

# Top Ten of One Thousand Essays



**Dr Mark Sircus**

# Table of Content

## About Dr Sircus

### Top 10 Articles

- 1 - Low Body Temperature Symptoms and Causes – And How to Treat It
- 2 - Healing the Kidneys with Sodium Bicarbonate (Baking Soda)
- 3 - Uses of Magnesium Oil
- 4 - Baking Soda Uses in Daily Health
- 5 - Calcification and Its Treatment with Magnesium and Sodium Thiosulfate
- 6 - Iodine Dosages
- 7 - Inflammation and Pain Management with Magnesium
- 8 - Function of the Vagus Nerve
- 9 - Treat the Inflammation not the Cholesterol
- 10 - Sodium Bicarbonate Cancer Treatment Overview
- 11 - Weight Loss Via Baking Soda and Reduced Breathing

## What Is the Natural Allopathic Protocol Useful For?

### Consultations With Dr Sircus

### Treatment and Products

### Ebooks

## About Dr Sircus

Dr. Mark Sircus, Ac., OMD, DM (P) (acupuncturist, doctor of oriental and pastoral medicine) is a prolific writer and author of some astounding medical and health-related books. Dr. Sircus's methods are based on medical science and long years of clinical experience, not only his own but experiences of doctors from around the world who have been practicing brilliant medicine.

His books are heavily referenced, but the layperson finds little difficulty in understanding his presentation of medical topics. For many years Dr. Sircus has been researching into the human condition and into the causes of disease; he has distilled many of the divergent medical systems into a new form of medicine that he has coined *Natural Allopathic Medicine*.

*Natural Allopathic Medicine* represents a new therapeutic principle that revolutionizes both allopathic and naturopathic medicine offering a radical shift in medical thought and practice. Dr. Sircus's protocol addresses foundational physiology. It focuses on pH management, cell voltage, magnesium and iodine medicine, cannabinoid medicine, carbon dioxide medicine, re-mineralization of the body, increasing oxygen transport and oxygenation of the tissues, opening up of blood vessels, saturation and healing of cells with concentrated nutrition via superfoods, breathing retraining, emotional transformation processing, detoxification and removal of heavy metals and radioactive particles.

The exciting part of Dr. Sircus's protocol is that it is easy to learn and anyone can start implementing it even while being treated by other approaches. Secondly, with a recent medical breakthrough—a *legalized* form of medical marijuana now available throughout the world—Dr. Sircus's protocol is entirely legal.

With the publication of Dr. Sircus's *Treatment Essentials* book, which actually teaches people to put into practice this medical approach, anyone

will now have access to the information that will enable them to take charge of their own health.

Dr. Sircus's approach is humanitarian because it pays attention to the majority who cannot afford expensive medical treatments or pharmaceutical drugs. With the Natural Allopathic Medicine protocol, people with limited funds can make use of the top three medicinals mentioned above—**magnesium chloride, sodium bicarbonate (baking soda), and iodine**—to inexpensively treat most health problems. Add breathing retraining, CBD, superfoods, vitamin C, plenty of water good enough to be called a medicine, enough sun, daily magnesium massages and one will improve or cure almost any ailment.

### **Dr. Sircus's World Reports**

Change is upon us whether we like it or not. Navigating though intense changes is hard enough but almost impossible when we are deprived of correct and pertinent information that we can trust. *Navigating with Love through the Next Five Years* is not only the name of a new book I will publish in a few months but also my personal goal for my own family and friends.

Life is not guaranteed at this point anymore. Not all of us are going to make it. With violent climate change, economic collapse, depression, drought, rapid cooling, war and disease on our doorsteps we cannot take life for granted. These are important subjects I have focused and written on for years. All of these subjects are coming home to roost meaning they are coming down heavily on the neck of civilization. Even the intensity of earthquakes and volcanic activity is effecting earth changes and the sun is going into hibernation bringing cold into our weather at now alarming speed.

I have only recently created a **special area called world reports** on my site DrSircus.com for these writings. My reporting on disease, medicine and health will continue to be featured on the mother site.

We not only have to navigate violent changes in our civilization on a physical level but also on an emotional and spiritual one as well. In the end we will have to build a new world. I do not think we are up to the task. To sustain that negative view all we have to do is look at our present manifestation as a race. We allow the worst elements among us to get control of powerful institutions and that is the way it has almost always been.

All bets are off when the debt collapse begins in earnest and I would not bet my money on adequate food supplies at affordable prices because of drought and a rapidly cooling climate that will have even the global warming scare mongrels shivering at night.

We are going to be beaten back to the local level with most of our resources dedicated to family protection and survival. Big government wants to be bigger at the expense of freedom and liberty everywhere so we are in for a rough time.

I have also been reporting on more personal and spiritual realities like conflict resolution, communication and listening as well as human sexuality, intimacy and love. Human vulnerability, the tears of the melting heart, the world of feelings and emotions are among my favorite subjects as well as imagining new forms of human relationships that are not so egocentric.

I am a man on a mission and that is to speak out the truth and dissect complex issues to an understandable form. Whatever is coming down the pike we are in this together as a race. We can continue our extreme forms of separation from each other or we can learn to cooperate and love on entirely new levels. The choice is ours but will we choose anything that will move us forward and upward on an evolutionary curve or will we descend into the darkness that has been so prophesized?

# 1 - Low Body Temperature Symptoms and Causes - And How to Treat It

*Posted by Dr Sircus on January 21, 2015*

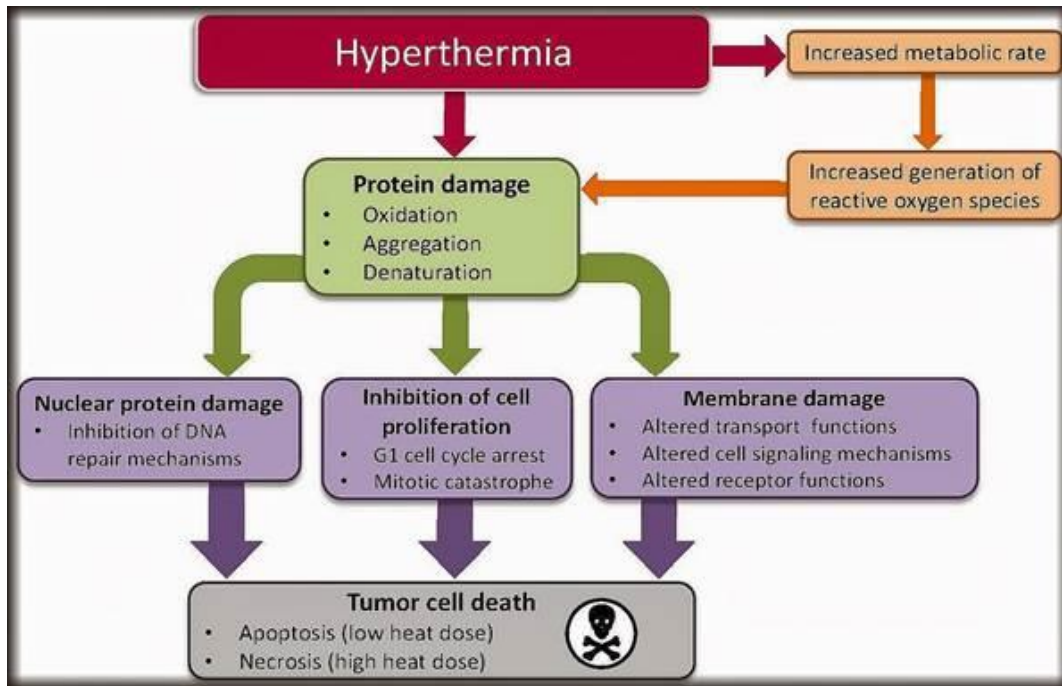
Temperature is an indicator of the amount of heat contained in a system and in the human body our temperature is an extension of basic body metabolism and a host of other factors. Heat is a form of energy and every reaction in a human body occurs at a certain energy or temperature level thus tracking well with cell voltage and pH.

It is essential for the normal functioning of the human body, that this internal temperature be maintained, that pH be regulated and cell voltage optimized. The core body temperature of a human body is an important factor, which is always why it should be considered while evaluating the health condition in a checkup.

An important difference between mammals, including humans and other organisms like a reptile are that we are warm blooded creatures. The body temperature of mammals is maintained at a constant level, despite the changes in environmental temperature.

Normal core temperatures are at the exact temperature at which all the functions of the human body can operate with optimal efficiency. The same can be said about pH because all physiological processes are pH sensitive.

Normally the rectal temperature or vaginal temperature is considered as the core temperature. The ideal core temperature is considered to be around 98.6° Degree Fahrenheit or 37° degree Celsius. This temperature is however, the average body temperature and the overall normal temperature varies from a minimum of 97.7° Fahrenheit (36.5° Celsius) to a maximum of almost 99.5° Fahrenheit (37.5° Celsius). Any temperature above or below this range is abnormal. At the ideal temperature, all human body systems function with maximum efficiency with oxygen being supplied in ample amounts because CO2 levels are optimized.



## Causes of Low Body Temperature

Body temperature can fall due to numerous reasons .such as being exposed to cold weather or wearing soaked or wet clothing for a long time. On the other hand, abnormally low body temperature can also be a potential symptom of the following diseases and disorders:

Addison’s Disease

Diabetes

Drug/alcohol abuse

Hypothyroidism

Infection

Kidney failure

Liver failure

Sepsis

Side effects of medications

Shock

Fast Breathing/Asthma

Cancer

Stress

Insomnia

### **Common Symptoms**

Shivering is one of the most obvious and easily recognizable symptoms. Shivering is accompanied with chattering of teeth and goose bumps. Apart from this the following symptoms are observed:

Slow heartbeat

Shallow breathing

Purple fingers and toes

Lack of coordination

Difficulty in making decisions

Slurred speech

Dilated pupils

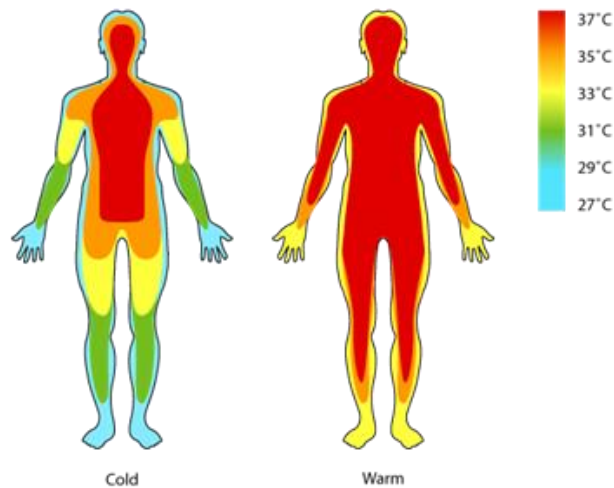
Confusion

Drowsiness

Weak pulse

Tiredness





One important factor that decides this temperature is the base metabolic rate of a body, which is the rate at which we burn calories and use up our energy stores. Other factors like administration of medications can also affect it, usually in a negative sense.

The control center for body temperature lies in the brain and it is known as the hypothalamus. The hypothalamus is alerted to either extreme cold or hot conditions reducing or opening blood flow towards the external layers of skin. Stress interferes with body temperature regulation driving down body temperature and its interesting the color green is warm and relates to the heart's emotional center and the hypothalamus.

Changes in hand/foot temperature are a reflection of blood flow – a measure of the stress response. For example, while talking about an upsetting incident involving your parents, an employer/employee, or friend your temperature may drop 5\_ to 20\_. In contrast, when recalling a minor misunderstanding your temperature may only drop one degree. And yet, when you recall the warm sun on a recent vacation, your temperature may increase a full 10 %.

What is most surprising is how quickly the changes occur. People often comment, “I never had any idea that a little finger could show so much!”

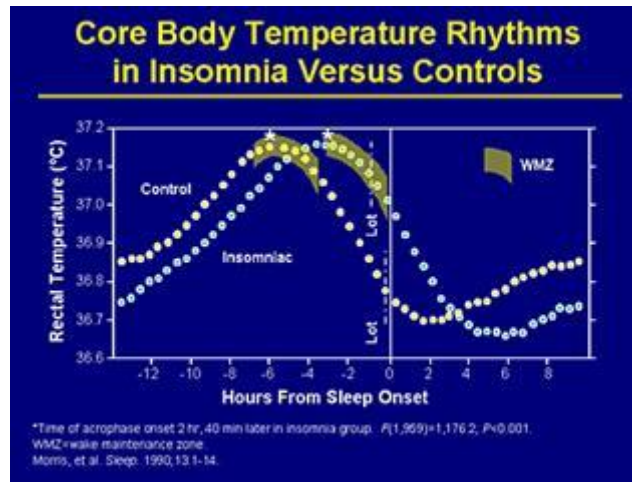
The basic rule for interpreting temperature change is simple, Warmer hands/feet indicate Relaxation while Colder hands/feet reflect Activation or Tension. When the body's fight/ flight system is activated the muscles tense, heart rate and the vital organs speed up. As a result, blood flow is

shunted from the extremities and directed to the vital organs to facilitate the increased level of arousal. As a result, changes of 5, 10 or 15% can occur within just a few minutes.

Every process that goes on inside our bodies requires energy – specifically, metabolic energy. When the body does not have enough energy to function properly, each component of the body will malfunction in its own unique way. For example, if the brain has too little energy, thought processes such as memory and focus become impaired. The body needs energy to keep itself warm – a low body temperature, therefore, usually accompanies low metabolic energy.

Dr. David Jernigan says, “Much emphasis in conventional medicine is usually placed upon feverish conditions; however, a low body temperature can be a much more sinister condition. Where a fever can be viewed as an active developmental and corrective process of the healthy body, a low body temperature can never be viewed as a normal or healthy condition, nor is it a mechanism for a learning or developmental process in the body. The colder a body becomes, the slower the electrical oscillatory rate and therefore the thicker, more viscous, or syrupy the body fluids become. The more viscous the fluids become the more difficult it is for the body to push the fluids through the body. The lymph fluids that are normally supposed to bathe the outsides of all of your cells become progressively stagnant as it is too thick to move efficiently.”

“A low body temperature creates a happy home for viruses and chronic infections, and is a sign of degeneration and gradual cellular death. The problem with a low core temperature is that no effective immune response can be mounted therefore no fever is generated and infections go undetected. The sickest person is one who gets the same infections but never miss a day of work because there is no response by their immune system, so they have a false sense of wellness as healthier individuals go through healthy fevers and immune responses that may cause them to miss work. Low body temperature is the plague of the 21st century. People with low body temperature have a weak reaction to even the most ideal medicines and therapies,” continues Jernigan.



[http://www.medscape.org/viewarticle/510528\\_3](http://www.medscape.org/viewarticle/510528_3)

What causes low metabolic energy? The most common cause is poor thyroid and/or adrenal function. Another very common cause is hormonal imbalance – especially low progesterone or estrogen dominance in women or low testosterone in men.

Dr. David Brownstein points out that body temperature is a crucial function of the thyroid, besides regulating the metabolism of every cell in the body. The thyroid gland is located in the neck and is responsible for secreting important hormones into the bloodstream. The thyroid gland controls the process of metabolism thus there is a direct relationship between low body temperature, thyroid function and iodine sufficiency. When the function of the thyroid is compromised by inadequate production of thyroid hormones, the metabolic balance moves at a slower pace and is unable to maintain its primary function – production of heat.

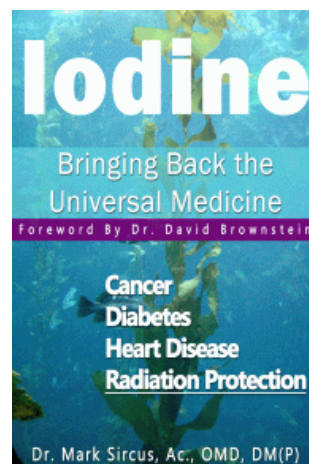
A normal temperature is critical for good health. Low body temperature results when the body is unable to keep the body "thermostat" regulated within a safe range. Under normal circumstances, the body is able to generate and dissipate heat. The internal mechanisms can overcome most outside adversities of freezing cold or broiling heat. Normally, this protective mechanism keeps your body temperature in the safe range in emergencies for maintaining life.

Chronic fatigue syndrome and low body temperatures are symptoms of mitochondrial failure. As the body's core temperature decreases cellular energy also decreases thereby leading to profound and chronic fatigue that is not relieved by sleep. The normal functions of maintenance, repair and

cleansing are slowed and problems develop when body temperatures drop below normal. When the body temperature is low, the body cannot maintain its homeostasis/balance in the way it was designed. The actions of enzymes, vitamins, minerals and essential body chemicals become "depressed".

The laws of thermodynamics state that if we decrease energy we decrease temperature. The process of energy production leads to heat. It is this heat that keeps the body warm. When resting, body processes produce enough heat to keep the body at its set temperature. This process of heat generation occurs due to metabolism. It is here that the relationship between low body temperature and thyroid comes into the picture.

Persistently low temperatures typically come on or worsen after severe stressors such as childbirth, divorce, death of a loved one, job or family stress, surgery or accidents. The body slows down and the body temperature drops in response to the stress and is supposed to recover once the stress is over, but sometimes it doesn't. When our temperature does not recover, this results in the condition Wilson's Temperature Syndrome (WTS).



**Special Note:** Much can be said about Iodine, thyroid conditions and low body temperature. I would recommend my book on *Iodine* and Dr. David Brownstein's book on *Thyroid Disorders* and *Iodine* as well. Look for an upcoming essay which addresses specifically thyroid conditions and low body temperature. In addition to iodine supplementation, for thyroid and low body temperature issues, add a **Biomat** to warm the body directly.

## 2 – Healing the Kidneys with Sodium Bicarbonate (Baking Soda)

*Posted by Dr Sircus on November 11, 2009*



Sodium bicarbonate is not only an excellent agent for natural chemotherapy, bringing as it does higher O<sub>2</sub> levels through increased alkalinity to the cells, it is also one of the most basic medicines we have for kidney disease. **New research by British scientists at the Royal London Hospital shows that sodium bicarbonate can dramatically slow the progress of chronic kidney disease.**<sup>[1]</sup> We don't need a thousand years of tests to understand something as simple as water and it is quite the same with bicarbonate, which is always present in the best drinking waters. *Bicarbonate acts to stimulate the ATPase by acting directly on it.*<sup>[2]</sup>

The simple household product used for baking, cleaning, bee stings, treating asthma, cancer and acid indigestion is so effective in treating kidney disease that **it prevents patients from having to be put on kidney machines.** The findings have been published in the Journal of the American Society of Nephrology. Bicarbonate is a truly strong universal concentrated nutritional medicine that works effectively in many clinical situations that we would not normally think of. It is a prime emergency room and intensive care medicine that can save a person's life in a heartbeat and it is also a supermarket item that you can take right off the shelf and use for more things than one can imagine – including diaper rash.

