

Theoretical

SALUTOGENESIS I: *A Unified Theory on Medicine, Health and Healing*

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ABSTRACT

The construct of Salutogenesis is proposed as a unifying theory for medicine, health and healing. It is posited as a spectrum from the most subtle nuances of health to the most adverse medical issues where all interventions at our disposal would fit within this model. The primordial aether is assumed to be the underpinning function and the model relies on and maximizes the placebo effect for efficacy. A common nomenclature is introduced, through which health status can be measured and changes resulting from interventions be also evaluated regardless of the mode of intervention. It is a non-linear system blind to the traditional divisions made in health and medical disciplines.

KEYWORDS: Salutogenesis, pathogenesis, salutogen, aether, biophoton, placebo effect, homeostasis, salutogenic reserve, homeostatic decay, cellular cosmic signature

INTRODUCTION

Ours is probably the first culture in human history where medicine, health and healing are considered to be separate entities.¹ Until the 20th century most cultures recognized that these three belonged within a spectrum and their systems of health did reflect that notion.² A logical and coherent framework of reasoning needs to re-establish the longstanding traditions in preventive medicine, health and healing, as employed through the centuries. Criticism directed at dimensions in health, which cannot readily be evaluated using current technologies, is that every intervention has to be demonstrated efficacious according to the “scientific method.”³ However, while the scientific method, as it is employed today, is arguably the most powerful tool developed by humanity in recent history, the analytical models it employs make certain assumptions about reality which do not necessarily hold true, especially in biomedical research.

ASSUMPTIONS IN THE PREVAILING ANALYTICAL MODELS

1. *That our present technologies can discern the difference between a healthy cell and a normal cell.* If green tea is good for one’s health, for example, one must be able to demonstrate empirically that it is indeed beneficial. Most of what can be demonstrated empirically resides on the threshold between the absence and presence of a specific clinical condition or disease. In other words, if it cannot be demonstrated that green tea can reverse some clinical condition or conversely prevent it, then green tea is not considered efficacious. . . . or better yet, there is “no scientific evidence” demonstrating that green tea imparts any efficacy. This is because we can tell the difference between a sick cell and a “normal” cell but not the simple improvement from a normal cell to a “healthy” cell. We could never know such a change according to the existing methods at our disposal.
2. *That biomedical relations, broken down to their most fundamental elements, are ordered in a linear fashion.* As such, our insistence on empirical evidence for efficacy assumes that appropriate tools to measure what we believe we are measuring, do exist. A case in point is ascorbic acid. It was established as a vitamin by virtue of the resulting scurvy concomitant to its deficiency.⁴

But today we know that ascorbic acid is valuable in ways other than its utility in connective tissue pathways. We know it is a useful antioxidant that quenches free radicals within the human organism using a completely different mechanism.⁵ The latter does not qualify it as a vitamin because it departs from the traditional definition of a vitamin.⁶ Thus, shall we redefine vitamin C? We know intuitively that reality is not ordered in a linear fashion but practically all the analytical tools we use presume a linearity in relations to the point where we equate linearity with biological significance. For this reason, an analytical method that acknowledges non-linearity and the possibility of subtle effects in medicine, health and healing is needed. However, a unified and coherent context for it does not yet exist and Salutogenesis is being proposed as such a context.

ON SALUTOGENESIS

Salutogenesis is a term first coined by the late Professor Antonovsky of Ben Gurion University of the Negev, Israel, to describe the process of resilience to insult, from a social medicine paradigm.⁷ Most of his proponents continue to use this term from that paradigm. In this writing, the concept has been taken beyond the psychosocial to its fundamental biophysical underpinnings to mean: **The human organism's ability to resist insult, fight disease and promote health at the molecular and electromagnetic level.** It is derived from the Latin *Salus*, which means **health** and *Genesis*, which means **source**. *Salutogenesis* is the antithesis to Pathogenesis.⁸ The term salutogen is here proposed for: **Any substance, activity or procedure that enhances health or protects the disease-free human organism from the effects of insults.** Specific substances such as antioxidants, flavonoids or foods such as walnuts and fish oil do not yet have a place in the health or medical lexicon because we operate in a paradigm that is, for the most part, oblivious to *Salutogenesis*. These substances, within the proposed nomenclature, would be called *salutogens*.

Therapies, substances and procedures have been used as preventives (*salutogens*) for millennia. Light, laughter, subtle energies and hormones are but a few of the non-nutritive *salutogens* in use over the years. The prevailing paradigm begs to see a pathologic cell become normal or observe the effects or sequelae emanating therefrom, using linear models, in order to declare efficacy.

Through *Salutogenesis* the human organism can be preemptively healed. The processes that bring about pathology may be retarded or averted long before clinical manifestations occur. The health and medical practitioners can implement salutogenic interventions as routine preventive measures. Research into preventive medicine would focus more on making the human organism more resilient to insult. The practice of medicine would assume a preventive and probably less costly paradigm. Much of the substances and alternative practices would be subsumed into one scientific construct in which all practices can be compared and evaluated on a level playing field. Consumers would be compelled to be more participative in their health care rather than simply looking for insurance “coverage” and the medical practitioners would be compelled to know more about the “pills, potions and lotions” their patients are consuming from the health food store. But first, the antithesis to *Salutogenesis* must be considered; the prevailing *Pathogenesis Model*.

