

THE GENIE IN YOUR GENES

Epigenetic Medicine and the New Biology
of Intention

by Dawson Church

WE, AS HUMAN BEINGS, are beings of matter; however we are also beings of energy. Scientists are discovering precise pathways through which our thoughts and beliefs can affect our bodies. There is an electromagnetic component to every biological process. Every thought that we have, every feeling we feel, produces a complex shift in the biochemical make-up of our organs.

This discovery is having a revolutionary consequence on the way treatment of our civilization is being conducted, from standard back pain to post traumatic stress syndrome. Techniques in energy medicine and energy psychology can:

- ▶ Alleviate chronic disease
- ▶ Shift autoimmune conditions
- ▶ Eliminate psychological traumas
- ▶ Be quicker & more efficient than conventional medicine

This seemingly goes against the scientific doctrine that concludes that everything we are is coded in our genes. The color of our hair, the diseases we may get in the future, is already all there in our genetic codes. However, science is seeing the fallacy in these beliefs. As Blair Justice, PhD, points out in his book *Who Gets Sick*,

“...genes account for about 35% longevity, while lifestyles, diet, and other environmental factors, including support systems, are the major reasons people live longer.”

Did a Friend Send You this Summary?

If so, please be sure to visit our website to register so you can gain access to all our past and future summaries. We keep your email private and will send you updates when we've summarized a new book. Click here or visit www.HealthBookSummaries.com to register now!

Want to Sponsor a Summary?

If you have a business in the health industry and want to reach your target audience, then please visit our website to access our affordable advertising packages. We work hard to make sure our sponsors get the best value and service. Click here or visit www.HealthBookSummaries.com to view our downloadable ad kit.

Reader Services

If you have a question for us, please visit our site and take a look at the Frequently Asked Questions page for a quick answer or send your questions or comments to us via email at Readers@HealthBookSummaries.com

Summary Information

From the book *The Genie in Your Genes: Epigenetic Medicine and the New Biology of Intention* by Dawson Church. Copyright © 2007. Reprinted by arrangement with Elite Books (<http://www.EliteBooksOnline.com>). All rights reserved.

This book summary may not be copied or distributed in any form without the permission from HealthBookSummaries.com. HealthBookSummaries.com assumes no responsibility for the use or misuse of this material. Always work with a qualified health professional before making any changes to your diet, prescription drug use, lifestyle or exercise activities.

Genes provide a basic structure for our lives, but rarely guarantee anything 100%. Our conscious-based beliefs, thoughts, prayers, faith, and intentions have a much stronger affect on our lives – including our health, happiness, & longevity – than our genes do.

The Human Genome Project

The Human Genome Project began in an effort to catalog all of the genes possessed in the human body. They originally expected to find at least 120,000, believing that was the minimum number necessary to control an organism as complex as man. This expectation missed its mark by a long shot, and when they finished mapping they found the human genome consists of just 23,688 genes. This sparked scientific interest to determine exactly where the information necessary to control man is stored, as well as how it works.



BioAstin Natural Astaxanthin

**The new supplement
that the “Health Ranger”
Mike Adams is raving about**

Amazing new supplement supports joint health, skin health, eye health, and a healthy immune system. Click [here](#) to see for yourself what the Health Ranger says about BioAstin® Natural Astaxanthin.

Please go to our website today at www.nutrex-hawaii.com to order. Enter “NaturalNews” as the coupon code and we’ll give you 25% off and free shipping on orders of \$75 or more!



*2% of profits donated to protect
the natural environment of Hawaii*

Nutrex Hawaii, Inc., Kailua-Kona, Hawaii, USA
800-453-1187
www.nutrex-hawaii.com

Signals From Outside a Cell

Scientists are trying to focus now on how exactly the genes work, and where the information required in maintaining an organism so complex, is coming from. They know that genes:

- ▶ Dance with our awareness, thoughts and feelings turn sets of genes on or off in complex relationships
- ▶ Are either activated or deactivated in relationship to the environment:
 - Outer environment
- ▶ Food
- ▶ Toxins
- ▶ Social rituals
- ▶ Sexual clues
 - Inner environment
- ▶ Emotional
- ▶ Biochemical
- ▶ Mental
- ▶ Energetic
- ▶ Spiritual

The Buddha declared years ago that *“We are formed and molded by our thoughts. Those whose minds are shaped by selfless thoughts give joy when they speak or act. Joy follows them like a shadow that never leaves them”*. Genetics and neurobiology are now lining up with this ancient wisdom.