Dr. SK Hariachar, a nephrologist who oversees the Renal Hypertension Unit in Tampa Florida stated, upon seeing the research on bicarbonate and kidney disease, “I am glad to see confirmation of what we have known for so long. I have been treating my patients with bicarbonate for many years in attempts to delay the need for dialysis, and now we finally have a legitimate study to back us up. Not only that, we have the added information that some people already on dialysis can reverse their condition with the use of sodium bicarbonate”.

John, a dialysis technician at the same center as Dr. Hariachar, who used to be on dialysis himself for 2 years as a result of kidney failure, had his kidneys miraculously start functioning to the point where dialysis was no longer needed. He states that he was prescribed oral doses of sodium bicarbonate throughout his treatment, and still takes it daily to prevent recurrences of kidney failure. Dr. Hariachar says that not everyone will be helped by taking bicarbonate but still maintains that, “Oral bicarbonate makes all the difference.”

### **Kidneys Produce Bicarbonate**

The exocrine section of the pancreas has been greatly ignored in the treatment of diabetes even though its impairment is a well documented condition. The pancreas is primarily responsible for the production of enzymes and bicarbonate necessary for normal digestion of food. Bicarbonate is so important for protecting the kidneys that even the kidneys get into the act of producing bicarbonate and now we know the **common denominator between diabetes and kidney disease**. When the body is hit with reductions in bicarbonate output by these two organs, acid conditions build and then entire body physiology begins to go south. Likewise when acid buildup outstrips these organs normal bicarbonate capacity cellular deterioration begins.

*The kidneys alone produce about two hundred and fifty grams (about half a pound) of bicarbonate per day in an attempt to neutralize acid in the body.*

The kidneys monitor and control the acidity or “acid-base” (pH) balance of the blood. If the blood is too acidic, the kidney makes bicarbonate to restore the bloods pH balance. If the blood is too alkaline, then the kidney excretes bicarbonate into the urine to restore the balance. Acid-base

balance is the net result of two processes, first, the removal of bicarbonate subsequent to hydrogen ion production from the metabolism of dietary constituents; second, the synthesis of “new” bicarbonate by the kidney.<sup>[3]</sup>

It is considered that normal adults eating ordinary Western diets have chronic, low-grade acidosis which increases with age. This excess acid, or acidosis, is considered to contribute to many diseases and to contribute to the aging process. Acidosis occurs often when the body cannot produce enough bicarbonate ions (or other alkaline compounds) to neutralize the acids in the body formed from metabolism and drinking highly acid drinks like Coke, Pepsi and we are even seeing reports on bottled mineral water being way too acidic.

Acid-buffering by means of base supplementation is one of the major roles of dialysis. Bicarbonate concentration in the dialysate (solution containing water and chemicals (electrolytes) that passes through the artificial kidney to remove excess fluids and wastes from the blood, also called “bath.”) should be personalized in order to reach a midweek pre-dialysis serum bicarbonate concentration of 22 mmol/l.<sup>[4]</sup> Use of sodium bicarbonate in dialysate has been shown in studies to better control some metabolic aspects and to **improve both treatment tolerance and patients’ life quality**. Bicarbonate dialysis, unlike acetate-free biofiltration, triggers mediators of inflammation and apoptosis.<sup>[5]</sup>

One of the main reasons we become acid is from over-consumption of protein. Eating meat and dairy products may increase the risk of prostate cancer, research suggests.<sup>[6]</sup> We would find the same for breast and other cancers as well. Conversely mineral deficiencies are another reason and when you combine high protein intake with decreasing intake of minerals you have a disease in the making through lowering of pH into highly acidic conditions. **When protein breaks down in our bodies they break into strong acids.**

*Unless a treatment actually removes acid toxins from the body and increases oxygen, water, and nutrients most medical interventions come to naught.*

These acids must be excreted by the kidneys because they contain sulfur, phosphorus or nitrogen which cannot break down into water and carbon dioxide to be eliminated as the weak acids are. In their passage through the kidneys these strong acids **must take a basic mineral with them because in this way they are converted into their neutral salts and don't burn the kidneys on their way out.** This would happen if these acids were excreted in their free acid form.

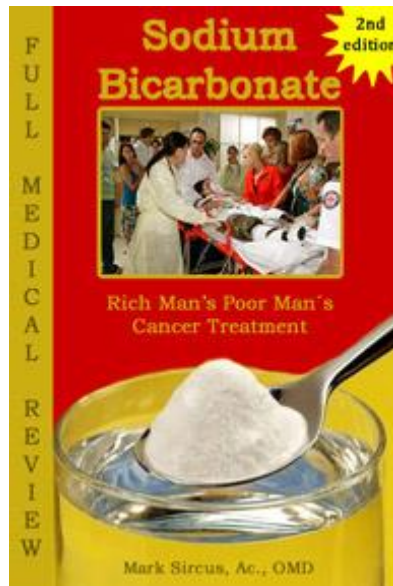
*Substituting a sodium bicarbonate solution for saline infusion prior to administration of radiocontrast material seems to **reduce the incidence of nephropathy.***<sup>[7]</sup>- Dr. Thomas P. Kennedy  
*American Medical Association*

**Bicarbonate ions neutralize the acid conditions required for chronic inflammatory reactions.** Hence, sodium bicarbonate is of benefit in the treatment of a range of chronic inflammatory and autoimmune diseases. Sodium bicarbonate is a well studied and used medicine with known effects. Sodium bicarbonate is effective in treating poisonings or overdoses from many chemicals and pharmaceutical drugs by negating their cardiotoxic and neurotoxic effects.<sup>[8]</sup> It is the main reason it is used by orthodox oncology – to mitigate the highly toxic effects of chemotherapy.

*Sodium bicarbonate possesses the property of absorbing heavy metals, dioxins and furans. Comparison of cancer tissue with healthy tissue from the same person shows that the cancer tissue has a much higher concentration of toxic chemicals, pesticides, etc.*

Sodium bicarbonate injection is indicated in the treatment of metabolic acidosis, which may occur in severe renal disease, uncontrolled diabetes, and circulatory insufficiency due to shock or severe dehydration, extracorporeal circulation of blood, cardiac arrest and severe primary lactic acidosis. The acid/alkaline balance is one of the most overlooked aspects of medicine. In general, the American public is heavily acid, excepting vegetarians, and even their bodies have to face increasing levels of toxic exposure, which help turn the body to acidic pH conditions.





For more detailed information feel free to consult my book *Sodium Bicarbonate E-Book* that's with a reasonable price, or for a more personal approach check my **Consultations** page.

## References

- [1] [www.nelm.nhs.uk/en/NeLM-Area/News/2009—July/20/Bicarbonate-supplementation-may-slow-renal-decline-in-chronic-kidney-disease/](http://www.nelm.nhs.uk/en/NeLM-Area/News/2009—July/20/Bicarbonate-supplementation-may-slow-renal-decline-in-chronic-kidney-disease/)
- [2] Origin of the Bicarbonate Stimulation of Torpedo Electric Organ Synaptic Vesicle ATPase. Joan E. Rothlein 1 Stanley M. Parsons. Department of Chemistry and the Marine Science Institute, University of California, Santa Barbara, Santa Barbara, California, U.S.A.
- [3] Levine DZ, Jacobson HR: The regulation of renal acid secretion: New observations from studies of distal nephron segments. *Kidney Int* 29:1099–1109, 1986
- [4] [www.uptodate.com/patients/content/abstract.do?topicKey=~G/p55S8w8sQDwqG&refNum=28](http://www.uptodate.com/patients/content/abstract.do?topicKey=~G/p55S8w8sQDwqG&refNum=28)
- [5] [www.ncbi.nlm.nih.gov/pubmed/16523427](http://www.ncbi.nlm.nih.gov/pubmed/16523427)
- [6] [news.bbc.co.uk/2/hi/health/7655405.stm](http://news.bbc.co.uk/2/hi/health/7655405.stm)
- [7] *JAMA* 2004;291:2328-2334,2376-2377.  
[www.urotoday.com/56/browse\\_categories/renal\\_transplantation\\_vascular\\_disease/sodium\\_bicarbonate\\_may\\_prevent\\_radiocontrastinduced\\_renal\\_injury.html](http://www.urotoday.com/56/browse_categories/renal_transplantation_vascular_disease/sodium_bicarbonate_may_prevent_radiocontrastinduced_renal_injury.html)

[8] These include, Benzotropines (valium) cyclic antidepressants (amitriptyline), organophosphates, methanol (Methyl alcohol is a cheap and potent adulterant of illicit liquors) Diphenhydramine (Benedryl), Beta blockers (propranolol) Barbiturates, and Salicylates (Aspirin). Poisoning by drugs that block voltage-gated sodium channels produces intraventricular conduction defects, myocardial depression, bradycardia, and ventricular arrhythmias. Human and animal reports suggest that hypertonic sodium bicarbonate may be effective therapy for numerous agents possessing sodium channel blocking properties, including cocaine, quinidine, procainamide, flecainide, mexiletine, bupivacaine, and others.

## 3 – Uses of Magnesium Oil

*Posted by Dr Sircus on May 14, 2010*



Magnesium supplementation is actually crucial for everyone today but we have to pay special attention to the method of supplementation because this is critical in terms of effective body utilization. **“Magnesium is poorly absorbed orally.** That is why I start off with injections. By injecting magnesium I can guarantee 100% to bring the levels up. I cannot guarantee to do this with oral magnesium,” says Dr. Sarah Myhill. Dr. Garry Gordon could not agree with her more. What Dr. Myhill did not know when she said this was the discovery of a natural form of magnesium chloride that comes from sea water.

Called Magnesium Oil, it is a natural substance that can be applied to the skin or poured into ones' bath like Epsom salts. Magnesium chloride, applied transdermally is the ideal magnesium delivery system with medical benefits unequalled in the entire world of medicine. Yet one does not need a doctor to prescribe or administer it. One can relax in a medicinal bath, without a doctor's prescription or simply put it on the skin and have someone massage you for sublime effect.

*Transdermal delivery of medicines is generally considered safer, more efficient, convenient and less painful than injections or IV's.*

Most doctors and patients think of magnesium chloride as a medicine that can be injected while you are having a heart attack and it does save the day for both heart and stroke patients if used quickly enough. I first introduced “Magnesium Oil” in my book *Transdermal Magnesium Therapy Paperback* and have been astonished from the beginning of what a wonderful thing this substance is and how it has benefited so many people.

What I have found is that magnesium chloride, applied transdermally, is the ideal magnesium delivery system – with health benefits unequalled in the entire world of medicine. Nothing short of a miracle is to be expected with increases in the cellular levels of magnesium if those levels have been depleted. There is no wonder drug that can claim, in the clear, what magnesium chloride can do. Most people will show dramatic improvements in the state of their health when they replete their magnesium levels in an effective manner.

*When we first started talking about the magnesium I was dying. I knew it inside. I am no longer dying. I feel life in me. I am so happy.*

With magnesium oil, the concentrate can simply be applied to the skin or poured into bath water, and in an instant we have a powerful medical treatment. Intensive transdermal and oral magnesium therapy can be safely applied day in and day out for consistent health benefits. Magnesium oil is nothing short of a miracle to a person deficient in magnesium. So clear and observable are the effects that there is no mistake, no mysticism, no false claim made.

There are not too many medicinal substances or medicines that can make this claim. It should be noted that pain management with magnesium employs magnesium oil applied transdermally to the skin. Dr. Linda Rapson, who specializes in treating chronic pain, believes that about 70 per cent of her patients who complain of muscle pain, cramps and fatigue are showing signs of magnesium deficiency. “Virtually all of them improve when I put them on magnesium,” says Rapson, who runs a busy Toronto pain clinic. “It may sound too good to be true, but it’s a fact.” She’s seen the mineral work in those with fibromyalgia, migraines and constipation. “The scientific community should take a good hard look at this.”<sup>[1]</sup>

Daniel Reid, author of *Tao of Detox* says, “Using magnesium oil is the quickest and most convenient way to transmit magnesium chloride into the cells and tissues through the skin. 2-3 sprays under each armpit function as a highly effective deodorant, while at the same time transporting magnesium swiftly through the thin skin into the glands, lymph channels, and bloodstream, for distribution throughout the body. Spray it onto the back of the hand or the top of the feet any time of day or night for continuous magnesium absorption. Regardless of where you apply the spray on the body, once it penetrates the surface of the skin, the body transports it to whichever tissues need magnesium most.”

### **Magnesium Oil and Sports Medicine**



*Magnesium Oil can be applied directly to inflamed areas.*

Transdermal magnesium therapy offers an exciting breakthrough in sports medicine. Coaches can now treat injuries, prevent them, and increase athletic performance all at the same time. Magnesium Oil enhances recovery from athletic activity or injuries. It reduces pain and inflammation while propagating quicker regeneration of tissues. Topical application of magnesium chloride increases flexibility, which helps avoid injury. It also increases strength and endurance. Transdermal Magnesium Therapy is a boon for athletes, coaches and doctors who practice sports medicine.

Dr. Jeff Schutt says that hamstring injuries can be avoided through nutritional support because contraction and relaxation is dependent on adequate cellular levels of magnesium. “A shortened hamstring is a result

of lack of available magnesium,” he says. Liquid magnesium chloride can be simply sprayed and rubbed into a sore Achilles tendon to decrease swelling. And soaking the feet in a magnesium chloride footbath is the single best thing – apart from stretching – that you can do for yourself to protect from, or recover from hamstring and other injuries.

### **Magnesium Massage**



One of the most luxurious medical treatments on earth is to receive magnesium massages with magnesium oil on a consistent basis. Having an ounce of magnesium oil rubbed over one’s body by either a trained or massage therapist or by a loved one is heavenly.

There are many ways to calm a person, many healing and medical treatments that can reduce stress, reduce sensory overload, slow the heart and help a person center and nothing does this better than touch. The most beautiful forms of touch are healing techniques and this is what professional massage therapists’ true aim is, to heal through touch. The skin provides the best avenue into the body for many medicinals. When it comes to magnesium we have a method in our hands that is similar in effect to intravenous magnesium treatments that are used to save peoples’ lives in emergency rooms. We simply use the magnesium oil like we would massage oils, or create a special blend mixing essential oil or other massage oils together with the magnesium chloride, which is quite slippery even though there is no oil in the ‘magnesium oil.’

Massage therapists should be introducing their clients to the tremendous benefits of a magnesium massage and it is they who should suggest to their clients to start using it at home. Transdermal application of magnesium is superior to the commonly recommended oral magnesium supplements where absorption is typically poor. In magnesium chloride oil we have a potent natural substance that penetrates the cells with stunning result on cell biochemistry and when loving touch is added to the mix the results are heartwarming to say the least.

In general, for a large adult, spraying an ounce or more of magnesium oil a day all over the body is recommended for six months to recover cellular levels, with that dosage adjusted downward for children depending on their age and size. This coupled with oral intake, especially for adults, is necessary to get the maximum effect out of magnesium. When magnesium levels are at extremely low levels intravenous application is an option and is necessary in emergency situations. Very strong therapeutic magnesium baths yield another level of effect. Such baths compete with intravenous applications but they are no substitute for in emergency situations.

### **Magnesium Oil and Relief of Pain**



Pain relief and muscle relaxation for people with arthritis and muscle cramping is an important and significant benefit of magnesium oil. Magnesium applied directly to the skin alleviates chronic pain, muscle

cramps, and in general makes our job of opening up and softening muscles and connective tissue much easier. Magnesium is a potent vasodilator, and smooth muscle relaxant.

### The Purest Magnesium Oil

For the very purest magnesium oil we now have to turn to Europe. Deep underground is a 250 million old inactive sea of magnesium chloride oil that has never been touched by modern day pollution and there is enough of it down there to last humanity hundreds of years. It is so pure that I use it diluted as a mouthwash and then swallow what is in my mouth for oral supplementation. It is ideal not only for oral intake but also seems to be better tolerated by the skin, even when used at full strength. **This magnesium oil is called Ancient Minerals.**



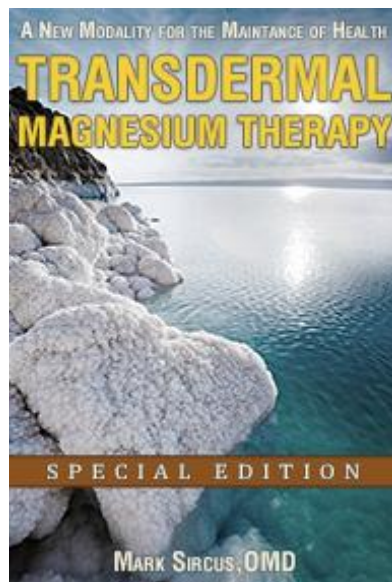
Personally I have just had two cataract operations and I used magnesium chloride eye drops that I made up myself using this pure magnesium oil diluted 15 parts distilled water to one part magnesium. The surgery was a success and my recovery was quick. This same magnesium can be put in a nebulizer and can be used at home by patients both before and after surgery both orally and transdermally to great effect. Surgeons need to become familiar with the transdermal approach for then they can start their patients off with heavy application weeks before surgery and for weeks after since this method of application can easily be done at home by patients. For use with a nebulizer again I recommend only the purest magnesium available. Even the pharmaceutical grades have heavy metal contamination so are not suitable.



## Testimony

I've just started using the magnesium oil on my 7yr old ASD son. He's always tested very low in magnesium and I don't believe oral supplementation is doing that much. I put a few tablespoons of the oil in his bath water, and I also spray it onto my hands & rub it into his skin (tops of his feet & elbows). The reason I chose his elbows was because he's had this rash (large, bumpy, flesh colored) for quite some time. The magnesium stung at first when I rubbed it on, but after just a few nights, the rash is gone from one elbow and fading from the other!

**Rose Langford**



For more detailed information feel free to consult my digital version of the book *Transdermal Magnesium Therapy* that's with a reasonable price, or for a more personal approach check my **Consultations** page.

## References

[1\]www.ctv.ca/servlet/ArticleNews/story/CTVNews/20020923/favaro\\_magnesium020923/CTVNewsAt11/story/](http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20020923/favaro_magnesium020923/CTVNewsAt11/story/)

## 4 – Baking Soda Uses in Daily Health

Posted by Dr Sircus on November 30, 2009

### Using Bicarbonate Against the Swine Flu



Over 150 years ago Dr. Austin Church formed a business to produce and distribute Baking Soda. ARM & HAMMER® Baking Soda is derived from a natural occurring mineral called trona. It is 100% pure, safe, and natural. Baking Soda (also known as sodium bicarbonate) is a substance that is found naturally in all living things. Its purpose is to maintain pH balance in the bloodstream, which is necessary to sustain life. Due to its chemical and physical properties, sodium bicarbonate has unique medicinal capabilities that every healthcare practitioner, doctor and patient needs to know about.