THE PATHOGENESIS MODEL

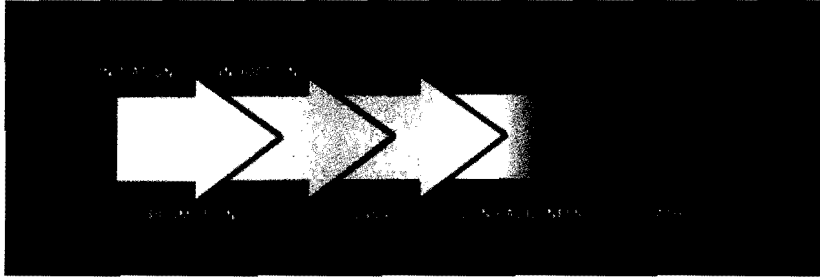
The *Pathogenesis Model* of disease is rooted in the scientific method as employed the past two centuries. Without discussing the historical roots of this Newtonian deductive reasoning, we can deal with its most recent adaptation into the Popperian probabilistic model, which has become the scientific standard in biomedical research today.⁹ We falsify an assertion by simply posing a null hypothesis, which is usually dichotomous, and we use some model to ask the question whether proportions, means, ranks, rates depart from that null within *a priori* specified statistical parameters.¹⁰ We test its falsifiability, usually in a linear model. This approach works well in mechanistic single or multiple linear or log linear relations.¹¹ Our medical reality tells us that life is not ordered in a linear fashion and that not every effect on a cell is measurable according to our current conception of cellular and molecular biology. A patient may feel better from a therapy or substances that are functioning simply as *salutogens* without our ability to measure the clinical effects.

The Popperian linear falsification construct of reasoning has served us well in past decades.¹² But now, the linear models are no longer adequate, not that there is anything wrong with them, but that we have outgrown them by virtue

of our new found understanding of how nature is ordered. Kenneth Rothman's treatise on disease causation is a monumental watershed in our quest to model disease causation and, conversely, prevention in human beings.¹³ It is a watershed for at least three reasons;

1. *It recognizes that causation is multifactorial.* For the first time, the multifactorial nature of causation is articulated in a logical framework. It is only within the past 30 years that we have come to discard Koch's one-disease-one-cause construct.¹⁴ Moreover, in our development of drugs, we continue to think in terms of the one-disease-one-cause construct.
2. *It is not linear.* The linearity is a much more difficult idea to abandon because, we tend to think in linear terms. Even when we consider multifactorial issues, we order them in a linear fashion. Rothman's pie chart is a worthwhile attempt at bringing the global or three-dimensional construct to life, especially his recognition that the contribution of all possible causes of disease is greater than 100%.¹³ This is clearly a new concept whose reality still eludes many of today's investigators.
3. *The probabilistic falsification model we currently use is inadequate for investigating disease causation or prevention.* Rothman is expressing his concerns by introducing the idea of sufficient and necessary cause, within the Popperian paradigm. He shows that there is always a constellation of contributory causes that have to be expressed sufficiently to bring about disease in a probabilistic and falsification model.

If we consider the *Pathogenesis Model* used in describing the progression of a neoplasm from a normal cell to a dead cell, we conjure the basic elements in pathogenesis generally. A disease begins with a lesion. That lesion may be what allows the cell to change its secretion of specific substances or it may contribute to certain functional infrastructure. The normal cell is transformed into an abnormal cell through *initiation, promotion and induction* as depicted in Figure 1. When the first signs of a changed cell become apparent without any concomitant clinical presentation, it becomes the *detectable pre-clinical phase* (DPCP) of disease. By the time it becomes clinically manifest, it is *clinical illness*. Eventually the cell will proceed on to *death*.¹⁴ This model continues to have merit, however, there is a myriad of factors that will give rise



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Figure 1. Pathogenesis model of progression.

to *initiation and promotion*; environmental factors, host factors and so on. Furthermore, in this model, we do not have a good grasp of what is a healthy cell and what is a normal cell prior to the *induction* period. In fact, a cell in induction is considered to be “normal.”

THE SALUTOGENESIS MODEL

While all the concerns noted above could be true in the *Pathogenesis Model*, the model itself begs to see pathology in a cell and then have that pathology reversed or ameliorated, in some fashion within some statistical parameters, in order to call it efficacious or, conversely, safe. In medical school we learn about normal cells and sick cells. We have no concept of how a healthy cell should look or behave. If a *salutogen* can render a normal cell healthier by slowing down the untoward processes, we have no way of measuring that change using the *Pathogenesis Model* nor any existing technology. However, the patient may notice the difference. Indeed, *Salutogenesis* should be the new paradigm and appropriate tools should be developed to meet this challenge.

PREMISES FOR THE SALUTOGENESIS MODEL

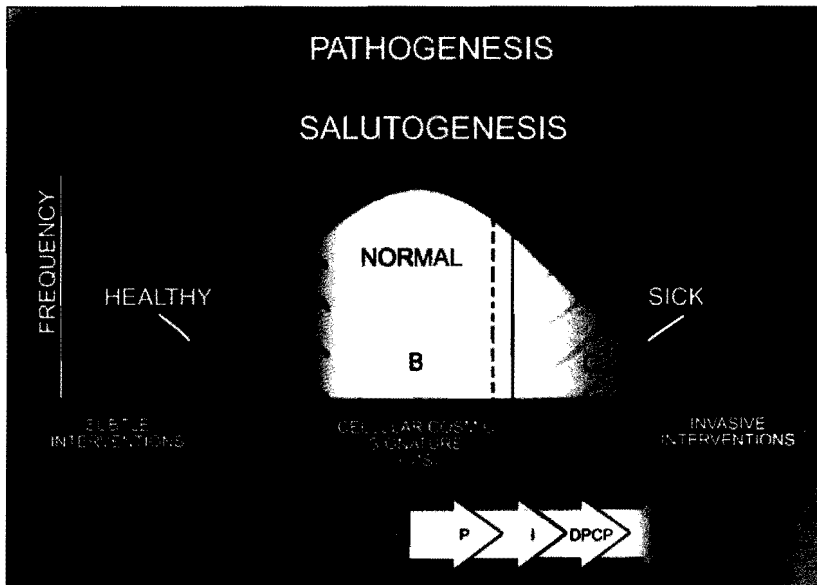
Premise 1. In an idealized normally distributed human population, there will be a spectrum of health beginning with the very healthy to the terminally ill. Overlaid upon the normally distributed spectrum are three basic regions of