The way genes affect processes in the body is mapped like this:

1. Signals pass through the membranes of each cell, and travel to the nucleus
2. The signal enters the chromosome, activating a particular strand of DNA
3. The protein sleeve around the DNA that serves as the barrier to the information held inside from the extracellular regions is unwrapped when the signal arrives
4. With the sheath unwrapped, the information can now be read and acted upon
5. It is no longer a dormant blueprint, but is now active, possessing the ability to construct, assemble, or alter products within the molecular structure of the organism

The science of epigenetics lies in tracing the signal outside the cell back to its origins. It looks for the energy flow that causes the blueprint to activate, the driving force behind the whole process.

Magic Before Science

- ▶ Scores of important medical procedures, even as simple as aspirin & penicillin were discovered decades, and sometimes centuries, before the clinical evidence showed the principles of their effectiveness.
- ▶ Total health spending is over 2 trillion dollars per year, and only two tenths of 1% of that figure is estimated to be spent on alternative therapies.
- ▶ There are 70 allopathic physicians for every one naturopath or licensed physician, even though the figures also tell us that:
 - Such treatments can work when conventional medicine fails
 - According to a 2006 study at Baylor university, over 74% of the population believes alternative therapies are effective
 - Alternative medicine has been more effective than mainstream medicine in cases of predominant disease such as cancer and autoimmune diseases.

Although we are accustomed to incremental approaches to scientific discoveries, every once in a while one breaks through the mold. The possibilities of epigenetic medicine could very well be the next major breakthrough.

DNA is Not Destiny – The First Studies

Randy Jirtle, Ph.D., a professor of radiation oncology at Duke University, conducted one of the first epigenetic signal studies on gene expression in mice. He found that by feeding the mothers a diet rich in particular gene-suppressing chemicals, known as methyl groups, he could affect the way the genes expressed in their young, to a healthier version of their predecessors. In this way it is shown that something as small as a nutritional change in the parent can affect the genetic health of the offspring.

Another researcher, Dr. Moshe Szyf at the McGill University in Montreal, Canada, studies interactions between mother rats and their offspring. Some of his rats would spend time nurturing their young, while others did not. The babies of the nurturing mothers were less fearful and better adjusted, while the neglected babies showed signs of fear and anxiety. This pattern repeated when they later had offspring.

The researchers found differences in the brains of the two groups of rats; there were higher levels acetyl group chemicals found in the nurturing group. This was important, as acetyl group chemicals aid gene expression by binding to the protein sheath surrounding the gene, which makes it easier for the gene to express. They bind to the protein sheath by way of an enzyme catalyst which adds them, and there were higher levels of this enzyme present in the nurturing rats as well.

In the fearful group, they found the same gene-suppressing methyl chemicals that were in the Jirtle rats. Once they injected a substance that raised the level of acetyls into the brains of the neglectful group, their behavior began to change: less fearful, less anxious, better adjusted. When they injected the methyl group chemicals into the nurturing rats, the opposite occurred, they were now the fearful rats, with the heightened stress response.

Studies like this show clear mapping of protein pathways from our behaviors and beliefs to the suppression or expression of genes. This has an enormous impact on our understanding of the implications of our actions, and how our actions not only affect ourselves, but others, such as our children, as well.