*The only problem is that Arm & Hammer Baking Soda can replace many more expensive medicines and this does not make the medical industrial complex happy.*

### Baking Soda Uses

In today's modern world of medicine the FDA just will not let companies that sell products make medical claims about them unless they have been

tested at great expense and approved as a drug. But this was not always the case and as we can see in the information in this chapter, which is from a 1924 booklet,<sup>[1]</sup> published by the Arm & Hammer Soda Company. On page 12 the company starts off saying, “The proven value of Arm & Hammer Bicarbonate of Soda as a therapeutic agent is further evinced by the following evidence of a prominent physician named *Dr. Volney S. Cheney*, in a letter to the Church & Dwight Company:

“In 1918 and 1919 while fighting the ‘Flu’ with the U. S. Public Health Service it was brought to my attention that rarely **any one who had been thoroughly alkalized with bicarbonate of soda contracted the disease, and those who did contract it, if alkalized early, would invariably have mild attacks.** I have since that time treated all cases of ‘Cold,’ Influenza and LaGripe by first giving generous doses of Bicarbonate of Soda, and in many, many instances within 36 hours the symptoms would have entirely abated. Further, within my own household, before Woman’s Clubs and Parent-Teachers’ Associations, I have advocated the use of Bicarbonate of Soda as a preventive for “Colds,” with the result that now many reports are coming in stating that **those who took “Soda” were not affected, while nearly every one around them had the “Flu.”**

Recommended dosages from the Arm and Hammer Company for colds and influenza back in 1925 were:

During the first day take six doses of half teaspoonful of Arm & Hammer Bicarbonate of Soda in glass of cool water, at about two hour intervals.

During the second day take four doses of half teaspoonful of Arm and Hammer Bicarbonate of Soda in glass of cool water, at the same intervals.

During the third day take two doses of half teaspoonful of Arm and Hammer Bicarbonate of Soda in glass of cool water morning and evening, and thereafter half teaspoonful in glass of cool water each morning until cold is cured.

*Well the sodium bicarbonate cure for colds and sore throats. A friend called as I was reading about it, I told her to try it. She is rapt! Relief in a few hours, and she went to work the following day! And she was miserable*

*and could hardly talk,<sup>[2]</sup> had just woken with it full on, and was planning on missing work.”*

In order to secure the best results with Arm & Hammer Pure Bicarbonate of Soda (Baking Soda) when taken internally, certain simple rules must be observed. *Materia Medica, pharmacology and Therapeutics* (Bastedo, Page 88) clearly outlines these rules to follows:

“The effect of an alkali in the stomach will vary according to the nature of the stomach contents at the time of administration. In the resting period (after food is digested) sodium bicarbonate merely dissolves mucus and is absorbed as bicarbonate into the blood, to increase its alkalinity directly.

“In the digestive period it reduces the secretion of gastric juice, neutralizes a portion of the hydrochloric acid, liberates the carminative carbon dioxide gas, and is absorbed as sodium chloride.

“In cases of fermentation or ‘sour stomach’ it may neutralize the organic acids and so result in the opening of a spasmodically closed pylorus (the opening between the stomach and the small intestine); while at the same time it acts to overcome flatulency (accumulation of gas in the stomach and bowels).

“The time of administration must, therefore, be chosen with a definite purpose. Usually for hyperchlorhydria (excess of acid) one hour or two hours after meals will be the period of harmful excess of acid.

“In continuous hyperacidity and in fermentative conditions a dose an hour before meals will tend to prepare the stomach for the next meal; or sometimes a dose will be necessary immediately after eating, because of abnormal acid or base having been present at the commencement of the meal. (For the average person one-half hour after meals is recommended).

“A dose at bedtime tends to check the early morning acidity, or a dose on arising cleans the stomach of acid and mucus before breakfast.”

Whenever taking a bicarbonate solution internally the soda should be dissolved on cold water.

This is all very valuable information coming from the horses own mouth, the Arm and Hammer Baking Soda Company, which sells aluminum free baking soda. Clearly they knew what they had in their hands one hundred years ago; and its long use in medicine sustains the companies published medical views:

“Besides doing good in respiratory affections, bicarbonate of soda is of inestimable value in the treatment of Alimentary Intoxication, Pyelitis (inflammation of the pelvis of the kidney), Hyper-Acidity of Urine, Uric Acid disturbances, Rheumatism and Burns. An occasional three-day course of Bicarbonate of Soda increases the alkalinity of the blood, assists elimination and **increases the resisting power of the body to all Infectious Diseases.**”

Baking Soda uses extend much further than even Arm and Hammer were aware of and it's now been used to help with everything from sunburn, ulcer pain, kidney disease, diabetes, and cancer.

Magnesium chloride is the only form of magnesium that has been reported to increase immune system strength though all forms of magnesium need to be counted in this regard. When one adds magnesium chloride to ones baths, puts it on the skin like suntan screen, or takes it orally with sodium bicarbonate one supercharges their defensive perimeter or what is called the anti-pathogen factor in Chinese Medicine. Add Iodine, Selenium, Vitamin C and some healthy sun exposure or Vitamin D and we have the heart of army we need to array against viral invaders. *Magnesium Bicarbonate – Ultimate Mitochondrial Cocktail* is the name of one of my chapters that explains why both these essential mineral ions need to be present in sufficient concentrations.

### Testimonials

My father was a veterinarian and as far back as I can remember (I was born in 1938 so my memory goes back to maybe 1943) **he would take sodium bicarbonate dissolved in a full glass of warm water whenever he felt a cold coming on. I don't remember him ever coming down with a full blown cold.** He would treat my cold symptoms likewise and I responded equally as well. He also treated farm animals for various illnesses with sodium bicarbonate via a gastric tube and they recovered quickly. So I've

known about the benefits of sodium bicarbonate from early childhood on. Glad to see that its benefits are being more widely touted. Although my father was a doctor of Veterinarian medicine, he sometimes referred to himself as an MD (Mule Doctor).

Dr. David B Winter, DO

\*

Dear Dr. Sircus,

Several weeks ago, I purchased your eBook about Sodium Bicarbonate. IT CHANGED MY LIFE. I believe that God is working through you and your staff to spread the word about the body's natural ability to heal, given the right elements. Thank you!!!

I've been reading your newsletter for some time now, and happened to see your eBook about baking soda. We don't have a lot of money, but I felt that your research might help me. Sure enough I can tell you that within the week following reading your book – and practicing what you preach – I have been practically hive/urticaria free.

**I started with straight baking soda and water.** Yuck! I could hardly make myself do it. But I was going for the PH balance you talked about. I read more about the different oral combinations and decided to try the Maple Syrup and Baking Soda. 3:1, it worked great and tasted great too. I couldn't believe I could eat that much sugar!

Right now I'm smiling and feeling great. **My mood is good, my energy is way up and most important the swellings and itching are gone. My hair is growing back thicker. My skin looks great. I'm not tired all the time.** I can't believe the difference in my health. Praise God for his goodness in inspiring your work.

I've recently added Nascent Iodine after reading some tips of yours. I was indeed deficient and that seems to be adding to the overall good effects. My children are benefiting from this research as well. I'm so happy to find alternatives to mainstream medicine.

Lane Carter,  
Delaware, United States

\*

Dear Dr. Sircus,

I have had Morgellons for over 6 years – very nasty – and I know you are aware of our plight. I am now ready to start your transdermal magnesium therapy treatments but first I have to tell you something.

I would like you to know that **bicarbonate baths really help me**. But, and this is a big BUT, I use it with about 3 Lb's of sea salt per bath and when I did **5 Lb's of bicarbonate – I put myself into an alkaline state**. The high salt content somehow opened up my skin to take in the bicarbonate – it came out of my skin for a few weeks!

Thank you,  
Carola Dunham

\*

The addition of a cup of baking soda to a hot bath after a long exhausting day alleviates tension and muscle aches. It exfoliates the skin to remove dead dry skin leaving fresh bright youthful skin behind without the high cost of the commercial skin exfoliates. The addition of baking soda to foot baths help with tired, achy feet when working in jobs such as waitressing or other heavy-walking type jobs. Combining the baking soda with magnesium chloride brings dramatic changes to human physiology and the only thing making this formula even better would be the addition of some sodium thiosulfate for a full hot springs therapeutic treatment.

*When salt and baking soda are combined in the bath, the combination may reduce the negative effects of minor exposure to the radiation from X-rays.*

Sodium bicarbonate, the monosodium salt of carbonic acid, is used as a gastric and systemic antacid and to alkalize urine; also used, in solution, for washing the nose, mouth, and vagina, as a cleansing enema, and as a dressing for minor burns.

## References

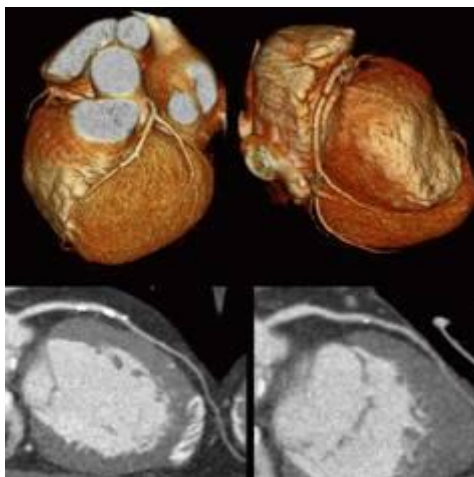
[1] [http://cgi.ebay.com/ARM-&-HAMMER-BAKING-SODA-MEDICAL-USES-BROCHURE-1924\\_W0QQitemZ370285074486QQcmdZViewItemQQimsxZ20091104?IMSfp=TL091104191005r1063](http://cgi.ebay.com/ARM-&-HAMMER-BAKING-SODA-MEDICAL-USES-BROCHURE-1924_W0QQitemZ370285074486QQcmdZViewItemQQimsxZ20091104?IMSfp=TL091104191005r1063)

[2] A testimonial left on my site by Laurel from Australia



## 5 – Calcification and Its Treatment with Magnesium and Sodium Thiosulfate

*Posted by Dr Sircus on December 8 , 2009*



Cardiac CT showing calcified plaques.

*Calcium plays a central role in the electrical stimulation of cardiac cells and in the mechanical contraction of smooth muscle cells in the walls of arteries.*

Calcium is essential to health yet it holds a hidden danger that brings us to our graves much quicker than we would like. Calcium is the most promoted nutrient by proponents of conventional, nutritional, and alternative medicine. This is a great and tragic mistake. They should have been promoting magnesium. Magnesium deficiency leads to an increase in myocardial levels of both sodium and calcium. This is a problem because Coronary Artery calcium is a predictor of near-term coronary heart disease events. **In the face of growing magnesium deficiencies calcium becomes increasingly more toxic to human physiology.**

Dr. Dean makes this clear when she says in her book *The Magnesium Miracle*, “To understand how you can create a calcium/magnesium imbalance in your own body, try this experiment in your kitchen. Crush a calcium pill and see how much dissolves in 1 oz of water. Then crush a magnesium pill and slowly stir it into the calcium water. When you introduce the magnesium, the remaining calcium dissolves; it becomes more water-soluble. The same thing happens in your bloodstream, heart, brain, kidneys, and all the tissues in your body. If you don’t have enough

magnesium to help keep calcium dissolved, you may end up with calcium-excess muscle spasms, fibromyalgia, hardening of the arteries, and even dental cavities. Another scenario plays out in the kidneys. If there is too much calcium in the kidneys and not enough magnesium to dissolve it, you can get kidney stones.”

Magnesium and calcium work together to control muscle action though calcium becomes a problem when there is not enough magnesium to control calcium’s actions. Calcium becomes a slow acting poison (often decades of build up) to tissues all over the body when in excess relative to magnesium in deficiency. Trace mineral symptoms of excess or deficiency depend on their ratios to other elements. In the event of calcification, it is not particularly a high calcium level that results in the formation of a stone or spur, but calcium being high in ratio to magnesium.

*Magnesium increases the solubility of calcium in the urine. Supplementing magnesium to the diet has demonstrated significant effect in preventing recurrences of kidney stones.*

If calcium is not taken with magnesium or if it is not highly absorbable, it will cause much more harm than good. **Unabsorbed calcium can lodge anywhere in our body.** For instances, if it lodges in your bones and joints, it mimics arthritis; if it lodges in you heart, it mimics arterial lesions. Calcification or calcium poisoning can manifest as heart disease, cancer, wrinkled skin, kidney stones, osteoporosis, dental problems, bone spurs, cataracts and many other health problems. Calcium deposits in the joints are called arthritis; in the blood vessels it is hardening of the arteries; in the heart it is heart disease, and in the brain it is senility.

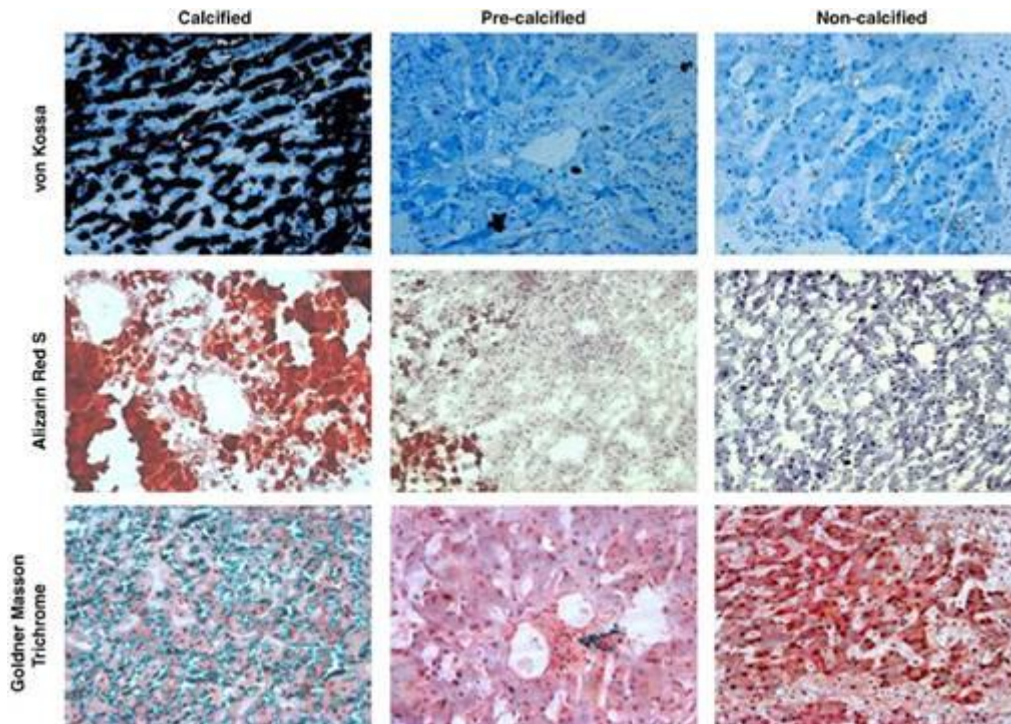
*It is magnesium that actually controls bone density not calcium. Magnesium drives the calcium into the bones where low levels encourage its loss.*

Exceedingly few healthcare practitioners in the world have learned much about magnesium medicine so they do not know to lay off the calcium and start intensive magnesium treatments. After decades of dairy industry marketing pushing calcium we have a situation that is literally killing millions of people. Anyone who wants to live longer should pay attention to the magnesium story and should immediately begin a strong and

prolonged treatment with magnesium in its chloride form. Magnesium chloride is the most versatile, absorbable and effective form of magnesium and can be used orally, transdermally and via IV drip. It can even be nebulized directly into the lungs and in much diluted form dropped into the eyes when its purest forms are used.

While calcium affects muscle contractions, magnesium balances that effect and relaxes muscles. Calcium tightens the muscles; magnesium relaxes the muscles. With insufficient magnesium the muscles stay tense and through the years may cause a cramp in the muscle. This could happen when you have too much calcium or too little magnesium. Too much calcium causes the heart to go into a spasm and it can't relax. This is a heart attack. Get some magnesium into the body and the heart will slowly start returning to normal unless major damage has already been done. Add iodine and selenium and we have the makings of an ideal formula to support recovery and possibly even minor tissue regeneration.

As we will see in another chapter medical scientists are already creating heart patches made from sea weed and are seeing both blood and heart tissues growing and regenerating into the patches. Seaweed just happens to be high in magnesium, iodine and selenium. A great part of this book will be devoted to mercury poisoning and the tendency of it to be concentrated in cardiac tissues. Selenium is the antidote to mercury and iodine reveals one more of her secrets when it comes to cardiac care.



Characterization of liver calcification. Von Kossa (top panels), alizarin red S (middle panels) and Goldner–Masson trichrome (bottom panels) staining of calcified, precalcified and noncalcified liver tissue sections. Top panels, black staining indicates the presence of phosphate precipitate. Middle panels, dark grey staining indicates the presence of Ca<sup>2+</sup> precipitate. Bottom panels, light grey staining indicates the presence of collagen. Magnification 20.

There are no pharmaceutical drugs on the market to reduce calcium deposits but magnesium chloride and sodium thiosulfate are useful in preventing and treating unwanted calcification. Together they offer the best way of combating the calcium time bomb going silently and slowly off in uncounted millions of people. The best way to track calcium toxicity is actually through looking at the level of deficiency in magnesium for magnesium controls and counteracts calcium. The average American consumes only 40 percent of the recommended daily allowance of magnesium. This has serious consequences, including death, in many people, according to magnesium expert Dr. Mildred Seelig. Eighty to 90 percent of the U.S. population is magnesium deficient.

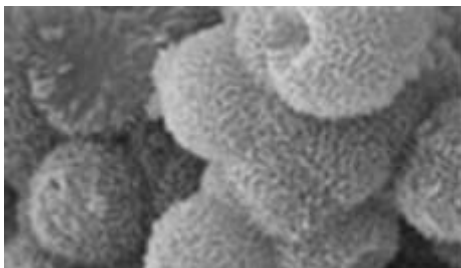
*Calcification consists of calcium and phosphorous and is a normal process for building healthy bones and teeth. But it also plays a central role in disease conditions such as strokes and heart attacks.*

Dr. H. Ray Evers writes, “The power plant of human cell is called the “mitochondrion.” The mitochondrion is what generates energy for the cell to use. What everyone refers to as “energy” is derived from the oxidative reduction of the cellular respiration. This is done through the mitochondria. But the problem arises when the cell is low in magnesium, relative to calcium. **Adenosine triphosphate, the “energy currency” of the cell, is magnesium dependent. This means it is obvious that the calcium pump at the cell membrane is also magnesium dependent.** Without enough “biologically available” magnesium, the cellular calcium pump slows down. Thus a vicious cycle is established. The low levels of available magnesium inhibit the generation of energy, and the low levels of energy inhibit the calcium pump. The end result? **The mitochondrion, the powerhouse of the cell and the entire body, becomes calcified. This is the beginning of aging.** It all starts in the cell. First the cells age. This leads to organ aging. And after the organs age, individual aging occurs. Since calcium is readily accumulated by mitochondria, this ion is potentially capable of antagonizing the activating influence of magnesium on many intra-mitochondrial enzyme reactions. This means that **every function of your body can be inhibited when the mitochondria calcify.** It’s like going through life with the emergency brakes on. Calcium is the brake. Magnesium is the accelerator. To be in optimal health, there must be a balance between the two.”

