaviest, providing the greatest vitality and life-giving potential. If Living-water is the only real healthy kind of water to drink, very few have access to such water. Schauberger called water an "emulsion" when it is supercharged with creative **fructigenic energies**. *"The more diverse the make up of the constituents dissolved and suspended in water, the more complex the emulsion, the broader the range of its properties."* Alick Bartholomew, *Hidden Nature: The Startling Insights of Viktor Schauberger*. For more on the fructigenic energies of nature read *Living Energies: An Exposition of Concepts Related to the Theories of Viktor Schauberger* by Callum Coats.

At 4°C water molecules form into their longest chain state. Thus if the flow remains ordered or 'laminar' ionic charges have a chance to build up macroscopically as the long molecules entrain. The entopic energy in the cosmos is balanced by an absorbing, cosmic patternmaking force, which can been seen as information ordering, or as life in the most general sense. Viktor Schauberger observed that moving fluids can generate energy by reducing entropy. A natural watercourse builds up an energy that flows within the stream in the opposite way and can be seen as a channel of light within the stream. Recently a patent was granted for a water treatment devise using a Schauberger type water vortex, which proved that oxygen is incorporated into the water bonds and that the dielectric properties of water are enhanced by vortexing and the structure itself levitates through hydrodynamic electrogravitics! Plant growth increased when treated with this "living water" showing that indeed the water had been charged with fructigenic energies. See patent number 5611926 online.

One of the mechanisms by which the bodymind may go into its super-metabolic kundalini-state is probably through the body's higher EMF changing the nature of the water in the tissues, making energy and element transfers super efficient.

The higher EMF of the metamorphosing body would increase the electrical zeta potential of the body's living-water, allowing greater colloidal suspension, polarity differential and lowering surface tension. Living-water is "wetter water. This means greater cellular hydration and consequent increase in anabolic metabolic function, including higher energy generation via ATP directly through the Krebs cycle and also by increased hydroelectric power (if Dr. Batmanghelidj's idea of cellular hydroelectric power generation is correct).

When the cells super-hydrate it triggers an anabolic or growth phase, triggered by a positive hydrogen balance, protein synthesis and growth hormone. On the other hand when cells are dehydrated they enter a catabolic phase, leading to **oxidation**, inflammation and premature aging. Living-water enables super-hydration of the cells, bringing about cellular detox and to promoting balanced pH. If you drink "non-living" water chances are your cells will not become fully hydrated even if you drink the recommended daily amount. Each cell is a receiver and transmitter of vibration, with its own characteristic frequency. Each cell in the body receives vibrational energies from the earth and nature. Every atom, molecule, or substance has its own unique oscillation pattern, or vibration, which can be measured in electromagnetic wavelengths. It is the physical cluster structure as well as the chemistry of a water that gives it its "living-water" capacity. The geometric pattern of matter confers its energy frequencies and it is these EMF frequencies that contribute to its life-giving potential.

"Water is incredibly sensitive to minute environmental stimuli, as Italian scientist Giorgio Piccardi discovered in the 1930s. Piccardi found that the rate of chemical reactions taking place in water solutions could be mysteriously affected by cosmic influences, such as the lunar and sunspot cycles, solar eruptions, or sudden cosmic ray showers. As Michel Gauquelin has put it, water is 'subject to major changes as a result of even very low energy influence… Water studied in the lab is sensitive to very slight changes in electric or magnetic fields. Because water makes up so much of our bodies, these subtle influences must also occur within our own cells and tissues." 176, Earthmind, Paul Devereux.

*"This means that the *structure of the water already contains these characteristic bio length scales*. The *templates* (in very general sense) for microtubules, cell membranes, epithelial sheets etc. are already present in the structure of water (and any liquid, although water might have richest structures). For instance, In the Topological Geometrodynamics (TGD) inspired explanation of* ***sonoluminescence*** *the regions emitting coherent light in gas to liquid phase transition are of microtubular dimension."* Matti Pitkanen. (Sonoluminescence is the production of light from sound.)

All action in life is colloidal and enzymatic. 80% of the body's weight is water 2/3 of which is found in the cells; water makes up 92% of the blood. Water is the substrate in which the process of life occurs, hence life exhibits hydrophilic (water-loving), colloidal (water suspending) properties. That bioactive molecules are electromagnetically able to form a colloidal suspension in the water is the foundations of life, and when hydrophilic colloids of the protoplasm precipitate out of suspension this causes cell death.

Liquid crystals may flow like a liquid, but the molecules in the liquid are arranged and/or oriented in a crystalline way. Liquid crystal substances are abundant in living systems. In particular membranes and lipid cell membranes are a form of liquid crystal. Their phospholipids molecules are perpendicular to the membrane surface, yet the membrane exhibits elastic behavior. These lipids can inter-mingle easily flipping from one side of the membrane to the other, but remain in the membrane due to the high energy required to leave. These liquid crystal lipid membrane also host protein receptors that freely float inside, or partly outside, the membrane. DNA and many polypeptides can also form liquid crystal phases.

Weak external magnetic fields or electromagnetic radiation can easily interact with the endogenous electric field to alter the alignment of molecules in a liquid crystal on a global scale. *It should be noted that the electro-static fields do not exist in the absence of charges nor charges in the absence of fields. They are both fundamental properties of matter. In living organisms it can be said that chemical components, wherever they posses charges, cannot exist without fields nor can fields be found except in the presence of charges."* 67, Blueprint for Immortality, Harold Saxton Burr

"Unlike liquids which have little or no molecular order, liquid crystals have an orientational order, in that the molecules are aligned in some common direction(s), rather like a crystal. But unlike solid crystals, liquid crystals are flexible, malleable, and responsive…Liquid crystals typically undergo rapid changes in orientation or phase transitions when exposed to electric (and magnetic) fields…they have been found to respond to visible light by undergoing structural transformations that make them luminesce, i.e., to re-emit light…The chemist George Gray, who has studied liquid crystals for many years, refers to liquid crystals as "tunable responsive system", and as such, are ideal for making organisms." 173, Mae-Wan Ho, *The Rainbow and the Worm.*

In bulk water there are high-energy colloids that act as seeds charged to attract freely roving water molecules. These colloid seeds form the nuclei of liquid crystal microclusters; the charge of the colloid is made stable through the protection of a coating such as gelatin, albumin or collagen. Large colloids tend to bounce around and lose their charge but tiny ones retain their charge. Living organisms such as the human body are made up of colloids and *all their flows are based on electric attractions.* Blood cells have a protective coating of albumen which keeps them charged, stable and uncoagulated. Wrong (especially cooked) foods destroy the electric charges on the blood cells, which then coagulate, get sluggish, become sticky and eventually die.

The cell membrane lipids and proteins are arranged in quasi liquid crystal arrays, which are easily aligned with electric and magnetic fields. The dissonant vibratory waves of negative thought, radioactivity and electromagnetic pollution cause entropic disintegration of our pattern determination. DNA possesses a vibratory structure (lightbody) that parallels its molecular structure. Thus it is probable that one of the ways that DNA imparts design to protoplasm is through its electromagnetic field. Any external electromagnetic and radiation influence that is contrary to the life force will therefore interfere with the structure building

capacity of our internal architect. From a vibratory standpoint, disharmony is disease.

By taking Living-water and highly charged alkaline colloids from fresh raw foods or Hunza water the negative charge on the blood cells is enhanced. The membrane of immune cells has a negative charge, and so does the outer surface of a cancer tumor…this is how cancer "hides" itself from the immune system, because pathogenic organisms and toxins normally have a positive charge. Dr Otto Warburg stated that cancer develops when the normal aerobic cellular respiration is replaced by an anaerobic one. Apparently microclustered water holds more oxygen. Most tap water contains around 5-10 ppm oxygen; water from a mountain stream is 15 ppm and microcluster structured Hunza-like water holds around 40-60 ppm oxygen.

Increasing Oxygen—I am not in favor of adding hydrogen peroxide to water to increase oxygen, because hydrogen peroxide is a reactive oxidative species. And it is the lungs, not the digestive system that is the organ for adding oxygen to our system. I prefer the idea of getting adequate exercise and sunlight to build up vitamin D levels, the bones and bone marrow, thereby increasing the red blood cells and a hemoglobin rich blood. This has the added benefit of increasing the power and number of the white blood cells of the immune system also. This will create a high oxygen body where cancer and candida never become a problem. Ashwagandha increases hemoglobin (red blood count) and increases hair melanin pigment as well. Other herbs that increase hemoglobin include ginseng, jerusalem artichoke, nettle, wild strawberry. Peppermint and sarsaparilla increase oxygen in the blood, raspberry leaf and yellow dock supply iron for blood building, and milk thistle increases the lifespan of blood cells. While cayenne helps the mitochondria to use oxygen more effectively and Don quai increases metabolism and oxygen usage in the liver. Suma and the mushroom Cordyceps sinensis improve cellular energy production and enhance oxygen utilization in the body.

Photosynthesis is primarily described as the excitation of the chlorophyll molecule to a higher energy state through the absorption of light. The structure of chlorophyll is very similar to hemoglobin in the blood except where there is iron in the blood their is magnesium in chlorophyll. Ample green vegetables promote maximum health; not only calming nerves and easing digestive disorders, greens also increase oxygen, reduce anemia, detoxify and alkalinize the body and prevent healing crisis. Chlorophyll has the ability to break down carbon dioxide to release free oxygen, this inhibits growth of bad or anaerobic bacteria and reduces tissue damage by radiation.

RADIATION

Radiation's main damaging effect is the splitting of our water molecules to produce one proton and hydroxyl free radicals, thus radiation causes oxidation of our tissues. Radiation also causes flocculation of suspended colloids. When the electron that was shared by the two atoms to form a molecular bond is dislodged by ionizing radiation, the bond is broken and thus, the molecule falls apart.

Furthermore ionization may form chemically active substances, which in some cases alter the structure of the cells. Radiation damage to cells may depend on how sensitive the cells are to radiation. In general, rapidly dividing cells that are relatively non-specialized, such as the blood producing bone marrow, are more susceptible to radiation. Thus getting the sunlight necessary for Vitamin D production, along with a diet that builds the bone marrow, offers important radiation protection. The new research on vitamin D and cancer reveals that adults should daily take 2,000 international units (IU) of vitamin D3 (cholecalciferol) and 200 to 400 IU of vitamin E daily to help prevent some cancers, including colon cancer and breast cancer. Bluegreen algae supports strong bone marrow growth and provides radiation protection and removal of heavy metals. Inflammation of the liver and blood vessel walls (endothelium) is increased by toxins such as heavy metals. Any food high in antioxidants in general, and Marine Phytoplankton in particular, will help detoxify these foreign chemicals. Marine phytoplankton increases the levels of Short Chain Fatty Acids (SCFA) produced by healthy intestinal bacteria, which are indispensable to the health of cell membranes, particularly the endothelium. Mustard greens are notable for bone marrow also due to the high selenium and beta-carotene. Astragalus restores white blood cell count. Also the oriental art of Bone Marrow Nei Kung cleanses the marrow and uses internal power to improve the blood.

Cells can repair radiation damage if it is limited. As we are increasingly exposed to electrosmog and atomic radiation, I see the field of electromagnetic medicine and geomancy becoming one of our main areas of interest, as we reach a subtler understanding of the way the universe is put together. Until recently life on Earth has always been surrounding by natural frequency pulsations. Electropollution and increased nuclear radiation levels may cause us to feel more stressed, fatigued and "out of balance." Within the discordant radiation and EMF influences, how can we generate strong structural integrity and immunity to oxidation? There are ways we can maintain a strong ionic harmony in our colloidal crystalline matrix with the use of negatively charged alkaline living-water, mucopolysaccharides, silicon, Himalayan salt (complete mineral array) and clay.

However, I must first point out one of the most readily available reservoirs of healing force: the **electrogeomagnetism** of the Earth herself! Grounding by lying on the ground, or communing with a tree or other aspects of nature, will help to reinstate the electro-potentials of the cells, giving immunity and recovery from dissonant vibration contamination. The best places to lie are those that have been relatively untouched by human hands. Lying on the ground you will feel a lot of electrical activity in your body and the slow sense of it coming back to sympathetic vibratory resonance over the course of say an hour on the ground. You may feel the spine literally "rooting" itself into the earth. Some of the ways nature reinstates our electrical potentials include mineral pools, swimming in oceans, lakes and rivers, lying on rocks and grass and burying yourself in the sand at the beach. Love making with the opposite sex, might also offer this kind of grounding and repolarization, if the individuals are not already electrically depleted. Besides electro-balancing in

nature, some of the most rapid means of reinstating our ionic potentials are raw green plant protoplasm, wheatgrass, kelp, clay and seaweed packs and the spinal shower, Himalayan salt in drinking water.

The streaming flow of protoplasm within the cell increases in velocity with the increase in electromagnetic charge of the cell's environment. Thus the motility of cellular processes would be affected by changes in the body's EMF, changes in the ion (orgone) content of the air, gravimetric vibration from the moon and sun, and solar wind changes—which would in turn change the body's EMF. To live in an area that is rich in bio-enhancing electromagnetic charge—such as near the ocean, in rainforests, near pristine rivers and waterfalls—is to enhance the very speed and efficiency of processes within the cells. This is no doubt one of the reasons why our bodies feel better out of doors, and for extended space flight we are going to have to model the starship on the EMFs of natural systems in order to maintain the cellular integrity of the crew.

Radiation however is not "all" bad! In "*The Anti-Aging Pill*" Bill Sardi says that low dose radiation such as from areas of high natural radiation, can actually enhance health, in that it stimulates a novel DNA repair mechanism, consequently making cells more resistant to radiation and may even prolong life. This conditioning effect is called **Hormesis**, (from Greek hormæin, meaning "to excite") involves positive biological responses to low level exposure to toxins and other stressors. This is rather like homeopathic's "law of similars." The word "homeopathy" is derived from the Greek words *homoios* (similar) and *pathos* (suffering or disease).

Resilience to radiation is of major importance to all lifeforms, especially kundalini active ones. For when kundi-active we may not be more vulnerable to EMF damage, but with the supersenses of awakened kundalini you will be much more aware of such vibrational disturbance in the bodymind. There are many products on the market that offer electrosmog protection, including a convenient "Teslar Watch." The scalar energy expert Dr. Glen Rein demonstrated the ability of the Teslar watch to shield the body from harmful ELF fields. His results showed lymphocyte (immune) cell proliferation increased 137 percent in the presence of the Teslar watch and noradrenalin uptake was decreased by 19.5 percent in nerve cells, thus acting as an anti-depressant. The Teslar chip emits a frequency of 7.83 Hertz known as the Schumann Resonance, creating a cocoon of EMF protection and increasing coherency in the biofield. www.bioenergyfields.org/

EMF exposure increases an inflammatory compound that can increase the excitoxicity of the nerves. EMF-Bioshield® looks like one of the best external protection out there for radiation protection from computer and TV screens is the EMF-Bioshield® system. They use the properties of electromagnetic resonance of rare earth elements (atomic numbers 58 to 71) to produce counter-phase resonance, which eliminates all harmful radiation effects on life.

www.rhfweb.com/research.html —Radiation Health Foundation

www.lessemf.com —Bioshield 2000, Polarizers

Cross Currents, The Perils of Electropollution, The Promise of Electromedicine, Robert O. Becker, M.D.

SUNLIGHT

Sunlight also acts to cleanse, reset and harmonize the effect of EMF-radiation pollution on the body. Sunlight probably acts to increase the ionic charges and microclustering of our body fluid and increases the electrical potential of cells and molecules. Morning sunlight has the greatest therapeutic value, perhaps by setting the days circadian rhythms and hormone production off to a good start. By working with the natural rhythms, through "early to bed, early to rise," we generate the strongest metabolism for a long disease free life. In p. 37 *Bioelectromagnetic Healing* by Tom Valone he says that photons from sunlight are absorbed and stored to recharge the biophoton batteries in the DNA and that cells absorb photons and transform their energy into the cell energy molecule ATP (p.54). Refilling our energy batteries is just one aspect of the multiple benefits of sunlight on the body.

Beta-carotene (Vitamin A) rich skin is resistant to sunburn and wrinkling. It takes several months on a high beta-carotene diet of green and orange fruits and vegetables, to build up the carotenes in the skin. Then you can avoid aging while still getting the plentiful sunlight you need for Vitamin D production, antibacterial defense and immune enhancement. Back of vitamin D is a contributing factor to cancer, osteoporosis and perhaps most degenerative diseases. By the age of 70 the skin's ability to produce Vitamin D declines by 50-70%. If you have been in metamorphosis for many years you may need to take Vitamin D during the winter to stop your bones from crying out for sunlight. The discomfort and pain we feel in the middle of the winter is often due to insufficient Vitamin D and consequent immune suppression. Sunlight supports blood and immune cell growth in the bone marrow. When the blood and immune system is happy, we are happy.

Sunlight also increases the mood elevating serotonin hormone and sets the body to produce healthy levels of melatonin at night. Low light levels during the day produce too much melatonin when we need to be active and then artificial lighting at night reduces melatonin production. Cod liver oil contains vitamins D and A which are beneficial for almost everyone from fall through late spring, during the cloudy winter season when sun exposure is low. Aloe vera gel from the living plant leaf applied to the skin prior to sunbathing will prevent sunburn.

The Healing Sun, Sunlight and Health in the 21st Century by Richard Hobday

http://matpitka.blogspot.com/ — Topological Geometrodynamics. Motherload juicy physics site! Matti has many papers that advanced researchers will need to study to formulate a quantum understanding of kundalini. Please kind researchers if you use Matti's work then donate him some money, as the Finnish government do not yet look after their world class theoretical physicists.

www.helsinki.fi/~matpitka/bioselforg/bioselforg.html

http://orgonelab.org/livingwater —Viktor Schauberger and Living-water

For Bioenergetic Books: Go to the "*Life-Energy Science and Biological Mysteries*" at www.orgonelab.org/naturalenergy.htm for books by Reich, Schauberger, Burr, Piccardi, Backster etc...

www.borderlands.com/rifeandtesla.htm —Borderland Sciences Links

The Sun's Role in Monotheism

The existence of nearly all life on earth is "solar powered," fueled by light from the sun. Autotrophs or plants collect sun energy directly and convert it into sugars, which heterotrophs subsequently live on, releasing stored solar energy. Ever since humans started to grow their own food, the sun became the major religious focus. Solar metaphors abound in all the world's religions. Akhenaten (Effective spirit of Aten), was an Egyptian Pharaoh (1351 BC–1334 BC) who attempted to change the population over to the monotheistic worship of Aten. In an effort to "dethrone" the many "Gods" Akhenaten declared that Aten was not merely the supreme god, but the only god. And that he himself was the only intermediary between Aten and his people. My interpretation is that Akhenaten was striving to promote monotheism in an attempt to consolidate power in the monarchy and to diminish the economic power that the nobility and priesthood had through their siphoning wealth off the populous in religious payments made for ritualistic services to the many gods. Akhenaten is also believed to have composed the "*Great Hymn to the Aten*," one of the most exquisite love songs to the universe ever created.

Hermetics is basically the yoga of the ascent of consciousness, which probably stems back to ancient prehistory Egypt. Its founder is said to be Hermes Trismegistus (*Hermes the Thrice-Great*), reputed to be a wise sage and Egyptian priest, and who is commonly seen as synonymous with the Egyptian god Thoth. *The Emerald Tablet*, attributed to Hermes, is an ancient text purporting to reveal the secret of the primordial alchemical substance and its transmutations. In the book *Emerald Tablets of Thoth the Atlantean* by Doreal, the tablets reveal that there are 10 Masters (*charkas or Sefirot*) which are both infinitesimal and also encompasses infinity. According to Kabbalistic cosmology, these Ten Sefirot (*Ten Numerations*) correspond to ten levels of creation or consciousness. These levels of creation are seen as ten different ways of revealing God. The tablets expressed in this book by Doreal are mostly focused on the first 7 Masters [*chakras*], because he says humans are not yet ready for the others. The Emerald Tablets are concerned with bringing man out of darkness into light...eg:P.17, *Emerald Tablets of Thoth the Atlantean* by Doreal

"Place in thy body a thought-formed picture.
Think of the numbers that lead thee to Life
Clear is the pathway to he who has wisdom
Open the door to the Kingdom of Light.
Pour forth thy flame as a Sun of the morning
Shut out the darkness and live in the day.
Take thee, O man, as part of thy being,
The Seven [chakras] who are but one not as they seem
Opened, O man! Have I my wisdom.
Follow the path in the way I have led
Masters of Wisdom
Sun of the Morning
Light and Life to the children of men"

PART VII
MEANING

MEANING OF KUNDALINI

"Without the inner world the outer loses its meaning, and without the outer the inner loses its substance." KD Laing

Perhaps our greatest fear is not of the dissolution of self, but of owning up to Self. Often we have a radical opening, just to find ourselves flipping back in the opposite direction. The ego and armor seem pull back ones closure around one after a radical opening. Through witnessing the openings and the closures time and time again we become aware that this vacillation is biochemically driven hyperbolic curves. Ultimately though with the radical heart expansions and associated gravity warping and acute sensory and psychic experience...we are essentially "broken open" by love.

Achieving the Grail of the Soul requires the mind to surrender its frequencies to entrainment with the Heart. One could say that the heart is the organ of meaning and purpose. If the metamorphic process proceeds with adequate grace and conditions are not too detrimental to the process then the Percival Heart is born, or the Heart that is radiant irrespective of external conditions. In this we learn to take such radical responsibility that we do not injure ourselves with the world. Compassion is so fundamentally deep at this point that we have transcended our reactive conditioning and the reptilian brain has less of an impact on our functioning. At this point there is just One Love, and so the energy that is usually wasted in ego-definition and protection is now spent on a higher order of functioning.

We may back away from our flowering edge however, simply because we can, and this return to a less mature state is taken for various reasons. But the major insight to get is that we have to give ourselves permission to show up in our full glory for the world is not going to invite us to arrive...it must be self-initiated. Thus we must become "causal," through the Percival Heart is the Solar or Causal Heart. If you can stop running from both the "loss of meaning" and the "presence of meaning" then you are enlightened. The transpersonal is the glorification of the personal and the amplification of the Self. Our inability to be causal and create a life is a matter of responsibility. There are so many steps and things involved, commitment to being here, being the first I think. And knowing approximately what one is doing here. But really a human life takes intimacy with others. If our sense of failure is equal to our faith, this provides a wall of detachment removal—a distraction from really being here.

What is the "purpose" of kundalini? That's an interesting question that subjectively changes over the course of ones awakening. You get to see through the minds assumptions on the purpose of life, and Life and ones own life—from both on-high and on-low—that is from an angelic perspective of the peak and

from burnout hell. The capacity for "choice" is what life is all about. You could say the meaning of Life is "choice." Depending on how one navigates the awakening, (whether one is burnt or well-cooked), this determines whether the ultimate outcome is more creative or destructive. Usually it's a mixture of both for the birth of the new requires the death of the old.

Consider that while we are still **preconventional** and conventional (conditioned) we are immersed in meaning that is imposed on us from the outside. There is the existential crisis prior to becoming postconventional, after which meaning is interiorized with the development of the stronger umbilical cord to the Self. That is first we are motivated from external authority, and then we become a spiritually sovereign entity. There are infinite modes of interpreting the "meaning" of kundalini...but when we are still operating from the conventional mind and piloted by external authority/motivation (some might say the reactive mind) then we will tend to interpret events as being "caused" by external circumstances...that is our entire world is flavored with the particular stage of the alchemical cascade. Thus the world becomes a reflection of our chemistry and vice versa.

Is kundalini independent of thought and is kundalini is trans-subjective? There is the up-peak of the ecstasy influx and the terror down-peak where the energy seems to penetrate the dark depths of one's being. These two phases are both essential stages of the metamorphosis, and we do not have one without the other. We interpret the physics and physiology of metamorphosis through the conditioned lens of where we are at. The alchemy itself is transcendent of the circumstantial "reasons" but we generally think we are experiencing such and such because of so and so. Depending on what we are going through at the time we will ascribe psychological meaning to the up swing and the down swing. Although the chemistry itself has little to do with the "content" of the mind, even when the chemistry itself seems propelled by our "reasons" for such ecstasy or terror. The more holy the individual the deeper they go into their Matter of the underworld during their down cycle, simply because they have surrendered and gone-with the transmutational alchemy of the up cycle. Unless one has penetrated linear time and can cognitively grasp the fact that something in the future causes a certain chemistry to happen to us in the present...then we are stuck in the egos mythic interpretation of events. Psychological meaning is the "story" that we create for ourselves about who we are, what the world is, and our relationships. It's ones life-myth; it's a kind of Jungian level understanding of archetype, motif, gods and goddesses and how these elements play on our chemistry through our personal interpretive lens.

As the alchemy unveils, this symbolic map-making ability of our mind operates at full bore in a valiant effort to digest and explain our experience. For a sense of reality and grounding we look to our environment (projection) and use anything as a metaphor for our inner experience. And believe me on kundalini we project our interiors to epic proportions. Of course such sign and symbol making does have a deep importance in the psyche and to the health of the soul and to the richness of life experience. We can be so pulled around by our interiors that after

an awakening we see everything as symbolic and thus gain detachment from both inner and outer phenomena. In its morbid expression this could be existential meaninglessness, in its healthy expression it is Freedom.

Often during ones first awakening the down cycle is as electrically energetically powerful as the spontaneous explosion of energy up the spine. It's the same intensity of energy up the body threatening to blow one's head off, however instead of ecstasy one experiences great terror. Of course whatever rational faculty we have going at that moment will ascribe a particular "reason" as to why we are in such terror. The real reasons for us reaching such a crisis are deep in our biology and unconscious. As we descend layers of meaning this propels the chemistry further in our efforts to rationalize our terror. Such an event can lead to ongoing depression beyond the initial blast up the spine itself, because our "reasons" can perpetuate our dark night, and this can stretch on for years if we do not have the discipline and insight to turn our chemistry back into an up swing. Going deeper into being can kick up mud in our pond, but the lotus flower is just as beautiful all along.

Stressed about enlightenment—thought about changing your self-talk a little? In the initial stages of transformation we might operate more from the deprivation side of ourselves, to be intent on whipping ourselves into shape through guilt, shame, self-loathing and fear. This approach is almost inevitable except in those who have been uncommonly supported and unconditionally loved as a child. To avoid the paradox of being stressed out by our drive to transform, we need to observe this phenomena and change our self-talk. Instead of transformation, we could use the word Enjoyment-Aliveness, for real transformation actually amounts to this.

If we find that flagellating ourselves on the spiritual path then we can be sure that the dominant figures we have in place are the Superego-Parent and the Self-Righteous-Teacher. When it comes to establishing your integral-lifestyle, this is not going to get you anywhere. For true transformation is bought about via the Child and the Sage...and neither of these will give you stress. If you sit intimately with the disharmony and disillusionment that your transformation-drive sets up you will be able to see and feel it as an object, then move around the edges of it to the Child and Sage and allow them to heal you and make Whole. The Sage is All-Knowing and the Child is All-Innocent. By relaxing into the not-knowing of the Child this allows the Sage to be heard. But if you stay in the Parent-Teacher mode, their voices are so strident, loud and overbearing that you lose touch with the true agents of transformation.

Consider that it wasn't until the industrial age that humans became unbalanced in their lifestyles. Village and tribal lifestyle was integral at the mythic level. We now have to find out what it means to live a Whole-HUuman lifestyle in the very unbalanced information age. Considering the vast resources at our disposal it should be easy...but greater choice and information sometimes makes it harder to focus, to choose and to commit. Thus we must draw on the *Percival* and *Merlin* within us to find the path that is true to us beyond all outer appearances and distractions. The *heart* and *intuition* will stabilize the incarnation of our Divine Child and Sage.

HILLS AND VALLEYS

Sometimes for no apparent reason, the moon?, the season?, the world soul? the galactic alignment?, the future? we do go through periods of shadow type chemistry... just as a child has nightmares. It can happen in the beginning stages of kundalini or in fever, in dark nights or drug trips—it just represents a particular perturbation of consciousness. It's not any deep or mysterious dark secret with Kosmic meaning, it's simply the detoxification and restructuring of the limbic system. Often we don't know what is inside us until we are triggered. Partly this phenomena is due to the fact that the first 3 years of our life are largely unconscious to us, and these are the "formative" years, so there is a lot of programming in there that we only get to learn about through the course of life in how and why we are "triggered." So our source-programming is made conscious through contemplation of happenstance and our reaction to it. "The brighter the light, the deeper it illuminates shadow." Light being infinite and shadow being infinite...this is why I think enlightenment is never ending.

In *Shamanism—Arachaic Techniques of Ecstasy*, Mircea Eliade says that usually the sicknesses, dreams and ecstasies themselves constitute the initiation of transformation of the profane individual into a priest or technician of the sacred. Initiation incorporates isolation, suffering, death (pain and unconsciousness) and resurrection. The initiate ascends into the sky (influx) and descends into the underworld (Die-off and dark night). In this book Mircea says that to become a shaman there needs to be an ecstatic hysterical crisis (kundalini awakening), which occurs in most cases at maturity. But one cannot become a shaman until several years after the first experience and a subsequent period of instruction.

In order to succeed in the profession of shaman a predisposition to nervous disorders was essential. Shamans come from particular families in which nervous instability is hereditary. The only difference between a shaman and a hysteric is that the former can deliberately enter trance. However no neurotic or paranoiac can become a shaman...the crucial determination is that the individual is chosen for their ability to directly relate with the sacred. Shamans are often found in a community by their early childhood interest in sex, for example masturbating earlier than usual. Thus showing a sensitive intuitive nervous system and high life force.

Kundalini is so deeply personal and unique chemistry, it doesn't seem advisable to try and block or counter its progress. If you look into cases where people have used antidepressants or antiseizure medicine for kundalini, you will probably find that they were worse off with the medication than without. With drugs we abort our chance of shamanistic death and rebirth and forfeit the experience of our highest highs and lowest lows. Instead of medication a proactive POSITIVE APPROACH to kundalini awakening is needed. That is preparation, protection, practices and higher purpose. Some have been able to gradually wean themselves off of their anti-depression prescription medication (such as Zoloft and Prozac) with the Peruvian Camu Camu powder with no relapse into depression. The Camu Camu fruit is a powerful immune stimulator containing more Vitamin C than any other known plant in the world.

Consider that life is exactly like **surfing waves**. There is a charge of life force that arises with any new exciting event be it meeting a lover, or a Eureka discovery. But if we fail to ride the energy of that charge we miss the wave and get ground into the sand. Each time we do this aborted surfing trick we get further and further from the life we want, and we get less and less excited about every new event. Thus if we don't learn to surf properly we become generally apathetic or downright depressed, so life is like surfing and opportunities are waves. If we do not learn how to handle the energy of kundalini and use expanded consciousness effectively and creatively, then it turns on us and we become listless, depressed and dysfunctional. Thus it becomes obvious that we need to transcend our own and the collective shadow to reintegrate ego into a higher mode and larger purpose. That is if we don't pick up and constructively proceed with the light-sword, it will cut us to pieces. As Diana Durham said in her great book, *The Return of King Arthur*, "*To ask the question we have to "dare" to be who we really are—a truly terrifying thought."*

All the empirical investigation and understanding in the world can never really explain happenstance. Yet spirituality necessitates that our understanding and maturation keep pace with unfolding reality. Thus we must hold the stance of willingness to learn, while simultaneously being open to "not knowing." I see us progressively moving into an experiential transrational investigation of manifestation by Games of Spirit. Consciously laid plots of scientific inquiry into the complexity of human nature and the universe. Thus we will be participating in the evolution of God, as we investigate Gods existence. Not in an effort to "prove" but to participate, reveal and cocreate.

Like a hurricane, a tornado, or an ice age, Metamorphosis is an inevitable universal force that descends upon us from beyond our control and to which there is very little we can do about to alter its path and effects…unless we establish knowledge and mastery. It's not so much where we are on the spiral of development, it's the degree of information and contemplation we have given to our experiences that denotes how we will relate it. Kundalini is a natural phenomena with infinite perspectives, interpretations, implications, and explanations.

Evolution would have us *evolve* despite ourselves.

CON-PULSATION

Union of souls
Entwine in divine dance
Galactic syzygy
To be more than either alone
Jointing fuels the heart
The gravity of love
Alchemical fire
Revealing and perfecting
Flowers conscious awakening

RELATIONSHIP

If kundalini is the energy of individuation, then how does kundalini apply in relationship? During a kundalini awakening as more layers of our being are accessed we are both more vulnerable, complex and sensitive. The energy of kundalini is highly attractive and addictive and so we have to be careful not to draw unhealthy relationships, like wasps around a honey pot. It's the kundalini energy itself that is "attractive," but it's not always attractive. Kundalini energy is attractive to the degree that bodies and hearts are "open," and it pushes uncomfortably against that which is not open. Those who are nervous, borderline, hypersensitive or unbalanced would most often be made uncomfortable by contact with someone with active kundalini. An aggressive person might be stimulated to be aggressive within the heightened field of a kundi-active, due to the their resistance to the "pressure" on their heart to open. Perhaps as a general rule kundalini energy will tend to stimulate the default emotional precondition of individuals exposed to it. And during the Die-off, gravity crushing and panic phases kundalini is definitely not attractive to oneself or others.

During a kundalini awakening we are at a lifetime peak in pituitary potency, so our center of being rises to the psychic level, and we have access to a vastly higher vision and taste of reality. While at that level we cannot fit our larger being down into the consensus flatland "reality," so during an awakening we are more alone than we will ever be in our lives, for no one can intimately tread the same territory along side us. Beware of selling-out your values and truth for the comfort and security of having someone around. Also during active kundalini, sex along with all sense-perception and sensation, is greatly amplified and this can interfere with discretion and decision-making in relationships. With kundalini flow we are already greatly in love, bliss and openness and likely to overlook warning signals, traits and behaviors which normally we wouldn't tolerate in a partner. So it is a strange condition of being in total readiness for relationship, and yet the stakes of setting a foot wrong have never been so high. We will fall into whatever traps we have prepared for ourselves by our nature. If you find yourself involved in relationship difficulty, pull back and focus on your own creative output and integrating the kundalini through exercise, energy work (Qi Gong etc…) and nature. The potency of kundalini greatly exaggerates relationship such that situations can become a comedic parody of relating. The exaggeration means one cannot hide from the potential for love, or one's need to betray that potential. All that is within oneself becomes exposed at much greater speed and intensity. The "derepression capacity" of kundalini is so great that the whole relationship has to be dedicated to the All or both parties are screwed no matter what they do.

It is important to always seek a peer relationship and even more so during awakening. Never fall into the trap of thinking you are doing someone a favor and helping them to grow, heal or overcome neurosis by having sex with them during active kundalini. Seek someone of equal or higher openness and intelligence, for anything else will be degrading, wasteful and produce suffering. The neurotic that you desire to "help" will not be able to grow at the same pace, nor commit to

conscious awakening and their rubber banding will be a severe waste of energy for you at a time when you already have enough to deal with. By rubber banding I mean the push-pull that goes on in someone who is divided in their being and their intention, so that they cannot commit to relationship but flip around, one minute for, one minute against. Push-pull relationships I advise to do it before a kundalini awakening, or if it starts happening within a relationship while in kundalini, just get out of the relationship fast. It boils down to whether a relationship is syntropic and builds autonomy, soul, consciousness, energy and love or if it's entropic and interferes with the evolutionary expression of these. Since we are usually already out of our depth and in crisis during kundalini, engaging in sum-negative relationships with people who are not up to the task of truly loving us, is perhaps the most dangerous and damaging thing we can do. For we just waste our time, energy and spiritual attainment in low-grade human drama. Yet the potential for relationship-growth during kundalini is never higher because of the exposure, vulnerability and lifting of repressive prefrontal-lobe controls. The malleable conditions are fertile for great social breakthrough and authentic intimacy beyond role playing.

To a large degree whether we enter a relationship or not is up to the universe. If someone turns up in which attraction, communion and purpose are aligned then we literally HAVE to go with it in order to live in truth. Spirit makes such things happen, and we must obey spirit or move down the ladder of being. Many of us are living such fictitious lives however that finding something real between two people is extremely uncommon...all the more reason why we are obligated toward a relationship should one arise. But if a relationship is going to interfere with who we are or where we are going on the soul level then it is best to avoid it. Since there are very few people who have had awakened kundalini or are presently active, it's unlikely that we can pair up with someone based on this criteria. In my experience it is best to avoid the person who has read all the books, knows the lingo and has a spiritual practice, but is still deeply in schism, neurosis and narcissism. Instead it is better to choose one who may have none of the trappings of the spiritual path, but is united and grounded in their being, with an open heart and forthright energy.

Don't be distracted by appearances for in the trials of a kundalini crisis we cannot afford the luxury of draining or twisted relationships. If the non-popped partner considers him/herself to be a spiritual practitioner then eventually narcissism, competition and jealousy will likely get the better of them and their rubberbanding cocoon will snap back into place. Ultimately it takes someone who is equally ready to open, for the degree of surrender necessary is perhaps absolute, thus it is the openness or "expansion capacity" of your partner's heart that is the crucial factor. Because the supernal energies of kundalini will shake everything within the couple, the ability for compassionate objective nonreactive witnessing and shared communication is vital. As is an understanding of the process and phases of alchemy between the sexes itself. The success of romantic relationship during a kundalini awakening depends on the interrelationship of the capacity for "transcendent faith" of the two individuals. The sheer intensity of kundalini forces us to trust that which is beyond the known. It forces us to surrender to that which

seems infinitely larger than ourselves. It forces us be befriend ourselves and forces us to love.

Spiritual practice doesn't necessary make one more spiritual, ie: post-conventional. Individuals of a conventional level are unsuitable for they are too rigid and will contest you at every turn as you Be and express information from higher realities. There are many ways to develop a truly post conventional brain including a kundalini awakening, good genetics and richly stimulating beginnings, extreme experiences and adventurous lifestyle, crisis, shamanic drug use and spiritual practice that involves the removal of the sense of specialness. As kundi-actives we don't need the conventionally minded to ground us or bring us back down to earth, for it is our job to bring heaven down to earth. We must have the open space to learn inner-adaptation to the elevated energy and consciousness, as only this will help us integrate larger/higher orders of our being. Fundamentally it is our "job" not to succumb to consensus reality, but to bring the gifts of spirit down and to illuminate the "flatland" material world. That is it is the "lower" material nature that must be sacrificed to the higher, not the other way round. If our partner is not thoroughly kundalini-informed, they may tend to pathologize our kundalini, or seek to exploit it, either way this will be very degrading situation.

If a couple is in active kundalini and having regular sex, then it must be done consciously, that is tantrically, or else they are likely to generate big trouble because everything is so amplified. Active kundalini really needs a 3rd stage relationship (David Deida scale) or mature monogamy (Robert Augustus Masters), with fluid honesty and eyes wide open. To preserve joint-spiritual ascendency you have to watch out that the energy is not being used in a masturbatory, selfish or codependent fashion; egoically using kundalini energy, or be selling it for love. That is we must wary of the ego's attempts to barter kundalini energy for sex, comfort, companionship and security, for this is a no win situation. Masturbatory-egoic sex and relationship is driven by the older survival/defense parts of the brain and is inspired by deprivation. While for transcendental sex and higher forms of relationship one needs to already have a certain proficiency at the basic needs level. Survival stress focuses consciousness in older brain areas and tends to interfere with higher cognition.

During awakening the changes and upheavals can be so great that it is essential to look for the ultimate support within oneself. If you feel you need support from sangha, Guru, mate, parents or doctor you will just run yourself ragged and end up increasingly deprived. Isolation often leads to the evolutionary chemistry of the mystics. The energy/awareness has to go somewhere, so it turns into the inner flower. When we witness anything, be it loneliness, horniness, kundalini, desire, pain, fear etc...it can be transmuted into its own satisfaction. But if we turn our consciousness away from it and resist it or suppress it then it just persists in an unconscious fashion to infest our behavior and destiny. To be touched with affection we must first touch with affection. The heart of the world grows thus. We fill up from the inside out, after which we can shine our love on all creation.

Relationship boils down to personal responsibility. If we are dissociated from ourselves and the world, it's rather hard to make relationship happen. Being actively

on the path of ones life purpose is the opposite of dissociation. But we have to learn to contain these global cosmic forces, carry out our Kosmic-quest and have a personal life as well, because we can "relationship bypass" by both prepersonal and transpersonal means. We can be so driven by transpersonal imperative that we miss out on personal life possibility. That is the personal responsibility to accept life and to fulfill ourselves within it. If we still feel dependent (fighting enmeshment with parents or employers) then we are not yet in this personal responsible state. The fundamental key is that we have to be sovereign before we can surrender ourselves into accepting a relationship..."to accept life and fulfill ourselves and our purpose within it." Thus paradoxically relationship requires sovereignty or empowerment by Essence. We have to be boundaried before we can proactively include another within our boundaries. But if we are dissociated, that isremoved from Essence, this is the opposite of self responsiblity and self-knowledge. The quality of our relationships throughout our life are determined by the quality of human interaction we had in the development of our self-system in the first few years of our life. If we got inadequate heart-eye contact as an infant chances are we may be cut off from Essence, dissociated (latent and repressed) from self and other and prone to isolation.

For the creation of a beneficent human civilization we must evolve beyond the security bound ego to the unconditionally loving soul. So focus must be shifted from survival, to transmutation, without transmutation becoming yet another goal of the security seeking ego. To do this we must achieve spiritual autonomy from the world such that we can relax into unconditionally loving soul in the midst of the chaos of the world. As the Global Brain awakens and connects there will be such a floodtide of transpersonal alchemy that we will collectively gain the skills and language needed to address it. Until then the pioneers will largely be stumbling in the dark with barely a candle, other than the light in their own heart. Relationships are so complex that there will always be an occasion to disprove all our prior assumptions and theories.

The hardest won lesson I learnt from my awakening was: that there is a very real danger that if we are already blissed out of our tree and intent on some heroic journey, we can accidentally pass up on the lover of our dreams. Thus we must be weary of the dangers of our inflation and idealism, to be responsive to the inner call to action when faced with a meaningful encounter. And even more importantly if at all possible we must be aware of our degree of spiritual pride, and prejudice which in the end does nothing but disrupt our lives and create misery, loneliness and division. The spiritual ego can be our worst enemy, because hubris stops the "learning mind." Thus if our focus on spirituality makes us more arrogant than humble, then we are actually better off without any focus on spirituality.

The main problem with prolonged removal from romantic relationship, is the likelihood that we may the One because we are so used to holding nothing to us, so no relationship "feels" like ours. A fabulous partner turns up and we marvel at his/her beauty for "someone else" not us. That is we have turned a prepersonal situation into transpersonal dissociation and forgotten the personal in between. Distracted

by our duties and survival strategies, the miracle of chance meeting then becomes a one hour conversation instead of a lifetime of relationship. The degree to which we have fought the pain of our loneliness rather than accepted it, is the degree to which we have escaped into transpersonal amnesia, by which relationship is unlikely to touch us even if it does arrive. Similarly if we have fought for the "right" to have a relationship this resistance to feeds into our transpersonal removal...which as I say becomes a prepersonal prison. We could call this phenomena, "relationship bypass," which can only interfere greatly with our soul development.

Metamorphosis, for all its fire and flash is completely useless if undergone at the expense of genuine human relationships. That it is relationship, not enlightenment that is important, and that enlightenment involves skillful relationship. Love and human experience is more important than the pursuit of kundalini energy, spiritual philosophies and enlightenment. If a spiritual partner arrives then sex might become a natural part of that love, and the two of you can cultivate ways for sex to not be depleting but regenerating. The upwelling of kundalini tends to reduce "suitable" mates, but the chances of finding a spiritual partnership are increasing due to global communication means such as the internet. Finding someone who is not in consensus trance and who will not attack the original thought and creativity of our Muse, or be jealous of it, is the hardest task for someone looking for spiritual partnership. Until we find such a person we are far better off alone putting our energy and creativity into enjoying the freedom of our single life. Rather than have chronic longing be a handicap for us, we have to learn to find ways to use our energy that give positively to the world and also receive back in return.

The question of whether celibacy enhances or impedes spiritual development is not black and white. Some sexual matches generate more energy through synergy, while others dissipate and drain energy and consciousness. Thus being celibate is no guarantee that you will have more energy available for metamorphosis. Chances are that prolonged celibacy while dry up your hormones and you will become spiritually desiccated. Celibacy can be just as damaging and wasteful as relationship. Some traditions insist that celibacy is essential for spiritual transformation, but you could just as easily say that intimate relationship is necessary to transform. Relationship or celibacy undergone in an entropic or energy wasting fashion is obviously counter to evolution. Over masturbation or excessive sexual intercourse will tend to waste the neurotransmitters and energy necessary for transmutation. Avoidance is not transcendence and that which is repressed cannot evolve. Rather than make a career out of avoidance and join a monastery or nunnery, nowadays we have modern psychology and relationship science to help us navigate these murky waters...we have the technology! Church systems of the past played an intrusive and usurping role in the sexuality of their flock. Take away sex, replace it with a set of rules called God, promise rewards in heaven and you basically have a stagnant, prepersonal slave pool to draw from and build great wealth and power with. As Wilhelm Reich points out *"Sexual suppression becomes an essential tool of economic enslavement."*

Traditionally it was thought that sex was counter to spirituality because churches and gurus wanted to control their flocks through manipulating their sex drives. A

fully sexually cognizant person is a liberated sovereign individual and therefore of no need of organized religion, and certainly cannot be manipulated to offer absolution money for sins they know they are not committing in the first place. Only the childlike can be indoctrinated by fear to give up their sovereign soul to external dictatorial forces. Thus religions interference and insistence that their flock remain prepubescent and malleable to their machinations. There are some benefits to celibacy however...if ones ego structure is undeveloped, or ones wounds unhealed avoiding sexual intimacy will conserve energy and time needed for self-survival. Also anyone going through a full-on awakening might be so overwhelmed in just dealing with that, that a relationship would be harmful—being too vulnerable for intimacy so to speak. And if one engages in sex compulsively then neurological and hormonal resources maybe used up which could have been applied to evolution of the bodymind.

Since metamorphosis uses the sexual hardware as part of the general psychosomatic hyperactivation, any sexual energy and development that is not "used up" in relationship will directly feed transmutation. Thus unconsummated hyper-arousal can and does lead to the inner-conjunction (10,000 orgs up the spine), for the energy has to go somewhere. Conversely if sex and attraction are avoided then the sexual hardware becomes atrophied or latent and the very foundation of spiritual energy maybe thwarted. Biologically there is no spiritual evolution without fully engaged sexual engines, because the foundation of our life energy is not separate from causal consciousness. If the sex hardware is not revved up then there is not enough energy available to reach the higher levels of consciousness, revelation and being. Without the higher-play of the poles/hemispheres/sexes there is no alchemy period! Sex is not an obstacle to God Realization, but lack of love is. The quest is not "how to avoid sex" but how to reveal the inherent holiness of sex through spiritual, mental, emotional, physical communion. It is obvious that intimacy or "connection" involves the surrender or sacrifice of ones egoity and defense. Intimacy therefore requires both the need for the yin of surrender and the yang of active inclusivity. And beyond even this—for connection to occur there is the need to let go of ones own identification with the separate-self-sense itself. Conscious sex in a harmonious evolutionary relationship is definitely the ideal, and I suspect that such supportive circumstances will reduce both the down cycle and recovery time, such that ones spiritual gains from kundalini awakening are substantiated and creativity is maintained.

Relationship is the process where by we are annealed and tempered, both softened and hardened by the forces of separation and union. There is no way to side step this work, for by avoiding relationship altogether we just remain half dead enclosed in our cocoon. Erotic love helps us break free and become a butterfly. To work through the death throws of the Pain-body and armor we need to have great compassion, intelligence and willingness. Willingness is the key I think, intention is not enough...there needs to be a willingness to be vulnerable and be undone by love in order to be "remade" by love. One of my favorite books on relationship is *Love, Freedom, Aloneness*, by Osho. In it he says that love is painful because it transforms. Love is mutation!

The alchemy of the imagination is to perfect sacred marriage through an ever deepening conscious eye into the mysteries of the universe. Every cell of our body holds the truth of our life and speaks with the voice of the earth, man and Kosmos from our own unique perspective. There must be greater truth, reconciliation, vulnerability and acceptance between the sexes and the left-right brain if we are to evolve at all, for our flesh cannot contain the tension of repressing to unconsciousness all that stands in the way of our total and unimaginable freedom. "Stopping" the conditioned self permits a cosmic relaxation...and the neutral blazing sword of infinite penetration between the dancing polar serpents of male and female. This waking to the Universal Template can only occur through the resting-neutral state where both time and space are penetrated with the eye of awareness. The Kosmic sex game is the driving force in conscious awakening on the planet. Thus the conscious science of the process of sympathetic resonance between the brain hemispheres and the sexes, has probably just begun.

Transformation Through Intimacy by Robert A. Masters is one of the ultimate books giving a vision of a higher form of relationship.

The Mystery of Human Relationship: Alchemy and Transformation of the Self, Nathan Schwartz-Salant; Routledge, 1998.

Why We Love: The Nature and Chemistry of Romantic Love, Helen Fisher; Owl Books, 2005

Secrets of Attraction: The Universal Laws of Love, Sex, and Romance, Sandra Anne Taylor; Hay House, 2001

Perfect Love - Imperfect Relationships, and *Sacred Fire* by John Welwood

Awakening is the dance of the seduction of Self.

PROJECTION

"True love takes its own course through uncharted territory. It knows no fences, has no barriers or boundaries. It's difficult to define, eludes modern measurement, and seems scientifically wooly. But I know true love exists. I just can't prove it." David Buss

There is an extremely volatile and complex human predicament involved with activated kundalini, perhaps more so than any other aspect of the human experience. Kundalini awakening presents us with the raw edge of our existence, because it involves the radical amplification, derepression, nexus and shakeup of ourselves in relation to our world! Due to the power of Limbic Attractors and since the hormonal chemistry of kundalini awakening is the similar romantic love, only tenfold, it is very easy to assume one is in love with the teacher, Guru or person that provides the initiation stimulus. In fact this transference cannot be gotten over until the kundalini awakening itself has abated…for the heart, sex and love sensations are synonymous with the inner image one has of the initiator and probably wouldn't have occurred without psycho-spiritual attraction to him or her. Transference is the tendency to respond to particular others as if they were figures from our past. Thus our Great Attractors are somehow the resolution in the drama of our past history of desire, aversion and need.

Thomas Lewis et al say that through limbic resonance and regulation human minds are joined together in a continuous exchange of influential signals.

"No individual can think his way around his own Attractors, since they are embedded in the structure of thought. The limbic transmission of Attractors renders personal identity partially malleable…as our Attractors activate certain limbic pathways, and the brain's inexorable memory mechanism reinforces them. Who we are and who we become depends, in part, on whom we love." 141 A General Theory of Love by Thomas Lewis, M.D., Fari Amini, M.D., Richard Lannon, M.D.

If your kundalini awakening is in association with a Great Attractor or initiator and think you are in love with this person, you probably are. But it is love at the supra-sex level that is transcendent of normal sex. In supra-sex there is a radical exaggeration of sexual chemistry as a furnace for the alchemy of transformation. I suppose there have been plenty of people throughout history who have actually had relationships in situations where supra-sex has arisen, but a relationship is not necessary for the alchemy to proceed. If transference with a Limbic Attractor has been the trigger the awakening will proceed without any further interaction. A spark is all it takes to set your own chemistry rolling. I liken spiritual preceptors (teachers) to being an antenna for soul/spirit and if you get around them your own soul accelerates/amplifies, ones biology starts jumping around and new connections are made. Being in Mr. Universal's I experienced outrageous symptoms and a radically altered sense of being, which I will never experience again. The work of transference occurred on a biological and energetic level, and my body dissolved itself at light-speed.

During a full-on awakening it is likely that you would project your awakened Heart onto a spiritual leader as the sun and source of your own Self. Because we

are relational at our core, this projection inevitably happens until the kundalini dies back down again; or until the rational mind has made peace with the sub and transrational sides of existence and the Self moves to the forefront of ones being. This is so because we are naturally "lovers" and there is a fundamental propensity to love an object (Guru, teacher, lover) "out there." Whereas indeed, it is merely the awesome love of the Self illuminating ones mind and body. Because of it's rare and self-perpetuating (self-initiating and autopoietic) nature we must as a society learn to distinguish the difference between personal-temporal-earthly relationship and ephemeral-spiritual transpersonal chemistry…and so clarify our thoughts and emotions around these two very distinctly different phenomena. Creating a language of the multifaceted nature of love.

The sociobiological evolution of the Global Brain may or may not have a personal relationship component. It's cellular, energetic, subatomic…and non-local as well, although the effects are usually amplified by proximity. Not everyone is triggered by spiritual adepts, it depends on ripeness and how one is wired. Females probably pop more so than males in the presence of male gurus, because of the sexual polarity and the hormones...sex hormones being fundamental to the alivening of kundalini. Even the ones that don't pop are "changed" but in a less dramatic fashion when in the presence of evolved beings and Great Attractors. We can of course pop without having any initiator or specific cause and yet if we reflect we can see that our entire lives, the good and the bad and all that has happened to us leads us to that inevitable threshold event, through the very nature of our being alive.

You don't need a tantric partner to have kundalini experiences, you can "open" purely from giving generously to life and following your Muse. If you commit to the challenge of your spiritual journey, you will go through these types of initiation, even if your eyes never fall on anyone that personally kicks you off. Metamorphosis happens within an individual but it is larger than the life of the individual because it is beyond the personality…it is a process of species emergence. If it happens in association with another individual (say a guru) it might feel like the ultimate love affair, but it is of the realm of the Gods, it is not a worldly phenomena, hence cannot be taken personally. At first we may interpret such love and bliss personally and intimately identify with our heroic journey, but after many years we tend to view it as a transpersonal force, more like an ocean in which we swim. Other people who have not experienced this kind of thing, will however take it personally…they will see "our" experience through the lens of ordinary sex and attraction. Thus normal human jealousies, possessiveness, protection and envy emotions will be lumped onto something that is essentially beyond all these personally inspired qualities.

What about the ultimate gamble of loving and finding it unrequited? Loving someone who doesn't love us back is not such a bad thing, if we are able to use that love to grow and not react in self-destruction. The pain from such an event can help us to open and be ready for a deeper love. To be more grateful when love arises, in awe of the miracle and the precariousness and the rareness of it

all. Romantic longing for another is synonymous with longing for homecoming with one's own Self. Unrequited love can result in metamorphic initiation, for the energy that would have been used in relationship is then used in the opening of the inner flower of Self. The perturbation of consciousness during a kundalini awakening or when we are in love gives us greater access to the right-brain. When the two hemispheres are in greater communicate a profound love is experienced. The worry thoughts of the left-brain are met and subsided by the expansive right-brain. Thus it's like being in communion with the Beloved, for we are the Beloved. Unrequited love and kundalini awakenings both eventually teach us that we ARE the love we seek.

At shaktitechnology.com there is a great article by Todd Murphy called "*The Neurology of Romantic Love*" where he talks about Michael Persinger's work on sensed presence, romantic love, projection of the Beloved and brain science. Michael Persinger's take on romantic love and the hemispheres is essential to gain greater insight as to what happens when we "fall in love." Our "self" identity is mostly centered in the left-linguistic brain, but we each have a silent "Other" in the right-brain. Meeting another person who we "resonate" with sets off wakeful/relaxation chemistry by which we have more access this silent Other in our "feeling" right-brain. Hence the increase in telepathy and psi during romantic encounters of an elevated kind. A triad emerges "You, your left linguistic "I" and the other person's left-brain identity, and the transconscious communication via the combination of the two right-brain selves in sympathetic resonance. This inner marriage facilitates meta-recognition, or the fully human human.

Perhaps one of the first things that happens on the spiritual path is both a sense of "recognition" and a sense of "self-doubt." After spiritual initiation, the observing eye of the mind is enlargened, we become more hip to both our glory and our shit. Accepting that we all have an unconscious and dark side is a major spiritual milestone. Perhaps idolatry stops the moment we marry our shadow, and hence forgive the world. When this projection ceases perhaps we can truly love as an adult instead of a child. Once we collectively get over the cup being half full, and over original sin, and grok that nothing is broken, perhaps then we will give up the doubt, greed, lust and fear that dissipates our energy and prevents Samadhi.

RELATIONAL ALCHEMY

Relational Alchemy is simply the inner polytheistic pantheon theocosm at work. The most obvious example of the way process operates is, the female's submission to the patriarchial image of the King. Here she projects her inner-King onto an external male figure—then the consequences of her volitional giving up of her own King will be played out in her life and relationships, until she becomes conscious of what she is doing and reowns or finds for the first time her own inner-King. This alchemical archetypal process of psychic development often occurs through loss, grief and reclaiming. Those that fail to make the last stage, remain psychological and spiritual victims of their own inability to own all the aspects of their theocosm (archetypal matrix). This "projection without reclaiming" constitutes a fundamental

failure of understanding how the psyche works and a blindness towards ones own inner process.

Relational alchemical projection might be stronger in the female of the species because they are biologically more focused on "relationship" and therefore more at the mercy of the inner panoply of identities—the archetypal arcana. The wiring of males towards "objects" rather than "people" allows them a biological distance from this alchemical-projection process. They still do it to a degree, but it does not consume the entirety of their body, mind and soul. Whereas with females it is so insidiously overwhelming that it seems like the entire universe is conspiring to produce this inner-cooking of the psyche through archetypal projection. Because we are not very familiar with this process yet, females tend to lose their inner-King many times over during their life to various external males and male icons. But each time she tends to find her inner masculine after the illusion of the protector-daddy-God is broken down and broken through. In this process she learns to love, reclaim and inhabit "all" of her Self. It is this lack of aware Self-development that relational alchemical projection overcomes if it is allowed to proceed naturally and if the light of compassionate awareness is brought to it. If it is not seen through and the polarization of self-other, inner-outer is not made conscious, then there simply is no psychological or spiritual development. Relational alchemical projection reveals the clockwork of the mind of Nature herself.

The marriage between the microcosm and the macrocosm produces an epic drama in which propels the individual on their hero's journey. The psychic heating involved in discovering Great Attractors, people, events and objects which deeply affect us is a self-fulfilling prophecy; providing us exactly what we need to "wake up." This psychic cooking process will become increasingly apparent in the psyche of humans as we enter a more global arena where there is more choice available and more freedom to access those choices. The pace of change on the inner psychic level and the outer experiential level can only accelerate geometrically.

Building the skills and knowledge to deal with these rapid successive jumps in cognition and experience is the work of the present generations. Since this process is happening to us all, it demands communal investigation and revelation. As time and space become more transparent to consciousness and we connect up all over the globe to share in this relational alchemy, each of us has a major contribution to offer in this theocosmic unveiling. We all balance, provoke, trigger, facilitate and promote the alchemy in each other through the sheer fact that we are alive, and we are Spirit.

We must be very weary of dismissing this archetypal process, for to do so is to dismiss the way that spirit really is, for some simplistic model. This issue is at the heart of genuine spiritual emergence itself. It demands to be looked at with reverence and honor not with base cynical materiality. We simply have to allow for it, understand it and laugh at it. This process is vastly more strange, magical, mysterious and mystical than any real life encounter or relationship could ever be. It is part of the dream world of the inner humanizing process, that if treated with understanding can bring meaning, quality and depth to our lived experiential lives.

The more we use mystical language to describe our inner world in our daily lives the more we participate in a global psychic heating process.

This Overmind or the Mind of God is not a homogenized undifferentiated Borg-like tumorous mass. For managed consent and excessive cooperation prevents the flexibility and diversity necessary for the individuals' spontaneous response to the rhythms of the cosmos. Universal Mind allows for each cell, organ or individual organism, indeed each particular "thought" to have a completely unique expression. Indeed it is this very differentiation by which each "part" is engaged in natural rhythms of exquisite coherence that bring the all the parts into a collective Whole. Perfect coherence is the optimal state between chaos and order. Pathology occurs when through defense, security or aggression, an unnatural order is imposed by coercion or tyranny leaving the individual cell, organ or individual *unable* to follow the dictates of the larger cosmic order of which they are made. Unable to respond to the Mind of God or to flow in God's Time (Kairos) the Part then loses sync with the universal Whole…and disease results.

The Philosopher's Gold in a sense is the "search itself," for an ever purer reception of what this omnipresent Overmind is telling us. The Sacred Science is the revealed knowledge of liberation from suffering and mortality, and the search for a "real" vision of the universe. That is the magic, that is the mystery—this Overmind as it unfolds in time comes from a source that is beyond Time and is one with the matter of earth and the plasma of noosphere. This is Total Consciousness—the always already, the Eternal in time. It is the experience of Spirit and the full ramifications of that which constitutes the sole purpose in life. The more purified, alive, renatured and spiritualized is the bodymind, the more receptive we are to the Real, the sacred call of the wild and our highest Nature. This clarity and sensitivity allows us to find our soulmate and/or tune into our Dharma and Global imperative.

For reading on projection and transference one of the most precise books is *Jung On Alchemy* by Nathan Schwarz-Salant.

Projection and Re-Collection in Jungian Psychology: Reflections of the Soul by Marie-Louise von Franz

Jung on the alchemy of the sexes can be found in Jung's Collected Works... *Psychology and Alchemy*... Vol 12; *Alchemical Studies* ...Vol 13; *Mysterium Conjunctionis* ...Vol 14

SUPRA-SEX

"Some day, after we have mastered the winds, the waves, the tides and gravity, we shall harness…the energies of love. Then, for the second time in the history of the world, man will have discovered fire." Pierre Theilhard de Chardin

Both Jung and Sri Aurobindo believed that the soul is both individual and universal and that the physical and psychic exist simultaneously. Supra-sex you could say is the spiritual intercourse of the Global Brain—the communion of the overmind or Superman (Aurobindo). This communion is superluminal, nonlocal and probably involves instantaneous communication via scalar waves or sympathetic resonance. Supra-sex is a mysterious subatomic force that spans the globe. The experience of supra-sex makes it apparent to us irreverent humans that we live in a spiritual universe, an intelligent universe, far more profound than we could possibly imagine. There is nothing more powerful than the force of Supra-sex. It is the force of evolution and consciousness itself, the energy at the ground of manifestation. Future generations will know more about and honor it more deeply than us, for slowly humanity is being awakened by this evolutionary force.

The spiritual journey is driven by sex hormones, as the principle drivers to metamorphic alchemy and awakening. The urge to unite with God, and the urge to merge with a beloved runs on the same biological equipment, it is just lived at a different level of expression. Bliss is the energy of transcendence, and when kundalini arises and the Heart opens it feels like a lover. For females it feels like a male lover, for males it feels like a female lover. For this reason it is commonly thought that the soul of each sex is the opposite gender. Hence the anima/animus of Jungian philosophy.

The idea of Supermind (global brain) maybe as old as Plotinius, tho not explicitly stated. A teacher of Aurobindo brought it to his attention and so seeded Aurobindo's sadhana. For information on Aurobindo's take on the Supermind check out the book: "*On the way to Supermanhood*," by Satprem. The Supermind is as vital as the body of man is vital—as the Earth herself is vital. Unfortunately our modern world is filled with interference patterns to consciousness such as electromagnetic fields, pollution and the destruction of nature itself leading to the devitalizing the human organism. The Supermind is when one's subjectivity exhibits a planetary empathy. So one has to be enlightened to reside in Supermind consciousness...to be both separate and not separate at the same time. Maps of consciousness such as Spiral Dynamics maybe a ladder of objectivity, but no matter how high one's eye, cognition is always subjective. That is *Evolution = increasingly objective subjectivity.*

Spirit uses the sexual chemistry and apparatus in the metamorphic process, so that even though the mystics may not be actually engaging in sex with another human their systems are fully sexed, fully revved up and potent during the great Passion of the alchemy. If this energy is simply masturbated away or spent on gross level compulsive sex then the Great Passion will fall short of its mark. To be fully sexually potent doesn't necessarily mean one is actually engaging or even interested

in sex, but that one is not repressing the full flow of Eros in the bodymind. At the mystic level supra-sex transcends, includes and amplifies normal-sex. Supra-sex is the total alchemy of transformation of which super-sex is a symptom or beneficial side effect.

Kundalini operates on the body's sexual system to radically heightened degrees: in dreams that facilitate certain phases of the metamorphosis, in magnified sensory sensitivity, in heightened attraction or rather spiritualized attraction, higher sexual energy and sex hormone production and vastly increased levels of opening. But in fact kundalini simply uses the sexual system in the same way that it uses the nervous system, the immune systems, the endocrine system, the lymphatic system and the digestive system—to "evolve" the structures and systems of the bodymind. This process is transpersonal and related to species survival and evolution.

The transpersonal nature of the Overmind or World Soul (Anima Mundi) is recognized as one becomes a pawn in the hands of the Gods, with the ultimate objective of evolving and connecting the individual neurons of the Global Brain. The individual neurons being ourselves. This is why in 2000 I said, "**Sex is not Sex**." Supra-sex transcends, includes and amplifies normal-sex." The global brain wakes up through sexual attraction, and nothing is more wakeful and enlightening than the pull of supra-sex, and you don't even have to have sex for it to be so. It is the trickster nature of the Universe. Remember sex is not sex, it is the energy of the Universal existence…sex IS the universe...it is all the play of the charges, hemispheres, sexes and poles, and enlightenment proceeds via this cosmic intercourse of the marriage of opposites.

Union beyond all states is basically nondual intuition, or being one with the flow of Spiritual Eros. As far as action in the world goes, as long as we are an ego acting for or on the world this is still not the highest dharma. Consider the concept of relationship AS the World—even 'sex' for worldcentric reasons. Coming from this highest ethical level then there would not be internal divisions that would prevent joint-nirvikalpa. This kind of relationship is perhaps the only kind of relationship that is deeply satisfying in the soul-sense, and thus fundamentally "Real." Relationship AS the Universe.

Supra-sex is autopoietic and seems to be focused primarily on the spontaneous transpersonal evolution of consciousness itself. Because it is the most extreme experience of love and sex, we learn that human relationship is a subset of this much larger transpersonal agenda of Nature. Supra-sex cannot be described in words, for one can only know it by experience, thus I resort to Gurdjieffs idea of supra-sex to help clarify the distinction that this is something so beyond our usual concept and experience of sex that it defies both understanding and expression. There is a great piece on sex in Chapter 12 "*Sex and Evolution"* in Ouspensky's "*A New Model of the Universe*." Here he described the three types of sex.

Infra-sex: A non-understanding, terror and disgust of sex, arrested development or degeneration, sex abnormalities, underdeveloped sex, all perversions, either abnormal sex desires or abnormal sex abstinence, indifference to sex, exaggeration leading to inner degeneration, wastes energy. Disharmony between sex and other sides of life.

Normal-sex: Contains no danger, sex harmonizes with all other functions including emotional, intellectual and spiritual. Sex inwardly is completely justified in the normal man and this justification is based solely on the full coordination of sex with other aspects of life. Builds energy, awareness and inspires.

Supra-sex: The sex system is greatly magnified and subsumed into spiritual alchemy, such that normal sex eventually ceases. Supra-sex signifies the inner marriage or metamorphosis and is intimately tied into one's life purpose and calling. The Muse or Holy Spirit becomes prior to all else.

"The first sensations of mystical experiences intensify sex sensations but the further waves of the light that a man begins to see completely absorb and cause to disappear those small sparks of sensations which before seems to him a blaze of love and passion. Consequently in true mysticism there is no sacrifice of feeling. Mystical sensations are sensations of the same category as the sensations of love, only infinitely higher and more complex. Love, "sex," those are but a foretaste of mystical sensations. It is clear that the foretaste must disappear when there comes that which has been anticipated. But it is equally clear that struggle with the foretaste, the sacrifice of the foretaste, the giving up of the foretaste, cannot bring nearer or hasten anything." 541,Ouspensky.

Ouspensky says that it is the cessation of transmutation that is the curtailment of metamorphosis, which produces pre-normal sex characteristics (infra-sex) such as suppression and pathologies of sex. He says that the degradation of sexual attributes "secondary characteristics" points to a weakening of transmutation. Thus it seems that sex must be healthily integrated into normal life so that evolution to supra-sex or mystic life is possible. Ouspensky says that if transmutation is possible, it is only possible by passing through normal-sex for none of the lower infra-sex forms can evolve. And that through supra-sex, alchemical transmutation is brought to a totally incomprehensible and unknown intensity, which creates a new type of man. Behind all esoteric teachings lies the knowledge that we evolve in consciousness through the higher-utilization of sex energy, which is normally wasted unproductively in ordinary life. Both Ouspensky and Wilhelm Reich were intuitively advocating the liberation of the evolutionary energy of man…supporters therefore of the continued evolution of life on earth.

The Sacred Marriage is not a romantic fantasy, nor is it arrived at through the direction of personal will. Rather it is prior existant, unadorned, uncorrupted and uncontaminated. It is the "cooking" of spirit and matter that is occurring at the elemental core of our being, despite our unconscious efforts to subvert the process and waste the energy. Surrender to the complete satisfaction of the energy (emotion) is to be in tune with cosmic design. For this we must "cease" subverting and bleeding off our energy into the lesser drives of the needy, deprived self. The person who speaks most clearly of the aborting and shunting of spirit into lesser drives is Robert Augustus Masters...he has been talking of this since the 80's with his book *Way of the Lover: The Awakening and Embodiment of the Full Human.* The way we use our sex energy is a model for the way we do everything in life. The sacred marriage occurs by dropping completely into the energy and emotion

and thereby allowing it to complete its alchemical cycle, whereby illumination is arrived at along with peace and equanimity. The Sacred Marriage is the felt-sense recognizing What Is.

The male and female and the potential love between them is the main catalyst of the evolutionary force of God, Eros or Awakening. Whether the relationship actually occurs or not at the human level is irrelevant to this evolutionary force that proceeds despite us, imposing "its" will regardless. Spirit uses whatever means are necessary to break us open and force us to awaken. Alchemy between the sexes is the primary vehicle for the awakening of consciousness and the Global Brain itself. Kundalini represents a ripening and fruition of the psychosomatic life of the individual and the driver for collective awakening. Kundalini is perfect love, that elevates all that is base and 'raises' all that is dead.

The mystical birth of man proceeds through the full realization of sex energy as the **caldron** of transformation. In Celtic lore the cauldron had three powers: inexhautibility, regeneration, and inspiration. Of course the alchemical caldron is "The Holy Grail," and it is by following the pure heart's desire in search of The Grail that we undergo the journey of transformation. Unless the heart is given the time and space in which to unfold the metamorphic alchemy, it might start and fizzle, just like a flower severed from its plant. The pure heart's ability to allow the alchemy of individuation to proceed is the gallant quest of the preceptors of the Mystic Civilization. This is the central meaning of the Grail myth in preparing the way for realizing a global Camelot based on the vitues of justice, bravery and truth.

Mastery (non control) of the serpent power sustains the enchantment and regeneration of our world. While the inability to master it can be destructive. Mastery involves submission to rapture. That is, allowing ecstatic sublime currents that melt the entrenchment of the ego's sense of separation, bringing freedom from fear and judgment, and the petty nature of resistance in general. *Mastery of Kundalini is in effect mastery of the ego!* Kundalini adeptness is the alchemy of individuation through the integration of ego and Self. That is the unification of the conscious and unconscious elements of the psyche and the establishment of the proper center. This inner center or cosmic consciousness is the steady state of intuitive knowledge or illuminated mind that develops from the harmonious nuclear fusion of the Tao within our very atoms. Mastery of kundalini involves dropping our resistance to this inner sacred marriage.

If we are all going to learn new transcendent modes of being that are not merely denial or abdication of "care." We must then make a conscious effort to stabilize this transcendent heart meme within our immediate community so that it spreads throughout the global by ripple effect.

The Global Brain Awakens by Peter Russel

The Global Brain by Howard Bloom

Earthmind, Communicating With The Living World of Gaia, Paul Devereux et el.

Animate Earth: Science, Intuition, And Gaia by Stephan Harding

Spiritual Eros is wild, it cannot be tamed, just as the truth cannot be faked.

It is apparent that the separate-self-sense is a low energy condition and sex sometimes raises our energy enough so that the veil of separation falls. Then it is like looking at the world, or ones lover with the eyes of a child. Stepping into cosmic levels of consciousness is to experience intense love, awe and gratitude, coupled with the sense that "I never knew it could be like this." There is tendency to go unconscious and into the body and pleasure during sex, this is why Tantra is so useful as a gate to remain in higher states. If you can remain conscious during sex, then this helps us to maintain wakefulness/mindfulness generally in ones life.

Nirvikalpa Samadhi is the state of oneness with Atman (the Self or soul) and is traditionally achieved through the advanced and prolonged practice. The concept of arising at nirvikalpa through physical sexual union with another human being is very interesting. In the book "*The Jewel in the Lotus: The Tantric Path to Higher Consciousness"* by Sunyata Saraswati and Bodhi Avinasha, they say that Tantric Kriya Yoga greatly accelerates spiritual alchemy such that it is possible to experience illumination in one tantric ritual. *"If you and your partner make love twice a day, doing the Cosmic Cobra Breath, you can have the experience of Ultimate Universal Unity in a week."* 29. You can find out more about Tantric Kriya Yoga at www.TantricBliss.com. This might be the best resource for learning the technique of entering joint Nirvikalpa Samadhi.

Once we have learnt to cope with kundalini on the survival level, we then need to cultivate it and use it in the higher sphere of life to prevent the energy turning on us in self-implosive decay. Although I have not experienced joint Samadhi through tantra, I would like to mention it as an example of the higher dimensions in which kundalini maybe followed and cultivated. The last third of *"Kundalini, Energy of the Depths,"* by Lilian Silburn, gives an account of a tantric practice drawn from Kashmir Shaivism scriptures. *"The sexual practice mentioned here is not a lewd activity, a craving for enjoyment; it does not aim at pleasure or procreation, but appears as a yoga, a discipline, a sacred act having for its goal the realization of the essence of the Self, the identification with Siva; as such it is essentially ascribable to heroic behavior."* Silburn

The term **sacrifice** is used a lot in this book and this refers to "stopping the resistance and fear," or the complete surrender to love, such that the Heart supercedes and pervades all else. We sacrifice all that keeps us from the open, pure, immaculate Heart. This then increases coherency that ignites the Divine Spark through phase singularity. Like the conductor of an orchestra, the heart is the central oscillator, which is able to frequency tune ones own atomic system and sync with another via sympathetic resonance. Apparently for two people to enter **turyatita** (beyond all states) there must be a sacrifice of ego such that there is no fear, doubt or wavering; and the two are able to completely identify with the energy of the other, thereby producing boldness and power. In other words there must be no egoic holding back, such resistance being antithetical to the sacrifice

of the lesser vehicle. Sacrifice, as we normally understand it, is not the best word to use here. More precisely in this context sacrifice means the evolutionary force of the universe that transcends and includes, i.e.: Spiritual Eros. So in sacrifice we have "gone beyond" the preceding condition of being—we have "let go." Sacrifice means you no longer identify "merely" with the ego-complex which contains the somatic-mental-emotional defenses, armoring and safety-attachments.

Then through such sacrifice there is **satisfaction** leading to the cessation of desire. But we do not transcend desire through negation or denial of desire; we transcend desire through the most spiritualized satiety of that desire. By elevating desire to an art form and thereby "evolve" desire. Satisfaction being essentially the blooming out of consciousness leading to the mutual satiation of the other chakras so that there is a mutual ignition of the heart charkas of the individuals. This is how two hearts become entrained as one. The inertia generated by hunger of the senses and the inability to transcend one's self-system means that this atomic transducer of unified hearts is not constructed, then it's just normal sex of two separate individuals getting off. So it's by satisfaction or the satiation of the physical senses and the consequent cessation of desire that this miracle of soul-union can happen. Obviously there needs to be great courage to engage in such practice, along with unwavering fortitude, implacability, faith beyond doubt and division. The couple must have transcended the normal courting, winning over, fear and material bargaining that normally constitutes relationship. We are talking about something very rare indeed.

I know I said we engage in such practice to "enter" turyatita, and that one cannot really "enter" the condition beyond all states. Rather I mean that "everything else drops away" leaving the underlying absolute unity that is always there. In order to achieve turyatita the two have to go beyond their own minds in a trans-egoic and not a pre-egoic fashion. So we are talking about one of those transrational things that can't really be explained with words. We can assume that there is an inborn intuition toward this supreme union if the love is great enough and the couple is competent in navigating their multilayered selves. Generally nirvikalpa is achieved when awareness is withdrawn step by step from physical body, astral body, causal body until self realization or oneness with God is achieved. In Silburn's book she points to the activated chakras being directed toward the heart chakra. I see it more of an allowing of the Heart to predominate and entrain the rest of us in its amplified/spiritual field. So in a sense it is when attention is drawn from parts, activities and phenomena and there is a singular merging of the hearts. Ultimately the "third thing" takes the couple over. The third thing being the supra-consciousness that resides in the two hearts made one. So there is the need to accept oneself as completely unknown and willing to be in-formed via this new force of consciousness. Hence the term "sacrifice." One could look at higher consciousness as being the stabilization of love and care. Success in relationship is the stabilization of love. Unless we come from such a harmonious family chances are we will have to learn how to love. I think the instincts of how to love are always there, but there is also an equal resistance in protection and coping patterns. So love in all forms is a sacrifice of this secondary layer of protection.

I think that one would have to be already acclimatized to kundalini and ready to work with it, this means that ego must be already somewhat compliant and positive, ie: open. With Grace things don't have to be perfectly aligned, for the alignment descends from on high, BUT we have to be able to let the lesser attributes and states drop away. Perhaps the ultimate in rationality is the willingness to suspend rationality, or to "go-beyond-it," that is. Through this union we are using the bodymind to transcend the bodymind. Kundalini, being the speed of spirit, makes it feel like we are growing at great speed as a couple, but if the two are not similarly activated the relationship will dissolve under the differential speeds. The individual that is not in an awakening will strongly seek to revert to their habitual speed as their inertial ego demands control. While the more activated partner will long for someone similarly lit with a vast potential for opening. Thus to prevent disaster we have to find a partner that is capable of matching our own expansiveness.

Inspired action, the spiritual drive of Eros is our own deepest Self, source and condition. The unquestioned response to Spiritual Eros is freedom, whether it be to produce a child, paint a painting, write a sonata, create an institute or fast. In order for reception and abeyance of Eros however, the inner man must be alive and not subdued by decades of unprocessed pain. What we normally assume as freedom, "the ability to choose," is not freedom at all. The texts say that those who engage in the joint nirvikalpa practice will experience hell unless they have a teacher - someone who has been there before, has a pure heart and is heroic. Perhaps work on the shadow in relationship requires these three allies also. Hell could be seen as the inability to live one's authentic Self. Freedom is the choiceless response to Eros whereby all our holons sing in unison. Individuals have to stand on their own two feet spiritually speaking. Sovereignty is the ticket to nirvikalpa, for one has to be sovereign in order to sacrifice. Sovereignty could indeed BE sacrifice: an ongoing daily stripping away of the lesser self. So in this sense sovereignty is synonymous with bravery. This is perhaps why the individuation journey is called the Hero's journey.

Love is not for the faint of heart! Sovereignty is none other than the realization of the Self or Soul. Why should this take heroism? Because it requires "transcendence," it requires faith and the ability to trust in the unknown and the unseen beyond the veil of awareness and the event horizon. Bravery takes the post-linear skill of humor. That is probably why the Fool is one of the most courageous and successful of archetypes—because he is light on his feet and dances with the opposites of light and dark with equanimity. Rather than conservatism, reactionary or even revolutionary, he is enjoying himself, simply playing the fool and dancing a tantric jig between the forces of light and dark.

Because it's the most differentiated (has the greatest depth) the spiritual level is the hardest for a couple to meet in. The ability to relate on the spiritual level is part faith, part grace, part piety and part courage. The homing beacon for *truth* has to be stronger than the one for *security*. Or rather security is sort in spirit not mind or matter. Consider also that the ego automatically resists and opposes, so if one's partner is going in one direction, we may react and go in the opposite. Spiritual

relationship transcends confusion, resistance, contrariness, defense, denial, and the 7 deadly sins. One would assume that in order to enter joint nirvikalpa both individuals would have to have dealt with the challenges of the various charkas: 1. Fear, 2. Guilt, 3. Shame, 4. Grief, 5. Lies, 6. Illusion, 7. Attachment. Thus we can see why joint nirvikalpa is such a rare event and is such a sure ladder for awakening.

If spiritual realization is "the stabilization of love and care," such that there is more energy and consciousness contained in the bodymind. Such complexity I would hope is intrinsically stronger, differentiated and more capable of maintaining its syntropic power without falling apart. Evolution itself is I think this ability to stabilize and build greater energy and consciousness that is "heroic" or impervious to the forces of entropy and decay. My feeling is that we all have a natural intuition for this but that it is most often blocked by attachment to sense gratification, fear, doubt, worry, self-ishness, thus the energy cannot build. That is why it's called a sacrifice because all this lesser personality stuff must be let go. The main thing with maintaining or abiding in the alchemy is to remain without "doubt." That is undivided in one's projection/appreciation of the other as Divine, thereby maintaining one's own divine "I".