health, A, B and C. A, to the far left of the normally distributed curve, represents the best possible viability, while B, the middle of the curve which contains the peak, represents the “normal” health of the masses. Area C, to the far right of the curve, represents the proportion of the population that is clinically ill. This characterization implies that the *proportion of the population that is clinically ill is relatively small, that the majority is “normal” and that a small minority is healthy as defined by their CELLULAR COSMIC SIGNATURE*. The C region is the part of the population for which medicine and all the other health activities have been focused in the occidental world. The small section preceding region C is the DPCP or Detectible Pre-Clinical Phase of disease. This represents disease that is present but not yet clinically manifest and has been the basis for most of the disease screening programs of today.¹⁴

Premise 2. There exists a process by which a cell deteriorates from its ideal “healthy” state, to a sick state and finally death. This process has been historically known as pathogenesis; however, it has been described only in terms of “abnormal” cells.¹⁵ In the *Salutogenesis* paradigm, the healthy cell undergoes changes that are not morphologically visible long before morphologic changes can be observed. Indeed, before the changes become morphologically apparent, cells have been called “normal.” In the *Salutogenesis* paradigm *a distinction is made between normal and healthy*. These changes are subtle electromagnetic energy, biophoton energy, chemical and genomic changes for which methods of measurement remain elusive.

Premise 3. The pathogenesis process *can be reversed*, but the extent to which that reversal is possible is predicated upon many prevailing conditions.¹⁶ This reversal is called Salutogenesis and is the antithesis to pathogenesis. However, pathogenesis in a single cell, according to our current understanding, does not readily reverse. Instead, the cell dies and is replaced by new cells which are not on an immediate path towards death.¹⁷ So reversibility is the ability to shift the equilibrium to the left while the system’s “natural” propensity is to progress to the right (Figure 2). In other words, the population of “sick” cells is replaced by a population of “healthy” cells, hence maintaining a homeostasis biased towards the left.

Premise 4. The viability status of a cell or an organism can be measured at any point during its life and belongs in a spectrum from healthy to death. This measurement is achieved by detecting the *Cellular Cosmic Signature*



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Figure 2. A basic overview of the central tendency of a normally distributed human population.

(CCS) of the cell or organism, which in turn is the health index of that cell or organism. The CCS is a composite measure of the change in the light emission of the cell reflecting homeostasis changes through the spectrum of pathogenic change from a healthy cell to a dead cell. The CCS may be measured for a small community of cells, for an organ or for the entire organism. The CCS is principally a measure of biophoton emission by living cells. Biophoton technology has been known in biophysics circles for almost a century but relatively new to the English Speaking biomedical world.

For the past 30 years, F. A. Popp has pioneered a voluminous body of work and championed the biophoton phenomenon, but more recently, a comprehensive work by Bischof has tackled this emerging discipline.¹⁸ Much of this work emanates from Germany and the Far East under the auspices of The International Institute of Biophysics. Work in Kirlian photography has also delved into this area for several decades. The schematic diagram in Figure 2 depicts the basic overview of the central tendency of a normally distributed human population. The majority of this populace is "normal" because of the

apparent absence of illness. So a healthy cell should emit more biophotons than a normal cell, which should express still more biophotons than a sick cell, where Cellular Cosmic Signature (CCS) = $1/(\text{mean biophoton emission/square centimeter of body surface area/second})$, at room temperature, where biophotons are the quanta of light emitted by the cell *in vivo*.¹⁹

Biophoton emission is a general phenomenon of living systems. It concerns low luminescence from a few up to some hundred photons per second, per square centimeter surface area, at least within the spectral region from 200 to 800 nanometers.

Popp's Biophoton Emission

$$1 \text{ biophoton emission}_\lambda = h \times c/\lambda \text{ Joules} \tag{1}$$

where λ = wavelength of the biophoton

h = Planck's constant = 6.6262×10^{-34} j.s (joule seconds)

c = Speed of light = 2.9979250×10^8 m/s (meters per second)

It is thought that communication, between and among the organelles, cells, tissues and organs within the organism, is achieved through a network of light invisible to the naked eye.²⁰ It appears as though the organism mobilizes this energy to enlist whatever resources are available for healing purposes, suggesting that healing at its core is fundamentally mediated through biophotons. These are photons used by all living organisms and they arise from the body's ability to convert Aether into Aether Derived Energy. The Aether Derived Energy is in the form of biophotons.

According to the Thomson-Bourassa Aether Physics Model, Aether is the primordial substance from which everything, including the vacuous space itself, is created.²¹ It explains 100% of the mass in the universe. The Aether Physics Model resolves many discrepancies in our prevailing physics paradigm. A dynamic Aether would explain some of the most complex difficulties in reconciling the Theory of Quantum Mechanics with the Theories of Relativity. A central concept of the Aether Physics Model is that space surrounding physical matter is active and dynamic, contributing to the existence of subatomic particle angular momentum. This dynamic aspect of space is mathematically represented through Coulomb's Constant and the gravitational constant.