The Adverse Childhood Experiences (ACE) study

This was a large-scale, authoritative research project conducted by Kaiser Permanente Hospital, which included 17,421 people enrolled in their health plans over a 5 year period. The study shows a strong inverse link between early life stress and emotional well being. Certain family functionality stressors were scored on, such as: alcoholic parent(s), divorce, mental illness of a parent, or domestic violence. The study finds that people raised in such a family are:

- ▶ 5 times more likely to be depressed than one raised in a functional family
- ▶ At least 30 times more likely to attempt suicide
- ▶ More likely to suffer ailments such as obesity, heart or lung disease, diabetes, bone fractures, hypertension, and hepatitis

Men that scored poorly in the study were 4600% more likely to use intravenous drugs than those with healthy childhoods. Epigenetics could allow for treatment of social problems to begin in childhood, at the root, instead of in adulthood, when the effects have begun to manifest as disease and violence.

The Power From Within:

- ▶ Heart surgery patients who have a strong social support network and spiritual practice have a mortality rate 1/7th of those who do not
- ▶ There are over 1200 scientific studies demonstrating the link between prayer and intention
- ▶ Studies have indicated that practice, interest, and experience make a difference in the effectiveness of prayer in spiritual healing – in order to be powerful, the intent must be deep, personal, and sincere:
 - In one test practitioners attempted to germinate seedlings quicker through prayer. Those who were more experienced in prayer saw the best response.

- ▶ Acts of altruism can prolong our lives and increase our happiness, benefits can include:
 - Enhanced immune system function
 - Lower death rates than in those who do not volunteer acts of kindness
 - Reduced stress
 - A sense of joy, peace, and well-being
 - Relief from mental and even physical pain
- ▶ Meditation can be much more beneficial than pharmaceuticals
 - The part of our brain that produces happiness is strengthened through meditation
 - Studies show just 30 minutes a day of meditation can boost moods as much as antidepressants
 - The use of visualizations is helpful in patients coping with cancer
- ▶ Older people with positive attitudes walk 9% faster than those with negative attitudes, and are shown to live longer as well:
 - 23% lower risk of death from cardiovascular disease
 - 55% lower risk from all other causes

Research now shows that optimism and positivity are no longer accidents, rather they can be learned. Over 1400 chemical reactions along with over 30 hormones and neurotransmitters shift in response to stressful stimuli. We can consciously engineer our cells to de-stress by way of what we think, how we feel, and how we act, because all of these cause change in the genetic expression and chemical composition of our bodies, dynamically, every moment of every day.

Immediate Early Genes

Immediate early genes are those that react within minutes to our environment. They can have a peak of one hour, but many express in a much shorter time, even as little as 2 seconds to two minutes. For example, consider a gene known as C-fos:

- ▶ C-fos is in the class of early genes that react to stressful situations, i.e. marital disagreement, attacks by wild animals, etc
- ▶ They then activate the brain's neurons to produce a protein – fos
- ▶ Fos binds to DNA molecules, triggering the transcription of other genes
- ▶ Set up the response of the rest of the body's mechanisms for dealing with stress

As Gary Marcus, Ph.D. puts it:

"A single regulatory gene at the top of a complex network can indirectly launch a cascade of hundreds or thousands of other genes" and that by "compounding and coordinating their effects, genes can exert an enormous influence on biological structure".

This effect has been studied for acupuncture by way of gene chips, and there are many other therapies that induce eustress, the healthy stress, by way of other consciousness, such as meditation, prayer, and energy based therapies such as EFT.

These could all have an influence on physical health by inducing behavioral states in our genes that promote health, and avoiding those states which do not.

Intention

The circadian (daily) rhythm and the ultradian (periodic) rhythms are thought to be linked to behavioral patterns. Many believe that deficits in these natural patterns are the cause of common complaints in the afternoon, such as being tired, needing a drink after work, etc. This is influenced by the secretion of hormones like ACTH and Cortisol, which are released on the usual 90-120 minute ultradian cycle, and are thought to not be under our conscious control.

This can be disputed however, by the many people who can go to bed, and who only 'set' their internal alarm clocks, yet wake within a few minutes accuracy of when they choose to get up. Many can even hit the internal 'snooze' button – and wake 20 minutes later. This mindfulness suggests that intentionality can condition aspects of our genetic activity, which would in fact, put them back within our control.