Since we are talking about being Spirit illuminated, we cannot revert to our mortal mind without losing the connection. In the Sex with Eros experience I was The Divine, the energy was such that I was Divine without doubt, there was no me there other than this divinity. So the joint nirvikalpa experience would be similar although perhaps harder to remain in state, because of the usual self-conscious and archetypical mechanics that arise within relationship. But if the couple can realize that there is no separation between each other then this lesser psychological stuff is let go. Once doubt enters the picture energy is divided and is not available for lasering in the synchrotron of being.

It's a very high art not to get dragged down into sense gratification and remain in the Witness during this tantric act. Considering all that the ego normally has invested in sex, this is why joint nirvikalpa is such an expedient spiritual practice. Because it is the final challenge and breakthrough of the attachment to our ego-personality and its objects of desire and aversion. With this fusion of souls the normal self-centeredness is penetrated and the underlying unity of all things is grokked. Alchemy between the sexes is one of the most effective and expedient ways of reaching higher states, because the chemistry runs of its own accord beyond any mental cognitive interference. Also such alchemy between the sexes is transtemporal and trans-spacial—meaning that the chemistry can unfold even if the couple are separated by half a globe. If a relationship is based on healing and processing it just becomes a chore, however, at the same time a transformative relationship will allow the psychological mirroring for mental-social development and healing.

Romantic relationship is the fastest way to grow because everything comes up, especially during the pressure cooker of active kundalini. Relationship between man and women has the potential to be the ground of health and the basis to the evolution of consciousness. This is so because the alchemy that can be produced as a

couple is far greater and deeper than what can be achieved as single individuals…if the relationship is synergistic rather than entropic that is. Cosmic genius comes in pairs of opposite poles and one can look at the fundamental design of the universe to figure out why that is. Orchestration of the alchemy between the sexes is arranged in time and space by the Universe itself without our conscious knowledge. This syzergy can be known to us precognitively however through dreams and intuition from the deepest, highest place in us. We could say that Limbic Attractors operate at the subatomic, quantum and telepathic level through the Unified Field. When we are talking of the Unified Field which is prior to matter itself, the couple do not vibe in sync with the entire Kosmos, they in fact vibe AS the entire Kosmos. ie: Unity Consciousness.

For a tantric relationship with high level kama sutra both individuals need to be both fully engaged and distanced. Through heightened alertness and calm focus, which encourages a state of "allowing," "readiness" and "receptivity," by reaching a state of emptiness and immersion in the moment. It helps to have gone through radical kundalini awakening in order to pass beyond the mythic and personal interpretations and all the gender programs and ego-needs. What the couple is reaching for, or bringing into manifestation doesn't have a lot to do with the world as is, for kosmic-sex involves the decimation of who we have known ourselves to be. I am curious as to what a joint inner-conjunction event between a couple would be like, since when going through extreme catastrophic events by oneself, there is paralysis and ecstatic trance for the 1/2 hour or so. Also such ultra tantra would need to occur on "free persons timetable"...ie: not having to rush off to obligations etc...which would break up the chemistry and recovery period…aborting the alchemy. Plus the couple would need to be regenerated in nature, supported by superfoods, green-food and water intake after a cosmic joint event to help nervous system recovery. Thus when reaching for the Gods, you have to be fully supported by Gaia.

I think that we as a species underplay and "make petty" the game of sexual relationship, whereas it's really an awesome cosmic dance and the basis of conscious evolution itself. Perhaps we have not yet seen what it is to be human, and in love. True Love is something that must be fought for with every breath one breathes. It must be the ground of faith, and not be tainted with self-pity, doubt, regret, insincerity, and self-contraction. One could say that the measure of ones capacity for romantic love, is the same as ones capacity for God. Courtly love came into being when people started to understand the enormous power of romantic love to quicken and evolve spiritually. There is no greater force for evolution on earth than the alchemy between the sexes. We should not be getting "down" on romantic love, but looking into this awesome power that lies at the heart of us. Not so we can harness this power for profit and gain, but so we can LIVE IT and realize the deepest potential of our humanity. Full pituitary potency is essential to a sense of soul and experience of the psychic domain, thus the synergy of relationships help to prevent burn-out.

Spirituality is not separate from any part of life, for it is life. If our Spirituality does not address and heal our wounds, what does? All of life is an opportunity for spiritual awakening and our darkest depths hold the seeds of our greatest release into the light. We create events to initiate this awakening and are drawn to people and places that can initiate it. This call often defies all common sense and rational understanding. The transrational is scary because it is far more Real and holy than our safe, controlled, structured domesticated lives. Artists and mystics know of this as a daily experience and more people will have to stand the heat of the Real as we evolve as a species. The sexes/poles cause the meltdown and restructuring of each other towards ever higher levels of sublime function. Thereby we can deepen into the unseen unknown spiritual realm of existence beyond the veil of safe predictable human meanderings. The Real is so real, the courage needed to be there is uncommon, the depth and responsibility overpowering. Rebirth and restructuring to the next higher level cannot occur without surrender to the Kosmic nature of What Is. Thus we have to be willing to die to our former self continually.

Love, The Inner Connection by Carol Anthony is a true postconventional approach to relationship based on the I Ching.

The best material on taking love and sex into the spiritual realm is the work of Diana Richardson, *The Heart of Tantric Sex*, and *Tantric Orgasm for Women*. www.livinglove.com

Alchemy of Love Relationships, Joseph Michael Levry (Kabbalah and Kundalini)

Transformation Through Intimacy: The Journey Toward Mature Monogamy, Robert Augustus Masters

Sacred Pleasure: Sex, Myth, and the Politics of the Body by Riane Eisler

The Ecstatic Wave is the flow between dissolution and structure.

CREATIVITY AND KUNDALINI

"Thou art the sun which illumines the inner darkness of the ignorant. Thou ar the channel running with the honey of consciousness for the unknowing." Sankara, Wave of Bliss

Kundalini awakenings are peak times for visions, the muse, depth-feeling, insights etc...which can all translate to art, music, science or some form of creativity. All genius is riding on this kundalini current and is inflamed with the muse, God intoxicated, art-intoxicated. Enormous energies "could" be harvested. However in this "conformist" society we are such neophytes at handling the energy that it is hard to stabilize ourselves enough to realize the products of our Muse. The kind of kundalini awakening we have is specific to the way we have built ourselves. The scrapes and bruises life offers are beneficial also. All is fuel for the flame! We complicate matters with wasteful secondary fallout, due to our misunderstanding about kundalini and the religious superstition that has been lumped on the process over the centuries. Thus it's up to people that have initiated kundalini to share their experience with others, in order to reduce the ignorance. Each person that becomes "meta-adapted" to metamorphosis means a colossal jump forward for humanity as a whole. While kundalini is active we ignite those around us simply with our presence with a power that works directly from body to body, heart to heart—like a contagion of fire.

A "hot-burn" is when we go through a catastrophic full-on awakening. You can tell if someone is having a hot-burn awakening by the extremity of their symptoms, and the duration of the awakening itself. The **hot-burn cycle** can leave the nervous system incapable of actually performing the art, patience can leave one, precision destroyed, coordination crapped out. I for example was a better painter prior to my awakening; abilities will return with time and rehabilitation however. Usually for the 6 month peak we are in such an altered state that holding down a job in which left-brain function is required is often not possible. I got by through massaging people, which is a healthy thing to do while in the peak, and clients get to have heart expansion through state resonance…plus the scalar healing energy is greatly magnified.

Research may discover that a large % of hot-burners were abused or traumatized in childhood, making their nervous system more vulnerable to tipping into this kind of raging inferno. The body is literally throwing off tension, detoxifying and reforming itself in a way that obliterates the original trauma. Thus the hot-burn, though traumatic in itself, is one of the very best ways for the phoenix of soul to rise from the ashes of the past…to a truth beyond the constraints of social machinations. After recovery from the awakening itself, ones art could deepen in profound ways as we become liberated from our energy wasting pain-body and through the expanded awareness, clarity and prioritizing discernment that awakening provides.

There are many reasons why I had a hot-burn peak in 2000...unresolved childhood trauma, isolation, a diet too high in fruit, tension buildup through lack of sex and exercise, insufficient maturation of the nervous system by not having

a subtle energy practice (meditation, martial arts) and the fact that I was primed for the massive peak by a previous awakening in 1988. The trigger this time however was not my father's death and unresolved family issues, but devotion to Mr. Universal. My 1988 awakening although extreme also did not incapacitate me quite as much, so some of my best paintings come from that time. The 2000 awakening could have been equally as productive painting wise if I had thrown myself into the visual arts, with a profound teacher or social support to ground the energies.

Collectively we need to become so knowledgeable about Kundalini that we can ride its power without frying our circuits and burning out. The methods we often use to try and "control it" tend to be very damaging; such as eating heavy food, lack of exercise, increased sex, tranquilizers. This is negative adaptation reduces any potential evolution. My "work" is aiming for positive adaptation, where there is an original trust in the alchemy itself. Through positive adaptation we fortify the body while protecting it from the fire, facilitate the birthing process and using the energy productively (focus). If coping with kundalini is successful we should be able to endure a hot-burn without it detracting from our lives and remain at the peak of our creative potential…riding the wave of spirit into a new world.

Life is like surfing and opportunities are waves we must catch for our own evolutionary process. There is a charge of life force that arises with any new exciting event, be it meeting a lover, or a Eureka-like discovery. But if we fail to ride the energy of that charge we miss the wave and get ground into the quicksand. Each time we do this aborted surfing trick we get further and further from the life we want, and we get less and less excited with every new event. Having lost faith in the "process" of spirit we become generally apathetic or downright depressed and less like to catch the next wave that comes along.

Inner voices increase when kundalini is fired up, you could say it's our supersensoral Self speaking to us. My "higher" voice doesn't say that much but when it does, it's on a transrational, gnostic, Christ-like level and the words seem omnipotent and packed with "authority." Some people are particularly wired more for voice, others for visions, some for music. These illuminating intrusions are just the higher operations of the mind that we normally do not have access to, due to the strict repressive/filtering capacities of the ego. Increasingly humans will make the barrier between this higher consciousness and our normal operating mode more transparent. So that eventually as a species we will all be living at this higher operating level. As we evolve higher hardware is forming and coming into focus. A lot of people get confused and think that the voice of their deeper mind is another entity like God, spirit guides, angels etc…whereas they are really just channeling their emerging higher self. Some voices are from a consciousness way beyond our normal operating mode, others stem more from a lower condition say of biological distress when we have mis-eaten, are ill or going through a Die-off. You can easily tell the difference by what is said and the "energy packet" and bliss level that comes with the information. Visions seem to be the most life altering in physiology and direction. They pack a more psychedelic punch to permanently alter physiology.

The perturbation of normal consciousness by kundalini means we are more open to higher information from inner voices and visions. Perhaps due to increased communication between the hemispheres that supersedes the modular parallelism of the compartmentalized brain…and the contrasting functions of the left and right sides of the brain. Greater synchronization and coherency within the brain makes for "Whole-Brain" thinking. This revelatory chemistry and its higher information flow often arises in hypnognia or Theta wave…through synchronization of the enteric and head brains via the Schumann resonance. Because of the bliss, pituitary potency and expanded whole-brain consciousness, kundalini comes with an inherent grace and faith. The muse is naturally transpersonal and must be followed and the energy used creatively or the negative resistant ego (pain-body) will hijack the energy and use it for our self-destruction. What is not used for the light of Eros turns into the darkness of Thanatos. The daemon that is not followed becomes a demon that haunts us.

The Muse is our highest connection with Divinity. You will probably notice that the Muse always manifests along with an intense sexual tension. Of course there are infinite levels of the profundity to that which the Muse brings forth and this is reflected in the degree of "spiritual presence" of the particular eros heatwave that arises "as" the Muse. These cycles of peak functioning are tied into the tides and rhythms of the cosmos itself and the zeitgeist. **Zeitgeist** is a German expression meaning "the spirit of the age." Its literal translation is "time (Zeit)-spirit (Geist)." It describes the intellectual and cultural climate of an era, which ultimately translates into what we term The Global Brain, Overmind or world soul. The genius that is bought forth in any age, is determined by the psychic-spiritual tensions of the Necessity of the times. Thus we "give birth" to culture collectively, by bringing to light that which is growing unseen in the soil of our communal dream.

The terms muse, music, mind, men, mental, amuse and museum are all related. But by "Muse" we are not referring to simple associative thinking processes but to Gnosis…which is in a way "knowledge of the mind of God." The conscious content tends to arrive in our mind fully formed, and we simply transcribe it. Like Mozart's music in which he heard an entire piece all in one instant then wrote it down in "linear" time. Poetry can be like that also—it's all there beyond the conscious horizon and just flows out onto the page. Since the Muse is greatly amplified during a kundalini awakening, we must learn how to fit genius level gnosis into a flatland and subrational culture. The Gods may not get jealous, but people surely do. So skillful means and timing are very important in expressing and presenting the "higher" knowledge that maybe coming through us during awakening. More often than not you will have to sit on your revelation, and incubate it into a polished work of art or science which can readily be digested by "the people" when the time is right.

People get into trouble by raising kundalini without first building up the body's integrity and establishing the powers of inner-guidance. That is why I stress establishing health, spiritual vocation and the inner voice of God (Muse), the individual genius, as primary. Going after the gold without having a bag to carry it in is frankly as waste of time. The worst thing about post-awakening life is that

we feel bereft of our muse having tasted it so acutely—if we have tasted what it is to be a God—then we must set about feeding the God in us in every respect. You could say that spiritual growth is about getting out of the road and becoming a conduit for the flow of the Muse. The creative tension builds and the Muse is a heat-seeking-missile device that must be satisfied. That satisfaction does come in a Eureka, a finished painting, the end to a performance, an inner-conjunction or an orgasm...then there is a lull, and then the creative tension of the Muse builds again, on onto the next thing. Thus the authentic self rides a roller coaster ride of accumulating facets of Self discovery, through the play of dynamic inner-outer forces on all levels. Increasing satisfaction with the very nature of this hyperbolic tension and release process of the Muse is the mark of someone who is both tuned into their Self and tuned into the process of life itself.

Nature is perfect in her curves...the animating force of Divine Intelligence builds toward a completion. The reward chemistry itself provides the high and the period of coming down off of the reward chemistry provides the lull of recuperation. If these cycles aren't respected and you dive right into the next thing before the cycle has completed then you are simply NOT following the force of Divine Intelligence, but your own ego drives. In this way by not respecting the curves of nature we cut ourselves off from our superhuman abilities...ie: genius. The only viable spiritual form in the Universal sense is the individual and his Muse. *The Muse is the animating force of Divine Intelligence.*

The way through blockage, resistance and opposition is to raise your energy level and presence till the miasma becomes transparent, disappears and can be released. The Muse is more alive than any part of our life, for it is the seed and source of life and the driving force of our existence. It is also nonlocal and transtemporal... thus we might call it a hyperspace library with an omniscient librarian. The Muse has superpowers at its disposal, and will use whatever tools we allow it to access. If you let it the "Muse" will continue to help you clear all obstacles between you and the optimum energy levels. Infuse the Muse (living spirit) into all your suspended, stuck areas in order to become more intimate (present) with yourself and the world. Know that you cannot change the world, but you can change yourself. Spirituality in my mind is the transcendence of culture…it is an added dimension beyond cultural conditioning, through the building of the personal umbilical to the Divine/Cosmos, via the initiation of the solar heart. Spirituality is creative redemption...that is reclaiming the universal self from the abuses, stigmas, power trips, intimidations, seductions, manipulations and original sin of society at large. That is self love!

I think the next big jump in cognition will come when large groups of people have been through intense kundalini awakenings and have disembedded from the culture and the archetypal nature of their own minds. With this "internal distance" there is more forthright power and passion to bring the product of our Muse into existence. Without this focus on genius then there is no "added thing," no increase in evolution for the whole of humanity...no increase in sanity. Thus not only is there a spiritual imperative, but there is a moral imperative to follow the inner

dictates of our higher-conscience, to get over ourselves and the culture at large. Focusing on one's art or science and the timely revelations of genius, allows us to give up the painful preoccupation with ourself. Yet as we turn away from the existing culture we are apt to feeling like an unreconciled version of the Christ, uninterested and unwilling to play the games of existing society, and yet not established in a visionary lifestyle that is establishing the new culture. Yet we must be true to ourselves for only real people can make a new culture, that is not more of the same lies. Our personal contribution to the creation of a noble transcendent culture involves discovering what are the most important needs and values for enhancing personal and collective autonomy and fulfillment. Something you are passionate about and enjoy doing. When one is true to the calling the consequences cannot be predictable but when we obey a Global empathic directive, the results will be intense as we are aligned with Necessity.

INCREASING VISION, REVELATION AND PSI

Windows for visionary chemistry and psi occur in association with the cosmic (sun-moon) and weather cycles. The visionary, revelatory chemistry cycle is a subcycle of kundalini, occurring at particularly potent, high-energy periods of transpersonal cognition. There are certain things you can do to increase visionary consciousness including: a raw-remineralized diet, fasting, exercise in nature, travel, new visual stimulation, allowing the beauty of nature to flood your being, intense bodywork and yoga, hanging, regular periods of continuous breathing, toning, adventure like sailing or mountain climbing, music and heart opening new romance. In fact the same purification and enlivening practices one would use for raising kundalini and embracing Reality, will simultaneously increase the potential for visionary chemistry.

Also the door to **Visioneering** is opened by increasing one's felt-sense into the emotional body via Focusing, Rosen, Presence Process, Holotropic breathing etc... Along with this is the inevitable delving into your numbness and blockages; that is your fears and unconscious triggers of your archetypal matrix and shadow. Prolonged deep breathing in a float tank or bath, while clearing the mind and focusing all your energy and attention into the solar plexus (enteric brain), is a method of raising significant revelatory chemistry and for metabolizing, integrating and substantiating the chemistry and the "visions," so they can be bought into manifestation. These higher transpersonal, transrational layers of consciousness remain impotent as long as we lack the strength of will, rational tenacity and heart to bring them into existence. Only we can green light our own spiritual-creative genius. And only in doing so can we raise the operative ego and body towards the Divine. (BOK-2 includes a section on the tenets, how to and resources for Visioneering.)

The Visioneer's Bath—Take a long, tall bath, preferably at least an hour long. Use Epsom salts in the bath, some essential oils, a candle, listen to heart stirring music such as "Aeterna" by Constance Demby. Drink 1-2 qts of water during the bath. Drop your tongue into your belly, do the inner smile and focus the mind's eye on your solar plexus. Put one hand over the right-side of the heart and the

other on your solar plexus, breath into your solar plexus, empty your mind, feel into any pain or deficit you feel in your body. You will probably find the attention needs to be shifted to the thyroid-throat area and the liver so put your hands over these, put your attention there and breathe into these areas. The Visioneer's bath is useful both to increase the space and energy to invite visionary capacity, and for metabolizing and adjusting to extreme revelatory chemistry, ecstasy and the bliss of "hurricane season."

Trust in Thyself

The reality of the universe is not confined to our limited human laws, which in our hubris we think we can know as fact. The universe and nature is composed of infinite laws of increasing subtly and complexity. And the sooner we humble ourselves to realize this, the faster we will grow away from species suicide toward an unimaginably exultant future. The only limit is our imagination!

Paolo Lugari the founder of Gaviotas, a 40 year old ecocommunity in Colombia said that generally people have been hypnotized into thinking that a degree is more important than knowledge, but if the child is raised to be creative, he doesn't need a degree. He decried the fact that world has too many specialists and that we need more generalists, who can see all the connections and possibilities. Paolo complained that people don't learn how to think and that their curiosity is blunted. He believes that students should be taught through a hands-on village-wide apprenticeship in the carpentry shop, the factory, hydroponics, the tree nursery and even the hospital. Paolo stressed that through an experiential education within the community of the imagination (enlightened society), we teach our children that the world is one big opportunity.

"There is a time in every man's education when he arrives at the conviction that envy is ignorance; that imitation is suicide; that he must take himself for better, for worse, as his portion; that though the wide universe is full of good, no kernel of nourishing corn can come to him but through his toil bestowed on that plot of ground which is given to him to till. The power which resides in him is new in nature, and none but he knows what that is which he can do, nor does he know until he has tried...Trust thyself: every heart vibrates to that iron string. The magnetism which all original action exerts is explained when we inquire the reason of self-trust...We lie in the lap of immense intelligence, which makes us receivers of its truth and organs of its activity." ESSAY II Self-Reliance, Ralph Waldo Emerson

Sparks of Genius: The Thirteen Thinking Tools of the World's Most Creative People by Robert and Michele Root-Bernstein

Creating Minds: An Anatomy of Creativity Seen Through the Lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi by Howard Gardner

The Seer's Handbook: A Guide to Higher Perception by Dennis Klocek

Gaviotas, A Village to Reinvent the World, by Alan Weisman

PITFALLS ON THE PATH

This is a summary of some obstacles we might encounter on our journey toward supreme consciousness. We are each a spectrum of various degrees of pitfalls that make up our shadow side. The shadow playing into the light and the light playing into the shadow. Love-consciousness would be the light side that is half of who we are. The dark side would be the recalcitrant neglect of cues from body-mind-soul-muse regarding the appropriate care and love-consciousness for self or other. Shadow is perhaps the separate-self-sense's blind concern and focus on that which stops the heart from expanding to infinity.

• Pathological Regression
Retreat into infantile prerational uroboric fusion. Indulgence in dissolution and fragmentation; often due to lack of modeling, support, structure or clearly defined developmental framework of ascent that covers all sides of the whole human (ie: lines, levels, states and stages). Desire to let ones life collapse in the hope of being rescued. Retreat into depression and grief to escape more expansive perception and profound sense of being

• Running Away
Retreat and evasion through dissociation and denial. Inertial holding back to former modes of perception and being. Effort to pull energy down, back and in through substance addictions, heavy food, sedentary lifestyle and through avoidance of "opening" practices and therapy. Secondary fear chemistry due to negative interpretation of kundalini events resulting in panic, paralysis, stagnation, isolation and avoidance. Even running away from bliss and increased wellbeing with various forms of anaesthetization, self-repression and self-destruction. We transcend suffering by moving through it rather than away from it.

• Oblivion
Bliss obsession is a preoccupation and addiction to blissful energy, using it as a form of narcotic anaesthetization to avoid real world obligations, survival and development imperatives. Hazy, diffuse, forgetful, preoccupied, heedlessness, day dreaming, castle building, directionless. Lost in fantasy, trance, myth, symbol, story, meaning making, synchronicities and connections. Creativity at the expense of survival, through avoidance of rational discernment.

• Diffusion
Loss of left-brain focusing and hierarchical prioritization. Chain of Being collapsed. Codependency, dependency, false security in catering to the egos of others, coupled with lower-order giving through forms of slavery whereby ones highest contribution is lost in obscurantism, confusion, ambiguity, paradox, double-binds due to the collapse of the hierarchical prioritizing faculty. Indistinct, labyrinthine, vague, leaky boundaries, jumbled, enigmatic.

• Directionlessness
Stay focused on something to look forward to, something you want to do, build the image of that up in your mind, write it out and start making plans. As soon

as you engage yourself into some future fun thing, your body-mind-spirit will come together. Your energies cannot ascend coherently unless you are using active imagination in all five senses to visualize where you want to go, who you want to be, and what you want to do.

• Problem Mind

What you focus on grows. Gossiping or worrying about "The Problem" will generally only perpetuate and increase the problem and cause some form of shadowy backlash. Focusing on the problem to the exclusion of positive action, is moral-masturbation. Problem consciousness is a kind of social conspiratorial gossip, which holds energy down into our more primitive reptilian wiring. This undermines our immune system and prevents the high-energy states that build toward visionary chemistry. If we waste our energy in problem-gossip we lose the window of opportunity for revelation and gnosis. If a negative issue needs to be brought to the attention of others, try and use positive visionary solutions orientated language to frame the problem. This empowers both you and the listener, creates less resistance and speeds social change.

• Fixation on Internal Processes

Overly fascinated, morbidly curious, distracted by and absorbed in kundalini symptoms, psychic phenomena and newfound spiritual powers (siddhas). This compulsive obsession with symptoms and phenomena feeds inflation and interferes with relationships and functional utility. Possible secondary fear or depression over the temporary loss of adaptive functions and left-brain sharpness. Inability to disembed to perceive emotional storms as psychosomatic events of alchemical cycles. Excessive reactivity to conditions both internal and external.

• Inability to Face the Shadow

Freedom is only gained by facing the Shadow. Default states of fear, doubt, cynicism, apathy etc...prevent the sanitizing atonement of facing of the Shadow. This Shadow is infects and corrupts through an infectious bad-faith and negative condemnation of the world. It is a low energy defense strategy. To gain power over the Shadow it must be faced with an open heart that exposes the lower energies without being dragged down to resonate in the Shadow frequencies. Call this Spiritual Immunity...a priori incorruptible, perfect, sublime goodness, (ie: wisdom or Horus) and knowledge that the light of Heart-intelligence wins supreme in every battle no matter what the outcome.

• Chasing the Dragon

Blindly engaging in practices, stimulants, relationships and events with the aim of rapidly increasing the intensity and speed of the trajectory of kundalini opening. Thereby increasing the danger of more extreme peaks and valleys, which could result in tissue damage, depression, regression and burnout. Self destructive use of the alchemy for thrills, novelty and status. If you find yourself earnestly desiring to be somewhere you are not spiritually, turn your attention onto your ambition itself. Where does this spiritual lust come from and how are you creating inner-violence and hurtfully rejecting your present self? The goal can only be as good as the means.

• Spiritual Lust
At the Unified Field level evolution is occurring at faster than light speed. You don't have to lust after Spirit, for you are It and God is evolving at faster than the speed of light. Spiritual ambition in this context is a misunderstanding that blocks the natural unfolding of Spirit. For the vibration of spiritual craving prevents the realization of the a priori wholeness and limitless of Spirit. Spiritual craving is a self-inflicted deprivation state—drop it, and you are already home. Once there is a marriage between the subconscious and conscious minds the tension and urgency of spiritual lust disappears.

• Spiritual Ego
Spirituality pursued as an end in itself is simply the unctuous spiritual ego at work—which is fundamentally an issue of bad self-esteem. If we were raised to have good self-esteem, then spirituality just "is" and doesn't need to be chased after like some lost thing that is forever over the event horizon. Hopefully humanity will soon start operating from a mode of "just don't break it and it will remain whole." Then we can all stop wasting our time pursuing something that is already innately ours. Wherein we can finally get down to the business of living that which we ARE without the need for permission, excuses or apologies.

• Inability to "Stop"
In order to move faster, you have to slow down further...if you slow down enough you can move as fast as the Universe...faster than light speed. With any degree of urgency or tension however you will never melt into the Unified Field enough to marry the subconscious and conscious minds. This schism constitutes suffering, dissonance, chaos and lack of progress (evolution). This division between the inner Self and the outer conditioned personality leads to the homogenization of humanity into a painful Borg-like conformity where one can only "react" and learn to fit in through monkey see, monkey do.

• Inflation~Self Engrandizement
Expanded psychic ability, high energy and siddhas inflate the ego to feel overly special, superior and unique. This feeds into the separate-self-sense's illusion of an independent existence and promotes selfishness or "my enlightenment for me," or my enlightenment is "better" than yours. World savior, grand mission, martyr, new religions, global ideas, evangelical crusade. Visionary over-estimation of reality and potential, generating the propensity to forcibly impose ones will on the world. Reality moves at "its" pace not ours, if we try and urgently push our agenda it is counterproductive, the world of human ego forcibly resists us.

• Deflation~Self Diminishment
Self criticism is a reverse or negative egoism that generates paradoxical intent. Paradoxical intent being a con-voluted self fulfilling prophesy of reverse-will. Self-doubt is a surefire way to abort the possibility of success. We thus generate the level of success we feel we deserve by our degree of self-acceptance, degree we have resolved the tension in our pain-body and the degree to which we can love through the separation between inner and outer, self and other. The transparency to spirit

in avoiding either egoic inflation or deflation helps us to simply be Present and to see through the multiple escape routes we use to be anywhere else but here now.

• Belligerent Over-Sincerity
Only the coolest most elite teachers and teachings will suffice. To be worn as badges of power, prestige and manipulation. This is a mean spiritual materialism that beats others over the head with its sense of righteous superiority. The insensitivity to the universal principle of "Necessity" in spiritual unfolding, prevents a sensitive appreciation of infinite diversity of paths and of allowing others their own unique process free from critical disapproval. Spiritual Nazis spend a lot of energy keeping their ideology intact and inflict it on those around them; whereas no human can presume to know the path of another.

• Idle Speculation
False stimulation of the bodymind's appetite for excitement through wild, misinformed, confabulations of alternative realities like the 12th planet, alien intervention in human evolution, reptilian illuminati, UFO's, past lives, communicating with the dead etc... When in Reality things are so much more exciting, unbelievable and interesting than anything that could be contrived at by the sensationalist imagination.

• Internal Exploitation
Turning the sacred into the profane. Lack of integration between the levels, coupled with disillusionment about achieving "higher goals." Hence exploitation of sex/kundalini/muse energy for "worldly goals" of power, status or monetary gain. "Using" oneself is an introverted symptom of inflation. The more we exploit ourselves the more others exploit us. Treating ourselves as a resource without regard for our spiritual welfare.

• External Exploitation
Using powerful psychic and siddha powers to exploit others in order to fulfill ones own drive for power, status or monetary gain. Lust, usurpation, manipulation, dominator-hierarchies. Power mongering is an extraverted symptom of inflation. The more we exploit others, the more we exploit ourselves through turning the sacred into the profane. Treating others as a resource without regard for their spiritual welfare.

• Projecting Spirit
Transference onto Gurus, lovers, alien or channeled entities, angels, saints etc…in disownership of ones own alchemical process, soul and muse. Feels like a powerful force enacting on us from outside, sometimes seeming too great for mortal endurance. Externalization of internal archetypal aspects (Great Attractors) ultimately resulting in our reclaiming them as our own through the pain generated by the projection.

• Formalism
Entrenched preoccupation with appearances, rules, forms, formulas, dogmas, details, rituals and traditions of religious sects. Fanaticism, orthodoxy, fundamentalism,

letter of the word, conservatism, conventional, spiritual materialism, elitism/exclusion, need to "belong." Formalism feeds into power, pride and defense systems of the psyche. It is sacrifice of the inner living truth to an external ideology. As Ralph Waldo Emerson said, "Do not follow where the path may lead. Go instead where there is no path and leave a trail."

• Perpetual Seeker
Looking for wholeness and Self outside oneself. Fragmentation due to lack of coherent integration, individuation and boundary definition. Spirit always over the horizon, without serious intention of achieving Self, due to resistance to sovereignty and autonomous choice. Tendency toward projecting Spirit and formalism. Need for parental figures as there is an unconscious commitment to remain immature, obsequious and surrender ones personal power. Bottom dog trying to gain power through connection to a Guru or power figure.

• Addiction to Cognition
Inability to relax into the spaciousness of the transrational due to tenacious drive of the mind to "know." Unwilling to let go of focal, associative, analytic mind in order to transcend and include it in "whole-seeing" and full spectrum consciousness. Resistance to relinquishing the myopia of the representational mind and thus avoid uniting the relative will with the Absolute Will; perhaps due to lack to lack of faith or knowledge that there is anything higher than intellect.

• Absolute Knowledge
Loss of growth potential by closing off to new information due to the hubris of a premature claim to enlightenment. Rigidified bubble of the known as a defense against chaos, dynamism, dissolution and breakdown—thereby preventing resurrection to a higher order. Bombastic grandiose omniscience. Cults, obdurate, implacable, inflexible, rigid, unshakable, stagnant. Dogmatic scientific orthodoxy. Arrogance, self-righteousness, self-justification, vanity, pride, top of the heap. Forgets beginners mind due to inflation, hence pride makes one ignorant of ones ignorance—growth is suspended.

• Fear of Stepping Outside the Box
Giving oneself license to be oneSelf in a conformist world that is probably not going to appreciate what we have to offer anyways, now that is the challenge. Our spiritual vocation ultimately it boils down to what is "fun" and natural for us. We each have to "do" what we "are." It doesn't really matter if someone's flights of fantasy are a little "out there." Consider if Gaudi, Tolken or Mozart had limited their expression to what had been done before. The spiritually integrated "decision making process" happens from beyond the linear mind and self-identity. Thus there is a higher order of discernment that arises subliminally from soul and universal connection itself…this is genius. All geniuses path the way for us to polish our substance and show up as bright as we can be.

• Guilt Over Awakening

We need not fear retribution or persecution to be leaving "what was" behind. We need not fear punishment for being who we are to become. For guilt over higher consciousness is itself a thing of the past dogmatic information age, not the wisdom age to come. We do not have to apologize for fully showing up, because more and more of us will be brave enough to admit it. The psychic heat of self-realization creates an a priori subliminal activism that works to dissolve the fear-culture from the interiors of man. Thus the structures of flatland material enslavement will voluntarily dismantle. And a flowering of freedoms will erupt from the fertile luminal soil without the anticipated cataclysmic war of wills.

• Missing The Mark

Kundalini and our conceptual beliefs about God and spirituality are not what is important. What is of ultimate value to us is Life, love and relationship. If the preoccupation with our kundalini and our beliefs are interfering with our Life, love and relationship then we must do everything within our power of awareness to rectify this situation and set our priorities straight.

• Spiritual Bypass

"Premature transcendence—high level denial. Avoiding painful psychological issues by immersing oneself in a rigorous spiritual practice, or focusing on experiences of transcendence within the Kundalini phenomena to the exclusion of processing trauma from the past." Michael Dubois

• Abiding in the Absolute

"Holding the absolute dimension so tightly that we can't see all the relative learning that we still have to do. Trivializing the sense of relative impermanence amidst the artificial perfection of what can seem like a permanent awakening." Michael Dubois

• Blinded by Clarity

"When inner Vision and Intent become so clarified and overpowering, that the clarity itself fixates attention on a limited range of perceptions/interpretations/possibilities. Polishing the interpretive lens so thoroughly, that the lens itself becomes invisible as an object of perception." Michael Dubois

• Threshold Unreadiness

The ability to move from one mode of being to another requires a certain kind of state necessary for broaching thresholds. "Threshold crossing readiness" is itself is a condition of heart-mind best represented through say the symbol of Percival. Unless we are in a luminal state of receptivity we cannot shapeshift from one layer of consciousness to embody the next. The vibratory-resonant-energy of the new "higher" condition needs to fully impress itself on our atomic structure, reorganizing the physical form to accommodate the new zeitgeist and associated worldview. If we do not have adequate energy, plasticity and openness of tissue and consciousness, then we remain in stasis not able to respond fully to the cosmic evolutionary force that moves us. Spirit will give you what you need for your

development, but then you have got to be "ready" and to open to Eros, or you simply do not get the benefits of the evolutionary impulse.

Individual and Collective Pitfalls

The pitfalls to spiritual progress describe interference patterns in the growth of the individual toward being a cosmic citizen or mystic. By dealing with our individual pitfalls, we bring about a revolution in the world through the reduction of chaos, irrationality and narcissism. The Global Brain is only as sane as the differentiation, individuation and development of the individual neurons within it. Through overcoming our pitfuls we gain the self-transparency necessary to more perfectly commune with the other neurons in the collective brain. The pace of the emergence of the Superman and the refinement of our collective consciousness is increasing geometrically. Once we pull out all the stops, the pretensions, exclusions and primate power games, then the miracle of spiritual community will be readily apparent in daily life.

In establishing the new mode of global society we don't have time to fall prey to the default of habitual depression. Thus we must spread new thought, new energy and behavior that is uplifting and empowering to the "souls" of individuals. I think that depression is a kind of aborted "Self-response-ability." Those suffering extended depression get the first half of the equation right "facing reality," but they then fail to continue the process of emergent consciousness by going the next magic step and "transcending reality." That is allowing a transcendent reality to emerge through God's Grace. The transcendent reality becomes us when we fully embrace our destiny...through our willingness to suffer we transcend suffering. Some say that we only grow through pain, but I like to think we really grow by learning the lessons of pain, which forces us to lessening our separation and re-member the One.

Purgatory is normally seen as the purification of certain souls after death in order to allow entry into friendship with God, and consequently the eternal happiness of heaven. But for those living in active kundalini "purgatory" can describe the middle phase, where you can tangibly see and feel the collective hell "because" you have one foot in heaven. There is the Grace and openness to become cognizant of a larger reality, but as yet the seeker doesn't have the spiritual strength to fully embrace heaven while in hell, through deep recognition of the Tao and nondualism. Purgatory can be seen as the purifying fire of kundalini that slowly eliminates the ego, removing separation and uniting the soul with the Universal.

Perhaps purgatory is the burning process of conscience...not only does one burn up ones own sins, but burns up the sins of the parents and culture. As Jung says, "the only sin is unconsciousness." Thus if we haven't exactly been loved by our parents etc... then the fires of purgatory burn through this unlove (unconsciousness) allowing us to ultimately love ourselves. Till then we are somewhat at war with a world that seems out to get us. As the fires of purgatory burn, we become increasingly at peace with ourselves and the world. The successful navigation of this phase requires the submission to a vocation of reparations, regeneration and spiritualization in ones own life and in the world around one.

PART VIII

KUNDALINI PRACTICES

KUNDALINI SKILLS LIST

With a kundalini self-care program we are literally capturing the energies of nature and putting them into our cells!

Kundalini will permanently rewire the bodymind to release the stored tension of the body armor of the dispossessed self—for all we do to our self in the form of contraction, denial, negation, abuse, shaming, neglect in an attempt to avoid our True Nature. Kundalini is not a walk in the park, transformation is not for the weak and unstable—we must be physically, mentally, emotionally and spiritually prepared to handle the awesome force of kundalini. If there is a significant loosening of the armor without sustained integral practice and intent, then the armor will reinstate itself and rubber band back into place. The following tools of self-recovery and coping are derived from spontaneous arising solutions stemming from many years of processing kundalini, and merely hint at what is possible.

This list of meta-adaptation and mastery skills largely arose through shear necessity, the energy presenting its own solution. My personal list is not meant to disempower you from finding your own answers, for I think each of us can find whatever answers we need within ourselves. Since kundalini is the energy of Individuation it is the source of creativity and gnosis, therefore to find ourSelf we need not look beyond our Selves. A sovereignty that comes through another or needs the "confirmation" of another is not much of sovereignty is it? Hence to thine own Self be true. I think a combo of strengthening, stretching, shaking, aerobic, listening, exploring, extending, feeling, fast and slow, grounding and vocalizing practices to be the "best." Whatever we are called to do by the energy itself, and you will find that since kundalini is the force of nature, it literally commands you to be out in nature.

• **Gratitude**—gets the whole ball moving to melt the fear and resistance to life that has solidified in the body. It also helps deal with the disorientation and vulnerability inherent in opening oneself up to the world. We don't really know the meaning of gratitude until we experience the amplified love and heart expansion generated by a kundalini awakening. Gratitude is the measure of our aliveness and the "quality" of our Presence—the quality of our Presence, determines the quality of our life. Gratitude is sure fire insurance against stress, hypertension and depression, and it increases happiness and efficacy and synchronicity. With gratitude to move to the beat of Kairos rather than Chronos. Existence is defined by our ability to appreciate it.

• **Big Fun Practice**— Big Fun is the transcendent condition of metanoia. It is actually disembedded from body, mind, circumstance and conditions—it is a priori state or attitude—it is an unconditional perspective of sublime humor. Pursuit of happiness should be our highest goal. Positive emotions widen our worldview

and expand our resourcefulness, while negative emotions narrow and constrict. Happiness fires up the prefrontal lobes and so "play" naturally makes us more creative. Novelty is a permutation that allows reconstruction and refinement. Thus because it increases consciousness in stream of daily life Big Fun is our growing edge and our highest practice! I want to distinguish between the normal way we think of pleasure and fun and Big Fun. Big Fun is an upheaval of our comfort zone, we are not just playing around, we are Really Playing in full originality and resourcefulness. That is we are performing in perfect sync in the moment without hesitancy, ego blockage or shades of depression that would pull us back from our edge. Big Fun is life in the raw.

In Big Fun the "content" of our lives finds a peaceful resting place in the spaciousness of Big Mind and we have room to expand out to the totality of our lives periscoped into the moment. It is not the normal myopic-fun we try to have from a sense of deprivation with our addictions, substitute gratifications, entertainment, or social distractions. Big Fun is not of Thanatos, but of Eros so it is not had by "trying" but by "being." By alignment of body, mind and soul to live the life of the Spirit. And since Spirit is already complete Big Fun is a liberating radiance rather than a coying need.

Big Fun is transpersonal…it is transcendent of work, duty, family and relationships...it is a cathartic transmutation of daily life. It is the Grand Adventure... the dance of the Muse in the Eternal. It is the integration of the soul in ones lived experience, in the engagement of Kosmic Purpose...Big Fun is Nomind, Flow, "I and the Father are one," No-self; and the only thing standing in the way of Big Fun is fear. The Big Fun prerogative is to express ever more genuine and higher fun—to take fun where no man has gone before—to bring serious fun into the lives of others. To not just be pumped up on the hysterical pretend fun of Thanatos, but to be engaged in the real thing—Spiritual Fun (Eros). Big Fun is redemption, release, relief, purification, rarefaction, rebirth, redemption, forgiveness, salvation, sanctification, validation, absolution, atonement, transubstantiation, rebirth, innovation and revolution.

Big Fun is the most strenuous practice demanding the most acute growth curve and pious effort to remain on focus as to the next spontaneous Big Fun action. Our experience will evolve over time to more genuine and deeper forms of Big Fun. How does ones Big Fun fits into the larger scheme of things, will it be a force for social change and transformation? How much Big Fun can I allow ourselves? What are the consequences of Big Fun? What am I doing here if not to have Big Fun? What is Big Fun in the 21st Century?

• **How To Avoid a Kundalini Awakening**—Eat a heavy cooked diet, do not exercise or spend time in nature, waste your energy on alcohol and cigarettes, do not meditate, avoid spiritually advanced people, do not get into stressful or challenging situations, do not sail across the ocean or do anything remotely adventurous, breath shallow, avoid music, dance, drumming and raw food. Do not fall in love, and especially do not love any guru type. Do not feel any gratitude or mystical feelings. Have no awe over creation, cultivate a mean, small and nasty nature, do not use your intellect, and do not follow your muse or your heart.

• **Why Not To Avoid a Kundalini Awakening**—You can try to avoid kundalini if you are bent on avoiding your soul and your edge, because kundalini is just the energy of amplified life. It's the coil-essence of all the energy generating systems in the body at peak energy and communication. It maybe inconvenient, but I don't think one is truly alive without experiencing a kundalini awakening. It's the beginning of the mystic journey. Whether one is on an up-cycle or a down-cycle all kundalini activity occurs within a background of bliss. There is nothing to fear with kundalini, but our ignorance of it.

• **Hanging**—Hanging from the hips over a bar 10 minutes a day is the best place to "start" our kundalini skills practice. I think it the most significant factor in "sustaining" a de-contraction progress. Hanging is a general pick-me-up and the more pick-me-up we do, the higher our general operating mode. The higher our baseline level then the higher we ascend during an expansion of consciousness, and the more likely we are to have the resources for stabilizing, substantiating and gaining productivity from our excursions into deeper aspects of ourselves. It opens the pelvis to energy from the earth bringing new life into the legs, elongates my spine giving the nerves new life, and feeds the brain of course by being upside down. It allows the sympathetic trunks and plexus to be fed better with the decompression of the **spine**, and new blood/lymph/O2 entering the area. Hanging is a catalyst to metabolism and consciousness in general, due to increased blood to the brain, but also through extra lymphatic stimulation. The bar should be about 1.5"-2" wide; put a towel over it for padding; hang from the hips with both the arms and legs hanging free off the ground. Start off at 5 minutes in the morning, and 5 in the late afternoon or so. Do not do handing during major heart expansion periods, or during times of high blood pressure in the head associated with sympathetic nervous system hyperactivation.

• **Full Already Breathing Meditation**—Consider that the Golem in us is created out of deprivation, fear and pain. We can directly approach this state rather than working through the myriad of content within the Golem personality. You lie on you stomach in bed and breathe into your belly. On the in breath you think "Full" and on the out breath you think "Already." You keep doing this till the sense of need, Void and lack of Presence in the belly is relieved. I think half hour sessions would be good for a start, tuning in nightly. By lying on your belly you get a tactile sense of the "hole" in ones belly and by felt-sensing the words "Full Already" it's like calling ones spirit home. The more you do this the more you get a sense of what it is you are depriving yourself of, your "precious" Presence, and what being Full Already means in all facets of ones life. Happiness comes down to our ability to generate **unconditional joy** as our baseline state. The karma of our daily life reflects our capacity to en-joy ourselves...that is to fill ourselves with joy simply through breathing and being alive. I notice that if you are mindful of the air atoms hitting the nostrils, you can actually generate en-joyment. Then once is the chemical state of en-joyment, then the duality/samsara is not as convincing, we do not get "stuck" so much.

• **Solar Plexus Breathing**—Breathing and Toning are the number one kundalini coping skills. We can prevent morbid overextension of both the on and off sides of the nervous system by conscious breathing into the largest plexus of the body—the solar plexus. If we find ourselves either in a high or a slump then *long walks* focused on such solar plexus breathing help to integrate and balance the energy. This is the major way to cope with panic states, excess sex energy or excess energy in general when the sympathetic nervous system is hyperactivated. But also solar plexus breathing is especially important years after an awakening to aid in the integration and establishment of the spiritual will and prevent a morbid hyper-parasympathetic condition of stagnation and depression. The solar plexus is the seat of shame and one of the greatest areas that propagate self-division.

• **Rejuvenating Breath**—As you exhale: First you tone Saah, this empties the bottom of the lungs, then Huum, this empties the middle of the lungs, then Ommm this empties the top of the lungs. And you carry the ommm up into the head. Continuous Breathing or *Fish Breathing* is a type of regenerating breath that is good for energy integration during panic attacks, ecstasy and heart expansions**.** The mouth is completely relaxed and open like a fish; you breathe gently at medium pace in and out of the mouth without a pause between in and out breath. This is especially effective while walking. This continuous, nonpause breathing can be done through the nose also when needing more focus and brain power during peak kundalini activity; make the in-breath nasally and the out-breath throaty. How to deal with radical ecstasy I put at the end of the Heart Expansion section on my site. You know the drill, water, toning, grounding, green, walking and breathing. While on your **breathing walks** you can loosen up the spine by twisting the torso in rhythm with your step, or alternatively walking like Charlie Chaplin to loosen up the hips.

• **Toning**—Mantra is the main method of treating consciousness and is helpful for healing all levels of the mind inner and outer. The sound and breath combination help move cerebrospinal fluid which cleanses the brain and spine. Lie in a deep hot bath and hum one tone on the expiration of one breath. You will notice that your tone wavers, perhaps due to the spasticity of the diaphragm. If one continues using this technique regularly perhaps with both higher and lower tones, the diaphragm should strengthen and release its spasticity through the vibration. Joe Alexander says toning works better than any other self-healing tool. I cannot stress enough that toning and mantra are the most effective tools we have for integrating energy during an awakening and helping the kundalini to clear through blockages. Thus if you have any difficulty at all with kundalini I suggest half an hour of toning in the morning and evening…keep it simple, either Huuu, Mooo, Om or Eeee will do, or whatever sound you are drawn to. While toning generate a feeling of love and lightness in the heart! Toning helps to restore a harmonious higher frequency to our psychesoma, in a similar way that vortexing water helps to clear it from the memory of harmful pollutant frequencies.

• **Syncopated Toning**—One day I found a neat affect when I was sitting down by the river near a little waterfall/rapids…and started to Huuu. Then I toned vowel sounds very loud…and I noticed that when the tone is directed toward the rapids, the air filled with the sound of the rapids creates an interference pattern with the tone one is emitting and what ends up happening is a staccato vibration in the diaphragm created by the interference pattern of the merging sounds. In this way the effect of toning on the body is greatly amplified when the tone is directed at the noise of the falling water.

When each tone finds Atonement with the river sound the staccato effect is "felt" and heard. If the tone is slightly "off" in relationship to the river the syncopation effect doesn't occur. However the sensitive body-voice naturally tunes to the correct tone…nature the great tuning fork. The syncopated toning I found July 2002 when in extreme horniness with the kundalini...I went down to the river to try and get some relief and found that staccato effect...I was so blown away, I thought I had discovered a new law of the physical universe, of course this distracted me from my oppressive sex energy. Once the diaphragm learns how to do this you can retain the staccato ability even without using a river when the kundalini light is highly active.

• **Excess Grounding**—In July 2000 my Christ Heart or the Solar Heart was coming on daily as I walked outside and as it did I was being pulled into the earth with such force that I found it hard to walk. To ease the grounding I learnt to lie flat on the ground with my spine on the earth…this greatly speeds up the grounding process, so that when I stood up again I could walk around with ease. From grounding in this way there was less "pull" on my heart but the **heart expansions** would then break open my chest. To take the pressure off my heart I remembered that apes beat rhythmically on their thymus when nervous…this thumping on my chest helped to take the unbearable tension off my expanding heart. So when the gravity warping and grounding pull come one with the Solar Heart first lie on the open ground for at least half an hour, then thump the sternum. Also a repolarizing technique when one is radically being pulled into the ground, is to sunbath exposing ones genitals to the sun.

• **Increase Grounding**—Failure to ground involves a stressed or damaged nervous system. Grounding reduces the dissonance and depolarization of the nerves and reduces stress. We can reduce electric interference with electronic equipment by increasing our grounding. The primary grounding procedure is to lie your spine on the earth or rock for half an hour or more. Hang out at a negative ion rich environment such as a stream or waterfall while you do this and you get bonus points. The ultimate thing for removing extra static energy is the spinal shower, and also Dr. Fred Bell's *Negative Ion Showers*. Need I say that sex will also help reduce the kundalini's interference with electronic equipment, but it can also increase kundalini. Dancing and Reiki would be good. Put some more green plants around your computer, and if you are still having problems you might want to invest in an inexpensive negative ion generator for your computer room or an indoor waterfall.

Grounding exercises include lying on ones back and pushing ones feet against a wall or tree. Standing in **Haka** position like a Maori, which is kind of like a gorilla stance and stamping one leg at a time...actually doing the Haka itself with facial expressions, vocals, hand and feet movements is a big bonus...watch the All Blacks prior to a rugby game for how to do it. Of course there is the traditional method of grounding...horse riding, gardening or farming. Drive around in cars less, and spend more time outside of buildings in nature. Move to Hawaii or vacation there, it's the primary grounding place on the planet. Meditate at sunset on iron rich rocks. Hug a tree, or go to sleep under trees. Any kind of body-work, swimming or water therapy. Clay body pack. If you have synthetic carpet in your computer room it might be best to tear it up and put something more natural down, either a wool carpet or wood or something. Also for grounding get a kitty or dog to pet. Main thing is do not go to space during a kundalini awakening, or you might crash your spaceship.

• **Animal Yoga**—To reinstate our connection with the planet and the deeper parts of ourselves this practice of animal yoga is done in natural environments…in your back yard, a park or wilderness. First ground the body by lying on both your back and your front on the grass for a while. Then using the nature around you—the grass, the trees, the rocks—put yourself into various animal postures while feel-sensing yourself as that animal. Some possible animals to try are the dog, cat, frog, rabbit, seal, monkey, turtle and bear. Use the full tactile impact of the environment around you to get deeply into the various postures to become the spirit of the animal. Because it is an attempt to more fully enter the electromagnetic sensorial environment animal yoga is best done in the nude if possible. You will find this deeply reviving, integrating and centering.

• **Yoga**—The evoking and yoking of Spirit via the Grand Alignment of body, mind and soul—is the source of our muse, our noble destiny, our soul-work (Dharma), our security, our financial integrity/right livelihood, our spiritual worth/inherent nobility and our happiness. Kundalini Yoga can rebalance the glandular system, activate the brain, balance the body, release stress, unlock our creative potential and increase intuitive powers and inner calm. Results can be immediate, long lasting and cumulative, toward feeling more in control and able to deal with the challenges of life. Kundalini Yoga can help to stimulate and assist the functions of the lymph system, facilitate detoxification and support you while you move through the different phases of an awakening. DVD's on kundalini yoga will be vary helpful during an awakening for reassurance and for helping to clear blockages and assist exploration, steady progress and greater clarity.

• **Spinal Rebirthing**—I had a dream that I did a technique on a young woman who had been affection deprived in childhood. She crouched on the ground (in a squat position on her feet with hands on the ground in front) and I put my hands on either side of her spine at the back of her chest. She pressed up into my hands, while I pressed down against her. Her spine cracked about 10 times. This is perhaps one of the most effective means of releasing body armor.

This spinal compression/extension can be used at the bottom of the spine by pushing up into a therapists hands with the legs. In the middle of the spine by pushing up on all fours and at the top of the spine by pushing with the arms. It is the most cathartic and radical form of back release I have found. Theory being that the contraction can be released by overextending already contracted muscles. When they are relaxed they let go further than they were originally. Emotionally the burden is lifted once the tension is acknowledged, rather than carrying the load around for years...making to body numb with pain. With spinal rebirthing we "feel" into the numbness and recover what was lost to us due to the freeze response.

• **Presses**—To assimilate kundalini some strengthening integrating exercises might be in order. The upper-body wall press is perhaps the perfect exercise for integrating heart expansions. I found that when the autonomic White Shock made me "not in my body," then leg presses against the wall helped me to come back into my body. Pushing into a wall or against a doorframe with ones arms is similarly helpful. It pays to remember we can only go up in Spirit as far as we can go down into Matter.

• **External Pressure**—Theoretically a double layered pressurized suit, that you climb into and blow up with air would be good for stabilizing and taking us out of various contraction phases. The idea is to put sustained force on the exterior of the body so the most inner musculature thinks it can relax its grip because someone else is doing the work. Even a pile of bodies on top of one would probably work. Clay/wheatgrass body packs provide a massive holiday for the body, you feel like a new creature after them. It takes two trays of wheatgrass to make up enough for the whole body and one puts the mixture of bentonite clay and wheatgrass on and leave it to dry for an hour till the clay is completely dry. The *contraction* of the clay aids the lymphatics, immune system and circulation. It works to oxygenate, repolarize, detox, resensorize the skin etc...

• **Swan Pose**—Stand like the Maiden on the Prow of a ship, arms back, chest radically protruding and breath deeply into this pose. Breathe in through the crown chakra and out through the solar plexus. Adopting this stance as a general living posture will change ones wiring and life in short order. It especially helps overcome the sexual harassment, shaming and victimhood of living in this culture as a woman and for powerlessness in general.

• **Heart Entrainment of the Three Lower Chakras**—We have to suspend fear-reptilian reactivity long enough for the higher order to come into play. If we are not radiating love from our solar plexus then we are engaged in a power struggle with the world, fighting with fear for our "own" survival. The Cardio Muscular Release jumper cable technique can also be taken into the viscera by putting one hand on the spleen (liver, solar plexus etc...) and the other on the heart, and breathe the Heart down into the organ then eventually the tension held in the organ releases. Only the Heart it seems can reclaim the shocked organ and bring it back into the fold of the organism total in order to reduce inflammation and heal by changing the electromagnetics of the area.

• **Clearing Negative Attachments**—One method of releasing negative, primitive defense mechanisms is to CLEAR the solar plexus of its unhealthy attachments. Imagine you are floating in space and you have an umbilical cord connected from your solar plexus to those you are emotionally bonded to. One by one cut off the umbilical cord to each person and see them float away from you. When all the cords are cut do all kinds of flips, cartwheels, swimming movements and twists and turns to express your glee at being free and boundless in space, with no gravity weighing you down. This is one way to give up the reptilian—clinging/aversion level of bonding to elevate the relationship to the heart and higher chakras. The lower unconscious bonds diminish US all.

• **Affirmations**—Affirmations can be used like pointing out instruction to corral thought/emotion/state into more expansive directions. Often you might find yourself slipping down in mood or thought and need to catch yourself with some well remembered little catch phrases that pull ones state up by the bootstraps. In the book... *What to Say When You Talk to Your Self* by Shad Helmstetter, he suggests that such self-talk, used in reprogramming more idealized behavior and states, can be recorded on tapes. If one listens to such self-talk tapes the information tends to be absorbed by osmosis into the subconscious. Such a technique will also help to keep at the ready and fresh in the mind the catch phrases that will tune our being in the direction that we really want to go in.

• **Integrative-Empowerment Meditation**—This is simply focusing, first on the body, then mind-temporals, the heart and the soul-prefrontals with the minds eye and saying to each one: I empower my body...I empower my mind…I empower my heart...I empower my soul. What happens is that the focused attention forces one to breathe life energy into all these aspect of ourselves one after the other. The meditation is to help empower prepare one to walk through the barrier/threshold that separates one life era from another. That is to make changes. You can lie down or sit during the meditation and envision a special door, or gates that one stands before while doing this. Pull your mind away from present affairs and don't dwell to any "content" of the life journey. Consciousness can be focused and the body-mind-soul-heart infused with consciousness is a lot happier and whole than one in which dissociative amnesia and lack of "readiness" is occurring.

• **Building a Self-System**—Although it is useful to use all the guided meditation materials out there, we really need to build the sense that we are our own "creator." Both healing and enlightenment arise from going directly to the SOURCE with no inner or outer go-between. As Anthony De Mello say, "*In the things that really matter, life, love, reality, God, no one can teach you a thing."* Building the power to explore, initiate and choose inner content is the first step in a deeper relationship with ourselves. Active imagination and visualization work for building a self-structure, boundaries, wound healing, and creating trust, faith and openness. Developing a deeper sense of internal-self involves skills which are essentially not taught but are found within. The issue of self-determinacy and self-realization needs to be explored in this age of pathological leadership and oligarchy. Self-integrity,

self-integration, self-rights, self-healing needs to be built on a deeper foundation of anarchism and self-authority to be fully realized. The book "*Oneness*" by Rasha is particularly good for self-building, and Jerry Minchinton's *Maximum Self-Esteem* is the best book I have found of establish a strong self-system. *The Magic in your Mind* by U.S. Anderson is great for inspiration and building inner resourcefulness.

• **Fluctuating Temperature**—During kundalini there are several factors operating on our temperature regulation. First there is extra energy moving through the hypothalamus which controls body temperature. Then there is the fluxing back and forth of the parasympathetic and sympathetic sides of the nervous system. And also there is the change in metabolic energy generation in the mitochondria of nerve cells and other cells that can generate great heat at times. Plus changes in neurotransmitters like serotonin and histamine which regulate heat, and also the sex hormones themselves increase basal heat generation. Thus during kundalini we often fluctuate between being hot and cold with the activation of the different sides of the nervous system. Sympathetic activation causes contraction of the blood vessels and draws blood away from our body surface and into the skeletal muscles. While parasympathetic activation opens out blood vessels and activates the fire in the digestive system.

If you are too cold then avoid caffeine which contracts blood vessels; sugar and fruit also can make you feel cold. Take warming herbs like calamus, cayenne, ginger and spicy foods. Focus on deep breathing into the solar plexus. Go for a run, take a hot bath, sun bathe. Meditate and empty your mind of problems, worries or negativity. Imagine you are lying on a tropical beach getting massaged.

If you are too hot then drink plenty of cool water spiked with Himalayan salt and Biosil. Make lots of green drinks with cucumber, celery and spinach stalks in them. Pineneedle tea also helps the body to endure hot or cold with ease, as does horsetail and silicon rich foods. Motherwort, ginseng, dandelion and chickweed might also help with heat. Sit or swim in rivers or the ocean, lie in cold grass and put feet in an ice-cold foot bath. Avoid spicy foods. Use an icepack on your forehead, back of neck and base of the spine. Imagine standing in an ice cold waterfall while drawing heat energy up and out. Freeze some berries such as blueberries or strawberries and periodically pop one in your mouth and suck on it. Make a berry smoothie with mango, berries, bananas that have been frozen.

• **Eliminating Enervation**—Reduce stimulants, cut back on fruit %, increase greens and kelp for minerals, and drink heaps of water. Get plenty of nature and exercise. Preferably one has done ones major cleansing and fasting prior to the onset of kundalini. Avoid energy sapping people, situations, and environments and continually drop the contents of the mind and move onto your highest vision.

• **Raw Diet**—Cooked food and other denatured substances compound primal contraction through increased toxicity, free radicals and acid pH, which constrict all tissues and occlude the of life/light energy within and between cells. The body will need maximum enzymes, water and minerals during the decompression-expansion phase, or else the tendency is to retreat back our former hypoxic, acidic,

toxic, contracted/defensive condition. Nature's true needs must be addressed beyond our concepts and habits. The best raw recipe book is: *Raw: The Uncook Book*, Juliano Brotman and a great overview of the raw diet system is: *Living Food For Optimum Health*, Brian Clement.

• **Take Time for Rapture**—At certain times of the year, often in April and July, the circuit between the heart and brain amplifies and the bliss and symptoms of kundalini increase. Give yourself permission to go into rapture at this time for this is what the body is wanting to do. Lie in bed, listen to music, breathe, do CMR. Carry the hand positions down over the liver, spleen and the belly, one hand on the belly and the other on the back of your neck. When the body wants to go into rapture, follow nature and obey. If you try to keep going with busy-work at this time, you will just do a half-pie job and experience dissonance and fatigue because you are disobeying the highest organic directive.

• **Healing the Heart Hole**—This is a very direct way of addressing pain and deficiency in the heart. You just turn your etheric field from your brainstem back into the heart area at the back of your chest. With the mind's eye imagine lines of magnetic force turning out of your brainstem and looping down into your heart. This works rapidly and is amplified when used in combination with long walks; it can probably used in panic and emotional trauma situations especially if assisted or encouraged by a stable practitioner.

• **Spinal Shower**—The ultimate healing devise is a 3" thick column of warm mineral or Living-water which falls about 4 feet onto the spine, shoulders and head. It has radical effects in "unconditional meeting" and eliminating stored pain from the nervous system. While sitting under this flow one goes into a deep trance, fossilized pain rises to meet the water and is slowly eliminated. This facilitates healing of the neuromuscular system at the deepest possible level. The arrhythmic flow helps to break up structure and resistance. The effectiveness of the spinal shower in transforming the nervous system is largely due to waterfall electricity produced by the electrostatic charge of falling water, which repolarizes the nerves and allows neurons and all cells to detox and "let go."

• **Cold Showers**—Or jumping into cold streams etc… is essential to wake up the immune system, promote emotional strength and break victim-weakness mentality that perpetuates the destructive behavioral patterns. Baths and cold water dips are a lifesaver during kundalini awakenings for emotional strengthening and integration of the energy. Alternating hot and cold is one of the secrets for initiating kundalini.

• **Hydrotherapy Baths**—One thing you might try is something that I am doing during periods when I need to grow-flow rapidly, or to metabolize high kundalini and high revelatory chemistry—is to take long baths with 1/4 cup of Epsom salts. During these baths I drink 2-3 quarts of chilled sun-water spiked with a drop of Himalayan Salt. Don't forget the breathing, candles, plus music or audio programs while doing this. It really is the fastest way to both detox the body and to get consciousness flowing at much deeper and faster levels. The sun-water is made by leaving a glass bottle of filtered water out in the rays of the sun and moon for about 24 hours. Although modern science might not be able to tell us why at this point, this solarized water does have a sweeter, less metallic and champagne-like quality. I also think a sensory-maximization-super-spa with hundreds of jets may work to release fossilized tension.

• **Foot Baths**—Soaking feet in ice water when the kundalini heat or sex energy is high gives great relief. Also taking herbal baths or footbaths is stabilizing and nurturing. To energize use red clover, mint, peppermint or rosemary. To calm down use chamomile, lemon balm or catnip. For pain use ginger root, feverfew and white willow bark. For unblocking and cleansing use the leaves of burdock, plantain, yellow dock, yarrow and dandelion. Steep the chopped herbs in a big pot of water just off the boil, as though you were making a strong infusion. For Candida and fungal infection use ½ cup of baking soda in a footbath.

• **Sun Meditation**—I find most expedient for gathering the necessary energy, and creating the greatest background sense of bliss and well-being. It is vital for continuing on this difficult work of unveiling the inner self. Lie on your back on the bare ground naked, opening legs and arms to the sun, like a solar collecting dish, turn closed eyes toward the sun and draw energy up the spine. This is great while doing hot rock therapy and taking intermittent dips in a cold stream. Obviously it's not good for the skin to do this too long in the midday sun. Lying on the ground on ones back and exposing the genitals to the sun is the ultimate way of repolarizing during the exhausting grounding phase of the Solar Heart initiation.

• **Rock Meditation**—Meditating at sunset or sunrise on rocks (especially iron rich rocks) seems to have an amplifying effect on the meditation, such that it can help prompt an acute phase of kundalini alchemy. Samadhi is more easily achieved this way. You might also notice an intense grounding episode after doing this; if so lie the spine on the ground if necessary.

• **Hot Rock Therapy**—Collect various shapes and sizes of rocks that hold the heat from the sun well. You can build a healing temple space in the wild or use

the rocks at home. After the sun has heated the rocks put them over your body, on your stomach, pelvis, chest, neck. You can hold them to your jaw, temple and face or wherever there is congestion, pain and contraction. Lie and meditate in the sun with the rocks on your body (rf: sun meditation). To move energy through the pelvic area to counteract Western-numb-pelvis syndrome or sexual abuse numbness—pile some rocks on your belly/pelvic area and masturbate gently while trying not to tighten your stomach muscles. Orgasm is not important with this exercise for the focus is on moving energy through the pelvis/stomach without tightening muscles to force or control pleasure. This practice allows you to free your sexuality and hence your Being from trauma, ego, deprivation-mode and social conditioning. The wound will not disappear if you insist on operating out of the wound.

• **Rosen**—is a form of bodymind work which is essentially meeting contraction with unconditionally loving hands and presence. This is excellent for addressing the gross and current manifestations of primal contraction. No other bodywork seems to get the individual to focus on the reality of their deep condition and to face their truth beyond the strenuous ego-armor blocking that occurs. Rosen is the lightest of bodywork, but it was more excruciating than Rolfing for me, because I began to feel the pressure of my own internal contraction as prana (consciousness) was "allowed" to move through the tissue. (kriyas).

•**Bodywork**—Because of the restructuring that is going on in the sensorymotor cortex, cerebellum and brainstem sensory-motor body-centered psychotherapies like Hakomi and Rosen Method are particularly useful during kundalini awakenings. Reading: *Body-Centered Psychotherapy: The Hakomi Method: The Integrated Use of Mindfulness, Nonviolence and the Body* by Ron Kurtz. For advanced practitioners: *The Sensitive Nervous System*, by David S. Butler. If you need help in uncovering and releasing the armor that is preventing a full experience of life, perhaps you could find a Bioenergetic therapist in your area. Healing the numbness of the abandoned/betrayed child requires actually touching the pain that brought on that numbness and then filling that void with life, blood, love and spirit that we never received. It maybe painful to do so, but ones closure needs to be touched and transformed in order to "come alive."

• **Belly Love**—During meditation if one turns the eyeballs directly down into the cheek area the energy flow is directed down into the belly. The belly is then nurtured with energy and a greater connection is achieved between the heart and the belly increasing digestive health and emotional equilibrium and awareness. The CMR jumper cable of one hand on the heart and the other on the belly will help direct healing love into the area.

• **Mindfulness**—must address our daily habitual responses, in a pervasive contraction watch...The egos habits of mind rule the body so we must open and reveal the mind, differentiate from the mind to free the body. Naming each thought as it arises allows us to differentiate from the reticulating mind: defense, justification, worry, blaming, avoidance etc…

• **Visualization**—The visual neurology plays a huge role in the integration of our being. Spontaneous visioneering and dreaming is good for transforming the atomic memory level and as a diagnostic tool. Affirmation or positive mental outlook is essential for improved immunity and the strength needed to change and grow. Intensive visual stimulation and natural landscape stimulates our inner visual cortex, as does spiritual relationship. The body integrates/heals through the inner-visual cortex…or during healing images appear in the visual cortex. Sun meditation is excellent for increasing the power of inner visual healing. Hang out with genuine active artists and you imbibe the visionary vibe.

• **Death Phase**—There is a senescence phase of spiritual metamorphosis after a solar heart/kundalini movement. The main cycle of this death phase is 3-4 days in which staying in bed and drinking water is all we are often able to do. It is important to go with this phase and not try to fight it. The more we go into it in feeling and inquiry the more we will emerge a larger being after the bodymind has finished its radical catabolism of its former pupae structures. Lying in the death pose in a warm tub of clay inside a cave for several days maybe an "advanced" form of this death work. I would say that juice fasting in combination with this death cycle would be the deepest and fastest route to transformation. Its the type of thing where if one could lie around in a spa for a couple of days one's whole life would change...but we just don't give ourselves the chance to completely collapse, and collapse again...as much as we need to, to be reborn.

• **Dealing With Torpor**—Paradoxically the chemistry of awakening can lead to a down cycle of anesthesia, apathy, lassitude, lethargy, narcosis, numbness and stupefaction. The torpor can be overcome in the same way it is usually done... jumping in cold rivers, oceans, saunas and cold showers, walking in nature, lying on the ground. Percussion massage, tapping the head and face, new novel experiences, dancing. B complex vitamins, 6-8g Vitamin C per day with DHLA (dihydrolipoic acid), raw foods, green vegetables and wheatgrass juice. Constant stretching, moving, exercising throughout the day...deeper breathing. Drink lots of water, up to 5 quarts a day and pop spirulina tablets throughout the day.. You have to turn your consciousness into the torpor, ask for insight, and invite yourself to be over it. Try Yerba mate tea for work, but don't allow yourself to use substances stimulate yourself out of torpor, for it requires a comprehensive enlivening program that includes supernutrition, movement and breathing as its foundation.

• **Loving Self-Talk**—One has to reclaim one's full sexual power from unconscious social fear-shame, in order to be a spiritual autonomous being. That is we have to rise above the impact of Mummy's and Daddy's controlling (Superego/judge) on the bodymind-soul, in order to be reborn as the Self and be in communion with other Selves. In this way we transcend culture. Spirituality is the free-flow of conscious energy in the body such that there is no division between the individual and the Kosmos. Even if we do not use our bodies for sex, we must be fully sexually ignited in order to be whole. One way we can do this is self-talk. To work against the gravity of contraction and the winding down of energy...throughout the day

we can say to ourselves: "You are so luscious, so beautiful, so sweet etc..." Just as though we were our own Beloved. This counteracts the social forces that would seek to use us as an object for the "machine." For a while it is counterintuitive to do this, however, this is not self aggrandizement, but merely attending to the needs of the bodymind to grow in an environment that is conducive to the fluid circulation of flows, hormonal production and neuronal strength. Liberating our soma in this way, we free up our lives for depth, precision and evolution. It must be done to overcome the cold claws of Thanatos that attempts to make us infinitely smaller than we really are.

•**Understanding Cycles**—Perhaps the most important aspect to grasp in navigating the evolutionary energy, is that it is hyperbolic in nature, as is all nature. After the grace of the influx of Light, the darkness is entered. After tasting the stars one has to deal with the mud of ones existence and convert that mud into the lotus. Spiritual mastery involves rising equally to the challenge of both the light and the dark. After the light backs off there can be depression, achy body, sense of emptiness and self-pity. And if you are not aware that this is all just shifting cycles of chemistry there may be disillusionment, despair and self-hatred. Working with the dark means breathing positivity into the feelings, rearranging beliefs to be more empowering and giving the bodymind plenty of down time and resuscitation in nature.

• **Cultivating Emotional Equilibrium**—Since it is the degree of emotional tension we hold which determines whether our emotional responses are healthy or hurtful to us, we should cultivate emotional equilibrium. That is the absence of accumulated emotional tension, so that we can experience equanimity. We reach this emotional equilibrium by "building energy reserves," while "discharging tension." This is accomplished by diet, fasting, sports, martial arts, intense vocalization, psychodrama, addressing relationship problems, meditation, toning etc.... A state of high emotional tension is a weak and vulnerable state in which learning and Being is made impossible through discord.

• **Queen and King**—I found that during meditation to direct ones eyeballs and ones attention back into the **brainstem** that this profoundly increases ones steadiness, centeredness and nobility. Brainstem mediation is good for centering, soul recovery, boundary formation and general healing of the entire bodymind. Perhaps it focuses consciousness in the occipital lobes which are serotonin based, contributing to integration and harmony.

• **Soul's Posture**—If one walks along unconsciously, usually the shoulders are a little hunched and forward and the chin is out. It is exhausting to the bodymind to be in this posture-state. When one remembers the Self pulls the shoulders down and back, tucks in the chin (neck-lock-posture) and walks being pulled by an imaginary string at the top of one's head…one immediately enters the noble state. It is effortless to walk in this fashion, there is infinite energy available…one just needs to be mindful enough to catch oneself when one has slipped into the ego's walk. This shows how close the distance between hopeless-deprivation and faithful-

sufficiency. The Self embodies the body differently than the ego does. Mindfulness helps us build the bridge of ego-Self in all our thoughts and actions.

• **Outside in Nature**—If you are "working with" your awakening you will probably find that you are drawn to be outside in nature as much as possible during the day. This is a compelling intuition which should be followed. One's life field is greatly expanded while kundalini is active and being indoors, especially in steel framed and concrete buildings, we notice that it feels like we are separate from ourselves or cutoff when inside buildings. The energetic charge and metamorphic process works more profoundly, deeply and with greater ease when the body is under an open sky, in touch with the bare earth, around moving water and fields of green. "…the earth's natural field is severely distorted or altogether eliminated while you are inside." 198, *Subtle Energy,* John Davidson.

• **Sex in Nature**—Going nude in nature really helps to empower our full senses/sentience. The Kosmic human starts returning as soon as the body is placed unclothed in a vibrant natural ecosystem. This has something to do with the opening of the human energies fully to the larger energies of earth and Kosmos. Also you might find that when you do go into nature thus, and try immediately to have intercourse, the bodies are not receptive to sex in the normal self-indulgent soft-bed style. The bodymind first is engaged in integrating on a higher plane and needs time for "assimilation" of this super-sensory or aboriginal human condition. So one has to go into nature many times in the nude to elevate oneself to these higher energies, to make them conscious and to experience what full sensory intercourse is all about. Being so used to ego-driven usury sex, one has to wait for nature's timing of these higher experiences of autopoietic Soul-sex.

• **Handling Increased Sexual Energy**—Kundalini awakenings mean radically amplified sex energy, so how do we deal with this? This entire list of kundalini skills will help strengthen our ability to handle sex energy. The irony is the more one works on integrating ones sex/kundalini energy the more it can flow, but we just become less wimpish about handling it. Once we "turn toward" it we can ask it to show us what is to be done; we "allow" it to transmute us. Toning, the microcosmic orbit, breathing and drawing the energy up the spine really helps... toning can be a lifesaver both when we are under energized and over energized. Note especially the need to ground your body through nature, lying on the ground, jumping into streams etc... It is most important to ones energy toward some higher creative project or to assist others. During the height of my 2000 awakening the only way for me to integrate the sex energy was to walk for hours outside each day for a period of 6 months or more. Normalization/integration of the excess energy took about 5 hours walking in nature a day.

•**Supra-sex Meditation**—Perhaps the fastest method of accelerating metamorphic alchemy, involves sensoral-imagining using the inner kinesthetic felt-sense of the body to imagine one is having sex with a cosmic lover. This cosmic lover is the "soul" making love to the body. This only really works when kundalini heat is already highly active. I don't think there is any way faster of refining, defining,

integrating and transforming the bodymind over from its more gross form to its illuminated form. The key point however is that Supra-sex Meditation doesn't involve any touch, any normal sexual stimulation or any orgasm…it doesn't even necessarily involve visual fantasy. Go easy though, especially in the beginning you need days, weeks or possibly even months of integration time after each session, depending on how conducive your social environment is to you actually "showing up." I have done this a couple of times spontaneously and both times I woke up in the morning, and my body looked alien to me, like it was somehow more "formed" integrated and alive than I had previously known it to be. It is the sensation of consciousness, that is the "feeling" of directed consciousness in the body which transforms. Emotion far from being a primitive or lesser element of the Human is the very force of atomic resonance, reconstruction and communication of matter-energy-Spirit. Spiritual integrity entails an increase in listening to body, mind, soul and earth via the evolution of Emotion itself. When we evolve to the subtle level we speak with the e-motion of the Earth herself....God-Speak.

• **Working with Excalibur, the Silver Cord**—Stand tall with shoulders back , breathing slow and deep; chin up, stomach pulled in, pelvis tucked under, with feet about a foot apart. Imagine a silver-white lightening rod extending through your spine, shooting up into the sky from the crown of your head, and extending deep into the ground from the coccyx. As you draw energy in to the Silver Cord it begins to glow and pulsate, dispersing energy through your body. By plugging oneself into the cosmos, this lightening rod connecting heaven and earth generates energy that can be used for healing yourself or others.

• **Left-brain Freeze**— I am still not clear as to what exactly the left-brain freeze is... the numbness might even be caused by endorphins, I only usually get a noticeable freeze during peak chemistry now, but it is there all the time to a degree. I will work on the freeze symptom more in BOK 2 to try and come up with some answers... it is a core symptom of the larger anhedonia - full body numbness problem that develops during the down side of a huge awakening. But the left-brain freeze seems to be so tenacious that our measures barely touch it. Until we know exactly what it is we just have to experiment around with our methods of alleviation. Various ways to deal with it include friction rubbing on the head and neck...bend over and rapidly rub your fingers back and forth along the scalp and neck. Put an alternating hot/cold shower on the area. Clearing the sinuses by pinching top of the nose and deep breathing. Tapping the left face, using an electric massage tool. My left-brain freeze seemed to be associated with the spleen and possibly through activation of the special metamorphic activity of the immune system. So tapping and centering love and breath in the spleen and thymus might facilitate the chemistry, even if it doesn't alleviate the freeze symptom. Lymphatic massage of the belly and neck will also assist the process, as will rebounding.

Try putting your feet in a footbath with 1/2 cup of baking soda once a week to alkalize your blood, or find some good mineral pools in your area. Rub in to face neck and even scalp a mixture of Rosemary essential oil, Beta Carotene (Dunaliella Salina), Borage oil, Vitamin E. This might help with the dropping of the facial

muscles on the left side that can occur with the left-brain freeze, to help to reduce the severity of this loss of muscle tone and nerve function. For me at least there was a slight interference or loss of nerve function to the facial muscles which caused a mild stroke like affect to the left side of my face. I suspect all the neurological herbs will help, Vitamin C, Alpha lipoic acid and DMAE and Choline and B vits. Lethicin, Omega 3's, fish oil and greens should reduce nerve damage. I suspect that acupuncture and acupressure massage will help maintain facial tone.

• **Ecstasy Meditation**—I found this meditation while developing a painting for Michael DuBois, the webmaster for biologyofkundalini.com. I was drawing an image of a woman in ecstasy so I needed to put my face into ecstasy to get the right position of the features and the lighting. So lying in bed I held up mirror up to my face while attempting to put it into ecstasy. Needless to say that when one does this the crystal chamber does light up, and the lesser mind is obliterated. I found out that if one does this meditation prior to sleep using the mirror as a biofeedback machine to ensure a perfect facial representation of ecstasy, that sleep is much deeper. Also during the day as I was walking down the road, I remembered the ecstasy meditation and could put myself in ecstasy on command. Ultimately if done consistently it should change the facial features more toward happiness, which will alter ones social relationships and personability. The Inner Smile Meditation works in the same manner.

• **Enduring Ecstasy**—Ecstasy can indeed make us dysfunctional especially if we have PTSD from childhood. If our brain is geared toward anaesthetization through massive endorphins and intense pleasure, this can interfere with productivity and undermine basic drives, ambition and direction. We can however use the ecstasy as a means to become increasing lucid instead of oblivious. The trick to enduring ecstasy without being undone by it is to penetrate into the stillness with intent, questions and goodwill. The ecstasy then becomes a means to not to avoid reality but to directly perceive it with greater depth. Tolerating and allowing ecstasy is perhaps the hardest spiritual task, for it requires us to let go of our known self and worldview.

The short list for tolerating ecstasy is to relax, belly-breathe, ground feet, focus on the Hara, draw energy up the spine, prolonged toning and long walks. You also have to stop trying to collect the kinesthetic sense in the head into a pinpoint of concentration (digital mind) and to generate the sense of serenity in the temporal lobes. The microcosmic orbit of circulating energy around the body, up the back and down the front also helps. But most importantly you must not get "upset" about the inability to focus on keeping all your ducks in a row. Baths, catnip tea and extending the energy to others are some other tricks that help in enduring and metabolizing extreme ecstasy.