In the Salutogenesis construct it is believed that the Aether is used by the human organism to facilitate memory, the placebo effects and spontaneous healing through the autonomic nervous system. It activates the regulation and production of cytokines involved in inflammation, immunity, sleep, oncogenes, etc. Salutogenesis further purports that it is not mediated through adenosine triphosphate (ATP) energy moiety and that the human organism, under sleep conditions, is an ideal accumulator of this Aether. In a word, the human organism uses the Aether which excites the organism at the subatomic level. Once excited, the human organism releases photons which it consumes. Excess energy is released as biophotons by the organism although it is released according to several energy fields, as the ancients of India have determined with the chakra.²² This excess energy is the *Cellular Cosmic Signature* which is an index of homeostasis integrity. The excess energy is released back into the Aether or shared with other organisms in the form of intent, hand shaking, coitus and orgasm, laying on of hands, prayer, mantra, etc.

With this energy comes concomitant information. As the energy is transferred from one organism/substance to another, it brings along memory from the previous host. Benveniste's controversial work suggests that water previously containing a substance will continue to carry "memory" of that substance.²³ Water containing memory of contaminants can be rejuvenated by the introduction of new memory, much like overwriting a computer diskette containing bad files with good new files. A healthy organism, whose homeostasis approaches optimum thresholds consumes less aether derived energy, so it will emit more biophotons, while a sick or aging organism will consume more and emit less biophotons. This becomes a good measure of salutogenic reserve measured as the *Cellular Cosmic Signature*.

The human organism is immersed in plentiful ambient Aether. With a magnetic permeability (expressed as μ_0) of value $4\pi \cdot 10^{-7}$ henries per meter and a permittivity ($1/\mu_0 c^2$) of $8.854187817 \times 10^{-12}$ farads per meter, the concept of the universe being immersed in a "vacuum" filled with the aether was accepted by most illustrious scientists of a century ago, including Albert Einstein,²⁴ Maxwell²⁵ and others. It was Einstein²⁴ who said:

. . . we may say that according to the general theory of relativity space is endowed with physical qualities; in this sense, therefore, there exists an ether. According to the general theory of relativity space without ether is unthink-

able; for in such space there not only would be no propagation of light, but also no possibility of existence for standards of space and time (measuring-rods and clocks), nor therefore any space-time intervals in the physical sense. But this ether may not be thought of as endowed with the quality characteristic of ponderable inertia, as consisting of parts which may be tracked through time. The idea of motion may not be applied to it.

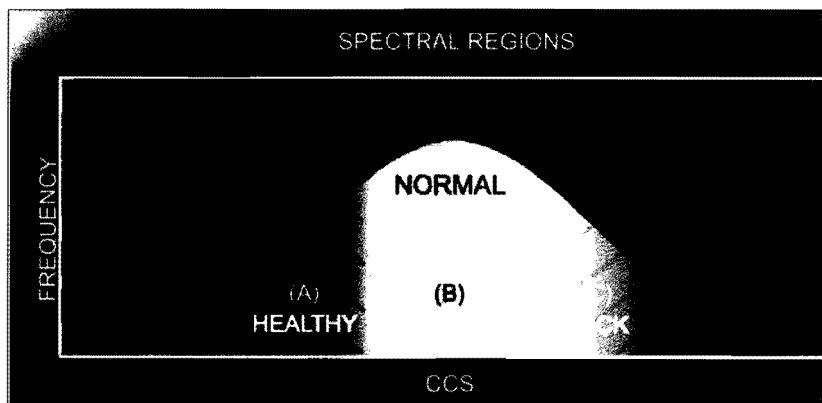
However, after the Michaelson-Morley experiment yielded null results, the concept fell into disfavor.²⁶ Michaelson and Morley's experiments had been testing for a stagnant and rigid Aether. Today, many physicists are revisiting a fluid Aether concept. In the Salutogenesis construct it is believed that the Aether is a medium in which all creation is immersed. This is the medium in which light and electromagnetic waves are propagated. Like an ocean, energy can be derived from the medium itself on which living creatures, the human organism and plants do "feed." Indeed deprivation of it will result in untoward health effects. Because of its inherent spectrum of frequencies, the Aether is analogous to the Periodic Table of Elements which contains 115 to 116 different densities called elements, beginning with Hydrogen, the simplest. In the Aether, the analog to Hydrogen is only now beginning to be understood, but there are numerous other frequencies analogous to the different elements in the Periodic Table. Each frequency can combine with other frequencies and bring about effects, some of which are beneficial and others which are not so beneficial.

The Aether is also a medium for cosmic information. It could also explain the placebo effect and other yet unexplained means by which organisms heal themselves. Conversely, it could explain the patient who is always complaining of illness in the absence of any observable clinical evidence, not to mention mind-body processes and Hans Selye's generalized adaptive syndrome (GAS).²⁷ The holographic biophoton field of the brain and the nervous system, and perhaps even that of the whole organism, has been postulated to be the basis of memory and other phenomena of consciousness, by neurophysiologist Karl Pribram and others.²⁸ Work by Antonovsky, Benveniste, Bischof, Popp and Selye, contribute to understanding this composite quantitative measure of health.^{7,27,29-31} Benveniste's work particularly, underscores the concept of transference of aether and information from one aqueous moiety to another.²⁹