*The higher the protein you consumer the more magnesium is needed. When large amounts of calcium are consumed, you need more magnesium. A diet which is high in calcium increases the body’s need for magnesium.- Dr. H. Ray Evers*

The higher the calcium level and the lower the magnesium level in the extra-cellular fluid, the harder it is for cells to pump the calcium out. Mitochondria produce the energy our cells and organs need. This is vitally important for the heart because heart muscle cells have a never ending need for energy. Mitochondria are also important for proper neurotransmission

and are highly concentrated in cells of the brain and central nervous system. **A healthy cell has high magnesium and low calcium levels.**



Calcifying Nanoparticles (CNPs) form slow-growing calcified colonies in arteries and organs, much in the same way as coral reefs form.

We may say that our biochemical age is determined by the ratio of magnesium to calcium within our cells. As we age, calcium deposits tend to accumulate in our soft tissues. Doctors call it “Extra-skeletal calcification.” This means that the calcium that is supposed to be deposited in your bones is being lodged in our soft tissues.

*Up to 30% of the energy of cells is used to pump calcium out of the cells.*

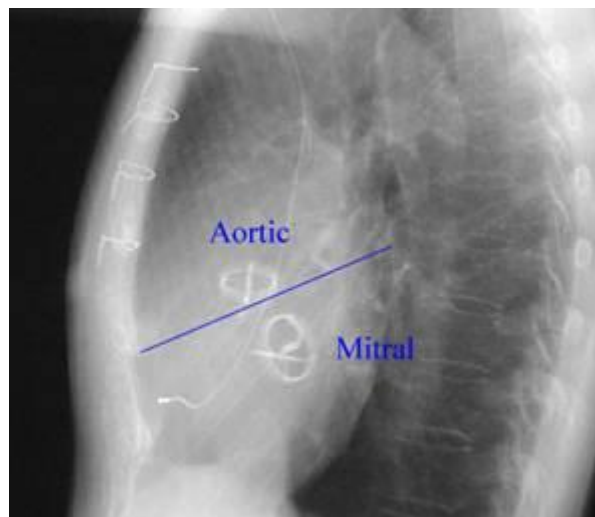
Deficiency in magnesium, aside from having a negative impact on the energy production pathway required by mitochondria to generate ATP, also reduces the threshold antioxidant capacity of the cardiovascular system and its resistance to free-radical damage. **Magnesium acts as an antioxidant against free radical damage of the mitochondria.**

*Magnesium has been called nature’s “calcium channel blocker” because of its ability to prevent coronary artery spasm, arrhythmias, and to reduce blood pressure.*

“Calcium enters the cells of the heart by way of calcium channels that are jealously guarded by magnesium. Magnesium, at a concentration 10,000 times greater than that of calcium in the cells, allows only a certain amount of calcium to enter to create necessary electrical transmissions, and then immediately helps to eject the calcium once the work is done. Why? If calcium accumulates in the cell, it causes hyperexcitability and calcification and disrupts cell function leading to angina, high blood pressure, arrhythmia, asthma, headaches and even heart attacks. Magnesium is

nature's calcium channel blocker," says Dr. Carolyn Dean, author of *The Magnesium Miracle*.

Dr. Garry Gordon wrote, "If you have compromised cell membranes or low ATP production for any reason, then the cell has trouble maintaining the normal gradient. This is because the usual gradient is 10,000 times more calcium outside of cells than inside; when this is compromised you will have increased intracellular calcium, which seems to always happen at the time of death. Whenever intracellular calcium is elevated, you have a relative deficiency of magnesium, so whenever anyone is seriously ill, acute or chronic, part of your plan must be to restore magnesium, which is poorly absorbed through oral means."



*The optimal blood serum value for vitamin D is 45-52 ng/ml (115-128 nmol/l).*

The adverse effects of excessive calcium intake may include high blood calcium levels, kidney stone formation and kidney complications.<sup>[1]</sup> Elevated calcium levels are also associated with arthritic/joint and vascular degeneration, calcification of soft tissue, hypertension and stroke, and increase in VLDL triglycerides, gastrointestinal disturbances, mood and depressive disorders, chronic fatigue, and general mineral imbalances including magnesium, zinc, iron and phosphorus. **High calcium levels interfere with Vitamin D and subsequently inhibit the vitamin's cancer protective effect unless extra amounts of Vitamin D are supplemented.**<sup>[2]</sup>

*Vitamin D works by lowering insulin resistance, which is one of the major factors in heart disease. It is also used by the thyroid gland, which secretes a hormone that regulates the body's levels of calcium, which in turns helps regulate blood pressure.*

Cardiovascular calcification lesions can lead to the development of myocardial ischaemia, myocardial infarction, impaired myocardial function, congestive heart failure, cardiac valve insufficiency, and cardiac arrhythmias. There is a strong association between increased cardiac calcification and risk of death. **Administration of vitamin D to treat secondary hyper-parathyroidism increases intestinal absorption of calcium** and phosphorus. It raises serum calcium and phosphorus levels. Soft-tissue and vascular calcification are associated with a history of vitamin D therapy.<sup>[3]</sup>

*Changes in serum calcium do provide important information about various hormonal or organic disturbances, including excessive Vitamin D status.*

Magnesium and calcium share a common route of absorption in the intestinal tract and appear to have a mutually suppressive effect on each other. If calcium intake (or dairy intake) is unusually high, calcium will be absorbed in preference to magnesium. Also, **excessive doses of vitamin D and calcium supplements can cause renal magnesium loss.** Sunlight is the only safe way to get vitamin D since the body regulates how much is made. Take it by pill form and calcium homeostasis is overridden. The entire idea of toxic sunscreens and avoiding the sun's life giving effects (natural vitamin D formation) is just one more mistake modern medicine is making.

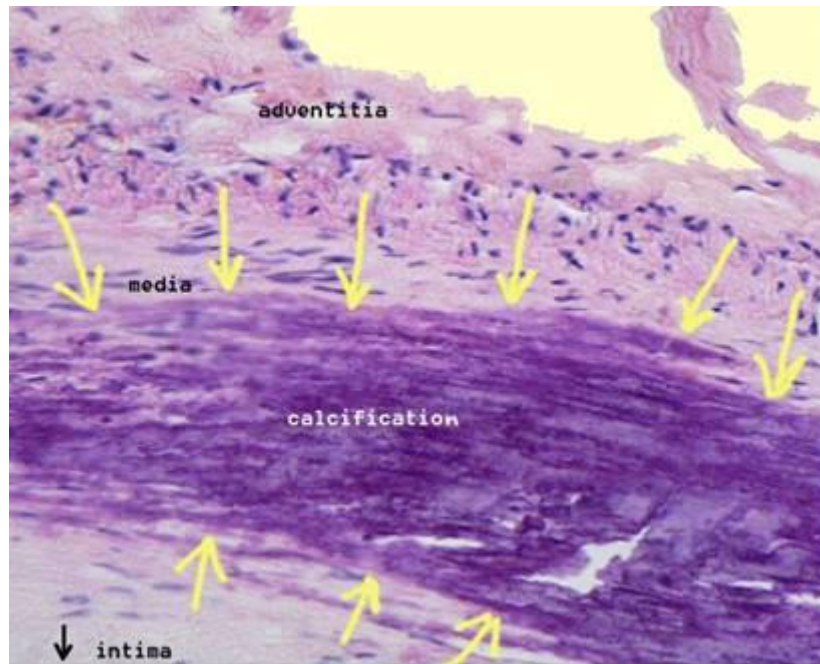
*Researchers from Winthrop University Hospital in Mineola, New York, found that giving supplements of vitamin D to a group of volunteers reduced episodes of infection with colds and flu by 70 per cent over three years.*

The dangers of sun exposure have been greatly exaggerated by the same types of people who over exaggerate and lie about many things in medicine. Sun exposure is not the major reason people develop skin cancer. Researchers point out that increasing level of vitamin D3 could prevent many diseases that claim hundreds of thousands if not millions of people

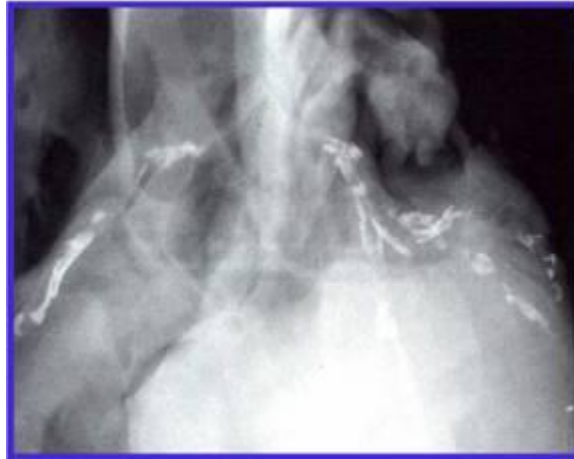


world each year. Vitamin D, the sunshine vitamin, is different from other vitamins in that it influences your entire body — receptors that respond to the vitamin have been found in almost every type of human cell, from the brain to our bones.

*Magnesium is essential for the normal function of the parathyroid gland and for vitamin D metabolism.*



Coronary artery calcification is common, is severe and is significantly associated with ischemic cardiovascular disease in adult end-stage renal disease patients.<sup>[4]</sup> The amount of calcium in the coronary arteries reliably predicts heart attack risk and is measured by what is called ones calcium score. UCLA cardiologist, Dr. Matt Budoff, a long-time champion of the Coronary Calcium Scan, and author of the AHA paper says, “The total amount of coronary calcium (Agatston score) predicts coronary disease events beyond standard risk factors.” The Coronary Calcium Score is a precise quantitative tool for measuring and tracking heart disease risk. It is more valuable and accurate than other traditional markers (such as total cholesterol which is practically worthless as a heart disease risk marker).



This image demonstrates coronary artery calcification.

According to the University of Florida Shands Cancer Center a high level of calcium in the blood, called hypercalcemia,<sup>[5]</sup> may become a medical emergency. This disorder is most commonly caused by cancer or parathyroid disease but underneath the primary etiology is a magnesium deficiency. Hypercalcemia is commonly attributed to cancer treatment. Severe hypercalcemia is a medical emergency that can be avoided if magnesium levels are brought up to normal.

*Magnesium is the mineral of rejuvenation and prevents the calcification of our organs and tissues that is characteristic of the old-age related degeneration of our body.*

Magnesium inadequacy interferes with cellular metabolism and accelerates the aging of most human tissues. Most human cells can only replicate a limited number of times in cultures before they lose the ability to divide, a phenomenon known as replicative senescence. Recent studies have shown that culture in low magnesium accelerates the senescence of human endothelial cells and fibroblasts.<sup>[6]</sup> Dr. James Howenstein says “Calcification in cellular tissues is a sign of tissue damage, cellular aging and impending cell death. When cells are unable to regulate calcium and keep the calcium content of cells down cellular function degenerates. Calcified arteries, calcium in soft tissues and high levels of calcium within cells are all signs of aging. At age 80 the average calcium content in the aorta is 140 times greater than the levels of aortic calcification noted at age 40.”



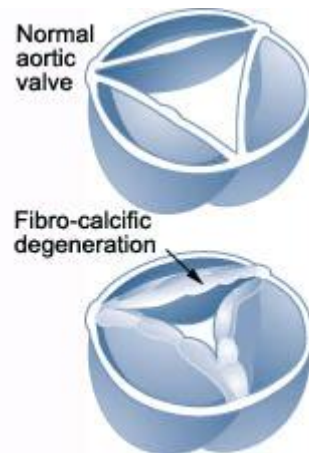
Age 20-30 years      Age 50-70 years

In youth, at left, there is minimal plaque formation. However, at right with passage of time the plaque grows larger. **About 20% of this plaque volume contains calcium** which is measurable on CAT scan, providing a marker for the total plaque burden. Calcification of atherosclerotic lesions is due to a process of active deposition of calcium in the atherosclerotic plaque that utilizes metabolic pathways similar to those found in normal human bone. Calcium accumulates steadily in plaque and its presence is verifiable via microscopic examination from the very early stages of disease formation. Having a build-up of calcium plaque in the arteries means increased risk of heart attacks and death from heart disease according to findings from the Multi-Ethnic Study of Atherosclerosis (MESA) funded by the National Heart, Lung, and Blood Institute. Researchers at the University of Virginia Health System suggest that composition of plaque deposits in the carotid arteries indicate a patient's risk of having a stroke.

*The ratio of calcium to magnesium in milk is 9 or 10 to 1. Calcium is the physiological partner of magnesium and should be present in a 2:1 or even 1:1 ratio.*

American women have been consuming an average of two pounds of milk per day for their entire lives, yet thirty million American women have osteoporosis. Drinking milk does not prevent bone loss. Bone loss is accelerated by ingesting too much protein, and milk has been called "liquid meat." In order to absorb calcium, the body needs comparable amounts of magnesium. Countries with the highest rates of osteoporosis, such as the United States, England, and Sweden, consume the most milk. China and Japan, where people eat much less protein and dairy food, have low rates of osteoporosis.<sup>[7]</sup> Dietary protein increases production of acid in the blood which can be neutralized by calcium mobilized from the skeleton.<sup>[8]</sup> About

50,000 Americans die each year of problems related in some way to osteoporosis.<sup>[9]</sup>



Aortic valve replacements are done when too much calcification of the heart valve leaflets takes place. According to The Cleveland Clinic, fibro-calcific degeneration most commonly affects the aortic valve. According to reports, calcified heart valves typically occurs in adults over the age of 65. When valve leaflets are calcified, the valve leaflets become fibrotic (thickened) and calcified (hardened), producing a narrowed valve opening. Risk factors for this type of valve disease include increased age, low body weight and high blood pressure.

This photograph shows the aortic valve with a short segment of the aorta around it. The valve clearly has only two cusps (bicuspid aortic valve), and is narrowed and densely calcified. If you placed your fingertip through the opening, the valve would feel hard and gritty.

William R. Quesnell, author of ‘Minerals: The Essential Link to Health, said, “Most people have come to believe nutrition is divisible, and that a single substance will maintain vibrant health. The touting of calcium for the degenerative disease osteoporosis provides an excellent example. Every day the media, acting as proxy for the milk lobby, sells calcium as a magic bullet. Has it worked? Definitely for sales of milk; but for American health it has been a disaster. **When you load up your system with excess calcium, you shut down magnesium’s ability to activate thyrocalcitonin, a hormone that under normal circumstances would send calcium to your bones.**”

The most common cause of death in dialysis patients is cardiovascular disease. This is due in part to the presence of excess vascular calcification, particularly in the form of extensive coronary artery calcification, which can be observed even in very young dialysis patients.<sup>[10]</sup> The presence of coronary artery calcification in the dialysis population appears to correlate in part with the ingested quantity of calcium-containing oral phosphate binders.<sup>[11]</sup>

*The associations among valvular calcification, inflammation, carotid atherosclerosis, and arterial calcification suggest that valvular calcification is a marker of atherosclerosis and arterial calcification in patients with end stage renal disease.*<sup>[12]</sup>

Dietary surveys clearly show that magnesium, not calcium, intakes have been falling over the last fifty years. This is a problem because it is magnesium that controls the fate of calcium in the body. If magnesium is insufficient calcium will be deposited in the soft tissues (kidneys, arteries, joints, brain, etc.).

Countries with the highest calcium to magnesium ratios (high calcium and low magnesium levels) in soil and water have the highest incidence of cardiovascular disease. At the top of the list is Australia. Adequate levels of magnesium are essential for the heart muscle. Some researchers predict that the American ratio of calcium to magnesium is actually approaching 6-to-1, yet, the recommended dietary ratio of calcium to magnesium in the United States is 2-to-1. The process of absorption for magnesium is similar to that of calcium but some people absorb or retain much more magnesium than calcium (or more calcium than magnesium). The commonly suggested supplemental intake ratio of 2:1 for calcium and magnesium is arbitrary for the value can change significantly under various individual circumstances.

Current research on the Paleolithic or caveman diet shows that the ratio of calcium to magnesium in the diet that our bodies evolved to eat is 1-to-1.<sup>[13]</sup> Balancing this information is the fact that mothers breast milk is ten parts calcium to only one part magnesium so it seems that at least early in life we need less magnesium and more calcium to build strong bones. Though high doses of calcium carbonate taken alone over a long period of time will lead to low magnesium levels,<sup>[14]</sup> magnesium is what is needed to

encourage the correct utilization of calcium by the body to increase bone strength.<sup>[15]</sup> Researchers estimate currently that the ratio should be two parts calcium to one part magnesium.<sup>[16]</sup>

*Without magnesium, calcium is not fully utilized, and under absorption problems may occur leading to arthritis, osteoporosis, menstrual cramps, and some premenstrual symptoms.*

In contrast to skeletal muscle, **cardiac muscle cannot contract in the absence of extracellular calcium ions as well as extracellular potassium ions.** In this sense, it is intermediate between smooth muscle, which has a poorly developed sarcoplasmic reticulum and derives its calcium across the sarcolemma; and skeletal muscle which is activated by calcium stored in the sarcoplasmic reticulum (SR). The reason for the calcium dependence is due to the mechanism of calcium-induced calcium release (CICR) from the SR that must occur under normal excitation-contraction (EC) coupling to cause contraction.

According to Dr. Sarah Mayhill, “Calcium and magnesium compete for absorption and so too much calcium in the diet will block magnesium absorption. Our physiological requirement for calcium to magnesium is about 2:1. In dairy products the ratio is 10:1. So, consuming a lot of dairy products will induce a magnesium deficiency.”