• **Haka**—The haka is a Maori war chant that precedes battle, in order to motivate the warriors psychologically and to threaten the enemy. it is delivered with loud shouting and forceful flexing arm movements, to invoke the god of war and to discourage and frighten the enemy. It involves fierce facial expressions and grimaces,

poking out of the tongue, eye bulging, grunts and cries, waving of weapons and rhythmic thumping of ones thighs, biceps and chest. The hands, arms, legs, feet, voice, eyes, tongue and the body as a whole combine to express courage, annoyance or aggression. The haka is an excellent kundalini tool, both for raising kundalini, freeing its movement and for grounding and integrating the energy. It will also enhance confidence and improve the immune, lymphatic and circulation systems and clear the lungs. Also will also eliminated stagnant energy from the nervous system and aids in the liberation of pent-up or repressed emotions. There are plenty of version of the Haka on web videos.

• **Self-care Shortlist for Dealing with Social Stress—**The way through blockage, resistance and opposition is to raise your energy level and presence till the miasma becomes transparent, disappears and can be released. Know that you cannot change another, but you can change yourself. Light a candle, put on some music (Koyasan - by Deuter) and take a long path with Epsom salts. Do this at least every second day for a while. Drink extra water, with a pinch of Himalayan salt in it...up to 5 qts a day. Do stretching daily, do spinal rolling with the **Fitball Rollar** (www.balldynamics.com) and hang if you can find something to hang on...lie on the grass 1/2 hour a day doing breathing, take long walks in nature if possible...do some feet stomping, wall pushing and do boxing motions coordinating the whole body...check out the Haka war chant videos on the web. Beat on your chest like a gorilla while making gorilla sounds. Social tension (especially shock) tends to get caught in the glut muscles, so bend your knees – stick your ass out and wiggle it like a duck. It is the running impulse that is being fired up, so perhaps the best thing would be to go for a run. Rolling on tennis balls on the floor also works for the gluts. While slightly bent jump from foot to foot real fast as though you were warming up for a game of sports. Focus on rooting your energy into the ground through your feet, build the sense of a cord going through you and extending out the top your head to infinity, and generate energy in your Hara. Also to work the tension out the gluts lie on your back and push your legs against a wall or tree. Eat extra greens and sprouts. Take 1/4 tsp of magnesium citrate with a large glass of water prior to bed if you are constipated...which often happens when we are under some form of persecution. Do drumming and go dancing, find someone to laugh with, check out new environs, a new movie and get some positive stimulation. To learn how social stress is the most pernicious and pervasive form of stress watch Robert Sapolsky's lecture on google video. He is also doing a documentary on primate social dynamics with National Geographic.

• **Social Immunity**—In rational mysticism, we do not sacrifice the best in us to the worst in others. Instead we lead by example to show others how they too can enter the Kingdom of Heaven. In her books Ayn Rand is talking about higher selfishness in the effort to rise above mediocrity and degradation of the Self by a caustic and ignorant social body. I call this social immunity. The way to approach disharmonious harmful vibrations is to fully acknowledge them, but to not resonate in their frequency. To do this you need a transpersonal, transanthropomorphic "scientific" viewpoint and to maintain that universal objectivity throughout all the

days of your life. It is rather hard to be reactive and get pulled into and bound up to Mara (evil/desire/aversion) when you see and feel everything from a Universal vibration. Rather than the simplistic notion of non-judgment, you clearly see the "devilish" mechanism of the bite/trigger/dig, but you do not get sucked in to believing that it has any relevance to you and where you are going.

You can work out what is happening, by looking at human affairs through primate psychology dynamics and learning the neurochemistry involved. Simply stating what people are doing to their face, is just likely to cause more trouble by engaging the negative ego still further. Then by knowing the way human primate dynamics work on the neurochemical level, you can use skillful means to get "on top." Such as using energy, consciousness, camouflage (clothing), the power of the "voice," exercise, nature and Presence in a non-reactive fashion. This way you can take little notice of and do not dwell on the present machinations of human affairs...to "cut through it" like a knife--as irrelevant data. A temporary dissonant note in the almighty hum of the Universal song.

As we deal with the collective shadow in this fashion, this will allow for the creation of new inner-human technologies to deal with madness, shadow and repression. In dealing with the uninitiated—don't let the narrow-minded arrogance and tall poppy syndrome stop you from being all that you can be. The inertia of conservatism comes about through lack of spiritual development/initiation...fear of the unknown and consequent control and low self esteem. Just call the demon by its true name and it will lose its fire power. The growing edge is to work out what is triggering you in your daily interactions and what you can do to bring more energy, love and awareness to the situation. Do some energy practices, insight meditation and visualization around a successful outcome. Put a sign up on the inside of the door so that you can establish a positive affirmative stance toward this trigger every time you leave the house. That way you can maintain a strong vision, energy, stance and game plan. *The Way of Aikido* by George Leonard.
Hara: The Vital Center in Man, by Karlfried Graf Von Durckheim.

• **Joy the Secret Weapon**—Joy is the main secret weapon in dealing with social aversion, because it opens up the throat chakra to allow positive self-expression and prevents the cut-off of the brain and body (anaesthization) that occurs when confronted with negative shadow. Always remember, to not become a victim, generate a perpetual bubbling joy in the throat and general amusement about life. J*oy: The Surrender to the Body and to Life* by Alexander Lowen

• **Savasana, or the Death Pose**—Do we have to continually be confronted with death in order to grow a higher relationship to it? Perhaps like life, mere exposure does not invariably mean the evolution in depth...depth is found through the desire for "feeling" into the fundamental ground of things. In this way the Death Pose is really the maximum life pose, because it is the "ceasing" of the psycho-somatic resistance to our existence. Best done lying in bed in the dead of the night, you empty your mind and focus on dropping all holding such that one "melts into the Uni-field." There is nothing there but the sense of infinite depth and unity, all perception and sensation becoming one with the Unified Field. There is nothing

holding us back from the One—in this there is ultimate security. Integrity—that is sincerity and authenticity arise in the absence of "doing." It is the "feeling," the sympathetic resonance of cells melting into the Unified Field that transforms us and our world.

• **Vortex Meditation**—Spiritual myths and laws (formop) are "external" training in the ability to act automatically. But we need "inner" training on the ability to act in Kairos...that is in sync with the universe...in God's time. I found one method we can do this, I call it Vortex Zero point Meditation! First you go watch some *Viktor Schauberger* clips at google video and look for the upward twisting vortex and imprint this image on your mind. Then while lying in bed, deeply rested, visualize the upward pulling vortex arising from your third eye, as you draw up all your body's energies into it. You will find all thoughts and concerns disappear and the body may go through a series of "sudden falls" into increasingly relaxed zones as you do this powerful upward spinning tornado. Remember I said that toning helps to restore a harmonious higher frequency to our psychesoma, in a similar way that vortexing water helps to clear it from the memory of harmful polluting frequencies. It is the "*movement*" feltsense of this vortex meditation that operates in a similar fashion to "wipe the slate clean" allowing more synchronicity with the spontaneous unfolding of reality. It also creates bubbles of joy in the throat and jaw, which supports higher hormone regulation.

• **Galactic Meditation**—Immature forms of will to power such as submission, seduction, aggression or manipulation, are not going to evolve humanity beyond the pathological hypermasculine. Thus we must generate more universal energy states and higher forms of will to bring about necessary change. In the movement toward a galactic species, we can use the sense of the body of the galaxy (Hathor)—the immense power, beauty and impartiality of the spiral arms of the milky way—to align ourselves with the greatest depth of wisdom and substantial Presence within (Horus). First get a felt-sense of the galaxy itself and your location in it. Then pull your being into the galaxy itself and "become the whole of it." Feeling the full force of the majesty and pristine self-generated power in that. In merger with the larger cosmos, you do not have to go in search of divine wisdom, for it will find you. Being receptive to the power and portent of the message, now that is the work!

What is the symbolic meaning of aligning with the Dark Mother (Hathor) on the winter equinox of 2012; that is passing the ecliptic of the equatorial line of the black hole at the galactic center. It is a reorientation away from myopic slavery to materialism, an invitation to look out in awe at the depths of the universe and participate in the galactic orgasm/organism. And through this shift in focus, to move from the rigid formalism of the information age, and into the spacious expansive, depths and luminal embrace of the wisdom age. Effortlessly incorporating multiple layers and modes of consciousness without denial, resistance or hesitation (Horus). Do the Vortex meditation first for this wipes the mind clean for the Galactic Meditation. The Galactic Meditation is fundamental, in that it allows a felt-sense of how you, your life and all existence is manifest out of the

creative crucible of the Galaxy. Thus in one sense it is building a deeper conscious connection to the Source.

• **Causal Majesty Meditation**—Before you go to sleep imagine yourself as a royal personage of the same sex. I chose Princess Grace because she represents the most majestic female to me. The first time I did this…as I became Grace I felt a power-filled snake rising through the core with its head out of my forehead. I was immediately fascinated that this sensation was portrayed in the imagery of the Ancient Egyptians—whereas I thought that the symbol of the Uraeus was more of a pictorial representation of kundalini, rather than an exact description of the Royal Flow of Ki in the bodymind. The **Uraeus** was the image of the Egyptian cobra (Naja haje), worn in the front of the king's headdress. The interesting thing was the disparity I felt between my nascent body, and this causal flow...for the snake was shaky and was drawing prana from an incoherent body source. Feeling the potential of this, I realized that if I did the Causal Majesty Meditation often enough, then the whole body would be naturally pulled into a stabilized higher order of Grace (coherency). The Butterfly (Spirit) would essentially suck the life completely out of the pupae of the nascent body bringing the whole into complete causal integration.

Dr. Sara Lazar at the Massachusetts General Hospital in Boston found that meditation actually increases the thickness of the cortex in areas involved in attention and sensory processing, such as the prefrontal cortex and the right anterior insula. This growth of the cortex is not due to the growth of new neurons, but results from wider blood vessels, more supporting structures such as glia and astrocytes, and increased branching and connections.
www.nmr.mgh.harvard.edu/~lazar/

Further Reading on skills for awakening—Books with useful exercises and coping/developmental strategies:

Pharmacy For The Soul: A Comprehensive Collection of Meditations, Relaxation and Awareness Exercises & Other Practices for Physical and Emotional Well-Being, Osho.

Mending The Past And Healing The Future With Soul Retrieval, Alberto Villoldo.

Human Technology: A Toolkit For Authentic Living by Ilchi Lee and his *Brain Respiration Self-Training* CD.

The Great Stillness: The Water Method of Taoist Meditation Series 1-2, by Bruce Kumar Frantzis

Lifting The Veil, Practical Kabbalah with Kundalini Yoga by Joseph Michael Levry

The Divine Doctor, Healing Beyond Medicine by Joseph Michael Levry

Change Your DNA, Change Your Life! by Robert V. Gerard

INNER ARTS PRACTICE

There is as much potential to journey into the infinite depths of our internal space as there is to explore outer space.

The interior self is the new infinite frontier. The Inner Arts arose from my own practice over the years...they came of their own accord from within, starting with CMR in 1997. This information arrived not so much from listening as receiving; that is reception and acquiescence, i.e.: Grace; which I suppose is spiritual insight or gnosis. Life/suffering makes spiritual insights like the Inner Arts emerge when they are most needed. Thus we see the play between suffering and light, the checkerboard of existence. The Inner Arts ends with The Pot of Gold, which is actually the beginning, but right now willed-ecstasy is what people need to access their amrita for de-stressing.

The Inner Arts are a tool we can use for inner exploration and self-communion as well as for relieving stress/trauma and removing blocks/voids from the bodymind. If undertaken as a daily practice the Inner Arts are some of the deepest and fastest spiritual-healing work there is to embody the Self. The 3 STEPS—Cardiomuscular Release (CMR), Psychospacial meditation (PSM), Neuroemotional Reprogramming (NER). are preliminary training for a much deeper JOURNEY—PsychoSomatic Release (PSR). Inner Arts practice is realignment therapy for freedom from bodymind holding. It works to achieve Ground zero of emotional neutrality and equanimity, it also removes discordant static charge and consequently frees the evolutionary impulse from the inertia of the past.

The experience of finding Psychospacial Meditation taught me that peace resides in the enteric brain (i.e.: solar plexus). From that I realized that our true power and empowerment arises from building and substantiating that "belly peace" by entraining the brain, heart and enteric brain in sympathetic resonance. It was then apparent that it was "*receptivity*" or **biological worthiness**, which was the major key to establishing both the Peace of Power and the Power of Peace through the incarnation of Presence! Biological worthiness is the measure of our degree of incarnation. That is how much we are keyed into our Self and the All and this is also reflected in how deeply we are aligned with the "life-will" or the "death-will." Bliss is simply Eros or the evolutionary catalyst of the Life-will.

Pride arises from a deep sense or organic unworthiness, and it is this false pride that generates poverty mentality by creating arrogant, superior and self-righteous states in which learning and receptivity are diminished. This prideful unworthiness represents an inertial force by which we are stuck in the past, entrenched in Matter and cannot awake fully to Spirit in the present moment. Thus obstructing and curtailing the full flow of the light of Spirit throughout the bodymind in its connection to the All. It is this unresponsiveness to Spirit that is the core of our resistance to enlightenment and our rejection of the natural abundance of existence.

Since Bliss is the felt-sensation of love, and we are love, the craving for Bliss might be the re-cognition that there is something, either a block or void, in the

way to being fully integrated as love. Craving for Bliss is simply craving for more Presence. This craving is a good thing because if we listen to our heart it shows us the way to the realization of the full Flow of Light. Freedom or Bliss is making that which is unconscious conscious by bringing light to it. The unwillingness to enter a wider field of consciousness through the illumination of Matter with Spirit and to radiate it out to infinity, is our only hindrance to **happiness**. The pursuit of happiness is uncovering the a priori happiness of the bliss of being alive and simply breathing. Just as a muscle or body area will never loose its pain and numbness unless the mind's eye is infused into it, and a relationship flourishes to the degree that love is extended.

Rumi said: "Longing is the core of mystery. Longing itself brings the cure." Longing of the heart is the key to the Mystery and the answer to the question of life. However we are not taught to go into it and inquire into it, and thereby realize a greater life. We are taught to subdue it with lesser energies and lesser matters, and cut it off before its greater realization. In families where Spirit is not realized, we are programmed by a sense of biologically inherited unworthiness to subvert and undermine the "urge of the divine light itself." Thus the living death of not knowing our Self.

The intent and focus of consciousness alters the quantum field of consciousness. Ecstasy is the beginning of the Great Way through communion with the Self and unity with the Cosmos—bliss is the result of unifying the Universe with consciousness…to make sacred, holy or whole. Wherever we place our focused awareness there is a simultaneous flow of life force to that area of our body, field or environment. Coherent thought and feeling activate energy vortexes within us that effect energy, geometry, harmonics and warping at the quantum field level. Eros, love or gratitude and appreciation create coherent resonance which increases energy flow and integration throughout the bodymind and by which we enter communion with the omnipresent All.

"Power is the ability to remain in context no matter what the subject or object," Garwin Redman www.bewideawake.com/

STEPS TO FREEDOM

1•CMR—Thus as a sequence of practices first we need to establish **Cardio Muscular Release** in order to remove nerve static, turn down the sympathetic nervous system, focus and entrain consciousness and build the inner felt-sense to generate familiarity with the heart-brain.

2•PSM—Psychospacial Meditation gives us a tangible grasp of the mind's eye which we focus on a series of gateways that open up communication between the head-brain and the enteric/solar plexus brain. Dropping bodymind and bringing organism to Ground Zero or Peace—giving us the ability to remain in "context" (unconditional/nonduality/equanimity) no matter what the subject or object.

3•NER—Neuroemotional Reprogramming eliminates blocks/voids to empowerment by Presence through infusing the body with Universal-unconditional

value-qualities; thereby changing cell and neuron growth, raising vibratory resonance and possibly changing gene expression. Also heals GI tract.

4.PSR—Psychosomatic Release is a journey *of* a priori transformation to the Always Already whole body-mind-soul. Blood, oxygen, immunity, nerve energy, prana and life follow consciousness...This psychosomatic release work is a body-meditation that uses the focused awareness principle...progressing through all holding areas in the body, allowing the light of life to integrate and unify body, mind and soul. This is a melting process of pushing warmth, feeling and consciousness into the numbness of blockages of holding. You can use any "value-feeling" word for attitudinal breathing at any block you might come across...some blocked areas might tell you what they are about if you inquire as you work on them.

5•Pot of Gold—Ecstasy is the evolutionary catalyst and the secret of the nottwo of Matter and Spirit. The more you do the preparatory 3 steps and the journey the more you unblock and build self-communication, the greater the amount of amrita elixir you are able to generate in the Pot of Gold. When you are proficient in the Inner Arts you can use the Pot of Gold anytime to gain greater peace, love, equanimity and Unity.

GROUND ZERO

Negative emotions such as anger, frustration jealousy or divisiveness are associated with an erratic, disordered, incoherent pattern in the heart's rhythms and consequently throughout the body via the heart's EMF, superconduction of consciousness and by metabolic chemistry. Positive emotions give rise to a mode that HeartMath Institute calls "psychophysiological coherence."

It is essential to allow the organism to reach Ground Zero long enough and deep enough to be "structured" in a trans-anthropomorphic mode. That is only in the resting neutral state of Ground Zero can a Universal patterning come into effect to slowly transmute the human into the God. Thus we see that the "acceptance of our Divinity" is a receptive act that first requires an active emptying, surrender and letting go of that which we currently are. **Apocatastasis** means the reconstitution or restitution and restoration to the original or primordial condition through the realization of potential. Apocatastasis occurs when a soul, which is Divine Light trapped in Matter, frees itself by attaining special knowledge or gnosis to rejoin the Unified Field or Absolute Reality (God).

The Neutral resting state, or Absolute Peace is where the ego-mind-defense-associative-meaning making brain is offline and the body's reality can be fully palpated, that is tacitly felt without filter or explanation. Once the mind has let go of its tyranny over the body, we can listen to the pain and abandonment of our organs and nervous system and then we can "program" higher frequency vibratory states into them. When consciously and lovingly acknowledged our abdicated lost parts come back into the orderly fold to greater coherence. An ecstatic reconstitution of our lost and broken parts occurs bringing restitution and restoration to the original or primordial condition of our Divine Self. Without the knowledge for doing this inner work of reconciliation with our abandoned cut off parts, we tend

to run around like headless chickens looking for this Lover, Guru or that healer to "make it all better for us.

Actually with the Inner Arts letting go and diving into the abyss is easy. You build higher neuronal, biochemical and vibratory structures FIRST, laying the pathway for universal being, then the maladaptive (ego) patterns drop away because you no longer have any "use" for them. Through cultivation of Absolute Qualities we build the Universal or nondual bodymind through which enlightened experience is possible. Perturbation of the conditioned mind allows the change in perspective necessary for Grokking to occur. Grokking of course is nondual consciousness. But nondual Witnessing doesn't mean we sit back and observe the world as though it was a bad soap opera—rather it is the basis of right action through a transpersonal vantage point.

Basically what yogis do when they transcend the world of form is to put all sticking points of identification into Emptiness, by voiding the body chemistry in bliss-meditation. The natural opioids wipe out the emotional memory associated with the sticking point so that the individual is not caught up in the vortex of preoccupation with thought or emotion around the sticking point. Thus we can maintain our transcendence...that is to flow like a river over and around happenstance, without being forever caught up in back eddies. The Inner Arts are the practice of habitually cultivating Emptiness or Ground Zero.

"What we call mass would seem to be nothing but an appearance, and all inertia to be of electromagnetic origin." – Henri Poincaré, Science and Method.

SUGGESTIONS ON PRACTICING THE INNER ARTS

Stress is the resistance to the stretch necessary to grow.

Through this practice we can train ourselves to be open (vulnerable) and hence "spiritual," by opening up communication channels within the body and emotional-limbic brain. Increasing coherency between the left and right-brain, thereby unifying our feeling, sensing, thinking and intuition. By using these techniques we should notice an increase in intuition, no-mind and whole-consciousness…plus freedom from worry and the incessant badgering of the left-brain's analysis. Our critic and judge that is invested in keeping our painbody and armor in a defensive holding pattern, is dissolved during this transformational work, thereby releasing us from our limitations, allowing us to embrace life anew. If any fear arises during this process focus the mind's eye on the brainstem while doing attitudinal breathing for peace…peace into the heart on the in-breath, then down into the solar plexus with the out-breath.

You might like to begin your Inner Arts session with hanging, primal release pose and 20 minutes of nude sunbathing or sun meditation for optimum effects. Also a wheatgrass shot prior to Inner Arts and a super-smoothie after will synergize the results. Inner Arts work best on an empty stomach, but the energy boost of something like wheatgrass juice would be beneficial. Toning and meditation-pulling energy up the spine, and do toning while you do the Inner Arts greatly

amplifies the effect. Freely allow "huff" breaths and emotions to occur if they arise. You can also listen to meditation tapes like Kelly Howell's "Destiny," or "Secret" while you do CMR. Listening to tapes might help you drop ego-recriminations and disbelief faster if you are having trouble quieting the mind.

Stress is suffering and suffering is stress. Any of the Inner Arts allow you to detoxify from the days stress, and in cultivating universal-value feeling-qualities the petty mind is readily dropped because the body is trained to appreciate the sensation of being free from the defense-recriminations mind and lower emotional states. When we do not accumulate our emotional tone day after day, this allows more of a clean slate each morning, so we can be new and flexible with each unique day. Thus it will probably cultivate genuine equanimity over the course of years. I reached pseudo-equanimity with the bliss chemistry, but it was more of a repression of response due to the neuroinhibiting effect of endorphins than anything. Dissociation is not a true dropping and embrace...it takes enormous energy and focus to drop what is not Self.

The three steps of CMR, PSM, and NER entrain the brain to the heart and synchronize the heart, cranial, and solar plexus brains. **Cardio Muscular Release** (CMR) gives us a tangible grasp on our inner feeling sense, and reduces nerve scatter, establishes communication with the heart, conscious belly breathing and an attitude of self-respect/listening. Then when the nerve energy is well "organized" and *readily employable* it is then we can take this Presence on into Psychospacial Meditation and Neuroemotional Reprogramming. Because CMR readily establishes a conscious felt-sense of Presence it is very important to include in the development of the Inner Arts. You need to first gain some proficiency in Cardio Muscular Release (CMR), then you need to build up your ability for Psychospacial Meditation in order to train the minds eye to open the gates to the enteric brain...to gain conscious purchase on this area...that is to palpate it with the mind's eye and bring it into conscious awareness. After which you can run through the Neuroemotional holding positions in sequence.

How one approaches this practice depends on ones discipline and time allowance. Obviously the more Presence you put into it the more you get out of it, for this is "work." Sometimes late at night in bed I don't have the Presence to do the full sequence systematically but potter around between CMR and Neuroemotional holding positions as my body demands. It is perhaps best to set some time aside during the day for the 3 step process and go through everything systematically, then during the downtime prior to sleep or first waking up you can just do a more spontaneous version.

Neuroemotional Reprogramming (NER) is the focused building of subtle communication within the nervous system via the generation of plasma balls of feeling-tone associated with higher archetypal qualities of being. This process involves a coordination mind, body and soul in a concerted YES to life by reprogramming tissue from its resistant defensive posture of ancestral, collective and individual trauma...into its Universal condition "prior to and transcendent of" the shutdown, limitation and maladaptive patterns of survival that warp and

diminish our ongoing incarnation. Thus NER is for the purpose of transcending the narrow reflexive conditioning (armor) we have build up through our social environment and habitual thought patterns...in order to experience a vaster, limitless sense of being, extra-dimensional cognition and full spectrum feeling-tone. That is we get to experience **Presence**. Each of us has different holding patterns, blocks and numb voids built up from our past.

With NER I have given a general template of the sequence of holding places and archetypal-values to work with. I suggest one would start out with this sequence (which to me at least seems a universal template) and then move on to feel-sense what is needed your own particular case relative to the way your neuroemotional matrix has been built up over your life. Once you have learnt the form, self-inquiry is the next step in using these techniques. I suggest you locate sticking points and question them to see if a meaning-cause arises…(worry, envy, hatred, greed, sadness etc…). Start a conversation with these blocks/voids by sensing what they have to teach and asking them how they are to be dissolved.

The Inner Arts combine to help us get more in touch with our *inner kinesthetic will*. Only consciousness that is "self-willed" into felt-sense cognition is effective in building the interior-self…thus we must do our own "work" if we are to have an internal life of the soul. Because we still live in a culture of fear, the Western world has yet to fully grok that the Kingdom of Heaven is within. We generally have an outer persona to deal with the world and an anesthetized interior; thus the epidemic of low self esteem, biological unworthiness and powerlessness which is just now becoming more recognized.

One simple way of recognizing emotional health is that ALIVENESS increases. To become more of a mystic, that is a sovereign spirit, instead of a victim, seeker or follower and to deprogram from the automaton, disingenuous, rote, reactive and assumptive strategies of our Western conditioning, I suggest a Sufi-like "Pathless Path" training. Chances are we need the reinforcement of the extra-dimensional cognition of the Sufi tradition to embrace the full spontaneous nature of Spirit, and help prevent the regression and reversion to prior-mechanical thought processes once the peak of our awakening has subsided.

Intellectually grasping an idea is very different from experiencing the living reality. Many of us have grown up in a culture than denies the reality of the felt-sensation of this energy world. It is a world much larger and deeper than intellect can penetrate. Because we have not built the cognitive senses and language for this deeper world, and were often punished if we admitted the reality of this energy-world, we basically were cut off from both our inner shaman and our inner priest. The Inner Arts help us to get in-touch with the FEELING reality of the energy world by relaxing our guard and building inner communication hardware.

While there is some structure involved in training for this FEELING of energetic reality of the bodymind, what emerges is the larger WILL beyond the intellect, which has a priori consciousness that is "wholistic" and far more cognizant of Reality than mere intellect. It is the Genius that lies behind intelligence; it is the source of the mind and all else besides. Thus with these practices we have tangible

and immediate recognition of the WILL within us that is being suppressed by the alienated and dissociated personality...bringing us back into a sense of Presence, integrity and wholeness which should have been ours from birth...had we been born in a more enlightened society. Through such training we can more fully become the multidimensional being that we always intuited that we were, but could never fully realize.

The dropping of the mask of conditioned consciousness is achieved not by the "negation" of thought and emotion but by the "development" of them. These practices are not for making men or women more emotional, but of amplifying the perception of the energy world that is already there; note that emotion here means felt-sense of the energy world. Like flipping the switch to an innate sensory intelligence that we have been conditioned out of during our socialization, while having our emotional wiring laid down in conditions of untruth, double bind, callousness and avoidance of psychic information. I suggest there is almost unlimited capacity to awaken to a vast inherent intelligence and sensitivity to inner and outer environment that has been knocked out of us...and which we have been collectively denying is even there.

By rejecting, repressing and cutting off *disowned* parts of ourselves and our difficult emotions we lose access to the opposite *empowering* qualities of the emotions we deny or fail to integrate…thus if we repress fear we lose access to our courage; if we repress anger we lose access to focused loving action. It is obvious that that which is repressed cannot grow, therefore emotional-spiritual development is held back through this emotional retardation. Since emotion is the go between mind and matter...having the emotional body retarded in this fashion is holding back the entirety of human evolution. We reclaim Presence (whole consciousness) through derepression. Thus we must learn to be our own **Good-Mother,** holding ourselves in unconditional embrace, in order to build the neurology for "transcendent emotional regulation," i.e.: equilibrium, equanimity and Presence.

As we set about generating the noble, Universal qualities within our bodymind, especially worthiness and gratitude...what happens is the primary wound of separation and shame is healed. You become "whole," autonomous and plugged back into the cosmos via your own umbilical. No longer reliant on others to feel connected. The old shame, punishment/reward authoritarian projection mechanism that makes us go search for a Good Mother or Father, or Bad ones for that matter, no longer exists. The whole ball game of mythic, seeking and deprivation spirituality collapses and any attention given to that will only hold one back from the sovereign growth of spirit. Both the need for a healer, teacher, Guru and lover pass away when we grok or listen to our Self and directly give our Self what it is we really need—our own Presence!

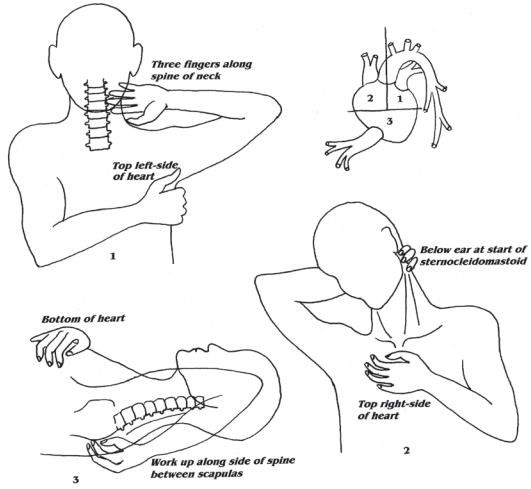
Best way to go about laying out a life system practice for yourself is to lie down on your back in a quiet place, see what hurts, is deficient or is blocked and ask how to fix it. Then come up with various solutions...and do them. Then start the process over and over again...that way you are spontaneously responding to the

loudest most immediate needs. You could go your whole life in this manner, and this would be your integral life practice. Take notes and map out your journey so that if stuff comes up again you will know what you did last time that occurred. It naturally follows that raising the vibratory resonance causes one's worldview to become more Sufi-like, because the rigidity that unconscious fear produces is lifted. By entering states of ecstasy that we are propelled into being as little children within the Kingdom of Bliss.

If the heart becomes heavy, connection lost and you feel hopelessly awash in the conflicting aspects of destiny...wash your heart in the fluorescent river of love that flows Eternally. Loosing your smallness in limitless largess, to revel in all powerful expansion flooding over the horizon in all directions.

"*The greatest sin is to be unconscious.*" Carl Jung

CARDIO MUSCULAR RELEASE (CMR)



In 1997 I was massaging people in California and I found many would come to me with scattered brains. I asked myself how to get rid of brain scatter, because my brain would start resonating with their brains and it was just real irritating to work on scatterbrained people. A month went by and while in bed one night I did a three-step jumper-cable holding technique on myself. As soon as I did it, I realized I had discovered what I was looking for—a technique to get rid of brain scatter I called Cardio Muscular Release (CMR). CMR works on increasing the conscious and vibratory connection between the heart and the sympathetic trunk running either side of the spine on the neck and thorax. It is the only thing I have found to get rid of brain scatter and to unlock the neck and shoulders from the inside out.

The heart is a hologram for the entire neuro-musculature of the body. CMR is a neurological jumper-cable technique using the heart as a holographic key to unlock the muscles of the neck and shoulders and to take the static off the nervous system. It entrains and relaxes the heart, breathing, metabolism and brain, unlocking the neuromuscular system from the inside out; as such it is way more effective, profound and lasting than massage. CMR is a simple technique that opens the neck/shoulders/heart and turns off the fight-or-flight and removes static from the central nervous system so current/consciousness can flow with less friction and greater efficiency.

CMR is very useful to move through any fear or resistance as our contraction becomes tangibly felt and we progressively melt into a deeper sentient experience of our existence. Car crash victims and others with PTSD will find this technique invaluable for getting relief from an overactive sympathetic nervous system (HPA axis). This technique can be self-administered and is useful for improving concentration, to take the static off the nervous system, prior to meditation, headaches, processing emotions, insomnia, and to relieve muscle pain and tension. It can be used before or after any stressful event to enable us to transcend anxious emotions and thoughts. When insomnia occurs CMR can be used to reduce fear,

pain and tension so that sleep naturally comes on. The effects are accumulative over time and will permanently rewire the nervous system from more primitive reptilian function toward a more spiritual and less reactive condition. Done as a daily practice it is both preventative and restorative.

Because CMR acts on the nerves themselves it unlocks tension in the muscular-skeletal system changing the chemistry of spasticity, and associated neurosis and anxiety, even in the interior muscles right next to the bones. I suspect that as in meditation, blood lactate levels in the muscles, which is associated with anxiety, are reduced by CMR. The chemistry of flight or fight that remains locked in the muscles in this age of stress, "when the lion just won't go away," is changed on a fundamental level by the repolarization of the nerves of the heart and muscle. The core of our tension is held in the deep skeletal muscles, but these deeper muscles do not have pain nerves, so any pain that is felt is the result of spasm being transmitted to the surface muscles. Once the cage of contraction is reduced with CMR greater energy flow, feeling and awareness are experienced in the body. Tension is in effect the body trying to hold the emotion of consciousness back from awareness. Thus release of this tension works in the reverse to allow what was unconscious to be felt consciously, allowing Presence to infiltrate the body.

The heart is divided into three sections: left-top=1, right-top=2, bottom=3. There are three holding positions on the left side of the body then the three are mirrored on the right side.

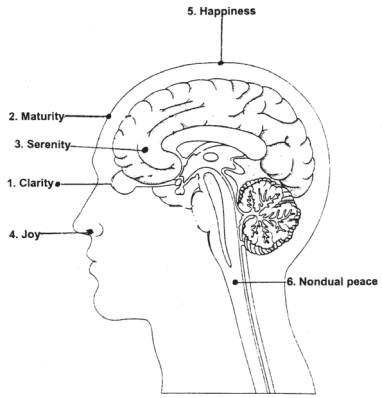
Position 1: The three middle fingers of the left hand are placed along side left of the spine on the back of the neck; the right hand is placed on the left of the heart. Hold 5 minutes breathing gently into the belly.

Position 2: The head is turned to the right, and the right hand reaches behind the neck and holds the left neck at the point where the sternocloidomastoid muscles joins the skull just under the left ear. Left hand is on the right-side of the heart at the middle of the chest. Hold 5 minutes, continuing to belly breathe.

Position 3: The left hand reaches up over the shoulder and down the back and the fingers poke into the muscles alongside the spine between the scapulars. The right hand is on the bottom of the heart. Hold 5 minutes, deep breathing; slide left hand slowly up the back over the course of the 5 minutes.

Repeat in mirror fashion on the other side of the body. Note all positions must be held for a full release to occur, otherwise one will still feel some disconnection and static. The key is to remain present and sensitive throughout the process. If you feel you need longer than a half hour practice either hold each position longer, or cycle a second time round. Meditation and toning done along with CMR offers a synergistic effect.

PSYCHOSPACIAL MEDITATION



PSYCHOSPACIAL MEDITATION

If one focuses the Mind's-Eye:

1. **Clarity**—occurs as a single-point in front of the two eyes.
2. **Maturity**—is at the top of the forehead.
3. **Serenity**—is at the temporal lobes above the ears.
4. **Joy**—is found by focusing the mind's-eye at the nostrils and following the breath there.
5. **Happiness**—(the absence of closure and sadness) is found by focusing at the crown of the head and this lifts sadness in the lungs/throat/diaphragm. I found that once I had cycled through the various focus points a couple of times I could do clarity, maturity, serenity and joy all at the same time; this then translates as **peace**. After running through the full sequence then a painful knot of "need" is felt in the solar plexus.
6. **Nondual peace**—This knot in the solar plexus (hole of non-being) is then dissolved by focusing the mind's-eye on the brainstem and filling it with love.

The knot of need/control in the solar plexus is accessed and dissolved by first passing through clarity/maturity/serenity/joy/happiness and then finally this control-knot is "touched" and healed through the "brainstem." So perhaps final letting go of our unenlightenment is done in this way. When we are talking of resistance, division, judging, distancing etc... we are probably talking about the "need to control." So this is the tension that prevents Unity Consciousness and at-one-ment with our environment.

Interestingly the knot of pain in the solar plexus was not observable until I had done all the other focus points and past through the "portals" so to speak. However this knot must have subliminally always been there as a permanent ongoing pain. I theorize that if one clears the larger-noisier emotions out the way, the finer more nuanced emotions can be felt and one's inner life should be deepened and refined, becoming ever more precise in communicating subtle emotional resonances. Asnd as we descend into the depths of our being we touch ever more causal layers of our function, which have more profound and far reaching effects on our well-being.

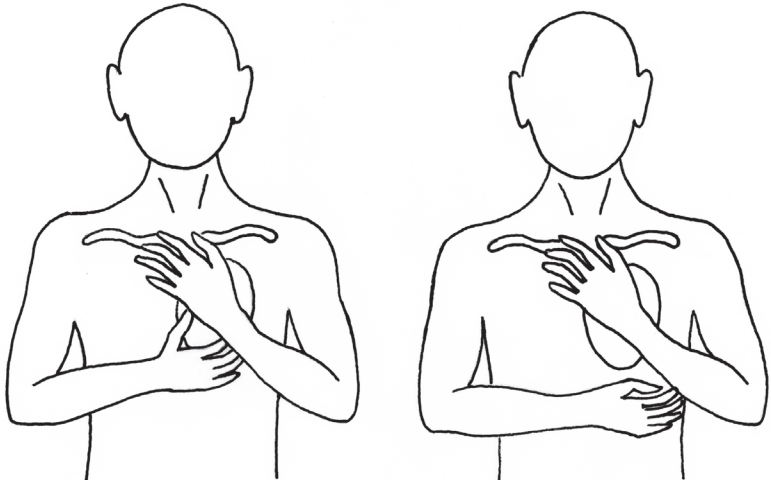
I intuit that the sequence is important. Clarity is necessary prior to maturity. Maturity is necessary prior to serenity. Serenity is necessary prior to joy. Joy is necessary prior to happiness. Happiness is necessary prior to overcoming deprivation/need. Thus there is a specific flow to the unfolding of energy in the body. Psychospacial meditation will permanently rewire one if done consistently. Individual reasons and issues for suffering are not important, it's a matter of rewiring and changing the vibratory state of the tissues. Thus all hurts are one, and all healing is one.

The key to psychospacial meditation

I found the sequence of this meditation by simply by holding the word in my mind and seeing where my minds-eye went. This way we should be able to find the psychospacial focal point for any such word, eg: fortitude, gratitude, benevolence etc.... Focus your minds-eye on any pain, constriction or ill feeling in the body and ask "what is this?" After a while a word will arise reflecting the dominant emotion connected with that stuck spot. Then find the opposite word and send the minds-eye on a hunt to search for the place and mechanism that switches the stuck negative emotion into its opposite. Through processess in this way we shift our vibration over to the positive. By emotionally clearing our tissues we do not have to remain victim to entrenched, stressful vibratory states that play havoc with our organs, health and lives.

As that which has been unconscious suddenly becomes conscious, often the first response is fear. Transmutation involves taking that fear and transforming it through gratitude, reverence and equanimity into Pure Awareness.

NEUROEMOTIONAL REPROGRAMMING



Neuroemotional Reprogramming (NER) is allowing, resetting and fine tuning the body's vibrational resonance, in order to grow the neurochemistry and neurons (dendrites) for the Universal bodymind. NER enhances the embodiment or incarnation of transcendental spiritual qualities/states such as peace, empowerment, worthiness, gratitude, trust, faith, reverence and equanimity. In the stepped down nature of our daily lives we often do not get to experience the conditions needed to spontaneously generate these higher vibrational states. Therefore we need a "daily practice" whereby our bodymind becomes trained and accustomed to generating these frequencies. With this meditative therapy not only do we make up for the absence of emotional and spiritual nourishment during our developmental years, but after our NER conditioning is stabilized to higher emotional resonance, we find that our lives change in direct correspondence to the new resonant frequencies we embody. We thus radiate higher spiritual dominion both in our own behavior, thought, attractiveness, and in our energetic influence over the behavior and responses of others that come in contact with us.

So few of us were given a sense of self-worth and spiritual validation as a child that we live with a subliminal wrenching wound which we try and fill up by many different inferior tactics. NER takes us directly to Ground Zero, where we can be "organically receptive" to reconstruction into a higher estate. We stop fidgeting with our wound and open to the dominion of the Christ/Buddha within. Neuroemotional reprogramming is simply addressing the void in our socioemotional make up and building up our neurological structures to facilitate a deeper more meaningful life. Through transcendental training via NER we grow the neuro-anatomy or esoteric anatomy for increasingly "universal boundaries." Thus we take on more of a species or global Being, and waste far less energy indulging in, enforcing and defending our smallness. Modern man doesn't know it yet, but emotional development is the key to enlightened life and to enlightenment, because that is where we are most lacking.

We cannot expect to find, nor will we be given our higher spiritual qualities from the outside world. We must look within for the qualities of Clarity, Maturity, Serenity, Joy, Happiness, Peace, Empowerment, Worthiness, Gratitude, Faith, Trust, Reverence and Equanimity. These are aspects of the "Absolute" that we are attempting to integrate, they are not "Relative" or related to the conditioned worldly realm. These "inner qualities" cannot be derived by external means. If we do not find these qualities by internal means then the social world will seem indeed to be constantly undermining us, because we are expecting it to give us these qualities, and of course it never will...humanity has not yet reached the point of social reinforcement of Divinity as a daily occurrence.

If we did not grow up in ideal social conditions we have to **grow the wiring** for these Universal value qualities. If as a baby we were not given a sense of welcome, worth and value our spirit shied away from incarnating. Without biological self-worth we have no biological trust, and without trust we cannot establish biological faith. Without biological faith we cannot maintain a sustained sense of unity with all creation or God—with this emotional reprogramming method we find the void and invite in healing Presence. In the externalized, usury world of material capitalism that exemplifies our current era, chances are our parents didn't even have the self-esteem or deep spiritual value qualities to give to us. So we cannot really blame them for not giving us that which they did not even have for themselves. It is after all the pain of this Self betrayal that propels us forth on the hero's journey of Self discovery. Thus humanity proceeds in awakening both from that love which it receives which gives us strength and encouragement and from that which it still lacks which drives our journey toward health and wholeness.

NER PRACTICE

Empowerment, dropping of the painbody and peace are a self-esteem phenomena. It is in the embodiment of biological self-esteem that our true self worth lies. Dropping of the bodymind is synonymous with "receptivity" and this in turn is synonymous with "worthiness." Essentially this is done by being at Absolute Peace (Ground Zero) long and deep enough to let the life within us flow and grow. Affirming ourselves we green light our bodymind beyond the need for armoring ourselves against the sense of unworthiness.

• **Worthiness**—Make a J around the heart with your hands by putting the left hand at the top of your heart with fingers resting on the clavicle and the right hand at the bottom of the heart under the breast, with thumb extended up between the breasts. Hold this position while breathing worthiness in through the heart and out into the solar plexus. Since worthiness is primary to NER there is two holding positions, the second involves keeping one hand on the right side of the heart, while the other hand is moved down onto the spleen at the bottom of the left ribcage… continue the same worthiness breathing down into the spleen area. Worthiness-receptivity gives one the correct stance (Kokoro-gamae) to be empowered to act in ways that build self-esteem. "Worthiness" represents a cellular level of receptivity to life (a biological YES) without which we cannot fully incarnate, nor can we maintain a strong immune system, good health or Self-actualize.

• **Gratitude**—Continuing on with the exploration of the neuroemotional reprogramming: The liver is the area that should be infused with Gratitude from the heart during attitudinal breathing. Gratitude gives the brain a direct link to the enteric brain and our "power" to take full responsibility for our lives. Feel into the feeling quality of Gratitude generated in the heart and send it down into the liver. This turns on the parasympathetic nervous system, and you might notice your digestion making noises. The liver must be bought into the fire of Gratitude first before Trust is worked on, for faith is born from gratitude. You have got to have biological trust and faith in order to open to fuller incarnation and empowerment; so we do not have to burn so much wasted energy in defense (mask, shield, ego).

• **Trust**—Again holding the right side of the heart with one hand the other is placed on the solar plexus; which is the seat of power and need. Do the attitudinal breathing in through the heart and down into the solar plexus with Trust this time. The trust we are generating here is not the trust of Other or self, but a Divine Trust, a cellular biological-trust beyond conditions. A trust prior to differentiation, concept and distinction...prior to mind all together. As soon as this practice of approaching trust becomes an exercise in trusting any human or even oneself, you have lost it as far as the deeper cellular working of the process.

• **Faith**—Jumpercable between the right side of the heart and the lower Tantien, (the Hara, 2 inches below the navel area) with the attitudinal breathing of Faith. Faith is one of the last things approached in the neuroemotional sequence, as the final letting go into nothing. This work to establish biological faith is the direct door to Witness or Pure-Context Awareness. Pure Awareness, the marriage of intellect and intuition, is cultivated with the following step…

• **Reverence and Equanimity**—After biological faith is developed and there is good prana flow into the Hara, then both hands are used at this area with finger tips almost touching the pubic bone. Generate a plasma ball of Reverence and Equanimity, thus growing the immovable seat of soul. Without reverence and equanimity we are still driven by poverty consciousness, ie: inadequacy, deprivation, need, powerlessness and lack of harmony. Equanimity breathing and the generation of the **Reverence Power-ball** in the lower belly allow us to build a spiritual nervous system that is transcendent of the pros and cons and the twists and turns of life in order to bring our Realization effectively into the world through spiritual action.

HeartMath Attitude Breathing: Focus on the heart on the in-breath and on the solar plexus on the out-breath. Choose a positive emotion such as gratitude, devotion, happiness joy, peace, forgiveness, care, courage or ease. Breathe the attitude in through the heart and out into the solar plexus.

www.heartmath.org/research/our-heart-brain —Pictures of the Heart-brain.

PSYCHOSOMATIC RELEASE

An advanced decontraction journey for dropping the painbody

By the **mind's eye** I mean the kinesthetic felt-sense and directional focus of the brain. This feels like a connection between the third eye region and the brainstem through which you can "point" your consciousness. While directing the mind's eye, the closed eyes point in the direction you are focusing on. Thus you can even look out through the back of the eyeballs and down into the brainstem, or in any other direction of focused intent. Following is the **full version** of the Psychosomatic Release, however as a shorter daily practice you might simply track the blockages through the neck-shoulders and torso, then the thyroid, jaw and pulling the tension out of the head via dropping the tongue into the belly. You can turn on your anti-stress, parasympathetic nervous system any time during the day by dropping your tongue into your belly and deep breathing.

Lying on the back:

1. Feel the most prominent area of holding in the body—perhaps it is the right neck and shoulder. Put your hands on this area and focus your mind's eye into it. Go deeper into the felt-sense of the area melting it with the power of your mind's eye. Dropping into an infinite void and then dropping some more, bringing the mind's eye back to the spot if you drift off for a while. Progressively dropping consciousness into an area will repolarize the nerves, relax the muscles and bring new life and blood to an area, essentially making it more conscious. You can readily feel the shift in "charge" when the body reclaims an area and it starts to let go. The contracted body part will not let go of its accord unless it is made conscious through focused awareness. Use whatever visualizations you need such as imagining melting butter or seeing gentle waves lapping the sand to melt into an area.
2. Shift focus of the melting onto the next area of holding such as the liver by putting one hand on the right side of the heart and other on the liver. After that the next areas of holding might be the solar plexus and then the bottom of the belly. Progressively melt each area as it arises in awareness with breath, the mind's eye, visualizations and your hands.
3. Once you are done with the side of the body with the most apparent holding move over to the other side and run through areas moving down the body eg: the left neck and shoulder, then down into the spleen, solar plexus and belly.

Lying on the side:

4. Hold the sternocleidomastoid area under the ear on the side that is down and the clavicle of the topside gently pushing the clavicle down toward the feet.
5. Push the top of the lungs by pressing down under the clavicles and hold to melt.

6. Hold to melt the jaw on the bottom side while working the scapula topside.
7. Thumb push slowly up ridge of shoulder girdle.

On back Again:

8. Place hands lightly on/over the **thyroid** at the front of the neck and melt this area with the mind's eye, drop your tongue progressively releasing tension as you do this.
9. Tap the thymus gland which lies under the sternum for a few minutes with your fingertips to stimulate the immune system.
10. With the body released you might find that pressure/pain in the head is felt—drop the tongue into the belly drawing down the brain…continue to pull the brain down into the belly by the tongue for at least 5 minutes until head pressure is released.
11. Cup the bottom of the ribcage with the fingers and push ribs into the diaphragm…breath into the pressure for about 5-10 breaths.
12. Reach under the mid back and press fingers into and melt the adrenals and then the lower back, moving down to work into the sacrum. Melt any tension, holding in these areas with the mind's eye, warmth, breathing and visualization…progressively bringing the whole bodymind into the void till it is free of static charge and holding.

OPENING THE MOUTH OF GOD

The "Mouth of God" or the "Bindu" Center can be assisted to open to the spiritual inspiration of the "Flute of the Gods," the cosmic mantra or logos. This area, known as the Jade Pillow by the Chinese, lies at the base of the skull above the first cervical (neck) vertebra. It is part of a pump that draws spinal fluid and chi energy upwards. While lying your the back...at the back of the neck, in the dip where the spine meets the cranium place the tips of your three middle fingers and with the other hand press the third eye region—while toning Huuu with the mouth slightly open for more resonance...and meditating by pulling energy up the spine. Amplify the effect by adding the **Inner Smile** to assist in opening the Mouth of God—tdo this by smiling and extending the energy-sense of the smile up into the jaw and past the ears around to the Mouth of God. It helps to wiggle your ears while you are doing this. This is the fastest way yet I have found to work on detoxifying and integrating this region, allowing a more perfect flow of ecstatic energy into and through the brain. It might help those with kundalini symptoms that seem to be blocked in the neck region and for those who have excessive ongoing energy in the brain.

THE POT OF GOLD

Pot of Gold is the pinnacle of the Inner Arts. The other practices involved developing the skills and nerve pathways to get to a significant Pot of Gold. Simply what Pot of Gold does is turn off the sympathetic activation and removes recriminations and worry-mind; it quickly stops all "egoic mind chatter" and generates Presence. Building up and tuning into the parasympathetic nervous system, if your sympathetic nervous system is in overdrive this may be a way to balance the panic and hyper states of kundalini and stress in general. It can also be used on any and all social and psychological issues, and to set the vibe to blissful equanimity prior to making decisions. Not only can Pot of Gold be used to alleviate depression and insomnia, it can also be used to enhance creativity. The amrita chemicals produced in the brain during this process increase visual acuity and transcendental vision.

The Pot of Gold is a simple method of generating ecstasy, peace and equanimity. You lie on your back on the floor or bed, like the NER worthiness position make a J with your hands around the right side of the heart—cupping your clavicle with your left hand, and the right hand under the left-breast with the thumb pointing between the beasts. Turn your head to the right, drop the tongue down into the belly, do the "inner-smile," focus the mind's eye on the brainstem and silently repeat the word "peace" with your gentle belly breathing. You can tone also, but beginners may find this extra element hard to include with so much to focus consciousness on. The more you generate a huge charge of peace-ecstasy (equanimity) with this technique the more you change your nervous system away from sympathetic activation of defense circuits, which generate nerve-static, high blood pressure and reactionary behavior.

By doing the Pot of Gold you can balance the hemispheres and sides of the body, and as the light of amrita is produced in the brain the Light of Life is seen through the eyes, and the pupils are dilated as if on cannaboids. Pupil dilation occurs because of vagus parasympathetic activation, but also because the brain is producing tryptamines, opiates and endocannaboid and other chemicals that facilitate relaxation and bliss. This divine harmony of reception to the fire of life occurs through a perfect interplay or marriage of the sexes, hemispheres, poles and charges.

Jesus said unless you become both the fire and the water you cannot enter the kingdom of heaven. The lower tan tien is represented as water and the heart as fire...the fire must be merged with the water to copulate in stable equilibrium in order to build the steam for spiritual evolution. In Taoist understanding, if the outer sun and moon do not mingle their lights, the inner water and fire do not "copulate" and prenatal true vitality cannot manifest. That is the elixir of enlightenment is manufactured by the harmonious play of the sexes, poles, charges and hemispheres.

"Yin and Yang. NOT balance, Harmonic. Balance is momentary stasis at best, Harmony is dynamic, and yet both occur as a third plus element obtains." Garwin

RIGHT SIDE OF THE HEART

Thought, Emotion, Felt-sense, Biochemistry, Energy, Spirit are different but simultaneous aspects of one and the same thing. The generation of the solar heart involves the two main factors self-love and individuation. Self-love generates egalitarianism, equanimity and focus on expression of the Muse; while conversely low self-esteem generates inflation, bombast, hierarchy, usury, and enmeshment. Thus we can use the Inner Arts to install worthiness in our cells and generate the amrita with which to become authentic…that is filled with Light and Presence. Bliss signifies the return of Spirit. Bliss occurs when the Presence of Spirit fills that which was cut off and occluded from the light of the integrated-realized full-creature (organism-total). This "return" is felt as blissful honey moving into that which was painful or numb.

The ecstatic brain juice "amrita" is the Universal Medicine. It is the Elixir of Equilibrium with which to conquer love and hate and build the solar body. The amrita produced in the crystal chamber of the pineal-pituitary area travels with lymph and blood and down into the right side of the heart creating perfect entrainment between head and heart brains, and the constant deep ecstasy of soul-embodiment. The Sufis say the left side of the heart is associated with the mind, the right side with the Soul. The right side is more palpable with the fingers as electrical energy or bliss sensation, because the right side of the heart has the most neurological tissue.

Turn the head to the right during meditation or CMR and you can often get a sudden influx of amrita to the right side of the heart that puts you in unity consciousness (Samadhi)...that is if your kundalini is already highly charged and you are spiritually and vitally open. The "channel for immortal bliss" is none other than peptide filled (tryptamine), ion-charged lymph (cerebrospinal fluid) entering the bloodstream and flowing into the right side of the heart thereby entraining the brain fully into the heartfield. The heartfield created us as a fetus, and the return to heartfield dominance is the great journey "Home."

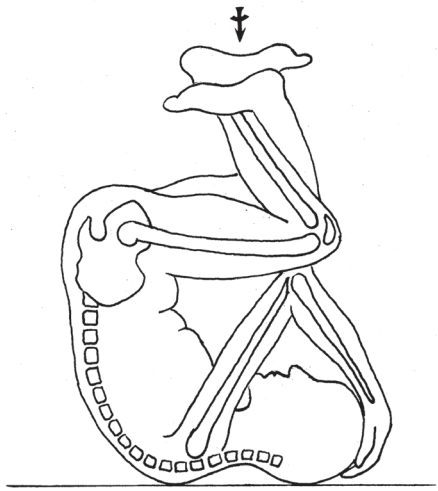
Further on in the alchemy the lower belly (hara, lower tantien) can merge into entrainment with the Heart. This sets up a permanent current of bliss between the center of the brain (crystal chamber), the Heart and the lower belly. This marries intuition with intellect, so there is a lived psychic experience in daily life as the general course of things. The activated Philosopher's Stone, or the generation of amrita in the body, however is not the end of the game, but the beginning of a truly human existence. Go see "91 Platonism and Alchemy" video at videogoogle.com, it will tell you what I mean.

Polarity Therapy The Complete Collected Works Volume 1 by Randolph Stone

www.energyarts.com—Bruce Kumar Frantzis...The taoists have been doing the same kind of work of melting into the body for thousands of years.
Opening the Energy Gates of Your Body: Chi Gung for Lifelong Health
Relaxing Into Your Being, Vol. 1; The Great Stillness, Vol. 2

www.voicedialogueconnection.com/bookstore.htm —Bodywalk Meditations CD

PRIMAL RELEASE POSE



Primal Release Pose addresses two of the major blocks in the body armor—The two areas in the bodymind where the reins on our spirit are pulled most tightly by the entrenchment of ego's defenses are: The diaphragm and the Iliopsoas muscle complex. If we can release these, we can free ourselves from the crippling effects of trauma, denial and the accumulation inner and outer negativity. It is these two somatic blocks that lead to the unconsciousness and inertia resulting from dissociation. Since these blockages are set up in order to curb emotion, we cannot be emotionally authentic without opening up these two neuromuscular areas… and in doing so the Heart is then given preeminence in our psyche. This primal contraction release for the lower body involves contorting the body in a yogic pose to compress the diaphragm and psoas, waiting for an emotional discharge to occur, then breathing and pressing into the muscular spasm that occurs when the pose is dropped

1. Warm up: First lie on your back, kick your legs over your head carefully (do it harshly and you will strain your neck muscles). Knees lightly bent, legs in the air. Put your weight on your thoracic/shoulder area, cross feet, put your hands over the top of your head and rock back and forward, pulling gently on the head to extend the neck, thus rolling the neck and thoracic into the floor. The spine will probably crack.
2. Pose: Put your elbows on your thighs about 4" above knees, while still holding the head and rest in this position with maximum body weight on the shoulder-back. Drop all the weight from the legs directly down in a line of gravity to the spine at the back of the chest. Breathe deeply and stay in this position, gently moving as desired for around 10 minutes.

3. Enforced Spasm: Then lie flat on your back, holding the muscles of the small of the back, either side of the spine with the fingers splade out. After a minute these muscles will spasm after having been over extended in the pose position. Press into the spasm with fingers and breathe into the belly until it subsides. The more one does the exercise the less spasms will occur. If spasms are too much to handle, lift knees to relax spine and press into spasms with fists.
4. Integration: To finish roll back and forth to loosen up spine again.

This technique provides a gentle cathartic release of the charge from the muscles. The discharge is interesting its like a rolling wave of energy-emotion coming from the diaphragm, often associated with a contemporary thought of sadness or self pity, however the thought is only what the psyche is using as a vehicle for the discharge to happen. The charge comes from the diaphragm, through the throat and exits the head. The more this is done, the more the diaphragm and psoas muscle is released and this straightens the spine and softens the belly allowing full breath.

The PRP releases chronic contraction in the lumbar muscles...the innermost layer of these being the psoas. This contraction and release allows more space inside, and more conductivity through the pelvis and into the legs, better grounding and more connection between the top half and the lower half of the body. Both the psoas and the diaphragm have origin points at the 12th thorasic vertibrae. By removing chronic internal holding it frees up the region of the Gate of Life at the 12th Thorasic, allowing for healthier function of the adrenal glands and kidneys. Regular practice of this pose lowers the stress threshold and reduces the propensity to emotional triggering and cortisol production.

This pose is excellent for emotional release and "getting stuff to the surface." So we could call this pose the upside-down insight-out pose. Some people call it the upsidedown foetus.

This pose is ideal for contemplating one's "Fundamental Doubt" over whether the Universe is indeed supportive of you.

WELCOMING BELONGING PRACTICE

This is a form of self-nurture in which we emotionally re-parent ourselves to improve sovereignty and self worth, giving birth to our "true" form. I would say all children born into patriarchal families where the mother relied on the husbands wage packet would need to have this practice. In the patriarchal system children were born as extensions of the parents fear and egos, they were not seen as spirits in themselves…their needs where not "felt" as the parents played out their dual roles in "coordinated opposition" as it were. Any woman that relies on a man for livelihood of her and her children is bound to be dissociated...in somewhat of a parasympathetic freeze...because she cannot speak her mind or point her life in her own direction...she thus becomes more infantile and helpless herself. Babies are then not blessings born of self actualized people but are burdensome chattels born to ensure the mothers dependent livelihood. The whole setup relies on and breeds the unconsciousness abdication of self-responsibility, autonomy and freedom. Economically this situation has changed in the last 50 years, but the fall out from this kind of breeding continues.

If we could start a movement of widespread Welcoming Belonging Practice things might shift, by helping us move into a mode of conscious incarnation, rather than living in the fallout of a social train wreak. This practice has elements of rebirthing in it, but it is specifically for restitution to the indignant unseen infantile ego/heart/spirit from conception to 5 years. I imagine that there is perhaps a music background. The tapes or talking are heard while the individual lies down under a blanket, not in fetal position or the person will be too unconscious to take much in. It would be good in a session with a therapist to actually do the auditing of what it was like for the individual from 5 back to 0 first...and then do the reframing. Of course this type of thing could be conducted in groups with individuals swapping roles.

With Welcoming Belonging Practice the process starts out with ones first day at school, and this is rescripted to care for the real fears of the child, then the process regresses back through the years back to conception itself, and the whole drama is replayed to portray the most loving, caring, attentive scenario one can think of. With WBT we give ourselves permission to live in our own right…that we are not just extensions of family and society, or worth only what security we give; that we have a God given right to a life that is "self-determined" prior to family, state or species. We can undertake this reprogramming by ourselves, with a partner, in groups or we could make up an audiotape. Some of the things it will heal are infantile pride, defensiveness, envy, approval seeking, borderline disorder, leaky boundaries, codependency, lack of connectivity, lack of place and purpose, inability to trust, dys-intimacy, infantile-bio-anger at rejection, and would probably cure compulsivity ie: disincarnation, and neurotic armoring etc...

We must first feel worthy ourselves, before the world will treat us with respect.

CONSCIOUS EMBODIMENT PRACTICE

Mitochondria and our other cells are just as sensitive to emotion, thought and sense of being as the immune system. Incarnation is one of the hardest tasks imposed on us, the instinct is to back away from the edge of our incarnation. We tend to hang out halfway here on planet earth, not sure if we want to stay or go. To the degree that we do this, our immune system and mitochondria are diminished.

If you turn your feeling-sense, emotion and thought toward coming forth in "good faith" to the n'th degree without hesitation or doubt, then you will automatically increase both the strength and the number of mitochondria and immune cells. I am proposing conscious and fully intentional incarnation, as a form of mindfulness meditation along with breath. Embodiment practice or purposeful incarnation is rather like Clark Kent's time in a phone booth when he changes into Superman. We transform not so much through visualization or affirmation, but by allowing and letting the Essence of our soul permeate our being. When you do this you can actually feel your cells respond positively, as though our normal operating mode is one of self-negating suppression.

The head-brain, the heart-brain and the stomach-brain fall into sync as spirit as it pours through the body...the knot of control in the belly is released and we transcend the fear of the unknown and come home to Presence. Then we see the suffering of the separate-self-sense is an illusion. The background fear, resistance, holding and avoidance can be worked out of the system through raw diet, green food, exercise, nature, exodus from cities, exhaustive use of the body, social connection, music-drumming-dance, meditation, communion with the planet and Kosmos etc... This "separation" is organic programming that must be worked "out" on a cellular level.

Once we have dealt with this organic fear, then existential conceptual fear reduces and we no longer fear for our fate, the fate of our family or planet. After kundalini, with the melting of the body armor, the bodymind is restructured and the perceptual filters of fear are dissolved. Kundalini changes the chemistry over to a background of love and cosmic connection...one may still have the question of "what to do?" but it becomes more of a case of whatever we do is ok. The fear that we are doing wrong—is the fear that we do not love enough—this is symptomatic of the division between body, mind and soul, and perhaps the frustration of being unable to live our highest subtle awareness in this 'stepped down world." Like we are stuck in between, waiting for reality to catch up to us or us to catch up to reality and all our visions and love is laid to waste, in this wasteland of commercial exploitation.

With conscious embodiment practice we take on full responsibility to change our world according to our contemporary values, without feeling like a victim to current social conditions. Thus a Cosmic "Yes" arises deep within every cell that affirms its existence and we gain the cooperation of all aspects of our being in furthering a directive that arises from deep within.

PART IX
METABOLICS OF LONGEVITY

ANTI-AGING

Longevity/spirituality = nutrition divided by calories + cleansing-repair-regeneration

Aging and disease are associated with the following interrelated factors: Oxidation damage to cell membranes; Resulting in disruption of flow into and out of the cell; Imbalance of excess calcium and a deficiency of magnesium inside the cell; Cellular dehydration-insufficient water for cell processes, structure and energy; Receptor desensitization and insulin resistance; ATP generation is reduced producing a cellular energy crisis.

Basically an antiradiation, antiinflammation, antiaging and the kundalini meta-adaptation diet and lifestyle is one and the same thing. Metamorphosis is dangerous to those that do not understand nature and the life of the cell, in that we are dealing with the welfare of our cells within a high radiation condition. To fully protect the body from the quickening of life processes and the radiation, oxidation, glycation, detoxification, catabolysis associated with kundalini we need adopt an antiaging program that includes: Water and fat-soluble antioxidants, antiradiation herbs, The Lightbody Formula, Bioactive water (left-spin, North-pole, negatively charged, alkaline), an antiinflammation-Raw-remineralized diet and supplements.

CALORIE RESTRICTION DIET

The aging process involves incremental damage to cells through oxidation, coupled with the accumulation of toxins from metabolism, food and environment. Fasting and calorie restriction (reducing Calories by 40%, especially carbohydrates) is the most profound method of reducing the aging process. One per cent of the oxygen we consume turns into reactive oxygen species (ROS or free radicals). Over a year a human body makes 1.7 kilograms of ROS. The gastrointestinal tract, especially the stomach with its highly acidic environment, is constantly generating reactive oxygen species from food. "An antioxidant" is a reducing agent, which can react with oxygen in the water to produce hydrogen peroxide.

Harvard University researchers found a link between aging and two human genes that seem to play a role in the longevity of the cells that compose our bodies. "We've found a gatekeeper of cell survival and potentially the aging process itself," said David Sinclair, a Harvard molecular geneticist and lead author of the paper. In 2003, he made headlines after finding that resveratrol, an antioxidant compound in red wine, could lengthen the life span of yeast cells by up to 80 percent. Sinclair sees a link between resveratrol and calorie restriction in that both seem to activate the SIRT1 gene that produces one of a class of enzymes known as sirtuins, which help cells protect themselves against DNA damage and cell death

As well as lowering free radical production, calorie restriction reduces the body temperature, slows metabolic rate, lowers insulin levels and eases the decline in

DHEA. Raw food might operate in a similar fashion to calorie restriction, because raw food does not kick in the activation of white blood cells (leukocyctosis) of the immune system in the GI tract. Thus a life of raw food and the consequent reduction in body temperature via reduction of the inflammatory immune response, contributes to longevity.

Reducing calorie intake was the only reliable method found to repair DNA. With an excess of food the increase in oxidation to the mitochondria reduces ATP production which impairs cell efficiency and promotes aging. Also mitochondrial DNA lacks the protective protein shield that prevents DNA damage—this is known as the Mitochondrial Theory of Aging. With a combination of fewer calories plus higher nutrient density, it is easier for the body to run through all its cycles with greater efficiency. If we start up the digestive process several times a day, every day of our lives, then the body doesn't have "time" for cleansing/repair/regeneration. So organs congest, plaques are laid, enzyme systems get exhausted, and metabolism and DNA repair is interfered with.

If we load our system with food day after day, then our body is so preoccupied with digestion/elimination that it doesn't have the energy, enzymes and immunity for higher functions such as building the "spiritual body," and for higher thinking, psychic and visionary capacities. Such unceasing digestion therefore reduces the amount of light/love flow through the tissues. We become largely a "digestive" animal, with little contact with our psychic, subtle and spiritual life. The spiritual benefits of fasting and the calorie restriction diet arise because conductivity of nerve energy and biophoton coherency goes up. Cell membrane fluidity increases because the cells are no longer coated with junk increasing the availability of receptors for hormones and neurotransmitters. The cells are better "informed" so metabolism improves and they can detoxify themselves properly so there are less stored poisons. This means that metabolism in general can occur at optimum efficiency thus increasing the conductivity of the Light of spiritual Presence.

In considering the need for maximum nutrition with minimal digestion, it becomes apparent that recreational eating is counterproductive and will set us back spiritually and energetically. In the philosophy of the calorie restriction system, we need to refine our diet so that we are only eating the most vital, nutritious food, specific to the real needs of our body. This system is focused foremost on efficiency, and thereby getting the digestive process "out of the way" so that higher life processes and experiences can be explored unencumbered.

Calorie restriction is not undertaken in a deprivational fashion, but simply through a hypersensitivity to reality, i.e.: Love! The more perfect the flow of light/love through our tissues, the more spiritual-intuition and intelligence we embody, and the more awareness we can apply to "including and transcending" our digestive function. We tend to use food for self-repression without even knowing it. When we stop doing this we quickly become reacquainted with all our repressed urges and unease: loneliness, horniness, sadness, confusion and other uncomfortable emotions. The calorie restriction diet should enable us to plum the depths of our incarnation in a geometrically accelerating fashion without holding ourselves back.

Fasting cleans and clears all body tissues including synapses, liver and blood which allows greater conductivity of energy and nutrients. In an article on fasting in Alternative Medicine Sept'04 it says that the mild stress imposed by fasting fortifies the body to stave off degenerative diseases. The continual low-grade stress of calorie reduction seems to make the cells stronger by kicking in a gene repair mechanism. Members of the Calorie Restriction Society typically eat between 1100-1950 calories a day, whereas the average Western diet is around 2763 per day. Some eat once a day, others eat once every other day. According to Jack Tips the main meal should be in the morning between 9-11am.

Hunger increases blood flow in the hypothalamus and other limbic areas. Mark Mattson of the National Institute on Aging says that he believes that the mild stress of fasting increases *protein synthesis in the brain*, inducing increased growth of new nerve cells, as well as shielding the cells from oxidative damage. So fasting increases brain function, offers nerve protection. With a calorie restricted diet there is going to be less oxidation in the body in general. The calorie restriction diet does have spiritual effects in its highest aspect, but people usually adopt calorie restriction for longevity first, then health benefits second. This diet system started when research found that rats live 30 percent longer on reduced calorie diets. The key point is though is that they still get maximum nutrition through nutrient dense supplements. High nutrient-density is key for you won't get results out of simply dropping calorie intake. More information on calorie restriction can be found in Roy Walford's book *Beyond the 120-Year Diet: How to Double Your Vital Years.*

"Man either builds himself or destroys himself by the manner in which he lives… Every normal habit indulged to satiety and every abnormal habit produces disease. Here is the origin of every so-called disease. The end is chronic disease and premature death. Until we learn to recognize the fact that symptoms are the result of toxic saturation and learn the source of the intoxication, we are left with nothing we can do for the sick except provide a brief and questionable palliation." Herbert Shelton, *Fasting Can Save Your Life*. P.111

The Fasting Path by Stephen Harrod Buhner is one of the best books I have encountered on the spirituality of diet. As I get older I find less enthusiasm for disciplines like fasting...but this book perhaps more than any other gives inspiration, with a sensitizing injection of spiritual intention.

Heavy Metals—Calorie restriction also reduces the accumulation of the metallic mineral oxidizing agents such as iron, copper, cadmium, lead, manganese and arsenic…lowering the accumulation of toxins in the cells improves the cells ability to repair DNA. Thus calorie restriction helps maintain DNA integrity. In Bill Sardi's book *The Antiaging Pill*, he writes that women have half the rate of diabetes, heart disease, cancer and infections because they have half the iron levels compared to males. If men are meat eaters, they might be able to add more years to their life by doing periodic iron chelation with IP6 to lower their iron levels. Inositol Hexaphosphate (IP6) is a phosphorylated form of inositol commonly found in fiber-rich plant foods like rice bran. IP6 may support the cell's natural defense against damaging hydroxyl free radicals by chelating with reactive iron.

IP6 is an efficient mineral chelator and therefore should be taken only on an empty stomach (1 to 6 X 500 mg capsules per day for 1-2 months with water). You can also add rice bran itself into your daily diet. **Super Sprinkle:** Get some raw *rice bran* and *wheatgerm* from a reputable source that you can tell has been refrigerated and is still fresh, and mix these together with fresh ground *flaxseed* and keep in the fridge...you can use this as a sprinkle over your food or in smoothies etc... They are tastier together than by themselves. (See more on rice bran in the Herb List).

Note that Vitamin C (ascorbic acid) increases iron assimilation, while bioflavonoids such as quercetin protect against the negative effects of insurgent iron in the system. When supplemental Vitamin C is taken along with iron enriched foods, the iron can cause the oxidation of the Vitamin C, forming dehydroascorbic acid, a free radical pro-oxidant that is dangerous to neurons. Vitamin C combined with vitamin E, work together synergistically to reduce lipid peroxidation in the brain. CoQ10 and niacinimide (B3) also work together to protect against mitochondrial toxicity from heavy metals. Alpha Lipoic Acid (ALA) and Dihydrolipoic acid (DHLA) is capable of regenerating the Vitamin C molecule, which along with Tumeric can provide the broadest spectrum of antioxidant neuron protection. Salicin from White Willow bark increases the production of ferritin, an iron-binding protein that prevents iron from inducing free radical oxidation. Ferritin is the form in which iron is stored in the liver and other tissues. Use calcium buffered Vitamin C as heavy metals acidify the body so it draws calcium from the bones to help restore the proper blood pH. Further, toxic metals set up conditions that lead to inflammation in arterial walls and tissues, causing more calcium to be drawn to the area as a buffer.

Chelation Foods that remove heavy metals include: Ashitaba, Green tea, Cilantro and Parsley, Nettle, Ginkgo, Aloe gel, Olive leaf, Water melon juice, Banana stem juice, juice of whole pumpkin with skin and seeds, and sulfur foods and supplements. **Chelation Supplements** that help remove heavy metals include: Folic acid, Selenium & Vitamin E, Silicon, Pycnogenol, Quercetin, N-acetyl cysteine, L-Carnosine, Vitamin C and Magnesium. Kelp contains a powerful chelating agent called Mannitol. (See *Dirt~ The Elixir of Life* for information on using humic acids to remove heavy metals.) Spirulina or chlorella are needed to bind up the liberated mercury and carry it out of the body.

Medically chelation is done to reduce calcium plaques on arterial walls using a synthetic amino acid, **EDTA** (ethylene diamine tetraacetic acid). Oral chelation works best through the synergistic effect of combining EDTA with numerous natural chelating agents, such as activated Clays (Zeolite and Fulvic acid), bioflavonoids, Vitamin C and Alpha Lipoic Acid, Chlorella, Cilantro, Hawthorn berry, Cayenne, CoQ10, Garlic, Grapeseed extract, L-cysteine, L-glutathione, Vitamin B's and E, Methionine, Lysine, Proline, L-taurine, Selenium, Sodium alginate, and Zinc gluconate. L-lysine is an amino acid involved in the structural repair of damaged blood vessels. It has a beneficial effect on lead toxicity and high blood pressure. Plant-based enzymes (bromelain, lipase, catalase) to ensure optimal utilization of all of the above nutrients.

THE ENIGMA OF VITAMIN C

Due to a genetic mutation, humans and other higher apes do not manufacture Vitamin C. The mutation has not been lethal because vitamin C is abundant in their food sources. Most simians consume vitamin C in amounts 10 to 20 times higher than the RDA. Prior to the mutation Vitamin C was a hormone produced in the liver, while in reptiles and birds it is produced in the kidneys. Bill Sardi in *The New Truth About Vitamins and Minerals* says that a 160 lb mountain goat makes about 13 grams of Vitamin C a day, and more when under stress. Vitamin C is an anti-stress vitamin and our need for it varies with our level of physical or emotional stress. Stress causes the adrenal glands to signal the release of sugars and fats into the blood stream to prepare for a response to danger. In most other animals but apes, fruit bats and guinea pigs these sugars are converted to Vitamin C in the liver. Sardi suggests that if humans also manufactured Vitamin C, we would be immune to degenerative disease and our lifespan would be more like 144-216 years.

Vitamin C (L-ascorbic acid) is available in many forms, and according to Linus Pauling none is more effective than another, and natural and synthetic L-ascorbic acid are chemically identical. However, one needs to balance the Vitamin C intake with up to 70% Bioflavonoids, to increase assimilation, utilization and prolong the Vitamin C's effects. Mineral salts of ascorbic acid (Sodium ascorbate and Calcium ascorbate, Magnesium ascorbate, Potassium Ascorbate) are buffered and therefore, less acidic to the stomach than ascorbic acid. Vitamin C plays an important role in the synthesis of the neurotransmitter norepinephrine. Like dopamine, norepinephrine has a stimulating effect, fosters alertness, and plays an important regulatory role in long-term memory and learning. It also protects endorphins from being broken down prematurely, which might elevate mood. It is required for the synthesis of carnitine, needed for the transport of fat into mitochondria, for conversion to energy. Vitamin C is also needed for collagen, bile, as an antioxidant, antimutagenic and for the regeneration of other antioxidants. It may also protect from lead poisoning by inhibiting intestinal absorption or enhancing urinary excretion of lead.

During a kundalini awakening it might be good to supplement with Vitamin C up to 4-8g per day. When taking vitamin C tablets avoid the chewable type or you will lose tooth enamel. As a general rule the hotter the kundalini heat we are experiencing the more we need to increase our antioxidant intake and the more careful we have to be to not include cooked carbohydrates or transfats in our diet.

Camu Camu fruit contains the highest documented quantity of natural vitamin C on earth—Camu Camu's vitamin C content has been recorded at 500,000 ppm. Compare that to orange which provides 500 to 4,000 ppm (parts per million) of vitamin C, or Acerola which provides up to 172,000 ppm.

Amla (Amalaki), the Indian gooseberry, is one of the fruits in the most widely used Ayurvedic herbal formula – Triphala. It is considered a general panacea for almost all imbalances and described as containing 20 times the amount of vitamin

C to be found in an orange. The fruit contained 482.14 units of superoxide dismutase/g fresh weight. As one of the highest vitamin C sources in nature, amla fruit is antiaging, antidiabetic and immune enhancing. The powder of the dried amla fruit is an effective remedy of hyperacidity, ulcers, blood cleansing, inhibits platelets aggregation, lowers cholesterol levels. Amla is a longevity tonic, which stops premature graying or hair-loss, encourages nail and hair growth, and improves eyesight.

Rose Hips (*Rugosas*)—Rose Hips are a valuable source of vitamin C, like Amla they contain as much as 20 times more vitamin C than oranges. Freshly ripe hips can contain nearly 10% ascorbic acid; while overripe hips are sweet, but have lost much of their vitamin C. Rose hips are also full of bioflavonoids, associated with fruit pigment that increase the absorption and biological effectiveness of vitamin C. The anti-inflammatory and antioxidant compounds in rosehips could provide new ways of tackling a whole range of inflammatory diseases, including osteoporosis, arthritis, Crohn's disease and even heart disease. Rosehips have been used as a traditional medicine to treat arthritis, colds and flu, bladder stones, dry skin and premature ageing. Rose Hip Oil increases cell growth in the region of wounds and effectively helps in removing scars and wrinkles, in preventing advancement of premature aging. Trans-Retinoic acid, derivative of Retinol (Vitamin A) was the component responsible for the remarkable pharmacological properties of Rose Hip Oil.

Moringa Oleifera—The dried and powdered leaves of the *Moringa Oleifera* tree provide 7x the vitamin C of oranges. Be aware that the skins and seeds/kernels of plants contain the most amount of antioxidants…for example mango peel and kernel has antioxidant levels that are 20-40 times higher than the flesh itself. One study showed that pomegranate peel gave the maximum antioxidant activity due to the presence of its high polyphenolic content. At a concentration of 60 ppm pomegranate peel powder reduced fat oxidation by 65% in an in vitro assay.

How to Live Longer And Feel Better by Linus Pauling

RESVERATROL

Studies on resveratrol, found that this enzyme from the skins of red grapes, activated the longevity gene (SIRT1) more than other substances. In rat studies Dr. David Sinclair, at Harvard Medical School, found resveratrol switched on an array of genes, which are also activated by calorie restriction, thus it is believed to mimic the effects of a low calorie diet without actually reducing food consumption. Resveratrol therefore mimics calorie restriction longevity effects! Resveratrol is reputed to have anti-cancer, anti-mutagen, antifungal, antiviral, neuroprotective, anti-aging, anti-inflammatory and anti-oxidant effects.

Resveratrol is a phytoalexin—a class of antibiotic compounds produced as a part of a plant's defense system against fungi. It is found in widely varying amounts in grapes, primarily the skins of Vitis vinifera, labrusca, and is particularly high in muscadine grapes and seeds. The muscadine grape is native to the southeastern

United States. Wines produced from these muscadine grapes may contain more than 40 mg/L of this phytochemical, while ordinary red wine contains between 0.2 and 5.8 mg/L.

The resveratrol content of a wine is related to the length of time the grape skins are present during the fermentation process. So non-fermented grape juice and cider made from grapes is not a significant source of resveratrol. If you are anticipating getting your resveratrol from red wine, be aware this flavonoid is oxidized by exposure to air, so only freshly opened bottles of red wine offer a good dose of the enzyme. Cooking also reduces the resveratrol by half.

Highest resveratrol levels are found in dark purple grapes from humid, cooler, high altitude areas, in wines made by traditional methods. Resveratrol is highest in pinot noir wines from Portugal, France, Italy, Mendoza-Argentina and Marlborough-New Zealand Pinot Noirs. The Italian island of Sardinia produces wine with the highest resveratrol levels in the world and this region is known for its centenarians. On this isle there is less mortality of the elderly due to circulatory diseases and cancer. In 1997 there were more than 220 centenarians; that is twice the average for western countries and with a higher ratio of male's over 100 years than elsewhere also.

Muscadines also contain ellagic acid, a natural organic compound thought to inhibit the start of cancer caused by certain chemicals. An enzyme called CYP1B1 found in many cancer cells converts resveratrol into a chemical called piceatannol that kills cancer cells. Resveratrol has many anti-cancer effects including preventing DNA mutations, it is more protective of DNA than vitamin C, plus it arrests tumor cell replication and induces cancer cell death by apoptosis. Resveratrol directly induces apoptosis of the cancer cell through depolarization of mitochondria and activation of the intrinsic mitochondrial apoptotic pathway. It also lowers levels of the enzyme "aromatase" that converts testosterone to estrogen. One appealing characteristic of resveratrol's anti-cancer potential is its minimal toxicity to blood-forming cells. Resveratrol may reduce the risk of developing prostate cancer; male mice fed resveratrol showed an 87 percent reduction in their prostate tumor risk. Also pterostilbene, a compound found in berries and grapes, strongly suppresses a type of an enzyme that activates cancer-causing processes.

