# Scientific Rational for OrganoMineral Complex (OMCx)

Seven human pilot studies have been done between 1993 and 2004 based on continuous care of 80,000+ individuals. This was done using a combination of concepts from traditional Allopathic medicine, Osteopathic medicine, traditional Chinese medicine, homeopathic philosophy and medicinal remedies, orthomolecular medical precepts, functional medicine and several unique pioneering ideas. All of these specific pilot studies were done to confirm components of facilitating cellular communication and how tissues behaved when given opportunities to change in ways which promoted their longevity and vitality. Cells consistently changed according to their self-interest to survive and then, more importantly, they changed in ways which promoted their ability to thrive.

How cells communicate is complex, but their communication is also decipherable and understandable. Currently, there are nine known ways which cells use to communicate information and status.

The self interest of cells and communities of cell, called tissues, are flexible. Yet, cells are also repetitiously predictable in their response toward changes in environment and availability of resources. For example, cells are flexible in their ability to substitute one resource for another even though the substitution is inferior. When the better resource is made available again, the cell will adapt and again take advantage of the superior resource. This resource will also be stored and then passed on to the next daughter cell. Thus, optimization, insufficiency and/or deficiency are spontaneously passed on depending upon the point of origin. Unhealthy cells pass on to the next generation, only what they have.

## Does DNA Have The Final Word?

DNA is important and it can be supported to help express positive, life-sustaining components. Tissues within their specialized community work cooperatively with the rest of the body. They behave in ways which support the whole and they behave in regional ways which support the organ system they belong to. This layered cooperation is akin to an internal radio device which is capable of receiving information signals and emitting information signals. Some signals are long-range to the whole body and others are short-range within the tissue itself. DNA is the computer-like life-interface which has an operating system and a mechanistic physical dimension. Yet, the mechanisms by which the cells control their structure, physiology and behavior extend beyond DNA. Thus arena's of quantum physics come into play along with the human mind, the human soul, the collective unconscious of the human species and the collective consciousness of the human species and our personal connection within other dimensions.

A cell's life is more controlled by its physical and energetic environment than by what genes are present. Genetics are not your destiny; there is no pre-destination in genetics. It is extremely important to understand this because it is not what traditional medicine teaches or believes. A lot of genetic material is dormant or poorly expressed because of what does exist, or does not exist, in its environment. Minerals, for example, intimately interact with 21 known nodal monitoring junctions which either allow a daughter cell to emerge or stop the process of cellular division. Genes are molecular blueprints used to guide construction but the end result is dependent upon what resources are made available. The environment is the functional, on-site foreman interacting with the blueprint instructions. Together, the character of a cell's life is built. This is true for both the external environment and the internal environment. For DNA to open for transcription, a specific set of minerals must be present in the nucleus. Ultimately, it is the cell's awareness of environment which begins the mechanism of life. Cells working in concert create higher and higher forms of life contrary to the physical universe and its thermodynamic laws of lower and lower states of organization and energy vibration. Cells strive to express greater consciousness. This is a fundamental effort for each cell.

It is commonly agreed in the scientific literature that all cells stem from an original source. Plant and animal species are integrated and are living in a dynamic balance of mutual support. Yes, Darwin's ideas regarding competition in nature are obvious. Simultaneously, it is obvious nature relies more heavily upon cooperation. The hundreds of thousands of species of bacteria in the ocean do not compete with one another to extinction for resources. Life prefers harmony over struggle but both have their respective role to help move life upward into greater consciousness. So does DNA have the final word? No, not at all. DNA expression is simply limited by the lack of mineral elements or ability to utilize the mineral elements being supplied. This lack of minerals and all transport functions are completely corrected with OMCx.

### **The Potential of Epigenetics**

The human genome project found less than half of the active genes researchers expected to find. The 25,000+ active human gene sets are currently regarded as THE instruction book for the human body. Ironically, the remaining genetic material is referred to as redundant DNA or "junk" DNA. (This "junk" DNA actually has a purpose, of course, and you can find a very plausible theory for that in Dr. Leonard Horowit's book, *Pirates of the Sacred Spiral*.) Experiments to date with multiple generations of plants reveal that fruits and seed go through a steady change. At the fourth generation level, there is a more dramatic change which includes a change of expressed geometry.

Every human cell came from the same sperm and egg melding. The cells were guided to take on specialized tasks and form what are called "tissues". Genes follow instructions – what to do and where and when to do transformative actions. Part of this physical construction is guided my macro-molecules, similar to a binary code. However, there are actually three such basic large molecular framework guides: 1) positively charged guide posts, 2) negatively charged guide posts, 3) neutral guide posts.

What helps to maintain these guide posts? Minerals within the fascial and ground-substance matrix. Each community of tissue cells ... heart, brain, liver, and so on, makes proteins which support and maintain differentiation and carry out specialized work. This is the realm of proteomics (which includes all of the enzyme systems). Yet these tissue communities somehow know to code and build only those proteins needed for their area of expertise. These instructions are intimately involved with DNA but these guiding openings and expressions or transcriptions are not found in the simple letter combination of the DNA helix / strand. These guiding sources of energy interact on the DNA in an array of mineral-chemical markers and switches. Collectively, they make up the epigenome.