Even as the human organism sleeps, it becomes the most efficient Aether Derived Energy accumulator. Our need for sleep could be primarily for the purpose of regaining the Aether Derived Energy for the day. Schauberger demonstrated that aqueous bodies can accumulate Aether Derived Energy through vortex movement. The mammalian heart is itself a vortex and accumulates Aether Derived Energy constantly and particularly during sleep, analogous to the generation of electrical current by crossing a magnetic field in a perpendicular attitude. The use of an auxiliary vortex, as in the Ventricular Assist Device (VAD), has provided unexpected “healing” to the failing heart tissue. Wilhelm Reich demonstrated that a cosmic energy, which he coined “orgone,” had an affinity for aqueous bodies.³²

Premise 5. In a normally distributed human population, the spectrum of viability spans through *basic regions of viability* that merge one into another (Figure 3). The regions are an attempt to contain the spectrum of possible classes of interventions. Each of the categories can be ameliorated by efforts from the most subtle effects on health to the most invasive, namely (in reverse order):

vii) Procedures. Surgical and other invasive procedures are well within the *Salutogenesis* paradigm, which is preventive. Surgeries such as prophylactic mastectomies and excision of malignancies *in situ* are among the most



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Figure 3. A depiction of the seven regions of viability.

common preventive procedures. Some may even insist that all surgeries are preventive. Even plastic surgery is a new tool for the mental health of dysmorphic patients.³³ *Interventions:* Invasive medicine.

- vi) **Drugs.** Many prescription and Over The Counter pharmaceutical preparations play very crucial roles in *Salutogenesis* even in the prevailing pathogenesis paradigm. Drugs such as cloroquine malarial prophylaxis, isoniazid prophylaxis for tuberculosis, have long been used for preventive purposes and insulin sensitizers are emerging as preventives for insulin resistance or the metabolic syndrome.³⁴ Vaccines also fall in this category. More and more drugs will, in the future, be used at low doses as *salutogens*. Ancient societies discovered herbs as basically low dose drug cocktails. *Interventions:* Preventive medicine and primary care.

- v) **Substances.** Herbs that are not normally consumed as foods fall into this category, but more importantly, the compendium of *salutogens*, which has been derived from foods and herbs, is growing. Substances contained in walnuts, red wine, fish oil, ellagic acid, antioxidants from grape seed and pine bark all fall into this category of substances that are neither vitamins, minerals nor herbs *per se*.³⁵ Substances known or suspected to be preventives without belonging to any of the vitamin and mineral families may be expressly coined *salutogens*. Active ingredients in “functional foods” are also *salutogens*. Specifically *salutogens* are substances, which reverse the homeostasis equilibrium by shifting it to the healthy side of the spectrum. Most vitamins, by definition, reverse clinically overt pathology but may also continue to improve “vitality” even after the clinical threshold has been achieved.³⁶ Moreover, most vitamins would belong to a subset of *salutogens*. *Interventions:* Salutogens.

- iv) **Foods.** Most societies, from time immemorial, have recognized the utility of food as “medicine.” A classic case is the now disputed discovery by Lind that limes averted scurvy among British sailors.³⁷ Whole foods and food derivatives such as vitamins, fiber, juices and herbs are pivotal to a sound *Salutogenesis* program. Historically, we have advised patients to consume fresh fruits and vegetables as part of a good dietary regimen, although there is no empirical evidence demonstrating that such is actually true. Fresh fruits and vegetables will show a higher aether content than

non-fresh foods.³⁸ This could be the empirical evidence we have been missing. The energy is imparted to the human organism resulting in greater *Salutogenesis*. *Interventions*: Fresh and Raw foods, Functional foods and Nutritional supplements.

- iii) **Forces.** There are forces, not quite so subtle, that have been used as therapies for centuries. These physical forces are used to solicit and elicit subtle aether to bring about physiological changes. *Interventions*: Physical Exercise, Physical Therapy, Acupressure, Acupuncture, Massage Therapy, Yoga, Tai Chi, etc.
- ii) **Subtle Energies.** While the occidental scientific world has not had much to do with subtle energies except in prayer and the laying on of hands, the oriental traditions have an extensive history of using them for therapeutic purposes.³⁹ These, so called, subtle energies are the aether. *Interventions*: Homeopathy, Laying on of Hands, Aroma, Sound and Visual therapies, Magnets, Bracelets and Vibrational therapies, Shamanism, Shiatsu, Chakra manipulation, Feng Shui, etc.
- i) **Placebo Effects.** The placebo effect is the quintessence of *Salutogenesis* in that it is the goal for which we strive. It is the ultimate in prompting the cell or the organism into spontaneously healing itself. Examples are suggestion, hypnosis, meditation and other mind-body oriented mental effects. An individual witnesses terrifying events, i.e. is exposed to events of a specific quality and the brain cells are permanently altered, changing the brain chemistry and resulting in PTSD (Post Traumatic Stress Disorder).⁴⁰ For some reason the human organism's physical reaction creates a vicious energy cycles that interferes with the successful ability to use aether and PTSD is made manifest. *Salutogenesis* presumes that there are effective energies to reverse such a change. *Interventions*: Hypnosis, Suggestion, Meditation, Prayer, Mantra, Counseling etc.

Premise 6. *Salutogenesis* can be achieved at any point in the spectrum using whatever tools are available and necessary to bring about the reversal of pathogenesis. Drugs and surgery can achieve *Salutogenesis* just as much as it can be achieved by the simple suggestion, counseling, placebo effects and aromatherapy depending on the circumstance.⁴¹ Therefore it recognizes the utility of

methods from all traditions and attempts to bring them under one scientific construct for standardization and evaluation. Salutogenesis does not judge *a priori* that the stethoscope is superior to the banana leaves that a shaman may use in his craft. It is blind to the traditional boundaries between disciplines and crafts in the realm of health and medicine. Rather, Salutogenesis attempts to discover what it is about banana leaves, using the most fundamental measuring tools, namely *Cellular Cosmic Signature*, to determine efficacy, if it does exist.