Men tend to accumulate more iron in their tissues which can cause free radical damage in the mitochondria...this is thought to be one of the main reasons females tend to live longer. Resveratrol and Quercetin are potent iron and copper binders, serving to reduce the accumulation of these "rusting" elements in the mitochondria. Greater than 90% of free radical oxidation damage occurs within the energy generating centers, the mitochondria.

Wine and supplements made from purple grapes are used for cardiovascular health, clear arteries of cholesterol, lower platelet aggregation, relax arteries and regulate nitric oxide. Besides fighting free radical damage and lipid oxidation, it also helps joint pain, bones, headaches, fatigue, menopause, lowering blood sugar and aids digestion. And protects neurons from oxygen damage during a stroke, retards age related loss of mental faculties, improves endurance, performance and recovery, and reduces damage from toxins and radiation.

A study in rats showed that resveratrol is absorbed in the gut and has a high affinity for the heart and liver. Critics say that most of the resveratrol is broken down in the digestive system, but antiaging scientists say that reservatrol works better in low concentrations anyway. **Quercetin**, a companion antioxidant to resveratrol in red wine protects it from being broken down in the liver and significantly improves the bioavailability of resveratrol. In fact the other antioxidants "quercetin and epicatechin," also found in red wine may be even more effective than resveratrol. Quercitin is found in highest amounts in onions, apples, berries, green tea, grapes, red wine, chamomile, pollen, olives, fenugreek, lettuce and ginkgo.

Resveratrol is also found in raspberries, mulberries, plums, peanuts, including blueberries, bilberries, and cranberries, some pines, such as Scots pine and eastern white pine, eucalyptus, spruce, yucca root and lily. Remember that antioxidant substances are in highest concentrations in the skins and seeds of plants. Resveratrol is commercially harvested from the roots and stalks of Polygonum cuspidatum (Japanese knotweed) otherwise known as Hu zhang in China where it is used to treat arterial endothelial damage. He Shou Wu (Polygonum multiflorum) or Fo-ti is a relative of Hu zhang with similar antioxidant properties, taken for vitality and virility. The knotweeds should not be taken by people with kidney stones because they contain oxalic acid. Resveratrol oxidizes easily and so most supplements other than wine itself will not be bioactive, except the supplement produced by Bill Sardi under the "Lonevinex" brand that uses special processing conditions.

I think the message to take home is to not be so squeamish about drinking wine, and to have some sense that if you drink the right kind of wine, in moderation, there may be some longevity benefits to health...as proven by the Sardinians.
www.longevinex.com —"Stabilized" supplement of resveratrol
www.longevitypill.com, www.askbillsardi.com—Bill Sardi
www.revgenetics.com/Index.htm —Highest concentration of resveratrol
www.muscadine.com/wineries.htm —Muscadine Wineries
www.paulkvineyards.com —Purple Power - Muscadine Grape Skin Powder

ACAI BERRIES

So we have got the grape down, but apparently the acai berry rules the phytochemical world, with even more potent in phytochemicals than grape is the acai berry (Euterpe oleracea). This dark purple Amazonian palm berry boasts the highest known ORAC (Oxygen Radical Absorbance Capacity) antioxidant value ever reported for any fruit or vegetable to date. The acai palm grows in the rain forests of Brazil and the Amazon. The fruit is harvested in the wild by local farmers and then quickly frozen to preserve its nutritional value, for the high fat content of Acai berries makes them go rancid within a day of being picked. Buy as freeze-dried pulp and skin powder or frozen Acai berry pulp for smoothies.

The acai berry contains 7.59% protein and 44% fiber, as well as healthy omega-6 and omega-9 fatty acids. Nearly 1/3 of the Acai berry is fat - with 74% of that being essential fatty acids Omega 3, Omega 6, and Omega 9. There are also many other vitamins such as B1, B2, B3, E, and C, minerals such as Phosphorus,

Calcium, and Potassium. Acai berries can contain over 30 times the anthocyanin red pigment of red wine. Anthocyanin, a natural antioxidant have been shown to reduce pain and inflammation, prevent capillary fragility, thin the blood, stimulate the release of vasodilators, lower blood pressure, reduce clotting and improve blood supply to the nervous system, reduces inflammation, and stabilizes collagen and may benefit the retina. Twelve other flavonoid-like compounds were found in acai including resveratrol, although at low levels of 1.1 microgram per gram. Acai was found to have higher "slow-acting" antioxidant components, suggesting a more sustained antioxidant effect.

Other high ORAC scoring foods include cacao, cherries, prunes, raisins, blueberries, blackcurrants, kale, spinach, spices, Camu camu, Acerola, Amla, Aronia, Pomegranate, Bilberry, Mulberry, Jaboticaba, Black Sapote and the guava genus.

www.herbal.com/ sell powders by the pound of Camu Camu, Acerola berry, Acai berry and Rosehip.

PINE BARK EXTRACT

Pycnogenol is a natural plant product made from the bark of the European coastal pine, *Pinus Maritima*; used for peak performance and against all disease, illness and infirmity. Pycnogenol is the most efficient natural free radical scavenger known; it is 50 times more antioxidant power than vitamin C or E and is said to be is one of the main 21st century anti-aging substances. Pycnogenol contains 85% to 95% of a bioflavonoid call proanthocyanidin. These proanthocyanidins make Pycnogenol the most powerful natural free radical scavenger, antioxidant anti-inflammatory and anti-mutagen yet discovered. Being water soluble it is absorbed almost instantly and it passes the blood brain barrier to protect the brain cells. Antioxidant protection to the brain and central nervous system is a vital consideration in kundalini. Proanthocyanidins act within the cell membrane where they can neutralize both water and fat-soluble free radicals. Pycnogenol has the unique ability to bond to collagen fibers, repairing damage, protects **collagen** and **elastin** from destructive enzymes, prevents inflammation, and improves microcirculation and maintains vascular integrity. It lowers the activity of the immune cell trigger for inflammation. Pycnogenol balances stress hormones, which lowers adrenaline and dopamine, resulting in a decrease of ADHD.

GRAPE SEED EXTRACT

Proanthocyanidins are also found in Grape Seeds. In fact Grape Seed Extract contains 92-95% proanthocyanidins. The binding of grape seed extract to phosphatidycholine enhances its biological activity further, making it three times more effective than pine bark. Research is finding that grape seed extract inhibits cancer growth and causes apoptosis of cancer cells. You take 160 mg of Pine Bark Extract or Grape Seed Extract for ten days at first to reach tissue saturation. Then the dosage can be cut back to about 50 to 60 mgs per day. Pine Bark and Grape Seed are nontoxic and support the body's own antioxidant system.

INFLAMMATION THEORY OF AGING

The Inflammation Theory of Aging and Disease reveals the role of cellular inflammation in disease and degeneration of tissue. Inflammation is a consequence of the accumulation of toxins in the body, and it is a biological response to harmful stimuli, such as pathogens, damaged cells, or irritants. The over production of three hormones: Cortisol, Insulin and Pro-Inflammatory Eicosanoids contribute to low-level chronic inflammation. This global inflammation characteristic of the aging process, is associated with the reduced capacity to cope with immune stressors, a weakening of related enzymes systems, and progressive increase in pro-inflammation. This phenomenon is thought to be provoked by decades of continuous antigenic load and stress. Silent inflammation not only accelerates aging, but also contributes to unwanted weight gain. Reduce silent inflammation and the immune system gets a lot happier. And when the immune system is "happy," that is not on hyper-alert and overworked, then a sense of wholeness and well being is achieved. The sense of cellular metabolic mastery reduces cravings, compulsion, addiction and compensatory self-destructive behaviors, because the body knows itself to no longer be under constant "threat."

Contributors to low level chronic inflammation include smoking, alcohol, fatty foods, refined carbs and sugars, pollution, pharmaceutical by-products, lack of exercise and stress. Modern man is becoming increasingly "denatured" due to heavy metal poisoning, oxidation and inflammation, because of a cooked diet, mineral deficiency and phytochemical deprivation. Which then creates the degenerate symptoms of obesity, diabetes, heart disease, ADD and all manner of metabolic, mental, social and political breakdown. Research has found that inflammation leads to insulin resistance while excess insulin leads to inflammation. The way that we reduce silent inflammation is by removing toxins from our cells and building the reserves of nutrients that fight free radicals. This is achieved by a diet rich in raw fruit and vegetables of high phytochemical value. There are more than a thousand known phytochemicals that have protective, disease preventive properties and antioxidant activity including: sterols, flavonoids, allyl sulfides, carotenoids, flavonoids, polyphenols, lycopene, isoflavones, saponins, capsaicin, anthocyanin, resveratrol and quercetin to name a few.

The heavy metals cannot be metabolized by the body, so if they accumulate in the tissues and interfere with various physiological functions. The heavy metals that pose the most threat to the body are mercury, cadmium, lead, arsenic and aluminum. Rejuvenation would entail methods of **chelation** to remove these heavy metals and other toxins. Cilantro is believed to help remove heavy metals, especially mercury. Aluminum, perhaps the most serious toxin in our environment, can be chelated with magnesium glycinate. Magnesium also helps remove fluorides and the only substances that are more damaging to living cells than fluorides are the radioactive isotopes. ¼ tsp Magnesium citrate in a glass of water before bed might help remove fluoride, because the citrate ions can chelate unwanted metal ions. This is also a remedy for those with constipation and may be useful for people who develop calcium kidney stones from impaired intestinal absorption due to inflammatory

bowel disease. Fluoride accumulates in the pineal gland, creating damaging effects such as early puberty, lowered melatonin, porous bones and teeth, bone cancer and feeble mindedness. The toxic effect of fluoride ion plays a key role in acute Mg deficiency. www.mgwater.com/fl2.shtml —Fluoride Magnesium Interaction

Cysteine is a naturally occurring, sulfur-containing amino acid that is a building block to most proteins, including the antioxidant glutathione (L-cysteine, L-glutamate and glycine). Due to the ability to undergo redox reactions, cysteine has antioxidant properties. Cysteine is best taken as Cystine, rather than N-acetylcysteine (NAC). Organic sulfur phytochemicals from plants in the onion and cabbage family offer phytochelation properties that remove heavy metals and other toxins from the body. **Phytochelatins** are peptides - short chains of amino acids are synthesized from glutathione. Phytochelatins are small, cysteine-rich peptides capable of binding heavy metal ions. They trap, or 'chelate', heavy metal ions to form an inactive complex. Phytochelatins are more effective than glutathione and citrate at protecting the plant from heavy metals. I haven't found reference to it yet, but it makes sense that the phytochelatins from raw fruits and vegetables are the ultimate chelators of toxins in the human body as well. Dietary detox measures should include sulfur-rich foods; kale, cabbage, garlic, beans and egg yolk.

Echinacea and Dandelion are immunomodulators that help diminish acute allergic hypersensitivity. Echinacea modulates the expression of pro-inflammatory cytokines by acting on cannabinoid receptors on the surface of immune cells, and lessening the production of NF-kappaB and therefore the transcription and expression of inflammatory proteins. Echinacea suppress IL-2 production, a pro-inflammatory cell-to-cell signaling molecule. Ginger is a natural cox-2 inhibitor.

NEUROENDOCRINE THEORY OF AGING

The Neuroendocrine Theory of Aging first proposed in the 1960's by Prof. Vladimir Dilman, along with Dr. Ward Dean. This theory is central to meta-adaptation to kundalini and specifically how we might protect receptors, and recover receptor sensitivity and numbers after an awakening. *The Neuroendocrine Theory of Aging* is outlined in Ward Dean's articles at vrp.com in the Research Center.

"The central thesis of the Neuroendocrine Theory is that the aging process is caused by an age-related loss of central (hypothalamic) and peripheral receptor sensitivity to inhibition by hormones and other signaling substances. This loss of hypothalamic sensitivity results in a progressive shifting of homeostasis—the body's regulatory system for maintaining internal balance—and altered levels of hormones, neurotransmitters, and cell signalers. These metabolic shifts are believed to cause aging and the diseases of aging." Ward Dean M.D.

By restoring hypothalamic and peripheral receptor sensitivity to more youthful levels, this positively impacts the four principle homeostats, increasing overall adaptogenesis and reducing "aging." The four principle homeostats are: Energy, Adaptive (hypothalamus-pituitary-adrenal axis), Reproductive and Immune. Dilman believed that the level of catecholamines (epinephrine, norepinephrine,

dopamine) is one of the most important factors determining hypothalamic sensitivity and homeostatic balance. The Catecholamine receptors decline with age and are damaged both by the toxic effects of emotional repression, stress and the extreme chemistry like kundalini awakenings or trauma. Because kundalini represents increased metabolism and nerve transmission we should consider all the various aging mechanisms during an awakening and supplement accordingly. As such the protocol outlined in Dr. Dean's articles on receptor recovery constitute one of the main ways that we can recover from a kundalini surge and to substantiate higher homeostasis. In this way we can gain the benefits of kundalini without enduring harm. In addition to a low-glycemic diet and exercise, we have to *fight* free radical damage to our cell membranes, *conserve* hormone and neurotransmitter receptor sensitivity, *rebuild* hormone and neurotransmitter levels after the peak and *restore* the four homeostats.

Three ways of enhancing catecholamine metabolism:

1: Receptor Repair— Free radicals cause cross-linked AGEs, reduced cell membrane fluidity as well as the loss of number and sensitivity of receptors, this upsets the balance of hormones and neurotransmitters. Since kundalini is a highly excited state we can expect overwork of our glutamate and catecholamine systems and consequently to our neuroinhibiting receptor mechanisms as well—i.e.: GABA, serotonin, acetylcholine, glycine and opiate receptors.

2: Use Precusors—One way to balance neurotransmitters in the brain is to use neurotransmitter precursors like the amino acids: Tyrosine, phenylalanine, GABA, tryptophan and 5-HTP to normalize neurotransmitter levels. Dilman demonstrated that appropriate use of these substances restores hypothalamic sensitivity. The amino acids phenylalanine and tyrosine increase the synthesis of catecholamine neurotransmitters.

3: Inhibit transmitter breakdown—The enzyme Monoamine oxidase (MAO) catalyzes the breakdown of epinephrine, norepinephrine, dopamine. MAO levels increase with age thus increasing the degradation of these stimulating neurotransmitters, in favor of the inhibitory, serotonergic neurotransmitters, altering the *balance* of the dopaminergic/adrenergic to serotonergic neurotransmitters. One way to conserve catecholamine power as we age is to use the MAO-B inhibitor Deprenyl.

RECEPTOR RECOVERY—Following are some supplements Dr. Dean suggests for increasing receptor sensitivity. They all have multiple mechanisms of action, without toxicity: Ginkgo biloba, Goat's rue, Alpha Lipoic, Acetyl-L-Carnitine, Cinnamon Extract, S-adenosylmethionine (SAMe), Phosphatidylserine, Acetyl-l-Carnitine (ALC), Tribulus terrestris, Chaste Berry, Forskolin, Chromium picolinate, Vanadyl Sulfate, Essential Fatty Acids (EFA), Tryptophan, (5-HTP), Blueberries, Spinach, Strawberries, Succinic acid, Calcium-2 AEP, Black Cohosh.

For details see *Neuroendocrine Theory Of Aging, Part II: Adaptive Homeostat Dysfunction*, Ward Dean, M.D. http://vrp.com/art/1666.asp

MITOCHONDRIAL THEORY OF AGING

Mitochondrial DNA is ten times more susceptible to damage than the DNA in the cell nucleus, because it lacks some of the systems that protect and repair DNA in the cell nucleus. When there is oxidative damage to mitochondrial DNA cellular energy is reduced and the cell's sensitivity to excitotoxicity is greatly increased so that even normally occurring amounts of neurotransmitters, such as glutamate, can trigger cell death. Inflammation can also lead to a low cellular energy state, which allows neurons to become hyper-sensitive to glutamate, aspartate and other neurotransmitters so that even normally occurring levels of these neurotransmitters can result in cell death.

Fast DNA repair is promoted by the flavonoids, and any phytonutrient that has anti-viral properties is capable of DNA repair. Mitochondria produce 80% of the ATP needed to power our cells. These energy production organelles become less efficient with aging. Changes in the mitochondria induced by aging include: free radical damage to DNA, reduced efficiency in the Krebs cycle (citric acid cycle), reduced responsiveness to energy demands, defects in the respiratory chain due to enzyme alterations and decreased membrane fluidity.

Cancer is an inflammatory metabolic disease caused by generations of demineralization, cooked empty food and triggered by stress, age and carcinogens. One of the main components of the disease is the cells shift from aerobic to anaerobic energy generation. To prevent "rusting" in the energy centers—Men, particularly meat eaters, need to chelate excess iron out of their system after they reach 40 with IP6 and pycnogenol and prevent rusting with quercetin and resveratrol. Oxidation damage from iron, copper and other heavy metals might be a leading factor cessation of mitochondrial krebs cycle-ATP production and the shift over to the anaerobic gluconeogenesis of cancer cells. To prevent cancer therefore we need to maintain a lifestyle that builds strong mitochondrial function and efficient ATP production.

Succinic Acid—Spirit of amber has been used as an antibiotic for centuries; it was procured from amber by pulverizing and distilling it. Amber resin contains about 8% succinic acid, which offers protection from radiation, infections and toxins. It helps the body to process alcohol by improving acetaldehyde detoxification. Succinic acid restores the energy balance at the cellular level; because succinate, is a component of the citric acid cycle and is capable of donating electrons to the electron transfer chain. Succinic acid is a powerful antioxidant, restores cardiac rhythm, stimulates neural recovery and bolsters the immune system. Succinic acid can be safely taken as needed without side effects, even in large amounts, since it is impossible to overdose.

Idebenone (a synthetic CoQ10 analog) protects cell membranes and mitochondria from oxidative damage. A therapeutic regimen of 300 mg Idebenone per day, and six grams of sodium succinate, combined with magnesium and potassium citrate may normalize mitochondrial function, increase cellular and systemic energy production. Sodium Succinate has many uses in the treatment of

cancer, specifically to revive mitochondrial activity in tumor cells, which generate their energy anaerobically via gluconeogenesis, producing lactic acid.

Also along the lines of **mitochondrial reactivation** for cancer treatment is ongoing research at the University of Alberta on using Dichloroacetic acid (DCA) to kill cancer cells, but not normal cells. Evangelos Michelakis and his colleagues discovered that this simple cheap molecule, DCA, worked to reactivate the apoptosis mechanism of cancer cells, causing tumors in rats to shrink 70% in three weeks. Mitochondrial reactivation represents an entirely new exciting approach to treating cancer.

When mitochondrial DNA is oxidized and cellular energy falls, the cells vulnerability to excitotoxic neurotransmitters is increased. Oxidative stress can also trigger inflammatory cyctokines which induce the production of nitric oxide. Acetyl-L-carnitine and alpha lipoic acid (and DHLA) are believed to play a role in slowing mitochondrial oxidation and apoptosis. In research, the activity and energy level of old rats taking these same supplements almost doubled, and memory and cognitive function improved. By providing more "mental energy," studies show that animals receiving supplements are much more readily able to learn new things as well, even at an advanced age. N-acetylcysteine (NAC) supplementation enhances glutathione levels and mitochondrial respiration. Mitochondrial energy production is also supported by magnesium and vtaimins B1, B2, B3, A, C, E, K and folic acid.

See Dr. Ward Dean's articles on Mitochondrial Restoration in the Research Center at www.vrp.com

Seven Dimensions of Fitness: A Guide to Anti-Aging, Exercise, and Supernutrition by Chris Kilham

Cracking the Metabolic Code by James B. LaValle and Stacy Lundin Yale

www.acu-cell.com/—Great nutrition information

FREE RADICALS AND KUNDALINI

Longevity = maximum ATP (energy) with a minimum of free radical production.

How well we weather a kundalini awakening is partly determined by our antioxidant reserves, our blood-sugar/glycation history and our mineral and enzyme reserves. If our protein structures are strong and we have strong antioxidant defenses, then extra energy can pass through our system without excess glycation or oxidation damage. Getting those powerful antioxidant reserves from food sources is harder these days considering that there is a 50% reducing in the antioxidant content of food grown in the industrial agricultural method. Superfoods, wild foods and herbs and nutraceuticals can be taken as a general course to guard against neurodegeneration, collagen breakdown and aging.

Free radicals are reactive oxygen molecules that have lost an electron in interactions with other molecules. As a result, these molecules are extremely unstable and they race around stealing electrons from other molecules creating more free radicals in the process, damaging cell components. Free radicals are produced by normal cellular processes, and the majority are produced during the production of ATP in the mitochondria and in digestion. Other normal cellular enzymatic processes create free radicals include phagocytosis, inflammation, prostaglandin synthesis, in the cytochrome P450 system and in reactions involving iron and other transition metals. Free radicals are also created from exercise, sunlight, cigarette smoke, alcohol, transfats, pesticides, air pollution, stress and electromagnetic radiation.

The body produces several free radical quenching enzymes as its first line of defense: superoxide dismutase (SOD), catalase, and glutathione peroxidase. Additionally the body uses exogenous antioxidant vitamins, minerals and substances found in food to counteract free radicals. Half the protein produced in the body every day is enzymes and our endogenous antioxidant Superoxide dismutase is the fifth most abundant protein in the body, because there is no "life" without protection from oxidation. Intestinal bacteria produce SOD and other vitamins like biotin and B12. Chlorine in drinking water, coffee, birth control pills, other steroids, antibiotics and even the acid produced from negative thinking will reduce intestinal bacteria and promote candida yeast growth.

The hormonal swings that are inevitable with kundalini awakenings may promote intestinal conditions that could interfere with the body's free radical defense system. There is an increase of free radical production in the body during metamorphosis because of increased hormone and neurotransmitter use and breakdown, increased metabolism and nerve energy flow, increased oxygen and glucose consumption, increased immune function, the increase breakdown and growth of cells, increase in stress hormone production and the impairment of normal digestion due to sympathetic-nervous-system hyperactivation. All these factors raise the free radical load on the bodymind during active kundalini. Free radicals overtax the immune system and keep it so busy processing the breakdown of the body's own cells that it cannot fight off viruses, microbes, and infections that attack it from without.

Secondary Stress—If we have not yet stabilized meta-adaptation and mastery of kundalini, it is likely that we will be stressed during an awakening in experiencing the extreme chemistry and expanded levels of perception. Having a spiritual practice would reduce this secondary stress by making us more familiar and adapted to anomalies in the autonomic nervous system and state changes. This stress would further over-excite the body and produce a cascade of free radicals. High levels of cortisol cause cells to shift from maintenance to energy creation. Even muscle tissue is broken down for use as fuel during the fight-or-flight chemistry. Also even the breakdown of cortisol and adrenaline produces free radicals. The stress hormone cortisol causes free radical damage,inducing temporary nerve damage and long-term consequences in health, functionality, success and longevity. Stress therefore is synonymous with oxidative damage and inflammation. Spiritual practice makes us more of an "active participant" rather than a victim of our own alchemy, thereby reducing this secondary stress.

Glucose is burned in the powerhouses of the cells, known as mitochondria to generate 90% of the energy used in the cell and free radicals and ROS are created as toxic waste in this process. Consider also that since greater energy is generated and used during an awakening the numbers of mitochondria must correspondingly increase. The faster oxygen is used to burn glucose, the more free radicals are produced as toxic waste.

The brain is susceptible to free radical damage due to its high content of polyunsaturated fats and high numbers of mitochondria. The free radical damage to proteins in neurons reduces their efficiency. Levels of vitamin C in the brain are 50 times higher than elsewhere in the body to protect brain tissue and neurotransmitters from oxidation. Raising antioxidant levels not only allows damaged proteins to repair, but increases neurotransmitter levels as well. Preventing morbid down swings or permanent neurological damage from kundalini awakening is a matter of increasing our ability to cope with these higher levels of free radicals. To protect the brain from free radical damage during the heightened nerve flow we need to take hydrophobic (water repelling) antioxidants like pine bark, vitamin C-Ester and alpha lipoic acid, as the blood brain barrier is impervious to hydrophilic (water loving) substances. We must aim to get more antioxidant protection into the cerebrospinal fluid and reduce secondary stress from a negative interpretation of symptoms.

One way of interpreting the Die-off is that it is a temporary overwhelm of our ability to cope with the free radical load, specifically in the mitochondria of the nerves and the tissue in general. As the body is fully engaged in self-digesting catabolysis there is simply little energy available for normal functioning. And so this overload often forces complete bed rest until the body's free radical defenses can win out and the bodymind can begin to reinstate normal functioning. The average Die-off therefore takes 3-5 days for this recuperation to occur. The septic shock and Die-off phase of awakening constitutes a free radical oxidation crisis that we can attempt to meta-adapt to by increasing antioxidant intake and upping our stress reduction, relaxation techniques at this time.

Die-offs however should not be prevented because they are needed to dissolve the present structure to make way for the new. Thus the Die-off is an "essential" part of the process, however we do not have to be set back and regress if we know how to successfully work with these changes. If we have adequate mineral, enzyme and antioxidant reserves we will be able to weather the catabolic stages without complete collapse and damage due to secondary backlash. Once we intimately know the process of biological transmutation we can achieve a greater adaptation and higher-homeostasis, to achieve a higher level of resurrection.

Free radical interference with the ability of mitochondria to produce energy is no doubt implicated in various periods of intense **fatigue** that often accompany kundalini awakening. This might be one of the many processes occurring during the Die-off period, when free radical overload is at max. The fatigue periods could also be brought on by free radical interference with nerve transmission itself. For serious fatigue situations try B-complex vitamins, alpha-lipoic acid, Co Q10 or **Idebenone** and magnesium along with NADH. Although Idebenone has a very similar in chemical make-up to CoQ10, its longer chain organic structure gives it extra powerful anti-oxidant properties making it a more effective "free radical quencher" resulting in less cell and tissue damage. It also offers protection against excitatory amino acid neurotoxicity, so could be valuable during peak kundalini events and phases.

When there is inadequate exogenous and indigenous antioxidants cellular decay and aging occurs. In fact the decline in faculty that occurs with age is largely because free radicals interfere with the messages transmitted by neurotransmitters, thus affecting reflexes, organ regulation, muscle contractions, blood flow, memory and learning ability. This is why the concentration of vitamin C in the central nervous system, the brain and spinal cord, is 50 times greater than in other tissues of the body.

Despite their destructive power, the body in fact uses free radicals for useful purposes. Their killing power is used by the white blood cells to destroy invading organisms. Ironically it is the free radicals that the macrophages use in their fight against arterial cholesterol which kills them and turns them to foam cells thus producing arteriosclerosis. Free radicals also play a role in the synthesis of major biomolecules—proteins, carbohydrates, lipids and nucleic acids and in the detoxification of chemicals inside organelles in the interior of cells. Plus free radical reactions play a role in the generation of cellular energy in the mitochondria. So you see that free radicals are indispensable to life, but they need to be managed so that their usefulness outweighs their destructiveness.

Billions of free radicals are being produced in the body at any time. Our environment, personality, attitude, state of mind and susceptibility to stress can actually contribute to our level of oxidative damage. For example each molecule of adrenaline produces two oxygen radicals as it metabolizes in the body, therefore too much stress can increase our oxidation damage and overwork our immune system. Stress also increases our endorphin production which in turn suppresses our nervous, immune and hormonal systems. Cortisol also increases our free radical load and reduces our resistance to oxidation.

One of the best ways we can counter and overcome the stress in our lives is through regular exercise. However not all exercise is good for fighting the free radical war. In fact excessive exercise for which the body is not prepared can cause extensive oxidative damage. Free radical production goes up during exhausting, high intensity workouts and such free radical activity is associated with oxidative damage in the muscles, liver, blood and other tissues. Hence at the heaviest training levels there is increased susceptibility to cancer, heart attacks, arthritis, cataracts, premature aging and decreased immunity. Some of the reasons why there is increased free radical damage during exercise are: the consumption of oxygen goes up 10-20 times, there is an increased output of Superoxide radicals by mitochondria, there is oxygen deprivation from the increased demand by tissues and the body's antioxidant defenses are over burdened. There is an increase in free radical production in both excess oxygen and lack of oxygen conditions.

Regular lower intensity exercise minimizes the production of free radicals while strengthening the indigenous antioxidants, enzymes and proteins. But without regular exercise the body's internal defenses against free radicals (SOD, GSH, Catalase) may become too fragile for the antioxidants in our food and supplements to have their full affect. Sedentary people are twice as likely to get cancer and heart disease as active individuals. Trained muscles are resistant to oxidative damage because of the increased supply of the body's own antioxidants. Regular training prepares the bodymind to better handle unexpected physical and emotional stresses and strains. That is, exercise builds up our resistance to free radical damage from all stressors and reduces the production of stress chemicals. Fast walking at the pace of 12-15 minutes per mile is ideal for returning optimum endurance benefits, without creating excess free radicals and damaging tissues. Fast walking can be as effective as jogging without the risk of injury. To strengthen our endogenous free radical defenses we need to do at least 30 continuous minutes of brisk walking three times a week. Besides this we also need to do some weight bearing strengthening exercise and some stretching as well. By maintaining strength and subtly we prevent the aches, pains and free radicals that come from physical stress to an unconditioned body.

Free radicals do most of their damage to the outer layer of the cell, the **cell membrane,** because free radicals are drawn to areas that have the greatest density of molecules, hence the richest source of electrons. As the cell membrane has the greatest concentration of molecules, it is the primary target of free radical attack. Since the outer portion of the cell is mostly fat, we need fat-soluble antioxidants to protect our cell membranes. So along with stable (non-reactive) fat intake you will also need to have a good supply of **fat-soluble antioxidants** to protect the cell membranes such as Vitamin C 'Ester,' Alpha Lipoic Acid, DMAE, Fish Oil, Vitamin E Tocotrienol, CoQ10, Acetyl L-Carnitine, Glutathione, NADH, Pycnogenol, Propolis.

Free radical damage to the cell membranes causes dehydration of the interior of the cells and edema or fluid collecting outside of the cells. Once the cell membrane becomes damaged by free radicals, it becomes unable to let nutrients in and wastes

out, because of diminished exocytosis. **Exocytosis** is the process by which a cell releases large biomolecules through its membrane. Wastes and salts, such as potassium, begin to take up increasing amounts of space within the cell. As a result the cell's water supply is pushed out, and the cell becomes dehydrated. At this point the water we drink does little to rehydrate the cells. To establish the cellular flows we need to repair and protect cell membranes with fat-soluble antioxidants, use negative charge-North pole water and eat plenty of raw-remineralized fruit and vegetables.

The sleep hormone Melatonin is a major physiological antioxidant (and hormone) by directly reacting with hydroxyl and peroxyl radicals, or by stimulating the expression of superoxide dismutase, glutathione peroxidase, or glutathione reductase. Melatonin has also been reported to inhibit nitric oxide synthetase, thus might be used to reduce hypertensive headaches. However recent studies in rats have shown that melatonin reduces learning in rats given supplemental melatonin.

TOP ANTIOXIDANT FOODS

• Oxygen radical Absorbency Capacity or ORAC's:

Fruit: Prunes 5770, Raisins 2830, Wolf berries 3472, Vitamin E oil 3309, Pomegranates 3037, Blueberries 2400, Blackberries 2036, Strawberries 1540.

Vegetables: Kale 1770, Spinach 1260, Brussel Sprouts 980, Alfalfa Sprouts 930, Broccoli 890.

• ***Other antioxidant substances are:*** Fresh raw fruit and vegetables are loaded with antioxidants. The fruits highest in antioxidants are blueberries and other berries and kiwifruit. Brewers yeast, bioflavonoids, pycnogenol, Co enzyme 10, hydergine,

PABA, RNA, BNT, BHA, Choline, Inositol, B_1, B_5, B_6, B_{15}, L-Dopa, Amino acids: NAC (N-acetyl-cysteine), L-methionine, L-glutathione.

• ***Antioxidant herbs include:*** Ashitaba, Astragalus, Bilberry, Chaparral, Echinacea, Garlic, Gingko, Green Tea, Rosemary, Ligustrum, Schizandra, Shiitake mushrooms. Green tea contains an antioxidant EGCG which is believed to be 200 times more powerful at inhibiting lipid peroxidation than Vitamin E.

• NADH — NADH is an activated form of the B vitamin niacin and is the body's most powerful antioxidant. NADH increases overall energy, boosts the immune system, protects cells from damage and improves memory. NADH is the reduced (electron- energy rich) coenzyme form of vitamin B3, while NAD is the oxidized (burned) coenzyme form of B3. The molecular structure of NADH is a vitamin B3 (niacinamide) combined with a ribose (5-carbon sugar), a phosphate group and an adenine nucleotide (a DNA component). Ribose is a fundamental building block of adenosine triphosphate (ATP).

Mitochondria produce the NADH necessary for the Oxidative Phosphorylation of food stuffs into ATP. It is NADH, which captures the electrons thrown off

during Krebs' cycle oxidation and shuttles them to the electron transport side chain energy production cycle. Whether it is produced internally within the cell or enters the body from a dietary supplement, NADH will trigger increased cellular energy production. Energy is stored in the NADH molecule, and when it reacts with oxygen, energy is produced in the form of ATP. One NADH molecule leads to the formation of three ATP molecules. In addition NADH creates more energy when it reacts with oxygen and water forming nicotinamide (also known as vitamin B3) and ADP.

Free radicals interfere with cellular energy production by destroying enzymes and mitochondria. NADH is a high-energy hydrogen that occurs naturally in all our cells. NADH transfers the Hydrogen to oxidized (or damaged) glutathione to restore normal glutathione, and it can regenerate other important antioxidants as well. In the nucleus of the cell there is only one compound that can activate the nucleus DNA repair system: that compound is NADH. The better the DNA repair system functions the better our protection from chronic diseases such as cancer, arthritis, arteriosclerosis and immunodeficiencies.

The brain must produce and use 20% of the body's total ATP production in order to maintain normal function; depression reflects a lowering of the brain's energy status. Through its multiple roles in producing ATP energy, NADH energizes the brain thereby reducing depression, seizure and psychosis. Besides increasing brain energy NADH also increases the neurotransmitters dopamine and noradrenaline, which along with serotonin are frequently diminished during depression (brain cells use dopamine to make noradrenaline). And since NADH's spares tryptophan, more tryptophan is available for conversion to serotonin. For depression take NADH along with DL Phenylalinine, tyrosine and tryptophan or 5-HTP. NADH can also be made from the amino acid L-Tryptophan using 60mg tryptophan for 1mg B3. Tryptophan being the precursor to serotonin.

NADH can be made in the liver and other cells from vitamin B3, so rather than the expensive activated form you could take 50-100mg of vitamin B3 per day (in your B complex) and 750 mg ribose. NADH is involved in three energy production cycles, and helps your body to oxidize (burn) all foods including carbohydrate, fats, and amino acids to produce ATP energy. The increased energy supply renews tired muscles and sparks nerve cells to give you physical strength and mental focus, it also enhances mood due to its important role in the development of dopamine and serotonin. Letting go of the past and trans-forming requires an increase in energy to move through and beyond interference patterns and reinstate the harmonious vibratory pattern of health. The energy of healers reduces the activity of the enzyme that changes NADH to NAD. Thus making more NADH available for ATP production in the mitochondria and more energy available for change.

Freedom From Disease, How to Control Free Radicals A Major Cause of Aging and Disease by Hari Sharma

Brain Longevity: The Breakthrough Medical Program that Improves Your Mind and Memory by Dharma Singh Khalsa and Cameron Stauth

BLOOD SUGAR AND GLYCATION

High levels of blood sugar (glucose) damage body protein by a process called glycation or crosslinking, which is implicated in all degenerative disease. High concentrations of sugar combine with protein molecules to form advanced glycation end products (AGEs). AGE particles act like glue, binding protein molecules together to form a rigid lattice network know as cross-linking, thus accelerating aging and leading to many of the symptoms of diabetes. These large crosslinked protein molecules reduce flexibility, elasticity and functioning of proteins, and can initiate harmful inflammatory and autoimmune responses. AGEs also interfere with tyrosine and dopamine utilization and they signal glial cells to produce superoxide and nitric oxide. Then if glutathione levels are low, the powerful free radical peroxynitrite can form resulting in damage to cellular and mitochondrial DNA.

Glycation wreaks havoc on all body tissues including connective tissue collagen, arterial collagen, lungs, kidneys, lens of the eye, vision, immune cells, nerve myelin proteins and in the circulating low-density lipoprotein (LDL) of the blood. Crosslinking of the myelin sheaths makes them rigid, which impacts on the nerves themselves leading to tingling, numbness and pain. As free radical damaged proteins and other macromolecules are crosslinked into useless heaps they collect in the cell as blobs of *lipofuscin* or age pigment. The more age pigment we accumulate the poorer cell function becomes and the few years we have to live. These age spots are also called the ***Browning reaction.***

Protein is especially vulnerable to attack by free radicals. Much of the cell's structure is protein, in fact protein comprises 70% of the body's dry weight. Muscles, enzymes, hormones and neurochemicals mostly protein. The loss of a single electron from a single atom in a molecule can result in a chain reaction of adjustments that renders the protein molecule useless. Since there is increased free radical production during active kundalini if we try to emotionally cope with the awakening by overeating fruit/sugar/carbohydrates then nerve damage and increased glycation will result. Glycation occurs when sugars react with proteins resulting in damage that is just as detrimental as free radical damage. In fact higher levels of blood sugar increase the oxidation damage by free radicals, and this interferes with all metabolic processes including cell membrane permeability, receptor sensitivity and even energy generation systems, not to mention nerve transmission. AGEs signal glial cells to produce superoxide and nitric oxide. This combination can then produce the powerful free radical, peroxynitrite, which can worsen neurodegenerative disease by damaging cellular DNA and mitochondrial DNA.

Through my own experience and dream-insights I found that the strength of the body's protein structures determines whether one's kundalini awakening is successful or if it just creates more health and mental/spiritual problems. And the strength of our protein structures is determined by how well we have built our cells, our mineral reserves and the status of our blood sugar. High blood sugar, means weak protein structures, and the kundalini moving through weakened protein structures creates free radical cascades. Protein that has been weakened by

exposure to high serum sugar cannot conduct energy and information (biophonons and biophotons) to the degree that intact protein can and cannot repair itself as a well, nor fit neatly into the jigsaw of life. Not to mention that some of the body's own antioxidants are proteins, thus the body is able to maintain its integrity when blood sugar level is kept to the optimal level.

In his book *The Quantum Brain* Jeffrey Satinover states that the reason proteins can arrange themselves so fast is that the electrons quantum tunnel. Quantum tunneling is when a particle travels faster than the speed of light through another particle. That is one instant an electron is here, then it simultaneously turns up somewhere else. Quantum tunneling is observed in water and DNA as well as in protein. (Also the tendency of water to form hydrogen bonded networks is also important in the self-assembly of complex proteins.) The movement and 3D arrangement of protein molecules are the basis of life, and these movements are generated by quantum processes. Satinover says that these quantum effects are intrinsic, impossible according to classic physics and almost certainly necessary for life to be possible at all. Intact protein can superconduct consciousness more coherently, permitting increased depth of spiritual consciousness. We could say that such a person's spirit was "stabilized" in the material realm. Our bodies are actually superconducting instruments of spirit.

Insulin is the hormonal key that enables sugar to leave the blood stream and enter the cells where it is broken down to provide energy. Hypoglycemia or low blood sugar results from too much simple carbohydrate such as sugar, honey or molasses in the diet. Because these simply sugars cause the pancreas to over react and put out too much insulin which in turn makes the blood sugar drop precipitately. If the diet is also high in fat hypoglycemia can develop into diabetes. Insulin is anabolic, that is it builds tissue; it promotes fat storage by facilitating the uptake of fatty acids by fat cells, and reduces lipid oxidation in muscle tissue. When we eat carbohydrates, blood glucose (sugar) levels increase. Since the blood can only safely hold about a teaspoon of glucose, insulin is released to lower blood glucose by storing a small amount in the liver and muscles as glycogen. Once glycogen stores are filled the sugar is turned into triglycerides for fat storage. Because an overweight persons muscles are insensitive to insulin (insulin resistant) they reject the glucose circulating in the blood. This glucose then finds its way into fat cells and becomes triglyceride (fatty acids). Ironically the person with the least need for stored fat accumulates it the fastest. Low fat diets improve the insulin mechanism. For every fat cell you produce and fill up, the body has to produce more insulin in an effort to keep the fat cells nourished. Besides preventing the mobilization of stored fat, blood sugar spiking and excess insulin also prevents the release of Growth Hormone, and as we know plentiful Growth Hormone keeps us slim. Several studies have shown that thyroid hormone is associated with glucose intolerance resulting from decreased glucose-stimulated insulin secretion. This defect in insulin secretion is believed to result from an increase in the rate of **apoptosis** (programmed cell death) of pancreatic beta cells as a direct effect of thyroid hormone excess due to stress.

Members of the **Calorie Restriction Society** who restrict their daily intake to 1100-1950 calories had insulin levels that were 65% below average. Meaning their risk of diabetes was almost nill and insulin resistance and glycation damage must be radically reduced compared to the average person. By eating a nutrient dense diet while reducing calories they expect to live 120 years. One of the main reasons why restricted calorie intake works to promote life span is that it reduces the amount of blood glucose which lowers glycation damage and insulin resistance.

Researchers found that **Chromium picolinate** supplements can produce an equally extended life span without such dietary restrictions. With age insulin resistance increases, and glucose tolerance declines, but Chromium picolinate lowers both glucose and insulin thereby increasing lifespan. Chromium picolinate can reduce blood glucose levels by 25% and glycation by 60%. Chromium picolinate helps the body metabolize fats, carbohydrates and proteins and might be an excellent addition to metamorphic supplementation to reduce the sugar craving that can result from the body burning huge amounts of energy during kundalini. Supplementing with chromium also reduces the carbohydrate craving associated with depression. Chromium also aids in cortisol receptor sensitivity, lowering the cortisol levels in the blood and reducing the effects of stress. Chromium, manganese and B vitamins are important in blood sugar regulation. Brewers yeast, alfalfa, whole grains, liver and Spirulina are good sources of these nutrients. Only the picolinate form of chromium supplement is absorbed well by the body. Like chromium **Vanadyl Sulfate** also enhances the actions of insulin and improves glucose tolerance by restoring muscle and hypothalamic receptor sensitivity to insulin and improves blood sugar control by enhancing skeletal muscle insulin sensitivity.

Alpha lipoic acid is a unique antioxidant because it prevents **glycation** and may even reverse the attachment of sugar to collagen by allowing better metabolism of sugar in the cell, preventing its buildup and also by allowing the body's natural repair mechanisms to work better. In other words, it prevents the accelerated aging of collagen by protecting it from sugar's toxic effects. In fact, when alpha lipoic acid is taken orally, it protects all of the proteins in our body from glycation and helps cells take up sugar and use it for fuel much more efficiently. That explains why alpha lipoic acid is extremely effective with the symptoms of diabetes. Insulin resistance has also been associated with people diagnosed with depression. The antioxidant alpha lipoic acid has been shown to increase insulin receptor sensitivity and is used to treat people with diabetes and depression.

During the duration of acute kundalini sugars and carbohydrates should be generally avoided except sprouted seeds and grains, vegetables and even our fruit intake should be restricted to no more than 10% of our diet. High glycemic vegetables like corn, potatoes, beets and carrots need to be carefully restricted also. If our diet has historically consisted of a lot of simple sugars and starches then 1 piece of fruit a day is about all the sugar we should allow ourselves, so we can rebuild strong protein with greens and keep a healthy free radical/antioxidant balance. Note that for **epilepsy** it is recommended to have a diet high in fats and low in carbohydrates.

The glycemic index is a measure of a carbohydrate food's ability to increase insulin production. I recommend that everyone going through a kundalini awakening acquaint themselves with the **Glycemic Index**. Because the glycemic index measures how fast a food is likely to raise blood sugar, and so is useful in regulating the intensity of kundalini and the free radical load on the body. For example if we eat too much high glycemic food the fire of kundalini increases along with the symptoms. This constitutes a cellular emergency and we become emotionally unstable and can go into a panic attack. During this crisis we are more likely to resort to high glycemic food in an effort to and "separate" from our symptoms…to numb out. A good book on the glycemic index is "The New Glucose Revolution," Jennie Brand-Miller, Ph.D.

The more we set up a stable rhythmic circadian timetable for the care of our cells, the more they will be reassured that everything is ok, even while they are in complete overhaul. If we freak out and resort to addictive coping mechanisms then our cells not only have the work of metamorphosis to cope with, they also have the metabolic results of our emotional and substance abuse to deal with. It goes without saying that this reactivity puts a heavy inertial burden on the evolutionary process and results in organic disease and arrested spiritual developmental.

Increasing the sugar content of our diet in response to the cellular hunger we feel during kundalini will increase the brain and neuron damage that occurs. In a similar fashion hyperglycemia increases the damage that occurs during stroke, due to impairment of mitochondrial function and increased acidosis. The neurotransmitters, in particular glutamate and also dopamine (DA), noradrenaline (NA) and serotonin (5-HT) are all released in large quantities during blood loss to the brain during strokes (ischemia). The bottom line is that high blood sugar increases brain damage due to: acidosis, AGE's and glycation, accumulation of extra-cellular glutamate, impaired mitochondrial function, increased blood-brain barrier permeability, swelling due to water retention and decreased vascular reactivity. Blood sugar spiking with high glycemic carbohydrates also increases the loss of eyesight associated with aging.

During the first fall season after my July awakening I got so hungry that I would be propelled to go for fast walks and laugh at how hungry I was. But I intuitively knew that food could not satisfy this hunger. At the time I thought I was just ultra-sensitive to the energy of the trees draining down into the roots for winter. Not to denounce the super-sensory abilities of those with active kundalini, but I think the answer is less ethereal than that. Without my knowing it the peak summer of my awakening had set up a huge neurotransmitter and hormone debt that my food supply was inadequate to address. Now of course, if I had an awakening I would know to adopt mega-nutrition supplemental program of herbs, antioxidants, nootropics and amino acids.

Dandelion greens, bitters and all greens in general will help curb our sweet tooth and help build strength in our body's protein structures in order to endure kundalini with greater ease and efficiency. The stronger the body's protein structures the less dispersal and friction of energy—the deeper and more smoothly

the awakening will proceed. Free radical damage to the nerves is caused when blood sugar is poorly regulated. Stevia might be a useful addition to a kundalini diet if one has a craving for carbohydrates and sugars. AGE's are inhibited by glutathione, carnosine, tumeric, green tea and SOD. Superoxide dismutase (SOD) can be increased through the probiotic Bifido bacteria and foods rich in chlorophyll and carotenes. Green juices including parsley increase the body's antioxidant Superoxide Dismutase (SOD).

Sulfur containing vegetables such as alfalfa, asparagus, cabbage family, mustard greens, garlic and fruits such as figs, papaya and pineapple prevents the glycation of the blood. Zinc is essential for DNA synthesis, SOD and insulin production, because of increased cell growth and immune function during metamorphosis the demand for zinc must go up. Zinc is key in the entire hormonal system and immune system. 15 milligrams per day is recommended; sources include grains, brewers yeast, wheat germ, seafood and kelp.

• ***The Glycemic index of fruits:*** Apple 38, Banana 55, Cantaloupe 65, Cherries 22, Grapefruit 25, Grapes 46, Kiwi 52, Mango 55, Orange 44, Papaya 58, Pear 38, Pineapple 66, Plum 39, Watermelon 103.

• ***Vegetables:*** Beets 69, Broccoli 10, Cabbage 10, Carrots 49, Corn 55, Green Peas 48, Lettuce 10, Mushrooms 10, Onions 10, Parsnips 97, Potato (baked) 93, Potato (mashed, Potato (new) 62, Potato (french fries) 75, Red Peppers 10, Pumpkin 75, Sweet Potato 54.

• ***For stabilizing both low and high blood sugar:*** Onions, Garlic, Oats, Barley, Sunflower seeds, Cashews, Olive oil, Celery, Spinach, Carrot, Broccoli, Cauliflower, Blueberries, Cranberry, Burdock root, Nettles, Horseradish, Mugwort, Suma and Dandelion.

• ***To reduce sugar cravings:*** And raise blood sugar levels and cure mental fatigue take Glutamine and Cofactors: Folic acid, B_6, and vitamin C. Skullcap tea taken throughout the day will stop the craving for sugar. Another sugar craving cure is 1 tablespoon of flaxseed oil, take with Magnesium, Zinc, B_6, B_3, C and Chromium Picolinate.

INSULIN RESISTANCE

Cells become insulin resistant as a protective measure against the toxic effects of high insulin. They down-regulate their receptor activity and number of receptors so that they don't have to be continually subjected to excessive stimuli. The liver becomes resistant first, followed by the muscle tissue and lastly the fats With down regulation of insulin receptors normal amounts of insulin are inadequate to produce a normal insulin response from *fat cells*-(elevates free fatty acids in the blood), *muscle cells* – (reduces glucose uptake) and *liver cells* – (reduces glucose storage). Insulin resistance is associated with fatigue, foggy brain, obesity, fatty liver, type 2 diabetes, heart disease, retention of sodium, fluid retention, high blood pressure, depression and increase in cancer growth. Longevity scientists consider **insulin resistance** caused by over consumption of carbohydrates/sugars as a major cause

of aging itself. When a diet is high in fat some of the receptor sites for insulin become coated with an impermeable layer of fat thereby rendering insulin less effective. In this way fat people become insensitive to their own insulin and so they secrete abnormally high levels. Blood sugar levels then accumulate leading to hyperglycemia or diabetes. Hyperglycemic fasting-levels of blood glucose are around 126 mg/dL and hypoglycemic levels are at 70 mg/dL. After years of excess carbohydrate intake, blood glucose levels tend to increase as insulin becomes less and less effective at bringing them down. This insulin resistance is evident in hyperglycemic, pre-diabetic symptoms, and is so prevalent in our culture that it is taken as a "normal" sign of aging, however, insulin resistance is not found in cultures eating little starch and sugar.

Insulin resistance includes the production of antibodies against insulin that lead to reduce glucose below norm and decreased sensitivity of the insulin receptors, so that sugar remains in the blood for a longer period of time. During advanced hyperglycemia pancreatic B-cells are unable to produce adequate insulin to maintain normal blood sugar levels. Blood sugar spiking with high glycemic carbohydrates can severely damage tissues and turn the body toward insulin resistance and down-regulate other receptors as well. Excess calcium inside the cells and depleted magnesium is associated with insulin resistance. Fiber consumption is inversely correlated to insulin resistance; to counter the aging effect of insulin resistance our fiber intake needs to be at least 25 gr. each day. Blood sugar spiking must be avoided with the maintenance of a low glycemic diet and exercise leads to a more efficient use of insulin. N-acetylcysteine and taurine prevent hyperglycemia-induced insulin resistance possibly through preventing oxidative stress.

Insulin resistance occurs as cells become less responsive to insulin, and this results in higher blood sugar. Thus the pancreas is forced to over produce insulin in an effort to lower the blood sugar and get the glucose into the cells. This condition of excess insulin coupled with insulin resistance leads to increased storage of body fat or obesity. Damage to receptors and cell membranes occurs from the increased oxidation by the high blood sugar condition and high transfats. Transfats have the same chemical signature as omega 3 & 6, so the body uses them for the same purpose. But because they are structurally straight rather than bent they make the *cell membrane rigid* rather than porous. This contributes to many health problems including insulin resistance and type 2-diabetes. It also decreases osmosis, excytosis and endocytosis and reduces cell signaling and cell recognition. Increased levels of insulin are very inflammatory to blood vessel endothelium. Also, higher levels of insulin reduce the livers ability to keep cholesterol from becoming oxidized.

Besides being covered by fatty plaque, insulin receptor desensitization also occurs through damage to the endothelial cell membranes by silent inflammation (oxidation). Confirming this idea, studies show that insulin resistance can be markedly dropped by consuming DHA-omega 3 (fish oil). Raised levels of insulin from eating too many high glycemic carbohydrates stimulates the enzyme that changes the fatty acids to the inflammatory agent, **arachidonic acid** (AA). The arachidonic acid pathway constitutes one of the main mechanisms for the

production of pain and inflammation, as well as controlling homeostatic function. You can increase AA by either eating high AA foods like red meat and egg yolks, or too many high glycemic carbohydrates. Ideally judging from the neo-paleolithic diet the weight ratio of protein to carbohydrate should be around 3:4. The less control you have over insulin levels by maintaining this ideal ratio, the more fish oil you need to reduce inflammation.

To prevent insulin spiking, arachidonic acid production and inflammation our diet should contain a balanced ratio of protein, fat and soluble fiber to slow down the rate in which carbohydrates enter the bloodstream as sugar. Protein consumption stimulates the release of the pancreatic hormone glucagon, which reduces insulin secretion. Glucagon helps maintain the level of glucose in the blood by binding to glucagon receptors on liver cells and causing the release of glucose - stored in the form of glycogen (glycogenolysis). As these stores become depleted, glucagon then encourages the liver to synthesize additional glucose by gluconeogenesis. By keeping our insulin-to-glucagon levels balanced with a 3:4 Protein:Carbohydrate ratio we can prevent silent inflammation, insulin resistance, obesity and degenerative disease. (See Eicosanoids section for more)

• ***Overcoming Insulin Resistance:*** Vitamin C (fat and water soluble forms), Vitamin E (both d-alpha and mixed tocopherol), N-acetyl-cysteine, Quercetin, Alpha Lipoic Acid, B3—Niacinamide, Biotin, Chromium Picolinate, Cinnamon Extract. Vanadyl sulfate, by mimicking the actions of insulin, helps the muscle cells uptake glucose instead of fat cells uptaking glucose. EFAs help with triglycerides - use Flaxseed oil, Organic hemp seed oil, Sacha Inchi oil, and fish oil. These EFA's like omega-3 compete with linoleic acid in the arachidonic acid pathway, thereby reducing the metabolism of arachidonic acid. Bitter melon (*Momordica charantia*) reduces fasting blood glucose without increasing insulin & appears to enhance tissue sensitivity to insulin. Fenugreek (*Trigonella foenicum graecum*) reduces fasting blood glucose without increasing insulin. Gurmar (*Gymnema sylvestre*) helps to reduce blood sugar levels. Fiber reduces fasting blood glucose without increasing insulin - Psyllium and pectin reduces glucose and insulin levels after meals. Exercise enhances muscle sensitivity to insulin and helps the body regulate blood sugar better.

If undergoing an awakening the two most important things to consider even if all else is ignored are—Faith and Antioxidants!!!

SILICON

A silicon rich diet protects against aging and degenerative diseases including cancer, arthritis and osteoporosis.

Silicon (Si) is a non-metallic hexagonal shaped element, with atomic number 14 in the periodic table. The element Silicon rapidly oxidizes to form silica or "sand." SiO2 arranges itself into the highly ordered spiral configuration of quartz crystal. By mass, silicon makes up 25.7% of the Earth's crust and is the second most abundant element on Earth, after oxygen. It is found as biogenic silica in plants, animals and in most living organisms. It is present in the cell walls of various plants (including edible ones) to strengthen their structural integrity. Bird feathers are composed of 70% silicon. The silicon in tissues is usually bonded to glycoproteins such as cartilage, whereas the silicon in the blood is almost entirely found as either free orthosilicic acid or linked to small compounds.

This trace element really helps to bind protein molecules together in the blood vessels and connective tissues. Collagen is the "body glue" that holds our skin and muscle tissues together and silicon a component of collagen. Collagen protein comprises the connective tissue of the trachea, the aorta, skin, bone, hair, nails, cartilage and ligaments. Silicon is found in almost all body tissue and has numerous functions, not all structural, including assisting removing mercury from the body. Silicon is involved the water binding and protein swelling necessary for all plasma life processes. **Aging** involves dehydration of the cells and consequent desiccation and denaturing of protein through disruption in osmotic exchanges. In that silicon works to prevent dehydration it helps prevent aging.

Silicon is converted in the body to orologosilicate salt and incorporated into the colloidal structure of the connective tissue. Silicon plays an essential role in the synthesis of collagen, the most abundant protein found in the body. The bulk of connective tissue in the body is greater than regular cellular substance, in all tissue except fatty tissue. Because it has so much connective tissue 2% of muscle tissue is composed of silicon. Collagen fibers are constructed from chains consisting predominantly of the amino acids glycine and proline woven together to form fibers. These strands are the primary structural proteins of the body, whether they be thin layers forming the skin, rope-like tendons, or the collagen fibers shaped into the scaffolding of the bones. Both carbon and silicon are semi-conductors, readily either donating or sharing their four outer electrons. Silicon and carbon have very similar bonding properties, as illustrated by the fact that they appear in the same column of the periodic table. They both form 109.5 degree bonds in a tetrahedral configuration. Silica may have played a part in the origins of life.

"A curious fact is that terrestrial life-forms utilize exclusively right-handed carbohydrates and left-handed amino acids. One theory to account for this is that the first prebiotic carbon compounds formed in a pool of "primordial soup" on a silica surface having a certain handedness. This handedness of the silicon compound determined the preferred handedness of the carbon compounds now found in terrestrial life."
http://www.daviddarling.info/encyclopedia/S/siliconlife.html

Hypothetically we could say that silicon in its hydrophilic relationship to water provides the lubrication and electrical potential through which the atoms in the body form...according to the morphogenic fields which ultimately can be traced back to the cleaving or chiral/asymmetric interplay of the Unified Field as it steps down into dual charge (positive/right-spin and negative/left-spin) of manifestation.

According to a Life Extension magazine report the human body contains approximately 7 grams of silicon and it is necessary for the body's silicon stores to be maintained at this level to promote good health. Most forms of dietary and supplemental silicon are poorly absorbed and as we get older, our ability to absorb silicon from our food decreases due to age decline in hydrochloric acid. Silicon deficiency is common due to our agricultural methods, type of diet and food processing methods. Deficiency of this most abundant mineral occurs because we remove much of the coarse, fibrous plant material that contains the most silicon (husks, stems, peelings, cores). Primates generally eat very fibrous diets and obtain considerable energy through fiber fermentation by bacteria in the intestines. No doubt it is this bacterial fermentation of huge amounts of fiber that gorillas eat, which makes more silicon available for absorption…thus giving gorillas their enormous physical strength. Gorillas eat bamboo shoots—the highest silicon source in nature.

"Consider the high fibrous diet of mountain gorillas; their intake includes 86% leaves, shoots and stems, from some 58 plant species. At least 50% of their plant intake is herbaceous foliage (greens) such as thistles, nettles, and celery. One of their favorite foods is bamboo shoots...the ultimate sprout. Only 2% of their intake is fruit. This low sugar intake will preserve their alkaline reserves and bone calcium and prevent their teeth from acid and bacterial decay. Gorillas are not as omnivorous as chimpanzee, yet they do still eat some grubs, snails and the occasional termite. They also supplement their vegetable diet with bark, roots, mushrooms and soil from ridges rich in calcium and potassium during the dry season." Phoenix Rising, Jana Dixon

Silicon is active in both magnesium and calcium use in the body. It changes the arrangements of the atoms within the calcium molecule, thus enabling it to enter the bone cell. Diets heavy in phosphorus foods may overload the calcium ion and prevent its use unless adequate amounts of silicon are present. Without the silicon, which is often missing in the diet, calcium attaches to the outside of the bone but is unable to enter within the bone mass itself. In the bone forming osteoblast cell, silicon is found in the highest concentration in the mitochondria, or energy factories of the cell.

I think that youthful bones are the key to longevity, because they are the "structural" core and they make the blood and immune cells. Silicon is an element that works with calcium to improve the strength and flexibility of the structural system of the body. Silicon is required for the proper functioning of the enzyme prolyhydroxylase that functions in the formation of collagen in bone, cartilage and other connective tissues. Silicon's contribution to strong bones and nerves should be looked into to support kundalini awakening. I suspect silicon might also

greatly improve eyesight, and the strength of the nerves in resilience to kundalini light flow.

Keeping the spine open and flexible is essential to full utilization of the brain's capacities. Loosening the spine and joints to improve flexibility really helps to get the juices flowing. Body armor is the physical correlation to neurosis. The flaccid, static body is a sign by nature that this person is "too old and decrepit" for sex and reproduction and so the pituitary hormones "obey" our sedentary behavior and go into decline. Our spiritual awakening, our intelligence and quality of life depend directly on our sex hormone production as the basis of our mind and body. The spine will do—the heart will do—the head will do.

"The whole of yoga tries in many ways to make your spine alive, brilliant, filled with light, young and fresh." Osho, Meditation: The First and Last Freedom

"Chronic muscular contraction wastes huge amounts of energy, energy which otherwise could be channeled into the raising of kundalini. When there is not a strong flow of nerve energy up the spine our higher centers cannot be adequately energetically fed and our autonomic systems are lax. The stronger the kundalini energy up the spine the more of our soul we experience." Phoenix Rising, Jana Dixon

Silicon Deficiency—High silicon increases the rate of healing and prevents against aging, cancer, other degenerative and infectious diseases. Silicon deficiency could show up as a weakness of connective tissue; poor hair, nails, skin and brittle bones; lymphatic and immune weakness, susceptibility to infection, hemorrhoids, ulcers and cancer; sluggish circulatory system and heart disease, gastrointestinal, kidney and bladder disorders, and a general low rate of healing. Psycho-emotionally silicon deficiency shows up as insecurity, neurosis, excessive moralizing, rigid conventionalism, gullibility and inability to think outside the box. Also head congestion symptoms like headaches, tinnitus, vertigo, poor eyesight, seizure and sinus infection related to sluggish blood and lymph systems coupled with high blood pressure and carbo-craving. All skin conditions are improved with silicon supplementation including, eczema, acne, wrinkles and age spots. Silica helps to re-mineralize the skin, and it also has a softening effect. Silica can improve the appearance of the skin, hair, and nails by its strengthening, hydrating action on connective tissue.

Kundalini Protection—After 10 years of kundalini I found that I had burned through my collagen and so my skin and muscle was sagging. To rebuild my reserves I take 4 drops of Biosil a day in my drinking water, and a daily intake of 1 tsp of horsetail powder in capsules and about 1 tsp of cornsilk powder in a smoothie, along with oatstraw-horsetail sun tea. I am focusing on silicon as a means of avoiding cellular inflammation due to oxidation, coagulation, flocculation and glycation of the tissues, caused by the high metabolism (radiation) and extra nerve energy of kundalini. The colloidal matrix of our body is the "ground" of our structure. The thickened nature of the body's colloidal matrix on a cooked food diet is apparent in the thicker saliva, phlegm, ama, plaques, sluggish blood

and lymph etc…This thickening of fluids would reduce both detoxification and nutrient assimilation by the cells, slow metabolism and reduce energy efficiency. Silicon pumps up cells and holds water in the tissues allowing a more perfect electrolyte, hydroelectric, colloidal environment for metabolic processes.

Nerves—Silicon is also a component of myelin nerve sheaths, which protects and insulates the nerve fibers. The gel-like nature of cerebrospinal fluid is largely due to the high content of colloidal silicon in it. Supplementing with silicon increases brain activity, concentration and reduces stress and depression. Since there is a lot more activity in the brain and nervous system during a kundalini awakening it stands to reason we need a high silicon diet to maximize the effectiveness of our cerebrospinal fluid and nerve sheaths. Also during an awakening we need extra silicon for collagen as our connective tissue undergoes a renewal and lengthen process as the body armor gives way to the spiritualized body.

Cancer and Zeta Potential—Since silicon increases the zeta potential of the body's colloidal capacity, boosts the immune system and oxygenates the tissues it is a major ally in cancer prevention and cure. Silicon regenerates the white blood cells of those with cancer and instigates normal protein synthesis, as well as stopping the growth of malignant tumors. The largest concentration of lymph nodes in the body is in the abdomen, neck, groin and armpits. Connective tissue plays a significant role in the lymphatic and immune systems. Supplementation increases the reticular-endothelial connective tissue thereby increasing lymphocytes and phagocytes. Silicon concentrates in the lymph nodes and has a positive, broad spectrum effect on the immune system; and strengthening the connective tissue of the lymphatic system contributes to the healing of practically all illness and disease. In cancer cells a swelling of the mitochondria and cells occurs. Silicon helps to restore normal protein synthesis as a consequence of normalizing alkalinity, oxygenation, hydration, and zeta potential.

GI tract—Mucus possesses its slimy properties because it is a solution of mucopolysaccharide and you will find rapid repair of the mucus membranes with a high silicon diet. Silicon also reinstates correct motility, permeability and slickness of the GI tract and protects against growth of bad bacteria, candida and parasites. Preventing mucus lining inflammation has a beneficial effect on energy generation and metabolism as well as taking the stress of the immune system. Silicon has a soothing and disinfecting action on the GI tract, absorbing gases and toxins and calming inflammation. It is also a disinfectant for the bladder and kidney and prevents kidney stones.

Cardiosystem—Silicon rejuvenates vascular walls increasing the protective lining of the arteries, improving their structural integrity, elasticity and permeability. Silicon may be useful in reducing blood fats & cholesterol and in preventing lesion of the vessel walls and the laying down of plaques. Thus as blood flow increases blood pressure is lowered, and this lessens symptoms of headache, head congestion, tinnitus, vertigo, insomnia and heart palpitations etc… Plus silicon helps to keep the blood plasma alkaline so that cells and cholesterol do not lose their negative

charge and stick to vessel walls. Also by building up the collagen in the smooth muscle layer of the walls of the arteries, they become resilience to free radical damage. In heart disease the muscle walls of arteries are damaged by free radicals and calcium is laid down on this oxidation damage, then cholesterol builds up on the calcium blocking the arteries.

Radiation Protection—Because silicon is super-hydrophilic (water-loving) and strongly attracts water molecules, it helps to maintain the colloidal matrix and electrolytic potentials of the body fluids. Therefore there is a good chance that it will prevent the depolarization, precipitation, flocculation and coagulation caused by radiation of all forms. Including that caused by computers, TV screens and the sun. Also Himalayan salt, by providing the nano minerals for strong electrolyte charges also aids in protecting the body fluids from precipitation due to electrosmog and radiation exposure. A strong ionic zetapotential is necessary to keep the electrical voltage gradients, osmotic pressures and capillary force intact. This coupled with adequate hydration ensures the correct structure building intelligence of the proteins, enzymes, DNA and all molecular construction.

Albumin—Serum albumin is the most abundant blood plasma protein, is produced in the liver and normally constitutes about 60% of plasma protein. It is essential for maintaining the osmotic pressure needed for proper distribution of body fluids between intravascular compartments and body tissues. Serum silicon might be only weakly bound to carrier or storage proteins such as albumin. Albumin is negatively charged; the net charge of albumin is defined as its own charge plus the charge of all bound ions. Albumin is the principle serum transport protein to which drugs and hormones bind, and it contains a large number of multiple fatty acid binding sites for metals. In order to be conveyed around the body the minerals in life are held in colloidal bonds (chelated) with hydrophilic substances such as gelatin, albumin, collagen and mucopolysaccharides. In their chelated bonds minerals have 98% assimilation capacity by the body. Despite the low total protein concentration, the level of albumin (60% of total CSF protein) and immunoglobin is very high in cerebrospinal fluid.

BIOSIL

Biosil (Si[OH]4), a stabilized concentrated orthosilicic acid is 20,000 times more soluble than the silica (SiO2) found in horsetail and colloidal gels and 2.5 times more bioavailable than other forms of silicon! Biosil is sold by *Jarrow Formulas* in capsule and liquid form. It is likely that food fiber does not contribute significantly to the bioavailable pool of silicic acid in the intestinal tract and may even interfere with the absorption of free silicic acid. Over a wide range of dietary intakes, serum silicon levels are maintained within a narrow range because of a very efficient kidney clearance system. Therefore Biosil might be a good way to go to build up silicon reserves in the body as well as taking the dietary supplementary sources in herbs, teas and silicon rich foods.
www.vitadigest.com/ja-biosil.html —For one of the cheapest sources of Biosil.

COLLOIDAL SILICA GEL

"In the aging process, the protein in living tissue "unswells" and the surfaces shrink. This leads to a cessation of enzyme reactions. As particles enlarge, less water is available. Therefore the process of tissue aging is primarily a colloid physical change of proteins. A reduction in the size of the "inner surface" occurs. It is, however, the inner cell surface or boundary area that forms the basis for the life processes." 46, Silica: The Amazing Gel *by Dr Klaus Kaufman*

"The hydrophilic affinity for swelling is greatly helped by the presence of polar constructed hydroptropic silica, which promotes swelling, thereby preventing shrinkage, coagulation and hardening of tissues." 51, Silica: The Amazing Gel by *Dr Klaus Kaufman*

If you read Dr Klaus Kaufman's "*Silica: The Amazing Gel*" and "*Silica: The Forgotten Nutrient*" you will learn that colloidal capacity or zeta potential is the key to health…this is so because life is a liquid crystal. Enzyme efficiency, optimal speed and the free structural arrangement of molecules requires a certain ideal hydration level and zeta potential. All disease, injury or degeneration is accompanied by swelling and stasis in blood and lymphatic circulation. Aging involves the buildup of deposits, toxins and pathogens that disrupt the water-binding ability leading to structural disintegration, flocculation, coagulation, hardening and shrinkage of tissue. Silicon restores optimal colloidal conditions to reinstate healthy metabolism, reintegration and structural integrity.

Dr Klaus Kaufman says that silica gel is more easily assimilated than horsetail and plant based silica. You can rub the gel on your skin and use it in your hair as well as taking it internally. It does however leave a white film on the skin, so horsetail infusion would be best for topical application during the day. Gel in the hair also makes it stiff, while horsetail infusion makes the hair incredibly smooth and shiny. The gel therefore would be better for rubbing into the scalp prior to sleep. Colloidal silica gel is indeed much stronger than horsetail for chapped-athletes feet.

BAMBOO SAP

The highest plant source of silicon is bamboo extract, it contains over 70% organic silicon. This is more than 10 times the level as found in Horsetail (5-7% silicon). Bamboo extract is a gel is called *Tabashir* that is used in Ayurvedic and Tibetan medicine as a stimulant, astringent, febrifuge, tonic, diuretic, antispasmodic, and aphrodisiac. Its medical applications include tuberculosis and other wasting diseases. It has been adopted as a popular remedy for common cold, sore throat, sinus congestion, cough, clears heat, resolves phlegm, is an anti-convulsive, used for seizure and epilepsy and also for spasms, convulsions caused by phlegm and heat. The bamboo plant has unusually high levels of acetylcholine (a neurotransmitter in animals and humans). Bamboo Extract has potent antioxidant properties, helping protect skin from damaging free-radicals. Studies are showing that bamboo has excellent antitumor effects and reduces cellular inflammation.

Bamboo leaves are utilized as a source of flavonoids (e.g., vitexin and orientin), used as antioxidants. The flavonoids may reduce inflammation, promote circulation, inhibit allergy reactions and for treatment of some chronic ailments, including diabetes. Bamboo stem shavings are used for stomach heat syndromes that produce incorrect flow of Qi, commonly causing nausea and loss of appetite, as well as symptoms of hiccups, vomiting, irritability and insomnia. Bamboo shavings are still used today in the treatment of epilepsy and other convulsive disorders. No doubt bamboo leaf and shavings can be used to make a great sun-tea.

HORSETAIL (SHAVEGRASS)

After bamboo sap, the two richest sources of organic silicon in the plant kingdom are Dulse and Horsetail. Horsetail (*Equisetum arvense*) is a descendant of ancient plants that grew as tall as trees during the carboniferous period of three hundred million years ago and members of this family gave rise to many of our coal deposits. For both ORMUS and silicon we might be able to use swamp plants such as horsetail and calamus, if they have been wildcrafted from vital wilderness areas. Growing everywhere but Australasia, horsetail is a wetlands plant that is traditionally used for its silicon, for no other herb is so rich in silicon. Horsetail has the ability to accumulate gold in its tissues as well as cadmium, copper, lead and zinc.

The Chinese use horsetail to cool fevers and as a remedy for eye inflammations, dysentery, flu, swellings, osteoporosis, sprains, dislocated joints, pulled hamstrings or torn ligaments and hemorrhoids, benign enlargement of the prostate gland and also for kidney stones. Horsetails, both field and swamp versions, contains the enzyme thaiminase, which is a bone marrow toxin that can rob the body of the vitamin B complex. But the enzyme is destroyed by heat or thorough drying, so cooking the plant will remove the thiaminase. But you can use the "dried" horsetail (course ground in a coffee grinder) for making sun tea and you can take the dried horsetail as a brewed tea as well. Use the older rushes for teas, the younger more acidic ones for topical infusions and capsules. Keep a bottle in the fridge to spike your drinking water with. Horsetial harvested in winter has high levels of sugar in it which act as a freeze retardant, keeping the plant alive over winter.

To make an infusion collect some of the young shoots of horsetail. Chop up into 1/2 cm chunks and put in a small amount of water over a low heat, without even simmering, for 1.5 hours. Cool the mixture, strain and apply to the hair and scalp with your hands. It heals and flattens out the cuticle structure making hair strong, shiny and more youthful. You can also apply this tea to your skin as well with a small mister bottle. You can use this strong infusion to spray onto hair, skin and plants, but run it through a coffee filter or tissue first in order to prevent blocking up your spray bottle. Horsetail is the ultimate herb for healing any kind of skin condition whether it be acne, eczema, chapping, fungi or bacterial infection or burns.

Horsetail solution increases the elasticity, smoothness, healing rate, dermal thickness and water holding capacity of the skin. As with the hair, it gives the

skin a smooth youthful sheen. As well as giving instant results in reducing the appearance of ageing, I intuit that it will make the collagen-based tissues of the body more resistant to environmental forces and aging in general. My sense is that it helps return integrity and strength to the cell structure and shores them up against damage by oxidation, free radicals, UV rays, drying and weather. By holding water in the skin and maintaining structural integrity silicon helps to prevent the oils in these tissues from being turned into free-radical transfats, thus reducing inflammation, glycation and oxidation of the tissues. Silicon application to the skin will also prevent fungal and bacterial and viral infection through its disinfectant action and strengthening of collagen.

You can make silicon rich capsules containing powdered cornsilk, dulse, horsetail, combined with papaya enzymes for increasing the absorption of silicon into the body. Or you can make a soup stock base out of horsetail along with cornsilk and dulse flakes for irritable nerves. As a mouthwash horsetail (or silica gel) can be used for mouth ulcers, bleeding gums and sore throats. Use as a footbath for feet problems.

CORNSILK

Cornsilk contains high amounts of silicon, and moderate amounts of potassium, calcium, magnesium, iron, zinc and phosphorus. It is also an excellent source of B vitamins and PABA, chlorophyll, resin and mucilage. It contains maizenic acid, which acts as a diuretic reducing fluid retention in the body, thus is used for bladder infections, edema, heart trouble, high blood pressure. It is also a wonderful remedy for acute inflammation and irritation of the genito-urinary system, such as cystitis, urethritis, prostatitis and is used for urinary stones, gravel, hepatitis, albuminuria and kidney disorders. Corn silk clears toxins, catarrh, deposits and irritants out of the kidneys and bladder, and has a gentle antiseptic and healing action. By aiding elimination of toxins and wastes from the body corn silk may relieve gout and arthritis. Corn silk's healing and soothing properties are helpful for relieving skin irritation and inflammation and for healing wounds and ulcers. Cornsilk also contains Vitamin K which controls bleeding and thus for the normal clotting of blood.

BANANA STEM JUICE

Banana stem juice contains silica, potassium, soda, lime, magnesia, alumina, chlorine, sulfuric anhydride, carbon anhydride, polysaccarides, polyphenols, phytoalexins, sterols and sterolins. The gallic acid in the juice is an antibacterial, antifungal and antioxidant. Musa stem juice is also anti-inflammatory, anti-ulcer and anticancer; inhibiting cancer cell development. It is given to young infants and is a well-known remedy for snakebites to flush out poison. It improves the functional efficiency of kidney and liver and heals hemorrhoids. Banana stem juice has been found to be of great help in the treatment for the removal of stones in the kidney, gall bladder, and prostate. It clears the excretion organs in the abdominal region of toxins and helps to eliminate them in the form of urine. Juice from the stem is used as a scalp application for thinning hair. I once ate the meat of an

animal that had banana stem regularly in its diet and it was the most juicy, tender, fleshy meat ever. www.active-immune-booster.com/index.html

CEREAL SUN TEA

The immune supporting action of cereal sun tea is what gives it the power to generate the sense of well-being and reduces appetite! You can make a silicon rich sun tea from the ripe ears of oat, barley, millet, sorghum, buckwheat, chickweed and wheat, or indeed with many wild grasses. Cereal-ear sun tea seems to be even more energizing and fortifying than wheatgrass itself, stabilizing both mind and body and eliminating hunger. You get an immediate sense of wellbeing through the boost to the immune system with silicon, B17 and other factors. It will also provide you with the cancer fighting agent Beta-glucan. **Beta-glucan**, the water-soluble polysaccharide commercially derived from the cell wall of yeast. Beta-glucan is a natural gum polysaccharide which has anti-tumor and immune effects. Beta-glucans acts as a free radical scavenger and macrophage stimulator of phagocytosis, and increases interleukin production. Beta-glucans are most abundant in barley and oats and also in the bran of other cereal grains buckwheat, wheat, rice and rye and indeed in wild grasses. As well as the seed heads you can also use chopped dried or green cereal straw for sun tea. Add some chopped horsetail to your cereal straw mix, but use the older reeds of horsetail because the younger ones have an acid taste that is not good for teas, but is great for pills or topical infusions for the skin. If you don't have any cereals growing around, then soak some unhulled cereal berries for 2 hours, throw away the soak water and add these to your sun tea jar along with the straw. Lemon grass, bamboo shavings, bark of banana stem and the bark of sugar cane also make great silicon rice sun teas. There is a high deposition of silicon in the hemicellulose and pectin-rich layers of the cell walls of the outer layer of sugar cane stems, so this might be a fine source for nutritional silicon. Solarizing water increases the hydrogen perioxide in the water, which may contribute to the removal of heavy metals from the body. During winter, to make sure your herbs are still well brewed in the cold, bring the tea water to the boil first before placing your sun tea in front of a sunny window. To grow cereal grasses for sun tea, throw some kamut, wheat, barley, oat and birdseed around the garden in spring.

OTHER SILICON SOURCES

Plants absorb orthosilicic acid from the soil and convert it into polymerized silicon for mechanical and structural support. As the silicon from plant extracts cannot be readily absorbed through the stomach wall, the bioavailability of these products requires healthy levels of stomach acid in order to produce soluble orthosilicic acid. *Silicon rich foods include:* Bamboo sap, algae, onions, beets, bean sprouts. Silicon is found at high levels in grains such as oats, barley, millet and rice. Good food sources of silicon include the parts of food which are often discarded e.g., fruit and vegetable peel, cucumber skins, husks and the 'stringy' parts of mango, celery, asparagus, rhubarb, green leafy vegetables, beets, parsnips, apples, strawberries, grapes, raw almonds, raw sunflower seeds raw flaxseed. Besides

cornsilk and horsetail other *herbal sources of Silicon include*: Alfalfa, bilberry, birch, black cohosh, black walnut, burdock, caraway, celery, chaparral, chickweed, couch grass, dulse, echinacea, eyebright, feverfew, gentian, ginger, ginseng, oatstraw, oregon grape, parsley, peppermint, lemon grass, licorice, Nettle, sarsaparilla, rose hips, sage, shave grass, stevia, thyme, Uva ursi.

SILICON IN HORTICULTURE

Diatoms are algae and phytoplankton with an ornate cell wall made of biosilica (hydrated SiO), first appearing around the early Jurassic Period. It was diatoms in the ocean, through their production of oxygen that went on to make earth habitable for other lifeforms. After just several hours of silica deprivation diatoms cease photosynthesis, protein synthesis and their metabolism comes to a halt. Levels of selenium greatly affect the production of biosilica in sponges and diatoms. Silica has an affinity for water, and diatomaceous earth, which is the remains of the silica rich diatom algae, holds more moisture in the soil than any other silica clay soil amendment.

In horticulture the use of Pyrophyllite clay as a soil amendment was found to reduce fungal infections due to the increased available silicic acid. For plant protection a fungicide spray preparation can be made from finely powdered hydrated silica or hydrated silicic acid. There are products on the market like "Prosilicate." Using Prosilicate reduces disease and insect problems, increases stem strength and leaf positioning, improves photosynthesis, and increases heat and drought resistance. Colloidal silicic acid solution is also used as an environmentally friendly wood preservative.

It is interesting that scientists are using the plant disease causing fungus Fusarium oxysporum, in a bioleaching process for synthesizing silica in nanoparticle size. http://nanotechweb.org/articles/news/4/4/9 I assume that it is nano-silica produced by microbe decomposers in the soil which gives living-water its structural levity properties. Viktor Schauberger considered silicates essential to healthy water. He surmised that it is the fine dispersion of minerals and silicate in the flow of water which gave it the levitational energy (electrical potential) necessary for trout or salmon to jump up high waterfalls. Nanosilicon probably facilitates the microcrystalline structures in living-water allowing greater oxygen carrying capacity and may be a factor in sonoluminessence. The Brown's Cell and Joe Cell researchers need to experiment with adding nanosilicon to their electrolysis systems.