The Frequency of Healing

- ▶ Robert Beck, D.Sc., first saw that charts of the oscillations of the Earth's magnetic frequencies resembled the EEG readouts from humans
- ▶ The Earth usually resonates at 7.8 Hz
- ▶ He found that various regional healers, whether they were Amazonian shamans, Hawaiian kahunas, Christian faith healers, Buddhist lamas, or Indian yogis, all had brain frequencies which were almost identical at the moment of healing, although before and after, they had typical differences.
- ▶ He also found that their brain frequencies resonated with the Earth's frequency very closely, at 7.83Hz, and many times beat in phase with the Earth's signal. They all seem to be tapping into a universal healing frequency.

The Human Body – A Piezoelectric Generator & Electromagnetic Field

Piezoelectricity is generated by mechanical means; a pressure is applied to a certain structure, which then polarizes into either a positive or negative pole, thereby generating electricity. A simple example is the lighter in a gas grill. The button is pushed, a click is heard, which is the ceramic structure being struck, which in response to the pressure emits an electric spark, igniting the grill.

The human body is also a piezoelectric generator, with structures within whose primary purpose is the transference of energy, or the conduction of piezoelectricity from one part of the body to another. This is not a new idea in the medical community, for example:

- ▶ The term “electricity” was coined in the early 1600’s by William Gilbert
- ▶ In the early 1700’s, Stephen Gray showed that some materials conducted electricity better than others
- ▶ Stephen Hales applied this to physiology, theorizing that nerves might conduct electricity throughout the body.
- ▶ In 1753, Johann Schaeffer published the first book on the subject, *Electrical Medicine*
- ▶ 33 years later Luigi Galvani demonstrated that static electricity outside the body could be conducted through the nervous system to produce muscle contractions
- ▶ Carlo Matteucci demonstrated in the 1830’s that injured tissue generated electrical current
- ▶ Bioenergy was first described in 1868 by Jules Bernstein as positively charged ions generating electricity as they move across cell membranes
- ▶ In 1924 Willem Einthoven won the Nobel prize for discovering that the heart generated its own electromagnetic field

Electromagnetic fields, or EMF’s, have an affect on our bodies, as we clearly experience with jet-lag. This is due to magnetite microcrystals in the part of our brain called the hippocampus, which have been linked to our ultradian and circadian rhythms.

Research has shown that the fields also have an effect on water and plants, as proven by Bernard Grad, Ph.D., of McGill University. He experimented with healers performing a “laying on of hands” of water samples, which then were used for germinating seeds. He found that those seeds which were watered with the ‘blessed’ water grew significantly faster and larger than those that were not. He conducted the same experiments with patients diagnosed with psychotic depression, and found that the opposite happened; the plants fared poorly.

More recent experiments show that the hands of healers generate the same frequencies as electromagnetic healing devices. Magnetic therapies have an affect on a wide range of conditions, such as:

- ▶ Tendonitis
- ▶ Blood circulation
- ▶ Diabetic neuropathy
- ▶ Bone cysts
- ▶ Hypertension
- ▶ Optic nerve atrophy
- ▶ Facial paralysis
- ▶ Fractures

The Shortcomings of the Current Medical Situation

- ▶ The U.S. spends 3 times as much as Great Britain and approximately twice as much as Canada, Germany, France, and Japan on healthcare
- ▶ Medicare is predicted to go broke by 2019
- ▶ Benefits that are being added for seniors today will have our children footing the bill, with interest in the future
- ▶ Infant mortality rates are higher, and life expectancy lower, than all the above countries
- ▶ Americans get substandard healthcare more than half the time, leading to thousands of needless deaths each year
- ▶ About one in five Americans suffer from a diagnosable mental disorder

The Four Remedies

There are four remedies, which if taught to every person, would be a cheap, easy, effective way to drastically change the path of health our entire civilization is headed down:

- ▶ Aerobic exercise, flexibility, and strength training averaging 20 minutes a day
- ▶ Eat a diet based on protein and complex carbohydrates
- ▶ At a minimum, supplement a multivitamin, antioxidant complex, and fish oil every day
- ▶ Become proficient at a stress reduction technique such as meditation or prayer, and learn an Energy Psychology intervention to use during crisis

Energy Psychology Techniques

Energy psychology techniques are powerful therapies that work with the body's own electromagnetic signaling system to produce change. Healing in the cells and emotions occurs quickly, sometimes without even identifying the underlying cause or the trauma, or needing further therapy sessions. Stored traumas can be resolved quickly, as the process goes deep into the energetic level, underneath the conscious level.