THE SCIENCE OF SALUTOGENESIS

In the traditional *Pathogenesis Models*, all disease begins with a lesion and this lesion begins with some cellular aberration. If we consider the model used in the neoplasm of the cervix as an analogy, the cell shows progressively dysmorphic changes.⁴² *Salutogenesis* contends that long before dysmorphic changes occur, there have to be “unapparent” energy, chemical and molecular changes. This is an intuitive deduction that most would accept but which remains to be empirically demonstrated. The earliest changes should be demonstrable using a technique for measuring subtle energy or biophoton changes.⁴³

Epidemiologic findings on a disease such as hypertension, for example, suggest that individuals who are “genetically” predisposed to hypertension can begin to show clinical signs at about the median age of 42.⁴⁴ There are several gene loci associated with hypertension, some of which are active genes while others appear to be simply marker genes.⁴⁵ For some reason, at about this age, genes are turned on or turned off. It is not clear what turns them but whatever it is seems to be associated with cell cycles, age or the ageing process. When the genes are turned the change could be monitored indirectly through changes in mRNA.⁴⁶ These changes in mRNA would in turn show a subtle energy change. In the future, *salutogens* should emerge that can prevent or delay the turning on and off of “bad” genes. This can only occur within a salutogenic paradigm that recognizes and is indeed seeking such a prospect. These *salutogens* could be endogenous, such as enzymes, cytokines, and endorphins or exogenous, such as herbs, spices, drugs, therapies and combinations thereof. They could also be procedures, such as “energy” interventions.⁴⁷

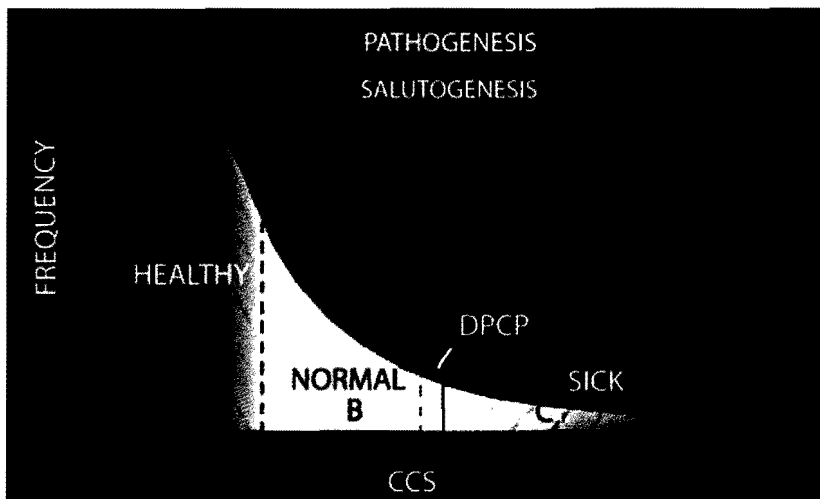


Figure 4. The goal of salutogenesis.

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The challenge of *Salutogenesis* is to develop techniques that can establish a universal energy signature which can be used to measure these subtle energy changes beginning with the healthiest cell whose “bad” genes have not yet been turned on or off. Based on this spectrum of energy change, a standardized energy signature can be established for screening and evaluation of interventions. The energy signature can then be used for pre- and post-intervention measures. Interventions could be anything in the entire spectrum from hypnosis, shamanism to the most invasive surgeries.

In the prevailing *Pathogenesis Model*, it is perfectly acceptable to maintain the curve in Figure 2 at equilibrium, as it appears. In the *Salutogenesis Model*, Figure 4 above is the goal. Ideally, the new paradigm should be attempting to shift the norm (region B) or central tendency of the curve in Figure 2 towards the left, i.e. towards region A, as depicted in Figure 4. Coincidentally, Popp and colleagues found that physiological values of healthy people have a log normal distribution, rather than the normal Gaussian distribution.⁴⁸ The goal of salutogenesis is a skewing of the normal distribution to one that closely approximates a log normal curve. This reflects a coherent field that controls the regulatory activity of biological systems in contrast to a chaotic field as seen in completely random processes. This skewing is indeed the improvement of homeostasis to a more coherent field.

Going back to our schematic in Figure 2; adverse deficiency in ascorbic acid in region C will give rise to scurvy, but subtle deficiency in region B will give rise to a diminished antioxidant effect by a completely different mechanism.⁴⁹ Which one should be used as the benchmark for deficiency? The fact is that ascorbic acid is a vitamin when it prevents scurvy, but it is a salutogen when it acts as an antioxidant.