We have established that silicon is also essential to the mucopolysaccharide structure and hydration of collagen. Thus silicon can be seen as the **Keystone** to the body's architecture. Silicon builds connective tissue in synergy with boron, calcium, magnesium, potassium, and ascorbic acid. Silicon works with these elements to support bones, arteries, connective tissue, healthy hair, skin, and nails. Bone can not re-mineralize and repair itself if enough Silica is not present.

Trace Minerals in Food by Kenneth Thomas Smith, p-392-398
Nature As Teacher: How I Discovered New Principles in the Working of Nature by Viktor Schauberger

MUCOPOLYSACCHARIDES

Silicon contributes to strong mucopolysaccharide metabolism, preventing dehydration of cells and consequent aging.

Mucopolysaccharides are built of a series of simple sugars, or polysaccharides, which form a chemical bond with water. They contain hexosamine (six carbon aminosugars) and sometimes proteins, composing a gel-like substance found in body cells, mucus secretions and synovial fluids. Mucopolysaccharides are gummy, viscous, and sticky, and mucus-like and function to glue cells together, lubricate joints, build connective tissues and are found in blood group substances. Mucopolysaccharides are no longer produced in the body after puberty and must be received from nutrition.

Silicon is firmly bound to the polysaccharide matrix of mucopolysaccharides such as hyaluronic acid, chondroitin, dermatan, keratan and heparan at around 57-191 ppm. Thus silicon is a component of the hydrated network of collagen and elastin that make up the fibrous material of connective tissue. While hyaluronic acids forming the vitreous humor of the eye and keratan from cornea were Si-free. Large amounts of bound Si are also present in the soluble dietary fiber pectin (2580 ppm); pectin helps to bind cells together and regulates water in plants. Also high in silicon is alginic acid, a gum found in the cell walls of seaweed - Si at 451 ppm.

Strong alkali and acid solutions hydrolyze the Si-polysaccharide bond, creating dialyzable silicate. But enzymatic hydrolysis of hyaluronic acid or pectin does not liberate silicic acid, but instead leads to polysaccharides of a lower molecular weight still containing the bound Si. It is concluded that Si is present as a silanolate, (ether or ester-like) derivative of silicic acid, playing a role in the formation of *structural bridges in the organization of mucopolysaccharides*. Thus, Si may function as a biological cross-linking agent and contribute to architecture and resilience of connective tissue.

Silicon is the element that forms the architectural bridge between the mucopolysaccharide molecules of the "glue" that holds the body together. Thus silicon has a role in "bridging" individual mucopolysaccharide polymers to form three-dimensional networks. Silicon helps stabilize these mucopolysaccharide networks, to attract and hold water in the joints thereby providing the cushioning effect of cartilage improving the load bearing capacity of joints and the hydration of connective tissue. Bound silicon can increase the resistance to tissue degradation by mechanical stresses, heat, or enzymes.

HYALURONIC ACID—Chondroitin and **hyaluronic** acid are mucopolysaccharide components of the collagen structure that forms and holds the body together. Connective tissue forms an extensive compartment in the body and can be considered as the "glue" that holds the body together. It ranges in consistency from the gel-like softness of areolar connective tissue of the lungs, to the hardness of bone, adipose tissue, cartilage, lymphatic tissue and even blood is also a connective tissue. The protein Hyaluronic acid (Sodium Hyaluronate), is a mucopolysaccharide

found throughout connective, epithelial, and neural tissues. It is sometimes called the "ground substance" or "intercellular cement" because it occurs between cells and helps hold them together. Hyaluronic acid is an example of hydrophilic matrix that exhibits turgid (swelling) force by absorbing a lot of water, providing a blanket against water evaporation. As we age the body produces less hyaluronic acid, hence the drying of skin and joints. Silicon stimulates chondroblasts to deposit chondroitin sulfate and hyaluronic acid into the cartilage matrix and the synovial fluid of the joints. Commercial sources of hyaluronic acid include the vitreous humor of fish and rooster combs. Exercise, magnesium, copper and zinc are needed for hyaluronic acid production. Thyroid deficiency from prolonged stress can reduce hyaluronic concentration. The mucopolysaccharides heparin, glucosamine and hyaluronic acid are constituents of cartilage, tendons, connective tissue, cornea, heparin, and blood-group substances. Glucosamine is amino sugar component of these mucopolysaccharides; the combination of both glucosamine and silicon is an effective in the treatment of arthritis.

Dr Tullio Simonchini in his youtube.com presentation entitled "*Sodium bicarbonate, a natural way to treat the cancer*," and in his Nexus Magazine interview www.nexusmagazine.com/articles/CancerIsAFungus.html said that cancer is a disease of epithelial (connective tissue) caused by candida. There are two main types of epithelial tissue: lining and glandula. Cancer spreads by invading healthy, normal tissue by producing massive amounts of enzymes that digest the surrounding tissue. One of the enzymes cancer cells produce is **hyaluronidase** - dissolves the collagen that binds cells together to form tissues. By catalyzing the hydrolysis of hyaluronic acid, a major constituent of the interstitial barrier, hyaluronidase lowers the viscosity of hyaluronic acid, thereby increasing tissue permeability. Some bacteria produce hyaluronidase as a means for greater mobility through the body's tissues and as an antigenic disguise that prevents their being recognized by phagocytes of the immune system. The key point is that these collagen dissolving enzymes "Chondroitinase and hyaluronidase" are believed to play a role in the pathogenicity of fungi, particularly species of the genus Candida!! Thus we see the production of hyaluronidase by either Candida or cancer allows wide distribution through body tissues by dissolving collagen fibers and simultaneously protecting itself by antigenic disguise from detection and elimination by the immune cells.

Stabilizing Collagen—During kundalini and in life generally you want to keep your collagen strong or your body becomes "unglued." That is you lose your muscle tone, bulk and strength, plus your joints get floppy, the spine starts weakening and the colon becomes prolapsed etc… Pycnogenol may protect collagen and elastin from these destructive enzymes. The synthesis of collagen requires vitamin C and the minerals copper, iron, manganese, zinc and silicon. B6 is also needed in the growth and repair of the protein and collagen structure of the body. Chaparral, echinacea and sarsaparilla to help maintain the integrity of the body's connective tissues. Echinacea stabilizes tissue hyaluronic acid and has corticoid-like anti-inflammatory effects, and stimulates fibroblast response at tissue injury sites.

Collagen fibers are made from protein and have large amounts of the two amino acids hydroxylysine and hydroxyproline. Vitamin C, Lysine and Proline are needed to build strong collagen to protect against the spread of cancer. Dr. Matthias Rath advocates increased consumption of the amino acid lysine as a companion nutrient with vitamin C. Lysine has the effect of blocking the enzymes that dissolve collagen. Dr. Linus Pauling and Dr. Rath developed a formula to clear arterial plaque and maintain the cartilage in arterial walls. The three ingredients of their formula are vitamin C, plus the amino acids lysine and proline. www.stopping-cancer-naturally.org This combined with the cancer cure program proposed by Dr. William Donald Kelley represent the most advanced (successful) anticancer approaches. http://drkelley.com/

AMINO ACIDS IN COLLAGEN—Lysine: The amino acid lysine inhibits the **hyaluronidase** enzyme that cancer uses to break down collagen in order to spread. High lysine foods include: sprouted legumes - especially peanuts, beans, buckwheat, the cabbage family, brewers yeast, wheat germ, chicken, kefir, dairy and seafood. Raw Sprouts contain lysine, and especially Buckwheat greens and sprouted buckwheat seeds contains substantial amounts of lysine, taurine, calcium, vitamin E, the entire B vitamin complex, and it is especially noted for its high laetrile (vitamin B17) content. **Proline:** Foods high in proline include cottage cheese, egg whites, yogurt, cabbage, bamboo sprouts, wheatgerm, gelatin and meats, although abstinence from meat is advised during cancer. Other foods that support collagen include garlic and two sulfur-containing nutrients - the amino acid taurine and the alpha lipoic acid. The catechins found in green tea have been shown to help prevent breakdown of collagen and anthocyanidins found in deep-colored, red-blue berries and fruits.

CHONDROITIN—Chondroitin is an acidic mucopolysaccharide with a high retention of moisture and lubrication. Chondroitin sulfate is an important structural component of cartilage and provides much of its resistance to compression. Chondroitin sulfate is a major component of the connective tissue (extracellular matrix), and is important in maintaining the structural integrity of the tissue. Chondroitin exists in gooey foods such as natto (fermented soy beans), yamaimo, okra, shark fin, turtle. Yamaimo is a Japanese mountain yam that the Japanese peel and grate or julienne for salads. They are about two to three feet long and the flesh is very sticky and glutinous.

ALOE GEL EXTRACT—Fresh Aloe Vera gel is a good source of mucopoly-saccharides. This large sugar molecule includes monosaccharides such as glucose, galactose, fucose and mannose. Clinical studies have shown that there are special mannose receptors within the gastrointestinal wall and that these receptors engulf these large mucopolysaccharides without breaking them into smaller pieces. These large molecules then act to balance and stimulate the immune system. Aloe gel is anti-inflammatory and heals the digestive system lining and can help to cure irritable bowel symptoms. Without good digestion, the body lacks the energy needed for metabolism, assimilation and detoxification. The Mucilaginous

Polysaccharide found in Aloe Vera both takes the stress of the immune system by healing the GI tract lining and also directly stimulates immune activity. Use more of the gel than the whole leaf, which has irritating alkaloids in the green skin. Many proteins at the cell surface are decorated with carbohydrates such as L-fucose. Oligosaccharides have been implicated in the strengthening of neural connections, a process believed to underlie learning and memory. L-fucose plays a fundamental role in nerve cell communication and long-term memory storage.

PECTIN—Adding apple pectin powder to your smoothie will slow down the sugar uptake as pectin has the ability to regulate blood glucose levels, and has an anti-inflammatory effect in the bowel. Other attributes of pectin is its ability to decrease the body's fat absorption, thus lowering cholesterol levels. It enhances cell uniformity thus reducing the occurrence of malignancy. Because it contains large amounts of silicon it helps to return synovial and other connective tissue to their previously smooth, elastic, lubricated condition. If your digestion is weak then Pectin/Bromelain Capsules with each complex meal might be good to build up the mucopolysaccharides and fiber in the digestive system. Citrus pectin capsules might be particularly good for cancer.

BUCKWHEAT GOOP—Hulled buckwheat gives off a thick gel after it is soaked and starts sprouting. I started to drink the goop in my water and to mix it into my carrot and wheatgrass juice. On doing so I noticed that my own assimilation capacity strengthened. This leads me to the assumption that this mucigel aids in the colloidal homogenization of the food in the stomach and intestines and probably enhances the capacity for the villi to extract large molecules by increasing the phagocytosis, that is the endocytosis of the leukocytes and the other mechanisms of assimilation. I am a big fan of using the goop in smoothies and raw soups. Grow your buckwheat in a colander in the fridge and use filtered water to rinse the seeds, and save the resulting goop for internal use and for topical use as a skin softener and hair conditioner. It is also great in the compost or on the garden to improve the soil grain, moisture holding capacity and mineral uptake of plants. If you live in a dry region you should eating buckwheat sprouts by the ton and use the goop to reduce the water demands of your garden.

GLUCOMANNAN—Glucomannan is a dietary fiber, forming a soft gel with water and is considered a "bulk-forming laxative." It is the main polysaccharide obtained from the tubers of the Amorphophallus konjac plant, a member of the family Araceae. This soluble fiber has a extraordinarily high water holding capacity, absorbing up to 200 times its weight in water. Of all known dietary fibers, it is the highest molecular weight, extraordinary water-holding capacity and is the most viscous. Human pancreatic and salivary amylase cannot split the beta-1,4 linkages, and hence glucomannan reaches the colon without being broken down and is then fermented by the intestinal bacteria. Glucomannan lowers cholesterol, lowers systolic blood pressure. reduces blood sugar, slows glucose absorption, lowers the Glycemic index and promotes regular bowel movements. A combination of glucomannan and plant sterols substantially improves plasma LDL cholesterol

concentrations. In one study obese adults consumed 1 gram of glucomannan fiber one hour before each meal for eight weeks, and they lost an average of 5.5 pounds of body weight—with no other changes to their eating or exercise patterns.

ORMUS

David Hudson calls the exotic materials he found Orbitally Rearranged Monoatomic Elements or ORMEs. He also refers to them as monoatomic elements in a high spin state or m-state. The raw food expert David Wolfe says it is the long chain sugar polysaccharides that are essentially the ORMUS carrying substances that concentrate in certain types of plants and animals. The polysaccharide is strongly concentrated in medicinal tree mushrooms such as reishi, maitake, shitake, fomes fomentarius, ganoderma applanatum and ganoderma orgensus. Other ORMUS collecting plants include noni, aloe vera, blue green algae, rapeseed, white pine and larch bark.

Hydrophilic silicon acts like a holder or coupler of ORMUS elements in aqueous solution, keeping them in colloidal suspension through electromagnetic charge, thereby preventing the dissipation of ORMUS into the air. In the body, silicon might have a similar bonding relationship with ORMUS. Essentially laying the framework for the flow of the light of life in the body—especially with regards to nerve and connective tissue—creating the morphogenic field for the autopoietic assembly of the body's cellular construction.

Fibroblasts are the cells that produce the connective tissue fibers and the nonliving matrix material, which makes up the structural scaffolding of the body. The main function of fibroblasts is to maintain the structural integrity of connective tissue by continuously secreting precursors of the protein-containing extracellular matrix. And it is the composition of the extracellular matrix determines the physical strength and flexibility properties of connective tissues that sculpt the "bulk" of an organism.

The mineral we tend to forget about is silicon, yet it is vital to the connective tissue structure of the entire body. After many years I found the kundalini was burning through my collagen and I finally realized I needed to increase the silicon in my diet. Consequently I have used about 10 pounds of horsetail in tea and capsules in the last 6 months. My drinking water is now comprised of oatstraw-horsetail tea, some muco-goop from buckwheat sprouting, a dash of fulvic acid and Utah shale minerals, plus Himalayan salt. After freezing it I drink three quarts of this delicious golden elixir of the Gods per day. As a consequence my muscles have regained their tone, my skin is thicker and more youthful, my joints and spine are stronger and my nerves more steady. Silicon is important for resilience to kundalini, not only in supporting the structure of the body, but also the conveyance of biophoton information (etheric communication) and nerve strength.

DIRT-THE ELIXIR OF LIFE

"*You can trace every sickness, every disease and every ailment to a mineral deficiency,*" Dr. Linus Pauling.

The answer to eliminating heavy metals, improving assimilation and elimination and enhancing electrolyte balance appears to be "dirt. Humic substances arise by the microbial degradation of biomolecules (lipids, proteins, carbohydrates, lignin) dispersed in the environment after the death of living organisms. "Humus" refers to any organic matter which has reached a point of stability, where it will break down no further and might remain essentially as it is for centuries, or millennia. Once fully humified it becomes a uniform dark, spongy, jelly-like substance and amorphous in structure. Humus is often described as the 'life force' of the soil. In the United States the **humin** content of the soil has decreased by 64% in 30 years due to agrochemical farming and monocultures.

Like clay humus is a colloidal substance, and increases the soil's cation exchange capacity, hence its ability to store nutrients by chelation and prevent leaching. By chelating the ions, humic acid increases the availability of these cations to organisms, including plants. Humic acid contains Sulfur, Nitrogen and Phosphorus in varying amounts. It also contains metals such as Ca, Mg, Cu, Zn etc. which are chelated. These acids are natural chelators that remove excessive calcium deposits; such deposits are often implicated in diseases like arthritis, kidney stones and Arteriosclerosis/Atherosclerosis. They do this by breaking down the insoluble ionic bones between iron, phosphate and calcium.

Humic acid are of two groups based on the polarity and size of the individual compounds. The smaller, more polar fraction is generally termed **fulvic acid** and the larger, more nonpolar fraction is generally termed humic acid. Fulvic acid has been shown to protect against, chelate and remove heavy metals, toxic materials and other pollutants and is essential to wash away metabolic waste and toxins that cells produce. Fulvic acid is produced naturally by plant roots and is important in root cell division. Is a catalyst, buffers pH, chelates minerals for plant-ready uptake and activates enzymes. When fulvic acid acts upon a substance, its molecular size and weight are altered. This reportedly allows it to pass through cell membranes. Fulvic makes cell walls more selectively permeable, so nutrients can more easily enter the cell, as well as allowing waste to leave the cells more readily. Humic Acids and Fulvic Acids enhance mineral and trace element uptake, counteracting aging effects of cellular starvation, element imbalances and cell membrane rigidity. Loss of electrolyte potential is the main reason why we "age," and Fulvic Acid is said to be the finest electrolyte known to man and it enhances the utilization of other supplements and foods that we ingest. Fulvic acid plays a vital role in penetrating the cell walls and transporting the minerals in to the cells. The major reason why aging and degeneration sets in is the rigidifying of cell walls making it increasingly difficult for vitamins and minerals to be transported into the cells. Fulvic acid makes water "wetter," that is to lower its surface tension and permit greater hydration of cells; increasing cell nutrition and longevity.

Since relatively strong acidic and alkaline groups may occur within the humic molecule, this results in a dipolar ionic structure similar to that of proteins. Like proteins humic molecules are capable of catalyzing chemical reactions, although with much lower efficiency than certain specific proteins. Certain parts of the humic molecule is hydrophilic, while other areas are lypophilic (*fat-loving*), capable of binding materials that are insoluble in water. This soap-like property of humic molecules permits the binding of water-insoluble materials. Similarly to other macromolecules, the humic molecules are capable of forming colloidal solutions. In this way both water soluble and insoluble nutrients are made available to the roots of plants. Like clay, humus is a colloidal substance, and increases the soil's cation exchange capacity, hence its ability to store nutrients by chelation, thus preventing leaching.

As an anticancer agent humic acids may act extracellularly by preventing the formation of mutagenic compounds that would affect the DNA of the cell, through binding to and inactivating the mutagen. It has been found that the ability of humic acid to adsorb mutagens increases with the molecular weight of humic acid. Humic acids bond with metal ions, and form complexes with amino acids, peptides, carbohydrates and steroids. This chemical-structural property of humic acids may also be responsible for some of the effects occurring in tissues; including the elimination of heavy metals, anti-mutagenic effects, antioxidant and anticoagulant activity. The cation exchange capacity and ligand formation ability of humic substances may partially explain why humic acids can bind and release ions of lower atomic mass while binding heavier ions with a higher atomic mass. It is known that lead and cadmium are among those bivalent ions that are most likely to be bound to the humic acid molecule. It binds to metals and body toxins, removing them from the system.

Fulvic acid helps fight cancer in many ways, by improving the electrolyte environment, cell hydration and as a super antioxidant and heavy metal detoxifier. Because of its speed of operation Fulvic acid must radically alter the electrolyte, ionic properties of the body fluids allowing the immune cells to detect the cancer/candida as a foreign invader. Organic fulvic acid electrolytes charge, recharge and restore the ionic potential that is or once was normal to the cell, and in doing so, balances and supercharges cellular life. As the most powerful, natural electrolyte known, fulvic acid restores electrical balance to damaged cells, neutralizes toxins and can eliminate food poisoning within minutes. Fulvic acids are vital in bringing substantial amounts of nutrients and minerals into soluble solution and transporting nutrients into the cells. Fulvic acid is a powerful natural antioxidant that can eradicate any form of free-radical. It can act as an acceptor or as a donor in the creation of electrochemical balance. If it encounters free radicals with unpaired positive electrons, it supplies an equal and opposite negative charge to neutralize the bad effects of the free radicals. Likewise, if the free radicals carry a negative charge, the fulvic acid molecule can supply positive unpaired electrons to nullify that charge. Fulvic acid plays the role as a bi-directional super antioxidant.

Chlorination By-Products

Companies that make these products must use "non-chlorinated" water, for the combination of chlorine with humic acids can create a toxin in the body. Water treatment facilities remove the organic compounds like humic and fulvic acid because the chlorination of drinking water can result in the formation of disinfection by-products (DBPs) such as trihalomethanes and haloacetic acids, compounds that are linked to increased rates of bladder, kidney and stomach cancer. It has the same dangerous results when chlorine comes in direct contact with many of the extremely valuable phytochemicals contained in fresh fruits, vegetables, and herbal extracts. Because of the carcinogenic compounds created by chlorine's interaction with organic molecules, it is best to use filtered water that has been standing 24 hours and exposed to sunlight. To avoid the production of these chlorine-organic matter by products, water treatment plants first remove the organic matter (humic acid) from the water prior to chlorination.

Unfortunately some municipal water treatments are using chloromines rather than chlorine. *"Many municipalities use chloramines, often on the back end of the treatment plant (after filtration), and ClO2 or Cl2 etc as a pre-oxidant on the front end."* Chloramine will not simply outgas the way chlorine does, even exposed to sun and plentiful oxygen, Chloramine-T could still last for as long as a week. To counter this add a pinch of Himalayan Salt and MSM (sodium and sulfur) to the water before leaving it to stand, to turn the chlorine to harmless chloride ions. We might consider going this extra step before we make our sun tea with plant matter which is naturally rich in humic acids. Fulvic acid and colloidal minerals are natural chelators; detoxifying the body, the liver, and the digestive tract, by attaching to toxic buildup, including heavy metals, and chlorination by-products, where they disarm, neutralize, and remove them as waste products.

NANO FLUVIC ACID—Nano Miracle Bion Advanced Omega (Fulvic Acid) from mdhealthstore.com make a virtually 100% Fulvic acid product from organic shale millions of years old. Oil shales are ancient sediment deposits of marine and terrestrial organisms that once inhabited lakes, marine basins and coastal swamp, that have been compacted under geological pressure. The consumption of Humic Acid increases energy, improves mood and initiates a wholesale cleansing of accumulated toxins and poisons, including heavy metals, parasites, and fungi. Other effects include decreased appetite, deeper sleep, pain reduction, antioxidant, immune stimulator, stimulates metabolism, anti-aging and rejuvenation. Miracle Bion fulvic acid has a pH of 7.4 to 8 and they don't use chlorinated water in the manufacturing, because the combination of chlorine with Fulvic Acid can create a toxin in the body. So do not drink chlorinated water with your humic acids, or when using humate to water your plants. FulvaLife is another brand of 100% fulvic which is made for human consumption. Shale derived colloidal minerals naturally contain around 6% fulvic and humic acid thereby increasing the assimilation of the minerals.

HUMIFULVATE—Metal-X contains the active ingredient humic acid (Humifulvate), which gets rid of heavy metal toxicity, while maintaining the body's level of the "good minerals". Humifulvate is derived from a 10,000 year old peat deposit in Hungry and is composed of humic and fulvic acids, along with minor amounts of phenolic acid. Humifulvate is a negatively charged (anionic) metal complexing ligand, which acts as ion exchanger, releasing metal ions of a low atomic mass and chelating, or binding to heavy metals.
Metal-X www.vitacost.com

SHILAJIT—Shilajit contains more than 85 minerals in Ionic form and 65-75% Fulvic acid. In Shilajit ("Rock Like" in Sanskrit) is mineral rich pitch formed from the remains of the plant life in the specific climatic condition and altitude of Himalayas. Ancient Chinese and Indian literature mentions Shilajit as the Amrita or Elixir of Youth, as God's gift and the nectar of longevity
www.rudramani.com/

DIATOMACEOUS EARTH—Diatomaceous Earth (food grade) helps eliminate candida, parasites, worms, yeast, fungi, and amoebas from the body. It helps detox heavy metals and is able to absorb many times its own weight in toxins. Candida is virtually present in every case of fibromyalgia, irritable bowel syndrome, chronic fatigue syndrome, hyper- or hypoglycemia, hypothyroidism, cancer and diabetes. DE has a drying effect on the body so drink extra water. Because of its small particle size and porous nature, it has both an abrasive and absorptive quality. Diatomaceous earth has a negative charge and bacteria has a positive charge, wherein it is believed by some that food grade diatomaceous earth sweeps bacteria out of the body by trapping it in it's honeycomb shaped skeletal form. Humans - 1 heaping tablespoon daily

TERRAMIN~RED DESERT CLAY—I found the best clay for external and internal use...a pinch of this can be added to your water prior to solarizing and magnetizing. Pure Calcium Montmorillonite looks like best calcium/silica rich clay to use. It has a pH of 8.3 so it is alkalinizing to the body. Montmorillonite is extremely fine-grained and thin-layered, more so than other clay minerals. The layers contain ions that are very loosely bound to one another and easily exchangeable. It is shaped like a credit card, with negative charges on the flat surface and positive charges on the edges. The strong negative charge gives a higher exchange capacity with a powerful ability to absorb toxins such as mercury, lead, pesticides, aluminum, arsenic, nicotine, copper, "Radiation", chemicals, bacteria, environmental pollutants and poisons. All toxins are positively charged. In nature, opposites attract, thus the clay negative ions attract the toxins, which are positively charged ions. The clay mineral spheres are formed from hydrothermal activity, consistently hot temperatures and minimal rainfall provided by the desert location near the border of Mexico. www.thepetalternative.com/terramin.html

ZEOLITE—Clinoptilolite Zeolite is commonly used as a soil amendment and fertilizer and taken internally for detoxification. Zeolites are found in nature, formed by the fusion of glass-rich volcanic rocks and ash layers react with

alkaline groundwater and also crystallized in ancient shallow marine basins. Zeolite is hydrated alumino-silicate clay with an "open" porous structure that can accommodate a wide variety of positive ions, such as Na+, K+, Ca2+, Mg2+ etc… Zeolite is a negatively charged molecule and has a cage-like structure that is able to "trap" H+ ions (acid). By "trapping" these positively charged hydrogen ions, this helps balance the body's pH to a more neutral and alkaline level. In this way zeolite balances pH level. The optimum physiologic pH of your body should be slightly alkaline around 7.4, as disease conditions that promote bacteria, fungi, yeast and viruses occur when the pH of your body is acidic.

Zeolite not only chelates and removes heavy metals from the body - removing mercury, cadmium, and lead, it also improves nutrient absorption, is a broad spectrum antiviral agent, provides immunomodulatory action, is an antioxidant for it is negatively charged and quenches positively charged free radicals. Toxic gases, chemicals, mold, heavy metals, and other toxins are drawn by the natural negative electrical charge into the crystal micro pores of the clay, where they can be safetly excorted from the body. Zeolite is known to be anticancer through suppressing tumor growth, as well as trapping and nullifing carcinogenic nitrosamines in the digestive tract. It has a unique property of capturing ammonium ions, plus reduces fermentation and putrefaction in the intestines and reticulation of toxins back into the blood. Zeolite reduces fat oxidation in the liver and improves the serotonergic system overcoming depression. With the zeolite-cancer research they are finding that zeolite works to repair the serotonin chemistry, and serotonin of course is the "calming" neurotransmitter that helps to key you into theta wave, the Schumann resonance and circadian rhythms…thereby strengthening the normalizing organizational principles of the cells and helping to restore a disordered bio-field, through *Bio-field Repolarization*. Remember the enteric stomach brain is a serotonergic brainabd it requires calming alpha and theta frequencies in order to operate optimally. Good digestion is a function of relaxation! There are antidotal accounts of MS type pain being reduced by 50% from taking zeolite internally.

A certain percentage of any powdered zeolite is going to be nano. You can make your own liquid zeolite by using Clinoptiloilite zeolite powder, fulvic acid and glacier water. Blend in a blender and then gently pour off the liquid and put it in a squeeze bottle to apply to your drinking water. The remaining zeolite sediment that is of a larger particle size you can use in a footbath, and then throw the footbath water onto the garden. You can also mix bentonite clay into the sediment and put this into a jar to use as a face or body masque. For ease you can mix your liquid zeolite together with your Himalayan Crystal Salt Sole (A fully saturated solution) to spike your drinking water and before solarizing it in the sun. The zeolites are particularly useful for removing heavy metals and radioactive species from water; you can even take a radiation detox bath of zeolite clay. I think there is potential for using zeolite in home made filter systems along with diatomaceous earth. Apparently fluoride can be removed from the water by adding calcium to the water, running an electric current through it to create a precipitate, and then filtering it through diatomaceous earth. There may be potential for using zeolite in home made water filter systems along with diatomaceous earth.

REMINERALIZATION

Due primarily to agricultural soil depletion and processed food consumption, mineral deficiency is a large problem facing most people today. Even way back in 1936, U.S. Senate Document 264 stated, *"The alarming fact is that foods, fruits, vegetables, and grains now being raised on millions of acres of land no longer contain necessary levels of essential minerals. These foods are starving us, no matter how much we eat."* This means unless we make an effort to remineralize, we are getting as little as 15% of the minerals and nutrients that were once readily available in our food sources.

The capacity to make enzymes and hydrochloric acid diminishes with age, resulting in inferior digestion, absorption and elimination and producing a variety of chronic disorders. By our 40's we only absorb 50% of the nutrients that we could in our 20's. As well as a deficiency in minerals and trace elements, it appears that modern humans have gone terribly wrong in eliminating the wild foods from our diet that are rich deposits of B17, silicon and other minerals and phytonutrients... this combo and our mistreatment of water is the foundations of the ill health of modern man I think. As apes we would have had a diet rich in silicon, B17, humic acids from dirt and other raw phytonutrients, and we have become increasingly deprived of these ever since we began agriculture, plant breeding and cooking food.

Silicon is needed to promote the formation of phagocytes and lymphocytes. Colloidal silica gel also binds to bacteria, pathogens, ama and metabolic wastes, aiding their elimination from the body...thereby giving the immune system less work to do. Silica also acts as a transporter for calcium deposition in the bones... and since the immune and blood cells are grown in the bone marrow, the stronger and more electrically alive your bones are, the better your immune system is. People are becoming so exhausted that they are "bone tired." They need to build up their mineral base with nutrient dense raw plant protoplasm, lie naked in the sun on the living earth and frolic in nature. For once you are "bone-tired" you are heading for major problems.

It is the mineral base that carries the light of life in the body. Industrially farmed land is weak in minerals and the food is even weaker...The geomantic earth energy is also generated, empowered and focused by its mineral content. Because of this mineral depletion of the land, you now need to look to the sea and ancient sea deposits for minerals (kelp powder, spirulina, Himalayan salt, zeolite). Wheatgrass grown with kelp powder is I think one of the best ways to get colloidal minerals readily absorbed and incorporated into body tissues.

The soul, lightbody or rainbow body runs on the electromagnetic fields of the minerals and especially the m-state metals in the body. DNA molecules are like little crystal transducers of this energy that generate the "form" of the body through the genes and through the biophoton field that the DNA emits. The way to get the DNA to heal and maintain its structure is to slowly build up the mineral base of the tissues with radically nutrient dense foods...such as greens, cress, grass-juices and sea products. It is imperative that biodynamic/permaculture farming methods are used, that focus intensively on building up the soil nutrient density

via ecologically sound means. If you don't have any land to grow food, then set up a highly conscious sprouting system with a powerful composting routine. Because it is easy to get an excess and unbalance of minerals through manmade mineral supplementation, it is best to start thinking in terms of putting the nutrients into the soil and rebuilding the entire ecosystem...even if only on your balcony sprouting system. And using combinations of minerals found in nature that are already balanced and chelated (kelp and spirulina).

Once the tissues are loaded with minerals this keeps the soul's morphogenic EMF strong enough to keep the DNA in perfect alignment, thereby eliminating the danger of getting cancer. The more perfect the mineral saturation the stronger "soul" and spiritual Presence an individual has, for they are no longer some fickle wofty ghost, cut off from the earth and cosmos. Their strong energetic signature ties them more fully into the energy fields and information of the planet and cosmos. Thus their presence can be felt at great distances and their psychic presence can be heard or felt anywhere on the globe. The coherency and power of their form, being a stronger transmitter for sending and receiving telepathic signals.

It is the density and perfection of the mineral body that contributes most intensely to the radiant quality of "animal magnetism" and "spiritual magnetism." This is so because the light of life needs a perfectly aligned and coherent liquid crystal body in order to shine with greater force. Genes and personality aside, it is the power inherent in the synchronic wave radiation or sympathetic resonance through the mineral body of the individual, which gives them greater Presence of consciousness and power of heart consciousness. It is this sympathetic resonance or "love" that we are "attracted" to in others.

I have a friend in Kona Hawaii who has remineralized his land with rock dust and green crops for 30 years. When you put his food on your tongue there is an immediate electrical jolt which lights up the brain. His food's "full mineral content" makes it more electrically potent with life force...and you realize like never before, "Oh so THIS is what food is supposed to be!" The food in stores is literally more expensive to the body than the good you get out of it and then we have to prop ourselves up on stimulants in order to get energy.

Degenerative disease is a depletion and toxicity problem. If all degenerative disease are caused by mineral depletion, lack of enzymes and phytonutrients then we need to remineralize from "various sources" with the best the sea and land can offer. In looking for a mineral supplement we need to consider that it be plant derived, chelated, colloidal, balanced, and without much sodium chloride (salt) because we already get enough. For every gram of sodium chloride that your body cannot get rid of, your body uses 23 times the amount of cell water to neutralize the salt.

The term "chelate" originates from a Greek word that means "claw," and refers to the process of complexing a metallic mineral with an amino acid. Most metal complexes in nature are bound in some form of chelate ring, e.g. with "humic acid" or a protein. These metal chelates are relevant to the mobilization of metals in the soil, the uptake and the assimilation of metals into plants and microbes. New generations of mineral supplements are arriving on the market that are using nano

and angstrom (atom-size) technology. They are 100% immediately bioavailable, but twice or three times as expensive.

If we are indeed liquid crystals we need the mineral components to our structure in order to show up in ideal holographic imprint. That is the more minerals our form contains, the stronger the manifestation of our soul, presence, form and purpose. But these minerals must be balanced and potentized BY nature, and preferably eaten in raw plant protoplasm. The cheapest most effective way of getting maximum uptake of highly absorbable minerals is to put soil amendments like kelp, shale powder and rock dust in our wheatgrass and sprout growing medium.

MULTIVITAMIN AND MINERALS:

- MultiVit Rx - A one source multivitamin supplement for most of your needs developed by Ray Sahelian, M.D.
- Nature's Way Multi Vitamin, Iron-Free Formula was recommended by one researcher that compared brands. www-ksl.stanford.edu/people/kpfleger/multivitamins/
- *Perfect Multi* from Purity Products is Bill Sardi's favorite multivitamin and mineral.

MINERAL SALTS—Other mineral supplements include Himalayan salt with 84 trace elements, it is a fossil marine salt, formed more than 250 million years ago. Spike drinking water with Himalayan Salt for ideal minerals and 4-6 drops of Biosil in the water per day. Liquid Ionic Minerals can be thought of as a mineral rich salt substitute. Utah's Great Salt Lake is particularly rich in certain minerals and trace minerals like magnesium, selenium, lithium, and boron. Then to get a different mineral spectrum you could also use salt from the Dead Sea for baths. *www.herbalcom.com/* —Low cost Dead Sea Salt, Kelp and Spirulina powders.

SEA KELP—Kelp is the ideal mineral supplement. Analyses of kelp indicate that it contains up to twenty-one amino acids, twelve vitamins, and sixty minerals, all naturally balanced; stimulating gland secretion and keeping the blood and tissue fluids from becoming either too acid or too alkaline. Because the sea has every essential factor necessary for life, seaweeds contain all the mineral elements required for growth and it yields a liberal supply of iodine. Red algaes are high in B12. Alginic acid, a compound found in seaweed fiber, lowers blood pressure.

SPIRULINA—Spirulina is an aquatic green superfood and 'metabolic activator' that is approximately 70% easily digestible protein. A rich source of concentrated nutrients including 10X the Beta Carotene of carrots, B-12, chlorophyll, GLA fatty acids, digestive enzymes, chelated minerals, many trace elements and 18 out of 22 amino acids and all of the essential amino acids. Its concentrated supply of essential nutrients decreases hunger pangs, reduces sugar cravings and regulates blood sugar levels. Spirulina is generally a superior energizer than ginsengs, dong quai, bee pollen and vitamin B-15. It is an aggressive cleansing herb that empties toxins out of the body tissues into the lymph.

SHALE COLLOIDS—Plant-derived colloidal minerals may provide the best form of minerals, for they are suspended in water and water is the primary vehicle of nutrient delivery in life. Colloids are extremely small particles and are 98% absorbable. One factor that accounts for their absorbability is their small size, which gives them a huge surface to mass ratio. It is best to take in these liquid minerals with food. Shale derived colloidal minerals naturally contain around 6% fulvic and humic acid thereby increasing the assimilation of the minerals. In the USA these products are being produced from Carbonaceous period organic shale deposits in Utah. They are naturally occurring "bioavailable" trace minerals from plant deposits 70 million years old. The good thing about these liquid mineral supplements is that they do indeed contain 74+ common and obscure elements which nature herself collected and combined.

- **ACTIVE Liquid Minerals** site has a great list of the minerals and trace elements and you will see how many of them are involved in the prevention of cancer. www.active-liquid-minerals.com/contents.htm —ACTIVE Liquid Minerals, this is a organic plant-derived ionic liquid mineral supplement, containing Monatomic Elements and Fulvic Acid in purified water. They also have another great product: Active Immune Booster that is derived from plantain and banana stem.
- **American Longevity Majestic Earth Minerals** by Dr. Joel Wallach is full spectrum' liquid mineral supplement derived from a similar shale mine in Utah. The Majestic Earth Minerals come in a 32 fluid ounce (1 quart) container and cost $18 at wholesale. You sign up as a member for $6 to get the wholesale price and you get his *Dead Doctors Don't Lie* audiotape for free. www.majesticearth-minerals.com
- **Humic Acid for Horticulture:** Hydroponic stores sell humic acid, liquid silicon and Seaweed extracts that are ideal for sprouting and gardening. *Diamond Nectar* and Grotek's *Pure Fulvic Acid* are humic acid extracts from Leonardite shale sources. Using mineral rich soil amendments for sprouting and gardening is one way of getting plentiful trace minerals with high bioavailability. Dr. Joel Wallach produces "Blooming Miracle Soil Revitalizer," from Utah Shale deposits. www.wallachonline.com

Healing Power of Minerals, Special Nutrients, and Trace Elements by Paul Bergner

Nutrition and Physical Degeneration by Weston Andrew Price

PERMACULTURE: A Designers' Manual by Bill Mollison and Reny Mia Slay

Agriculture Course: The Birth of the Biodynamic Method by Rudolf Steiner

The Fertile Earth: Nature's Energies in Agriculture, Soil Fertilization and Forestry by Viktor Schauberger.

ECSTASY AND NEUROINHIBITION

Because of the ubiquitous, body-wide "cellular" ecstasy that kundalini produces I am playing with the idea that the pervasive cellular bliss could be due to **anandamide**, an opioid neuroinhibitor produced from the **arachidonic acid** in the fat of cell membranes. Levels of arachidonic acid must be increased by the extra free radicals produced during kundalini awakening—from the extra biophoton production, increased stress glucocorticoids, the increased metabolism, apoptosis, catabolism of tissues and liberation of extra toxin stores especially from fat cells being used up in the energy generation method of catabolic-gluconeogenesis.

The picture that is arising is that the bliss of kundalini is associated with the neuroinhibiting opioids systems (endorphin, enkephalin, dynorphin). And that the increase in light, free radical generation, and catabolic energy generation of *lipolysis* and *gluconeogenesis* actually produce inflammatory agents like arachidonic acid and excitatory neurochemicals that keep the hyperactivation of the HPA axis at high rev in a snowball feedback mechanism. Kundalini thus represent a self-consuming, self-conflagration that results in a renewal of tissues using the building blocks of the old. (*Lipolysis* is breakdown of fat stored in fat cells and gluconeogenesis glucose from non-sugar carbon substrates like pyruvate, lactate, glycerol, and amino acids-alanine and glutamine).

To help compensate for the excitotoxicity of glutamate and other activating neurotransmitters (catecholamines) associated with kundalini activation, Robert Sapolsky says that endogenous neuronal defenses include substances such as adenosine, GABA and taurine. Other neuroinhibitors include the opiates Beta-endorphin which has 40 times the inhibitory powers of morphine and Dynorphine. Dynorphine is an endorphin the body makes that is 700 times more potent than morphine. It is produced at death and will wipe out any conceivable sensation of pain in the brain. Dynorphines are not produced only at death but is probably produced along with DMT at birth, as well as other extreme events. The extreme stress of battle also causes catecholamine and Dynorphine production in soldiers and the analgesic effect of acupuncture is based on Dynorphine. Dynorphines might also be produced during sex and most definitely during inner conjunctions as part of the chemistry of ecstatic paralysis.

The opioid precursor polypeptide **Pro-opiomelanocortin (POMC)** is synthesized by the pituitary gland, the hypothalamus and brainstem. POMC can be cleaved enzymatically into several peptides including adrenocorticotrophic hormone (ACTH) and B-endorphin. Pro-opiomelanocortin might be one of the main peptides involved in kundalini because it is produced in the right places for the stimulation of overall activation and because it is a precursor to both endorphins and stimulation of the HPA axis (sympathetic nervous system) via ACTH. Proopiomelanocortin (POMC) neurons in the hypothalamus are direct targets of the lipid regulating (adipostatic) hormone leptin and contribute to energy homeostasis in regulating appetite and body weight.

Arachidonic acid is a feature of the opioid neuroinhibition of the central nervous system. I assume that the extra nerve excitation and biophoton flow in the central nervous system would create arachidonic acid which might then be converted to **anandamide** for neuroinhibition. It is this kind of chemistry we must scientifically work out, if we are to become more "lucid" with kundalini rather than merely "stoned out" on our own energy!!

"The periaqueductal grey region (PAG) is a major anatomical locus for opioid activation of descending inhibitory pathways to the spinal cord and is thus an important site for m-receptor-induced analgesia. Opioids do not excite descending fibers directly but disinhibit them by inhibiting spontaneous GABA release from local GABAergic interneurones." http://opioids.com/receptors/index.html

Cocaine bingeing blocks dopamine reabsorption by nerve cells, and may alter levels of dynorphin-A, a natural opioid. Dynorphine-A also seems to affect dopamine levels. A drug that mimics dynorphine-A may help treat cocaine addiction and researchers have discovered a peptide called E-2078 that creates steady blood levels of dopamine, instead of the ups and downs of cocaine. Dopamine is an important brain chemical for motor functions and general arousal. Dopamine is made from the amino acid tyrosine, and can be converted into norepinephrine and epinephrine. Dopamine is also involved in the ability to learn and encoding of stimuli, reward, and addiction. **Dopamine enhancing herbs** such as ginseng, nettles, red clover, fenugreek, dandelion, catuaba, peppermint and Mucuna pruriens might also help those suffering from an extreme version of kundalini burnout, by reinstating the dynorphine and dopamine activity in the brain. Fish oil also reinstates dopamine levels and receptor sensitivity. The amino acids phenylalanine and tyrosine, along with the nutrient NADH and some of the B vitamins, influence the production of dopamine. CoQ10 protects dopamine producing neurons. Banana peel contains the richest source of dopamine at 700 mg/g, while the pulp has much less at 10 mg/g.

Eicosanoids are signaling molecules derived from omega-3 or omega-6 fatty acids. They exert complex control over many bodily systems, especially in inflammation, immunity and as messengers in the central nervous system. One neurologist says that the arachidonic acid cascade is arguably the most elaborate neurological signaling system. Barry Sears emphasizes that eicosanoids are superhormones, the most powerful biological agents known to man, that control virtually every metabolic function. *"Not only do the eicosanoids control all of the body's hormonal systems, they control virtually every vital physiological function: the cardiovascular system, the immune system, the central nervous system, the reproductive system, and so on."*32, Enter the Zone, Barry Sears, PhD.

During its short lifespan, free **arachidonic acid** may affect the activity of the neuron's ion channels and protein kinases. Or it may be metabolized to form eicosanoids, epoxyeicosatrienoic acids, neuroprotectin D or various endocannabinoids (anandamide and its analogs.) Anandamide is a recently discovered messenger molecule that plays a role in pain, depression, appetite, memory, and fertility. The bliss messenger molecule found in chocolate

Anandamide is an eicosanoid, that is it belongs to a group of substances that are derived from arachidonic acid, including leukotrienes, prostaglandins, and thromboxanes. Anandamide is basically a compound that reduces activity, such as reducing the formation of many stimulatory neurotransmitters. The human brain muscarinic acetylcholine receptor (mAChR), which is involved in memory function is inhibited by arachidonic acid and is also inhibited by anandamides. Anandamide is not the only THC-like molecule used for signaling in the brain.

Sunlight (radiation) produces free radicals in the body. Sunlight activates an enzyme that breaks down fats in the skin cells, producing arachidonic acid, a 20-carbon unsaturated fatty acid derived from cell membrane phospholipids, which is the chief fatty acid responsible for inflammation. When this fatty acid is attacked by free radicals, new chemical compounds result, including **prostaglandins** and thromboxanes, which promote inflammation that can damage and age healthy cells. When free radicals damage a cell, they cause inflammation and these arachidonic acid derived inflammatory molecules accelerate the aging of tissues and contribute to diseases such as heart attack, asthma, arthritis, colitis, asthma and recurrent headaches.

Antioxidants scoop up free radicals, preventing the breakdown of fats in the cell plasma membrane, and preventing the production of arachidonic acid and pro-inflammatory chemicals. Thus all antioxidants act as anti-inflammatories. Since the antioxidant **alpha lipoic acid** is found naturally in the mitochondria—the cell respiratory ATP generating centers—it can literally affect whether the cell functions with greater or lesser metabolic speed. A higher energy level allows the cell to take in more nutrients, remove wastes, and replace damaged components. Alpha lipoic therefore counters cellular aging by increasing energy production, allowing more efficient metabolism, nutrition, detoxification and healing. **DMAE** also gives some protection from free radicals and because it prevents the breakdown of the cell plasma membrane it prevents the production of arachidonic acid and its consequent inflammation. **Ginkgo** stops the cascade of arachidonic acid derivatives without causing harmful side effects—thus Ginkgo should be considered primary kundalini herb for the duration of your lifetime. The amino acid **Carnosine** (alanine + histidine) also has profound cell membrane-stabilizing effects. Other important actions of carnosine include proton buffering, heavy metal chelating, anti-glycation and even neurotransmitter properties.

OMEGA 3, EICSANOIDS AND INFLAMMATION

There are two principal Essential fatty Acids: alpha-linolenic acid (ALA, sometimes called omega-3) and linoleic acid (LA, omega-6). These two fats are essential because they are used to make the hormone-like eicosanoids, which go on to regulate a host of other functions in the body. The eicosanoid are cell-to-cell hormonal messengers produced from essential fatty acids Omega 3 and Omega 6 by all cells of the body. They have a lifespan of a few seconds and include prostaglandins thromboxanes, leukotrienes and endocannabinoids.

The most abundant fatty acid in cell membranes is arachidonic acid (AA). We get it from foods like meat and eggs or indirectly by modifying linoleic acid,

an omega-6 fatty acid found mostly in vegetable oils. Dr. Barry Sears in his inflammation zone books says that "bad" eicosanoids which cause inflammation, are created from arachidonic acid when we consume high levels of Omega 6 linoleic acid from vegetable oils such as corn, soy, safflower and sunflower. Omega-3 and omega-6 fatty acids compete with each other to regulate metabolism in order to maintain homeostatic balance.

The correct ratio of these fatty acids is important, for a grossly lop-sided ratio is considered a major contributing factor to inflammation and degenerative disease. The optimal ratio of omega-6 to omega-3 in the diet should be at 1:1. Whereas the average ratio in the diet is more likely to be 20:1 to 50:1. Flax seed's ratio of Omega 6:3 is 0.3:1. Hempseed oil contains a 3:1 ratio of omega 6:3 fatty acids. The ratio for omega 6:3 in fish oil is 2-3:1. Other Omega 6:3 ratios include canola, 2:1. walnut, 5:1. soybean, 7:1. corn, 58:1. safflower, 365:1. Contrary to popular belief, olive oil is a very poor source of EFAs. Ground flax seed contains Omega 3's but does not actually contain any DHA or EPA at all. Instead it contains ALA, which your body then has to convert to DHA and EPA.

The best dietary sources of EFAs are "fresh" nuts, seeds, fatty fish and unrefined whole grains. Fatty fish, such as mackerel, herrings, sardines, trout and salmon, are rich in two different kinds of omega-3 fats – eicosapentanoic acid (EPA) and docosahexaenoic acid (DHA). Dr. Mercola recommend both the Fresh Shores Antarctic Krill Oil and the Carlson's brand of Krill Oil and cod liver oil. When taking fish oil supplements you need to prevent oxidation of these delicate fats in the body by taking fat-soluble antioxidants like full-spectrum vitamin E.

Docosahexaenoic acid (DHA) is a major fatty acid in sperm and brain phospholipids, and especially in the retina. DHA is the most important fatty acid in the human brain. Low levels of DHA cause reduction of brain serotonin levels and have been associated with ADHD, Alzheimer's disease and depression. DHA constitutes 30-50% of the total fatty acid content of the brain, especially prominent in the cell membranes. DHA is an omega-3 essential fatty acid which cannot be manufactured in our body and must be obtained daily through our diet. The body will convert a little of the vegetable oils to EPA but hardly any to DHA which is what the body needs most of. The benefits of fish oil are primarily due to DHA (Docosahexaenoic acid) which is part of the Omega 3 essential fatty acids within fish oil. It is more complex than EPA, but can be converted to EPA should the body need it (it does this by dropping off two carbon bonds). However, in contradiction to the endorsement of dietary DHA some leading experts believe that dietary DHA may inhibit the beneficial actions of EPA (eicosapentaenoic acid). And since the EPA in omega-3 is converted naturally by the body into DHA, it is unnecessary to take extra DHA separately in supplement form. Fish Oil usually contains about 12% DHA already. A tablespoon of Fish Oil contains 7.5 g of EPA and DHA. Fish oil taken for many months may cause a deficiency of vitamin E, so vitamin E is added to many commercial fish oil products. Xtend-Life Natural Products use Hoki, a deep sea fish naturally high in DHA, from the pristine Southern Ocean off the coast of New Zealand.

Dr. Sears says that fish oil along with aspirin activates a powerful class of "good" anti-inflammatory eicosanoids called "Lipoxins," which trigger the release of growth hormone and promote the growth of new tissue. However excess or prolonged aspirin intake is known to cause bleeding stomach ulcers, abdominal burning, pain, cramping, nausea, gastritis, gastrointestinal bleeding and liver toxicity. As an alternative to aspirin you can use White willow bark and Meadowsweet (Gravel root), known for their pain-relieving, nervine and anti-inflammatory effects. These contains **salicin**, a chemical similar to aspirin (acetylsalicylic acid). Use low doses (60-120 mg salicin) of white willow and meadowsweet in your herb tea mix or capsulated formulas; it is slower acting than aspirin but its effect lasts longer.

The "bad" prostaglandins that are responsible for pain and inflammation involve the enzyme cyclooxygenase-2 (COK-2) in their synthesis; while good prostaglandins use COK-1. Salicin acetylates the COX-2 enzyme, thereby inhibiting the formation of inflammatory prostaglandins. It also appears to increase the production of ferritin, an iron-binding protein that prevents iron from inducing free radical oxidation. White willow bark also increases norepinephrine levels, which may stimulate fat burning metabolism, and lead to weight loss.

Omega 3 fish oils exhibit profound anti-aging effects in combination with calorie restriction. One reason being that calorie restriction increases CoQ10 which may prevent oxidative damage to the mitochondria. Food energy is converted into energy (ATP) for our body in the mitochondria with the aid of Coenzyme Q10. It is found in highest concentration in the inner membrane of the mitochondrion where it is an important part of the electron transport chain. CoQ10 serves as an important antioxidant in both mitochondria and lipid membranes. Rice bran contains CoQ10 and Ginkgo leaf works synergistically with CoQ10.

Common herbs and spices that halt the conversion to the "bad" eicosanoids include: Angelica root, Dong quai, Ashitaba, Turmeric, Basil, Ginger, Cinnamon, Rosemary, Cardamom, Cilantro, Cloves, Garlic, Parsley, Licorice, Neem, Echinacea and Chamomile. Vitamins pro-A, A, C, E, B-2, B-3, B-6, pantothenic acid, B-12 biotin and the minerals calcium, magnesium, potassium, sulfur and zinc are all involved in essential fatty acid (EFA) metabolism. Sesame seed has strong vitamin E activity, protects the liver from damage, normalizes blood fats and blood pressure and regulates autoimmune function, by regulating eicosanoids that cause inflammation, clotting and other immune imbalances.

SACHA INCHI OIL—Sacha inchi (Plukenetia volubilis) is the superfood of the ancient Incas**.** This oil from Peru is the most powerful Omega-3 source on the planet. Sacha inchi contains more than 84% essential fatty acids: 48% Omega-3, 35% Omega-6 fatty acids and 9% Omega 9. Sacha Inchi oil has a mild nutty flavor; almost like almonds and is the most easily digestible vegetable oil. We get enough Omega 6 and 9 in our diet already, so it is the Omega 3 that is important. Sacha inchi oil is an antioxidant, anti-inflammatory, reinforces the immunological system, regulates blood glucose, is antidiabetic and reduces cholesterol, is anticarcinogenic, helps to regulate blood pressure, and clears up eczemas, psoriasis, acne, diabetes. Sacha Inchi seed oil, while lacking in DHA/EPA, is a substantial source of Linolenic acid's omega 3 and 6.

INFLAMMATORY CASCADE

The first chemical released during the inflammatory cascade which activates the immune system is histamine. Histamine release is activated by bacterial toxins, heat, UV radiation, trauma, and proteolytic enzymes from invading cells, damaged cells or allergens. Then prostaglandins, leukotrienes, and then cytokines are released to activate the white blood cells—macrophages and basophils, which produce free radicals during their attack. Histamine stimulates prostaglandin release which increases vascular permeability. Then leukotrienes further increase vascular permeability promoting swelling (edema) caused by the local accumulation of fluids, this creates pain and restricted mobility due to the swelling. The inflammatory cascade is mediated by proinflammatory cytokines which are macrophage-derived, immunoregulatory peptides that target organ receptors in response to injury or infection. Cytokines complete the inflammatory process by bringing active leukocytes to the injury site.

After proinflammation, during the healing and repair phase, first cortisol is released to stop the production of proinflammatory "bad" eicosanoids; however cortisol also shuts down the "'good" eicosanoids. Glucocorticoids are considered as key modulators of glycogen homeostasis in peripheral tissues. Cortisol stimulates several processes that collectively serve to increase and maintain normal concentrations of glucose in blood. Cortisol also increases insulin resistance, impairs immunity and damages neurons in the hippocampus (learning, memory). The macrophages then eat up the dead cells to make way for the regeneration of damaged tissue.

A high glycemic carbohydrate diet increases insulin production, which in turn promotes increased **arachidonic acid (AA).** This encourages the body to store away AA in fat deposits to keep inflammation under control. As adipose tissues fills with AA there is an over production of pro-inflammatory eicosanoids in the fat cells, which generate systemic silent inflammation—promoting the production of inflammatory cytokines like Tumor Necrosis Factor and Interleukin-6 and essentially mounting an inflammatory response to infection even when there isn't one.

Visceral fat is found deep in the abdomen packed in between internal organs. The more of this belly fat we have the higher our silent inflammation, which in turn increases our insulin resistance leading to the susceptibility to type-2 diabetes. Insulin resistance appears to be mediated by Tumor Necrosis Factor (TNF)—high dose fish oil decreases TNF, lowering insulin resistance and insulin levels, and this allows the fat stores to be utilized for energy rather than in generating obesity. Thus the key point in Dr. Sears program is that to lose weight and reverse diabetes you have to reduce your silent inflammation. In fact silent inflammation plays into all degenerative disease; for example high blood glucose feeds cancer cells while an excess of insulin encourages them to divide, so taking fish oil to reduce silent inflammation and to promote the production of "good" eicosanoids is one of the most effective means of preventing and reversing cancer.

A telling observation on the potential benefits of fish oils in prevention of cardiovascular diseases and cancer is that incidence of these diseases are generally low in the Eskimo populations. The indigenous diet of the Eskimo and Inuit includes almost nothing but protein and fat, however, on this diet they showed an almost complete absense of heart disease. Signs of heart disease began to develop in these populations when they started to consume the cooked carbohydrates and sugars found in the western diet, which serve in increase silent inflammation.

We can prevent the chronic inflammatory syndrome that hastens aging and disease, by establishing anti-inflammatory conditions through dietary modifications, stress relief, exercise and supplements. Anti-inflammatory agents that favorably influence "good" eicosanoid production to prevent inflammation include: omega-3, antioxidants, frankincense (Boswellia), tumeric (curcumin), and quercetin. Proteolytic enzymes (bromelain, papain, pancreatin, trypsin, chymotrypsin, and rutin) break down plasma proteins and cellular debris into smaller fragments. This greatly facilitates their passage through the lymphatic system, resulting in more rapid resolution of swelling, with consequent relief of pain and discomfort.

It was found that high doses of Frankincense (Boswellia) given to mice before antigen challenge, almost completely inhibited primary antibody response. Note that frankincense powder was mixed with the White Powder of Gold in ancient Egypt to help protect, preserve cellular structural integrity under the increased light flow caused by the intake of monatomic elements. (Gold, Frankincense and Myrrh were the gifts of the Three Kings to the baby Jesus). In the companion book to BOK there will be a Lightbody Formula for people to use with their ORMUS or active kundalini.

So one of the main measures for kundalini endurance and degenerative disease prevention is an anti-inflammatory diet (low glycemic, 3:4 protein:carbohydrate ratio). To reduce inflammation by avoiding cooked carbohydrates, transfats and cooked proteins that clog the lymphatic system. Along with around 2 high grade fish oil capsules with the morning and evening meals with ½ an aspirin or white willow bark. Daily consumption of fish oil is highly effective at reducing blood pressure, lowering triglyceride levels while increasing "good" cholesterol, lowering platelet aggregation and improving glucose tolerance. Besides fish oil the arachidonic acid inflammatory cascade is inhibited by kaempferol, luteolin, quercetin, fisetin, apigenin and borage oil.

The Anti-Inflammation Zone by Dr Barry Sears on how to change your diet and protect the tissues from inflammation. www.drsears.com

The Perricone Weight-Loss Diet: A Simple 3-Part Plan to Lose the Fat, the Wrinkles, and the Years by Dr. Nicholas Perricone —The link between inflammation and unwanted weight gain.

Staying Healthy with Nutrition: The Complete Guide to Diet & Nutritional Medicine by Elson M. Haas

www.beyondacenturyonline.com/—Omega-3 from 1000 mg of Fish Oil Concentrate. By NOW, 200 gel caps, $9.75. Code 705.5

LIVER DETOXIFICATION

There are over 500 functions performed by the liver, and strong liver is essential to disease prevention. The liver plays a critical role in detoxifying and removing fat-soluble poisons absorbed by the gut and in the blood, converting them into water soluble form that the kidneys can eliminate. Kundalini can be associated with immune and digestive difficulties for many reasons. The actual restructuring of the body during Metamorphosis is largely an immune activity, and occurs under radical sympathetic/adrenal activation. Extra hormones (stress, sex, growth, thyroid) are in circulation and need to be sopped up and conjugated by the liver. Thus the liver has a lot more work to do with recycling the broken-down cells, and from the disrupted digestion, thinning gut lining and reticulation of toxins from badly digested food. The liver is also a site for candida attack, which could be a problem when the immune system is preoccupied with transmutation.

Because of the loss of glutamate from the small intestine during kundalini awakening, and the hyper-activation of the sympathetic nervous system there is an increased likelihood of leaky gut syndrome, irritable bowel syndrome and **enterohepatic circulation** of toxins from the colon back into the bloodstream. The "S" shaped sigmoid colon is the last part of the colon, before reaching the rectum. By the time stool gets to this part of the colon, most nutrients have been absorbed into the bloodstream. Enterohepatic circulation serves as an efficient mechanism for the conservation of bile salts and certain hormones. Because the stool contains products of putrefaction at this point, there exists a special circulatory system, a direct communication of veins called the enterohepatic circulation, between the sigmoid colon and the liver. This system of veins carries rectal/sigmoid toxins directly to the liver for detoxification, rather than circulating them through the rest of the body and all of its vital organs including the brain.

Have you ever felt ill just prior having a bowel movement, this is due of the toxic quality of the material and enterohepatic circulation. When toxins are caught up in this cycle, their biological half-lives and effects on the liver maybe significantly increased. To help the liver conjugate (detoxify) these toxins we need adequate supplies of antioxidants and conjugating agents. During kundalini awakenings in particular, we need more glutathione and sulfur amino acids (cysteine) because of the disruption to digestion and the extra load on the immune system and liver. Adequate fiber in the diet helps prevent enterohepatic circulation of toxins back into the system.

The Chinese use Bupleurum and Rehmannia for a deep liver detoxification formula, which reduces the size of swollen lymph glands, is antiseizure and for a variety of toxic conditions including excellent skin clearing effects. Other herbs that support the liver include: Aloe extract, Barberry, Burdock root, Chicory, Cleavers, Dong quai, Dandelion root, curcumin (tumeric), Schizandra berry, Stillingia root, Milk thistle seeds, Yarrow, Yellow Dock, Parsley, Pau de Arco, Gentian. Ashitaba, like most blood purifiers, stimulates liver function and helps remove heavy metals such as mercury, lead etc. Lecithin is the main component of liver cells and helps to eliminate fats from the liver. B6 helps the liver to detoxify and relieves depression

and pain. L-carnitine feeds the heart oxygen and energy and protects the body from ketosis during catabolic breakdown of tissues.

The liver detoxifies substances in two steps:

PHASE 1. OXIDATION

The liver is chief detoxifier of externally derived toxins, and is the main storage organ for glutathione prior to exportation to the other organs. Glutathione depletion contributes to liver injury, and to increased the morbidity related to an under functioning liver. An under functioning liver is more susceptible to toxic risk and injury, while altering fundamental liver cell functions. Factors that deplete the liver resources of glutathione can decrease conjugation ability and increase damage done by toxins. The deficiency of glutathione caused by one toxin may render the liver more vulnerable to other toxins. Glutathione is most concentrated in the liver, where the cytochrome P-450 enzymes convert metabolic waste and toxins to more water-soluble GSH conjugates in order to facilitate their excretion. Some leave the body via bile and out through the colon, others are carried to the kidneys and excreted through urine. Many carcinogens, heavy metals, drug metabolites and endotoxins are disposed of in this way.

The P450 system seems geared primarily to effect homeostatic control over circulating steroid hormones and other endogenous, fat-soluble substances. Cytochrome P450 reactions themselves generate free radicals and this can cause secondary damage to cells. Therefore an adequate supply of key antioxidants is essential to prevent tissue damage. Antioxidants such as Glutathione, superoxide dismutase and additional nutrients such as beta-carotene, vitamin E, zinc, selenium and N-acetyl-cysteine (NAC). Other nutrient co-factors required for phase 1 reactions include riboflavin, niacin, magnesium, iron and certain phytonutrients such as indoles from cruciferous vegetables and quercetin. The metabolites from this detoxification process are often potentially more harmful than their original toxic compounds so it's important that these toxic compounds not be allowed to build up. This is where Phase II of liver detoxification comes in.

PHASE 11. CONJUGATION

Conjugation is the neutralization of free radicals by the liver's antioxidant enzymes through the donation of a small molecule, so they can be safely escorted out of the body in bile and urine. Phase II also removes the oxidized wastes created in step one, and heavy metals. In Phase II glutathione conjugation is the primary pathway for these intermediate metabolites. **Glutathione** is the body's most powerful antioxidant and is the most abundant antioxidant in the liver and also the main detoxifying agent in the body. Increased exposure to toxins as well as a poor dietary supply of glutathione can soon lead to glutathione depletion and increased damage from these highly reactive intermediates.

Glutathione is crucial for step two conjugation. If the body doesn't have enough of the amino acids and cofactors needed to produce glutathione then toxins accumulate in fatty tissues, the brain and nerve sheaths. Glutathione plays a role in nutrient metabolism, and regulation of cellular events (including gene expression,

DNA and protein synthesis and cell growth. Glutathione is also required in many of the intricate steps needed to carry out an immune response. For example, it is needed for the lymphocytes to multiply in order to develop a strong immune response, and for 'killer' lymphocytes to be able to kill undesirable cells such as cancer cells or virus infected cells.

Glutathione is especially important during a kundalini awakening with the activation of the immune system and excessive free radical production. Thus it is vital to supplement with the four components that produce glutathione: selenium, cysteine, glutamine and tryptophan. With depleted glutathione reserves, the liver cannot effectively process and detoxify metabolites and toxins. Stress and metamorphosis increases the production of hormones (adrenaline, estrogen and testosterone) that are later broken down by the liver through a sulfation process. If our glutathione levels are low we don't have adequate sulfur containing cysteine for sulfation.

L-Glutamine stimulates the liver to build up large amounts of glutathione, while glutathione that is sold as a dietary supplement is mostly destroyed during digestion and therefore is of little use. But L-Glutamine, can be used with Alpha Lipoic Acid and N-acetyl-cysteine (NAC) to raise Glutathione levels. Cysteine has a sulfur-containing portion which gives glutathione its 'biochemical activity. Heat or mechanical stress etc., easily split the stable form of the amino acid "cystine" found in foods into cysteine, where upon digestion destroys it, thus raw unprocessed foods or special food supplements high in bioactive cystine provide the best source of this vital amino acid. Since cysteine itself is toxic, N-acetyl cysteine (NAC) is usually used. Other sulfur containing substances include taurine, alpha lipoic acid, glutathione, MSM and garlic. These are helpful for protection against heavy metals in general and specifically useful in mercury removal. Glutamine plays a chief role in ammonia detoxification as well as helping to maintain the integrity of the mucus of the gastrointestinal tract

Supplementing with Vitamins C & E, B Vitamins, Beta Carotene, "Glycine", Glutamine and NAC, Alpha Lipoic Acid, Selenium, Pycnogenol, and vitamin B12 will ensure adequate antioxidants for sulfation and detoxification. Selenium works synergistically with Vitamin E to increase Glutathione activity and to remove mercury, cadmium, lead and arsenic. The richest food source of selenium is Ashitaba…so the body can produce glutathione. Nutritional yeast delivers reduced (GSH) Glutathione together with B2 so the body can produce Glutathione reductase. Foods containing **Glutathione** include: Avocado, Asparagus, Broccoli, Cantaloupe, Grapefruit, Squash, Orange, Potato, Strawberries, Tomato, Watermelon, Wheatgrass. Foods containing **Cysteine** include: Barley, Garlic, Yogurt, Kefir, Cottage cheese, Tofu, Beans, Chickpeas, Oatmeal, Lentils, Eggs, Poultry, Red peppers, Brussel sprouts, Oats, and Wheat germ.

A number of foods stimulate glutathione production in the body even though the plants themselves don't have a lot of the amino acid in them. These glutathione stimulating substances include the cabbage family, spinach, watermelon, cinnamon, cardamom and cantaloupe, with "**parsley**" being the most effective. A potato soup

with yogurt, heaps of chopped garlic and parsley, and light-miso mixed in at the last minute, might be the idea kundalini food for comfort and nutrition. Don't forget the chopped garlic, nutmeg, ground black pepper and the mashed avocado on top for garnish. Red beets are very cleansing and have a specific action on the liver. Chlorophyll helps liver detox, and reduces carcinogen binding to DNA**.** Other nutrients which play vital roles in the Phase II liver detoxification include amino acids glycine, cysteine, methionine, taurine, glutamic acid and aspartic acid.

Calcium D-Glucarate is a phytonutrient found in many fruits and vegetables that helps remove fat soluble toxins, estrogens and other excess steroid hormones. As we age and become overly exposed to toxins, a dangerous enzyme is produced by certain bacteria that reside in the gut, called beta-glucuronidase. When levels of beta-glucuronidase become too high, it reverses the glucuronidation process and releases the toxins or carcinogens back into the bloodstream. D-Glucarate has been shown to inhibit beta-glucuronidase, thus prevents the recycling of carcinogenic metabolites. D-glucarate works by supporting detoxification and removal of dangerous chemicals, and also by protecting against the mutating effects of these carcinogens on cellular DNA. The beta-glucuronidase enzyme is associated with an increase in the number of estrogen receptors. D-glucarate has been shown to lower estrogen receptors and reduce tumor growth.

Silymarin or Milk Thistle Extract is also recommended throughout metamorphosis as there is an inflammatory cascade that occurs from accumulation of exotoxins and endotoxins that result in the production of alarm messenger substances called leucotrienes. These messengers in turn activate white cells such as the macrophages, monocytes and neutrophils to release free radicals. These oxidants in turn attack connective tissue and the hyaluronic acid joint lubrication, resulting in inflammation or irritation that in the long term produces degeneration. Alan H. Pressman says evidence points to degenerative joint diseases like arthritis being associated with a permeable gut and poor liver detoxification. Herbs such as Milk Thistle can be taken to lessen the damage to the liver from toxins cycling between the GI tract and the liver.

Dr. Alan Pressman in *The Gsh Phenomenon: Nature's Most Powerful Antioxidant & Healing Agent* says that for liver detoxification **fasting** can't help. When we fast the cytochrome P-450 enzyme activity drops sharply reducing Step One-oxidation of toxins. Plus antioxidant supplies are reduced when fasting, increasing oxidation damage from free roaming toxins and free radicals. So it seems that fasting is not recommended during kundalini awakenings, for the body is already greatly challenged by free radicals and cell breakdown. Even during a Die-off when food cannot be readily eaten it would be best to take antioxidant supplements and juices of those foods containing glutathione and cysteine.

During an awakening you might want to check out Alan H. Pressman's books: *Physicians' Guides to Healing: Treating Digestive Conditions* and *Glutathione: The Ultimate Antioxidant.*www.drpressman.com/

Herbal Tonic Therapies, Daniel B. Mowrey, Ph.D.

HORMONE CONJUGATION

Sex and stress hormones increase during the kundalini peak so care must be taken to support their production, and excretion from the body. Then during the exhaustion phase our hormones and neurotransmitters can become depleted and receptors resistant, leading to a hypotonic depressive state.

Estrogen is excreted from the body via methylation, glucuronidation and sulfation. Estrogen that is already "detoxified" can be deconjugated by gut bacterial and can reticulate (enterohepatic recirculation) from the colon back to the liver increasing the risk of various cancers. **Calcium d-glucarate** is known to decrease the amounts of an enzyme that is believed to be associated with certain cancers— particularly cancers of the breast, colon and prostate. Additionally, glucaric acid interferes with the reabsorption of estrogen from the gastrointestinal tract, resulting in more estrogen is eliminated. The cabbage family (cruciferous) vegetables especially broccoli, Brussel sprouts, and antioxidants like rosemary and alpha lipoic acid, help to bind the estrogens in a safe pathway so they can be safely removed from the body. Other substances that prevent genotoxic effects of estrogen metabolites are: Probiotics, anti-estrogenic phytoestrogen lignans from flaxseed, seaweed, broccoli, and berries. The bran layer of beans, seeds and grains. Tumeric, kudzu, alfalfa, clover, Green teas, B Vitamins, Vitamins A, C, E, fenugreek, licorice root, black cohosh, wild yam, fennel and anise and black cohosh. Green tea helps to block estrogen at tumor sites.

Beneficial modulation of estrogen metabolism can be accomplished through dietary and lifestyle modifications such as increasing fiber and reducing fat, increasing phytoestrogen intake, losing weight, and increasing exercise. In addition, many nutrients effectively reduce estrogen load by supporting the preferred pathways of estrogen metabolism and detoxification. These include isoflavones, indole-3-carbinol, B vitamins, magnesium, limonene, calcium D-glucarate, and antioxidants. The influences of these nutrients on estrogen metabolism may have profound significance for diseases and conditions in which estrogen plays a role. Yucca extract eliminates DHT, a byproduct of testosterone and it is good for treating Addison's disease, arthritis and just about everything else.

Plant sterols (phytosterols) are natural phytonutrients and hormone modulators, found in plants and converted during the normal digestive process into hormones. Researchers have discovered that phytosterols may help manipulate the hormonal environment in a favorable way, and by doing so, may help prevent hormone related cancerous changes in cells. These plant lipid-like compounds are present at low levels in grains, fruits, vegetables and vegetable oils, and are beneficial in lowering cholesterol levels. Because cholesterol and phytosterol molecules are similar, the human body can't tell the difference. Phytosterols compete with cholesterol for absorption in the small intestine, however, phytosterols themselves are not absorbed by the human body. The combination of phytosterols and omega-3 fatty acids and niacin is a potential strategy to promote cardiovascular health. Saw palmetto has a high concentration of phytosterols, as does rice bran,

GROWTH HORMONE

Growth hormone (GH) is a pituitary "youth" hormone that stimulates the Thymus gland improving the immune system. The Thymus gland is the master programmer of the T-cells educating them to kill specific enemies. One of the leading factors in immune system decline is the reduced rate of GH as we age. The Thymus gland is affected by this GH reduction and thus T cells decline in number. An alert T cell system is necessary for the prevention of cancer and plaque formation in the arteries.

Growth hormone is released during the first few hours of sleep, during fasting, in higher temperatures such as a sauna, during physical trauma and intense exercise. GH is anabolic, causing the body to go into a positive nitrogen balance, building muscle tissue, promoting healing and increasing tendon, ligament and bone strength. GH increases fat burning for energy thus sparing protein and glucose. GH stimulates protein production and causes fat cells to release fatty acids and the liver to increase the rate of fat burning. By increasing the oxidation of fatty acids and reducing the size of fat cells GH can reduce body fat without lowering caloric intake. GH slowly decreases after the teen years resulting in increased body fat and decreased muscle mass and lowered immune response as we age. Since teenagers have a high production of GH they can remain thin while eating all they want. **L-Ornithine** HCl is about twice as potent for releasing GH as L-Arginine, usually requiring a dose from 3-10 grams.

The website www.longerhealthylife.com has a technique for increasing GH and protein synthesis without stimulating unnecessary cell division which could cause cancer. 500mg Acetyl L-Carnitine with 30-100mg Ornithine HCl at bedtime at least 3 hours after last meal. Then 4-6 hours after a large meal a small amount of plant polyphenols such as grape or green tea are taken. They say that enhancing GH alone is dangerous and thus the polyphenol/bioflavonoids MUST also be taken to provide cancer protection. This protocol to increase protein synthesis while reducing cell division might be just what is needed after the catabolic phase of metamorphosis to help promote protein synthesis, rebuild the body and prevent oxidative damage. Considering that Glutathione, one of the body's main antioxidants is a protein, it might be vitally important to up GH during the burnout and recovery phase of metamorphosis. This website advocates that the best way to protect yourself is to eat only a single meal a day and then use the bioflavonoid/polyphenols to prevent cell division after 4-6 hours of promoting protein synthesis.

Insulin resistance and hyperinsulinemia are often associated with obesity, and obesity impairs growth hormone (GH) secretion. Lipoprotein lipase (LPL) is the enzyme that primarily controls the accumulation of fat in adipose tissue. Insulin is the hormone with the greatest ability to stimulate this enzyme, while epinephrine, testosterone and estrogen down regulate LPL. GH promotes lipolysis or the *mobilization* of fatty acids so that they can potentially be used as fuel and GH also appears to directly stimulate the *oxidation* of fats, perhaps by upregulating key mitochondrial enzymes involved in fat oxidation.

GH actually increases fat burning at the expense of glucose burning by activating the glucose-fatty acid cycle where the preferential use of fat as a fuel inhibits the use of glucose as fuel. In this way growth hormone slows skeletal muscle breakdown during fasting in an attempt to preserve skeletal muscle at the expense of increased fat oxidation for fuel. So during periods of caloric restriction, GH is responsible for less reliance on glucose and protein for energy, with fat being preferentially oxidized. This is how GH supplementation can induce insulin resistance: GH reduces the uptake of free fatty acids by fat cells, when more fatty acids are used as fuel, cells take up less glucose for use as fuel, leading to glucose intolerance.

To increase your production of Growth Hormone:

- Don't eat blood sugar raising refined foods, sweets or alcohol within four hours of bedtime as these inhibit GH release. Insulin retards the release of GH. Obese people usually have a deficiency of GH probably due to their insensitivity to insulin and the consequent higher levels of insulin in their blood. Avoid caffeine as it boosts insulin levels.
- The Thyroid hormone Thyroxin acts as an immune stimulant by causing the pituitary to release GH, which in turn increases the size of the Thymus and mobilizes other immune factions. Kelp will provide the iodine needed for Thyroxin production. Manganese is also needed for Thyroxin.
- There are several nutrients and drugs which enhance GH release these include: The amino acids Arginine and Ornithine and cofactors B5, B6, C; L-Dopa, Bromocriptine, Vasopressin and Niacin. GABA stimulates the production of Human Growth Hormone as does the amino acids: Glycine, Phenylalanine, Leucine, Valine. Papaya increases the amino acid Arginine thus raising GH. Goji Berries stimulate the pituitary gland to release growth hormone, as does Bee pollen and Royal Jelly.
- Herbs that may aid in the release of Human Growth Hormone include: Rhodiola rosea, Astragalus, Dong Quai, Ginseng, Mucuna Pruriens, Tribulus Terrestris, Chinese Mugwort, Herba Epimedii, St John's Wort, Epimedium Grandiflorum, Artemesia, Codonopsis and Ashwagandha.

PART X
PROTOCOL

HIGHER HOMEOSTASIS

"All the vital mechanisms…have only one object—to preserve constant the conditions of…the internal environment." Claude Bernard.

Extreme chemistry requires extreme adaptation. With kundalini the body is sent on a wild ride of hills and valleys, eventually creating new levels of homeostasis. Higher homeostasis is to ride the dragon with mastery. The bodymind must be strengthened and purified in order to allow the seeker to endure and stabilize the energy of higher states of consciousness. The lifestyle in which we maximize lifespan is the same lifestyle that maximizes spiritual growth. So in a sense the "deeper" we go in Spirit, the longer we potentially live. Of course it is not so much living for a long time that is desired, but to live greater "Depth" now. We have an inbuilt with the desire to go deeper and to "know ourselves" before we die.

The key to the proactive adaptation to metamorphosis is to rise to a higher degree of homeostatic balance by upgrading the body's four homeostats: energy, adaptive, reproductive and immune. Thus the evolutionary cycle and metamorphic process itself must be made "conscious" and worked-with. With higher homeostasis we can learn to grow in a sustained wave rather than in fits, starts and backslides. Anything that will contribute to our ability to maintain a higher-homeostasis will allow faster ascent through stronger adaptation with less catabolic breakdown and depression.

If we fail to address the extra free radical load on the body during metamorphosis our nervous system and brain function will simply take much longer to come out of depression and reinstate itself. And we will simply not evolve as much as when we work-with dissolution and regeneration. To live longer or go Deeper requires—*minimum free radical damage, maximum ATP/enzyme reserves, super-nutrition with minimum toxin generation.* That is a minimum and precise consumption of food, with perfect detoxification. This is so in order to permit **charge, focus, speed** and **conductivity** of consciousness.

I cannot stress enough how vitally important it is to support the body as it is going through this extreme chemistry. My first awakening resulted in increased tooth decay, because my immune system was compromised by the stress hormones. And in my second awakening I only came to the realization of needing to upgrade **allostasis,** and protect the body's cells "after" my peak, so during my own kundi-awakening I wasn't taking anything but cleansing herbs. It wasn't until after the fact that I worked out the need to prevent free radical damage, support hormones and feed neurotransmitters, and bind metabolites. Had I adopted my protocol during my awakening, I would not gone through years of suppressed immunity, burnt out, functional-depression and loss of left-brain function.

The stronger the body, the greater the resources, the greater the conductivity, the higher the charge, the more open to spirit are the tissues. If we change over to

a “raw-food” diet then the physical, mental and spiritual growth that we have been suppressing with a cooked food diet, rapidly springs forth. A kundalini awakening is very likely under these circumstances. To navigate this crisis of awakening we must understand that we are not only emerging from our own self-suppression, but also from the “collective” species-wide suppression of our Human nature. I propose we look into how we are creating our bodies from birth. Are we creating bodies that can really handle the extreme force of evolution when it hits us?

To evolve as a species, my experience has shown me what we must build up our bodies to endure metamorphosis, so that we can support the alchemy, grow our spiritual bodies. Once we know exactly what is going on with our physiology, and why we are having the symptoms we are having, then we can relax and do what is needed to FORWARD our alchemy even in the midst of the most intense kundalini flux. Going-with kundalini therefore takes a very high degree of knowledge, sophistication, higher purpose, determination, force of personality and self-respect. It is so easy to just backslide and become a spiritual wreck, rather than cultivate the experience into a trans-egoic art form. If we are indeed the growing edge of humanity, then we have a responsibility to secure the metamorphic ground we have won and not regress out of fear of claiming our divine nature.

The ability to withstand and co-operate with metamorphosis has got to do with the strength of the protein structures of the body, blood sugar levels, and quantum tunneling of electrons within the protein structures. If we had a less catastrophic (slow burn) awakening in a well-resourced body, we would be able to keep up our neurotransmitter/hormone supply and there would not be this wild swing of supreme height and plummeting fall. It is vitally important to support the hormonal, neurotransmitter and immune system to prevent bio-freak out—that is the hyper-activation of the stress hormones and sympathetic nervous system and the catastrophic overwhelm of all body systems.