*A diet high in dairy and low in whole grains can lead to excess calcium in the tissues and a magnesium deficiency.<sup>[17]</sup>- Dr. Nan Kathryn Fuchs*

## pH

The general theory behind increased calcium intake is that calcium will combat excess acidity, thus helping to promote good health. This is only half true: While the body uses calcium as a buffer, excess calcium can also promote soft-tissue calcification. Too much calcium running amuck through your body is the real danger of excess acidity. **It is far better to increase your intake of other buffers such as magnesium, which will safely buffer excess acidity without causing calcifications.** Of course, eating a so-called alkaline diet and limiting your intake of acidic minerals such as phosphorus may also help. Acidic minerals can contribute to calcifications. In essence, the real danger of excess acidity is the leeching

of calcium that it causes. Simply put, **excess acidity equals soft-tissue calcifications.**

*The chemical reaction of magnesium is alkaline (acid binding). It regulates the acid-alkaline balance of the body.- Dr. H. Ray Evers*

According to Dr P Kaye, Emergency Department, Bristol Royal Infirmary, UK, “Magnesium acts as a smooth muscle relaxant by altering extracellular calcium influx and intracellular phosphorylation reactions. It may also attenuate the neutrophilic burst associated with inflammatory bronchoconstriction by attenuating mast cell degranulation. The principal trigger for this degranulation is a rise in intracellular calcium, which is antagonised by magnesium. It has been shown experimentally to augment the bronchodilatory effect of salbutamol and to inhibit histamine induced bronchospasm. Magnesium should be used as a safe, easy to administer and effective second line agent in acute severe asthma.<sup>[18]</sup>

Medical authorities claim that the widespread incidence of osteoporosis and tooth decay in western countries can be prevented with a high calcium intake. However the opposite is true. Asian and African populations with a very low intake of about 300 mg of calcium daily have very little osteoporosis. Bantu women with an intake of 200 to 300 mg of calcium daily have the lowest incidence of osteoporosis in the world. In western countries with a high intake of dairy products the average calcium intake is about 1000 mg. With a low magnesium intake, calcium goes out of the bones to increase tissue levels, while a high magnesium intake causes calcium to go out of the tissues into the bones. Thus **high magnesium levels leads to bone mineralization.**

*Some gynecologists believe that one of the first organs to calcify is the ovaries, leading to pre-menstrual tension.*

Dr. Karen Kubena, associate professor of nutrition at Texas A & M University indicates that even if you monitor your magnesium level like a maniac, you're still at risk for migraines if your calcium level is out of whack. It seems that higher than normal blood levels of calcium cause the body to excrete the excess calcium, which in turn triggers a loss of magnesium. “Let's say you have just enough magnesium and too much

calcium in your blood. If calcium is excreted, the magnesium goes with it. All of a sudden, you could be low in magnesium,” says Dr. Kubena.

As a general rule, acid substances tighten; and alkaline substances relax. Magnesium is alkaline and relaxes the body from tightness, tension, stiffness, spasms, twitches, tics or jerkiness as in nervousness, anxiety, anger, fear, agitation, headaches, muscle cramps, menstrual cramps, arthritis, insomnia, constipation, heart palpitations, irregular heartbeats, high blood pressure, eye twitches, acne, plaque on teeth, plaque on heart and arteries due to cholesterol build-up, plaque on the brain [Alzheimer’s]. Magnesium acts as a natural gate or valve in the brain synapses that regulates influx of calcium into postsynaptic calcium channels from presynaptic neurons in parts of the brain that are involved in mood and behavior such as the hippocampus. With inadequate magnesium (calcium toxicity), this function becomes altered and irritability, anxiety, depression, ADHD, mania, hypo-mania, bi-polar disorder, hyper-excitability and hyper-emotionality, and perhaps some psychoses, result.

A pH less than 5.3 indicates an inability to assimilate vitamins or minerals. Due to the alkalinity of minerals, they loosen tumors, including fibroid tumors, endometriosis, cysts, moles, warts, skin tags, and other growths, and cause them to release their toxins. Magnesium should be used to buffer acid pH, not the calcium that is being leached from the bones.

*Magnesium taken in proper dosages can solve the problem of calcium deficiency.- Dr. Nan Kathryn Fuchs*

Experts say excessive calcium intake may be unwise in light of recent studies showing that high amounts of the mineral may increase risk of prostate cancer. “There is reasonable evidence to suggest that calcium may play an important role in the development of prostate cancer,” says Dr. Carmen Rodriguez, senior epidemiologist in the epidemiology and surveillance research department of the American Cancer Society (ACS). Rodriguez says that a 1998 Harvard School of Public Health study of 47,781 men found **those consuming between 1,500 and 1,999 mg of calcium per day had about double the risk of being diagnosed with metastatic (cancer that has spread to other parts of the body) prostate cancer as those getting 500 mg per day or less.** And those taking in 2,000



mg or more had over four times the risk of developing metastatic prostate cancer as those taking in less than 500 mg.

*The recommended daily allowance (RDA) of calcium is 1,000 mg per day for men and 1,500 mg for women.*

Later in 1998, Harvard researchers published a study of dairy product intake among 526 men diagnosed with prostate cancer and 536 similar men not diagnosed with the disease. That study found a 50% increase in prostate cancer risk and a near doubling of risk of metastatic prostate cancer among men consuming high amounts of dairy products, likely due, say the researchers, to the high total amount of calcium in such a diet. The most recent Harvard study on the topic, published in October 2001, looked at dairy product intake among 20,885 men and found men consuming the most dairy products had about 32% higher risk of developing prostate cancer than those consuming the least. Dr. Panagiota N. Mitrou, of the National Cancer Institute, Rockville, Maryland, and colleagues found the same thing, that increased consumption of calcium and dairy products raises the risk of prostate cancer.

### **Treatment with Sodium Thiosulfate**

*Sodium thiosulfate (STS) is a calcium chelating agent with antioxidant properties.- Dr. Carlos E. Araya*

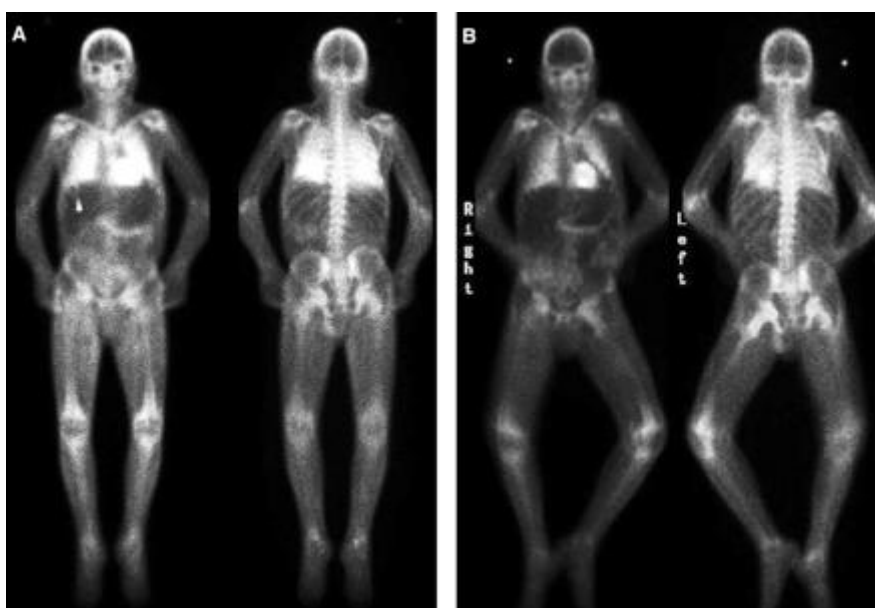


Figure 1. (A) Initial three-phase bone scan demonstrating soft tissue

accumulation  
in thighs, distal femur, proximal tibia, and forearms. There is intense  
uptake in the  
myocardium and early accumulation in the lungs. (B) Three months later,  
the  
calcium deposition in the thighs and forearms is less significant. However,  
there still is calcification in the heart, lungs, and para-articular surfaces.

Sodium thiosulphate results in the formation of calcium thiosulphate in the urine, a compound with much higher solubility than the other calcium salts (phosphate, oxalate). Thus, sodium thiosulphate could not only inhibit further nephrocalcinosis, but in some degree it could contribute to decalcification of renal parenchyma<sup>[19]</sup>.

The beneficial effects of sodium thiosulfate (STS) are thought to be due in part to its ability to enhance the solubility of calcium deposits. STS has a small molecular weight of 248 (Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>) and in patients with normal renal function has a serum half-life of 15 min. STS facilitates the mobilization of calcium from vessels affected by calcium deposits.

*Intravenous STS seems beneficial, has mild adverse effects, and is well tolerated in children and young adults. STS dosage was 25 g/1.73 m<sup>2</sup> per dose intravenously.- Dr. Carlos E. Araya*

Dr. Carlos E. Araya et al<sup>[20]</sup> successfully used this relatively nontoxic substance, which been reported as adjuvant treatment of several conditions involving disorders of calcium homeostasis. Yatzidis described its benefits by **decreasing the rate of new kidney stone development** in 34 patients with recurrent calcium urolithiasis. Prompted by these excellent results, intravenous STS was administered after hemodialysis to three patients with ESRD and tumoral calcinosis for a period of 6 to 12 mo. Two of the patients had regression of the calcified mass as well as improved motility of the affected joints. STS was given for a period of 9 yr to a patient with nephrocalcinosis as a result of renal tubular acidosis type 1. There was no further deterioration of his condition, and the discontinuation of the medication was accompanied by recurrence of renal colic. See later chapter for the full story on sodium thiosulfate.

## Body pH and Calcium

Many health care professionals believe there is only one disease. And that one disease is acidosis. The wastes produced from food are highly acidic and acidosis is one of the main contributors that lead to the aging process and various illnesses. Acid waste is excreted from the human body in the form of urine or sweat. But the wastes not excreted will be circulating around in the blood, in the body. This acidic waste will gradually accumulate somewhere in our capillaries blood vessels, and eventually clog them up. Also as a consequence of this, the cells of the human body will be deprived of their supply of oxygen and essential nutrients, rendering these cells inactive in reproduction. That's the main reason why people age. Moreover, with the capillary blood vessels clogged up, the function of every organ in the human body accumulating acidic waste will begin to deteriorate, causing serious illnesses in the long run.

One of the first warning signs of an acidic biological terrain is calcium deposits. Our dietary intake of calcium is not keeping up with the calcium buffering needed and we are actively pulling calcium from our bones and teeth. It all works like a little train, from the bones to the fluids and cells, to the blood. As our biological terrain becomes acidic, our pH level drops. When this happens we start losing calcium out of the blood, the bones, and the tissues. This is a safety mechanism. Now your biological terrain's oxygen level drops leaving you tired and fatigued, allowing fungus, mold, parasites, bad bacteria, and viral infections to flourish and gain a hold throughout the body. It is interesting to note that you often won't have just some of these invaders. If you have Candida you will likely have bad bacteria, fungus, and parasites because they all flourish in the same terrain.

Mild acidosis can cause such problems as:

- Cardiovascular damage, including the constriction of blood vessels and the reduction of oxygen.
- Weight gain, obesity and diabetes.
- Bladder and kidney conditions, including kidney stones.
- Immune deficiency.
- Acceleration of free radical damage, possibly contributing to cancerous mutations.

- Premature aging.
- Osteoporosis; weak, brittle bones, hip fractures and bone spurs.
- Joint pain, aching muscles and lactic acid buildup.
- Low energy and chronic fatigue.

A recent seven year study conducted at the University of California, San Francisco, on 9,000 women showed that those who have chronic acidosis are at greater risk for bone loss than those who have normal pH levels. The scientists who carried out this experiment believe that many of the hip fractures prevalent among middle aged women are connected to high acidity caused by a diet rich in animal foods and low in vegetables. This is because the body borrows calcium from the bones in order to balance pH.

### **American Journal of Clinical Nutrition**

The biggest problem scientists have found is that over time the human body becomes depleted of calcium. A compound called mono-ortho-calcium phosphate is the chemical buffer for the blood. This buffer maintains the alkaline level (or the lack of acidity) in your blood. Without it you would die. If the acidity level of your blood changes even slightly, you die immediately! But in order to supply enough calcium for buffering we must have enough calcium being absorbed from our diet. If not, our body will simply rob the needed calcium from our bones and teeth.

The more acidic we become, the harder it is for oxygen to be present, so our biological terrain also becomes more anaerobic. Without adequate oxygenation, unfriendly bacteria, viruses, molds, and fungus can live and prosper. Then our cells cannot carry on their life-giving functions in a very efficient manner because our biological chemical reactions need oxygen.

### **References**

- 1] New York State Department of Health; <http://www.health.state.ny.us/diseases/conditions/osteoporosis/qanda.htm>
- [2] Accu-Cell Nutrition; Calcium and Magnesium <http://www.acu-cell.com/acn.html>

[3] Nephrol Dial Transplant (2002) 17: 336-339 Cardiovascular calcification in end-stage renal disease. Isidro B. Salusky<sup>1</sup>, and William G. Goodman<sup>2</sup> 1 Department of Pediatrics and 2 Department of Medicine, UCLA School of Medicine, Los Angeles, CA, USA

[4] J Am Coll Cardiol, 2002; 39:695-701. J Am Coll Cardiol, 2002; 39:695-701 American College of Cardiology Foundation.

[5] Signs and symptoms of hypercalcemia may include:

• Nausea	• Fatigue
• Vomiting	• Lethargy
• Stomach Pain	• Moodiness
• Constipation	• Irritability
• Anorexia	• Confusion
• Excessive thirst	• Extreme muscle weakness
• Dry mouth or throat	• Irregular heart beat
• Frequent Urination	• Coma

[6] Magnes Res. 2008 Jun;21(2):77-82. A connection between magnesium deficiency and aging: new insights from cellular studies. Killilea DW, Maier JA. Nutrition and Metabolism Center, Children's Hospital Oakland Research Institute.

[7] Nutrition Action Healthletter, June, 1993

[8] American Journal of Clinical Nutrition, 1995; 61 (4)

[9] Osteoporosis International 1993;3(3)

[10] Braun, J, Oldendorf, M, Moshage, W, et al. Electron beam computed tomography in the evaluation of cardiac calcification in chronic dialysis patients. Am J Kidney Dis 1996; 27:394.

[11] Goodman, WG, Goldin, J, Kuizon, BD, et al. Coronary-artery calcification in young adults with end-stage renal disease who are undergoing dialysis. N Engl J Med 2000; 342:1478.

[12] Arch Intern Med. 2005;165:327-332

- [13] Eades M, Eades A, *The Protein Power Lifeplan*, Warner Books, New York, 1999
- [14] Camara-Martos, F. and M.A. Amaro-Lopez, Influence of Dietary Factors on Calcium Bioavailability. *Biological Trace Element Research*, 2002. 89: p. 43-52
- [15] Jones, G., M. Riley, and T. Dwyer, Maternal Diet during pregnancy is associated with bone mineral density in children: a longitudinal study. *European Journal of Clinical Nutrition*, 2000. 54: p. 749-756
- [16] Celotti, F. and A. Bignamini, Dietary Calcium and Mineral/Vitamin Supplementation: a controversial problem. *The Journal of International Research*, 1999(27): p. 1-14
- [17] The source of menstrual cramps may come from eating too much cheese, yogurt, ice cream or milk, combined with insufficient whole grains and beans. Or it could come from taking too much calcium without enough magnesium. Modifying diet and increasing magnesium supplementation may allow menstrual cramps to disappear.
- [18] **Kaye, P. O'Sullivan, I.** The role of magnesium in the emergency department. *Emergency Department, Bristol Royal Infirmary, Bristol, UK Emerg Med J* 2002; 19:288-291
- [19] Yatzidis H. Successful sodium thiosulphate treatment for recurrent calcium urolithiasis. *Clin Nephrol* 1985; 23: 63–67
- [20] Sodium Thiosulfate Treatment for Calcific Uremic Arteriopathy in Children and Young Adults. Carlos E. Araya, Robert S. Fennell, Richard E. Neiberger, and Vikas R. Dharnidharka. Division of Pediatric Nephrology, Department of Pediatrics, University of Florida College of Medicine, Gainesville, Florida. *Clin J Am Soc Nephrol* 1: 1161-1166, 2006. <http://cjasn.asnjournals.org/cgi/content/full/1/6/1161>

# 6 – Iodine Dosages

*Posted by Dr Sircus on November 15, 2009*

## Treatment of Influenza and other Diseases



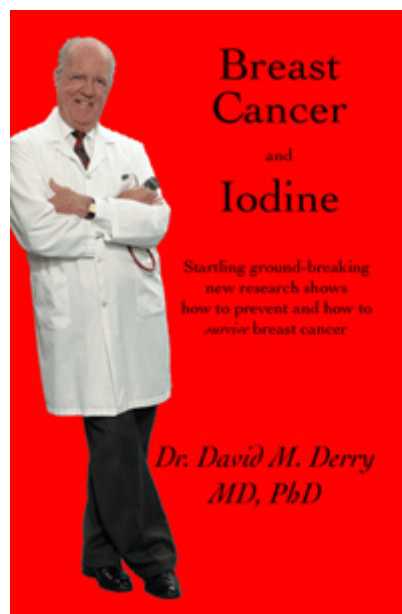
*After testing over 500 patients, I found that 94.7% of my patients are deficient in inorganic iodine.- Dr. David Brownstein*

There are several reference points we can use to plot out iodine dosages for a variety of disorders that beg for the use of iodine for successful treatment. In this chapter I will present different views and practices from present as well as from the long past when iodine was vastly more popular as a medicine than it is today. For whatever irrational reason, doctors and patients fear iodine thus en mass do not use to its fullest potential.

Humans tolerate large doses of iodine but the ultra high doses that were used many decades ago are not required to get the most out of iodine therapy. Just a little goes a long way, as the governmental iodized salt programs showed but this dosage level was only affective for Goiter and its avoidance. It actually takes very little iodine to prevent this disease but no one ever said that was the only purpose and need for iodine in the body. Today people are more deficient then ever before because our need for iodine has increased in direct proportion to our toxic burdens especially of other competing halogens.

So effective is iodine that aerosols can be effective in sterilizing a room at levels not even detectable by humans. But Dr. David Derry of Canada says that, “Dietary iodine found in iodized salt is **below the amounts needed to**

**fill mucus defense roles.** To protect themselves, people wishing to boost their defense against infections should supplement their diets with iodine.” “Extremely high doses of iodine can have serious side effects, but only a small fraction of such extreme doses are necessary to kill influenza viruses,” continues Derry who tells us, “In 1945, a breakthrough occurred when J.D. Stone and Sir McFarland Burnet (who later went on to win a Nobel Prize for his Clonal Selection Theory) **exposed mice to lethal effects of influenza viral mists. The lethal disease was prevented by putting iodine solution on mice snouts just prior to placing them in chambers containing influenza viruses.**”



Dr. Derry is one of several MDs that I refer to as the Iodine Doctors.

Dr. David Brownstein said, “After testing individuals and finding low iodine levels, I began to use smaller milligram amounts of iodine/iodide (6.25mg/day). Upon retesting these individuals 1-2 months later, little progress was made. I therefore began using higher milligram doses (6.25-50mg) to increase the serum levels of iodine. It was only with these higher doses that I began to see clinical improvement as well as positive changes in the laboratory tests. Why would people need the larger doses of iodine? Why have iodine levels fallen 50% in the last 30 years? As I pondered these questions, I came to the conclusion that the toxicity of modern life must be impacting iodine levels. It is well known that the toxic halides, fluoride and bromide, having a similar structure as iodine, can competitively inhibit iodine absorption and binding in the body. Because of



the elevated levels of toxic halides in the environment and in the food supply, iodine levels have not only fallen but larger amounts of iodine are necessary to correct iodine deficiency as well as to promote a detoxifying effect of heavy metals.”