DISCUSSION

PLACEBO EFFECTS

When salutogenesis occurs without any idea what caused it, we call this process “spontaneous salutogenesis” or the *placebo effect*, . . . the ability of the human organism to defend and heal itself, on prompt. The human organism, at the suggestion of medication, produces its own *salutogens* to the tune of 35% to 60% efficacy in clinical trials.^{50,51} Ideally *Salutogenesis* seeks to heal the body before the Detectable Pre-Clinical Phase occurs. The scientific community has generally characterized the placebo effect as a function of the mind and the will to live. Some more recent meta-analyses seem to refute the very existence of the *placebo effect*.⁵² Historically the placebo effect has been characterized as the superfluous effect in clinical trials. It has been described as “any dummy medical treatment; originally, a medicinal preparation having no specific pharmacological activity against the patient’s illness. . .”⁵² This definition summarizes our attitude to placebo: a useless and undesired side effect of treatment. We have looked upon it as a nuisance to be discarded. However, in the *Salutogenesis Model* we are counting on it. Only recently have serious strides been taken to understand how and why it occurs.⁵³ Even surgery can act as placebo.⁵⁴

Little is known about placebo pharmacology but we should seek new methods for eliciting the optimum and maximum placebo effects out of any given situation. Aspirin, for example, is a molecule which obeys chemical laws. Its transport across membranes and through compartments is governed by rigorous pharmacokinetic equations which should be considered during treatment. This conceptual framework ignores the placebo effect entirely because it is presumed the placebo effect is without any “specific pharmacological activity against the patient’s illness” at all.⁵²

The placebo effect seems to be always elicited by the presumption of treatment.⁵⁴ This suggests treatment to be ancillary to the placebo effect and in many cases there may be a synergy between the placebo effect and the treatment. Hence the cultural differences in placebo effects.⁵⁵ In a word, the placebo effect appears to be synonymous with “healing.”

SALUTOGENS

The most dramatic salutogens on the market today are arguably hormone replacement therapies. These are just another stark approach to *Salutogenesis* for both men and women. Perimenopausal Hormone Replacement Therapy (HRT) has long been the mainstay in Salutogenesis for women and Testosterone Replacement Therapy (TRT) is increasingly becoming equally popular for middle aging men.⁵⁶⁻⁵⁸ HRT tries to retard the homeostasis decay and apparently does it effectively. However, by definition, homeostasis is a constant attempt at establishing a physiologic equilibrium. Therefore whenever one part of the complex physiologic moiety is altered, the organism compensates, creating a possible new imbalance in the homeostasis. That compensation may result in harm as exhibited by the recent heart disease and carcinoma reports associated with the use of HRT.⁵⁹ Within the framework of the *Salutogenesis Model* CCS should be able to detect whether an intervention is possibly creating untoward effects.

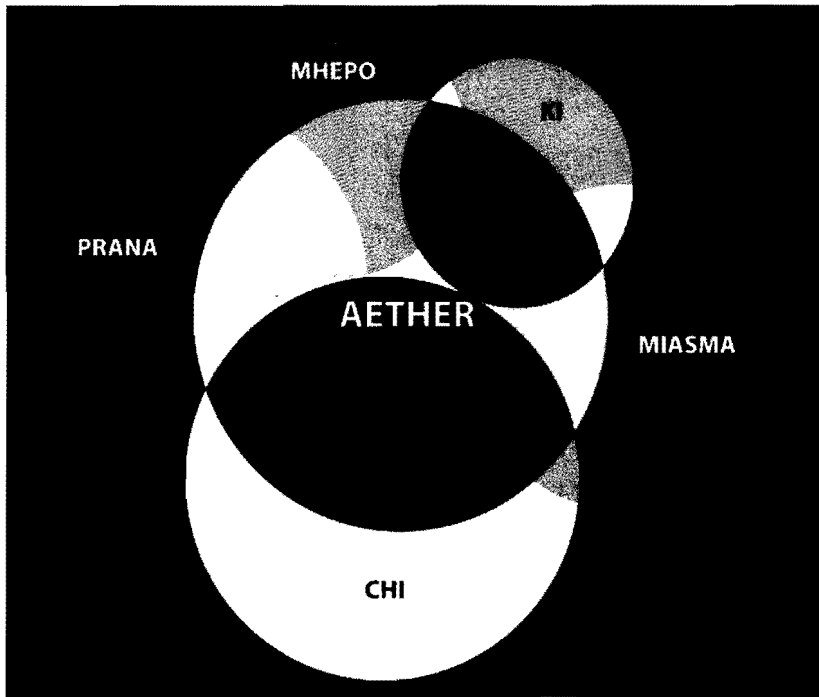
An herb, such as garlic, has more than 32 identified bioactive compounds, but some have standardized it against *allicin* as the active ingredient.⁶⁰ The probability is that several compounds in a substance act in concert or synergy to bring about salutogenic effects and as such, standardization may actually nullify efficacy. A salient analogy is the growing realization that combination therapy with drugs at lower doses can be more efficacious with less adverse effects than monotherapy at higher doses in several clinical scenarios. Drugs are generally homologues or analogues of naturally occurring substances. This is yet another reason why the non-linear Salutogenesis paradigm is well suited to deal with the issue of several compounds working in concert to bring about efficacy. Changes in homeostasis associated with these salutogens will, in the future, be measurable through the *Cellular Cosmic Signature* to recognize that an apparently normal cell can actually become healthier. In essence, pharma-

colgic and placebo effects are “energy” effects and all medicine is fundamentally “energy medicine.”