It is very important to realize that even though there is massive free radical production with the rising of kundalini, and there is cell die-off because of this, the body uses this recycling mechanism to restructure itself. So the temporary loss of functions should not be seen as pathological, but should be celebrated as as a natural part of the Metamorphic process. This “non-pathological stance” is extremely vital to grasp. This death and resurrection process may seem like an illness to the conventional mindset, but we must learn to see the Whole of it—the Die-offs, the loss of cortical function, the pain, the bliss—we must see all of it in the larger picture of the evolution of humanity as a whole. It may appear like I am contradicting myself creating a protocol to prevent severe free radical damage, supporting hormones and neurotransmitters...why not let the body completely exhaust itself and cannibalize itself...doesn’t that mean greater evolution? No, the dissolution occurs only in the service of greater order.

We must simultaneously preserve the new order while supporting the old to fall away; to naturally detoxfy without impinging on the transmutational process and regeneration. For example I was losing my collagen with the kundalini, but now I am really working up this collagen strengthening angle, because this is the

key to both anti-aging, bone strength cancer prevention, radiation resistance and strong immune protection from pandemics. The bottom line is to treat the body as a "whole," protect your membranes, build your enzyme and mineral resources, repair your receptors, keep your blood non acidic and get plenty of raw plant protoplasm into your system. Then you have the potential to stabilize a higher homeostasis.

"*In the back of my mind was always the concept of could you create a product that was designed for the whole body, for every body system, that was reasonably priced." Herbal Tonic Therapies* by Daniel B. Mowrey.

SUPERNUTRITION

Kundalini is an amplification of metabolism so all the normal process of oxidation, inflammation, glycation and mineral exhaustion are increased, thus we need a Superfood diet. After 10 years of awakening I realized I had lost the nutritional reserves necessary to fuel metamorphosis. For an extended period I noticed that around full moon my arms would get weak, my glut muscles sore and I would be hit by fatigue. Because the heart was literally pulling amino acids out of my skeletal muscles in order to feed its expansion. So I decided to start using smoothies to build up skeletal muscle reserves of glucose, and protein (amino acids - arginine and glutamine etc…). Food sources of the amino acid **arginine** include spinach, spirulina, sesame, sunflower, nuts, chocolate (raw cacao), alfalfa, wolfberry, and papaya. Food sources of **glutamine** include cabbage, beets, beef, chicken, fish, beans, and dairy products. Since cooking tends to destroy much of the glutamine in foods, "raw" spinach and parsley are better food sources. Glutamine is muscle building (anabolic); the higher the level of free glutamine inside ones muscle, the faster the muscle grows, because water, ions and amino acids enter the cell under conditions of high serum glutamine.

Fruits and vegetables may be a better source of antioxidants than supplements, since the antioxidant compounds are bound into tough, fibrous material they hang around in the stomach and colon, where they can neutralize free radicals. Just because a food with a certain compound in it is beneficial, it does not mean a nutraceutical of the same compound is. I tend to be adverse to high tech expensive supplementation because it is not a cosmically sustainable approach, it breeds narcissism and can inhibit the resourcefulness necessary to plant ones own superfoods. Since there are over a thousand known phytochemicals it doesn't serve to get myopically focused on one (such as resveratrol) and break your bank on that, when you would be better off creating a berry cocktail, eating raw diet of fruits and vegetables and harvesting phytochemically rich foods from the wild. During an awakening (and during pregnancy) it is important to add herbs and foods collected from the wild to our diet. If you are lucky you can get most of your phytochemical superfood needs by harvesting wild foods from nature.

The term "**biophilia**" means "love of life or living systems." It was first coined by Erich Fromm to describe the instinctive orientation of being attracted to all that is alive and vital.

The Life Harmonic

All matter and energy, everything in the universe has a signature vibration, frequency of oscillation or harmonic. Life is an electrodynamic continuum that feeds on life by incorporating biophilic (life-enhancing) vibrations into itself as food in order to live, reproduce and evolve. Because raw food represents the highest biophilic life-energy and the most coherent harmonics, it is obviously more life giving than food which has had the spark of life taken out of it by cooking, freezing or otherwise processing. Also food grown by permaculture or biodynamic methods increases the biophilic potential of the food. Thus the saying "we are what we eat," can be expanded upon to reflect the unavoidable fact that our health and indeed our spiritual realization is a direct product of the biological fecundity of our soil. The uroboric circle of consequence from soil to soul reveals the degree of spiritual realization and care attained by individuals or cultures. In this sense you could say that "we are our soils." Respecting the pyramid of manifestation and attempting the maximization of its organic foundations is not an act of reductionism, but is in fact the pragmatism and sanity of avoiding unnecessary hell, and is the mark of a truly cosmic spirituality.

When we heat our food beyond a certain temperature this changes the ionic charge of the molecules so they cannot be conveyed through the ion exchange system of the cellular membranes. This means that cooked molecules have a tendency to remain extra-cellular unless they have been re-ionized through enzyme action or bacterial action in the gut. Thus our own body's stores of enzymes are used up in an effort to re-animate the cooked food that we eat. Since the body's electrical energy is reliant on ionic electron exchange to establish a current and if cooked food thwarts the availability of these ions then it is obvious from a physics stand point that cooked food radically diminishes life force by "depolarization."

Food molecules find their respective homes in the body by virtue of their atomic resonance. The "frequency" of the atomic oscillation of a food molecules is how the body knows to convey this molecule to bone and that molecule to heart muscle. But once food is cooked its electromagnetic signature is changed so that the body has no knowledge of what to do with these damaged molecules—they do not compute with our biopilic cellular intelligence that seeks vital life force in all things. In a valiant attempt to protect "life" the unnatural molecules are conveyed to positions of the least immediate interference and are bound in fat and mucus to protect the body from further damage. This residual waste from cooked food clogs up our system and acts to reduce the elimination of toxins, even those produced from normal metabolism. If we consistently eat cooked food our bodies do not have the energy or enzymes necessary to escort this offending waste completely out of the body. Thus metabolic chaos occurs as the toxic waste accumulates on cell membranes reducing cellular exchange and suffocating receptors. It builds up on vascular walls and on the intestines. Cysts, arthritis, cataracts, arteriosclerosis and cancer are the accumulation of waste material which the devitalized body has failed to get rid of. Only living foods contain the frequencies, life-energy, enzymes, oxygen and nutrients necessary to maintain and regenerate our cells.

KUNDALINI AND DIET

"When the inner nectar travels down to the gastric fire in the solar plexus, it spreads through all the nerves. This nectar nourishes the body so that it is not necessary to consume much food." P.40 Swami Muktananda, Kundalini, The Secret of Life.

Serious distress of the GI tract in mid-life occurs from inadequate touch and loving social attention in childhood. Besides pain in the neurons and muscles associated with socializing, a biological unhappiness accumulates in the thyroid, thymus, spleen and liver and this translates into disruption of the entire digestive system. The vagus (parasympathetic) nerve is a key factor in this connection between the health of our social communion and the health of our self nurture/nutrition. Digestive conditions that may become more prominent during the exhaustion phase are Crohn's disease, colitis, irritable bowel syndrome and leaky gut. These digestive troubles are associated with kundalini for many reasons, but perhaps the main one is the chronic activation of the sympathetic nervous system during the peak means that the immune system is inhibited allowing invasive pathogens a chance to establish themselves. Scientists believe that chronic imbalances in the intestinal flora sets off a chain of events that, in the end, damages the intestinal mucosa. Many things harm our helpful bacteria (alcohol, sugar, drugs, antibiotics, etc.) and allow pathogenic bacteria, fungi and parasites to take over. Studies have shown that even psychological and physical stress may disrupt the normal balance of intestinal bacteria. Thus friendly lactobacilli and bifidobacteria must be re-populated if our digestive system is to function properly.

While stress can increase symptoms, stress is not a direct cause of these digestive disorders. It is thought that these intestine-related problems are caused primarily by viral or bacterial infection of the intestine that results in the development of an autoimmune disorder, where the immune system attacks the intestinal lining and secondarily by candida infestation, which promotes leaky gut. When inflammation becomes uncontrolled, cytokines released by immune cells in the intestine attract additional immune cells that produce destructive chemicals causing further inflammation. The delicate mucosa of the intestinal lining cannot function properly when inflamed and consequently malabsorption of nutrients occurs, while simultaneously allowing the absorption of toxins and bacteria into the bloodstream. Thus people with inflammatory bowel disease often have malnutrition, vitamin deficiencies, and infection and parasites.

Those with digestive disorders lack the ability to break down histamine at a normal rate, and since bakers yeast and some cheeses are high in histamine, bread and cheese should generally be avoided. Certain foods like dairy, eggs, nuts, fruit, tomatoes, corn, wheat (or gluten), refined carbohydrates and animal protein/fat should be avoided to help control flare-ups (although this doesn't "cure" the condition). Avoid drinking alcohol and coffee as they cause irritation. Ginger tea helps relieve both the pain and the condition itself, so you might want to carry around a mini grater, some ginger root and a cup-strainer.

The epithelial tissue of the gut relies on vitamins A and C for its integrity and a raw diet high of fruits, sprouts and veggies is high in these vitamins, plus the

additional bulk makes stools softer and easier to pass. People with very sensitive intestines may need to temporarily juice or blend their vegetables into raw soups until their GI Tract becomes stronger. Shutting down the digestive system for a few days of fasting gives the body a chance to rest and repair. Besides deep breathing, you can use a didgeridoo or vibratory massager on the sacrum, lower back, liver and the belly and this will relieve the pain.

DIGESTION PROBLEMS

Digestive system problems are common with kundalini awakenings because the energy and enzymes are being diverted away from the digestive system and into the transmutation/substantiation process. So it is harmful and counterproductive to overburden the digestive system during the years in which metamorphosis occurs.

Reasons for digestive disturbance during kundalini are:

- Metamorphosis is largely an immune activity, thus the immune system is not as available for digestion (leukocytosis). Immune system is compromised by the stress hormones of the peak.
- Kundalini initiates radical sympathetic/adrenal activation, while digestion is a parasympathetic activity. Even hyper-parasympathetic phases upset digestion.
- Extra stress hormones, and sex hormones and growth hormone are pumping through and need to be conjugated by the liver.
- The liver has a lot more work to do with recycling cells, and from the disrupted digestion.
- The demand for the antioxidant Glutathione steals glutamine from the small intestine thus thinning the GI tract.
- Overworked immune system allows candida yeast over-growth that can cause irritable bowel syndrome and leaky gut.
- Direct blissful flow of kundalini through the neurons of the GI tract creates fermentation. This is probably due to activation of the **histaminergic** and **serotonergic** activation of GI tract nerves.
- Kundalini may also alter friendly bacteria populations due to pH and EMF changes.
- Changes in nitric oxide production may interfere with peristalsis and gastric secretions.
- The huge demand for enzymes during kundalini no doubt reduces the enzymes resources available for digestion and allergen control.

Occasionally kundalini energy moves directly through the digestive neurology causing digestion to becomes gurgley and bubbly with fermentation. I find this happens around the full moons of September and October. When there is bliss in the lungs and digestive system and your lips start tingling during an awakening it's best to just revert to fresh squeezed juice. Any food you eat while kundalini moves through the digestive system will just ferment and won't actually provide you with nutrition. Once the food is fermented it will require extra resources and energy to protect the body from toxicity and eliminate the useless food. Antiseptic and

antibiotic herbs and spices like those listed for candida in the "More Supplement Suggestions" section at the end of this book will help reduce the fermentation and toxic load. This condition of kundified digestive system only lasts about a week so it's the perfect time to go on a juice fast.

White blood cells have the most enzymes of any cells and if one eats cooked food **leukocytosis** occurs. That is white blood cells rush to the digestive system to protect, clean up and digest the heat-damaged molecules. Thus leukocytosis takes energy and enzymes away from the metamorphic process and so evolutionary progress is disrupted by eating heavy cooked food during active kundalini. (Note that white blood cells leave the blood stream and enter the body only through veins, not through arteries.)

Stimulating the immune system with every cooked meal means that there is less cleanup, repair and regeneration going on. Most people's bodies don't even clean up between meals let alone repair and regenerate. But one of the main problems with cooked food is the radical overworking of the poor liver, kidneys, gall bladder, pancreas etc... It's just a lot of extra work for "nothing"—whereas that energy would have gone into the development of the spiritual body. Raw food however and especially sprouts provide adequate enzymes to ensure proper digestion while supporting the metamorphic process itself.

Although adopting a largely raw diet will tend to bring on a kundalini awakening, converting to such a diet while in the process of an awakening might cause digestive disruption if a lot of bulky fibrous material is eaten when the digestive system is *not used* to such cellulose intake. By use of raw juices, raw soups, wheat grass and careful use of high antioxidant fruits, we can avoid the problems that chowing through pounds of vegetables and unsoaked nuts and seeds will inevitably create. The fact that the digestive system is already compromised by the kundalini itself means that we have to be twice as mindful and intelligent about our diet.

Adopting a raw diet often brings on a kundalini awakening through the **derepression** of vital energy and improved integrity/integration of tissues. Whereas the cooked diet usually usurps most our energy in the digestion and detoxification processes, and so we have little energy and materials for repair, optimization and for building the spiritual-body. When we go raw this suppression is lifted and nature suddenly brings us up to the speed of our more Universal Self. Since we often use food as an escape mechanism to reduce the vividness of reality, returning suddenly to our full physical and spiritual senses can be extremely disorientating. It can take many years to integrate greater aliveness and to embody our full Presence and full senses. Because a kundalini awakening is already destabilizing I would not advise people to suddenly adopt a 100% raw diet during a full-on awakening…the adjustment would be too great for most people and negative coping mechanisms or digestive imbalances might result.

Metamorphosis must indeed be the highest energy function in human experience. Because metamorphosis demands energy and enzymes and because the body's elimination channels must be free to enable a high degree of detoxification during the changes, it is advisable to not weigh the body down with a lot of heavy

cooked food or substance addictions. A "quality" light, raw-sproutarian type diet with superfoods instead of "quantity" is advisable. Raw food promotes the fastest evolution, however you may find winter to be a challenge on raw, especially for the first two years. Sensation really increases, and that includes the sensation of pain as we emerge from the numbness most of us live under. A good all round book is *Living Food For Optimum Health* by Brian Clement of the Hippocrates Institute. A companion book to that for actually creating sumptuous raw meals is *Raw: The Uncook Book: New Vegetarian Food for Life* by Juliano Brotman and Erika Lenkert

The quantity of food one consumes need not return to normal until the anabolic or building phase of substantiation. In fact the transfiguring body needs less food because the senses are fulfilled with bliss, higher energy and consciousness is conveyed and the body is catabolically recycling its own tissues. It is advisable to maximize metamorphosis and assist purification by eating a diet of high nutritional and life force value. If we are in fear and resistance there maybe a tendency to try and maintain continuity with one's former self, and to put the reigns on the transmutation process by overeating. Over filling the stomach to may tend to dampen the intensity of the awakening, but it will also create dullness, unresponsiveness and generally make one ill equipped to handle the alchemy and one's life. Also belly breathing is one of the best adaptive tools to use when kundalini is heightened and a full stomach prevents this deep and natural breathing.

Because metamorphosis assumes precedence over other life processes it will continue by drawing energy from other functions. Thus we are our own worst enemy if we try and put reigns on the process by eating heavily and using up our energy in excessive sex etc…The ego will tempt us with these consolations and comforts, because the alchemy can threaten the ego's sense of control and the known. Until the ground of the Self is well established, the ego feels threatened by the sense of groundlessness that emerges as the dissolution of former conditioning proceeds.

If kundalini is out of control and there is a need to slow down the process because it's too intense, then it is suggested that a cup of food be slowly eaten every three hours. This takes energy away from its present fiery purification function and into the digestion of food. Gobi Krishna who awoke without the aid of a teacher resorted to this method to ease his distress from an extreme extended awakening. In my own experience, after the bulk of the "message" had come through in July 2000, I chose to come down, so I ate a bagel with cream cheese and coffee each day. This brought me down from the stratosphere. But had I been stronger, supported and more informed as to what was happening, I would not have reduced the fire in this manner. In the end this kind of avoidance results in the creation of a mere mortal who had a "spiritual holiday," not a transformed being. Thus I am not as advanced and transformed as I would have been had I truly surrendered to the process with no resistance, inertia or control.

Since females are more likely to choose passive modes of coping behavior in response to stress and trauma, their nervous systems are more likely to be set toward learned helplessness. Males are more likely to resort to vigorous exercise, fighting

and proactive aggression which would diffuse the traumatic charge and prevent Post Traumatic Stress Disorder (PTSD) with its hypertonality of the sympathetic and parasympathetic nervous systems. PTSD whether it be from a traumatic event or a dysfunctional family of origins leads to inevitable problems with digestion by causing the ongoing hypertonality of both the sympathetic and parasympathetic sides of the nervous system…which is a permanent subtle fight-or-flight/freeze. Ways to remedy this include yoga, meditation, breathing, toning, discharging the freeze through dance, aerobic exercise, shaking, vocalizing, pushing limbs and back against walls etc... This will help stabilize blood sugar, stop cravings, lift depression and reduce pain. But we have to work at it daily in order to reset our nervous system, and thereby prevent secondary complications like chronic fatigue syndrome, irritable bowel syndrome, leaky gut, diabetes, hyper/hypoglycemia, obesity-insulin resistance-lack of growth hormone production, fibromyalgia, cystitis, yeast infection, ADD, sleep disorders, allergies, asthma, psoriasis.

I would say that if you simply cannot endure kundalini, and can't find the methods to work-with and work-through the current symptoms, then a more solid diet is an answer. Providing one is still eating that which is slightly more complex, but not clogging and toxifying. Sugar will increase adrenaline and cortisol at a time when these are already high. It will degrade protein strength, compromise the immune system and increase pathogen growth. **Avoid sugar at all costs** or your kundalini will burn too hot, leading fragile nerves, emotional weakness, instability, light headedness, rapid burnout of neurotransmitters and oxidation damage to tissues, candida, as well as build up of metabolic toxins and fermentation in the intestines. A sugar-carbohydrate quota of two pieces of fruit a day should be ok for most people.

According to Stanford University Professor Reaven, best results are attained with a diet with 40% of fats, 40% low glycemic carbohydrates, and 20% of proteins. Fiber intake needs to be at least 25 gr. each day, fiber consumption is inversely correlated to insulin resistance. It is best to split food consumption to several small meals a day to avoid hypoglycemia and hyperglycemic peaks. Avoid foods with high glycemic index such as: potatoes, carrots, bananas, grapes, pineapple, watermelon, melon, refined rice, cookies, honey, jams, refined cereals, sugars and all foods rich in carbohydrates and poor in fibers. In the cooking process of carbohydrates the sugars caramelize with the proteins (glycation) and make the food difficult for the body to work with. You will notice that you can eat higher glycemic foods like dried fruit with little problem if it is not cooked; however, cook any carbohydrate and it tends to put the poor body to sleep, mess with clear thinking and generally create havoc in the bodymind.

Constipation—During kundalini we have to be conscious of preserving our intestinal lining because sympathetic activation can lower immunity and peristalsis and there is the potential for the intestinal lining to become more porous during the intense changes going on with metamorphosis. I tend to think colonics damage the colon, and allow toxins to enter the bloodstream. Instead of a colonic during the intestinal-contraction phase, or the constipation that sometimes comes with

the heating of the body it is best to just drink more water...around 5 quarts a day with 3 drops of Himalayan Salt in it. Eat juicy fruits and vegetables, celery, cucumber and watermelon for the duration of any period of hyper-sympathetic stimulation especially if you have high blood pressure or pressure in the head. Massaging the solar plexus, sacrum and belly with 1 teaspoon of caster oil will help release the intestines. Tap the kidneys/adrenals, spleen, liver and belly with light rhythmic thumps, or use an electric massage tool. Also go for at least an hours walk, preferably in nature, (and especially down by a river or the ocean) and do deep breathing into the solar plexus as you walk...also rebounding, growling, humming and toning with a focus on the belly will help. Take ¼ tsp magnesium citrate in a glass of water prior to bed.

Enzymes—All the work in the body is done by **enzymes** and during kundalini there is a huge increase in work being done in the body than during normal metabolism. So supplementation with plant-based enzymes is essential during an awakening to build enzyme reserves, to aid digestion, and to prevent the toxicity and inflammation that leads to leaky gut. To help digestion and help prevent wear and tear on the digestive tract you can put Papain (papaya) and/or Bromelain (pineapple) enzyme powder in a saltshaker and sprinkle this on your meals. These powders can be bought inexpensively by the pound from herbalcom.com.

If you continue to eat meat and complex cooked meals during an awakening you might need to supplement with extra enzymes, to make sure your system has enough enzymes for adequate digestion and cancer prevention. Proteolytic enzymes (or proteases) refer to the various enzymes that digest, that is break down protein into smaller units. These enzymes include the pancreatic proteases chymotrypsin, pepsin and trypsin. Pepsin is a digestive protease enzyme released by the chief cells in the stomach that work to degrade food proteins into peptides. The enzyme Pepsin needs a strong acidic environment such as stomach acid (pH of 3) in order to breakdown protein. Fruit acids can break down pepsin, so you shouldn't mix fruit and proteins together, for that reason. Peptides may be further digested by other proteases (in the duodenum) and eventually absorbed by the body. Pepsin is stored as pepsinogen and is only released when needed; it does not digest the body's own proteins in the stomach's lining. In the stomach, hydrochloric acid converts pepsinogen to pepsin, an enzyme that breaks down protein. As people age, hydrochloric acid secretion may be reduced, resulting in decreased levels of pepsin, which impairs digestion. Betaine hydrochloride can be used as a supplemental source of hydrochloric acid, which is utilized by the stomach to produce pepsin. Aloe gel inhibits the activity of pepsin until in the presence of protein, apparently this is helpful to avoid ulcers. For improved digestion mix bromelain (pineapple enzyme), papain (papaya enzyme) powders together and put in a saltshaker to sprinkle on your meals. Bitter herbs also aid in bile flow and our diet is normally lacking in these bitter plants.

Read Mark Rojeks excellent articles: nexusmagazine.com/articles/Enzymes1.html
Food Enzymes for Health Longevity, Dr. Edward Howell

BALANCED KUNDALINI DIET

Only overburden the digestive system during kundalini if you are not interested in spiritually transforming. For those not ready to adopt a raw diet, a combination of the anti-inflammatory Zone Diet plus the timing and principles of the Provita Plan will provide a great basis for balanced nutrition. But even for rawfoodists to adopt the principles of these diets would be advantageous, as active kundalini necessitates optimum nutrition and a balanced diet is all the more important. You can do much of it in the city, but harvesting wild plants from the local environs is the premo way to build up your nutrient and mineral base; such as adding spring dandelions to salads or carrot juice..

The Rave Diet people at www.BeaconDV.org recommend a 100% plant based diet with only 10% calories from fat. This is the ultimate disease prevention diet that strengthens the immune system and lengthens lifespan. Whereas animal based diets are proinflammatory due to increased Arachidonic Acid, they raise serum estrogen and testosterone increasing the risk of cancer and have cholesterol levels thereby blocking receptors. There is no problem with getting adequate protein on this diet. According to growing methods the protein ratio of spinach is 30%, brussel sprouts are 19%, boiled green beans 13%, romaine lettuce 18%, raw cabbage 15%, raw Spanish peanuts 16%, almonds 13%, quinoa 12%, buckwheat 13%, kidney beans 24%, sprouted soybeans 26%, tofu 38%, sprouted alfalfa 34%, Swiss chard 23%, wheat grass juice 27%, and mushrooms 37%.

The China Study is THE nutrition book of the century if people really want to get serious. The RDA for protein is 10% of the calories of the diet, which is equivalent to 50-60 grams. T. Colin Campbell, PhD, in his book *The China Study* said that his research proved that when rats were given only 5% protein (milk protein-casein), cancer initiation and growth was greatly reduced or suspended. He also found "plant" protein did not promote cancer growth even when fed at higher levels (20%). Thus he concludes that it is animal protein in the diet that feeds cancer growth irrespective of the dosage of initial carcinogen exposure.

Mail order food companies like Jaffe Brothers are really worthwhile using because most of the nuts, grains and seeds in the stores are old and rancid. When you by pumpkin seeds from Jaffe Bros they are as green as wheatgrass. There is no point in eating OLD food. They also have the cheapest apricot seeds.
www.organicfruitsandnuts.com/

I highly recommend *Rainbow Green Live-Food Cuisine* and *Conscious Eating* by Gabriel Cousens , and his *Spiritual Nutrition.*

The Bible Prescription for Health and Longevity by Bill Sardi on the Essene lifestyle.

Food As Medicine: How to Use Diet, Vitamins, Juices, and Herbs for a Healthier, Happier, and Longer Life by Dharma Singh Khalsa

THE PROVITA PLAN

After many years of researching nutrition, I finally found a low stress eating plan for sensitive conditions like kundalini awakenings, and for life in general. It works with the body's pH biorhythms for the best utilization of proteins, carbohydrates and fats, while producing the least amount of toxins and free radicals and wasting the least amount of energy.

The system is laid out in Dr. Jack Tips, book *"The ProVita Plan, Your Foundation For Optimal Nutrition."* Following Stu Wheelright's 5+5 meal plan, it is essentially focused on eating protein and vegetables for breakfast (preferably between 7-9am) when the body's pH is in an acid cycle. This leaves the body ample time for protein digestion, utilization during the day when we are moving around so lymph can bring amino acids to the tissues for building. Then overnight the body is cleansed more thoroughly and sleep is better, because the body is not made acid by protein intake later in the day.

The ProVita way is to not eat protein after 2pm and to not eat it with carbohydrates. The carbohydrate portion of the diet is eaten later in the day as it produces serotonin, which tends to make us sleepy anyways. Some people have their evening meal as just fruit salad, which is after all the most cleansing and easily digested thing to eat before night. Instead protein is eaten along with vegetables in a 5+5 fashion. One cooked protein source and 4 raw proteins are eaten along with one cooked green vegetable and 4 raw vegetables.

"The point about timing the major meal is quite simple. Protein foods are best introduced to the body early in the day, so they become available when we want to be active and productive. Carbohydrates and alkaline foods are best eaten in the meal preceding sleep, because they are more sedative in their effect. These foods also support the cleansing of the acidic metabolic wastes during sleep." Jack Tips, *The ProVita Plan,* p.174

It takes approximately 8 hours for proteins to be digested, assimilated, humanized by the liver and made available to the cells, provided that the liver is healthy. So exercise is best taken 8 hours after the protein breakfast meal. The lymphathics can then deliver proteins to the cells during the building cycle, which lasts till around midnight, and then the body switches to cleansing cycle. Proteins eaten later in the day interfere with the cleansing cycle, create hypoxia during sleep, have missed out on the building cycle and become toxic wastes which the body has to expend a lot of energy and resources in order to get rid of. Then with the extra toxic load the body tends to want to continue cleansing till 11am the next day to cleanup the residue from yesterdays maldigestion.

The 8-hour metabolic cycles proceed as follows:

7am—3pm: Process nutrients (eat, digest)
3pm—11pm: Use nutrients (build, exercise)
11pm—7 am: Cleanse cellular wastes (rest)

The Pro-Vita system builds strong protein metabolism, strong adrenals, avoids blood sugar fluctuations and makes for a higher energy, more productivity and positive emotions. Eating carbohydrates for breakfast works against the body's

natural pH cycle exhausts the adrenals and sets one up for energy crashes, addictions and lowered immunity. Carbohydrates provide quick superficial energy but because they create weak tissue integrity they do not build vibrant health.

This weak tissue is exactly what you don't want when kundalini fires megavolts through your system. So it stands to reason that we should work with nature and eat a protein breakfast so that it is ready for the anabolic-building phase, and consume carbohydrates later in the day. Doing this one thing we can master a kundalini awakening so much easier. Ideally we should aim for strong tissue integrity prior to awakening kundalini, but if its already awakened the need for disciplined, mindful attention to building integrity is vital to our survival and preservation of health and spiritual welfare.

"If we work in accord with these natural cycles. Nature rewards us with better health and longevity. If, in contrast, we fight or live in conflict with our natural cycles, then dispassionate nature allows only the survival of the fittest." Jack Tips, *The ProVita Plan,* p.110

PROVITA SUMMARY

- Our diet should give us more physical and essential energy than we had before eating?
- Because we live on the "energy" in our food, the ionization of food is an important factor. High quality growing method, and freshness from the field is vitally important for this reason.
- How we transform our food into energy determines the quality of our energy.
- Eat protein early in the day, in small portions, with a variety of vegetables, with a small amount of high quality oil, without carbohydrates or liquids and do not snack of protein.
- Protein digesting enzymes are available in the morning. If protein is eaten later in the day the enzymes have to be constructed which deprives other enzymatic functions.
- Protein toxicity must be cleansed through the bowel, lymphathics, liver and kidneys causing a lot of stress on the body.
- Proteins generate an acid field, and if eaten late in the day acid pH interferes with the sleep cycle, depriving the brain of oxygen and causing tossing and turning.
- 70% of the body's dry weight is protein. Proteins in addition to providing energy, build tissue and healthy immune system, while carbohydrates do not build and refined sugars destroy.
- Use low-stress proteins, that is those with short chains of molecules that are easy to digest. (High-stress proteins include meats, cooked cheese, unsoaked nuts, peanuts, unfermented soy beans).
- Low-stress proteins include: soft cooked eggs, feta cheese, raw milk cottage cheese, miso, tofu, tempeh, slow cooked (ie: without boiling) sprouted wild rice, slow cooked sprouted beans, shellfish, scallops, shrimp, fish, soaked blended nuts, blue-green algae, sea vegetables, sprouts, green-coconut milk, organic beef and chicken.

- Quinoa has excellent reserves of protein, and like the other non-grains buckwheat and amaranth, is not missing the amino acid lysine, so the protein is more complete. Quinoa offers more iron than other grains and contains high levels of potassium and riboflavin, as well as other B vitamins: B6, niacin, and thiamin. It is also a good source of magnesium, zinc, copper, and manganese, and has some folate (folic acid).
- Prepare proteins in ways that makes them easier to digest such as fermenting, marinating, slow/light cooking, steaming and poaching as opposed to frying.
- 65%-75% of the Pro-Vita system is vegetables, yet it is crucial to focus on the proper administration of protein as the difference between sickness and health.
- Vegetables assist with protein digestion/assimilation/elimination. They add enzyme-rich bulk to buffer the concentrated acid-producing proteins. Act as an intestinal broom and prevent putrefaction. At least 65% of vegetables should be raw to conserve enzymes.
- For proper cellular metabolism we require the correct fuel, correct pH, the correct oxidation rate and the clean removal of metabolic wastes.
- Excessive amounts of animal or vegetable protein are destructive to the body, affect pH and ultimately lead to disease.
- Protein toxicity occurs from eating unbalanced, heavy proteins, at the wrong time, with the wrong combinations of food and with low lymph movement from lack of exercise.
- Dietary stress weakens the gastrointestinal mucosa, inhibits the liver's function, clogs the lymphatic system, taxes the kidneys and damages the heart and brain.
- pH is perhaps the most important biological factor, because all process in the body are pH specific. pH deviations mean we may not get nutrition from food due to dormant enzymes that need a certain pH in which to work.
- At 7.46 pH the blood is able to transport the most amount of oxygen and carry off the most amount of metabolic wastes. pH governs the oxygen supply to determine the rate of metabolism.
- Insulin functions best at a certain pH range 7.79-8.02. Insulin controls how much glucose enters the cells and thus regulates the fuel supply and metabolic rate.
- Essential fatty acids, active in metabolism and protein building, are derived mostly from seeds and nuts. Expeller pressed flaxseed oil like Barlean's is also added to the diet around 2 Tbs per day.

Those undergoing a radical awakening may need two other books by Jack Tips also: *The Next Step To Greater Energy—A Unique Perspective on Bioenergy, Addictions and Transformation. Your Liver—Your Lifeline! PassionPlay, Manifest your dreams with the 7-minute mirror technique* —this is the very best manifestation book out there. www.apple-a-daypress.com

PAIN

Everything in the universe runs in cycles, for it is a polar universe, so everything spins in spirals from pole to pole. Kundalini follows the cosmic cycles of the seasons and gravitational tide of sun and moon, and is influenced by the sunspot cycle and weather. And yet even though it is cyclic, if the awakening is a permanent rising of life energy, the blissful heat of kundalini will stay with us for life. Especially if you are a raw-foodist and generally look after your health - the fire of life will be a constant companion. It rises up occasionally to greater intensity as the Muse impresses us with in-spiration, then it slowly backs down allowing us time to rest and recuperate. Inspiration, expiration is the breathing of consciousness as it unfolds into temporal existence. Its part of the humor of the Tao that excess endorphins leads to depression and anhedonia. Eventually, however, the chemistry will clear itself if you are aware of the cyclic nature of the metabolic process and don't get depressed about being depressed. Part of the down cycle of extreme ecstasy is to feel pain and discomfort in the body. During the down cycles you might find pain relief with willow bark and meadowsweet if you still have pain.

Alkalinize, remineralize, oxygenate, exercise, water, sunlight, negative ion sources-natural moving water, ocean water, bright green-red–orange natural raw foods…these will reduce pain. Your pain is not just due to your injures and insults, but also dehydration, diet and the slow depletion of energy (enzymes) and resources (minerals, hormones, neurotransmitters) in dealing with your life-conditions. For an experiment try to cut all grains and sugar from the diet, and only have about 1 cup of sweet fruit or sweet vegetables (corn, carrot, beets) per day. If you do this along with radically increasing your raw greens intake your pain levels will drop within days.

Sugar makes the nerves more sensitive to pain and dismantles protein structures in the body; it also encourages yeast which produces toxins that increase pain. You will find pain and depression will lift by dropping the majority of carbohydrates from your diet. Grains are for the birds not for apes like us humans, they should only be used for occasional use like once or twice a month at that. Also try to use easily digestible dairy such as yogurt and feta so you don't deplete the body's enzyme supply.

Calcium is the major mineral for pain and damage control in the body and it is especially necessary during the catabolic breakdown of tissues during metamorphosis. Save your egg shells, grind them and put the powder in your potting mix for growing sprouts. I eat mostly green buckwheat sprouts and wheat grass for juice, other sprouts don't interest me much. An increase in calcium/magnesium in the blood will reduce pain…Silicon also reduces pain by improving connective tissue strength, repairing the lining of the GI tract and improving the insulating layer of the nerves. Silicon is transmuted into calcium in the body, silicon rich herbs are: Nettle, Oat straw, Horsetail, Eyebright, Cornsilk, Comfrey, Lemon grass, Ginger.

In my experience Olive Leaf helps to build cell membranes and the myelin sheath of nerves protecting against inflammation (free radicals) and so reduces

pain and the raw-nerve exposure feeling of the body. Try to grow olive trees wherever you go, dry the leaves, grind, sift and put into capsules. Ginkgo, Gotu kola, Ginseng, Echinacea and Golden seal should also be grown.

Milk thistle will help the liver to detoxify, once the liver is healed this helps all tissues to reinstate their integrity. A happy liver is a pain free body. By boosting both zinc and selenium this will increase free radical (antioxidant) protection thereby reduce pain. By aiding the adrenal glands licorice will also reduce pain, as will Gingko by improving circulation and oxygen supply. White willow (Salix Alba) is the original source of aspirin. The bark of white willow has a longer half-life in the body than aspirin does and doesn't create heartburn or stomach ulcers. Willow Bark, Meadowsweet and Feverfew is a common mixture used by arthritis suffers. Get some pure real rosemary oil and rub into your neck, shoulders, spine, feet and calves. Grow rosemary and capsulate it also, and use it as a tea or in food, it's a major antioxidant and nerve protector.

Papaya/banana smoothies also reduce pain in my experience, perhaps due to Beta Carotene and enzymatic energy lift. I have a feeling that papaya leaf/seeds will also reduce pain. The papain enzyme found in papaya can readily digest protein in either and acid, alkaline or neutral medium. Both fat, carbohydrate and protein digestion is helped by papaya. Papain is also a powerful mucus solvent that helps to cleanse the intestinal walls and tissues of waste matter. Papain has the ability to breakdown proteins and converts some of it into Arginine which increases Growth Hormone Release. Plant enzymes powders of papain and bromelain can be bought n bulk from herbcom.com to sprinkle over meals and add to smoothies etc…they are good to take with any food or supplement to improve digestion and assimilation.

Anything GREEN reduces pain by increasing oxygen and by alkalinizing, remineralizing and detoxifying. Raw cabbage reduces pain very effectively by helping the liver, it can be added to daily vegetable juice intake. *Anything that buffers and alkalinizes acids/toxins/free radicals will reduce pain.* The ionic effect of clay does this, either taken internally or as a clay mask, body-pack, or bath. Baths made from a tea of ginger root, peppermint (is cooling and boosts energy), catnip, chamomile, borage, comfrey, basil etc….will reduce pain. Also 1 Tablespoon of Caster oil added to the bath helps the body to gently detoxify and leads to a feeling of expansion. Mineral salts from thermal areas or Himalayan salt added to the bath will also reduce pain and provide energy. Epsom salts and Baking Soda, 1 cup of each in a bath will rapidly relieve pain.

Happiness and Painkiller Tea: White Willow Bark, Peppermint, Catnip, Lemon balm, Plantain, Magnolia bark, Meadowsweet, Nettle, Horsetail, Peppermint, Tulsi (Indian basil), Ashitaba, Passionflower, California poppy.

OTHER HERBS FOR PAIN: Aloe extract, Gentian, Bitter melon, Nutmeg, Saw-wort, Grapeseed, Bamboo sap, Codonopsis, Saffron, Clove, Pomegranate, Juniper, Kava Kava, Sheep's Sorrel, Olive Leaf, Valerian root, Wild Yam, Garlic, Lemon balm, Catnip, Chaparral, Chamomile, Yucca root, Borage, California poppy,

Mullen, Marshmallow, Slippery Elm, White Oak Bark, Licorice, Peppermint. Cardamom, Dong quai and Angelica have warming, blood and chi moving properties. Chi made with Pau d'Arco, Ginger, Cinnamon, Cardamom and clove chi is good for arthritis type pains, giving a warming grounding feeling. Feverfew might be useful to counter the effect of excessive opiate production, dizziness, brain and nerve pressure from an overactive nervous system. It is bitter so needs to be capsulated. Meadowsweet normalizes acid levels in the stomach.

SPICEY DIGESTIVE TEA

This is an incredible tea to help all those with nausea, pain, digestive, coldness or circulation conditions and kundalini. If you want orange peel you might have to make and dry your own. You can also grind this tea fine and chug a teaspoon of the powder in a shot glass of apple juice to help reduce GI pain and inflammation, increase digestive fire and prevent nausea and dizziness.

Bulk Recipe for Digestive Tea:
6 oz Dried Ginger Root
4 oz Slippery Elm
4 oz Flax Seed
2 oz Cinnamon
4 oz Rose Hips
2 oz Chamomile
1 oz Clove
1 oz Cardamom
Optional: Small amount of dried orange peel.

Grind any of these that are not already powder in a coffee grinder and combine the powders. Note that herbs and spices are more potent if you buy them as cut or seed and grind them yourself. Keep in a jar in the fridge. In a saucepan heat water and 1 tsp of tea mixture per serving at a low temperature for 15-30 minutes. Then add apple juice to taste and heat to drinking temperature. You can use the mixture twice, making a less strong tea the second time so just add less liquid. This tea in combination with taking a papaya enzyme tablet with every meal and bentonite clay in the evening will greatly reduce weakness and nausea derived from disrupted digestion/elimination. Good for pregnancy morning sickness also. If you are kundalini active you might want to keep your apple juice intake to a bare minimum due to the sugar…I got a debilitating left-brain spazz going the day after I took 6 oz of apple juice in this tea. Raw apples do not give this effect, it is just the fact that the apple juice is cooked…hence the sugar is pasteurized or altered from its natural state. Rawfoodists and kundi-actives can get around this by adding some "raw, fresh apple juice" to the already made tea to sweeten it if desired.

TURNING IT OFF

I started out looking for a way to stop or reduce kundalini nutritionally, because it is maladaptive to survival in our current society. But if one uses glycine, taurine and GABA (neuro-inhibiting amino acids) this just makes one nauseous, heavy, dull headed and stoned, which adds, to the already overwhelming symptoms of kundalini. So it appears that rather than the counter-attack of directly taking neuro-inhibitor amino acids, a better approach would be to support the existing neurochemistry, aim for maximum free radical protection and do a variety of relaxing practices to bring the parasympathetic into balance with the sympathetic nervous system.

Since kundalini is the energy of evolution, turning it off is counterproductive. However if someone is maladapted to it and can't find adequate coping mechanisms, or raise higher homeostasis to balance the degree of spiritual acceleration, some things that might be used to reduce kundalini are:

- The primary way to reduce kundalini symptoms is to halt the intake of all carbohydrates except green and non-starchy vegetables. This means stopping all sugars including fruit and grains.
- The serotonin precursor L-trytophan (5-HTP) might reduce kundalini awakenings, but both sleep and relaxed states don't seem to inhibit kundalini flow.
- Increasing carbohydrate intake in an effort to increase the neuro-inhibitor serotonin, will not reduce but will amplify kundalini.
- Research needs to be done with the hormones relaxin and melatonin to see how they affect the manic or hyper stages of Kundalini.
- GABA is an antianxiety amino acid can be purchased from beyondacenturyonline.com and also is made in the body from the amino acid Glutamine.
- Glycine and taurine might be used to stop kundalini however it appears that simply taking things that increase the nerve off-switches may produce nausea, dull headedness and head pain rather than turning off kundi.
- Tyrosine, Vipocetine/hydergine, glycine and taurine might contribute to nausea.
- Supplements that seem to help limbic hyperactivity are DL-phenylalanine (DLPA), L-tyrosine, and S-Adenosyl-Methionine (SAMe).
- The herbs feverfew, kava kava and valerian might have neuro-inhibiting potential during the hyperactive phases of kundalini.
- Morphine—Christina Grof said the morphine turned off her childbirth kundi
- Lithium Orotate might be considered under medical supervision in circumstances of extreme maladaption to kundalini. Lithium is stored in the pituitary, ovaries, thyroid and adrenal glands. It may play a role in fertility and in cellular uptake of glucose. Lithium therapy may induce indigestion, weight gain, water retention (oedema not treatable with diuretics).
- There is a good chance that since lysine blocks NMDA glutamate receptors it might reduce nerve excitation.

SUPERFOOD SMOOTHIES

For a kundalini active even a normal vegetarian raw diet is inadequate—it takes superfoods to keep up with the kundalini fire and to build the Spiritual Body. Smoothies are a great way to get maximum nutrition for the least amount of metabolic effort.

SMOOTHIE BASE MIX

1 lb Raw Cacao Powder, 1 lb Maca root, 1 lb Spirulina, 1 lb Goji Berry Powder, 4oz non-GM Lecithin granules, 4oz Rosehip powder, 4oz Slippery Elm powder, 4oz Olive Leaf powder, 4oz Alfalfa leaf powder, 4oz Moringa Oleifera leaf powder, 4 oz Nettle leaf powder, 4oz Chamomile powder, 4oz Corn Silk Powder, 2oz Apple Pectin Powder, 4oz Papain Powder, 4 oz Bromelain Powder, 1 oz Kelp powder.

Other things you might add to the smoothie base include Orange zest powder, Wild flower-Bee pollen, rice bran, wheatgerm, raw Carob powder and a touch of Cayenne pepper. Another exciting addition to your smoothie base is Lucuma Powder. This exotic Peruvian fruit has strong fragrance and a full-bodied maple like flavor and is an excellent source of carbohydrates, fiber, vitamins and minerals, including high levels of beta-carotene, niacin and iron. Purple Power Muscadine Grape Skin Powder is high in antioxidants including resveratrol and quercetin.

Use a coffee grinder to grind anything that is not powder. Mix all the ingredients together and keep in a container in the fridge.

PROTEIN FOR YOUR SMOOTHIE

The word protein comes from the Greek "prota" meaning of primary importance. Proteins are linear polymers built from various proportions of the 22 different L-α amino acids. Eight of these amino acids are classified as essential because our bodies cannot synthesize them, so they must be obtained in the daily diet. Complete proteins contain all the essential amino acids. Proteins are the chief actors within the cell, carrying out duties specified by the genes. Our bodies recycle approximately 80% of our protein; cooked protein is denatured and largely unusable. Enzymes are proteins that catalyze chemical reactions. For digesting protein the enzymes from vegetarian sources (papain, bromelain) are more effective than from animal sources; raw kiwifruit is also rich in the protein-dissolving enzyme actinidin.

Inferior "Manufactured" Proteins

I found that when I used soy powder and whey powder (even the "low heat" variety) that I would wake up with a dull headache in the back of the neck and feel congested. Dr. John Ray found that synthetic amino acid formulations (containing L-form amino acids) tend to be associated with regression of the iris fibers, indicating a decrease of vitality in the body tissues. He also found that many of the body-building protein powders (whey and fractionated egg-white) seem to produce lymphatic congestion, indicating congestion of the intracellular spaces with undigested material. There is evidence that hydrolyzed protein fragments

(peptides) cross the small intestine and reach peripheral tissue via the circulation. If denatured manufactured proteins are largely unusable, fragments of them will end up clogging the lymphatic system. Soy-based protein concentrates are also advised against as they contain antinutrients and goitrogens. Soy also contains Trypsin inhibitors that interfere with protein digestion, not to mention the phytoestrogens that stimulate cancer growth.

More reasons why not to include dairy and soy products in your diet and smoothies. We have heard that most adults cannot digest the lactose in dairy, but perhaps you have not yet heard about Insulin-like Growth Factor. Insulin-like Growth Factor stimulates weight gain and contributes to cancer development, faster growth and earlier aging…and it is found in high amounts in dairy…because milk is meant for stimulating the fast growth of young animals. But it is even higher in soy according to John McDougall, MD. Also carbohydrates/sugar increase cancer rates because high blood sugar and insulin levels result in an elevation of Insulin-like Growth Factor-1, which raises the risk of cancer. www.drmcdougall.com/res_breast_cancer2.html

So how do we get our protein?

Following are some raw protein suggestions that you can add to your smoothie instead of using manufactured protein powders. To gain maximum benefit while eliminating the enzyme inhibitors, it is best to either soak and/or sprout nuts and seeds prior to grinding for your smoothie. One way you can do this is to put 1⁄4 cup (one smoothie worth) of your seed/nut mix in a yogurt container with lots of little holes poked in the bottom. Put this inside another yogurt container and cover the seeds and nuts with water. I usually only soak my seeds and nuts for about 4 hours. Then throw out the soak water and grow on in the fridge for a day or two. A blender grinds the plant protein mix up perfectly, thus this seed/nut mixture is ideal in a smoothie to provide adequate protein, without the morning neck headache and lymphatic congestion of the manufactured protein powders.

Protein Suggestions

Following is a list of the protein contained in 100g:
Cashews-17.2g, Almonds-16.9g, Apricot kernels-27.5g, Peanuts-24.3g, Pine nuts-14g, Pistachios-19.3g, Pumpkin seeds-29g, Sesame seeds-26.4g, Sunflower seeds-24g, Flax seeds-25-30 g, Hemp seed-33g, Goji berries-15g, Maca root-10g, Carob-18.g, Raw Cacao 17.8g, Spirulina-70g, Alfalfa leaf-20g and Alfalfa sprouts-35g. Buckwheat seed-11.36g; Free amino acid contents in buckwheat sprouts are almost four-times higher than those of buckwheat seeds. Wheatgerm-23g protein. Sweet nutty flavored raw Mesquite powder-11–17g protein. Acai Berries-7g, Lucuma-12.5g. You can also add a fresh raw organic egg to your smoothie for protein.

Nutritional Yeast is 55% protein, contains B12, 1-3 glucans and glutathione. Nutritional yeast is the most concentrated source of nutrition of any known food, resembling the composition the normal cells of the human body. It is the very best iron food there is, having more of this vital factor than any other food, including liver. It sounds good in theory, but we must remember that it is a highly processed product that is made from yeast grown on non organic sugar beets and

cane molasses, then pasteurized and dehydrated. Thus it is not exactly "raw" nor fresh and may be a neurotoxin and kidney irritant. If you take nutritional yeast be observant as to its effects. You can get a B vitamin boost via the use of freshly made cereal-ear sun tea.

MAKING THE SMOOTHIE

To make a smoothie start out with a handful of sprouted buckwheat seeds and your soaked protein seed-nut mix in the blender with a small amount of chilled water. Other liquids you can use are buckwheat goop (made in a colander system in the fridge), herb tea, banana stem juice or coconut water—but make sure they are cold as warm smoothies are not as appetizing. Then add more liquid and fruit such as Goji berries (wolfberries), banana, pineapple, papaya, mango, orange, fresh orange zest and berries. Leave the skins on mango, the white rind on oranges, but remove the skin from papaya. Then add about ¼ cup of your "Smoothie Base Mix" and blend. Acai berry can be purchased in the frozen berry section at Wild Oats or Wholefoods. It tastes a little like fatty unsweetened chocolate, and presents the ultimate final note to a superfood smoothie…however you do have to make sure the other fruit you use, such as banana and orange, have a high sugar content.

If you need extra sweetener use **Yacon root syrup** and pour into a large glass and suck slowly through a straw. Yacon root syrup is an alternative glucose free sweetener and prebiotic with few calories, it has a unique fructooligosacaride (FOS) carbohydrate composition. Like mesquite, the sweetness in yacon root comes from fructose, which the body can process without insulin, thereby stabilizing blood sugar level. You want to make sure you are not taking in excessive additional sugar and carbohydrates in your diet when you do the smoothies, because they are so readily available to the body.

Avoid candida by stopping any processed sugar or cooked carbohydrates; make raw fruit your only sugar and no more than 3 pieces a day. During the peak especially we have to stay away from sugar, aspartame and cooked carbohydrates to prevent immune suppression and excitotoxic nerve damage. Thus even fruit should be used in moderation to avoid candida and over excitation of the nervous system by excess glutamate. But usually we can easily handle one large smoothie a day...with say one orange, one banana and 1 tbsp of wolfberries as the sugar content.

Adding apple pectin powder to your smoothie will slow down the sugar uptake, thus pectin has the ability to regulate blood glucose levels, and has an anti-inflammatory effect in the bowel. Another attribute of pectin is its ability to decrease the body's fat absorption, thus lowering cholesterol levels; enhances cell uniformity, reducing the occurrence of malignancy. Because it contains large amounts of silicon it helps to return synovial and other connective tissue to their previously smooth, elastic, lubricated condition. However if you like to drink more than one large smoothie a day, you need to add "less" pectin powder, because it swells in the intestines like nothing else.

The adjustment to daily smoothies only takes a few days of dizziness and a gurgley tummy. Drinking ginger root tea might set the dizziness problem straight. Also to avoid initial dizziness you might need to balance the extra detoxification and super-nutrition of the smoothie with more greens and bitters. Perhaps finding local wild plants like dandelion leaves or watercress to put into your salads. If you are not doing fresh wheatgrass juice shots, then you may want to add dried green powder such as Barley greens to the smoothie base. One smoothie in the morning and one salad in the afternoon/evening is all the food I can handle.

If you feel your energy is too sympathetically activated (eg: palpitations, heat, sweating, tingles, high blood pressure, insomnia etc...) then put some kava kava, valerian leaf, chamomile, raspberry leaf powders into your smoothie base mix. This way you can take your superfood smoothie and your calming agents at the same time. When our sympathetic nervous system is activated there are periods in our awaking when our immune system is weaker, making us vulnerable to yeast and urinary tract infections etc… You might want to add **D-Mannose** to your smoothie base or add a couple of teaspoons of D-Mannose powder to your smoothie if you are going through radical kundalini events, especially when there is a lot of pressure or electrical activity going on in the head. D-Mannose helps to provide the neurons with extra energy and thereby reduces neuron death from excitotoxic damage by inadequate reuptake of the neurotransmitter glutamate and calcium. D-Mannose is a sugar that is used to alleviate urinary tract infections by binding to and eliminating bacteria. If you have a urinary tract infection don't drink cranberry juice as it has too high a sugar content...go buy some D-Mannose powder from a health food store...and put it into your smoothie. Fortunately D-Mannose does not raise blood sugar or cause yeast infection.

WHY RAW CHOCOLATE POWDER

Cacao or raw chocolate powder contains flavanols that increase blood flow to the brain for a two to three-hour period and may hold promise for treating some vascular impairments and cognitive function. The increase in brain blood supply should improve nutrition to the brain and consequent cognitive function. The flavonols in chocolate help the body to produce nitric oxide, a compound essential for proper cardiac function, muscle building and sexuality. Over 955 ORAC Units (Oxygen Radical Absorbance Capacity) of antioxidants are found in each gram of raw organic cacao powder! Compared with goji (wolfberries), another high antioxidant food which have only 253 ORAC Units per gram. Raw cacao improves the body's ability to metabolize sugar. It also contains Arginine, Tryptophan, **phenylethylamine** (PEA), and the most magnesium of any common food. As well as the mood enhancing PEA, cacao also increases serotonin, making raw cacao a fabulous natural antidepressant.

The best quality raw chocolate powder is produced by David Wolfe's Nature's First Law and Wilderness Family Naturals as they make sure the processing temperature never gets high enough to destroy the nutrients and create bitterness.

SMOOTHIE RESOURCES

www.rawfood.com/ —Nature's First Law-The best quality Raw Cacao!

www.wildernessfamilynaturals.com/cacaoperu.htm —Raw Cacao

www.therawfoodworld.com/ —Mesquite, Lucuma, Yacon syrup

www.lucsherb.com/ —Wolfberry or Lycium Fruit (Goji) $5.95/lb)

www.beyondacenturyonline.com —Spirulina powder 1 lb $12.00

www.seaveg.com —Kelp powder

www.paulkvineyards.com —Purple Power - Muscadine Grape Skin Powder

www.herbalcom.com — a great bulk herb company with a fantastic supply of various supplements and herbs including apple pectin, papain powder, bromelain powder and most of the herbs you need for the smoothie base mix, except for the "low-heat" manufactured raw cacao powder.

Read articles by Mark Rojek on Enzyme Nutrition Therapy on the web.

www.howweheal.com/protein.htm —Great article on the necessity for raw protein.

SUPPLEMENTS FOR AWAKENING

Extreme chemistry requires extreme adaptation

In this book I have listed many different substances one can use to prepare for, cope with and reduce the blowback effects of kundalini. Our modern Western bodies are not built for the intensity and free radical fire of amplified nerve energy. A cooked diet tends to create an oxidation and inflammation prone body, which in turn increases mutation rates and reduces the resources necessary to repair DNA.. I emphasize that the supplement ideas in this book are *not to stimulate kundalini,* but to enable the bodymind to rise to the challenge of the incredible metabolic changes and energies to promote successful transmutation. With the use of supplements and superfoods we can boost the homeostatic coping capacity to "meet" the radical chemistry of kundalini. Any meta-adaptation protocol focus on detoxifying, deepening the integrity of one's health and building internal resources, without further adding to the metabolic burden. Supporting the chemistry of each particular kundalini phase, plus protection from metabolites and their quick conversion and elimination from the body via the liver etc…There is no point in allowing the organism to go into super-drive if the cells do not have deep integrity, for this just leads to damage and depletion.

It is important to go-with the Tao of the wave and to avoid excessive stimulation during both the up-cycle and the down-cycle. I don't think it advisable to try to suppress the hills with depressants, nor to try to prop up the valleys with stimulants, but to support the chemistry in whatever its current cycle. Kundalini nutrition must aim to work-with the Tao to magnify our resilience, to build reserves and increase our homeostatic coping ability, all the while trusting that the body will find its own way through the storm. Surrendering all that is unhealthy into the fire.

In a perfect world we would not have to resort to supplements in order to maintain balance. But because we do not live in a perfect world I believe that everyone experiencing active kundalini, even Gurus, need protection against free radicals and nutritional nerve support. We are less likely to unbalance our system if we use "once living" and whole-life supplements like kelp, spirulina and herbs. Thus I think it important to balance manufactured supplements with more "natural" herbs, superfoods and green foods. Whatever we do with food and supplements during awakening, we must aim to put as little stress on the organs and tissues as possible and to establish a super-nutrition program from *multiple sources.* So unless you are going to focus on growing remineralized foods in an intensive permaculture lifestyle, you will need to use supplements during the high metabolic demands of kundalini, otherwise you will have to eat such bulk of food that it will overwork your digestive system and cause extra free radicals. Also you will be using up vital enzymes and energy in digestion that would otherwise be spent on metamorphic transformation itself.

You need some nutrients to absorb others, and an excess of one nutrient can inhibit the absorption and metabolism of another. So taking large amounts of a

single vitamin or mineral can throw us out of balance. To avoid this it is best to base our nutritional program a good multivitamin and mineral. If you are not already making a multimineral you might consider taking one for the minerals like zinc and selenium necessary to protect tissues during these high-pressure times. Zinc is involved in over 200 brain enzyme interactions. Other ways of remineralizing include adding ionic minerals (sea solids) into our drinking water and kelp powder. Some minerals are more easily absorbed when *chelated* to an amino acids. A high performance bodybuilding multivitamin may be suitable considering that kundalini awakenings demand the type of extra nutrition perhaps of a professional athlete or body builder. www.bodybuilding.com says that Universal Animal Pak is the number one best selling supplement program for body builders. Don't just take "extra" of a cheaper multi-formula or you may overdo certain elements. Make sure you don't overdo the RDA, for example Zinc would be 12 mg for females, 15 mg for males, and a maximum of 200 mcg selenium per day. A safe dose of Calcium is about 1 gm a day.

TAYLORING SUPPLEMENTS TO METAMORPHOSIS

To make your own protocol select only those that seem right for you according to your stage and symptoms. The hotter your kundalini is, the more antioxidants you will need to take. *To create more specialized neurological formulas for kundalini awakenings, research will have to be done.* Different stages of metamorphosis require slight changes, and each type of awakening requires a different protocol, not to mention individual differences in physiology. You don't need to go overboard and include a multitude of substances in your kundalini adaptation program. Even if you only use kelp, ginseng, gotu kola, olive leaf, echinacea and ginkgo, these few herbs will greatly ease and facilitate the alchemy. Whatever you do, always look back to basics of green juices, kelp, spirulina, fish oil and wheatgrass as the foundation to whatever other supplementation you might like to add.

The *Five Formulas for Kundalini* are only a preliminary set of formulas I devised for myself, which others will improve upon with research. I can suggest a broad outline for how these formulas maybe used during a kundalini awakening. For a "full-on" awakening I recommend a protocol that covers the essential areas to facilitate higher homeostasis: remineralization, antioxidants, collagen protection, conjugation of toxins and metabolites, adaptogenic support and nervous system protection.

The Calm Formula #1 is taken on an empty stomach first thing in the morning to support the neurotransmitters, taken with ½ tsp of the Antioxidant Formula #2. In fact you can just divide the antioxidant formula in half and put half in with the Calm #1 and half in with the Nootropic #3. Take the Nootropics at a convenient time for you in the morning, but not later in the day or it might keep you awake. Nutritional Herbal Formula #4 is largely of adaptogenic herbs and supplements that are too bitter to be taken uncapsulated. Cleansing Formula #5 is support, buffering and mildly cleansing herbs to betaken in the evening. Note there is some repetition due to the fact that the formulas are built to stand on their own; you may want to eliminate the repetitions in your own program.

I recommend Calm Formula #1 for periods of acute stress or the peak stage of kundalini to reduce the over stimulation of the nervous system with associated panic and anxiety attacks. However after a period of time, I found it necessary to adopt the nootropic formula to recover the functional edge of the brain. The Calm Formula #1 doesn't make one more intelligent just less anxious, disturbed and panicky. It probably takes the edge of both the ecstatic highs and the terrific lows. I only took this formula for one year during the peak to reduce panic attacks.

The main precaution with taking supplements during kundalini is to avoid taking stimulants during the peak or hyper phase. So until we know more about the chemistry of the acute phase of kundalini, it might be best to avoid stimulating nootropics during the 6 month peak. Formula #1 and protective nootropics can be taken at any time along with the antioxidants and herbs. With this caution in mind I suggest that the nootropic formula #3 be taken once kundalini hyperactivity is backing off and you are staring to head into the down cycle. It is also good to not take the nootropics on your weekend and down time.

If we reduce things that stimulate adrenaline and stress hormone production like caffeine and sugar we can remain on a more even keel during the peak and reduce the severity of the burnout during the down cycle. Depending on one's prior condition and adaptation capacity, I would say that five years after a "full-on" awakening you could probably cut back to just a multivitamin-mineral, B-complex and herbs. I myself am attempting to stop using manmade supplements and concentrate mainly on superfoods and herbs. I have no negative side effects from taking these formulas as they are, but I had to eliminate taurine, glycine, and tyrosine out of my formula cause they made me dozy, stoned and nauseous; somehow interfering with prefrontal lobe function. I am not sure exactly which one was the culprit, but getting rid of all of them solved the problem.

It cannot be stressed enough that diet, exercise and integral spiritual practice is the foundation of our ability to use these times of spiritual acceleration to our advantage—that is to skillfully ride the wave. Besides supplements I recommend practices and experiences to boost mood, brain function, interest and involvement. During an awakening, sensory and motor stimulation is of prime importance, as is community—we can think of the entire phenomenal world as our pharmacy.

You might want to use readymade herb formulas such as these www.tibetanherbs.com/herbalsupplements.html You can buy most of the supplements from BAC www.beyondacenturyonline.com or www.herbalcom.com

WARNING; The enzyme **Monamine oxidase** breaks down certain neurotransmitters, while MAO inhibitors reduce this oxidation, thereby increasing the concentration of these substances in the brain. Those who are bipolar, have epilepsy or depression or are taking antidepressant Monoamine Oxidase (MAO) inhibitors, or anticonvulsants need to consult their doctor before establishing a kundalini supplement protocol. If you are taking MAO inhibitors you can cause a severe drop in blood pressure if you take sedatives, tranquilizers, antihistamines, narcotics or alcohol. Passionflower and St John's Wort are MAO inhibitors.

FIVE FORMULAS FOR KUNDALINI

1. CALM FORMULA:

This calms and balances the central nervous system without exacerbating the kundalini symptoms. Good for reducing the hyperactivation of the sympathetic nervous system during the peak and the associated hypertension and insomnia. It calms one all day, reduces mental "noise," without tiring or reducing intelligence. Good for ADHD, panic attacks, anxiety and depression as well. Mix powders together, rebottle and keep in the fridge. Take ½—1 teaspoon in a glass of water on an empty stomach first thing in the morning half an hour before eating. * Take 1 B Complex along with formula 1.

5 http (L-tryptophan), 20 g; L-Glutamine, 300 g; DL Phenylalanine 100g; Calcium-Magnesium, 8 oz; Vitamin C/Ascorbic Acid Powder, 300g.

These quantities are those bought from www.beyondacenturyonline.com. Divide the bottle of Calcium-Magnesium in half between formulas 1&2. If you are to make the antioxidant formula and the neurotransmitter formula you might like to buy one bottle of ascorbic acid which is *water soluble* and one bottle of *lipid soluble* (Ascorbyl Palmitate) and divide them so each formula gets a half bottle of each type of Vitamin C. Note the Palmitate Vitamin C does not dissolve well in water but still can be taken this way. Rinse the Vitamin C off your teeth after taking formulas to prevent loss of tooth enamel.

2. ANTIOXIDANT FORMULA:

1/2—1 tsp taken once or twice daily in a shot-glass of water.

L-Glutamine, Ascorbyl Palmitate-Vitamin C, DMAE, L-Carnosine as alanine+histidine, Calmag, N-Acetyl-cysteine (NAC), Vitamin E Tocotienols.

* Zinc and selenium tablet are taken in a multimineral form. To this formula add a small amount of DHEA if over 40 and on the down cycle after the peak phase. I use 1 tsp mixed into the "bulk" of this entire formula.

3. NOOTROPIC FORMULA:

Definition: *Noo*=mind, *Tropic*=affecting. I started using nootropics four years after my peak because I still was not getting enough cognitive performance even with the basic neurotransmitter formula. With the nootropics I found I can use my brain better, my speech is more forthright, I don't search for words, productivity up. Visual acuity has increased also. At first the stimulating effect is more pronounced but will lessen over the weeks. I mix my nootropics in with my antioxidant formula and take around a teaspoon a day along with a B Complex, Fish oil, Majestic Earth Minerals and my herb mixes.

DMAE, Piracetam, Vinpocetine/Glutamine, Huperzine, Inositol, Arginine Proglutamate, Acetyl L-carnitine and L, Lysine, DMG, NAC, Ribose, Phosphatidylserine

When you start taking nootropics you might feel a little kick as your brain starts to power up. This will give you more energy to ride the waves, however if it is choppy water, you will feel the waves more. Many of us are used to zoning out and going numb rather than powering up to meet the storm...heck if we blah-out enough we don't even realize we are in shark infested storm waters. Thus until you stabilize with the supplements at a higher order of performance it is best to take plenty of nature walks and grass lying time for the first few weeks. To learn more about nootropics go to The Cognitive Enhancement Research Institute website at www.ceri.com and follow Ward Dean M.D. and his smart drug books and articles at www.vrp.com.

It appears with nootropics that you need to balance them with increased greens, fish oil, spirulina and other superfoods...for you can't wring more water out of a dried up sponge. Meaning that we have to think of detox, remineralization and building high integrity of resources and structures before we try and get more juice and efficiency out of our cognitive machine. When stimulating the nervous system with aphrodisiacs, nootropics or entheogens we also need to keep up blood sugar by not spiking it with sudden sugar intakes or high doses of caffeine. To prevent swings in our blood sugar during heightened chemistry of any kind, we can eat Sunflower Seeds throughout the day and pop a couple of spirulina tabs every hour. Sunflower seeds are high in lecithin.

4. HERBAL SUPPORT FORMULA:

Adaptogens for hormones, liver, free radical protection and increasing energy. Put powders in 000 capsules and take 3-6 daily. Store the bulk of your formula in the fridge until capsulated.

Alpha lipoic acid, Ashitaba, Beta carotene-mixed carotenoids, Dong quai, Echinacea, Eleuthero (Siberian Ginseng), Ginger, Ginkgo, Gotu kola, Grape seed extract, Graviola, Horsetail, Kelp, Licorice, Moringa oleifera leaf, Neem leaf, Nettle leaf, Olive leaf, Pine bark extract, Raw propolis powder, Rosemary, Rhodiola rosea, Spirulina, Tumeric, Wild Yam root.

*Alpha lipoic acid and Beta carotene are added to this formula because they are too unpalatable to be taken in water with formula 2. Also take 2 Tablespoons Ground Flax seed or flax seed oil, hemp seed and/or fish oil for EFA's; but these can be added to your Superfood Smoothie.

5. CLEANSING HERB FORMULA:

To assist with the buffering and removal of metabolites without using any harsh colon-type cleansers. Take 1 tsp per day in a shot glass of water. Or mix into your herbal support formula along with spirulina, kelp powder and keep in the fridge until you capsulate them.

Amla powder, Barberry root, Buckthorn bark, Burdock root and seed, Camu camu powder, Cardamon, Citrus peel powder, Clove, Corn silk, Dandelion root, Devils claw, Licorice root. Nettle leaf, Plantain leaf, Red Clover, Rosehips, Saw-wort (Saussurea), Slippery Elm, Triphala, Wild oregano, Yarrow, Yellow dock root, Yucca

root. Milk Thistle seed, Schizandra berry, gentian for the liver. Pomegranate peel powder if you can make it yourself.

These formulas should reduce the digestive stress that occurs with kundalini, but if one still has digestive problems consider taking slippery elm, chamomile, marshmallow, flaxseed tea, cinnamon, garlic, grapefruit seed extract. (See more digestive aids listed at the end of this book).

Included in the companion book BOK-2, is the "Lightbody Formula" which helps prevent runaway necrosis. This formula is for increasing ecstasy endurance, lucidity and assisting the body in its resistance to the oxidation and coagulation of tissue (ie: the "blackening" in alchemical terms.)

Web Herb Suppliers: www.mountainroseherbs.com/ www.herbalcom.com
A great basic overview of supplements is Bill Sardi's *The New Truth About Vitamins and Minerals*. I really enjoy Sardi's progressive and penetrating works.

SUPPLEMENT LIST

ALPHA LIPOIC ACID—Alpha lipoic acid is a completely natural molecule that exists deep inside every cell of our bodies…an essential component of the energy-producing part of a cell. It quickly enters the cell and protects it against free radicals. Alpha lipoic acid is both water and fat-soluble, and so can fight free radicals in any part of a cell and even in the space between cells and even protects the DNA.

The antioxidant alpha lipoic acid helps to block such damage and it may improve the glucose lowering action of insulin. By improving the regulation of blood sugar glycation is reduced and our protein structures maintained. Alpha lipoic acid increases blood flow to the nerves and improves the transmission of nerve impulses. Many of the difficult symptoms of kundalini can be improved by the use of Alpha lipoic acid, especially during the acute phase to avoid nerve damage, fatigue, inflammation, numbness, tingling by supporting nerve growth and liver function. This powerful antioxidant will help with heart strength, liver toxicity, boost the immune system preserve brain cells, and help in energy production. Alpha Lipoic Acid improves nerve blood flow, reduces oxidative stress, and improves nerve conduction. It significantly lowers blood sugar levels while increasing glycogen storage in muscles and liver. The brain is especially susceptible to radical attack and crosslinking due to its high phospholipid content, high energy metabolism and high oxygen usage. This is likely a huge factor in all mental dysfunction including ADD, Alzheimers, senility, depression and stress. For not only are the neurons impaired, their ability to produce neurotransmitters and convey messages is diminished.

Alpha lipoic acid also regenerates the levels of vitamin C and E, glutathione and coenzyme Q10. Alpha lipoic is vital for converting glutathione back and forth from its oxidized to its reduced form. Besides its antioxidant function alpha lipoic acid is the first coenzyme necessary in the conversion of glucose to ATP, and helps cells take up sugar and use it for fuel much more efficiently. Since alpha lipoic acid is found naturally in the mitochondria it can determine the rate of metabolism. A higher energy level allows the cell to take in more nutrients, remove wastes, and replace damaged components. Thereby Alpha lipoic counters aging by increasing energy production, allowing the cell to uptake, detoxify and heal more efficiently. Plus it also helps prevent against insulin resistance and blood sugar regulation, which also contributes to its anti-aging effects.

The Acetyl L-carnitine combined with Alpha Lipoic Acid protects both the membranes and DNA of the mitochondria, and this is extra important during kundalini. Suggested dose is 200 mg ALA and 500 mg acetyl-L-carnitine. Considering the breakdown and reconstitution of cells during metamorphosis one can assume that heavy metals, such as mercury, lead and cadmium, are freed to roam and create untold oxidative damage; taking alpha-lipoic acid and cysteine (NAC) will help chelate these metals so they can be removed from the body. Alpha Lipoic helps to chelate and detoxify mercury, lead and cadmium. Alpha Lipoic acid in loose powder form is unpalatable, however it is toned down by mixing it into

your herb mix and chugging it in a shot of apple juice. Otherwise encapsulate it yourself or buy it already encapsulated.

BETA CAROTENE—Beta-carotene is a member of the carotenoids, which are highly pigmented (red, orange, yellow), fat-soluble compounds. It is necessary for the kundalini active to have a diet high in carotenoid rich fruits and vegetables to protect against ones own internal radiation and hyper-metabolism. You can get mixed carotenoids from sea algaes such as Dunaliella salina or spirulina. The beta carotene in these algaes is ten times more concentrated than in carrots, and the recommended dose of algae is 5 to 6 mg daily. Beta carotene can aid in the prevention of arthritis, cataracts, cancer, damage from UV radiation, and macular degeneration. Other carotenoids in foods include lutein, zeaxanthin and lycopene. Watermelon is a better source of lycopene than tomatoes. Lutein is concentrated in kale, collard greens, spinach and other leafy green vegetables. Lutein is fully as or even more important to health than beta carotene; we need perhaps twice as much lutein as beta carotene to stay healthy.

Beta Carotene is converted to Vitamin A in the body and stored in the liver; then zinc mobilizes vitamin A stores when needed. While excessive Vitamin A intake can be toxic, high doses of Beta Carotene have never been found to cause such toxicity. The carotene in leafy greens such as spinach or kale is converted to vitamin A about twice as efficiently as the carotene in carrots and other root vegetables. The bioavailability of Beta Carotene from supplements is believed to be much higher than from foods. Marigold flowers are a rich source of the carotenoid "lutein," which helps optimize the antioxidant health of the eyes. Lutein is one of the two primary pigments found in high concentrations in the macula, the center of the retina where color vision and central vision are produced. The macula is yellow in color due to the presence of lutein and the other pigment zeaxanthin. The body does not synthesize lutein so the eye gradually loses lutein with age.

Goji Berries (Wolfberries) contain more protein than whole wheat, more beta-carotene than carrots and 500 times more vitamin C by weight than oranges. Goji is the richest source of carotenoids of all known foods or plants on Earth! www.lucsherb.com

B17 (LAETRILE)—Two of the dietary factors significantly lacking due to our agricultural and food prep practices are B17 and Silica. Our ancestors would have had abundant B17, however as modern humans we normally get very little. The hunting, gathering lifestyle of the Paleolithic era was ideal for building strength and preserving genetic information. Then about 10,000 years ago we discovered that cooking grains, beans and roots like potatoes destroyed the toxins in them and made them edible. Thus agriculture began, we depleted soils, breed crops for taste and convenience and finally ended up with chemical agriculture and genetic manipulation.

Vitamin B17 (*Nitrilosides)* occurs abundantly in nature but because of its bitter taste humans have eliminated the bitter substances like B17 by selection and cross-breeding. High concentrations of B-17 are obtained by eating the natural foods in their raw or sprouting stage. Vitamin B-17 is readily available in the diet of

cultures such as the Eskimos, the Hunzas, the Abkasians and these tribes are cancer free. The Hunza do not contract cancer as long as they adhere to their native diet which is exceptionally high in both Apricots and Millet. We need a minimum daily intake of 100 mg of vitamin B-17 (the equivalent of about seven apricots seeds) to be resistant to cancer.

Dr Ernst Krebs found that when we ingest a sufficient amount of laetrile (the natural form is hydrocynacic acid), this substance becomes "selectively" toxic to cancer cells. Laetrile is the proprietary name for one nitriloside. **Nitrilosides** or B17 are non-toxic water-soluble, accessory food factors found in abundance in the seeds of almost all fruits. This vitamin is characterized by a large group of sugary compounds found in over 800 plants, many of which are edible.

B17 is found in plentiful supply within the kernels (seeds) of many non-citrus fruits, such as cherries, nectarines, peaches, plums and apples. However it is within apricot seed that the highest concentrations of B17 can be found, up to 2 to 2.5 percent by weight in most varieties. A 170-lb man, for example, might consume 17 apricot or peach kernels per day and receive a biologically reasonable amount of Vitamin B-17. The best Price $10.35lb Apricot Kernels: organicfruitsandnuts.com/. Particularly for those with cancer it is important to consume papaya and pineapple fruit or enzymes, as the natural enzymes strip the coating on the cancer cells, so that the B17 in the kernels can work. Vitamins A and E are also important for enhancing the work of the kernels. A pancreatic enzyme supplement is also advisable.

Other foods that contain vitamin B-17 include: Beans and other legumes, most berries, buckwheat, oats, barley and ancient grains, and wheat grass. Bamboo shoots, sorghum, yew leaves. B17 is also found in grasses…suggest making cereal sun tea this way you get a dose of silica and B17…You can make a silica laden sun tea from the ripe ears of wheat, millet, buckwheat, oats, barley and rye; or indeed with many wild grasses. Wheat-ear sun tea seems to be even more energizing and fortifying than wheatgrass itself, stabilizing both mind and body and eliminating hunger. Most grains are acid forming except millet and buckwheat which are considered alkaline. Sprouted seeds and grains become more alkaline in the process of sprouting. http://www.worldwithoutcancer.org.uk/aspreventative.html

BIOFLAVONOIDS—Bioflavonoids might be one of the very best anti-oxidants to reduce inflammation and free radical damage. Inflammation occurs when immune cells such as neutrophils overproduce free radicals, causing damage to healthy cells in the vicinity. Since the immune system during awakening is activated in a non-ordinary fashion we need to modulate its aggression and promote balance. To temper the fire so to speak. Bioflavonoids inhibit free radical creation by reducing the production of leukotrienes—the chemical messengers that summon white blood cells. They also *inhibit histamine* production and are potent antimicrobial and antiviral agents. Bioflavonoids are anti-inflammatory, the richest source of bioflavonoids is the inner skin of citrus fruits. Wolfberries, blueberries, bilberries, cranberries, blue-green algae and other colorful plant material such as spinach should be ingested during awakening for this purpose.

Buckwheat greens, Elder, Hawthorn, Horsetail, Knotweeds, Roses, Hagrose, Shepherd's purse, Sea buckthorn, Toadflax. These bioflavonoid foods enhance cognitive behavior and improve signal transmission of neurotransmitters and hormones, psychomotor performance, and acetylcholine on smooth muscles and glands (i.e.: muscarinic receptor sensitivity). Bioflavonoids are needed to make supplemental Vitamin C effective and improve its absorption. Along with whatever Vitamin C you are taking you need to match it 70% of that amount in Bioflavonoids. Vitamin C increases iron absorption while the bioflavonoids bind the iron and protect the cells from "rusting" oxidation.

Red Bioflavonoids or Anthocyanins are versatile and plentiful flavonoid pigments found in red/purplish fruits and vegetables, including purple cabbage, beets, blueberries, cherries, raspberries and purple grapes. **Bilberries** contain the highest amounts of anthocyanins in comparison with other berries. Within the plant they serve as key antioxidants and pigments contributing to the coloration of flowers. Flower colors of red, pink, blue and purple come mainly from the anthocyanins. Cherry anthocyanins have been shown to reduce pain and inflammation. Cherries have also been shown to contain high levels of melatonin. Research has shown that people who have heart attacks have low melatonin levels. Both melatonin and DHEA are antioxidant hormones; besides being an antioxidant, melatonin has also been shown to be important for the function of the immune system. Research also indicates that melatonin suppresses COX-2. There is considerable interest at present in the use of fresh cherries or cherry juice to treat gout - a painful inflammatory joint condition.

BORON—Make sure your multivitamin contains around 3-6 mg of Boron. Boron works with calcium, magnesium, phosphorus and vitamin D in bone metabolism, growth and development. Animal studies show that a deficiency of vitamin D increases the need for boron. Boron is a trace mineral that has gained attention as a protective factor against osteoporosis. It appears that boron is required to activate certain hormones, including estrogen and vitamin D. In order to guarantee adequate boron levels, supplementing the diet with a daily dose of 3 to 5 mg of boron is recommended.

Boron supplements decrease blood phosphorus concentration and increase magnesium concentration. Both of these changes are beneficial to bone-building. Boron also increases male sex hormone levels. Because of its sex hormone-enhancing effects, boron may help to protect against atherosclerosis. Avocados, cherries and grapes are relatively high in boron. Almonds, peanuts and hazelnuts make sense, too. But did you know that scallops, mussels and clams have about as much boron as parsnips, beets and rutabaga (swedes).

CALCIUM-2 AEP—Ca-2-AEP is an essential factor for cell membrane integrity and sensitivity, protecting the cell from penetration by toxins and pathogens. It binds fatty acids and electrolytes to the cell membrane structure that generates the cells electrical charge. Ca-2-AEP is essential for neurotransmission, nerve impulse generation, muscular contractions and increases the activity of various neurotransmitters, improves cellular membrane signaling and receptor sensitivity.

L-CARNITINE—Carnitine appears to build up acetylcholine and possibly dopamine and may reduce deposits of lipfuscin (AGE's), that is accumulations of crosslinked molecules in the cells. It maybe more effective that Piracetam in cognitive-enhancing and rebuilding the brain. It's a natural antidepressant and increases energy and endurance. It acts to increase energy by carrying fat across the cell membrane and into the mitochondria. Energy is then stored as ATP. It reduces the metabolites of fats (ketones) in the blood from incomplete fat metabolism and reduces hyperammonemia. Carnitine is most concentrated in the heart, sperm, and brain, especially the cerebellum. L-Carnitine maybe equal to or better as a cognitive enhancer than ALC. Acetyl-L-Carnitine (ALC) has mitochondrial membrane normalizing effects, while L-Carnitine is usually used for its cardiovascular, performance-enhancing, and lipid-normalizing benefits. ALC resensitizes cholinergic, serotonergic, and GABA-ergic neurotransmitter systems, reduces age-related loss of cortisol receptors normalizing the adaptive homeostat. Chronic stress impairs the reproductive homeostat (hypothalamo-pituitary-ovarian axis). ALC normalized blood testosterone levels, as well as hypothalamic beta endorphin (BEP) and gonadotropin releasing hormone (GnRH) concentrations from the hypothalamus, thereby restoring luteinizing hormone (LH).