I have suggested that people put iodine into a nebulizer for aerosol treatment for transdermal effect into the lung tissues in the case of lung cancer, emphysema, asthma and tuberculosis. I make the recommendation to do the same with magnesium chloride, sodium bicarbonate and glutathione. It seems obvious that iodine would make the ideal first line of defense in influenza prevention and without doubt in the treatment of both swine flu and regular influenza. Iodine, teamed up with these other primary and very necessary substances, offers an exceptionally strong defense and treatment against viral infection. It certainly is better than the antiviral Tamiflu, which only reduces symptoms by only one day. It is really not hard to beat that.

Some physicians I know are also using chlorine dioxide as an agent for treatment either **transdermally or intravenously** applied but I would never use it for the prevention of anything. Though I have heard some success stories about chlorine dioxide I do not use it myself nor for my children. I always will reach for the iodine first for all the things that chlorine dioxide proponents advocate, for the iodine is much safer for oral usage, especially when used in the right form. The body needs iodine anyway as a fundamental nutritional item but when even heavier guns are needed instead of reaching for a pharmaceutical one can think of chlorine dioxide.

*A function of iodine in the human body relates to clear thinking. The mind simply works better when the body is supplied the iodine it needs and studies do show that iodine deficiency leads to decline in IQ.*

Despite its being critical to normal neurocognitive development, a new study finds that only 51% of US prenatal multivitamin brands contain any iodine, and in a number of randomly selected brands, the actual dose of iodine contained in the supplements did not match values on the labeling.<sup>[1]</sup> It is easy to understand a synthetic pharmaceutical being phased out but to have iodine, an essential nutritional element that doubles as a

super effective full spectrum anti-pathogen, ignored for what it can do is not reasonable.

Dr. Michael B. Schachter says, “The treatment dose when a person is iodine insufficient is generally between 12.5 mg and 50 mg daily. Preliminary research indicates that if a person is iodine insufficient, **it takes about 3 months to become iodine sufficient while ingesting a dosage of 50 mg of iodine and a year to become iodine sufficient while ingesting a dosage of 12.5 mg of iodine daily.** However, the patient needs to be monitored closely with awareness of possible side effects and detoxification reactions.” This is quite a bit of iodine and if his statements can be substantiated then most people are using dosages which are much too low.

In fact if we put our attention on the full iodine story, which collides with the fluoride, mercury and bromide story we conclude that we can only err on the side of too low of a dose. Patients should push their dosages higher and higher until they get the desired result but I recommend doing this slowly unless there is little time as is the case in emergency situations or very late stage cancer. When using the Nascent Iodine one can dose pulse every two hours orally taking each individual dose up to as many as 20 drops and even at this level we are no where near points of iodine toxicity and tolerance. I have given my own three year old up to fifteen drops in a dose when she was confronted with fever and infection.



Buy Lugol's Iodine

When treating life threatening diseases we do not have months to fool around with low dosages. We need to zoom up iodine levels quickly. And we need to get it concentrated to certain tissues or organs. Just to give you an idea of how high iodine dosages have been taken to we have to revisit the 1930s when iodine was still a universal medicine, present in the US Pharmacopeia and was used at much higher dosages than anyone even dreams of using today.

The usual dose for treatment was 300 mgs (46 drops of full strength Lugol's) to 1 gm (1000 mg, 154 drops). It is very important to realize that today's Lugol's is not universally the same as it was because of new federal legal requirements about concentration levels. The best company offers Lugol's at varying concentration levels. (2.2, 3 and 7 percent) Nascent is a 2 percent solution.

*Preoperative before thyroidectomy: Lugol solution 5-10 gtt three times daily, or 2-6 gtt twice or three times daily given 10-21 days prior to surgery has been used.- MedlinePlus*

Dr. Schachter wrote, "Dr. Abraham started this Iodine Project around 1998 when he became aware of the many benefits of treating patients with iodine using doses far beyond the 2 mg a day, which most physicians consider to be potentially toxic. He noted that starting in the 1820s, the French physician Jean Lugol used these higher doses to treat a wide variety of conditions. Dr. Lugol combined elemental iodine (5 %) and potassium iodide (10%) with 85 % water. Since iodine kills infectious agents, Dr. Lugol successfully treated many infectious conditions with this solution, which became known as Lugol's solution, and which is still available today. Prior to World War II, many American and European physicians used Lugol's solution to treat thyroid conditions, using doses higher than 2 mg daily without apparent significant adverse effects."

When you look at mainstream recommendations all the above information seems strange but this is because dosage and RDA are set obscenely low. Note instead of talking in milligrams (mg) the RDA is in micrograms (mcg) which is a scale exactly 1000 times less. Meaning it takes 1000 mcg to equal 1 mg and it takes 1000 mg to equal a gram.

Recommended Daily Allowance (RDA):50mcg daily for infants 0-12 months; 90mcg daily for 1-8 years; 120mcg daily for 9-13 years; 150mcg daily for 14-18 years.

Adequate Intake (AI) for infants:110mcg daily for ages 0-6 months; 130mcg daily for 7-12 months.

Tolerable Upper Intake Levels (UL): 200mcg/day for ages 1-3 years; 300mcg/day for 4-8 years; 600mcg/day for 9-13 years; 900mcg/day for 14-18 years (including pregnancy and lactation).

Radiation emergencies: Potassium iodide (KI) should be taken just prior to, or as soon as possible after exposure. For infants, babies, and children, KI is administered for exposure of 5 centigrays (cGy) or more. For birth through 1 month, 16mg can be administered; for 1 month through 3 years, 32mg can be administered; for 3-12 years, 65mg can be administered; for adolescents ages 12-18 years, 65mg can be administered (or up to 120mg if the adolescent is approaching adult size).

The highest dosage I have heard any doctor using today is 100 mg and that is quite a bit when you take iodine in a form where you can taste and appreciate what you are taking into your body. My favorite iodine (Nascent) is ideal for oral and aerosol applications into both nebulizers and vaporizers though I believe Lugol's, which is harsher on the stomach and has a very bitter taste, is better for transdermal application to the skin not only because it is less expensive but because you can get it at higher concentration.



[Buy Nascent Iodine](#)

**Nascent Iodine, though more expensive actually tastes and feels good while going down and is gentle enough to give to children, who do not seem to complain about its taste.** Having it on hand for ones children is important for when they need it you can get them to take it but that is not so certain with Lugol's. Nascent iodine contains approximately 400 mcg per drop so 10 drops is 4 mg and 100 drops is only 40 so it's safe to take much higher dosages than is suggested on the bottle. One hundred drops a day is a strong dose, but when treating life threatening diseases it would not be unheard of to use upward of 200 drops a day in divided doses. It is very important to remember though that one should not shoot straight up to these dosage levels. One should start at low dosages and monitor for detox reactions, which will be less if sodium bicarbonate and other substances are used in conjunction.

*For alcohol-sensitive people there is Nanocollidal iodine: <http://www.cedarbear.com/CBNLabsIodineProducts.html>. Recovered alcoholics are extremely sensitive with the tiniest amount of any alcohol a problem.*

Dr. Abrahams recommends taking 50 mg of Iodine/Iodide as Lugol's solution (8 drops) daily for 3 months as a loading dose. Lugol's solution is available online at varying concentrations. Then his recommendation is that dose should be gradually reduced to the 12.5 mg (2 drops) maintenance dosage under the supervision of a knowledgeable health care professional. Dr Abrahams feels that 14 to 15 mg. of iodine/iodide daily is the upper maximum of safety for long term use. This is close to Dr. James Howenstine's (another prominent iodine advocate) recommended dose of 12.5 mg daily.

In 1953 Dr. Orian Truss discovered the devastating effects of antibiotics in an Alabama (USA) hospital. During a hospital round Truss was intrigued by a gaunt, apparently elderly man who was obviously dying. However, he was only in his forties and in hospital for four months. No specialist had been able to make a diagnosis. Out of curiosity Truss asked the patient when he was last completely well. The man answered that he was well until six months before when he had cut his finger He had received antibiotics for this. Shortly afterwards he developed diarrhea and his health deteriorated. Truss had seen before how antibiotics cause diarrhea. It was

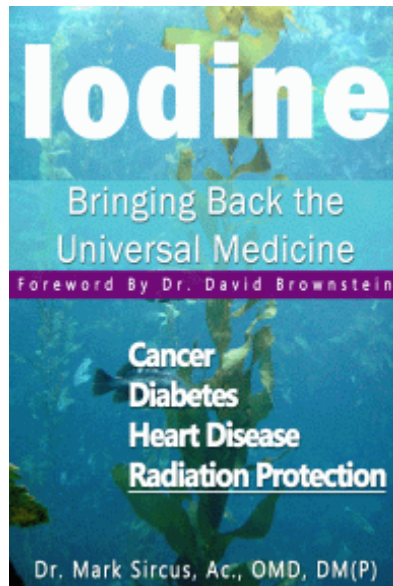
known that Candida was opportunistic and thrived in debilitated patients, but now Truss wondered if it might not be the other way round, that Candida actually caused the debilitated condition.

Truss had read that potassium iodide solution could be used to treat Candida infestation of the blood. So he put the patient on **six to eight drops of Lugol's solution four times a day** and soon the patient was again completely well. Soon afterwards he had a female patient with a stuffy nose, a throbbing headache, vaginitis and severe depression. To his amazement all her problems immediately cleared with Candida treatment.

When I was coming to closure on this chapter I happened to talk to Dr. Brownstein. We were in total agreement about dosages. Our consensus extended to the proposition that the sicker the patient the more iodine they would need with most average patients needing 25 to 50 mgs with 12 mg being a good maintenance dose though of course this varies with the quality of ones diet and with ones location. Living near the beach has its health advantages but in no case should one depend on iodized salt for their needs.

Dr. Brownstein said he was using 200 to 300 mg with his prostate and breast cancer patients with those who have metastases needing the highest dosages. He also uses both Lugol's and Nascent reserving the Nascent for his more sensitive patients. There are the tablet form of varying dosage, which are used by more than several of the iodine doctors I know.

*Iodine is needed in microgram amounts for the thyroid,mg amounts for breast and other tissues, and **can be used therapeutically in gram amounts.***<sup>[2]</sup>- Dr. David Miller



For more detailed information feel free to consult my book *Iodine E-Book* that's with a reasonable price, or for a more personal approach check my Consultations page.

## References

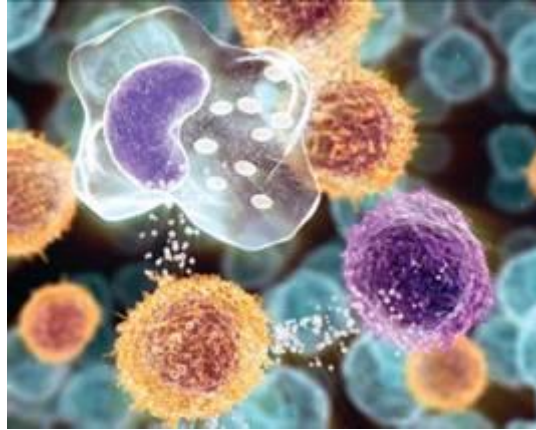
[1] <http://www.medscape.com/viewarticle/588739>

[2] Iodine

Metabolism; [http://iodine4health.com/overviews/clinicians/miller\\_clinician.htm](http://iodine4health.com/overviews/clinicians/miller_clinician.htm)

# 7 – Inflammation and Pain Management with Magnesium

*Posted by Dr Sircus on December 8, 2009*



*Inflammation plays a pivotal role in all stages of atherosclerosis, which is the progressive narrowing and hardening of the arteries over time.*

Inflammation is the activation of the immune system in response to infection, irritation, or injury. Characterized by an influx of white blood cells, redness, heat, swelling, pain, and dysfunction of the organs involved, inflammation has different names when it appears in different parts of the body. Most allergy and asthma sufferers are familiar with rhinitis (inflammation of the nose), sinusitis (inflammation of the sinuses), and asthma (inflammation of the airways), but inflammation is also behind arthritis (inflammation of the joints), dermatitis (inflammation of the skin), and so on.

*The inflammatory response can be acute or chronic. Acute inflammation typically lasts only a few days. This response usually promotes healing but, if uncontrolled, may become harmful.*

The primary objective of acute inflammation is to localize and eradicate the irritant and repair the surrounding tissue but this completely changes in chronic low-grade inflammatory states. Chronic low-grade inflammation is one of the characteristics of the metabolic syndrome and interferes with insulin physiology. Ignorance has prevailed over the interrelationship between muscular lipid accumulation, chronic inflammation and insulin



resistance because the central mediating factor is magnesium. **It is magnesium that modulates cellular events involved in inflammation.**

There are many factors that trigger inflammation. They are found in both our internal and external environments and include excessive levels of the hormone insulin (insulin resistance), emotional stress, environmental toxins (heavy metals), free-radical damage, viral, bacterial, fungal other pathogenic infections, obesity, overconsumption of hydrogenated oils, periodontal disease, radiation exposure, smoking, spirochetes such as the *Borrelia* that causes Lyme disease, and certain pharmacological drugs. Problems with insulin metabolism are a major contributor to cardiovascular disease. It results in the inability to properly store magnesium, causing blood vessels to constrict, elevated blood pressure, and coronary arterial spasm, all of which can result in a heart attack.

*Excess insulin causes retention of sodium, fluid retention, elevated blood pressure and congestive heart failure.*<sup>[1]</sup> - Dr. Ron Rosedale

**Inflammatory reactions in the body are a valuable predictor of impending heart attack.** Dr. Robert Genko, editor of the American Academy of Periodontal Journal, claims that persons with gingival disease (which is an inflammatory disorder) are 27 times more likely to suffer a heart attack than are persons with healthy gums. An American Heart Association paper disclosed that 85% of heart attack victims had gum disease compared to 29% of healthy similar patients.

*When magnesium levels fall researchers note a profound increase of inflammatory cytokines present, along with increased levels of histamine.*<sup>[2]</sup>

**Magnesium deficiency causes and underpins chronic inflammatory build ups.** This concept is intriguing because it suggests a fundamentally simpler way of warding off disease. Instead of different treatments for heart disease, Alzheimer's and colon cancer, we apply a single, inflammation-reducing remedy that would prevent or treat these and other deadly diseases. The key words here are 'prevent' or 'treat' but please notice the word is not cure. Though magnesium is a cure for many of our ailments full treatment protocols are recommended with magnesium chloride as the top protocol item. It is a protocol of basic items like magnesium, iodine, Alpha Lipoic Acid, sodium bicarbonate, sodium thiosulfate, whole food vitamin

C, natural vitamin D from the sun, spirulina and some other important items like purified water that will make a difference in a host of chronic diseases.

*Once we understand the critical importance of inflammation and glutathione depletion in brain diseases, we can take steps to prevent or even reverse the damage.- Dr. David Perlmutter*

Inflammation and systemic stress are central attributes of many pathological conditions. In magnesium we have found a potent medicinal that is effective across a wide range of pathologies. Pharmaceutical companies need look no further than the sea shore, which contains millions of tons of magnesium chloride the perfect anti-inflammatory agent.



*Is your heart on fire?<sup>[3]</sup>- New York Times*

It could very well be but we most likely will not know it until we suddenly have cardiac arrest. Researchers recognize **asilent kind of inflammation**. This type of internal inflammation has an insidious nature and is the culprit behind diabetes and heart disease. The chronic and continuous low-level stress that silent inflammation places on the body's defense systems often results in an immune-system breakdown. Magnesium deficiency is a parallel silent insult happening at the core of our physiology. **Magnesium deficiencies feed the fires of inflammation and pain.**

Epidemiologic studies have shown an inverse relationship between magnesium in the drinking water and cardiovascular mortality<sup>[4], [5]</sup>. This association between magnesium in drinking water and ischemic heart disease was reconfirmed in a major review of the literature done by

epidemiologists at Johns Hopkins University.<sup>[6]</sup> Since most heart disease is marked by various levels of inflammation these studies were all highlighting the hidden relationship between inflammation and magnesium deficiency.

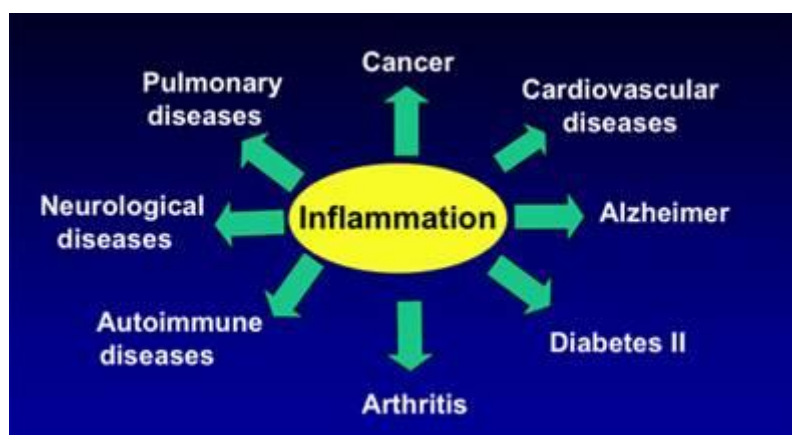
*Another reason that chronic inflammations can take us into the hell fires of pain is that magnesium gets depleted in conditions of inflammation.*

Beyond all the common symptoms of inflammation we find the body tissues themselves may lose their ability to recognize cells that are “self” from those that are not, and the body may mistakenly identify its own cells as foreign invaders. This internal programming error then continues to trigger and retrigger immune responses, **setting the stage for autoimmune diseases**, such as lupus, multiple sclerosis, and scleroderma. The result is cellular chaos, and what is even more disturbing is that this process may be happening year after year without our even being aware of it.

*This chronic inflammatory response breaks down healthy tissue in a misdirected attempt at repair and healing.*

Doctors who specialize in rheumatoid arthritis, multiple sclerosis, lupus and other autoimmune disorders are very familiar with what happens when the body goes to war with itself. These diseases demonstrate a direct inflammatory attack against healthy cells in such places as the joints, nerves and connective tissue.

*Magnesium is central to immunocompetence and plays a crucial role in natural and adaptive immunity.<sup>[7]</sup>*



*Alzheimer's patients who were already taking anti-inflammatory drugs for arthritis or heart disease tend to develop the disorder later than those who weren't.*

Atherosclerosis is caused by chronic inflammation, which often begins very early in life. The big dispute among experts is what causes the inflammation in the first place. One theory holds that bacteria and viruses may cause this inflammation but clearly we know that lead, mercury, monosodium glutamate (MSG) and fluoride and other toxic chemicals can also cause inflammatory reactions in blood vessels.