MIASMA THEORY REVISITED

Many traditions have expressed the concept of Aether and homeostasis, even our occidental traditions have had such a notion. The Miasma Theory was once the leading theory on disease causation before the Germ Theory superceded it. While the Miasma Theory had not evolved to the extent the Oriental *yin* and *yang* theory, it contained many of the same elements, especially the earlier definitions of *chi*.⁶¹ Had the Miasma Theory been allowed to evolve along with the Germ Theory, we would have had both the mechanical and electromagnetic traditions of health and medicine in the occidental world today. While the flaws of the Miasma Theory do not need repeating, its positive elements are seldom ever articulated. Public Health and Sanitation have their roots in the Miasma Theory. In fact, the sanitarians of the day resisted the Germ Theory for a long time, in favor of the Miasma Theory.⁶²

The nomenclature for what we now understand as *Salutogenesis* has taken twists and turns through the centuries. It appears that homeostasis, or the equilibrium between salutogenesis and pathogenesis (*yin* and *yang*) and the underlying energy, have been understood by practically every culture and expressed in different ways.⁶² Each society captured some essence of it, but either in part, or in excess. Therefore, what the Chinese call *chi*, and the Japanese call *ki*, the Polynesians call *mana*, the Indians call *prana*, the subSahara Africans call *mbepo* and the English called *miasma vapors*, of the Miasma Theory of Disease, all approximate more or less the idea of aether as expressed in this writing. The definition of *chi* evolved through the centuries to a point where *chi* 2000 years ago is different from *chi* today. The same would have held true for *miasma* and *prana*. Nevertheless, they were all attempting to approximate the same concept; aether, which to some can even be extended to inanimate objects. Today we need to reconcile the meanings of these concepts, taking into account their standing in the evolutionary process. Figure 5 expresses the convergence of these concepts.



A. J. Eaton

Figure 5. Evolution of the Aether Derived Energy Concept.

According to the Aether Physics Model, the Aether unit is defined as one quantum unit of dynamic spacetime or a quantum of rotating magnetic field.²¹ Those who have investigated magnets for healing may be glimpsing into the Aether.

The *Cellular Cosmic Signature* should be able to express the change that occurs in homeostasis long before any pathology is even suggested. For this reason, many interventions emanating from longstanding traditions but deemed “quackery” may simply be addressing and affecting changes in homeostasis, which we have not yet been able to measure. Conversely, the elusive “Sick Building Syndrome” or “Building-Related Occupant Complaint Syndrome” (BROCS) and other unexplained illnesses may have their underpinnings in anomalies associated with the Aether’s effects on homeostasis.⁶³ An improved homeostasis will not necessarily translate into clinically observable change,

especially in a subject who is not clinically ill *a priori*, although an improved homeostasis means improved health status.

In the “natural” progression of life, the biophoton emission gradually wanes with age, thus depleting the salutogenic reserve, i.e. homeostasis shifts to the right becoming increasingly dominated by pathogenesis. The natural reversal of this decay is *Salutogenesis*. Although it appears that homeostasis decay is inevitable, *Salutogenesis* is the organism’s way of reversing this homeostasis decay. The purpose of *Salutogenesis*, the discipline, is to determine as many methods possible of maximizing the reversal of homeostasis decay long before it becomes clinically relevant.

THE HUMAN GENOME

In the mechanics of *Salutogenesis* it is already suspected that aether is the mediator of the placebo effect and hence the salutogenic process itself. For this reason the *Salutogenesis* construct is intimately intertwined with the human genome. When genes are turned on or off, modern inquiry wants to know the mechanisms. Some believe that communication of cells through emission of light could be the fundamental basis of all reactions *in vivo*.³⁰ Ultimately the model will find its base in the human genome where salutogens could be employed to turn certain genes on and off. From there the human organism enlists all the necessary armamentaria for the *placebo effect* which is the quintessence of *Salutogenesis*. Most of our healthcare and medicine are confined to area C, or that portion of the population curve which is sickest. In the *Salutogenesis Model*, it is assumed that the human organism is capable of improving at any point in the spectrum and our task is to find ways to achieve such a prospect.

CONCLUSION

Aether is the primordial substance from which all matter arises. The human organism, although it is designed for systematic obsolescence, feeds on Aether Derived Energy for viability. In order for the human organism to feed on the Aether efficiently, salutogens are necessary. They retard the obsolescence in

two ways. There are salutogens which directly affect the human genome, turning genes on and off for the purpose of retarding the obsolescence process. Then there are salutogens that affect the physiologic moiety to bring about the same change. The more efficiently this triad (the Aether, genomic salutogens, physiologic salutogens) is executed, the greater the level of resilience to insult and the more protracted is the longevity of the human organism. The human organism derives energy from the "ambient" Aether (quanta of dynamic spacetime or quanta of rotating magnetic field) by the Casimir Effect and uses it to process genomic and physiologic salutogens. Any excess energy is emitted as biophotons which are sometimes detected as aura, chakra and the like. This construct is fundamental in a spectrum from the very subtle effects to the most invasive medical interventions.

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$$A_u = \frac{m_a \lambda_c^3 F q^2}{e_a^2} = r m f d \text{ (Aether units),}$$

from which photons can be derived through the Casimir Effect in the Aether Physics Model. The Aether unit defines one quantum unit of dynamic spacetime or a quantum of rotating magnetic field and expressed as r m f d. r m f d is an important constant as it is the mediating constant for the strong nuclear force. The strong charge law is given as:

$$r_{mfd} \frac{e_{x_{max1}} \cdot e_{x_{max2}}}{L^2} = F$$

where $e_{x_{max1}}$ and $e_{x_{max2}}$ are strong charges of any two particles, L is the length between the strong charges, and F is the resulting force. The strong charge law is mathematically equivalent to the Casimir equation when all the lengths are taken to be equal to the Compton wavelength:

$$\frac{\pi \hbar c \cdot A}{480 \cdot L^4} = F$$

Within the Aether Physics Model, *enrg* is the unit of energy. It has the same dimensions as Joule, except that it also has a value. The unit of *enrg* is equal to the mass of the electron times the speed of light squared. The energy equation below shows how to tune strong charge to extract energy from the Aether. Energy is extracted from the Aether by generating photons in a finely tuned, spherical capacitance between the strong charges.

$$\frac{4\pi \cdot e_{emax}^2}{capc} = enrg$$

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