L-CARNOSINE—The antioxidant amino acid L-Carnosine is believed to inhibit the formation of crosslinks between proteins which have been glycated and may even reverse glycation. The Life Extension Foundation calls carnosine the most important antiaging compound. Use in conjunction with alpha lipoic acid for maximum free radical protection during awakening. Taking Carnosine as its precursors alanine and histidine is much cheaper. During stress histidine is needed more than any other amino acid.

CHOLINE—Keeping up a rich supply of the B Vitamin Choline is especially important during kundalini to maintain the inhibiting side of the nervous system and the myelin surrounding the nerves. Choline in combination with another B vitamin Inositol from Lecithin which mostly composes the myelin sheath—the protective coating for nerves. Choline is found as phosphatidylcholine (or lecithin) in the phospholipids bilayer of cell membranes. The brain is rich in lecithin, especially so in geniuses. Choline is a building block for Acetylcholine which is the parasympathetic nervous systems primary neurotransmitter, and remember that excessive on-switch activity will tend to burn out the off-switch chemicals as well. Acetylcholine is a neuromuscular messenger which enables nerves to communicate with muscle cells therefore facilitating muscle control and tone as well as memory, long-term planning, mental focus, mood elevation, sexual activity and other functions. Pantothenic acid, B5 is needed for acetylcholine production.

Lecithin plays an essential role in the body's fat chemistry; it dissolves cholesterol and keeps the arteries from clogging. Lecithin is the main component of liver cells and helps to eliminate fats from the liver. Lecithin is known to purge the cells of LDL. It is useful for drug detoxification, cell membrane fluidity, viral infections and smoking withdrawal. It is best taken in its natural form from corn, soybeans, egg yolks, yeast, wheat germ and whole grains and seeds because according to

Pritikin the refined product can actually cause the same problems as other fats. Manganese conserves acetylcholine. The adaptogenic herb Ashwagandha root inhibits acetylcholinesterase, an enzyme which breaks down acetylcholine and even promotes the formation of dendrites. Choline is a precursor to Betaine, an osmolyte used by the kidney to control water balance. Symptoms for deficiency of the B vitamin Choline include kidney failure, high cholesterol and high blood pressure.

The omega-3 fatty acid Docosahexaenoic acid (DHA) found in fish oil also increases choline and acetylcholine levels in the brain. The *lecithin extract* phosphatidyserine supports acetylcholine and improves motivation, imitative and socialization. Brain cell survival is highly dependent on the availability of DHA to facilitate the incorporation of phosphatidyserine into its membranes.

Another *lecithin extract* L-Alpha Glycerylphosphorylcholine (**Alpha-GPC**) sometimes called GPC (glycerophosphocholine) is a naturally occurring phospholipid precursor and metabolite. It increases in endogenous human Growth Hormone (hGH) secretion by the anterior pituitary in conjunction with Growth Hormone Releasing Hormone (GHRH. Alpha-GPC contributes directly to improved mental focus and cognitive function through stimulation of the enzymatic synthesis of phosphatidylcholine (PC) in nerves, muscle cells and all cell membranes, counteracting the age-related decrease in phospholipid (PC) biosynthesis.

GPC acts as a precursor of acetylcholine (ACh) thus activates cholinergic transmission which permits the development of more strength from workouts and training programs, plus reducing levels of somatostatin in the hypothalamic-pituitary axis. Elevations in blood and tissue levels of the essential nutrient, choline, which supports improved lipotrophic functions in the liver. The fatty liver condition normally associated with degenerative disease can be prevented and possibly even eliminated with increased levels of choline. Alpha-GPC also acts synergistically with endogenous or supplemental S-adenosyl-L-methionine (SAMe) and folic acid, vitamin B12 and vitamin B6 to facilitate methyl group transfers in the brain and liver. GPC improves balance and coordination as a result of normalized nerve transmission in the brain, and in cardiac, skeletal and smooth muscles.

Di-Methyl-Amino-Ethanol (**DMAE**) is a naturally occurring compound that is present in significant amounts in fish. DMAE promotes the formation of acetylcholine, an important brain neurotransmitter, increasing memory, learning and intelligence. Acetylcholine and its precursor choline are unable to cross the blood-brain barrier very well. The body makes acetylcholine from choline as it is needed. DMAE is basically a choline molecule with one methyl group missing from the nitrogen. DMAE is more able to cross the blood-brain barrier than choline. Once inside the brain, an enzyme performs a methylation that converts DMAE into choline. So, taking DMAE increases the brain's potential to make neurotransmitters. (Use non GM sources of Lecithin that is kept refrigerated).

COENZYME Q10—CoEnzyme Q10, a vitamin-like substance that resembles vitamin E, but may be an even more powerful antioxidant. It activates beta-receptor cells, which allow the body to recognize the insulin it produces and protects the brain from free radical damage. It also helps reduce clogged arteries of the heart and has the ability to counter histamine and is valuable to allergy and asthma sufferers. Maximize oxygen in the body with coenzyme Q10. Most CoQ10 is synthesized in the liver, with B6 and selenium being necessary for its production. It is involved in the synthesis of ATP, so is necessary for the generation of 95% of the body's energy. For kundi actives it may be useful for brain protection during the peak and energy generation during the exhaustion phase. CoQ10 may become a proxidant in low oxygen hypoxic conditions such as stroke or anaerobic over exercised muscles. However a new analog of it called **Idebenone** doesn't have this proxidant problem. Idebenone raises mood by increasing serotonin levels even when the diet is low in L-Tryptophan. It also increases levels of nerve growth factor and protects the myelin sheaths and mitochondria. CoQ10 is found in spinach, broccoli, wheat germ, rice bran and whole grains, also in fresh sardines, mackerel, meat, liver and eggs. CoQ10 is a fat-soluble vitamin-like substance; the therapeutic dose is 100-300 mg/day taken with some fat containing food.

CREATINE—Creatine is an amino acid made from glycine and arginine in the kidneys. It increases blood sugar and Growth Hormone. Creatine in the form of phosphocreatine (creatine phosphate) is an important store of energy in muscle cells. During intense exercise lasting around half a minute, phosphocreatine is broken down to creatine and phosphate, and the energy released is used to regenerate the primary source of energy, adenosine triphosphate (ATP). Output power drops as phosphocreatine becomes depleted, because ATP cannot be regenerated fast enough to meet the demand of the exercise. It follows that a bigger store of phosphocreatine in muscle should reduce fatigue during sprinting. Extra creatine in the muscle may also increase the rate of regeneration of phosphocreatine following sprints, which should mean less fatigue with repeated bursts of activity in training or in many sport competitions.

N-ACETYL-CYSTEINE—Of the three amino acids needed to make glutathione—cysteine, glycine and glutamic acid—cysteine is the most crucial due to its sulfur molecule. Levels of cysteine will determine how fast we produce glutathione and how much we make. N-acetyl-cysteine or NAC is a potent antioxidant and immune stimulant, shown to enhance lung function. It enhances glutathione production more than taking glutathione itself. Protects the mitochondrial DNA from damage, and tissue free radical damage from exercise, pollution and UV radiation. Helps remove mercury and other heavy metal deposits. Barley and yogurt are particularly high cysteine foods.

L-DEPRENYL—or Selegiline, is a MAO-B inhibitor drug that might be considered for certain kundi-actives suffering depression, but only while under medical supervision. Taking 2 x 5mg/day irreversibly inhibits over 90% of MAO-B in the basal ganglia, the location of over 80% of dopamine leading to a 40%-

70% increase in synaptic dopamine. L-Deprenyl has immune-system-boosting and protects neurons from hypoxic or oxidative damage. L-Deprenyl induced rapid increases in NO production in brain tissue and cerebral vessels leading to vasodilation. Its use increases the level of tyrosine hydroxylase, growth hormone, cerebral nitric oxide and the production of key interleukins. L-Deprenyl offers protection against DNA damage and oxidative stress by free radicals and against excitotoxic damage from glutamate. In addition, L-Deprenyl stimulates the release of the body's own antioxidant superoxide dismutase (SOD). L-Deprenyl protects permeability of the mitochondria membrane through directly interacting with its pore-forming structures. L-Deprenyl tends to extend the lives of rats by 20%; enhances drive, libido, endurance and improves cognitive performance. We tend to lose around 13% of our dopamine cells a decade in adult life. L-Deprenyl protects the brain's dopamine cells from oxidative stress and retards the breakdown not just of dopamine but of phenylethylamine as well.

DHEA—DHEA is the precursor to the steroid hormones and stress hormones. If you are making up the antioxidant formula 2 from powders bought at beyondacenturyonline.com you only need about 1 teaspoon DHEA mixed into your entire batch. 1.5 teaspoons if you are a man or are very devitalized. Hormones should not be taken during the priming years or the main peaking months because the body is already maximizing its hormonal output at these times. Only take DHEA if you are over 40 years and are on the downside of the awakening and the hormonal herbs are not quite doing it for you

DHLA (dihydrolipoic acid)—The newly available DHLA (dihydrolipoic acid) is a unique antioxidant with spectacular effectiveness in quenching every known free radical in both fat and water-soluble tissues. Recently, the world's first stabilized form of DHLA has been created by Robert J. Marshall, PhD, CCN, of Round Rock, Texas. Dr. Marshall found stabilized DHLA effective for general use and for chronic illness and neurodegenerative disease. A dosage of over 300 mg/day of stabilized DHLA was used along with nutritional yeast, which contains natural-source B vitamins, sulfur-based amino acids and reduced glutathione. Stabilized DHLA provides superior neuroprotection and DNA protection and repair, unmatchable by any other antioxidant, quickly relieving fatigue, malaise, brain fog and improving mental acuity and short-term memory. DHLA, a form of alpha lipoid acid (ALA) previously unavailable due to its unstable nature. Previously DHLA could only be obtained indirectly through consuming ALA (alpha lipoic acid) which in turn, was converted by the body into small amounts of DHLA. Both ALA and DHLA increase cellular energy and efficiency by raising levels of adenosine triphosphate (ATP), combating free radicals, improving blood flow and repairing DNA. Premier Research Labs offers stabilized, non-synthetic DHLA derived from a non-animal source. www.prlabs.com/ —DHLA Nano-plex Liquid

DMAE—Dimethylaminoethanol is an antioxidant membrane stabilizer found in fish. It is a precursor to choline and acetylcholine. Unlike choline, it easily passes

the blood/brain barrier where it stimulates the cholinergic nervous system. DMAE actually intersperses and becomes part of the cell plasma membrane, making the membrane is more able to resist stress and therefore is stabilized. DMAE also gives some protection from free radicals and because it prevents the breakdown of the cell plasma membrane it prevents the production of arachidonic acid and its consequent inflammation. DMAE also increases cognitive function.

As we age the chemicals and nutritional precursors that give tone to muscles and skin, start to diminish as a result of years of free-radical damage. Once aging begins, the amount of acetylcholine produced, as well as the effect of the chemical on the muscle, is diminished. Increasing the levels of acetylcholine produces a stronger muscle contraction and firmer skin.

VITAMIN E—consists of both tocopherols and tocotrienols. Much research has focused on the tocopherols derived from corn, wheat and soybean. But the tocotrienols (TRF) seem to have greater antioxidant properties. The best form of TRF comes from rice bran oil, which is contained in the outer grain hull of rice. Its properties inhibit the activity of HMG-CoA reductase, an enzyme involved in cholesterol biosynthesis, thus tocotrienol reduces cholesterol. TRF reacts with liver enzymes in such a way that it clears toxic substances from the organ, and reduces or stabilizes liver tumors. Thus long-term use of tocotrienol might reduce overall cancer risk. The most effective dose is around 560 IU. However long term use of high dose Vitamin E is not recommended, so adding rice bran as a general component of your diet is advised. Consider putting it in your smoothies, cereals, fiber-clay drinks, sprinkled over meals or in cooking. Theraputic dose for the kundalini peak of Vitamin E (from Mixed Tocopherols) is 800 IU. Begin with 100 IU of natural vitamin E, and slowly increase to 6-800 IU daily.

ESSENTIAL FATTY ACIDS—Getting plenty of the essential fatty acids Omega-3 and Omega-6 is essential during metamorphosis to help protect the nerve sheaths and cell membranes from free radical damage. The average diet usually has an "excess" of omega-6 compared to omega-3, due to excess consumption of Omega 6 linoleic acid from vegetable oils such as corn, soy, safflower and sunflower.

• ***Omega-3 or EPA****, (alpha linolenic acid)*—is found in fish oils. The fish with the highest content of EPA are anchovy, salmon, herring then mackerel. Research has shown that EPA has reduced triglycerides by 64% and cholesterol by 24% after only one month on a diet high in fish oil. Omega-3 stimulates endothelial-derived nitric oxide and enhances the production of prostacyclin, a prostaglandin that produces vasodilation and reduces the stickiness of platelets.

• ***Omega-6 or GLA****, (gamma linolenic acid)*—is found in Borage and Evening Primrose oil. Cis-linolenic acid is converted to GLA in the body and is found in safflower, sunflower and corn oils in the greatest quantity.

Essential fatty acids (EFA) are necessary for all metabolic functions and must be included in the diet, as the body cannot manufacture them. In the body essential fatty acids are converted into **prostaglandins**. Prostaglandins are cell regulators that modify pituitary responses to hypothalamic hormones, including

thyroid-stimulating hormone (TSH) and adrenocorticotropic hormone (ACTH). Prostaglandins are short lived hormone-like substances that act in the regulation of all cellular metabolic processes in the reproductive, cardiovascular, immune, digestive and central nervous systems. They also act in the body's *thermoregulation*, calorie loss and restoring insulin sensitivity.

EFA's stimulate the release of Growth Hormone and alters the response of the thyroid gland to thyroid hormones. GLA and EPA reduce appetite, reduce blood platelet stickiness, relax blood vessels, lower blood pressure, lower triglyceride levels, relieve diabetes, improve immunity, protect from cancer, suppress inflammation, reduces eczema and allergy symptoms, help arthritis, skin hair and nail conditions.

One of the main functions of essential fatty acids are that they are the main component of cell membranes, governing membrane fluidity and cell receptor sensitivity. Researchers have found that exchanges of materials between the inside and the outside of the cell are more effective if there are sufficient EFA's in the cell membranes by promoting membrane fluidity. Gastrointestinal complaints including irritable bowel syndrome can be improved with adequate EFA's because certain prostaglandins govern the secretion of the protective stomach coating that prevents digestive acids from damaging stomach walls.

Ideally, *one third of the fat* consumed should be Essential Fatty Acids (EFAs): Omega-6 Linoleic acid (LA) and Omega-3 linolenic acid (LNA). At least 10% of daily calories should be Omega-6 and at least 2% Omega-3. A higher ratio of Omega-6 to Omega-3 is more advantageous in stemming fatty degeneration diseases. Flax seed oil is 58% Omega-3, but it contains only 14% Omega-6; while Hemp seed oil is 55% Omega-6 and 25% Omega-3, making it the best seed oil for optimal health and prevention of fatty degeneration.

Getting your Omega oils from plant sources is best these days with the fish situation being the way it is...hemp is particularly good. Because EFAs make up a large portion of the brain, hemp is especially beneficial for brain health and memory. Hemp also contains phytosterols, which have been shown to reduce total blood cholesterol by an average of 10 per cent and low-density lipoprotein (LDL) cholesterol by an average of 13 per cent. Find a good source of fresh hemp seeds with the hulls still intact and grind with up with water to make a milk, then sieve. Or get them hulled to put on salads or in stirfries etc…A mixture of flaxseed and hemp seed will supply Omegas 3 &6.

A diet overly high in Omega 6 and poor in Omega 3 increases insulin resistance and Type 2 diabetes. Hyperglycemia is a source of free radicals when the glucose rise above 120 mg% in the blood. Free radicals created by chronic hyperglycemia assault beta cells of pancreas worsening glycemic control.

The omega-3 fatty acid Docosahexaenoic acid (DHA), constitutes 30-50% of the total fatty acid content of the brain, especially prominent in the cell membranes. *Most fish oil supplements contain 12% DHA*—cod liver oil contains large amounts of DHA and EPA. Most of the DHA in fish and other more complex organisms originates in microalgae of the genus Schizochytrium, and concentrates in organisms

as it moves up the food chain. Most animals make very little DHA metabolically. The inclusion of plentiful DHA in the diet improves learning ability, whereas deficiencies of DHA are associated with deficits in learning. DHA is a major fatty acid in sperm and brain phospholipids, especially in the retina. DHA is taken up by the brain in preference to other fatty acids and the turnover of DHA in the brain is very fast.

Dietary DHA can reduce the level of blood triglycerides in humans, which may reduce the risk of heart disease. Studies show a reduced blood level of omega-3 fatty acids in people with depression. It controls inflammation and decreases free radical induced levels of lipid peroxide in the hippocampus (learning and memory). DHA also increases choline and acetylcholine levels in the brain. DHA is needed to facilitate the incorporation of phosphatidyserine into the membranes of brain cells. 1 tsp of codliver oil contains 400 IU of vitamin D, thus helping to increase magnesium absorption.

FOLIC ACID—Folic acid and folate are forms of the water-soluble Vitamin B9. Folate is necessary for the production and maintenance of new cells. This is especially important during periods of rapid cell division and growth such as a kundalini awakening. Folate is needed to replicate DNA. Thus folate deficiency hinders DNA synthesis and cell division, affecting the bone marrow's ability to make normal red blood cells and prevent anemia. Folate also helps prevent mutation changes to DNA that may lead to cancer. Folic acid is needed to produce choline for acetylcholine; short-term memory, mental agility and verbal fluency were all found to be better among people who took 800 micrograms of folic acid daily—twice the current RDA. Take a good B-complex vitamin to make sure you get a daily supply of B12, B6, Folic acid and the other Bs. But get a B-complex with non-flush niacin (Inositol Hexaniacinate), as niacin flushing combined with kundalini is too extreme. Cobalt is needed to make vitamin B 12.

GLUTATHIONE—Glutathione (GSH) is a sulfhydryl antioxidant, antitoxin, enzyme cofactor and is the major repair enzyme. Glutathione is one of the most highly concentrated intracellular antioxidants found in animals, plants, and microorganisms. Glutathione being water soluble is found mainly in the cell cytosol and other aqueous phases of the living system. It plays an important role in cell detoxification, DNA and protein synthesis, transport processes and in the removal of oxidants. Mitochondria from most mammalian cells do not contain catalase (the heart being an exception), implying that glutathione (GSH) in mitochondria is a major defense against the potential toxic effects of endogenously produced ROS in the electron transport system.

GSH depletion maybe the ultimate factor determining vulnerability to free radical attack, cell death by oxidation and has been documented in many degenerative conditions. Glutathione improves macrophage activity. It protects from and repairs damage caused by free radicals and UV. It is good for cancer, allergies, cataracts, arthritis and smokers. GSH has a potent electron-donating capacity and this is reducing power is most expressed by GSH where its concentrations are highest, as

in the liver. Glutathione has the ability to make a toxic compound water-soluble so it can be flushed out of the body via the kidneys. Also can inhibit the oxygenation of arachidonic acid to inflammatory prostaglandins and leukotrienes.

The reducing power of GSH is a measure of its free radical scavenging, electron-donating, and sulfhydryl-donating capacity. Reducing power is also the key to the multiple actions of GSH at the molecular, cellular, and tissue levels, and to its effectiveness as a systemic antitoxin. The two water-phase antioxidants are tightly linked: GSH can conserve Vitamin C, and conversely Vitamin C can conserve GSH. Its full name is g-glutamylcysteinylglycine, meaning it is a combination of Cysteine, Glutamic acid and Glycine. It maybe best taken in its component parts as it is cheaper than buying Glutathione and is easier to assimilate. Of all the oral GSH precursors probably the best is NAC (N-acetylcysteine). Glutathione is found in citrus, strawberries, peaches, potatoes, squash, broccoli and tomatoes. To reduce free radical damage thereby enhancing the immune system and preventing allergic reactions and auto-immune diseases like arthritis take: ***Aminos:*** Glycine, N-acetyl-Cysteine, Glutamine, Tryptophan with ***Cofactors:*** Vitamin B complex, C, E and Selenium and this will increase your glutathione levels.

GPC (glycerophosphocholine) —Sometimes called L-Alpha Glycerylphosp horylcholine (Alpha-GPC) is a naturally occurring phospholipid precursor and metabolite derived from soy lecithin and found in plentiful supply in mothers milk. It produces improved balance, coordination and muscle strength, improved lipotrophic functions in the liver, increases in endogenous human Growth Hormone (hGH) secretion and Improved mental focus and stimulation of cognitive function. GPC consistently improved space-time orientation, degree of consciousness, language, motor capacity, and overall quality of life. GPC is a major cell-level protectant, through its pivotal roles in osmotic pressure regulation and metabolic antitoxin. GPC is a major reservoir for cell membrane omega-3 phospholipids and helps keep choline and acetylcholine available to the tissues. 600 mg/day for maintenance.

GLUTAMINE—As well as *cysteine* it is recommended to take the other two aminos that make up glutathione as supplemental *glycine* and *glutamine*. Both glutamate and glutamine are forms of glutamic acid, the body easily converts the glutamine to glutamic acid. Glutamic acid readily passes the blood brain barrier and is considered a "brain fuel. In the brain, glutamine is a substrate for the production of both excitatory and inhibitory neurotransmitters (glutamate and GABA). Glutamine is also an important source of energy for the nervous system. Glutamic acid and cysteine are necessary for glucose regulation, and can decrease cravings for alcohol and sugar. If the brain is not receiving enough glucose, it compensates by increasing glutamine metabolism for energy. Glutamine users often report more energy, less fatigue and better mood. Taking glutamine during kundalini does not appear to enflame kundalini fire, however any carbohydrate or sugar appears to do so. Hence glutamine might be a "safe" brain fuel during kundalini while on a ketogenic or low sugar diet.

Glutamine is the most abundant single amino acid in the blood and in the muscle tissue comprising up to 60% of the amino acid pool in skeletal muscle; and is manufactured and released primarily by the skeletal muscle. Because it is important in the rapid growth of cells more is needed during stress or illness. Glutamine is utilized as a source of energy and for nucleotide synthesis by all rapidly dividing cells, such as the cells of the intestinal lining and certain immune cells thus without sufficient glutamine, the intestines atrophy and the immune function breaks down. Glutamine therapy was found to improve intestinal permeability in AIDS patients.

Glutamine serves as a nitrogen donor and a carbon donor, and is thus an important muscle-building amino acid. Glutamine's unique structure, containing two nitrogen side chains makes it responsible for 35% of the nitrogen that gets into the muscle cell. It is anti-catabolic, meaning it regulates protein synthesis in muscles, sparing muscle tissue and helps replenish muscle glycogen after exercise. It is also involved in glycogen synthesis in the liver and is a building block of many other amino acids. Glutamine can increase growth hormone levels by 43% thereby slowing aging. It also improves lymphocyte proliferation. Further more it reduces insulin resistance and high blood sugar which also counteracts aging. One study actually showed that glutamine directly prevents the **cortisol**-induced degradation of muscle contractile proteins. It can counteract some of the catabolic effects of cortisol through enhancing protein synthesis, increasing Growth Hormone levels and increasing cell-volume. Thus glutamine creates an anabolic environment in muscle cells and partially determines the rate of protein turnover in the muscle. It may also enhance glycogen synthesis through an unknown mechanism.

The amino acid glutamine strengthens the cell lining of both the small and large intestines, provides metabolic fuel for gut cells, brain cells, immune macrophages and lymphocytes. Glutamine has been reported to be helpful in reducing "leaky gut" and "brain fog". Glutamine is important as an energy source for our bodies, and is the primary fuel for the upper intestinal tract. It aids the immune system by increasing the integrity of the intestinal lining preventing toxins and pathogens from entering the bloodstream. Glutamine is also a component of **folic acid**. There is an association between folic acid deficiency and seizure. Disruptions of the intestinal lining may cause folate deficiency, and consequently lead to seizures.

The small intestine uses 40% of the glutamine in the body, it being the primary amino acid for nourishing and repair of the cells that line the small intestine. Insufficient glutamine increases the permeability of the gut leading to **leaky gut syndrome**. This lets in toxins, pathogens and partially digested molecules into the blood increasing the load on the liver. The large molecules entering the bloodstream stimulate antibody production, and then the liver subsequently has to cope with the waste products of antibodies. Which again increases the demands made on glutathione and other antioxidants.

During kundalini the body's demand for glutathione goes up to cope with the free radicals and detoxification process, which robs more glutamine from the small intestine making the leaky gut syndrome worse. The extra demand for antioxidants

during a kundalini awakening and the subsequent utilization of glutamine from the small intestine could be one of the main reasons for digestive upset during metamorphosis. This situation is remedied by taking glutamine and its cofactors. Glutamine protects the brain and body from ammonia toxicity. Excess ammonia interferes with the oxidative metabolism of neurons and reduces the production of ATP, the "energy molecule." In addition, ammonia gives rise to very harmful nitrogen-based free radicals.

GABA—GABA is made from the amino acid Glutamic acid (Glutamine or Glucose). It reduces anxiety, elevates the pain threshold reduces the blood pressure and heart rate and reduces compulsive behavior. GABA promotes fat loss and stimulates the production of Human Growth Hormone (HGH). GABA can be taken as a supplement (L-Glutamine), produces a calming effect on people who struggle with temporal lobe symptoms like temper, irritability, and anxiety.

GLYCINE—Glycine and glucose are the two most common amino acids in the body. Glycine is the simplest amino acid and is the only protein forming amino acid without a center of chirality, that is it is nonpolar. Because glycine has such a small side chain it can fit into many places where no other amino acid can. Hence it is the internal amino acid of a collagen helix, thus collagen is about one-third glycine. Most proteins however only contain a small quantity of glycine.

Like GABA, Glycine activates Cl- ion conductance resulting in a hyperpolarization of the neuronal membrane and an antagonism of other depolarizing stimuli. This membrane hyperpolarization makes glycine the major *inhibitory* neurotransmitter in the brainstem and spinal cord, where it participates in a variety of motor and sensory functions. However in the forebrain it functions in an *excitatory* way by promoting the actions of the major excitatory neurotransmitter glutamate at the NMDA receptors. Other amino acids, including alanine and taurine, also activate glycine receptors, but with lower potency.

Glycine may increase acetylcholine neurotransmission in the hippocampus, the memory center of the brain. This factor could be involved in having "ones life pass before ones eyes" during near death experiences. Increases blood sugar and Growth Hormone. Vitamin B6, magnesium and dimethylglycine are antiseizure and have increased speech in autistic children. Found in many foods, glycine is also synthesized in the human body where, among other functions it helps improve glycogen storage. It is utilized in the synthesis of hemoglobin, collagen and glutathione, and facilitates the amelioration of high blood fat and uric acid levels.

HISTIDINE— The amino acid Histidine is a precursor for histamine and carnosine. It is needed for growth and for the repair of tissue, as well as the maintenance of the myelin sheaths. It is also required for the manufacture of both red and white blood cells, and is also aids in the production of gastric juices. It helps remove heavy metals from the body and to protect the body from damage caused by radiation. Schizophrenics have been found to have high levels of histidine, so they nor those suffering from bipolar (manic) depression should take histidine. Dairy, meat, poultry and fish are good sources of histidine as well as rice, wheat and rye.

HYPERZINE—Inhibits the enzyme that breaks down acetylcholine thereby preventing the degradation of endogenous acetylcholine, promotes dendrite growth and seems to protect neurons from cell death caused by toxins. Use in conjunction with DMAE, choline and Vitamin B 5 for synergy. Hyperzine is found in Chinese Club Moss.

LECITHIN—Lecithin is the main natural source of choline in the diet and the most bio-available way to get supplemental choline! One tablespoon of lecithin granules provides about 50% of the RDA for choline. Lecithin is a union of fat, nitrogen, and phosphorus, and is classified as a phospholipid and is found in nearly every living cell. Phosphatidylcholine builds nerve cells and neurotransmitters. In fact 17 percent of the brain is lecithin, so lecithin is a brain food. It relaxes the nerves due to improving their protective covering, reduces stress and it hydrates the skin from the inside. The heart muscle has one of the highest concentrations of any muscle. Lecithin also insures increased use of vitamins A, D, and E, and helps the body utilize calcium. Lecithin can be found in a variety of foods including egg yolks, milk, meats, fish, nuts, wheatgerm and legumes. Seeds such as barley seeds, corn seeds, melon seeds, pumpkin seeds, and sunflower seeds are also good sources, especially the germ. Grains, fruits and vegetables are much poorer sources. The primary commercial source of lecithin comes from the soybean, and GM free lecithin is hard to get these days due to genetic drift. Some sellers are aiming for nonGM, such as NOW brand, which produces a nonGM Lecithin. You can also use Soy Free Sunflower Lecithin to avoid GM soy, or just eat more sunflower seeds and sprouts. Sunflower seeds head the list of all vegetable concentrates, about as close to the ideal nutriment as can be obtained from a single source. They are 25 % protein and are rated in the same class with meat. Sunflower seed meal proved superior to wheat germ in experiments with animals.

MAGNESIUM—Magnesium supplementation during kundalini awakenings is imperative due to the long periods of HPA-axis hyperactivation and increased lipolysis. Magnesium is the fourth most abundant mineral in the body and is essential to good health. Approximately 50% of total body magnesium is found in bone. The other half is found predominantly inside cells of body tissues and organs, while only 1% of magnesium is found in blood. The mineral magnesium (Mg) is used in building bones, manufacturing proteins, releasing energy from muscle storage, and regulating body temperature. Calcium (Ca) causes muscles to contract, while magnesium helps them relax.

Stress, both physical and emotional, evokes the release of the stress hormones: catecholamines and corticosteroids. These stress hormones can induce magnesium loss, and high ratios of Ca/Mg stimulate of their secretion, constituting a self-reinforcing loop. The result being that Mg deficiency and catecholamines each cause tissue Ca overload; hence the need to eat chlorophyll rich plants during kundalini. Adrenergic stimulation of lipolysis can intensify Mg deficiency by complexing Mg with the liberated fatty acids (FA). Short and long-term fasting has caused Mg loss for this reason. Kundalini also, because of the increased stress hormones, lipolysis and autolysis of tissues will increase the demand for Magnesium.

A low Mg/Ca ratio increases stress hormone (catecholamine) secretion, which in turn lowers tissue Mg levels. It also favors excess release or formation of factors (derived both from Fatty Acid metabolism and the endothelium: prostaglandins and fibronectin), that are vasoconstrictive and platelet aggregating. High Ca/Mg ratios lead to increased blood coagulation, which is also favored by excess fat and its mobilization during adrenergic lipolysis. Epinephrine, but not norepinephrine, significantly reduced plasma Mg in healthy men; and elevated blood catecholamines interfere with absorption of Mg in the intestinal tract. Mg modulates smooth muscle contraction through its Ca-blockage or competition. High altitude intensive training resulted in a negative Mg balance sufficient to cause convulsions.

Since the energy generation of the body goes up in kundalini there is an increase in ATP synthesis and ATP synthesis is Mg-dependent. Mg deficiencies can be caused by diuretics, stress, and dietary imbalances such as high fat, sugar, alcohol or calcium. A magnesium-rich diet consists of nuts, whole grains such as brown rice, millet, buckwheat (kasha), quinoa, whole wheat, and rye, and legumes including lentils, and beans. Cacao powder (chocolate) has the most Magnesium of any food. David Wolfe's "Nature's First Law Raw Organic Chocolate Powder" is the best on the market because it is cold-pressed to make sure the processing occurs at a low enough temperature to keep taste and nutrition at an optimum!

Magnesium is lost in cooking some foods even under the best conditions. Green vegetables such as spinach are good sources of magnesium because the center of the chlorophyll molecule (which gives green vegetables their color) contains magnesium. Also high in magnesium are peanuts, pumpkin seeds, almonds, brazil nuts, dried figs, dried apricots, yeast, parsley, spinach and tofu. Recommended daily allowance is 400mg/day—with kundalini it might be somewhat higher. Ideally supplementation should be in Ionic Liquid Magnesium form for optimum assimilation.

MELATONIN—Melatonin (N-acetyl-5 methoxytryptamine) is a hormone produced especially in the dark of night in the pineal gland. Melatonin is said to improve sex-life, longevity, lowers blood pressure and is a potent antioxidant. Serotonin, that feel good hormone, is a precursor to melatonin. Disturbances in your ability to sleep can cause you to gain weight. Carbohydrate consumption, acting via insulin secretion and the "plasma tryptophan ratio," increases serotonin release. Serotonin release is also involved in such functions as sleep onset, pain sensitivity, blood pressure regulation, and mood control. Because dietary carbohydrates increase brain serotonin secretion we can become addicted to eating starches and sugars in an effort to feel better. Supplementation with melatonin is used for sleep disturbances, seasonal affective disorder, neuroendocrine disorder and in cancer therapy. In vitro melatonin is more effective than glutathione in scavenging the highly toxic (OH) radical and also more efficient than vitamin E in neutralizing the peroxyl radical. It also stimulates the main antioxidant enzyme of the brain, glutathione peroxidase. Vitamin D slows the age related decline of melatonin. Melatonin is believed to protect against cancer by preventing tumor

cells from growing; those with highest melatonin levels had the lowest risk of cancer. Research shows that meditation increases levels of melatonin.

PHENYLALANINE—Phenylalanine is an essential amino acid, which is a precursor to tyrosine, another amino acid. Phenylalanine, after its hydroxylation to tyrosine, is also the precursor of dopamine, and of norepinephrine and epinephrine, hormones secreted by the adrenal medulla. Melanin, the black pigment of skin and hair, is also derived from tyrosine.

Phenylalanine prevents the breakdown of the brains morphine like painkillers enkephalins which inflate mood and depress appetite. Increases alertness and assertiveness, suppresses appetite, and is an effective antidepressant. Helpful as a daytime GH releaser.

The neurotransmitter Dopamine increases feelings of well-being, alertness, sexual excitement and aggression; and reduces compulsive behavior. Tyrosine is a natural amphetamine and precursor to adrenaline. Tyrosine might create headaches so DL-Phenylalanine is better. L-tyrosine is the first breakdown product of and similar in many effects to L-phenylalanine, but less likely to affect blood pressure. As a precursor to dopamine, norepinephrine, and thyroid hormone, it may help some types of depression, increases well-being and reduces compulsivity. Phenylalanine can be found in the following foods: soybean protein, frozen tofu, dried and salted cod, shellfish, lean meat, organ meat, skin-free chicken, cheese, milk, eggs, many seeds (watermelon, fenugreek, roasted soybean nuts), and chocolate.

PHOSPHATIDYLSERINE—The *lecithin extract* phosphatidyserine (PS) supports acetylcholine and improves motivation, initiative and socialization. PS is a phospholipid that occurs naturally in all cells of the body, with particularly high concentrations in the brain. Brain cell survival is highly dependent on the availability of DHA to facilitate the incorporation of phosphatidyserine into its membranes. PS has cognitive-enhancing properties probably due to its ability to sensitize acetylcholine receptors. It is an essential cell membrane component for nerve cells; playing a key role in communication across synapses between nerve cells, and reverses loss of membrane fluidity associated with age-related mental decline. PS also ameliorates elevations of stress hormones (ACTH and cortisol) and helps prevent memory loss and other cognitive decline. PS is a cortisol receptor sensitizer, resulting in improved levels and efficient use of cortisol. It is also a very effective antidepressant due to its ability to normalize the adaptive homeostat (HPA-axis). The normalizing of prolactin receptors may contribute to the many positive benefits of phosphatidylserine.

PIRACETUM—Wakes up your brain, boosts intelligence and stimulates the central nervous system. It promotes the flow of information between the left and right hemispheres of the brain, leading to increased creativity. Best taken with hydergine and choline. It appears to have a regenerative effect one nerves, and might increase the cholinergic receptors in the brain. Enhances cognition under hypoxia and has been used as an anticonvulsant in epilepsy. ANIRACETAM, 1-anisoyl-2-pyrrolidinone, is a more potent, longer-lasting, fat soluble analogue of Piracetam. It has proven to be one of the best nootropics currently available.

QUERCITIN—Quercetin is powerful flavonoid found in red and yellow onions and is a powerful natural anti-oxidant and anti-histamine. Studies show that quercetin is anti-cancer, anti-fungal, anti-inflammatory, anti-viral and anti-bacterial. It also helps to thin blood, reduce blood clots and processes that lead to artery-clogging. Red wine, apples, broccoli and tea are also rich in quercetin.

D-RIBOSE—D-ribose is a sweet, solid, water-soluble substance that is an actual building block of ATP. D-ribose is a naturally occurring five-carbon sugar found in all living cells. It is not an essential nutrient, since it can be made in the body from other substances, such as glucose. Some of the most important biological molecules contain D-ribose, including ATP (adenosine triphosphate), all the nucleotides and nucleotide coenzymes and all forms of RNA (ribonucleic acid). D-ribose in RNA and D-deoxyribose in DNA may be considered genetic sugars. Since D-ribose is found in all living matter, it is ingested in our diets. Such nutritional substances as brewers yeast are rich in RNA and are thus rich sources of D-ribose. Research suggests that supraphysiological amounts of this sugar may have cardioprotective effects, thus might be useful for heart expansion periods. Supplemental D-ribose is produced from the fermentation of corn syrup.

SAMe—S-adenosylmethionine is found in all cells and is formed in the body by combining the essential amino acid methionine with ATP. SAMe is involved in the synthesis and protection of DNA, RNA, and protein, maintains mitochondrial function, restores membrane fluidity and facilitates the binding of hormones to cell receptors. SAMe forms glutathione which protects and regenerates liver and cartilage, protects neurons from hypoxia, is involved in remyelination of neurons and protects cardiovascular system from homocysteine and free radicals. Aging reduces SAMe levels. Due to the reduced sensitivity of prolactin receptors, prolactin levels are known to rise with age, consequently lowering levels of growth hormone and testosterone causing impotence. Long-term supplementation with SAMe repairs cell membrane fluidity and enhances the sensitivity of prolactin receptors, as well as GABA and beta-receptors and probably serotonin and dopamine receptors as well. When there is inadequate estrogen negative feedback via the pituitary gland, elevated prolactin can in turn contribute to elevated estrogen levels (estrogen dominance). B12 (methylchobalamin) increases SAMe, thereby reducing depression and inflammation.

SELENIUM—Selenium maintains the elasticity of the tissues and increases antibodies. It is used in the body's antioxidant enzyme **Glutathione peroxidase** which breaks down rancid fats without releasing free radicals, which literally means that it prevents fats from going rancid (this can be seen on your skin as "age spots" or "liver spots" Seizures may result from glutathione peroxidase deficiency, which could be due to the lack of bioavailable selenium. Selenium is involved in the conversion of thyroid hormones T4 to T3, hence deficiency of selenium can lead to either hyperthyroidism or hypothyroidism, depression and wasting of tissue. If selenium is deficient the thyroid gland becomes damaged, causing heart palpitations and rapid heart beat, which is common in thyroid disease. The

huge demand for glutathione during kundalini could lead to a selenium deficiency, exaggerating the exhaustion phase and leaving the body open to pathogenic attack. Selenium detoxifies mercury especially in conjunction with vitamin E; it also works synergistically with Vitamin E to increase Glutathione activity. Selenium enhances lymphocyte proliferation; as selenium and Vitamin E are needed to make glutathione peroxidase. Selenium binds with and protects against cadmium, lead, mercury, and arsenic. Selenium is essential for the production of testosterone. Supplement around 200mcg per day. Selenium is best absorbed in its *chelated* forms selenomethionine, selenoglutathione, selenocsyteine; or SelenoExcel made from Baker's Yeast is the preferred form. Selenium is found in largest concentrations in Brazil nuts, whole grains, onions, garlic, brewers yeast, broccoli, seafood and mushrooms.

TAURINE—The amino acid Taurine comprises of more than 50% of the free amino acids in the heart. Taurine differs from other amino acids in that it doesn't become incorporated into proteins. It exists as a free amino acid and is one of the most abundant amino acids in muscle, blood platelets, and the developing nervous system. Taurine promotes the pumping action of the heart. Evidently taurine serves as a neurotransmitter, a regulator of salt and water balance and a stabilizer of cell membranes, a detoxifier, and regulates cell membrane excitability. Taurine is involved in calcium metabolism in the heart and may affect the entry of calcium into the heart muscle cells where it is essential to the generation and transmission of nerve impulses. It can also prevent heart beat irregularities caused by adrenalin. Taurine in combination with other cardio-protective nutrients maybe good to take during the heart expansion period of the peak: coenzyme Q10, L-Carnitine and Magnesium.

It protects and stabilizes the brains fragile tissues and is the second most plentiful amino acid in the brain after glutamic acid. Taurine facilitates Na, P, Ca and Mg in and out of cells, and electrically stabilizes cell membranes. Taurine is a component of bile and fat digestion, it plays a role in cellular defense against light damage to the eye and may prevent epileptic seizures in some cases. Under the stressful and hyper-activation conditions of kundalini taurine supplementation will help with the seizure-like hypertension and heart inflation. Taurine supplementation during kundalini maybe an advisable precaution especially for vegetarians. Cysteine (NAC) and B6 increases taurine levels, whereas taking taurine directly may irritate the gut. Zinc enhances taurine's effect. Since stress can deplete the body of zinc and B6 it may also lower taurine levels. Through its role in calcium metabolism in the brain, it plays a major part in the release of neurotransmitters. Taurine may inhibit the release of excitatory neurotransmitter such as norepinephrine and acetylcholine and suppress adrenaline release. Thus is a safe tranquilizer. As inhibitory neurotransmitters taurine appears metabolically and structurally similar to GABA and glycine.

TRYPTOPHAN (5-HTP)—The neurotransmitter serotonin is made from the amino acid Tryptophan. Serotonin neural circuits help counterbalance the tendency of brain dopamine and noradrenaline circuits to encourage over-arousal.

It calms, elevates pain threshold, promotes relaxation, sleep and feeling of well being, reduces aggression and compulsive behavior and increases confidence and concentration. It is better to take tryptophan as 5-HTP, because it is a natural extract from the seeds of the Griffonia simplicifolia tree from the West African countries of Ghana.

Taking tryptophan while under elevated cortisol-stress conditions might supply little extra serotonin to the brain, because of cortisol's activation of an enzyme in the liver that breaks down tryptophan (*tryptophan pyrrolase*). Vitamin B3 inhibits liver tryptophan pyrrolase and B3 also activates the enzyme that converts tryptophan to 5HTP. Thus taking 100mg B3 several times daily with meals will also serve to enhance the effectiveness of low-moderate tryptophan doses. Taking 50mg vitamin B6 once or twice daily with meals will also augment tryptophan-serotonin conversion, since B6 activates the *decarboxylase enzyme* that converts 5HTP to serotonin. Melatonin actually promotes increased brain serotonin through its ability to reduce cortisol levels, and reduced cortisol levels will lessen the activity of liver pyrrolase, the enzyme that degrades tryptophan. Magnesium also helps lower cortisol. And St John's Wort is a mild MAO inhibitor which reduces the reuptake of serotonin in the brain increasing synaptic levels and it is also a cortisol inhibitor. James South MA has a fabulous article on L-Tryptophan at http://smart-drugs.net/ias-tryptophan-article.htm

VINPOCETINE—Vinpocetine might be especially useful during a kundalini awakening, because it inhibits glutamate receptors and therefore might prevent excitotoxin damage. Vinpocetine is a supplement made from the periwinkle plant that improves blood circulation, oxygen uptake and glucose utilization by the brain. It increases ATP levels in the brain and stops the blood from thickening. Headaches, heart tension, panic, depression, ringing in the ears and impairment of thinking should be improved by the use of Vinpocetine during awakening, especially in conjunction with fat-soluble antioxidants and anti-inflammatory agents.

Researchers found that vinpocetine significantly reduced oxidative stress and inhibited free radical (ROS) formation up to 83%. It was found that the antioxidant effects of vinpocetine contributed to reducing neuronal damage in pathological situations. In addition it protects the body's energy supply for it inhibits the enzyme phosphodiesterase (PDE)-1, which breaks down adenosine monophosphate. **Adenosine monophosphate** (AMP) is an intermediary substance formed while creating the energy molecule ATP. Research investigated vinpocetine as a potential anticonvulsant treatment for epilepsy and found it to inhibit undesirable electroencephalogram (EEG) changes. Vinpocetine is capable of blocking sodium channel activity, leading to a decrease in the amplitude of the action potential and suggests a potential use in various sensory abnormalities arising from abnormal peripheral nerve activity and for heart arrhythmia. Vinpocetine also is an effective analgesic in neuropathic pain and possibly chronic inflammatory pain. http://bulkherbshop.com/—Periwinkle Powder

ZINC—Zinc is a component of more than 100 enzymes associated with many different metabolic processes, including the synthesis of the nucleic acids RNA and DNA. It is required for the transport of Vitamin A from the liver, and as part of the body's antioxidant superoxide dismutase (SOD) it helps protect cells from free radicals and stabilizes cell membranes. Zinc is also required for normal growth and development, reproductive development and function, and to support the immune system, where it has been shown to increase T-lymphocytes and enhance other white blood cell functions. Our brain and nervous system require zinc for almost every enzymatic reaction. Zinc stimulates the production and action of the thymic hormones (thymosin) which regulate T cell production and maturation in the thymus. A deficiency results in atrophy of the thymus gland, reduced thymosin levels and a decline in T cells. Zinc deficiency reduces lymphocyte numbers, thus low zinc levels weaken the immune system, which makes us binge in an attempt to gain energy. This further damages the immune system so that you gain weight and fall even further into the low zinc danger zone. Zinc is needed by the pancreas to manufacture insulin, and is helpful in healing the pancreas from the ravages of a high sugar diet. It is necessary to get enough zinc daily as the body can store very little. If you are stressed or taking contraceptive pills you maybe deficient in zinc. Zinc supplements may reduce ADHD by helping to regulate the function of the pleasure-reward neurotransmitter dopamine. Zinc is found in oysters, nuts, wheatgerm, meat, seafood, nutritional yeast and pumpkin seeds. RDA is 15mg but zinc requirements increase during times of healing and recovery so take 25 mg/day of zinc daily during an awakening.

HERB LIST

ASHITABA—The Asian longevity herb Ashitaba is perhaps THE major adaptogenic herb useful as an aid to kundalini-actives. Like Dong quai Ashitaba belongs to the Angelica family; I suggest you grow your own as the prices are rather steep. Ashitaba will provide strength and protection during the peak phase, and nerve recovery for exhaustion phase because it stimulates the production of Nerve Growth Factor (NGF). NGF is essential in the development and survival of neurons in both the central and peripheral nervous systems. In one study, using 1% Ashitaba dry powders, a 20% increase of NGF concentration was noted after only four days!

In China Ashitaba has a long history in the healing arts to: purify the blood & remove toxic wastes; detoxify the liver; enhance kidney function; support digestive & G.I. health; enhance peristalsis, cleanse the colon; harmonizes the spleen and stomach; regulate blood sugar level, balances insulin, reduces hyperglycemia; improve lung function; relieve smooth muscle spasms in the arteries & bronchial tubes; reduce blood pressure; enhance blood circulation; regulate cholesterol level; reduce joint & muscular pain; anti-viral & anti-bacterial actions; suppress cell mutation; inhibit general inflammation; strengthen the immune system; improve visual acuity; menopausal relief; smoother skin texture; also contains melatonin as an aid to natural sleep cycles.

Ashitaba out performs all other herbs tested for their antioxidant potential based on the ORAC guide (Oxygen Radical Absorbance Capacity). Ashitaba is a superfood containing eleven vitamins including, Vitamins: αcarotene, vitamin C, vitamin B12, thirteen minerals, chlorophyll, enzymes, carotene, germanium, saponins, proteins, plant fibers, glycosides, coumarins, and a rare class of flavonoids called *chalcones*, which are unique flavonoid compounds that give the juice its yellow color. The many potential effects of flavonoids include defending cells against carcinogens, curbing the oxidation of LDL cholesterol and preventing blood clotting, helping to protect the organs from destructive free radicals and slow the aging process on a cellular level and the inhibition of general inflammatory processes. The germanium, in Ashitaba promotes production of **Interferons** (IFNs), which are natural proteins produced by the cells of the immune system to prevent viruses and bacteria from penetrating into our cells.

ASHWAGANDHA—The adaptogenic herb Ashwagandha root inhibits acetylcholinesterase, an enzyme which breaks down acetylcholine. Ashwagandha has anti-inflammatory, anti-tumor, anti-anxiety, anti-stress, antioxidant, cognition-enhancing, immune-boosting, rejuvenating and has also been noted to have aphrodisiac sex-enhancing properties. Its antioxidant capacity was found an increase in the levels of three natural antioxidants — superoxide dismutase, catalase and glutathione peroxidase in the brain. Studies show that Ashwagandha even promotes the formation of dendrites.

ASTRAGULUS—Digestion, raises metabolism, reduces hyperthyroidism, enhances immunity, chi tonic, anabolic-builder of cells and strengthens cell

processes, increase macrophage numbers and killer cell effectiveness, induces interferon production, anti-cancer, strengthens liver, spleen, kidneys and adrenals, vasodilation, anti-inflammatory, increases DNA synthesis in the liver, aids detoxification and increases membrane fluidity.

ARTICHOKE LEAVES—Might be good to include in a metamorphic formula for toning, detoxifying protecting and supporting the liver and digestive system. Its antioxidant, tonic, cardiotonic and is used in irritable bowel syndrome and other bowel problems.

BACOPA—An Ayurvedic herb used in India for memory, epilepsy, and as a mild sedative. It helps to synthesize neurons and strengthen worn-out ones in the hippocampus where memories are created and retrieved. Bacopa is a brain tonic, memory booster, relieves headache, stress and increases alertness, intellect, antianxiety, and suppresses cortisol production.

BOLDO—Boldo is a cholagague (bitters), meaning it will increase bile flow, thereby diluting and reducing infection of the gall bladder and formation of gallstones. Cholagogues are often also called bitters and they are used around the world. Other bitters are Dandelion root, Yellow dock, Barberry root bark, Goldenseal. Boldo has also been used to treat urinary tract (urethra, bladder, prostate, and kidney) infections.

BANABA—Banaba leaf contains corosolic acid, a natural plant insulin that can be taken orally, and has no side effects. Banaba helps the body to handle glucose, lowers blood sugar, promotes healthy insulin levels, and is used to fight diabetes and obesity. Through modulation of glucose and insulin levels appetite is reduced along with total caloric intake.

BASIL—Basil contains phosphorus, potassium, vitamin A, calcium and Vitamin C, iron and magnesium. Basil is used for disturbances in renal function, strengthens the kidneys, gum ulcers and gastrointestinal disorders and can actually prevent dental plaque. Basil is used for nervous headaches, lowers blood pressure, is an expectorant and even kills warts. Make Pesto salad dressing using fresh basil, soaked pumpkin and pine seeds, garlic, buckwheat goop, lemon juice and seasoning. Great even on kale salad!!!

BILBERRY—Huckleberries are commonly used for their health effects especially on the eyes. The anthocyanoside pigments from the berries are considered to be the most important constituent and have contributed to Bilberry's primary role in the prevention of cataracts and glaucoma, treatment of macular degeneration and diabetic retinopathy, and improvement of night vision.

BORAGE OIL—Borage, (borago officianalis) is a wildflower commonly called the starflower. Borage seed oil contains 3 % **Nervonic Acid** which can enhance neuron "firing" thereby increasing mental focus and is involved in the biosynthesis of myelin. Borage oil is the richest known source (24%) of an essential fatty acid called gamma linolenic acid (GLA). Borage seed oil is now thought to be a superior source of GLA compared to evening primrose oil which contains 10% GLA. Our

body naturally produces Gamma Linolenic Acid (GLA) from Linoleic Acid (LA) through by the enzyme Delta-6-Desaturase (D6D), which biochemically converts Linoleic Acid into GLA. GLA is further converted via a sequence of biochemical steps into a hormone-like substance called prostaglandin 1 (PG1), which is a key molecule for maintaining healthy skin. PG1 exhibits a potent anti-inflammatory effect on the skin and also is very effective in regulating water loss and protecting the skin from injury and damage. Disease, aging, menopause, saturated and hydrogenated fats, lack of vitamins B and C and minerals like magnesium and zinc can interfere with the conversion to prostaglandin E1 (PG1). The D6D enzyme is impaired in people with skin disorders such as eczema, dermatitis and psoriasis and they show increased levels of Linoleic Acid with lower levels of GLA. Used as a supplement or even applied topically borage oil can circumvent slow or impaired D6D enzyme activity by supplying the body directly with GLA, thus allowing the production of normal levels of PG1. GLA has shown to decrease allergic and inflammatory conditions by competing with arachidonic acid, which when left unchecked may perpetuate a hyperimmune response. Borage oil has been shown to be very effective in treating the redness, inflammation, moisture loss and aging of the skin.

BUCKWHEAT—Buckwheat is another of those seeds commonly considered to be a grain, but it is a fruit not a true cereal. It that is in the same plant family as rhubarb and is a close relative to the docks and sorrels. Buckwheat is gluten free, so it can be used in food products developed for people that are allergic to gluten. Buckwheat bran is 4% to 6% rutin, a flavonoid known to reduce cholesterol, lower blood pressure, and strengthen diseased weakened capillaries. The human body can assimilate 74% of the available protein in buckwheat. It is the best known source of high quality, easily digestible protein in the entire plant kingdom. It even has more protein than soybeans and is high in the essential amino acids lysine and arginine, in which major cereal crops are deficient. Buckwheat is higher in iron than cereal grains. It contains substantial amounts of lysine, an amino acid commonly lacking in the true cereal grains; calcium, vitamin E, the entire B vitamin complex, and is especially noted for its high laetrile **(vitamin B17)** content. As well, it provides a good source of dietary fiber and the buckwheat greens contain plentiful mucopolysaccharides. The goop from buckwheat sprouting makes great skin and hair emollient.

BURDOCK—Burdock seed is good source of nutrients such as iron, to help build the body. It is also good for skin sores and is antibacterial and antifungal. Hormonal balancing. a strong liver purifier with particular value for skin, arthritic, and glandular problems. It is a specific in all blood cleansing and detoxification problems as an aid in neutralizing and eliminating toxins from the body; in the support treatment of liver problems, gallstones, flu, and to support the kidneys in filtering acids from the blood stream; to purify the blood, to treat gout and ulcers, arthritis, rheumatism, and help with skin conditions such as acne and psoriasis. The root is said to be an effective aphrodisiac, useful in treating impotence and sterility.

Burdock is also considered a diuretic, mild laxative and aids in the elimination of uric acid. By improving the function of many organs of elimination (*i.e. liver, kidneys, bowels*), many health conditions maybe improved.

CAT'S CLAW—The vine bark of Cat's claw is an immune stimulant, anti-inflammatory, cellular protector, anticancerous. Bowel cleanser and anti-inflammatory for bowel problems, reduces pain, tonic, anti-depressant, antioxidant, anticoagulant, might thin blood.

CAYENNE—Cayenne is perhaps the most useful and valuable herb, not only for the entire digestive system, but also for the heart and circulatory system. Cayenne is the greatest blood circulation stimulant known. It reduces blood cholesterol, triglyceride levels, and platelet aggregation - making them less "sticky." A combo of cayenne and hawthorn berries is used to strengthen the heart and prevent heart attacks. Cayenne may help weight loss by boosting metabolism while suppressing appetite; it boosts energy as well as lower stress-related fatigue and depression. It aids elimination and assimilation, and helps the body to create hydrochloric acid, alleviates dyspepsia, stomachaches, cramping pains, gas, chronic pain, sore throats, headaches and toothache.

It is a very high source of Vitamins A and C, has the complete B complex, and is very rich in organic calcium and potassium. Other constituents of cayenne are vitamins E and carotenoids. You can add cayenne to most of your herb formulas prior to capsulating, use it as an ingredient in cooking, or add a pinch to your fresh juices. People sometimes fast using the "The Master Cleanser" (lemon juice, maple syrup, cayenne and water), but I don't handle the sugar in this very well.

Capsaicin cream is a potent topical nerve and muscle pain-relieving treatment, used for psoriasis, skin ulcers, insect bites, itchy skin, rheumatic pains and arthritis, pimples and inflammatory skin conditions. The capsaicin in chili peppers accelerates healing by promoting the growth of the fibroblast cells of the connective tissue. You can make your own cayenne cream by mixing 1⁄2 teaspoon of cayenne pepper into 1 oz of lotion or balm. This heat rub is useful for jaw and neck pain, strained ankles and such. It will help energy move through any area that seems blocked, congested or cramped. It stings and reddens the skin for half an hour so keep well away from the eyes. Whether taking internally or applying externally do an initial "little" test to check your tolerance level and the potency and dose of the cayenne.

CINNAMON—Cinnamon Extract is known for restoring insulin sensitivity. It normalizes levels of blood glucose, insulin, and lipids; and helps to reduce the formation of AGEs. Loss of insulin receptor sensitivity and impaired glucose metabolism results in high levels of blood sugar and accelerates oxidation and cross-linking of the tissues.

CORDYCEPS—*Cordyceps sinensis* is a mushroom shown to improve cellular energy production, enhance oxygen utilization in the body. It increases blood circulation, making oxygen and nutrients more rapidly available to all parts of the body. It stimulates the immune system and enhances the natural antioxidant systems of the body.

DEVILS CLAW—Pain, headaches, fever, sedative. Digestion, increases stomach acid, anti-inflammatory, lymphatic stimulant, improves liver function and that of gall bladder, bladder and kidneys, regulates fatty acids in the blood.

DONG QUAI—Blood tonic, will help with heart palpitations and ringing in the ears, increases the effect of sex hormones, reduces hot flushes. Dong quai dilates blood vessels, facilitating the heart's pumping ability and possibly lowering blood pressure as a result. Stimulates the central nervous system and increases blood flow throughout the body. Nourishes body fluids, counters fatigue, and lowers blood pressure. As a rich source of vitamin B12, dong quai may play a role in stimulating red blood cell production. It may therefore indirectly boost energy and lessen fatigue by increasing the number of red blood cells transporting oxygen throughout the body.

ECHINACEA—Echinacea inhibits the **hyaluronidase** enzyme that breaks down the hyaluronic acid in skin and connective tissue, thus preserving collagen. It also stimulates fibroblasts to produce more hyaluronic acid and to repair tissue. This helps strengthen the body's first line of defense against infection and lowers its permeability to pathogens. Since the body is undergoing massive connective tissue changes during metamorphosis taking Echinacea at this time would reduce infection potential when the body is in a vulnerable condition, and will help the emerging spiritualized body to have greater strength and integrity. (*Echinacea*, Daniel B. Mowrey, Ph.D.)

FEVERFEW—Feverfew might be a useful herb to reduce the hyperactivity of the CNS during kundalini. Long term users often report beneficial side effects such as relief from depression, nausea and arthritic pain due to inflammation. Part of the herb's action appears to be via an inhibition of secretion of the granular contents from platelets and neutrophils in the blood. The migraine-relieving activity of feverfew is believed to be due to parthenolide, an active compound that helps relieve smooth muscle spasms, thus it helps prevent the constriction of blood vessels in the brain (one of the leading causes of migraine headaches. Feverfew helps inhibit prostaglandins and histamine released during the inflammatory process, so preventing spasms of the blood vessels in the head that trigger migraine attacks. It has been shown to inhibit serotonin release from platelets. Platelets release the hormone serotonin during a migraine attack and serotonin constricts blood vessels. Although headaches and inflammation are not normally involved in the kundalini complex, research needs to be undertaken using feverfew as a moderator for excessive prostaglandin production that might occur during kundalini due to the increase in free radicals. Free radicals are generated in the course of prostaglandin synthesis and inhibitors of prostaglandin synthesis are free radical scavengers.

FIGS—Although figs are 50% sugar, because of their high fiber content, they still have a low glycemic index (<40) similar to cherries and apples. Figs have higher fiber than any other dried or fresh fruit. The fiber in figs is both soluble and insoluble. Five figs, fresh or dried, give you a whopping nine grams of fiber, more than a third of the recommended dietary allowance. Soluble fiber can reduce

cholesterol levels in the blood by more than 20% and is important for regulating blood sugar. Eating ten dried figs gives you 33% of the calcium RDA. Unlike other fruits with inedible seeds, figs contain the valuable omega-3 and omega-6 essential fatty acids. They also contain from 4 to 50 times more bioflavonoid antioxidants than do other fruits. Figs have the highest overall mineral content of all common fruits—they're high in iron and ounce for ounce they're higher in calcium than cow's milk. Dried figs have a much higher level of the phenol makeup, which is rich in antioxidants and is antiseptic to micro-organisms; though their sugar content is apt to feed yeast infection.

FO TI—(*Polygonum multiflori*) He shou wu is a Chinese antiaging tonic, energizer and vitalizer shown to increase SOD levels and contains an antioxidant similar to resveratrol. It nourishes the blood, tonifies the liver and kidneys, strengthens sinew, cartilage and bone. It restores hair color and strengths the entire lumbar region. Fo Ti shouldn't be used by those susceptible to kidney stones because it contains oxalic acid.

FRANKINCENSE—(*Boswellia*) Apparently the ancients mixed monatomic white powder of gold with frankincense...the logic of doing this combo is that the frankincense would help to protect the body from the free radicals, oxidation and toxicity that ingesting the manna-bread produced...in the transformative process of the breakdown of the old body and the reformation of the new. Frankincense is especially suitable for conditions where the joints and muscles are very stiff, swollen, and painful. Frankincense can also relax tendons. Boswellic acids are reputed to have potent anti-inflammatory activity. Move energy and quicken the blood, dispel stagnation, cleanse the intestines, disperse swelling, stop pain, speed wound healing, prevent scars, and reduces skin and joint inflammation and is anabolic. It has been used in the Ayurvedic system of medicine for the management of rheumatism, respiratory diseases, and liver disorders. The major use of Boswellia serrata in contemporary medicine is as an anti-arthritic and anti-inflammatory. The inflammatory process in colitis is associated with increased formation of leukotrienes causing chemotaxis, chemokinesis, the generation of free radicals and release of lysosomal enzymes by phagocytes. A gum resin preparation from Boswellia serrata could be effective in the treatment of chronic colitis with minimal side effects. In kundalini it protects against cellular oxidation and digestive dysfunction.

GARLIC—Garlic maybe the best antioxidant. Garlic is rich in selenium is cofactor of *glutathione peroxidase* and also in another trace mineral, manganese, which also functions as a cofactor in *superoxide dismutase*. Studies have found that in adults deficient in manganese, the level of HDL (the "good form" of cholesterol) is decreased. Garlic also increases antioxidant enzyme, *glutathione-S-transferase* in the stomach and small intestine. Garlic contains allicin and sulfur compounds, which constitute garlic's antibiotic and anti-viral activity against infectious diseases, lowers blood cholesterol and thins the blood, warding off blood clots. Garlic has anti-cancer activity.

GINSENG—Adaptogen, regulates blood sugar, balance, reduces fatigue, increases energy, antioxidant, anti-inflammatory, for shock, anti-psychotic, anti-convulsant, fever reducing, endurance, strengthens spleen and stomach, improves oxygen uptake, improved cardiovascular performance, restores equilibrium to adrenals, hormones, blood sugar, blood pressure and immunity, increases DNA/RNA synthesis in the liver. Siberian Ginseng (*Eleutherococcus senticosus*) is milder and cheaper and might be better for the awakenings themselves, then a shift maybe made to the stronger versions for post-awakening recovery. Ginseng increases Nerve Growth Factor, which stimulates the growth of new oligodendrocytes and myelination.

GINGER—Powdered ginger is a good addition to any kundalini herb mix as it increases circulation and the effectiveness of the other herbs. It is an anti-inflammatory, helps neutralize stomach acids, enhance the secretion of digestive juices and tone the muscles of the digestive tract. Thus will also aid the digestive system, which is very often in distress during the first few years of kundalini. Ginger will also give relief from dizziness, vertigo, heart palpitations and the sense of gravity warping from the heart expansions.

GINKGO—Excellent free radical protection, improves transmission rate of nerve cells, increases serotonin reception sites, improves circulation, mental and sexual function, inhibits cortisol synthesis thus anti-stress. Nerve and vascular protector and restores receptor sensitivity, including the serotonin receptor and acetylcholine (Muscarinic) receptors. Ginkgo maintains the strength of blood vessels by helping deliver glucose to the cells, which ensures that the blood vessels have the energy they require. It also scavengers free radicals, which can damage the cells and tissues; neutralizes dangerous substances in the blood; and works to open constricted blood vessels. It heals and protects and opens blood vessels leading to increased oxygen supply and nutrition to the cells. It relaxes the arteries and veins in times of spasm, and it stimulates them in times of paralysis. Used in combination with Vitamins A and E and selenium Ginkgo inhibits cell damage from sunlight, by cleaning up free radicals, through strengthening the capillaries and reducing inflammation. Aging occurs when tissues are starved of nutrients and oxygen, which happens when the blood vessels are constricted. Gingko biloba contains factors that stimulate Glial Cell Line-derived Neurotropic Factor in astrocytes. Gingko increases protein synthesis in the brain and restores cell membrane fluidity. It is effective against the slowing of the metabolism, thickening of the blood, damage to blood vessels, decreased brain activity, oxygen deprived tissues. Ginkgo improves irrigation of tissues, aids lymphatic system, and prevents edema. The bioflavonoids in Ginkgo improve the absorption of vitamin C and since it improves the delivery system all cells receive better nutrition, cleansing and oxygen. Ginkgo promotes the work of the adrenal glands by helping cell receptors absorb adrenal hormones. Ginkgo increases both the number and sensitivity of epinephrine and norepinephrine (Alpha2 adrenoreceptors) receptors; resulting in increased negative feedback inhibition of noradrenaline release and decreased excess noradrenaline. The fatty

acid Arachidonic acid, is one of the lipids that forms cell membranes. If this fatty acid is attacked by free radicals, new chemical compounds result, including leukotrienes, prostaglandins, and thromboxanes, which promote inflammation that can damage and age healthy cells. Ginkgo stops the cascade of arachidonic acid derivatives without causing harmful side effects.

GOAT'S RUE—(*Galega officinalis*) French Lilac is used in insulin-sensitizing, capable primarily of lowering blood sugar and insulin and aiding diabetes, restores cortisol receptor sensitivity, optimizes lipid profile, lowers body fat, maintains levels of growth hormone, stimulates immunity, extends lifespan, retards AGEs and crosslinking. Goat's rue is one of the most potent herbs known to increase breast milk and stimulate the development of mammary tissue

GOLDENSEAL—Goldenseal too has a long traditional use in North America as an immune system stimulant, and antibiotic for people suffering from seasonal illness, chronic and life-threatening infections. Science suggests that this herb also stimulates macrophage production, and one of its constituents berberine is directly antibiotic to protozoans and pathogenic anaerobes.

GOTU KOLA—In India it is known as the most spiritual of all herbs and is said to develop the crown chakra. Anti-spasmodic, nervine, for fatigue and depression, calms and clarifies the mind, tonic, improves circulation and nerve health, balances brain hemispheres, improves memory and intelligence. Daniel Mowrey in *"Herbal Tonic Therapies,"* says that this improvement in learning and memory correlated with a decrease in the brain neurotransmitters norepinephrine, serotonin and dopamine. Stimulates repair of skin, hair nails and connective tissue, promotes collagen and bone density. Aids liver function and purifies blood. Calamus is often used with Gotu kola to improve metal focus.

GRAPESEED EXTRACT—A nontoxic antiseptic and antibacterial immune system aid will help clear up pathogens so the immune system can concentrate on transmutation. It is ten times more effective than Chlorine Bleach, Silver Oxide and Iodine. Internally it can be used for digestive upset, gastrointestinal disorders, diarrhea, food poisoning, parasites candida yeast infections, oral infections, colds and flu, sore throats, strep throat, mouthwash, sinusitis and more! Externally grapefruit seed extract works well for acne, nail fungus, athletes foot, cold sores, warts, cuts, scrapes, wounds and infections, rashes, head lice, dandruff, chickenpox etc… Powdered extract can be bought from beyondacenturyonline.com and in liquid form from pureliquidgold.com

GRAVIOLA—One of the best herbs to take during kundalini activation might be the leaves of graviola or soursop. Its antimutagenic, anticancerous properties guard against free radical damage. The increased free radical load of metamorphosis can increase the danger of getting cancer, especially of the digestive system, because it gets so disrupted. Graviola also has strong antipathogenic properties which support the immune system by reducing parasites and fungi. It is a nervine, antispasmodic, anticonvulsant and antidepressant as well. Use with probiotics and digestive enzymes if taking graviola in therapeutic dose for more that 30 days, as its

antibacterial properties may reduce healthy intestinal bacteria. See rain-tree.com and Leslie Taylor's fabulous work.

HAWTHORN—Strengthens heart, helps reduce blood pressure, dilates coronary blood vessels, reduces hypertension and stabilizes heart rhythm. It increases enzyme action and improves oxygen utilization in the heart. Hawthorn berry raises metabolism and increases thermogenesis. It helps to prevent atherosclerosis and improves conditions such as hypoglycemia, low blood pressure, kidney trouble and arthritis. Motherwort is another heart tonic that calms and supports the heart and nerves.

HEMP SEED—Hemp seed contain all the essential amino acids and essential fatty acids and is the most complete easily digested protein found in nature. Shelled hempseed is packed with 33 % pure digestible protein and is rich in iron as well as omega-3 and Omega 6. Hemp also contains three times the vitamin E contained in flax. Nearly three quarters of body solids are proteins built from amino acid sub units. The best way to insure the body has enough amino acid material to make the globulin proteins is to eat foods high in globulin proteins…Globulin is the third most abundant protein in your body. Since hemp seed protein is 65% globulin edistin, and also includes quantities of albumin, its protein is readily available in a form quite similar to that found in blood plasma. Eating hemp seeds will insure the immune system has the reservoir of immunoglobulin resources needed to make disease destroying antibodies. Hemp seed is used for fertility, strength, digestive and urinary difficulties. **Cannabidiol (CBD)** is a non-psychoactive cannabinoid of Marijuana/Hemp is effective in treating spasms associated with movement disorders such as epilepsy, Huntington's Disease, muscular dystrophy and multiple sclerosis; as well as improving inflammatory disorders and immunity.

HIMALAYAN PINE POLLEN (not bee pollen)—This is organic, pure pollen harvested from pristine, chemical free pine trees at 12,000 feet in the virgin Himalayan mountains. This pollen is considered to have the highest chi of all herbs, helps boost the body's oxygen capacity, increase energy and endurance, and maintain healthy cholesterol levels, also helps strengthen immunity and deliver extraordinary antioxidant protection to support the body's anti-aging systems.

HORSETAIL—(See Silicon section).

KAVA KAVA—Kava has been used traditionally as a anti-convulsant, for anxiety, sedative, muscle relaxant, stress, restlessness, nervousness and insomnia, but does not impair mental function or cause sedation. In the brain, kavalactones facilitate GABA transmission and bind to sodium and calcium channels, prolonging inactivation. Slow-wave activity on the EEG is increased. Kava has been shown to have a slight anti-fungal activity and it helps protect the nerves from damage due to ischemia. Animal studies have found only weak antiseizure effects, however, and they have not been tested against seizures in humans. Because it is a neural inhibitor it is best not to take Kava during the down-cycles and especially during the exhaustion phase, however it might be helpful to tone down hyperactivity and protect nerves during the up-cycles of kundalini.

KELP—Seaweeds such as kelp and dulse are a rich source of vitamins A, B, C and contains 50 minerals including a large amount of iodine. It improves digestion by stimulating the digestive secretions in the stomach and pancreas. Kelp nourishes the glandular system including the pituitary thus affecting the entire body. Thyroid function is improved by the iodine supplied in kelp and this increases metabolism. Kelp increases oxygen consumption in the heart muscle, lower blood pressure and increase stamina and fat burning during workouts. Kelp reduces cholesterol by increasing the elimination of bile acids and bile salts. Brown kelp binds with radioactive elements and heavy metals in the digestive tract rendering them harmless or unabsorbable. Seaweeds help reduce the impact on the body from environmental poisons thereby lowering our potential risk for cancer. Kelp helps remove plaque from the arteries, gall bladder and kidneys by removing the heavy metals which bind the plaque together. It cleanses and strengthens the entire body improving energy levels, overcomes fatigue, suppresses appetite and is antibiotic. Take 1 tablespoon or 6 tablets daily. 1 teaspoon of kelp contains approximately one thousand times more calcium than a glass of milk.

LICORICE—The licorice plant (Glycyrrhiza glabra) aids adrenals, digestion, detoxification, normalizes hormones, anti-inflammatory, protects liver, regulates immunity, anti-viral. Licorice may reduce immune hyper-activation caused by the shock to the nervous system during kundalini awakening. Recent studies have found licorice has remarkable rejuvenating effects on the cells of the digestive system, liver and to treat the gastrointestinal and urinary tracts with its soothing and coating action. Licorice root is anticancer, antiarthritic, antitoxic, anti-inflammatory, antibiotic, and of coarse antioxidant.

MACA—Maca's traditional use in Andean culture is to energize, revitalize and regulate: to increase physical strength, regulate menstruation, lessen menopause symptoms and help with insomnia. Recommended for malnutrition, convalescence, memory loss, fatigue, and mental weakness and as an aphrodisiac and aid to fertility. Maca is nutritious, believed to provide precursors that regulate the hypothalamus and pituitary glands controlling the release of sex hormones, pancreatic enzymes and adrenal gland hormones.

MORINGA—(*Moringa Oleifera)* The Miracle Tree has over 90 naturally occurring nutritional compounds and is the most nutritious plant so far discovered. Except for the bark, which can be toxic, all parts of the tree are edible. The dried-powdered leaves of Moringa Oleifera provide 7x the vitamin C of oranges, 4x the calcium of milk, 4x the vitamin A of carrots, 3x the iron of spinach, 3x the potassium of bananas, and 2x the protein of yogurt. Moringa is considered to have the highest protein ratio of any plant so far identified; the cake left after oil extraction contains 58.9% crude protein. When Moringa seeds are crushed and added to dirty, bacteria laden water, they purify the water. Moringa seed oil won't spoil or turn rancid and is used in cooking and cosmetics; it is also used as a preservative. Moringa oliefera Seed Oil Seeds yield 38–40% of a non-drying oil, known as Ben Oil, contains 65.7% oleic acids among the fatty acids. Due to its high quantities of

Oleic Acids (Mono-Unsaturated Fatty Acid) is good for sautéing and deep frying. Moringa Oil has a natural antioxidant that many consider to be the source of its remarkable oxidative stability. Oil is clear, sweet and odorless to mild nutty flavor, never becoming rancid; consequently it is edible and useful in the manufacture of perfumes and hairdressings. Omega-3, along with Omega-6 and Omega-9, are among the many nutrients abundantly found in Moringa.
Purchase Moringa: http://marikosfamilyfarm.com/orderonline.htm
Moringa, Nature's Medicine Cabinet, Sanford Holst, Sierra Sunrise Books

MUIRA PUAMA—Muira Puama is a Small Amazonian tree or bush, also known as "Potency Wood". The root is used by Indigenous Amazonian population as an aphrodisiac and performance enhancement. The root and bark of Muira puama is a CNS tonic, antidepressant, anti-fatigue, aphrodisiac, nervine, adaptogen, blood pressure regulator, cardiotonic, gastrotonic, tonic for kidneys and adrenal.

NEEM—Neem might be an all round panacea for kundalini/stress induced conditions. The leaves, fruits, flowers and stem bark extracts from the Siamese neem tree all have free radical scavenging, antioxidant properties. Neem is anti-inflammatory, antiviral, anti-worm, antifungal and used as an insecticide. It is useful in tiredness, cough, fever, loss of appetite, for cleaning the blood and arthritis. It speeds wound healing and is used for vomiting, skin diseases, excessive thirst, dental hygiene, eye disorders, heat-rash, boils, jaundice, leprosy, stomach ulcers, stomach problems and chicken pox. Neem's antidepression/antianxiety effect is attributed to its ability to increase the amount of serotonin in the brain. It has been most helpful in treating a variety of skin problems and diseases including acne, psoriasis, eczema and other persistent conditions.

Neem's antifungial properties help athlete's foot, ringworm, candida and thrush. Since it is antibacterial it may also reduce ammonia production by intestinal bacteria; (but may need to be used in conjunction with probiotics if used long term?) Polysaccharides and limonoids found in neem bark, leaves, and cold pressed seed oil increased immune responses, reduced tumors and cancers without side effects. Studies show that neem leaf and cold pressed neem oil could be of benefit in diabetes mellitus as it lowers blood sugar and reduces insulin requirements and may also be helpful in preventing or delaying the onset of the disease. Not only can neem be used as an insecticide against mosquitoes, but it can also be taken internally against malaria. It has potential in the fight against AIDs and can be used both in antiviral and contraceptive gels, as well as boosting the immune system on all levels without destroying beneficial intestinal bacteria, unlike synthetic antibiotics. The neem tree also can help reverse desertification, erosion and deforestation and provide economic returns. www.bytheplanet.com/Neem/neem.htm
Neem: India's Miraculous Healing Plant by Ellen Norten.
Neem: A Tree for Solving Global Problems by Noel Vietmeyer.

OLIVE LEAF—Reduces feeling of raw and fried nerves, reduces pain, anti-free radical, protects fats in the body, strengthens cell membranes, immunity, anti-fungal. From my experience with olive leaf I suspect it fortifies and protects the

myelin sheathes of the nerves for it certainly reduces nerve pain and shattered nerves. Olive Leaf alleviates Fibromyalgia, Chronic Fatigue Syndrome (chronic) Sinusitis. Olive leaf extracts have been used effectively in several ways: as an antiseptic, astringent and tranquilizer, fever, antiviral, anti-inflammatory, anti-microbial, immune tonic, an antioxidant for heart health, and a safe antibiotic.

Olive contains polyphenols, or phenolic antioxidants which are structurally distinct from the vitamins, carotenoids, bioflavonoids, proanthocyanidins, and antioxidants found in other fruits and vegetables. Studies have shown that that olive polyphenols exhibit anti-inflammatory activity, improve immune function, prevent oxidative damage to DNA, reduce oxidation, and protect the cardiovascular system by reducing platelet aggregation, increases levels of HDL while inhibits the oxidation of LDL Cholesterol. Olive Leaf lowers blood pressure, increases blood flow to the heart by dilating coronary blood vessels, and it also lowers blood pressure. The olive leaf also contains bioflavonoids (natural Vitamin C helpers) for maintenance of capillary walls.

PASSIONFLOWER LEAF—Nervine, tranquilizer, cardiotonic, disinfectant. Antidepressant, antispasmodic, sedative, CNS-depressant. For insomnia, headaches, migraines and general pain. Stomach problems, cramps and mood disorders. **Chrysin** extracted from *Passiflora coerulea* a member of the passion flower family, prevents the conversion of testosterone to estrogen and is an anti-inflammatory.

PICRORHIZA—Kutkins are group of bitter compounds present in the Ayurvedic herb *Picrorhiza kurroa*, which are a reputed remedy for the treatment of liver diseases. Studies have shown that kutkins are more hepatoprotective than silymarin from Milk Thistle. Picrorhiza kurroa is a small perennial herb that grows in hilly parts of India, particularly in the Himalayas between 3000 and 5000 meters. The roots and rhizomes are an established herbal remedy for variety of diseases ranging from indigestion to hepatitis.

PINE BARK AND GRAPE SEED—Antioxidant-free radical protection, immune support. 50 x stronger than vitamin E and vitamin C. Passes the blood brain barrier to protect brain cells. Cardiodepressant, hypotensive, anticonvulsant, antidepressant, anti-spasmodic, nervine, stomachic, vasodilator, antibacterial. Extracts of these can be bought from beyondacenturyonline.com, they are very strong tasting so would be best put in the herb mix for capsulating, or can be chugged if put in with a large amount of other herbs.

PINE NEEDLE SUN TEA—This is one of my favorite drinks, ideal for kundalini awakenings because of the water-soluble proanthocyanidins bioflavonoids. Pine Needle Sun Tea is the most incredible subtle ambrosial drink, which is even taster than champagne. Harvest some fresh green pine needles by cutting off a few branch tips and them pull them apart. Put this in a jar of good water, cover with plastic wrap, place in the sun in the morning and leave all day. You can dilute your sun tea to taste, and put this in the fridge/freezer to chill. The same pine needles can be used for moon tea overnight and then again put more water in for sun tea the

following day. But don't keep them in the same water more than 12 hours and if it is very hot you may have to solarize it for a shorter time or steep it in semishade. If your pine needle tea gets too hot and ferments the carbonic acid will tend to deprive the brain of oxygen.

Pine needle tea is high in vitamins A and C. In fact the fresh green needles have five times the amount of vitamin C found in one lemon. The remedy is effective for working with the smooth muscles that line the arteries and other muscular related diseases such as sclerosis (condition in which soft tissues inside the body become unusually hard). Pine needle tea has good success rates with cancer in the first stage. With pine needle tea you get all the pycnogenol-type nutrients without raising high blood pressure from ingesting pine bark and tree resins. Resin or sap is part of the turgidity and levity force of trees, so when taken into the body it tends to promote these qualities in us. Bark, while have less power for pressurizing fluids than resin, should also be avoided if the kidneys are particularly weak.