*Recent advances in the field of cardiovascular medicine have emphasized the involvement of inflammation in the formation of atherosclerotic plaque.*

This chapter represents basic research into the nature of inflammation. It looks beyond the pharmaceutical companies; beyond aspirin and other multipurpose experimental drugs that block inflammation, but not without collateral damages. Magnesium is at the heart of the inflammatory process, it is the prime first cause when it is not present in sufficient quantities. **Increases in extracellular magnesium concentration cause a decrease in the inflammatory response** while reduction in the extracellular magnesium results in inflammation. Inflammation causes endothelial dysfunction and activated endothelium facilitates adhesion and migration of cancer cells.<sup>[8]</sup>

*Chronically inflamed tissues continue to generate signals that attract leukocytes from the bloodstream. When leukocytes migrate from the bloodstream into the tissue they amplify the inflammatory response.*

**Magnesium literally puts the chill on inflammation.** Heart disease begins with inflammatory chemicals that rage like a fever through your blood vessels. Cool the heat by getting the recommended daily minimum of magnesium suggests Medical University of South Carolina researchers. They measured blood inflammation levels—using the C-reactive protein (CRP) test—in 3,800 men and women and found that those who got less than 50% of the RDA (310 to 420 mg) for magnesium were almost three times as likely to have dangerously high CRP levels as those who consumed enough. Being over age 40 and overweight and consuming less

than 50% of the RDA more than doubled the risk of blood vessel-damaging inflammation.<sup>[9]</sup>

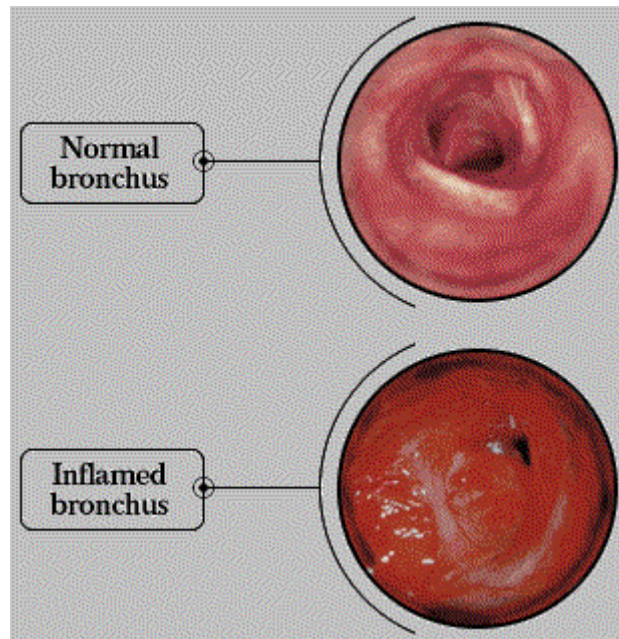
*Chronic inflammation destabilizes cholesterol deposits in the coronary arteries, leading to heart attacks and strokes.*

A study performed by the VA Administration, published in JADA, 1998 on 10,000 US veterans, showed that most coronary heart disease started as an endothelial infection and in most cases was caused by pathogens. **Recognizing the role of inflammation in arteriosclerosis represents a huge paradigm shift for cardiologists.** The American College of Cardiology, the American College of Physician's and the American Heart Association largely ignores the involvement of inflammation in heart attacks and strokes and certainly they ignore unresolved psycho-emotional trauma, as well as the toxic build up of mercury which can lead to massive heart failure and sudden death even in the healthiest athlete.

*Inflammation not only further damages the artery walls, leaving them stiffer and more prone to plaque buildup, but it also makes any plaque that's already there more fragile and more likely to burst.*

A 2006 issue of the Journal of the American College of Nutrition an article showing that as consumption of magnesium fell, the levels of C-reactive protein went up. C-reactive protein, or CRP, is produced in the liver and has emerged as a strong predictor of clinical events of cardiovascular diseases, such as heart attacks and stroke, even in cases where cholesterol levels may be normal. For this reason, CRP assays may become a routine part of blood tests for determining CVD risk. CRP levels in the blood are normally undetectable or very low; high levels are strongly associated with inflammation.

*Inflammation is the missing link to explain the role of magnesium in many pathological conditions.*



Persistent asthma is an inflammatory disease that requires regular anti-inflammatory therapy with magnesium chloride.

This new view of inflammation is changing the way some doctors' practice but most cardiologists are still not ready to recommend that the general population be screened for inflammation levels. Cardiologists don't know it but when in rare instances they test for serum magnesium levels they are not measuring anything but strictly controlled magnesium levels in the blood. There continues to be a blind spot the size of the Gulf of Mexico in cardiologists' perceptions. They just are not able to get to the bottom of the inflammation story – which is magnesium deficiency.

*Magnesium decreases swelling, and, "is effective in the treatment of inflammatory skin diseases."<sup>[10]</sup>*

Scientists at the Joslin Diabetes Center in Boston, have bred a strain of mice whose fat cells are supercharged inflammation factories. "We can reproduce the whole syndrome (diabetes) just by inciting inflammation," Dr. Steve Shoelson says. This suggests that a well-timed intervention in the inflammatory process might reverse some if not all the effects of diabetes. Some of the drugs that are already used to treat the disorder, like metformin, may work because they also dampen the inflammation response. In addition, preliminary research suggests that high CRP levels may indicate a greater risk of diabetes.

*Whatever makes us become less efficient at using insulin is going to aid in the development of diabetes. Treatments for diabetes work by replacing insulin, boosting its production or helping the body make more efficient use of the hormone.*

Modern medicine is just starting to admit that chronic inflammation is the main contributing factor to heart disease and it is just about to discover magnesium chloride as a supremely safe and effective anti inflammatory. Magnesium chloride safely reduces inflammation and systemic stress because magnesium deficiencies are in great part the cause of both conditions.

*People with magnesium deficiency can't properly metabolize important fatty acids such as EPA and DHA, which are vital to heart health.*

There are literally hundreds of physiological reasons to proclaim magnesium the ultimate heart medicine; its involvement in hundreds of enzyme reactions is just a start. Its use as an anti inflammatory makes magnesium absolutely indispensable to not only heart patients but also to diabetics, neurological and cancer patients as well. The treatment of chronic inflammation has been problematic for medical science because most of their treatments create more inflammation. Magnesium chloride does not do this.

*Virtually all the components of the Metabolic Syndrome of diabetes, high blood pressure, obesity and lipid disorders are associated with low magnesium.- Dr. Michael R. Eades*

Dr. Eades insists that the entire Metabolic Syndrome is nothing but a manifestation of a magnesium deficiency. He says, "Why are so many people deficient in magnesium? Because there are no single foods that contain huge amounts of magnesium, and because there is no single food containing large amounts, there is no magnesium lobby. Look at calcium. Thanks to the dairy industry, we are constantly told that we need to get enough calcium, and we're told right where we can get it. Milk and cheese. Same with vitamin C. The orange juice people never let us forget. Not so with magnesium, so no one really thinks of it. Another reason that many people are magnesium deficient is that they drink bottled water or softened water. In the old days everyone drank well water or water from streams,

both of which contain large amounts of magnesium. Magnesium is removed when water is softened and it isn't in large amounts in most of the bottled waters that are available."

*Inflammation contributes to the pro-atherogenic changes in lipoprotein metabolism, endothelial dysfunction, thrombosis, hypertension and explains the aggravating effect of magnesium deficiency on the development of metabolic syndrome.- Dr. Andrzej Mazura*

Dr. A. Mazur, et. al.<sup>[11]</sup> have shown in experimentally induced magnesium deficiency in rats that after only a few days a clinical inflammatory syndrome develops and is characterized by leukocyte (white blood cell) and macrophage activation, release of inflammatory cytokines and excessive production of free radicals. "Magnesium deficiency induces a systemic stress response by activation of neuro endocrinological pathways," writes Dr. Mazur. "**Magnesium deficiency contributes to an exaggerated response to immune stress and oxidative stress is the consequence of the inflammatory response,**" he continued.

Long-term air pollution exposure is associated with neuro-inflammation, an altered innate immune response, disruption of the blood-brain barrier, ultrafine particulate deposition, and accumulation of amyloid beta-42 and alpha-synuclein in children and young adults.<sup>[12]</sup>

*Magnesium-deficient rats develop a generalized inflammation.*<sup>[13]</sup>- Dr. Sophie Begona

It turns out that statins don't just lower cholesterol levels; they also **reduce inflammation**. The lipid hypothesis of heart disease is rapidly being supplanted by the inflammatory hypothesis. The researchers who have spent their careers doing cholesterol research are falling further and further into disfavor as most scientists are showing graphs demonstrating that elevated cholesterol in combination with an elevated C-reactive protein is a better gauge of heart disease risk. It seems that without the inflammation elevated cholesterol is not a threat after all.

Dr. Andrzej Mazura and team at Milan University confirmed that magnesium modulates cellular events involved in inflammation. Experimental magnesium deficiency in the rat induces, after only a few



days, a clinical inflammatory syndrome characterized by leukocyte and macrophage activation, release of inflammatory cytokines and acute phase proteins; and excessive production of free radicals. Increase in extracellular magnesium concentration, decreases inflammatory response while reduction in the extracellular magnesium results in cell activation.<sup>[14], [15]</sup> Today the most prescribed of all are drugs is used to lower “bad” LDL cholesterol. For those who are still interested in the cholesterol connection niacin (vitamin B-3) in high doses is as effective, much cheaper, and most importantly, far safer than any drug.<sup>[16]</sup> Niacin also dramatically lowers triglycerides. The New York Times said, “An effective HDL booster already exists. It is niacin, the ordinary B vitamin. Niacin can increase HDL as much as 35 percent when taken in high doses, usually about 2,000 milligrams per day . . . and it has been shown to reduce serum levels of artery-clogging triglycerides as much as 50 percent.”<sup>[17]</sup>

Inflammation is a response from your immune system in response to an irritant. For example, if you sprain your ankle, your immune system creates a protein called a Circulating Immune Complex (CIC for short). The CIC travels down to the injured ankle and causes pain and swelling. **The pain you feel is to inform you of the injury or damage.** And the swelling is protective as it prevents you from moving it and causing more irritation. This is also your body’s way of running to the problem with fresh blood, antibodies and vital cells in order to begin healing and repairing the damage.

Then what normally happens is our bodies produce proteolytic enzymes which counteract the inflammation, and things return to normal. That’s why a sprained ankle as a young child heals within a few weeks at most, but can take six weeks or more for an adult of say 45. The problem is, after around age 25, our production of these enzymes drops off almost completely so there is nothing to tell the body to stop the inflammation. These enzymes are also responsible for cleaning the blood, fighting off viral and bacterial infections and breaking down excess fibrin (scar tissue). Most if not all of these enzymes are mediated by magnesium meaning **as magnesium levels drop off so do the activities of these crucial biological magnesium sensitive enzymes.**

Enzymes break down scar tissue and fibrosis. Fibrosis is scar tissue that builds up in our bodies and over time creates some much restriction and strain on our organs that they can no longer function properly. Enzymes also clean the blood of excess fibrin that causes the blood to thicken, which sets us up for clots, which can cause heart attack or stroke. Enzymes also help take some of the strain off of the liver by keeping the blood clean and not allowing it to thicken beyond normal. Enzymes are very important in inflammation and enzymes bring us back to their fundamental supporter, which is magnesium.



When I received the following account from my research assistant Claudia French, who is an RN in an acute care psychiatric hospital, I realized that we should address the issue of magnesium, inflammation and pain more directly.

Yesterday I witnessed one of the most amazing benefits of transdermal magnesium I have seen. I work with another RN who is afflicted with arthritis, especially in her hands, and frequent muscle cramping/spasms in her legs. She has been using magnesium but became lax. Before leaving for work yesterday I received a phone call from her begging me to please bring with me some magnesium oil, as her hands were so cramped up and painful that she could barely stand to continue working.

When I got there, her hands and fingers were very contorted in spasm. Her fingers were curled up and stiff and her legs were cramping badly. She reported they had been this way all day, and the pain was driving her to tears. She immediately slathered the magnesium oil all over her hands. We were in report and she wanted it on her hands right away so the entire nursing staff watched and within 5 minutes you could visibly see her fingers extend back to normal and the finger movement return. We could

literally see the relaxation taking place. It was simply amazing. Within minutes her hands were completely relaxed and functional again and stayed that way the remainder of the evening. She also applied the magnesium to her legs and found relief.

About 30 minutes after applying the oil, she held up her hands for everyone to see, and showed us the arthritic nodules on some fingers. She described how painful these always are to touch. But she poked and prodded them telling us how there was no pain now. She was able to continue working and doing the extensive writing that is a large part of our work without any further discomfort.

Pain relief and muscle relaxation for people with arthritis and muscle cramping is an important and significant benefit of magnesium oil. The rapid relief, visible to us all was really amazing! The following day she reported that she'd gotten the first restful night of sleep in many days. The pain was not waking her up.



*What is essential to remember about treating pain with magnesium is that it treats both the symptom and the cause of pain. Meaning the cause of the pain can often be traced back to a magnesium deficiency.*

There are not too many medicinal substances or medicines that can make this claim. It should be noted that pain management with magnesium employs magnesium chloride applied transdermally to the skin.

Dr. Linda Rapson, who specializes in treating chronic pain, believes that about 70 per cent of her patients who complain of muscle pain, cramps and

fatigue are showing signs of magnesium deficiency. “Virtually all of them improve when I put them on magnesium,” says Rapson, who runs a busy Toronto pain clinic. “It may sound too good to be true, but it’s a fact.” She’s seen the mineral work in those with fibromyalgia, migraines and constipation. “The scientific community should take a good hard look at this.”<sup>[18]</sup>

Lynne Suo is one of Dr. Rapson’s patients. She had been using painkillers and steroids for years to try to ease the pain of her arthritis and fibromyalgia. Dr. Rapson started her on 675 units of magnesium a day. Within days, Suo called Dr. Rapson to report a surprising change. “I went from being in constant pain almost throughout the day and night to having moments of pain. And for me that was a huge improvement,” says Suo, a former college English teacher. She dismisses suggestions that the change is a placebo effect. “I was not one day without pain and now I don’t have to take heavy pain medication,” she reports.

The granddaddy of all anti-inflammatory drugs is aspirin, which can cause more serious problems than it often alleviates. Most pain and anti-inflammatory medications are not safe; even the over the counter pain medications hold unforeseen dangers. Despite more than a decade’s worth of research showing that taking too much acetaminophen can ruin the liver, the number of severe, unintentional poisonings from the drug is on the rise, a new study reports.<sup>[19]</sup> The drug, acetaminophen, is best known under the brand name Tylenol. Compounds containing Tylenol include Excedrin, Midol Teen Formula, Theraflu, Alka-Seltzer Plus Cold Medicine, and NyQuil Cold and **Flu**, as well as other over-the-counter drugs and many prescription narcotics, like Vicodin and Percocet.



People with poor quality sleep or sleep deprivation exhibit increased levels of interleukin-6 (IL6), the chemical that causes inflammation throughout the body. According to Dr. J. Durlach, the biological clock and magnesium status are linked, and a balanced magnesium status is important for the function of the mysterious pineal gland. Dr. Durlach sees the psycholeptic sedative effects of darkness amplified by magnesium. There probably is a strong relationship between melatonin and magnesium; certainly relative amounts of light and darkness affect the pineal gland and its production of melatonin. Magnesium provides a calming effect that allows for deeper relaxation and better sleep. Magnesium is considered the “antistress” mineral. It is a natural tranquilizer which functions to relax skeletal muscles as well as the smooth muscles of blood vessels and the gastrointestinal tract.

According to the National Sleep Foundation approximately 70 million people in the United States are affected with sleeping disorders. Approximately 12 million Americans have restless legs syndrome, a sleep and movement disorder characterized by unpleasant (tingling, crawling, creeping and/or pulling) feelings in the legs, which cause an urge to move in order to relieve the symptoms. Magnesium supplements may be helpful for relieving restless leg syndrome (RLS) and for treating insomnia.



Depression also is correlated with inflammation. A study conducted by researchers at the Emory University School of Medicine found that psychological stress leads to an excessive inflammatory response in people. Their findings published in the American Journal of Psychiatry showed that individuals who suffer from depression are more likely develop an inflammatory response due to the emotional disorder than people who are not depressed.<sup>[20]</sup> It should come as no surprise that magnesium supplementation has a great effect on depression.

In the final analysis there is no single medicine or nutritional agent that has the power to both treat and prevent chronic inflammatory conditions. Magnesium acts as a general cell tonic while it reduces inflammation and systemic stress. Equally it is important in overall energy (ATP) production, hormonal and enzyme production and function which all reflect powerfully on the process of inflammation.

## References

- [1] <http://www.diabeteshealth.com/read/2008/01/13/5617.html>
- [2] Am J Physiol. 1992;263:R734-7
- [3] <http://www.time.com/time/magazine/article/0,9171,993419-1,00.html>
- [4] Comstock G: Water hardness and cardiovascular diseases. Am J Epidemiol 1979; 110:375-400
- [5] Rubenowitz E, Axelsson G, Rylander R: Magnesium and calcium in drinking water and death from acute myocardial infarction in women. Epidemiology 1999; 10:31-36
- [6] Marx A, Neutra R: Magnesium in drinking water and ischemic heart disease. Epidemiol Rev 1997; 19:258-272
- [7] Mag Res. 1992;5:281-93
- [8] Magnesium and inflammation: lessons from animal models] Clin Calcium. 2005 Feb;15(2):245-8. Review. Japanese. PMID: 15692164 [PubMed – indexed for MEDLINE
- [9] [http://www.prevention.com/cda/article/magnesium-chills-inflammation/9c9150d1fa803110VgnVCM10000013281eac\\_\\_\\_\\_\\_/health/healthy.living.centers/heart.conditions](http://www.prevention.com/cda/article/magnesium-chills-inflammation/9c9150d1fa803110VgnVCM10000013281eac_____/health/healthy.living.centers/heart.conditions)
- [10] Hautarzt. 1990;41:602-5
- [11] Mazur A, Maier JA, Rock E, Gueux E, Nowacki W, Rayssiguier Y. Magnesium and the inflammatory response: Potential physiopathological implications. Arch Biochem Biophys. 2006 Apr 19; PMID: 16712775 Equipe Stress Metabolique et Micronutriments, Unite de Nutrition Humaine UMR 1019, Centre de Recherche en Nutrition Humaine d'Auvergne, INRA, Theix, St. Genes Champanelle, France. Arch Biochem

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=16712775&itool=iconabstr&query\\_hl=2&itool=pubmed\\_docsum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16712775&itool=iconabstr&query_hl=2&itool=pubmed_docsum)

[12] Calderón-Garcidueñas L et al. *Toxicol Pathol.* 2008;36(2):289-310. Epub 2008 Mar 18 Instituto Nacional de Pediatría, Mexico City, Mexico. Air pollution is a serious environmental problem. We investigated whether residency in cities with high air pollution is associated with neuroinflammation/neurodegeneration in healthy children and young adults who died suddenly. We measured mRNA cyclooxygenase-2, interleukin-1beta, and CD14 in target brain regions from low (n = 12) or highly exposed residents (n = 35) aged 25.1 +/- 1.5 years. Upregulation of cyclooxygenase-2, interleukin-1beta, and CD14 in olfactory bulb, frontal cortex, substantia nigrae and vagus nerves; disruption of the blood-brain barrier; endothelial activation, oxidative stress, and inflammatory cell trafficking were seen in highly exposed subjects. Amyloid beta42 (Abeta42) immunoreactivity was observed in 58.8% of apolipoprotein E (APOE) 3/3 < 25 y, and 100% of the APOE 4 subjects, whereas alpha-synuclein was seen in 23.5% of < 25 y subjects. Particulate material (PM) was seen in olfactory bulb neurons, and PM < 100 nm were observed in intraluminal erythrocytes from lung, frontal, and trigeminal ganglia capillaries. Exposure to air pollution causes neuroinflammation, an altered brain innate immune response, and accumulation of Abeta42 and alpha-synuclein starting in childhood. Exposure to air pollution should be considered a risk factor for Alzheimer's and Parkinson's diseases, and carriers of the APOE 4 allele could have a higher risk of developing Alzheimer's disease if they reside in a polluted environment.