The first of these was Thought Field Therapy, but the most widely used is Emotional Freedom Technique, developed by Gary Craig in the 1990's. It doesn't require a therapist & can be self-applied, although more chronic cases may benefit from having a trained therapist lead the session. The basis of it starts with an affirmation, and then acupressure points are tapped and brief sequences of eye movements are done. The whole process takes about 40 seconds, and even 12 year olds have had success with the method. Surprising effects of the therapy have been noted:

- ▶ There have been amazing results recorded such as people getting over phobias of heights and cockroaches in as short as 30 minutes of treatment with a therapist.
- ▶ Stress levels significantly drop during sessions, and remain low even months after
- ▶ A study showed that anxiety levels of 100% of participating patients dropped before dental exams, even in those experiencing severe anxiety

Researchers understand now that the tapping stimulates piezoelectric current through energy meridians in the body. One method of EFT, the Basic Recipe, has shown some amazing results of relief in various cases as well:

- ▶ Performance fear for a nineteen year old gymnast
- ▶ Flashbacks & insomnia in a woman who went through 2 car accidents in 6 weeks
- ▶ A refinery worker stopped smoking after 35 years
- ▶ Extreme anxiety in a woman prior to bladder surgery
- ▶ Depression in a single mother with two teenage daughters
- ▶ A boy with an intense allergic reaction to horses
- ▶ Pain in the knee of a woman after having reconstructive surgery

Basic tapping methods have shown an improvement in:

- ▶ Headaches
- ▶ Back pain
- ▶ Stiff neck

- ▶ Joint pain
- ▶ Cancer
- ▶ Chronic fatigue syndrome
- ▶ Lupus
- ▶ Urination problems
- ▶ Morning sickness
- ▶ PMS
- ▶ Sexual dysfunction
- ▶ Carpal tunnel syndrome
- ▶ Arthritis
- ▶ Numbness in the fingers
- ▶ And many, many more...

Applying the principles of epigenetic healing through the control of genes offers great potential for medical breakthroughs. This all points to a shift in the future of medical techniques; the more we learn that we can heal ourselves with treatments that are fast, safe, and effective, the less reliance we will have on harmful drugs and invasive surgeries. For more information about Gary Craig and to learn about EFT, please visit <http://www.emofree.com>.

Ten Principles of Epigenetic Healing

Epigenetic healing based on consciousness can be blended seamlessly with conventional, alternative, and integrative medicines. For example, DNA screening for molecular biomarkers can allow early detection of many conditions even before they present themselves pathologically.

Imagine walking into a doctor's office one day and walking out with a prescription for meditation and prayer, visualizations and concepts, all dedicated to eradicating your disease and keeping you healthy. The fact that we are conscious energy systems capable of controlling our genes at a molecular level completely changes the present way of only treating the material substances of our being:

1. Intentions First, Outcomes Second – as the Zen saying states – *“The journey is the destination”*
2. Healing is a Process; Not an Event – Lifestyle changes such as diet and exercise can address systemic problems, but must be adhered to on a day to day basis.