PURPLEBLOW MAPLE OIL—Nervonic Acid can enhance neuron "firing" thereby increasing mental focus and is involved in the biosynthesis of myelin and is one of the major fatty acids in brain sphingolipids.* Most supplemental nervonic acid comes from Borage oil (3%) and deepsea fish (0.35%), but the fatty acids of Purpleblow Maple seed oil contain to 5-6 % nervonic acid. Nervonic Acid is a 9 superlong-chain monoenic fatty acid, that is a white solid under ambient temperature. The content of NA in nerve and brain tissue is relatively high and is important in the composition and special physiological functions of cell membranes. NA is essential for the development of the brain and significantly contributes to enhancing the activity of brain nerves and protecting brain nerves from aging. Also due to a high Vitamin E content the oil from purpleblow maple seeds has a higher antioxidant activity than other vegetable oils. *(Sphingolipids are found in neural tissue and play a role in signal transmission and cell recognition, provide mechanical and chemical strength to the semipermeable phospholipid bilayer that constitutes the membranes of all cells and are important mediators in the signaling cascades involved in apoptosis, proliferation, and stress responses.)

RAW PROPOLIS—Raw propolis is reputed to be nature's number one antiseptic. It is gathered from the resins of plants by bees to disinfect their hives. Raw propolis can contain over 500 bioflavonoids. Freeze it then grind it in a coffee grinder while frozen, mix it in with your herbs or put separately into capsules. Propolis offers antiseptic, antibiotic, anti-fungal, anti-candida and even antiviral properties, helping to reduce the burden on the immune system. Unlike pharmaceutical antibiotics, propolis kills only bad bacteria, and maintains good bacteria. Propolis has been shown to reduce blood pressure, produce a sedative effect, and maintain serum glucose and strengthens blood vessels. It is an antihistamine, anaesthetic, helps eliminate pain, detoxifies, is a powerful anti-inflammatory and promotes healing. It helps to strengthen the skin and prevents free radical damage to cells. It can be bought raw from www.texasdrone.com

*Beware that we now have to make sure we do not use honey, bee pollen or propolis that is collected within 8 miles of genetically modified crops.

RHODIOLA ROSA—*Rhodiola rosa* is an "anti-stress" adaptogen that increases the body's resistance to any kind of stress by regulating hormonal response and lowering cortisol. Enhances the uptake of serotonin precursors into the brain. Improves endurance, helps maintain energy levels, strengthens memory…and helps maintain high levels of creatine phosphate in the mitochondria, lowers blood viscosity, increases oxygen saturation, increases energy and endurance, maintains optimum serotonin and dopamine levels, anti-depressant, improves memory, detoxifies liver. Used to revive libido, sexual function and to normalize the prostrate. Our modern stress load and PTSD can permanently raise cortisol levles and weaken the immune system. Rhodiola Rosa root powder can significantly rectify this.

RELORA—Relora is a new, non-sedative herbal stress relief formula derived from Magnolia officinalis and Phellodenron amurense extracts. It blocks cortisol, improves mood, reduces nervous tension and is non-habit forming.

RICE BRAN—Rice bran is gluten free and "fills the gaps" of many essential vitamins, minerals and antioxidants missing in todays modern diet. Rice bran contains Vitamin E Tocotrienols, Vitamin B Complex, Lipoic Acid, Essential Fatty Acids, Essential Amino Acids. The Gamma Oryzanol found in rice bran has a positive effect on blood lipids and metabolism; it is a natural replacement for anabolic steroids that helps build muscle. Also found in rice bran is CoEnzyme Q10 and phytosterols, 12%-13% oil, various antioxidants, and ferulic acid. Ferulic acid enhances the activity of antioxidant enzymes, making it an important anti-aging supplement. Rice bran also contains a high level of dietary fibers (**beta-glucan**, pectin, and gum). Rice Bran (which includes the germ) accounts for 60% of the nutrients found in each rice kernel. Mix rice bran with wheatgerm 50:50 and keep in a jar in the fridge as a sprinkle for everything—the combo is very tastier than either alone.

ROSEMARY—Antioxidant, boosts glutathione levels, nervine, memory, anti-inflammatory. Pure rosemary essential oil is good to rub into areas of congestion, numbness and nerve pain. During awakening rub into neck and spine to help protect tissue from free radicals and restore feeling and flow.

SCHIZANDRA BERRIES—Adaptogenic tonic, protects liver from free radicals, promotes normal liver function, regulates cardiovascular system, improves insomnia, dizziness, palpitations and headaches, improves memory.

ST. JOHN'S WORT—St. John's wort is effective against depression, and has fewer side effects than drugs. Hypericin (a glycoside) is thought to be the main active constituent responsible for Hypericum's success in treating depression. Hypericin has been demonstrated to increase theta waves in the brain. Theta waves normally occur during sleep and have been associated with deep meditation, serene pleasure and heightened creativity. In Germany nearly half of depression, anxiety, and sleep disorders are treated St. John's wort. It's a mild MAO inhibitor which preserves serotonin levels and inhibits cortisol release. It may improve perception and clarify thinking processes and is effective against alcoholism, premenstrual

syndrome, seasonal affective disorder (SAD), lessens anxiety, improves memory, reduces pain and inflammation, promotes healing and strengthens the neurology of the spine. Since St. John's wort has antiviral properties, we can speculate that this antiviral mechanism—by affording protection from DNA damage—may contribute to the plant's antidepressant action. Besides being antibacterial and antitumor, St. John's wort is also anti Bird Flu! Scientists from China found that St. John's wort extracts, with high hypericin content, can kill Bird Flu virus (H5N1, H9N2) effectively, and the final killing rate could reach 100%. It can also inhibit some retroviral virus, so St. John's wort may kill or inhibit the growth of human immunodeficiency virus (HIV). Make a massage oil for kundalini pains with St. Johns Wort and Rosemary in olive oil.

SUMA—Another adaptogen known as Brazilian ginseng, for energy, cellular oxygenator, immunity, fortifies hormones and regulates blood sugar. Anabolic, analgesic, anticancerous, anti-inflammatory, antimutagenic, aphrodisiac, estrogenic, nutritive, sedative, steroidal, tonic, enhances memory. Used for fatigue, anemia, diabetes and digestive disorders, muscle-building and endurance.

TULSI—(*The incomparable one*) Indian Holy Basil leaves are regarded as an 'adaptogen' or anti-stress agent, blood sugar regulator, antioxidant and anti-inflammatory. The leaves strengthen the stomach, are used for fevers and induce copious perspiration. It is used for headaches, as a nerve tonic, to sharpen memory, for colds, promotes the removal of the catarrhal matter and phlegm from the bronchial tube.

TURMERIC—Spices and herbs contain phenolic substances which have potent antioxidant and chemopreventive properties. In particular, curcumin, a powerful antioxidant derived from the curry spice turmeric, is a strong inducer of the heat shock response. The extra heat shock proteins will help protect the protein structures from oxidative damage. Turmeric might be the best inflammation-fighting compound to take during an awakening. It will aid digestion and prevent cancer also.

WILD YAM—Wild yam is used for hormonal support, spinal irritation, spleen, digestion, blood cleansing, is anti-inflammatory and anti-arthritic. Wild yam roots do not contain and are not converted into progesterone or DHEA in the body. It is a pharmaceutical process that generates steroidal compounds from wild yam.

VALERIAN—Valerian Root is one of the best nerve tonics. It reduces stress, muscle tension and hypertension while improving coordination, concentration and quality of sleep. Cardiovascular tonic herbs such as ginseng, valerian root, hawthorn berry and motherwort are advised during kundalini to stabilize and strengthen heart action and improve circulation.

WHEATGRASS JUICE—Wheatgrass is 70% chlorophyll, One ounce of wheatgrass juice has the vitamin and mineral equivalent of 2.2 pounds of fresh vegetables; although therapeutic doses can be up to 4 ounces. It contains most of the vitamins and minerals needed for human maintenance including 17 amino

acids, is full of essential fatty acids. Wheatgrass retains 92 of the 102 minerals found in the soil, including calcium, phosphorus, iron magnesium and potassium. Wheatgrass has more vitamin C than oranges and twice the vitamin A as carrots. It is exceptionally rich in vitamins E, K, and B-complex; is high vitamin K. Many of the benefits of wheatgrass juice stem from the fact that it is a living food, about 30 "live" enzymes that help to dissolve tumors. Wheatgrass alkalinizes the blood, cures anemia and blood sugar problems, protects RNA and DNA from mutation and combats free radicals. Wheatgrass helps depression, purifies the liver, disinfects, cleanses and improves digestion, immunizes against many dietary carcinogens, counteracts acids and removes toxic metals from the cells, nourishes the liver and kidneys and restores vitality. It also contains Laetrile (B17), the oxygenating properties of which fights cancer. To be effective wheatgrass juice has to be drunk immediately after juicing. Since it provides maximum nutrition for detoxification and rebuilding you might consider growing wheatgrass. 4 oz per day is around 1 tray, so you need to have 7 trays circulating. Nothing heals faster with less expense than wheatgrass. www.costplusjuicers.com

WOLFBERRY—Lycium fruit, otherwise known as Goji berry are a chi tonic, anti-aging, 48% increase in SOD, 12% increase in hemoglobin, 500 times more Vitamin C than oranges, highest antioxidant status, 21 trace minerals and 8 essential amino acids, increases white blood cell count, strengthens bones, stimulates tissue development, improves vision, nourishes liver, lowers blood pressure, reduces blood sugar, inhibits gene mutation, anti-inflammatory, anti-depressant. Inexpensive purchase at: www.lucsherb.com/

YERBA MATE—For use during an extended down-cycle as a stimulant and nervine to increase mental performance. Good for nerve pain, fatigue and depression as an overall tonic and digestive aid. Because of its caffeine content its best not to use it much during the influx, shock or Die-off stages however. That is "when going down" fall well, don't try and prop yourself up artificially even with "healthy" stimulants like Yerba mate.

YOHIMBE—Yohimbine is the active ingredient of the South African Yohimbe plant. It is a selective blocker of alpha 2 adrenergic receptors, and inhibits breakdown of dopamine and norepinephrine. Yohimbine's actions include increasing the level of the neurotransmitter norepinephrine by up to 68%, (which has been described as the brain's sex chemical). Norepinephrine (NE), the body's primary endogenous thermogenic (fat burning) hormone. Yohimbine has also been shown to increase the availability of the neurotransmitter, acetylcholine. Reduces fatigue, appetite suppressant, vasodilator - increases blood flow to fat-tissue and extremities, increases sex drive, antioxidant, decrease fat synthesis in the body by increasing fatty acid mobilization. Would be useful to prevent weight gain, lethargy, depression etc… during the down cycles, but might be too stimulating for use during up cycles. *When buying looking for the % of active ingredient "Yohimbine;" if it doesn't mention this don't by it, for the product probably doesn't have any active ingredient in it.

YUCCA ROOT—The Steroidal saponins in Yucca root could be considered as an intestinal soap or cleanser and a wetting agent for intestinal flora. Yucca helps form a protective coating on the intestinal walls. Yucca helps eliminate pathogenic organisms including viruses and encourages growth of friendly bacteria and eliminates intestinal mucus and the wastes on the intestinal lining. It has a high content of calcium, potassium, phosphorus, iron, manganese and copper. Saponins have long been known to have strong antibiotic activity and stimulate the immune system and reduce pains of all kinds.

HOW TO TAKE HERBS

Herb Shots In A Glass:

Mix herbs together and store in the fridge. Many of the herbs (unless they are very bitter pine bark or grape seed or hot like cayenne) can be taken in a shot glass of water or apple juice once or twice a day. They can also be mixed into fresh squeezed orange juice along with 1 Tablespoon Fresh-ground flaxseed. Keep flaxseed airtight in the fridge also and grind about a weeks supply at once. The flaxseed softens the pungent taste of the herbs. Try to get tree-ripened fruit if possible for juice for they are less acidic in reaction. You can also add some ground up papaya tablets to the herb mix to increase absorption.

Capsulated:

Kelp and Alpha Lipoic Acid will need to be capsulated along with your herbal mix because they are not very palatable. Note very bitter herbs like yarrow, Rhodiola, Jiaogulan, Pine bark, Grape seed, Gentian and most extracts would be best put in a mix to be capsulated in "large" 000 capsules from www.iherb.com and www.beyondacenturyonline.com. Neem also is rather bitter although I still manage to chug it down with juice when I add neem powder to my herb mix. For capsules remember to buy herbs in powdered form if they cannot be ground in a coffee grinder. Check out the locally grown wild herbs and someone who knows about the herbs in your area. For kundalini you are looking for the adaptogens, antioxidant, tonic herbs and herbs for the liver and nerves. Wildcraft what you can and dry them and then grind them in a coffee grinder. Sieve the powder and capsulate them yourself. Extract powders of many of these herbs can be obtained from beyond-a-century. Many grocery stores have extensive bulk herb sections. Store herb mixtures in the fridge.

http://richardalanmiller.com/ —I cannot recommend the herbalist, metaphysician Richard Alan Miller's books highly enough. His book on aphrodisiacs could be used as a herbal handbook for alchemists, artists and visionaries: "*The Magical and Ritual Use of Aphrodisiacs.*" Also for kundi-actives would benefit from his book "*The Modern Alchemist"* and also one that is partly on the web called *"ESP Induction Through Forms of Self-Hypnosis."*

www.mountainroseherbs.com/

www.herbalcom.com

www.swsbm.com/Maps/Maps.html —Herb distribution maps for the US

MORE SUPPLEMENT SUGGESTIONS

BRAIN FUNCTION

Acetyl-l-carnitine, Ashwagandha, Bacopa, B complex, Vitamin C, Carnitine, Carnosine, Choline, DMAE, Fish oil, Fo-Ti, Flax oil, Hyperzine, Idebenone, Inositol, Ginkgo biloba, Ginseng, Glutamine, Gotu Kola, Grapeseed, Lethicin, Vitamin B12 (Methylcobalamin), Mucuna pruriens, Oat Straw, Pantothenic acid, Pine bark, Piracetam, Phenylalanine, Reishi, Rhodiola rosa, Rosemary, Taurine, Trimethylglycine (Betaine), Tyrosine, and Vinpocetine.

CONTRACTION PHASE

Herbs for calming nerves, insomnia, neuralgia, pain, shock, Die-off and depression of the down cycles, for tea, baths or capsulation: Borage, Burdock leaves, Chamomile, Catnip, Gorse flowers, California poppy flowers, Comfrey, Cowslip, Evening primrose, Ginger root, Goldenrod, Hop flowers, Juniper berries, Kava kava, Lemon balm, Linden flowers, Lobelia. Peppermint, Magnolia bark, Meadowsweet, Motherwort, Mullein, Nettle, Oatstraw, Passionflower, Red clover flowers, Rosemary leaf, Skullcap, St John's Wort, Valerian, Yarrow, Yellow dock. White willow can be used as an anti-inflammatory for nerve pain and headaches. Wood Betony is good for all head, neck and face pain including headaches. *For migraine headaches:* Fenugreek, Thyme and Feverfew. *Fever:* Dandelion, Elder flowers, Parsley seeds, Nettle, Sage, Yarrow.

SPASM (CONVULSION)

Black cohosh, Black haw, Blue cohosh root, Bupleurum, Castrodia Tuber, Chaste berry fruit, Dong quai, Elderflower, Feverfew, Hops, Kava kava, Lobelia, Motherwort, Peppermint, Skullcap, Rehmannia, Valerian, Wild Yam. B6, Magnesium citrate.

VERTIGO AND NAUSEA

Basil, Butcher's broom, Cayenne, Chaparral, Chickweed, Cloves, Cramp bark, Dandelion root, Fennel, Ginger, Gingko, Hawthorne Berry, Lavender, Lemon balm, Licorice, Mullein, Peppermint, Skullcap, Wild Yam, Magnesium.

TINNITUS (RINGING IN THE EARS)

Dong Quai, Feverfew, Ginkgo, Gotu Kola, Ginger root, Ginseng, Hawthorne Berry, Horsetail, Kudzu flower, Neem Leaf, Propolis. Don't forget to add the Ginger root because this helps with Vertigo (dizziness) aspect of tinnitus. *Inflammation* can have a significant effect on tinnitus: Goldenseal, Echinacea, Garlic, Peppermint, Calendula, Plantain and Turmeric. Flax oil/fish oil along with Vinpocetine in a small dosage, acting as a cerebral vasodilator, may be effective in reducing tinnitus. Those with tinnitus may have low blood zinc levels; chelated zinc is effective in reducing tinnitus. Other vitamins & minerals include: Magnesium, Potassium, Manganese, Vitamins A & C, Quercetin and other Bioflavonoids, vitamin B5 (pantothenic acid) B12.

Ear pain from an ear infection: Use a herbal ear drop, including St. John's wort, garlic, calendula, and mullein flower.

HIGH BLOOD PRESSURE

Drink the full water requirement (2 times body weight (lbs) in ounces per day) and take a few hypertension herbs like Ashwagandha, Basil, Black cohosh, Calamus, Cayenne, Celery seeds, Garlic, Ginger, Gotu kola, Hawthorne berry, Kelp, Maitake Mushroom, Mistletoe, Neem, PassionFlower, Papaya enzymes, Skullcap and Valerian. L-Theanine in green tea is also used for regulating blood pressure and may reduce glutamate induced excitotoxic damage in the brain. For high blood pressure consider taking the anticortisol measures in the Exhaustion Protocol and relaxation practices in the Kundalini Skills List. Regular exercise will lower blood pressure, resting heart rate and increase lung capacity. Magnesium citrate.

ANXIETY AND HYPERTENSION

Alfalfa leaf, Ashwagandha, Catnip, Cardamom seeds, Chamomile flowers, Cinnamon, Dong quai, Ginger root, Gotu Kola, Hawthorn, Hop flowers, Ginkgo leaf, Licorice Root, Magnolia bark, Meadowsweet, Nettle leaf, Olive leaf, Passion flower, Raspberry leaf, Skullcap, Tulsi-holy basil, Valerian leaf, Violet leaves, Wild Oat leaf, White Willow. You put these into capsules or make a tea formula that you can take throughout the day to calm the nervous system, open the blood vessels and reduce hypertension. Use any or all of the following to make up a tea... you can brew it at home and take to work in a thermos...

ENERGIZERS

Wheatgrass juice gives the most immediate pick-me-up. Spirulina (bluegreen algae) gives substantial energy and is a complete food. Kelp provides the iodine to fire up the thyroid and metabolism. Green tea or yerba mate is good for energy also and it is not over stimulating like coffee.

Nori rolls are perhaps the most energizing high enzyme food there is: to make a hummus grind up slightly sprouted "hulled" Sunflower or Buckwheat seeds, add Tahini, Garlic, miso, Tom Yum Thai paste, Lemon juice and mix this into a paste. Then put several tablespoons of this onto a Nori sheet and cover with Tomatoes, Avocado, Cilantro and Cucumber, then roll up.

Raw Soup: Blend beets, Oranges and spinach in blender till smooth, add buckwheat groat-sprouts, parsley or cilantro, nonsweetened dried coconut and garnish with avocado mashed with lemon juice…sprinkle with fresh ground black pepper.

ADRENALS

Chronic inflammation and infection exhausts the adrenal glands. To build up your adrenals to recover from fatigue take 6-8 g per day of buffered Vitamin C/ Vitamin C 'Ester' with plenty of water between meals. This high dosage will reduce symptoms when withdrawing from any addictive substance whether it be food and food allergens, drugs, coffee or nicotine. The adrenals are the site of the highest

concentration of vitamin C in the body. Pantothenic acid or B5, vitamin B1 and vitamin B6 work synergistically to nourish and strengthen the adrenals. Herbs to rebuild the adrenals are: Suma, Ginseng, Licorice, Chaparral, Ma huang and Ashwagandha, Nopal cactus, Fo Ti Tieng, Tibetan ginseng (Rhodiola crenulata), Arctic root (Rhodiola rosea), Siberian maral root (Leuzea carthamoides), Cordyceps, Magnolia officinalis.

ANTI-INFLAMMATORY

Angelica, Avocado leaves, Basil, Black haw, Bone set, Chamomile, Chaparral, Echinacea, Fenugreek, Feverfew, Flaxseed, Gentian, Ginger, Goldenseal, Grapeseed extract, Green tea, Horsetail, Juniper, Larch, Licorice, Oregano, Marshmallow, Meadowsweet, Mistletoe, Nettle, Skullcap, St John's Wort, Tumeric. Silica gel and Biosil. Bioflavonoids are anti-inflammatory, the richest source of bioflavonoids is the inner skin of citrus fruits. Buckwheat greens, Elder, Hawthorn, Knotweeds, Rosehips, Hagrose, Shepherd's purse, Sea buckthorn, Toadflax.

IMMUNITY

Astragalus, Echinacea, Garlic, Aloe, Shitake mushroom, Sarsaparilla, Suma, Barberry, Basil, Boneset, Chamomile, Ginger, Goldenseal, Horsetail, Licorice, Marshmallow, Mistletoe, St John's Wort, Ligustrum, Chaparral, Pau D Arco.
Herbs that help neutralize toxins: Echinacea, Elecampane, Garlic, Fennel, Neem, Plantain, Silica gel, Biosil. Vitamin D, Fulvic acid.

Transposons, or "jumping genes," are sequences of DNA that can move around to different positions within the genome of a single cell, a process called transposition. In the process, they can cause mutations and change the amount of DNA in the genome. Transposons are also a widely used tool for mutagenesis of organisms and this is of particular importance when considering the biosafety of DNA plasmids and conjugative DNA transposons of genetically modified organisms (GMOs). Perhaps antiviral herbs such as Echinacea, St. John's wort and Elder flower will also afford us some protection from transposon mutation of our DNA from genetically modified foods as well, for that which is antiviral is also antimutagenic. Elder flower blunts the sharp protrusions on the crystalline coat of a virus, so that it cannot puncture cell walls. A good book on setting up a good immune system is *Immunotics* by Robert Rountree and Carol Colman

RADIATION PROTECTION

Aloe Vera, Ashitaba, Ashwagandha, Bladderwrack, Bromelain, Cilantro, Chamomile, Chaparral, Echinacea, Garlic, Ginkgo, Gotu Kola, Glabra extract, Graviola, Green tea, Jojoba, Juniper Berries, Noni Fruit & Seed, Licorice root, Lignum vitae, Marshmallow, Marigold, Milk Thistle, Mustard greens, Neem, Nettle, Olive leaf, Parsley, Plantain, Red Clover, Spruce, Tumeric, Uva Ursi, Wild Lettuce, Wild Yam, Yucca Root. Chlorophyll reduces tissue damage by radiation. Potassium iodide to protect the thyroid gland against accumulation of radioactive iodine.

Goji berry and bioflavonoids especially in the skins of berries and other fruit and other phytochemicals: flavonoids, allyl sulfides, carotenoids, flavonoids, polyphenols, lycopene, isoflavones, saponins, capsaicin, anthocyanin, resveratrol and quercetin. Calcium Montmorillonite Clay, Zeolite, Kelp, Bluegreen Algae. Potassium iodide, Humic acid, Miso, Silica rich Bamboo sap, Horsetail and Biosil. Himalayan salt, Rutin, Hyaluronic acid, Glutathione, Raw Propolis.

Other things for soothing the nerves after radiation exposure: Idebenone**,** succinic acid, frankincense, neem, olive leaf, ginkgo, chamomile, rosehips, rosemary, fish oil, blueberries, Oatstraw.

Topical for the skin: Emu oil, Sea Buckthorn oil, Lanolin, Aloe (pure), Calendula, Tamanu oil, Rose seed oil and Magnolia flower oil. Vetivert essential oil (Oil of Tranquility) in India due to its calming properties, antiaging aphrodisiac, nerving, antiseptic, helps form scar tissue, tonic and sedative. Masques made from wheatgrass juice or liquid seaweed mixed with clay powder. Skin spray with Biosil and Fulvic acid spray, or Horsetail infusion.

BLOOD THINNERS

Angelica root, Arnica flower, Anise, Asafoetida, Celery, Chamomile, Fenugreek, Horse chestnut, Licorice root, Lovage root, Parsley, Passionflower, Quassia, Red clover, Rue. The Quercetin found in onion and garlic makes a better blood thinner than aspirin. Herbs thought to contain salicylates (Aspirin): Meadowsweet, Poplar, Willow bark. Herbs that reduce platelet stickiness: Bromelain, Clove, Galangal, Onion, and Turmeric.

SPLEEN

In Chinese medicine herbs are used to strengthen spleen qi, to prevent colitis and intestinal inflammation and enhance the immune system. Angelica sinensis, Ashitaba, Astragalus root, Atractylodes rhizome, Black cohosh, Barberry bark, Bupleurum root, Cardamom, Cat's Claw, Cleavers, Codonopsis, Cinnamon bark, Quince fruit, Citrus peel, Costus Root (saw-wort), Dandelion root, Dolichos seed, Dong Quai, Echinacea, Fennel seeds, Galangal rhizome (Siamese ginger), Ginger root, Ginseng, Horseradish root, Japanese apricot (Prunus mume), Jujube fruit, Licorice root, Magnolia bark, Milk thistle, Nettle, Neem, Parsley, Pau D'Arco, Peony, Poriae cocos, Prickly Ash fruit, Red beet root, Rosehips, Wild yam, Yellow dock root.

ANTIPATHOGEN

Antibacterial herbs: Cayenne, Elecampane, Frankincense, Garlic, Grapefruit seed, Olive leaf, Lobelia, Moringa, Mullein, Neem, Thyme.

Urinary antiseptic herbs: Boldo, Cleavers, Cornsilk, Horsetail, Uva ursi, Buchu, Juniper berries, Kava kava, Saw palmetto, Shepherd's purse, Goldenrod, Pipsissewa. Barley water, cranberry.

Parasites: Wormwood, Black walnut inner hulls, Cloves, Pomegranate root bark, Garlic, Neem, Holarrhena antidysenterica bark, Papaya seeds, Pumpkin seeds, Onions, Papaya, Pineapple, Figs, Pomegranate seeds,

I meet a woman who said she got rid of her cancer using Hulda Clark's zapper. If we are generally depolarized due to removal from nature and generations of cooked-depleted food, then blood zapping might make some sense, especially if we are suffering from parasites, infectious diseases or cancer. I recently read that low voltage exposure of blood gets rid of AIDs and Hepatitis.
www.healthysigns.com/products/order.htm —Hulda Clark's Zapper

NAIL FUNGI—For antifungal use iodine tincture. It pays to try and clean up all types of infections in the body to reduce the work of the immune system. Nail fungi growth corresponds to the level of sugar and carbohydrate in the diet.

SKIN

Exfoliant—ground rolled oats; chemical exfoliant—papaya juice. For a facelift and cleansing face pack and lymphatic gland pack use wheat grass juice mixed with bentonite clay and/or spirulina. Crude lanolin is the most effective skin emollient treatment out there; great for chapped feet and also makes the most effective lip balm, but it has to be the sticky yellowish crude version. Horsetail infusion sprays and Buckwheat goop are also fantastic to preserve the skin from collagen breakdown during kundalini. Other outstanding skin topical agents are Olive Leaf extract, liquid lecithin, jojoba oil, Moringa oil, organic rosehip (rosa rubiginosa) seed oil, and Aloe Vera has the ability to accelerate cell growth in the skin. Plus extracts of hops, chamomile, nettle, ginkgo and gotu kola.

TEETH

There is a danger of loss dental health during metamorphosis, because the overworked immune system fails to look after the mouth. If it is your first awakening your immune system might be compromised by excessive sympathetic (HPA axis) activation. In which case you will have to take some extra measures to protect the integrity of your teeth and tooth enamel.

You can use colloidal silica gel to rub around the teeth with your tongue several times throughout the day. This cleans off the bacteria, because the positive bacteria are clumped together and removed by the negative charged silicon. Bentonite clay works in a similar fashion. Magnolia bark is a powerful oral antibiotic and cures bad breath. Edgar Cayce's *Glyco-Thymoline* mouthwash is fantastic, you can use it to brush your teeth also.

TOOTHPASTE RECIPE: Bentonite clay, Colloidal Silica gel, Himalayan Salt, Teatree Oil and water to form a paste. This is the most effective toothpaste…it will remove the positively charged bacteria from your whole mouth as well as more perfectly cleaning the teeth.

DIGESTION

Irritable bowel syndrome and leaky gut syndrome is most often caused by or associated with candida and is part of the degenerative disease complex. Long breathing-walks with deep abdominal breathing and meditative focus on the brainstem throughout ones awakening should help prevent gut problems further down the line. Cleansing the intestinal tract and improving assimilation and elimination, is the foundations of all healing.

DEEP CLEANSING AND ENZYMES—Here is the crux of the issue for regeneration—we ARE what we absorb and we cannot assimilate or eliminate if the plumbing is clogged. The capacity to make enzymes and hydrochloric acid diminishes with age, resulting in inferior digestion, absorption and elimination and producing a variety of chronic disorders. In these cleansing formulas, the mucopolysaccharide rich fibers stick the enzymes onto the sides of the GI tract in order to dissolve and remove old mucus layer on the walls, and then there is a bulk brushing effect allowing everything to exit. With no harsh laxative or irritating inflammatory herbs. Two formulas, one for regular use and one for intermittent cleansing of mucoid plaque.

1. Formula One—for everyday use to cleanse Intestinal Plaque: Mix the following powders and capsulate: Glucomannan, Yucca root, Green papaya powder and Bromelain. Take one capsule with a large glass of water an hour prior to each meal.

2. Formula Two—for periodic use during deep cleansing, fasting and acute illness. Mix Freeze dried okra, Pepsin and Aloe gel powders and take one capsule with a large glass of water an hour prior to each meal.

PEPSIN—Pepsin is a digestive protease enzyme released by the chief cells in the stomach that work to degrade food proteins into peptides. The enzyme Pepsin needs a strong acidic environment such as stomach acid (pH of 3) in order to breakdown protein. Pepsin can be broken down by fruit acids, so you shouldn't mix fruit and proteins together, for that reason. It will not cleave at amino bonds containing valine, alanine or glycine. Peptides may be further digested by other proteases (in the duodenum) and eventually absorbed by the body. Pepsin is stored as pepsinogen and is only released when needed; it does not digest the body's own proteins in the stomach's lining. (NB: Aloe gel inhibits the activity of pepsin until in the presence of protein, apparently this is helpful to avoid ulcers.) Super Enzyme from herbalcom.com

Okra powder can be purchased from Asian or Indian markets. There is freeze dried okra powder on the market if you can find it. Use this formula in combo with plenty of water drinking and the following intestinal broom formula…

NIGHTTIME CLEANSER—Bentonite, Zeolite and/or Montmorillite clay powder, along with Psyllium husk powder, plus food grade Diatomaceous earth, Magnesium citrate and Apple pectin powder (about equal parts of each)—mix together and take one heap teaspoon in juice, per evening. Or put into 000 capsules and take 3 with a pint of water 2 hours after your last meal. The clays will ionically

remove the byproducts of free radical decay. It is said that "regular" internal use of clay should be avoided in leaky gut conditions to avoid the assimilation of excess aluminum. However one is more likely to get brain damage from the toxins produced during maldigestion than contracting Alzheimer's from aluminum.

•*One of the most effective colon cleansing system is Arise and Shine,*
www.ariseandshine.com

Rich Andersons book *Cleanse and Purify Yourself*, is the best place to start for ultimate cleansing.

Toxic Relief: Restore Health and Energy Through Fasting and Detoxification, by Don Colbert M.D. is also great.

Repair and Rebuild: To rebuild the function and tone of the digestive tract after a kundalini awakening: White Oak Bark, Cranesbill root, Black cohosh, Licorice root, Peppermint.

Two parts each of kelp powder, spirulina and one part slippery elm put into capsules will help ease digestive problems that arise with kundalini.

Soothers: The mucopolysaccharides from Aloe gel act as an anti-inflammatory, it stops damage and leakage of the intestinal wall, thereby taking the stress of the immune system. Aloe guards against bacteria, viruses, fungi, yeast and parasites. Aloe mucopolysaccharides increase the number and intensity of all immune cells in the body. Herbs that have mucilage properties that soothe the digestive tract are—Aloe gel, Apple Pectin, Mullen, Chickweed, Comfrey, Borage, Bouch grass, Chamomile, Marshmallow, Rosehips, Slippery elm, Taro root, Japanese mountain yam (Yamaimo), natto (fermented soy beans) and Ground flax seed. The chlorophyll in wheatgrass juice will also reduce inflammation of the GI tract, as will ginger root tea.

Things to avoid: Coffee, Salt, Sugar, Alcohol. Avoid cooked food in general, especially breads, pastries, flour products, meats, processed, preserved, pickled and frozen foods…ie: avoid all foods that are not raw as much as possible. Foods dehydrated or warmed to less than 115°F are better, for this preserves the living enzymes.

Things To Adopt: GREEN! GREEN! GREEN! Green leafy vegetables and cabbage. Cabbage is so affective I would recommend daily carrot/cabbage/celery juices with wheat grass. Dandelion greens are as potent as cabbage and can be incorporated in carrot juice.

- You might have to grind nuts and seeds in a coffee grinder depending on your digestive power. Soak all nuts and seeds up to 8 hours before consumption to make digestion easier. Almonds are the safest nuts, the rest are questionable due to their tendency to go rancid (free radicals). Nuts brought from Jaffe Brothers are fresher than those one finds in the store. Soaked/sprouted sunflower seeds are one the best protein and iron sources. But find a source of "fresh" seeds, those in the shops are usually pretty old…Jaffe Brothers is a

great catalog company. http://www.organicfruitsandnuts.com/

- Eat daily raw salads, especially cabbage/coleslaw…chew well. Buckwheat greens are a sweet gentle easily digestible green to include in salads.
- Buckwheat is the grain par excellence for irritated GI, is soothing and alkalinizing. Soak hulled buckwheat 4 hours and sprout it in the fridge in a colander over a bowl covered with plastic. Ground up these sprouted seeds can be made into humus. Buckwheat sprouts can be used in salads, as a raw-substitute for rice and pilaf, and as a breakfast cereal over chopped fruit and soaked nuts with Kefir or yogurt. Kefir can also be made out of raw seed or nut milks.
- To aid digestion and help prevent wear and tear on the digestive tract you can put Papain (papaya) and/or Bromelain (pineapple) enzyme powder in a saltshaker and sprinkle this on your meals. These powders can be bought inexpensively by the pound from herbalcom.com.

Antacids: Apple, Caraway, Catnip, Cloves, Parsley, Peppermint, Lemon balm, yucca root.

CANDIDA

During kundalini the hyperactivated nervous system might produce a period of immune suppression during the peak, especially if the individual is under great stress. I theorize that a possible increased load of pathogens and the production of the collagen splitting enzyme **hyaluronidase** by candida and bacteria could be instrumental in the catabolic action of kundalini in the breaking down and recycling of body tissues. The Candida yeast is implicated in all degenerative diseases, including cancer, diabetes, arthritis, heart disease and even multiple sclerosis. The origins of the degenerative condition that allows pathogen and diseases to flourish is increased exposure to toxicity and radiation, coupled with the demineralization of the soils. (See Remineralization section).

To fight candida you need a multiple pronged attack that incorporates an anticandida diet and various methods of alkalinizing, increasing electrical potential with colloidal minerals (electrolytes) and oxygenation of the body and providing super-antioxidant protection with fulvic acid, antioxidants and the pigment rich phytochemicals from plants. This essentially amounts to wholesale detoxification and elimination of the environment that harbors pathogens.

Pau D'Arco, Cat's Claw, Oregano, Gentian, Barberry, chamomile, Olive leaf, Black walnut, Suma, Chaparral, Graviola, Siberian ginseng, Aloe, Garlic. Cardamom, Ginger, Fennel seeds and Fenugreek seeds. China Bark, Shield Fern, Black Walnut Hulls, Quassia Bark, Nettle, Pumpkin Seed, Chinese Wolfbane, Petroselinum Cripsum, Fedegoso, Wormwood, Cayenne, Cloves, Rhubarb Root, Black Sesame Seed, Plum Seed Powder, African Bird Peppers, Reishi, Burdock Root, Turmeric, Cinnamon, Quercetin, Bioflavonoids. Olive Leaf, Pinebark and Grapeseed extracts. Raw Propolis. Mucopolysaccharides in Echinacea have been found to strongly stimulate T-lymphocyte activity, macrophage and T-killer cell activity and host cell production of interferon.

Aloe extract (Acemannon) increased the up-regulation macrophage immune activity and stimulated immune candidicidal activity. The herb horsetail (Shavegrass) has a high silica content which can quickly normalize bowel function and is active in clearing the intestinal tract naturally, the mineral silica is necessary in the reconstruction of damaged and inflamed intestinal walls. Wormwood, ginger can soothe the inflammation caused by candida in the gastrointestinal tract, as does the chlorophyll content of green foods.

Goldenseal and Colloidal Silver tend to kill off friendly intestinal bacteria along with the bad, so should only be used for episodically in the same way you would use prescription antibiotics. After which you should repopulate the GI tract with probiotics and cabbage.

MINERALS—Mineral rich Humic and Fulvic acid and Diatomaceous Earth helps get rid of candida overgrowth. Minerals that may be beneficial for candida: copper, boron, platinum, colloidal silver, silicon, sulfur, zinc, iodine. Selenium is a very effective antifungal substance in high doses, 200 mg. 2 times a day. Acetaladehyde is a toxin from candida albicans which our body can metabolize in safer form with molybdenum supplements. Molybdenum aids in carbohydrate metabolism, increases libido, and dental enamel is rich in molybdenum. Chromium and Vanadium deficiency encourages diabetes. Vanadium mimics insulin and causes apoptosis in cancer cells. Boron can help overcome candida albicans. Kelp, blue-green algae and other seaweeds like dulse are great trace mineral foods with powerful anti fungal power. They contain both iodine and selenium in high levels, these two minerals are very effective against fungi. Black walnut is also high in iodine. The Chlorine and fluoride in our drinking water depletes iodine and causes other mineral imbalances. And of course the minerals of green foods like wheatgrass are readily bioavailable.

AMINO ACIDS— Vitamin C, Lysine and Proline are needed to build strong collagen to protect against the spread of candida. **Lysine** which inhibits the **hyaluronidase** enzyme that candida uses to break down collagen in order to spread. 8000mg of L-Lysine and 3000mg MSM three times a day.

OILS—Raw Virgin Coconut Oil start off with 1 teaspoon a day and built up to 1 Tablespoon with each meal (3x/day). Caprylic acid is one of the fatty acids found in coconut oil that kills candida yeast. Caprylic acid, 500 mg two times a day. Caprylic Acid (often used in its stable form sodium caprylate) is an 8-carbon fatty acid. It is readily soluble along the gut wall and is best known for its use as an anti-fungal agent. Caprylic acid acts to penetrate and destabilize the yeast cell walls. Besides caprylic acid, two other medium chain fatty acids (capric acid and Lauric acid) found in coconut oil have been found to kill Candida albicans. Wild Oregano Oil kills candida as does Moringa oil and oils like evening primrose oil, borage oil and black currant seed oil are also antifungal. Omega-3—essential fatty acids in fish oil and flax seed oil have strong antifungal properties; vitamin E 800iu,

VITAMIN-C—In high doses vitamin C is antifungal 6-8gms magnesium ascorbate, and calcium ascorbate. Magnesium Ascorbyl Phosphate is a water soluble, white powder that is transformed into Vitamin C by enzymes in the skin. The Magnesium Ascorbyl Phosphate form of Vitamin C doesn't oxidize upon exposure to air. Vitamin C is needed for collagen synthesis, for it is required to hydroxylate the amino acid proline, one of the main proteins in collagen. Scurvy is a syndrome of vitamin C deficiency and is related to defective collagen synthesis. Strong collagen helps prevent systemic invasion of pathogens.

COENZYME Q10—Maximizing oxygen in the body with coenzyme Q10, 100 mg once a day

NIACIN—B3 in the form of niacinamide (non-flushing) has strong antifungal properties and when used in high doses is relatively toxic to yeast. Niacin vitamin B3, 500 to 1,000 mcg once a day. Vitamin B_6, Biotin 200–600 mg in a B complex. Jarrow Formula has a B complex called B-Right with the more bioavailable B12 in it. Take two or three capsules a day to reduce pain and fogginess.

ENZYMES—Pancreatic digestive enzymes which include amylase, lipase, and protease among others are active in controlling fungal growth in the gastrointestinal tract. Digestive enzymes—Use papain/bromelain digestive enzymes or raw food with every meal.

CLAY—Take at least one teaspoon per day of Bentonite, calcium montmorillite, zeolite or Food grade Diatomaceous Earth in a glass of water. Diatomaceous earth and zeolite powder absorbs mercury and other heavy metals, helps remove toxins, and works to adjust pH in the body to a more alkaline state.

CLEANSING COMBO—make a formula mix of equal parts of psyllium powder, apple pectin, food grade diatomaceous earth, zeolite, "calcium montmorillite or pascalite," magnesium citrate and put into capsules…take three last thing before bed with a large glass of water….or mix one heaped teaspoon into a glass of water. If capsulating, you can add grapefruit pectin as well.

ALKALINE pH—Candida albicans optimum growth pH is a 4, but it can grow between pH 3 – 7. Alkalinize and buffer acids with the Baking-soda cure…use 1 cup of Baking Soda and 1 cup of Epsom Salts in your bath, or half that for foot baths. For each pH point increase (e.g., 6.1-6.2), the oxygen level is increased ten times, thus increasing the metabolism and enhancing the body's ability to burn fat.

ORGANIC APPLE CIDER VINEGAR—acts as an antifungal, alkalinizer and to neutralize the toxics from the yeast die-off. It's suggested that it has such curative abilities because it causes one's pH levels to become more alkaline. Apple Cider Vinegar has anti-fungal, anti-bacterial, and anti-viral properties, primarily due to the malic acid and acetic acid. Apple cider vinegar acts as a buffer in the body and can reduce the toxicity of yeast by products and die-off by converting the toxins into an acetate compound, which is less toxic. In the morning put 2 Tablespoons in

water and drink through a straw to save your tooth enamel. Use for detoxification and fasting periods. Rawfoodists will probably find apple cider vinegar too harsh on the body and may prefer raw apple juice with a dash of lemon juice instead.

BARK TEAS—Because the barks of trees contain antifungal agents to protect the tree from attack, barks are useful anti-candida remedies. Slow simmered tea from barks are anti-inflammatory, antioxidant, anti-viral, anti-parasitic, anti-septic, anti-cough, anti-asthmatic, expectorant, cardiotonic, aphrodisiac, hypotensive, laxative, stomachic (beneficial to digestion), lymphatic and Spleen tonic. Barks contain natural fungicides to protect the plants from infection. You can make your own bark tea infusion or capsules using the inner bark from a variety of local and foreign edible plants such as Pau d'Arco, Anamu, Bellaco-caspi tree, Black walnut, Babul bark (Acacia nilotica), Birch, Beech, Brazilian peppertree, Buckthorn, Graviola (sour sop), Wild cherry, Peach, Pine, Slippery elm, Cinnamon sticks, Eucommia bark (Du Zhong), Jatoba, Matico, Fedegoso, TGuaco, Mangosteen and Apple tree bark, Piri-piri, Ubos. Bark infusions are used topically for bacterial and fungal infections. Pau d'arco is a very common bark used as a potent anti fungal agent. Antifungal capsules from the Amazon www.rain-tree.com/form_antifungal.htm

PREBIOTICS—Prebiotics are nondigestible food ingredients that selectively stimulate the growth of intestinal bacteria. The most prevalent forms of prebiotics are nutritionally classed as soluble fiber. Fructo-oligosaccharides (FOS) increases beneficial bacteria in the gut including those like lactobacillus acidophilus and species of bifidus. Cabbage is a prebiotic. Unrefined oats, wheat and barely, jicama and chicory root (inulin).

PROBIOTICS—Friendly intestinal bacteria are one of the body's first lines of immune defense. The type of bacteria that inhabit the colon depends not only on the kind of food digested but also on the over all health and emotional state. Our health is dependent on the quantity and quality of the bacterial activity in both our soil and our intestines and these microbes are fed by vital organic material not from chemical fertilizers and inorganic vitamins and minerals. Arise and Shine sells a product called Flora Grow which contains Bacillus subtilus…which produces a large amount of catalase, an important enzyme for the neutralization of harmful free radicals of hydrogen peroxide produced from inadequate fat metabolism. After the shock phase of the initial awakening, when the digestive system has finished purging, then probiotics will help the GI tract return faster to normal function. I would suggest several forms of probiotic including Kefir. This needs to be researched so that you do not take supplements such as Acidophilus which will produce excessive amounts of lactic acid therefore producing an acid environment in the bowel. And acid bowel will inhibit enzyme function, decrease alkaline reserves, deplete electrolytes etc…Lactobacillus acidophilus combination supplement, 1 to 3 capsules or 1 teaspoon. Barley or wheat grass powders or fresh one teaspoon, 2 to 3 times a day

END RAP

In awakening spiritually we are essentially elevating ourselves to our noble "Human" condition. A condition we naturally would have been in, had we been born into an enlightened society! Enlightened society is made up of spiritually awakened and empowered individuals, and within this self-reforcing feedback loop of human decency, the "quality" of human existence is maintained and evolves. By perfecting the means of extracting ourselves from the density of the "old" unenlightened culture...we help to create a morphogenic field in which all humanity can awaken.

To the extent that our systems and religions are coercive, mythic and fundamentalist, they are brain damaging and retard social coevolution and communication. But even atheism can be a form of conceptual dogma used in a destructive way, through rigid adherence to repetitive beliefs and thoughts. This repetition occurs through constantly efforting to define and identify the self in order to feel "like somebody" and to fandangle a "worthy" self from bits and pieces of external information. Rather than promote self development and spiritual maturity, there are certain tendencies in religious sects which play on our wounds and sense of unworthiness in order to fill the coffers of the church. This perpetuates the triggering of our original wounds, and as long as we play into this game of spiritual extortion, there is little possibility of any significant healing or growth. Caught in spiritual materialism we remain tied to the religious organization through the pain of our wounds and the subsequent attempt at assuagement through tilth and service. And if Big Daddy Priest gives us a pat on the back and our bolsters our ego, then we feel "OK" for a while. This is how ones symbolic belief structure or Archetypal Matrix remains entrenched even into the spiritual domains, as we spin web of our self perpetuating, self reinforcing, self fulfilling stories. Proving this, explaining that, self justifying this—torturing ourselves and others with our mind, emotions and sense of inadequacy.

"Discrimination is possible only in a state of complete freedom where one can perceive all the alternatives and so can choose from them. Any identification by the mind puts an end to the process of discrimination. Thus a mind that is committed to beliefs, ideals and principles is not a free mind, and is, therefore not a discriminating mind. It is a "dull" mind in the sense that it cannot see beyond the patterns it has placed before itself." The Negative Approach, Rohit Mehta

Fundamentally, spiritual maturity is dropping the need for "parenting" and to become self-parented or Self-realized. That is connected to the causal aspects of our being. The degree that a society is engaged in subrational religion is the degree that it is distracted from the ultimate goal of spirit itself. If we lived in an enlightened society...we would all natural abide in unity consciousness 24X7, without the need for a special "spiritual" focus, our entire lives would naturally be enchanted. Spirituality would simply pervade all aspects of human life. The irony being that we do need to focus on spirituality in order to bring about an enlightened society through the awakening of rational individuals. Only conduits of the living spirit

can catalyze a conflagration of enlightenment in society at large. It is obvious that this process of communal global enlightenment must be quite different from religious approaches taken in the past. Through scientific understanding of Spirit, we can learn how to liberate our genius rather than suppress and exploit it, and so create enlightened culture.

Disenchantment and the desacralization of matter is the cause of all human suffering and this is a mere error of perception born of naivety and denial. We always have a choice between the sacred or the profane perspective. We always have a minute-by-minute choice between love and fear. Whether something is considered sacred or propane is a matter of subjective realization. To not be at war with the Universe is good common sense. Matter, Mind and Spirit are not separate, and so negative approaches to spirituality that condemn the body, negate the mind and cling to the Void and Absolute Spirit, are fundamentally flawed. You cannot embrace the All—that is become enlightened—by rejecting and desacralizing the parts of the Whole. To fire up the spiritual alchemy and live consistently on the higher subtle and psychic levels, we need to methodically address our density or resistance to the light. We must engage in a multipronged approach to deepening our lived spiritual experience…through perfecting body, mind, soul, earth and society.

Tacit recognition of the Source Energy "Kundalini "purifies the under-lying self-rejection that generates life negating thoughts and habits. The degree to which we carry this self-rejection is the degree to which we cannot feel, give or receive love. Kundalini burns through the substrata of self-hatred, body armor and shadow that keeps us from "Wholeness" and the ultimate connection. The alchemical fire transmutes the black gold of our fear and shadow to create the world anew from the inside out. With Kundalini we tap into the primordial energy source to spontaneously generate deep inner peace and a profound feeling of connectedness to all living things. Through pervasive ecstasy, Amrita - the elixir of life, slowly eliminates the self-rejection that lies at the heart of our separate-self-sense and unenlightenment. The ecstatic metamorphic transmutation is the real-ization of a greater lived cosmic truth than can be imagined by the conventional mind. This "spiritual pubescence" is a process of perpetual initiation toward the maturation of wisdom and ever more gentle eyes through which to see the world. A growth in perception, directed by a force that is not of this world, and yet is the source of all that moves in time and space.

Perhaps we can anticipate the arrival of Peter Russell's "Wisdom Age" that utilizes human knowledge and foresight to build a compassionate and equitable planetary culture that is based on sustainability, interconnectivity, regeneration and psychic development. Heralding in the Wisdom Age requires us to face "into" reality and courageously do what needs to be done through the vocational and spiritual empowerment. We need great patience and magnanimity to work joyously in community, because until the Wisdom Way can be readily seen, many people will still cling in false security to the self-destructive mode of the disposable consumer culture. Yet we cannot let the weight of present history hold us back,

thus we have to become an impassioned visioneer and listen deeply to our inner-call for our unique place in building the Mystic Civilization. For we are on the eve of a collective revolution from within.

The multitude's construction of a "quality" society requires a brave new vision that integrates the development of the higher nervous system with practical "hands on" educational institutions that provide tangible solutions that are "inclusive" of diversity. With a visionary plan and compassionate and egalitarian programs, we can empower creative individuals to be proactive in building a culture that truly feeds human potential and cares for the earth into the far distant future. Because they are ahead of the curve, "if you build it, they will come!" is the primary principle a visionary must operate from, or "farsight" simply becomes daydreaming. A culture with no eyes is blind. It is important that we take our visionary capacity seriously and gain perfect immunity to apathy, nay saying and scorn. If we remain true to our heartfelt vision, slowly things start changing of their own accord as the future descends on the present. We have yet to realize our true value as a species, or the magnitude of our powers. Inner gifts of unbelievable beauty await us.

The pariah of corporate feudalism or rank materialism is overcome by increasing the spiritual "depth" potential of each individual. We can will the emergence of a mystic civilization, first through not blaming the hierarchies of control and by each becoming a living example to the type of change we desire. A regenerative culture encourages diversity and decentralization; with the prime directive being the spiritual realization of each individual. The myriad of problems the human species now faces are generated by a moral crisis. A failure of rational and spiritual adjustment to reality. These problems will be overcome through a heightened sense of care, intention to do the right-thing and through education in regenerous permaculture principles in all areas.

As the "inner potency" or "divine power" of the inner life becomes paramount, values change and quality not quantity becomes the driver of commerce. This shunting of the purchasing power toward earth-friendly values, will in itself will curb the parasitic, predatory power-play allowing the earth to heal. Through the triumph of the imagination and application of a global-vision we can set about greening the deserts, replanting the forests and fulfilling our need for shelter, food, security and energy, all while enhancing the Nature around us. To survive and flourish we must engage a vision of a noble culture and go beyond sustainability to apply the regenerative meme in all our thought and endeavors.

To defend our dream we must actively pursue it. In the Tao Te Ching, Lao-Tzu tells us that we should not focus on the problems and to let situations take their course. Rather we should find what can be expanded on and worked into success, feeding the tree of life and allowing good to prevail. Our reality is defined by the nature of the lens we use. Our job in the blossoming of global consciousness is to wake up and widen our lens beyond the illusion of self-centered consciousness. We stand on the brink of a new age of renewal, when a fresh release of spiritual energy in the global community may unleash undreamed of possibilities...if we but drop our fear, envision transcendent futures and realize our endless potential.

BIBLIOGRAPHY

CONSICOUSNESS AND KUNDALINI

Baker, Douglas M., *Esoteric Anatomy*, Part 1; Little Elephant, 1976

Bearden, Thomas, *Excalibur Briefing: Explaining Paranormal Phenomena*; Strawberry Hill Press, 1988

Becker, M.D., Robert, and Selden, Gary, *The Body Electric, Electromagnetism and the Foundation of Life*; Quill, 1985

Bentov, Itzhak, *Stalking the Wild Pendulum, On the Mechanics of Consciousness*; Destiny Books, 1988

Brunton, Paul, *The Body Volume 4, part 2, The Notebooks of Paul Brunton*; Larson Publishing,1986

Chetanananda, Swami, *Dynamic Stillness Part One: The Practice of Triya Yoga*; Rudra Press 1990 [Kashmir Shaivanism]

Chilton Pearce, Joseph, *The Biology of Transcendence, A Blueprint of the Human Spirit*; Park St. Press, 2002

Cleary, Thomas, *Immortal Sisters, Secret Teachings of Taoist Women*; North Atlantic, 1996

Cleary, Thomas, *The Secret of the Golden Flower*; Harper San Francisco, 1991

D'Aquili, Eugene G., Newberg, Andrew B., *Why God Won't Go Away : Brain Science and the Biology of Belief*; Ballantine Books, 2002

Davidson, John, *Subtle Energy;* The C.W.Daniel Co., Ltd 1987

Davis, Albert, and Walter Rawls, *Magnetism and Its effects on the Living System*; 1974

Ellis, Ralph, *Love and The Abyss: An Essay On Finitude and Value*; Open Court, 2004

Kandel, Eric R., *Essentials of Neural Science and Behavior*, Simon and Schuster, 1995

Krishna Gobi, *Living With Kundalini*; Shambhala Publications, Inc. 1993

Krishna Gobi, *A Kundalini Catechism*; The Kundalini Research Foundation, Ltd., 1995

Goswami, Shyam Sundar, *Layayoga: The Definitive Guide to the Chakras and Kundalini;* Inner Traditions 1999 (academic)

Greenwell, Bonnie, *Energies of Transformation;* Shakti River Press, 1990

Grof, Stanislav, *Spiritual Emergency: When Personal Transformation Becomes a Crisis;* Jeremy P. Tarcher, 1989

Grof, Stanislav & Christine, *The Stormy Search For the Self;* Tarcher, 1992

Grossinger, Richard, *The Alchemical Tradition in the Late Twentieth Century*; North Atlantic Books, 1991

Jaynes, Julian, *The Origin of Consciousness in the Breakdown of the Bicameral Mind*, Houghton Mifflin 1977

Joseph, R. et al, *NeuroTheology: Brain, Science, Spirituality, Religious Experience;* University Press, 2003

Jung, C.G., *Mysterium Coniunctionis*; Bollingen Series/Princeton, 1989

——— *The Psychology of Kundalini Yoga*; Princeton University Press, 1999

Karen, Richard., *Becoming Attached: First relationships and How They Shape Our Capacity To Love*; Oxford University Press, 1994

Kason M.D., Yvonne and Teri Degler, *A Farther Shore*; Toronto, HarperCollins, 1994

Katz, Richard, *Boiling Energy: Community Healing Among the Kalahari Kung*; Cambridge, MA: Harvard, 1982

Kezwer, Glen Peter, *Meditation, Oneness and Physics,* Lantern Books, 2003
Khalsa, Dharma Singh, *Meditation As Medicine: Activate the Power of Your Natural Healing Force;* Atria, 2002
Lee, Ilachi, *Brain Respiration, Making Your Brain Creative, Peaceful and Productive*; Healing Society, 2002
Lipton, PhD, Bruce, T*he Biology of Belief, Unleashing the Power of Consciousness, Matter and Miracles*; Elite Books, 2005
Loye, David, *An Arrow Through Chaos: How we see into the Future*; Park St Press, 1983
Mae-Wan-Ho, *The Rainbow and the Worm: The Physics of Organism, 2nd Ed*; World Scientific, 1998
Masters, Robert Augustus, *Darkness Shining Wild: An Odyssey to the Heart of Hell and Beyond*; Tehmenos Press, 2005
Mc Arthur, David & Bruce, *The Intelligent Heart: Transform Your Life With The Laws of Love*—Combines the Wisdom of Edgar Cayce With the Science of HeartMath; A.R.E. Press, 2004
Metzner, Ralph. *The Unfolding Self. Varieties of Transformative Experience*; Novato, CA: Origin Press, 1998.
Mookerjee, Ajit, *Kundalini, The Arousal of the Inner Energy*; Destiny Books, 1986
Morgan, Robert, *Easy Meditation for Martial Artists*; Mystic Wolf Press, 2006
Mumford, John, *A Chakra & Kundalini Workbook: Psycho-Spiritual Techniques for Health, Rejuvenation, Psychic Powers and Spiritual Realization*; Llwellyn Publishers, 1994
Mumford, John, *Ecstasy Through Tantra*; Llewllyn Publishers, 1998
Neumann, Erich, *The Origins and History of Consciousness*; Princeton Uni Press, 1970
Odajnyk, V.Walter, *Gathering the Light: A Psychology of Meditation*; Shambhala, 1993
Osho, *Autobiography of a Spiritually Incorrect Mystic*; St Martins Press, 2000
———*Pharmacy For The Soul: A Comprehensive Collection of Meditations, Relaxation and Awareness Exercises & Other Practices for Physical and Emotional Well-Being*; St Martins Press, 2004
Perry, John Weir. *The Far Side of Madness*; Prentice-Hall, 1974
——— *Roots of Renewal in Myth and Madnes;* Jossey-Bass, 1976.
Radin, Dean, *Entangled Minds : Extrasensory Experiences in a Quantum Reality*; Paraview Pocket Books, 2006
Sannella, Lee, M.D., *Kundalini – Psychosis or Transcendence?*; Published by Author, 1976
Satinover, Jeffrey, *Quantum Brain*; John Wiley & Sons Inc, 2001
Satprem, *On the Way To Supermanhood,* Institute for Evolutionary Research, 1985
Satprem, Mother, *Or The Divine Materialism, Vol. 1*, Institute for Evolutionary Research
Satprem, *The Mind of the Cells, or Willed Mutation of Our Species,* IER, 1982
Schneider, Eric & Sagan, Dorion, *Into the Cool: Energy Flow, Thermodynamics and Life.* University of Chicago Press, 2005
Selby, John, *Kundalini Awakening: A Gentle Guide to Chakra Activation and Spiritual Growth*; Bantam 1992
Silburn, Lilian, *Kundalini: Energy of the Depths*; State University of New York, 1988
Sovatsky, Stuart, *Eros, Consciousness and Kundalini;* Park St. Press, 1999
Strassman, Rick, MD., *DMT: The Spirit Molecule: A Doctor's Revolutionary Research into the Biology of Near-Death and Mystical Experiences*; Park Street Press 2001.

Sri Chinmoy, *Kundalini: The Mother-Power;* Agni Press, 1974
St. Romain, Philip, *Kundalini Energy and Christian Spirituality: A Pathway to Growth and Healing;* Crossroad Pub Co, 1991
Tansley, David V., *Radionics and the Subtle Anatomy of Man*; The C.W.Daniel Co., Ltd, 1972
Tansley, David V., *Subtle Body;* Thames and Hudson
Tweedie Irina, *Daughter of Fire : A Diary of a Spiritual Training with a Sufi Master*; The Golden Sufi Center, 1995
Villoldo, Alberto & Stanley Krippner, *Healing States. A Journey into the World of Spiritual Healing and Shamanism.* NY: Simon & Schuster, 1986
Von Franz, Marie-Louise, *Alchemy, An Introduction to the Symbolism and the Psychology,* Inner City Books 1980
Watson, Gay (Editor), et al, *The Psychology of Awakening: Buddhism, Science, and Our Day-To-Day Lives*; Weiser Books, 2000
White, John, editor, *Kundalini: Evolution and Enlightenment*; Paragon House, 1979
Yudelove, Eric Steven, *Taoist Yoga and Sexual Energy*; Llewellyn, 2005

KUNDALINI AUDIO AND VIDEO

Awakening Kundalini For Health Energy And Consciousness by Chris Kilham (CD)
Awakening Kundalini by Kelly Howell and Robert Schwimmer (CD)
www.neuroacoustic.com/BuyersGuide.html —Ecstatic States of Consciousness Series – Maximizing Meditation, Dr. Jeffrey D. Thompson (CD Sets)
The Eight Human Talents: Restore the Balance and Serenity Within You with Kundalini Yoga by Gurmukh (DVD)
Kundalini Yoga: A Journey Thru the Chakras, Ravi Singh and Ana Brett (DVD)
namastepublishing.com/ —*A Walk Through The Presence Process* by Michael Brown
Leonard, George, *The Tao of Practice*; Video, mysticfire.com

READING WHILE AWAKENING

Adyashanti, *Emptiness Dancing*; Open Gate, 2004
Ardagh, Arjuna, *The Translucent Revolution: How People Just Like You are Waking Up and Changing the World*; New World Library, 2005
Berry, Thomas, *The Great Work: Our Way into the Future*; Harmony, 2000
Bonder, Saniel, *Waking Down: Beyond Hypermasculine Dharmas : A Breakthrough Way of Self-Realization in the Sanctuary of Mutuality*; Mt Tam Awakenings, 1998
Cavalli, Ph.D., Thom F., *Alchemical Psychology, Old Recipes For Living in a New World*; Tarcher/Putnam, 2002.
La Chapelle, David, *Navigating the Tides of Change;* New Society, 2001.
———*Destiny Lines* (CD), Sounds True, 2002
———*Engaging Creativity/Riding Change* (Cassette) newdiamensions.org
Church, Dawson & Gendreau, Geralyn, *Healing Our Planet, Healing Our Selves: The Power of Change Within to Change the World*; APC Books, 2005
Davidson, D., *Transference as a form of active imagination—In Technique in Jungian Analysis;* M. Fordham et al., eds., Heinemann, 1974.

Durham, Diana, *The Return of King Arthur, Completing the Quest for Wholeness, Inner-Strength & Self-Knowledge*; Tarcher/Penguin, 2005
Edinger, Edward, *Ego and Archetype*; Shambhala, 1972
Goodbread, Joseph, *Radical Intercourse: How Dreams Unite Us in Love, Conflict, and Other Inevitable Relationships*; Lao Tse Press, 1997
Grasse, Ray, *The Waking Dream: Unlocking the Symbolic Language of our Lives*; Quest Books, 1996
Hixon, Lex, *Coming Home, The Experience of Enlightenment in Sacred Traditions*; Larson Publications 1995
Johnson, R. *Inner work: Using dreams and active imagination for personal growth*; Harper, 1989
Kimura, Yasuhiko Genku, *Think Kosmically Act Globally: An Anthology of Essays on Ethics, Spirituality, and Metascience;* Univ of Science & Philosophy, 2000
Karen, Richard, *The Forgiving Self: The Road from Resentment to Connection*; Anchor, 1993
Kast, Verena, *Joy, Inspiration and Hope*; Texas A&M Uni Press 1991
Long, Barry, *Making Love: Sexual Love the Divine Way*; Barry Long Books, 1999
Masters, Robert Augustus, *Divine Dynamite: Entering Awakening's Heartland*; Tehmenos Press, 2004
———*Freedom Doesn't Mind Its Chains: Revisioning Sex, Body, Emotion & Spirituality;* Tehmenos Press, 2005
McLaren, Karla, *Rebuilding the Garden, Healing the Spiritual Wounds of Childhood Sexual Assault.* Laughing Tree Press, 1997
Mindell, Arnold, *The Shaman's Body: a New Shamanism for Transforming Health, Relationships, and Community*; Harper Collins, 1993
Mindell, Arnold, *The Dreammaker's Apprentice: Using Heightened States of Consciousness to Interpret Dreams*; Hampton Roads Publishing Company, 2001
Norbu, Chogual Namkhai, *Dream Yoga and The Practice of Natural Light*; Snowlion, 1992
Ouspensky P. D., *A New Model of the Universe*; Dover Publishing, 1997
Perera, Sylvia Brinton, *Descent to the Goddess (Studies in Jungian Psychology)*; Inner City Books, 1981
Pierrakos, Eva, *Creating Union: The Essence of Intimate Relationship*; Pathwork Publications, 2002.
Richardson, Diana, *Tantric Orgasm for Woman*; Destiny Books, 2004
———*The Heart of Tantric Sex: A Unique Guide to Love and Sexual Fulfillment*; O Books, 2003
Richo, David, *How to Be an Adult: A Handbook for Psychological and Spiritual Integration*; Paulist Press, 1991
Roob, Alexander, *Alchemy and Mysticism;* Taschen [Pictorial]
Vaughan-lee, Llewellyn, *Catching the Thread: Sufism, Dreamwork and Jungian Psychology*; The Golden Sufi Center, 1998
Swimme, Brian, *The Universe is a Green Dragon*; Bear & Co, 1984
Villoldo, Alberto, *Mending The Past And Healing The Future With Soul Retrieval*; Hay House, 2005

Von Franz, Marie-Louise, *Way of the Dream*; Shambhala, 1994
Walker, Steven, *Jung and the Jungians on Myth*; Routledge, 2001
Weisman, Alan, *Gaviotas: A Village To Reinvent The World*; Cheslea Green, 1995
Woodman, Marion, *The Pregnant Virgin: A Process of Psychological Transformation*; Inner City Books, 1985
Wilber, Ken, *No Boundary: Eastern and Western Approach to Personal growth;* Shambhala, 2001
——— *A Simple Feeling of Being: Visionary, Spiritual and Poetic Writings*; Shambhala, 2004

HEALTH

Anderson, Rich, *Cleanse and Purify Thyself*; Christobe, 2000
Becker, Robert O., *Cross Currents: The Promise of Electromedicine, the Perils of Electropollution;* Tarcher 1991
Braverman M.D., Eric R., *The Edge Effect, Achieve Total Health and Longevity with the Balanced Brain Advantage;* Sterling Publishing, 2004
Bergner, Paul, *The Healing Power of Minerals, Special Nutrients and Trace Elements;* Prima 1997
Buhner, Stephen Harrod, *The Fasting Path: For Spiritual, Emotional, and Physical Healing and Renewal;* Avery, 2003
Clement, Brian R., *Living Foods For Optimum Health*; Prima Publishing, 1996
Colbert M.D., Don, *Toxic Relief: Restore Health and Energy Through Fasting and Detoxification;* Siloam, 2003
Cousens, Gabriel, *Spiritual Nutrition: Six Foundations For Spiritual Life and the Awakening of Kundalini;* North Atlantic Books, 2005
Dean, M.D., Ward & Morgenthaler, John, *Smart Drugs and Nutrients, Health Freedom* Publications, 1990
———*Smart Drugs 11*, Health Freedom Press, 1993
Freeman, Dr. John M., *The Epilepsy Diet Treatment: An Introduction to the Ketogenic Diet;* Demos Publications, 1994.
Halpern M.D., Georges, *Ginkgo, A Practical Guide*; Avery Publ. Group, 1998
Kervran, C.L., and Lockwood, Crosby, *Biological Transmutations;* Beekman Publishers,1998
Mowrey, Ph.D., Daniel B., *Herbal Tonic Therapies*; Keats Publishing, 1993
Philips, Shawn, *ABSolution: The Practical Solution for Building Your Best Abs*; High Point Media, 2002
Pressman PhD., Alan, *The GSH Phenomenon, Nature's Most Powerful Antioxidant and Healing Agent, Glutathione*; St Martin 1997
Rubin, N.M.D., Jordan S., & Joseph Brasco, M.D,.*Restoring Your Digestive Health*; Twin Streams Books, 2003
Sellman Dr. Sherrill, *Hormone Heresy*; Getwell International 2000
Shames M.D., Richard, and Karilee Shames, Ph.D., R.N., *Thyroid Power: 10 Steps to Total Health;* Collins, 2002
Sharma M.D., Hari, *Freedom From Disease, How to Control Free Radicals, a Major Cause of Aging and Disease*; Veda Publishing 1993.

Taylor, Leslie, *The Healing Power of Rainforest Herbs*; Square One Publishers, 2005
Tips, Jack, *The Pro-Vita! Plan: Your Foundation for Optimal Nutrition : Featuring the Wheelwright 5 + 5 Meal Plan;* Apple-a-Day Press; 1992
———*Your Liver Your Lifeline: Insights on Health Based on the Liver;* Apple-A-Day Press, 1998

ALTERNATIVE ENERGY AND SCIENCE

Alexandersson, Olof, *Living Water: Viktor Schauberger and the Secrets of Natural Energy*; Newleaf, 2002
Backster, Cleve, *Primary Perception: Biocommunication with Plants, Living Foods, and Human Cells;* White Rose Millennium Press, 2003
Batholomew, Alick, *Hidden Nature: The Startling Insights of Victor Schauberger*; Floris Books, 2003
Buhner, Stephen Harrod, *The Lost Language of Plants: The Ecological Importance of Plant Medicines for Life on Earth*; Chelsea Green, 2002
———*The Secret Teachings of Plants: The Intelligence of the Heart in the Direct Perception of Nature*; Bear & Co, 2005
Callahan, Philip S., *Paramagnetism: Rediscovering Nature's Secret Force of Growth*; Acres U.S.A., 1995
Coats, Callum, *Living Energies: Exposition of Concepts Viktor Schauberger*; Gateway; 2nd edition, 2002
Devereaux, Paul, et al., *Earthmind: Communicating with the Living World of Gaia*; Destiny Books, 1992
King, Moray B., *Quest for Zero Point Energy Engineering Principles for Free Energy*; Adventures Unlimited Press, 2002
Lakhovsky, Georges, *Secret of Life: Electricity Radiation & Your Body: Legion for the Survival of Freedom*; 1988 (Radionics)
McTaggart, Lynn, *The Field Updated Ed: The Quest for the Secret Force of the Universe*; Harper, 2008
Oschman, James, *Energy Medicine: The Scientific Basis*; Churchill Livingstone, 2000
Pond, Dale, *Universal Laws Never Before Revealed: Keely's Secrets: Understanding and Using the Science of Sympathetic*; Message Co, 1995 —On sympathetic Resonance.
Schauberger, Viktor, *Energy Evolution* (The Eco-Technology Series); Gateway, 2001
Schauberger, Viktor, *The Fertile Earth: Nature's Energies in Agriculture, Soil Fertilisation and Forestry* (The Eco-Technology Series, Volume 3; Gateway, 2001
Stone, Robert B., *The Secret Life of Your Cells*; Whitford Press, 1994. (On Backster's primary perception research.)
Tesla, Nicola, *My Inventions: The Autobiography of Nikola Tesla;* bnpublishing, 2007

RESOURCES

KUNDALINI

www.elcollie.com —One of the most useful sites
www.kundaliniguide.com —Bonnie Greenwell
www.kundalininet.org/ —Kundalini Research Network
www.icrcanada.org —Institute for Consciousness Research
www.yrec.org/kundalini.html —Yoga Research and Education
www.greatdreams.com/kunda.htm
www.tantrabliss.com/ —Ipsalu Tantra
www.well.com/user/bobby/index.html —Personal experiences
www.uri-geller.com/shc11.htm —Larry Arnold - spontaneous human combustion.
www.kaia.ca/World_Support.php —Int. Spiritual Emergence
www.cpsh.org/ —Center for Psychological and Spiritual Health
www.nor.com.au/community/spiritualemergence/index.html —SEN Australia
www.issc-taste.org/arc/dbo.cgi?set=arc&ss=1 —Spiritual experiences of scientists. TASTE
http://home.jps.net/~stuartcs/ —Stuart Sovatsky
www.jrhaule.net/ —John Ryan Haule

NEUROSCIENCE

http://brainmind.com/Contents.html —Rawl Joseph, one of my favorite brain sites
www.brainplace.com —Dr. Daniel Amen's site for SPECT
www.pathmed.com/p/47.html —Dr. Eric Braveman
www.dana.org —Brain Resources
www.quantumconsciousness.org/ —Stuart Hameroff
www.nsi.edu/ —Neurosciences Institute
www.vrp.com —Ward Deans articles
www.vrp.com/thearticles.asp?article=1066 — Seizures: A Nutritional Approach, Ward Dean, MD
www.innerworlds.50megs.com —Todd Murphy on Michael Persinger's work etc…
http://apu.sfn.org/ —Society for Neuroscience - Brain Facts book.
www.ceri.com/ —The Cognitive Enhancement Research Institute
http://nootropics.com/index.html —Ward Dean M.D.
www.biopsychiatry.com —Better Living Through Chemistry
http://paradise-engineering.com/heaven.htm —utopian biotechnology
www.rickstrassman.com —DMT, the Spirit molecule
www.learntm.co.nz/scientific_research/cortisol_reduced.htm
www.erowid.org/spirit/devices/devices_article1.shtml Transcranial Magnetic Stimulation
web.indstate.edu/thcme/mwking/aminoacidderivatives.html — Michael King on Nitric Oxide Synthesis and Function.
www.cheniere.org/books/excalibur/kindling_effect.htm —Thomas E. Bearden
www.maps.org/news-letters/v08n1/08105and.html —Ibogaine Therapy in Chemical Dependency and Posttraumatic Stress Disorder
www.acnp.org —American College of Neuropsychopharmacology

CHILD DEVELOPMENT

www.childtrauma.org/ —Bruce Perry Articles
www.trauma-pages.com/schore-2001b.htm —Alan Schore
www.primaltherapy.com/ —Arthur Janov
www.appliedmeditation.org/The_Heart/articles_joseph_chilton_pearce.shtml —Joseph Chilton Pearce
www.continuum-concept.org/ —Jean Liedloff and primal mothering
www.naturalchild.com/alice_miller/ —Alice Miller
www.violence.de/ —James W. Prescott, The treatment of infants and its subsequent effects socialization and propensity to violence

SPIRITUALITY

www.robertmasters.com —Robert Augustus Masters, Power Jnana
www.BeWideAwake.com —Garwin Redman, Waking Up
www.integralinstitute.org —Ken Wilber, Integral Hub
http://newhermetics.com/ —Jason Augustus Newcomb, Hermetics
www.sandraannetaylor.com/ —Sandra Anne Taylor, Law of Attraction
www.osho.com —Osho, Zine, Resort, FAQ
www.thefourwinds.com/ — Alberto Villoldo, Shamanism
http://delos-inc.com/ —Hal & Sidra Stone, Voice Dialogue
www.bluetruth.org/ —David Deida, Relationship
namastepublishing.com/ —The Radiance of Intimacy by Michael Brown
www.livinglove.com —Diana Richardson, Tantra
www.adyashanti.org/ —Adyashanti, Nondualism
www.partnershipway.org/ —Riane Eisler, Partnership Way
www.pathwork.org/ —Eva Pierrakos, Pathwork
www.noetic.org/ —Institute of Noetic Sciences
www.scimednet.org/ —The Scientific and Medical Network
www.intuition.org/ —Jeffrey Mishlove, Intuition Network
www.thinking-allowed.com —Amazing resources and links
www.brucelipton.com —Biology of Belief, Fractal Evolution

NEW CIVILIZATION

www.integralvisioning.org/ —Visionary Integral
http://via-visioninaction.org/—Yasuhiko Genku Kimura
http://bioneers.org/ —Visionary, practical earth restoration
http://gen.ecovillage.org/ — Global Eco Village Network
www.newciv.org/ — The New Civilization Network
www.permacultureinternational.org/ —Bill Mollison, Permaculture
www.permaculture.org.au/index.php —Geoff Lawton
www.holmgren.com.au/ —David Holmgren Permaculture Founder
http://bfi.org/ —Buckminster Fuller Institute
www.rmi.org/ —Rocky Mountain Institute
www.chelseagreen.com —Sustainable Living Publisher

www.acresusa.com —Eco Agriculture
www.pfaf.org/index.html —Plants For A Future
www.tradewindsfruit.com/ —Seeds of exotic plants to grow
www.eco-logicbooks.com/index.cfm?fa=home —Books for sustainability
www.rain-tree.com/ —Database for rainforest plants
www.wwoof.co.nz/ —Weekend Work On Organic Farms
http://gaianstudies.org —Stephen Harrod Buhner
www.howtosavetheworld.co.nz/ —Biodynamic revolution in India
www.globalresonance.net/ —The Global Resonance Network

HEALTH

www.rain-tree.com —Leslie Taylor's incredible herb site
www.herbalcom.com —Ultimate site for bulk herbs, no shipping cost.
www.mountainroseherbs.com —Great comprehensive selection
www.seaveg.com —Maine Coast Sea Vegetables, Kelp powder
www.beyond-a-century.com —000 Capsules and Supplements
www.organicfruitsandnuts.com/ —Jaffe Bros., Inc.
www.watercure.com/ —Dr. Batmanghelidj
www.holotropic.com —Stan Grof's Website
www.traumahealing.com —Peter Levine
www.focusing.org —Focusing Institute
www.hakomiinstitute.com —Ron Kutz
www.rosenmethod.org —Rosen Method
www.apple-a-daypress.com —Jack Tips, Pro-Vita Plan
www.vrp.com —Fantastic articles on supplements, Ward Dean M.D.
www.treeoflife.nu/ —Gabriel Cousens eco rejuvenation retreat center
www.rawfood.com/ —Nature's First Law
http://living-foods.com/ —Great info on rawfoodism
www.hippocratesinst.org/ —Brian Clement-Rawfood
www.pacifichealingarts.com —Lee Holden Qi Gong DVD
www.bestabs.com —Shawn Philips, Art of spiritual body building
www.bodybuildingforyou.com —Good nutrition info
www.holisticonline.com/ —Medicine - Herb/Food Interactions
www.acu-cell.com —Great source of information on minerals
www.richardalanmiller.com/ —Outstanding Herbalist and alchemist

SOUND TECHNOLOGIES

www.brainsync.com —Kelly Howell
www.neuroacoustic.com —Dr. Jeffrey Thompson
www.hemi-sync.com/ —The Munroe Institute
www.phoenixregenetics.org/ —Regenetics Method by Sol Luckman

ECOTECHNOLOGY AND SUBTLE ENERGY

www.bioelectromagnetics.org —Bioelectromagnetics Society
http://orgonomy.org —American College of Orgonomy:
www.pks.or.at —Pythagoras Kepler School, Austria. (School started by Viktor Schauberger's son Walter.)
www.iet-community.org —Institute for Ecological Technology, Sweden
http://merlib.org/node/4238 —International Workshop on Natural Energies (IWONE), at Modern Energy Research Library
www.sulis-health.co.uk —Center for Implosion Research, UK
www.Schauberger-Ecotechnology.com —Callum Coats
www.Scahuberger-books.org.uk —Alick Bartholomew
www.philosophy.org/ —Walter Russell's correspondence course
www.asc-alchemy.com./hudson.html —David Hudson, monatomics
www.subtleenergies.com —Barry Carter, ORMUS-monatomic research
www.graal.co.uk/ —Laurence Gardner, alchemist
www.hbci.com/~wenonah/new/milewski.htm —Dr. John V. Milewski
www.orgonelab.org —Wilhelm Reich, Orgone Biophysical Research
www.borderlands.com/rifeandtesla.htm —Borderland Sciences Links
www.spaceandmotion.com/ —Geoff Haselhurst Physics site
http://svpvril.com/ —Sympathetic Vibratory Physics, John Keely
http://keelynet.com/ —Free Energy, Alternative Science
www.theresonanceproject.org —Nassim Haramein, GUT and spin
www.cheniere.org/ —Tom Bearden, energy from the vacuum
http://matpitka.blogspot.com/ —Matti Pitkanen, TGD and Quantum Biology
www.greatdreams.com/grace/indexes/comindex.html —A+ physics site by Robert Grace
www.IntegrityResearchInstitute.org —Tom Valone, New Energy Systems
www.halexandria.org/home.htm —New physics, sacred geometry, consciousness, ORME
www.royalrife.com/radionics.html —Albert Abrams, originator of radionics

BIOCOSMIC CYCLES

http://spaceweather.com/ —Info on Sun/Earth environment
www.spacedaily.com/ —Link to Space, Earth and Energy News
www.foundationforthestudyofcycles.org/ —Interdisciplinary Cycles Research Institute
www.cyclesresearchinstitute.org —Cycles Magazine and Journal
http://ray.tomes.biz/ —NZ Cycles Scientist
www.arcoscielos.com/ —Arcos Cielos Eco-Art-Science Center
www.orgone.org/ —Public Orgonomic Research Exchange;
www.borderlands.com/archives/arch/elf.htm —article that mentions stopping seizures with the use of a 10 Hz generator.
www.docweather.com —Precise weather observation and advanced planetary geometry by Dennis Klocek