When the internal environment of a cell changes sufficiently because of chronic mineral insufficiencies, any cell can spontaneously opt to shift to a more simplistic state as an act of self-preservation. This reversal of differentiation is most strongly determined by epigenetic environment. Of all the intracellular nutritional components, minerals and water are the two most important. There is a reason that cells don't either thrive or die, they adapt and in the process of self-preservation, they express symptoms and disease, which are merely a signal for us, or cry of insufficiency, if you will.

At Duke University in Durham, North Carolina, in 2000, Dr. Randy Jirtle, professor of radiation oncology, and Robert Waterland, carried out a unique genetic experiment. Pairs of obese yellow agouti-mice which carry a particular gene that makes the mice ravenous and yellow leads them to commonly develop diabetes and cancer. The intent of the experiment was to see if the genetic legacy of this sub-species of mice could be changed.

Offspring of agouti-mice are identical to their parents and equally susceptible to the expected life-shortening diseases. Without altering a single nucleic acid or base pair of the mouse DNA, these researchers changed the mother's diet starting just before conception. The mother's were fed a diet rich in methyl-group donors (small one carbon clusters which can attach to a gene and turn it off). The offspring were slender and brown in color. They did not display their parent's weakness or susceptibility to diabetes, degenerative disease or cancer and lived far longer than typical agoutimice. OMCx supplies the exact substances and allows each generation to begin to repair DNA transcription errors. Just as with the agouti mice, those health conditions currently labeled as "genetic" will cease to exist within as little as one generation. Your children will be born without the same weak genetic predispositions that you may have.

Epigenetics, genetics/genomics and proteomics are all reciprocally inter-related and interdependent. In addition, awareness is completely integrated with these processes. Awareness of environment; awareness of self, awareness for evaluation and response; responses leading to cooperation more often than to competition – these identify every living cell. Epigenomics both allow and guide genetics DNA expression. DNA expression leads to the manufacture of proteins. Proteomics build structures, immunity and all the myriad of protein functions, including the protection of DNA. All three working together build sperm and ova for reproduction. External nutrition establishes metabolomics/metabolism. All of these external protein substances and nutrient molecules contain information. The combined information may be neutral relative to a human being or it may be positive and support the combined cooperating cells of the human construct or it may be negative information. This will dictate the epigenetic expression and DNA response.

These nutrient molecules containing methyl units were supplied to the mouse, and through the mouse placenta, the methyl donors permeated the developing embryo's chromosomes and the critical agouti gene set expression was changed. The mother mice passed the gene on to their offspring but the methyl based chemical switch was affected. This is an example of what is called epigenetic change. The proper elements, supplied in a cell-usable format, make all the difference.

Can external intervention remodify, remedy and rebalance this situation? Yes. The OMCx is designed to do this. The complex as a whole primarily addresses DNA expression and intracellular activities. Some changes do occur on the cell membranes but these changes are both direct and indirect. For example, the OMCx helps to modify cell membrane flexibility and in a diabetic person, this allows glut bodies produced inside the cell to more easily fit into the membrane. Glut bodies are insulin receptors (plug-in sites). Thus, in turn, insulin is far more effective at getting glucose from the bloodstream and extracellular fluid compartments inside of the cells. Intracellular glucose is transformed into ATP energy molecules. never into fat (triglycerides). The glucose just has to be able to get inside the cells.

#### **Enzymes are Keys for Transformation**

There are key aspects to understanding in order to appreciate the profound nature of new technologies which can correct disorders and disease processes. DNA and the nature of the epigenome field are mutually interdependent and of equal importance for cellular function and for evolution vs. devolution (lacking the ability to express full potential). Healthy development of each life form in the microscopic kingdom and the animal kingdom require DNA sequencing and a supportive environment. The enveloping epigenome of DNA is sensitive to cues from the environment and respond with change – either subtle or dramatic changes. The changes are positive and facilitate evolution, or negative from exposure to a toxin which the cell, or a tissue community, or even a whole body system cannot transform and neutralize. What is the single most important component of transformation? The enzymes and their cofactors (mineral elements/catalysts). These positive and negative effects alter the software guiding the internal radio sets of DNA. These are sets which are designed to receive information and to transmit information. OMCx contains the highest percentage of bioactive enzymes and mineral transport proteins.

#### **Thought and Epigenetics**

Epigenetic switches enveloping the length and the groupings of chromosomes lie along the length of the double helix. If the correct triads of minerals are present with other switch material, the actual organization of genetic material begins to shift and change into a new geometry. These epigenetic switches and three dimensional geometric guides serve to turn on or off specific expressions of specific genes. Water influences this process. Human thought can influence this process. Repeated human thought processes contain sufficient energy to overwhelm self-correcting biofeedback monitors and guide which sets of genes get shut down and which are allowed to remain open and which are expressed. Thus, genes of bliss can be expressed and the individual has excellent health for decades or genes of tragedy can be expressed and the individual experiences high drama. Energy follows thought. Intention precedes thought. High drama may include shutting down neuroendocrine functions and distorting immune function and response. There are thousands of studies on mind-body connections and mind-body immunity.