3. Heart-Centered – Far more meaningful doctor patient relationships foster a stronger healing environment.
4. Being-Focused – Our state of being may reflect in our health much more than our medical charts.
5. Treat Whole Symptoms – Every treatment must be considered in how it affects the whole, not just a problem.
6. Healing Before Disease – In an optimized energy system, we may recognize symptoms before they manifest as disease, thereby reducing those that become pathological.
7. Magnify the Body's Inherent Self-healing Powers – Involving the patient in the healing process can help teach them the best way to improve their health.
8. Stream to Appropriate Treatment Paths – Know the limitations of both allopathic and alternative medicine.
9. Revisioning Death – As Larry Dossey emphasizes *“When we understand the survival of the consciousness beyond death, we see a change in the form, not in the spirit and we can celebrate the continuation of the spirit even as we mourn the loss of the form”*.
10. Understand the Global Context of Healing – The practice of sustainable medicine necessitates a change in the way it is delivered in order to preserve the health of the environment.

Practice of Epigenetic Medicine

There are deliberate actions we can take in our everyday life that can affect us in every way, on a cellular level. Just knowing that every word we speak, every action we make throughout the day is causing a reaction in our genes should make us more aware than ever of our day to day lives. Even during a stressful situation, simply reminding yourself that ‘this too shall pass’, can have a profound effect on your health.

As hard as this may be for current mainstream medicine to accept, so it was just as hard years ago for physicians to accept that there was a need to wash their hands between patients. It is possible that this may become as commonplace as the idea that aspirin thins the blood.

The way that medical treatment progresses would be changed by this integrative system. Now, a patient goes to a doctor for simple tests, at a relatively low cost. After diagnosis, the costs get heftier and heftier down the line for treatment. With an integrative approach, more attention would be given to all aspects of the patient during the initial visit. The cost for this would be more, as more aspects of the patient's life are examined. Energy medicine would be the start of the patient's treatment, not the end resort. This would, however, result in a better overall quality of life for him or her.

The process would look something like this:

1. Start treatment with energy medicine. The American College of Emergency Physicians has a list of ailments which require an emergency room visit, and therefore an allopathic approach:

- ▶ Difficulty breathing or shortness of breath
- ▶ Chest pain or pressure lasting 2 minutes or more
- ▶ Fainting
- ▶ Sudden dizziness or weakness
- ▶ Changes in vision
- ▶ Confusion or disorientation
- ▶ Any sudden or severe pain
- ▶ Uncontrolled bleeding
- ▶ Severe or persistent vomiting or diarrhea
- ▶ Coughing or vomiting blood
- ▶ Suicidal or homicidal feelings
- ▶ However, in less than 20% of ER visits is an organic ailment found, most visits to the ER are not for any of the above reasons. Among the most common ailments is back pain, which can be alleviated by epigenetic intervention.

2. Attachment Doctoring – We must be able to relate effectively with our caregivers, having a deep human connection. Just as a client does not want to rattle off a list of symptoms for the doctor to address, they also are not looking to how quick a doctor can rattle off a prescription.

3. Scaled Interventions – The most benevolent and least invasive treatment should be used first. The simplest treatments such as diet and meditation should be used prior to more invasive and costly treatments such as surgery.

4. Thrive Through Chaos – Tragic stories are easy to get wrapped up in and use for excuses to fail. There are however, powerful success stories in the face of adversity that should be looked upon for inspiration, i.e. Beethoven, Lance Armstrong, Nelson Mandela, to name a few. As Bill Bahen so eloquently put – *“What’s right with you is the point. What’s wrong with you is beside the point”*.

5. Discover What Triggers Your Quantum Field – How would you answer the question – “*What activates the expression of my inner wisdom?*” Understanding one’s own body and inner workings is a critical key to wellness.
6. Allow for the X-Factor – There are always variables that one must be constantly adjusting to in life.

In the jargon of science, consciousness is the “epiphenomenon of matter” – yet science is now recognizing that consciousness is what underlies and organizes matter itself. We hold the key to performing interventions within our own psyches, within our own bodies, ourselves, through the power of prayer, intention, mindful meditation, beliefs, visualizations, and so much more.

The code imprinted in our DNA, the one thing we thought was for certain, is just waiting for direction by us to change, creating a civilization that brings health, happiness, and vibrancy in ways in which the current medical establishment only dreams of. ■

If you like this summary,
you'll definitely want to order the
complete book *The Genie in Your
Genes: Epigenetic Medicine and the
New Biology of Intention*.