A healthy, thriving epigenome is a multi-dimensional conscious expression from spirit to mind to emotion to body. Just as human beings are multi-dimensional, humans are also multicellular physical organisms; we must inherently share basic common behavioral patterns with our own cells. Each human is a busy community of 50 – 70 trillion cells. These smart cells are imbued with intent and purpose seeking environments which support their survival. Simultaneously, cells avoid toxic or hostile environments. Single cells analyze a myriad of stimuli from their microenvironment. Data analysis determines cell response. Specialized cells called the neural system signal the higher consciousness of stress and danger. What happens when cells have an environment which supports all of their survival needs and also supports new functions which allow them to shift from survival to thriving? The initial answer is astounding and the whole answer is yet to be observed. One thing is certain, what you think, believe and surround yourself with influences the epigenome.

#### **Epigenetic Improvement is a Generational Investment**

Each cell is an intelligent life form. Cells removed from the body can survive and grow on their own in a culture dish. Individual cells are capable of learning from environmental experiences. Cellular memories are created in different ways; antibodies are a well known example. When a virus such as measles, mumps or rubella infects a child, an immature immune cell is called in to build a protective protein or antibody. The antibody is very species specific. In the creation process, the activated immune cell must create a new gene sequence as a blueprint in manufacturing the viral antibody protein. This cellular mechanism is called affinity maturation. The final antibody is a perfectly shaped destructive complement to the structural shape of the invading virus. Activated immune cells then use a process called somatic hypermutation to manufacture hundreds of copies of this new antibody gene. The cells retain the genetic memory of this antibody against potential future infections.

Our research work has indicated that epigenetic signaling is passed on from one generation to the next. This can ripple on for several generations without changing one single gene sequence. This does not require intense environmental change such as forms of radiation: ultra-violet, microwave, X-ray or cosmic ray damage. Consequently, what we do today prior to deciding to replicate or reproduce via offspring can affect four additional generations.

# **Elimination of Disease**

The work so far has successfully changed cell division nodal monitoring and histone code activity. The current on-going experiment with the cucumber is an amazing expression of longevity. Sitting at room temperature since being picked many months ago, yet only showing minor skin changes, how will a cucumber picked from the vine almost 10 months ago look at the one year mark? With the level of DNA support and epigenetic support given in the greenhouse, it shows no overt change or degeneration. If certain triads of minerals are present, the DNA unwinds from the histone anchors easily and fully. If one mineral of the triad is removed, transcription error rates appear. If two are missing, error rates increase dramatically.

The typical American adult above age 40 has around 5% non-function structures inside the cell. This non-function could be used as one of the markers for aging. What is so amazing is that even with all of this sustained, repetitious malfunction and injury – give the DNA and the support envelope what it needs and the self-correcting and healing response will activate over and over. How many times, and in how many people must this process be witnessed before realizing it is a universal principal for every living cell? Yes, the epigenome is strongly established during fetal development. But DNA is designed to take advantage of improved environment and begin its evolutionary adaptation. The more awareness an organism has of its environment, the better its changes for survival and the higher the potential for it to shift to a state of thriving – an exponential increase in awareness. What about life is static? Every moment your cells are alive there are rhythmic alterations occurring which lead to certain genes being more or less available to the proteomics level within the cell. In turn, the biochemical machinery aids gene expression or gene suppression.

Unlike some overt genetic mutations, all negative epigenetic changes are reversible. If the intracellular mineral environment is changed in three areas, the cells ability to create energy and improve efficiency of biochemical reactions and eliminate transcription errors and reproduce without clipping telomers allows the cell to begin to approach quantum states of interchange. Overt genetic mutations are also influenced by positive epigenetic change. If a new mutation was beneficial, it will be supported and passed on to new generations of cells and organisms. How is this achieved? By supplying the proper elements.

# What is the Human Potential?

It is commonly accepted by most educated societies that body forms, colors, strengths and weaknesses and diseases manifest through our DNA. It is even commonly believed personality is linked and even certain repetitious family and racial diseases. Some scholars have linked intelligence and the root cause of certain social misbehavior as if the gene determines ones fate. Facts say we actually have control over the integrity of our genetic legacy. The biologic formula called the Maturation Index calculates a human adult should live 150 years in good health and clear mental function. We believe we can plan for the future and make this so beginning right now. We also believe if we intentionally work to support DNA expression, DNA sacred geometry and the epigenetic environment, humanity will spontaneously evolve and regain multi-dimensional consciousness. Existing historic writings indicate human beings could live much longer than 150 years. It is probable that the real Maturation Index for a human being is actually 1,000 years. There is a way to find out. We just need to begin!

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