PMID: 18349428

[13] Assessment of the relationship between hyperalgesia and peripheral inflammation in magnesium-deficient rats. Sophie Begona, Abdelkrim Allouia, Alain Eschaliera, André Mazurb, Yves Rayssiguierb and Claude Dubray, Pharmacologie Fondamentale et Clinique de la Douleur, Laboratoire de Pharmacologie Médicale, Faculté de Médecine, France

[14] Magnesium and the inflammatory response: Potential pathophysiological implications. Andrzej Mazura, Jeanette A.M. Maierb, Edmond Rocka, Elyett Gueuxa, Wojciech Nowackic and Yves Rayssiguiera. University of Milan, Department of Preclinical Sciences, Milan, Italy

[15] Magnesium and inflammation: lessons from animal models] Clin Calcium. 2005 Feb;15(2):245-8. Review. Japanese. PMID: 15692164 [PubMed – indexed for MEDLINE

[16] Alderman JD, Pasternak RC, Sacks FM, Smith HS, Monrad ES, Grossman W. Effect of a modified, well-tolerated niacin regimen on serum total cholesterol, high density lipoprotein cholesterol and the cholesterol to high density lipoprotein ratio. Am J Cardiol. 1989 Oct 1;64(12):725-9.

[17] Orthomolecular Medicine News Service, August 11, 2008 Way Too Many Prescriptions

[18][http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20020923/favaro\\_magnesium020923/CTVNewsAt11/story/](http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20020923/favaro_magnesium020923/CTVNewsAt11/story/)

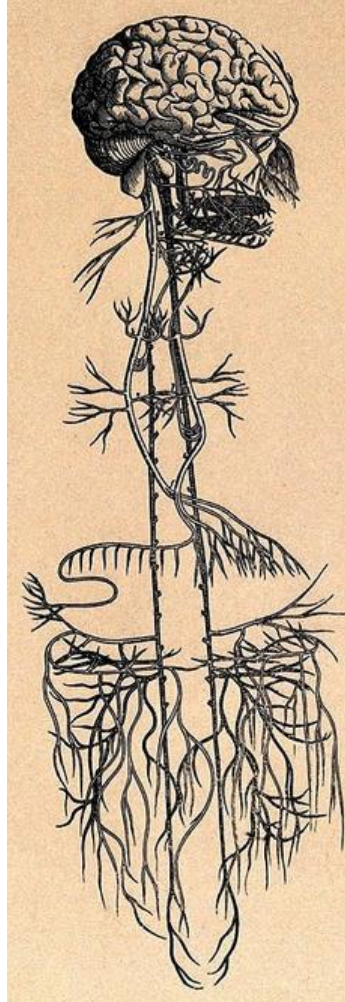
[19] <http://www.nytimes.com/2005/11/29/health/29cons.html?ei=5088&en=dcdd26e735aa717b&ex=1290920400&partner=rssnyt&emc=rss&pagewanted=print>

[20] <http://news.softpedia.com/news/Depression-Causes-Excessive-Body-Inflammation-34499.shtml>



# 8 – Function of the Vagus Nerve

*Posted by Dr Sircus on December 26, 2014*



Human Beings have an Autonomic Nervous System (ANS) that is actually comprised of three separate subsystems, the Parasympathetic Nervous System (PNS), the Sympathetic Nervous System (SNS) and the Enteric Nervous System (ENS). The enteric nervous system has been described as a "second brain," which communicates with the central nervous system (CNS) through the parasympathetic (e.g., via the vagus nerve) and sympathetic nervous systems. However, vertebrate studies show that when the vagus nerve is severed, the enteric nervous system continues to function.

We now know that the ENS is not just capable of autonomy but also influences the brain. In fact, about 90 per cent of the signals passing along

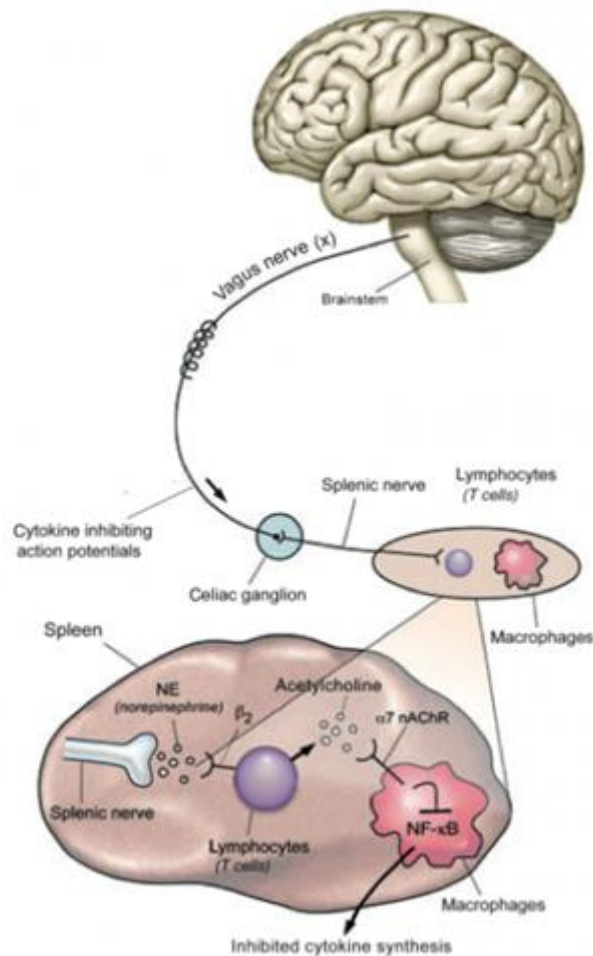
the vagus nerve come not from above, but from the ENS and that is why many consider it as abackup brain centered in our solar plexus. Our gut instincts are not fantasies but real nervous signals that guide much of our lives.

It is our vagus nerve that provides the gateway between the two parts of the autonomic systems. The vagus acts as a bio-informational data bus that routes impulses going in two directions. Since the vagus nerve acts as the central switchboard it should come as no surprise that impaired functioning of this one nerve can lead to so many different conditions and problems. Some neurological diseases actually come up from the gut spreading to the brain via the vagus nerve.

Christopher Bergland, writing for Psychology Today, said, “The vagus nerve is the commander-in-chief when it comes to having grace under pressure. The autonomic nervous system is comprised of two polar opposite systems that create a complementary tug-of-war, which allows your body to maintain homeostasis (inner-stability). The sympathetic nervous system is geared to rev you up like the gas pedal in an automobile – it thrives on adrenaline and cortisol and is part of the fight-or-flight response. The parasympathetic nervous system is the polar opposite. The vagus nerve is command central for the function of your parasympathetic nervous system. Unfortunately, the vagus nerve’s reflexive responses can backfire and turn it from comrade into saboteur.”

The vagus nerve is known as the "wandering nerve" because it has multiple branches that diverge from two thick stems rooted in the cerebellum and brainstem that wander to the lowest viscera of our abdomen touching our hearts and most major organs along the way. Vagus means "wandering" in Latin. It meanders all the way down, into the belly, spreading fibers to the tongue, pharynx, vocal chords, lungs, heart, stomach, intestines and glands that produce anti-stress enzymes and hormones (like Acetylcholine, Prolactin, Vasopressin, Oxytocin), influencing digestion, metabolism and the relaxation response.

Dr. Peter Levine talks about how the vagus reaches down to the genitals and about healing sexual stress and trauma through opening up the vagus.



The vagus nerve uses the neurotransmitter, acetylcholine. If our brain cannot communicate with our diaphragm via the release of acetylcholine from the vagus nerve then you will stop breathing. Botox is a toxic substance that has the power to damage the nervous system and shut down the vagus causing death.

It is interesting to note that the heavy metal mercury blocks the action of acetylcholine, the neurotransmitter that passes the nerve impulse from the vagus nerve to the heart muscle. Both acetylcholine and the nerve receptors in the heart muscle contain thiol (sulfur/hydrogen) proteins. When mercury attaches to the thiol protein in the heart muscle receptors and in the acetylcholine, the heart muscle cannot receive the vagus nerve electrical impulse for contraction. Mercury accumulates in the heart muscle and heart valves, causing damage by attaching to thiol (SH-) proteins. This damage is indicated by EKG and confirmed by histologic study.

*The frequently observed rocking and swinging behaviors in autistic individuals may reflect a naturally occurring bio-behavioral strategy*

*to stimulate and regulate a vagal system that is not efficiently functioning.*  
*Dr. Stephen Porges*

In this video, Dr. Stephen Porges talks about how vagus disturbances are found in Autistic children. Many practitioners have related the advent of autism to vaccines containing the highly toxic mercury containing substance called Thimerosal. In addition, the public have been highly contaminated with mercury used in dental amalgam, which dentists routinely place only inches from the brain. Moreover, more than 3,000 tons of mercury are put into the atmosphere each year contaminating the entire biosphere of our planet but the government nonsensically worries more about CO2 emissions from coal-fired smokestacks instead of the huge amount of neurotoxic mercury.

The vagus nerve is one of the largest nerve systems in the body. Only the spinal column is bigger. Sometimes this nerve is referred to as cranial nerve X, the 10th cranial nerve. The vagus is used to send a variety of signals throughout the body, but will also transfer signals back to the brain. The vagus nerve is constantly sending updated sensory information about the state of the body's organs "upstream" to your brain via afferent nerves. In fact, 80-90% of the nerve fibers in the vagus nerve are dedicated to communicating the state of your viscera up to your brain.



Vagus Nerve in Yellow

The vagus nerve helps manage the complex processes in your digestive tract, including signaling the muscles in your stomach to contract and push food into the small intestine. A damaged vagus nerve cannot send signals to

your stomach muscles. This may cause food to remain in your stomach longer, rather than move normally into your small intestine to be digested, which is part of the GERD complex.

Because the vagus nerve supplies motor parasympathetic fibers to every organ from the neck down to the second segment of the transverse colon (except the adrenal glands), its effect can be far reaching. Stress can raise the body's level of epinephrine and norepinephrine, which stimulates the sympathetic nervous system to over-ride the parasympathetic nervous system, of which the vagus nerve is the main component.

The vagus nerve is used to regulate the heartbeat and the muscle movement necessary to keep you breathing. This nerve also regulates the chemical levels in the digestive system so that the intestines can process food and keep track of what types of nutrients are being gained from the food that is taken in.

There are two main types of vagus nerve disorders. One is caused by an under-active or inactive vagus nerve, while the other is caused by a vagus nerve that overreacts to ordinary stimuli. Vagus nerve disorders that stem from an under-active vagus nerve often lead to a condition known as gastroparesis which is a frequent and severe complication of diabetes. Patients suffering from this disorder may experience pain in the stomach, nausea, heartburn, stomach spasms, and weight loss. Patients with under-active vagus nerves often experience severe gastrointestinal problems. Those with overactive vagus nerves may faint.

Testimony: I just recently developed my vagus nerve condition a few months ago even though I now believe it started over a year ago with IBS symptoms. This disorder is absolutely crazy with so many symptoms that do not show up in testing by physicians except when certain symptoms get really bad that it's hard to get the diagnosis.

My journey with vagus nerve disorder started one night when I was at my computer and bent over to move a shoe out of the middle of the floor. I passed out and woke up in a sweat thinking I was having a heart attack. I woke up in kind of a dream state wondering why I was laying down on the ground.

As the weeks passed, more symptoms started to appear. Weird sensations in certain parts of my body, more passing out episodes, shortness of breath and fast heart rates. I went to the doctor and he said all my vitals and internal numbers were healthy but I felt like my body was not working right. I took some nerve calming drugs and that helped for a couple of weeks then they did not work and arrhythmia bouts set in. I would get arrhythmia for 8 to 12 hours and was up all night wondering why my heart was kicking my behind like this when it was running smoothly several weeks ago.

Acupuncturist Jill Blakeway asks, “So how does the vagus nerve get irritated in the first place? Any kind of GI distress can put pressure on the nerve and irritate it, with a hiatal hernia being a frequent culprit. Poor posture along with muscular imbalances can also cause the vagus nerve to misfire, as can excess alcohol or spicy foods. Stress can inflame the nerve, along with fatigue and anxiety.”

Blakeway recommends:

Many of the patients who present with symptoms of an irritated vagus nerve have what could be described as a Gall Bladder and Heart Complex in Chinese medicine. This traditionally has been a diagnosis used to describe a collection of symptoms such as esophagitis, hiatal hernia, gastritis, insomnia, palpitations, fearfulness, being easily startled, chest fullness, and a bitter taste in the mouth. In these patients, I have found that accessing the Gall Bladder Divergent Channel can bring almost immediate relief. I usually use the separating and convergent points of the channel GB 30 and GB 1, along with GB 34, LIV 3, PC6, SP 4, LIV 14, and UB 19.

How can patients suffering from an irritated vagus nerve help themselves? Here is the advice I give my patients, with one caveat: Because these symptoms can be caused by so many disorders, I always refer my patients to their MD to rule out more serious pathologies before giving self-help suggestions.

- Regular acupuncture reduces the inflammation that is often at the root of this disorder and calms the irritated nerve.
- During an attack, patients often find that moving, stretching and/or burping can relieve the pressure and calm the heart.

- During an episode of tachycardia, vagal maneuvers can be used to slow the heart rate. These simple maneuvers stimulate the vagus nerve to slow down the electrical impulses through the atrioventricular (AV) node of the heart. Vagal maneuvers that you can try to slow a speedy heart rate include: Herbal formulas that support digestion (and calm the heart) along with probiotics and digestive enzymes can really help remove the GI inflammation that is part of this syndrome.
  - Gagging
  - Holding your breath and bearing down (Valsalva maneuver)
  - Immersing your face in ice-cold water (diving reflex)
  - Coughing
- Likewise, diaphragmatic breathing, yoga, and meditation help the parasympathetic nervous system over-ride the sympathetic nervous system and calm the vagus nerve.

Researchers confirm that daily habits of mindset and behavior along with conscious breathing and yoga can create a positive snowball effect through a feedback loop linked to stimulating your vagus nerve. In order to maintain homeostasis, the central nervous system responds constantly, via neural feedback, to environmental cues. Stressful events disrupt the rhythmic structure of autonomic states, and subsequently, behaviors. Since the vagus plays such an integral role in the regulation of heart rate and heart rate variability it follows that how we breathe when under stress makes all the difference in the world.

Dr. Stephen Porges, gives us a great clue to the connection between the sensory nervous system and the very center of our emotional makeup. Darwin (1872) noted in *The Expression of Emotions in Man and Animals* the importance of the bi-directional neural communication between the heart and the brain via the "pneumogastric" nerve, now known as the vagus nerve. According to Dr. Porges, "Darwin's statement is important, because it emphasized two points: 1) afferent feedback from the heart to the brain through the vagus was independent of the spinal cord and the sympathetic nervous system, and 2) the vagus played a regulatory role in the expression of emotions. The Darwinian description of the vagus,

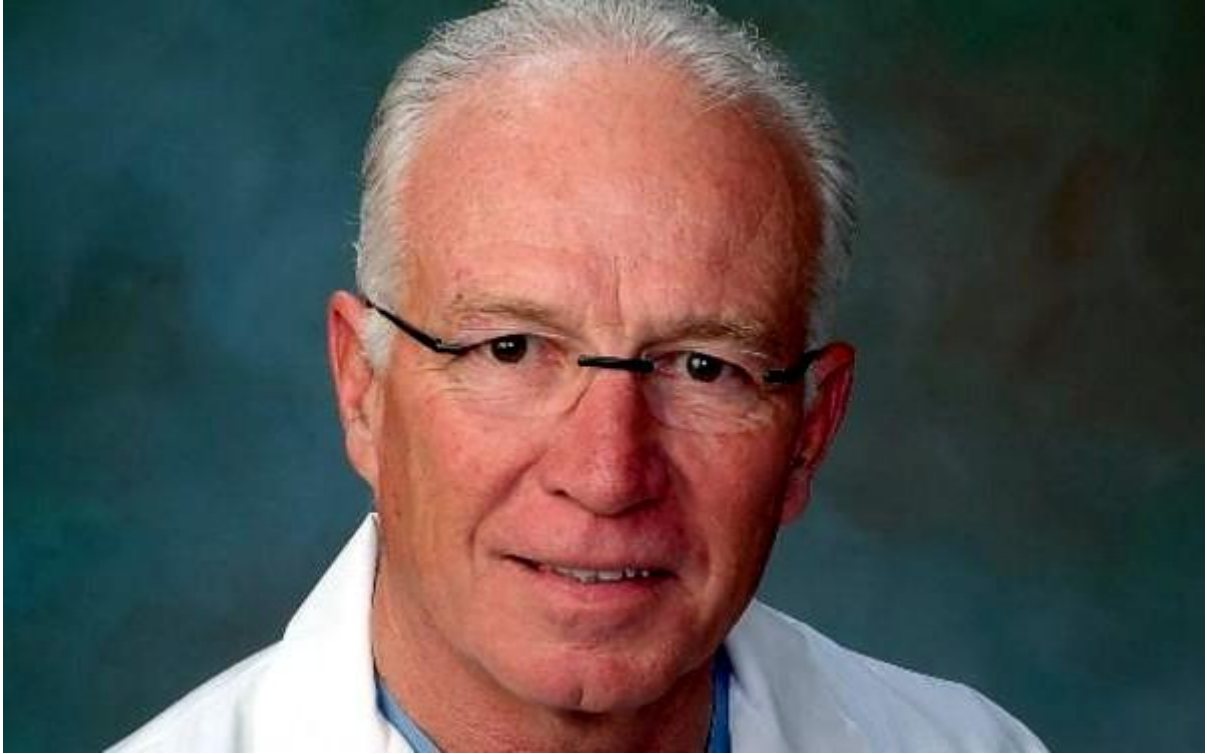
emphasizing the bi-directional communication between the periphery and central nervous system, assumes that the vagus is part of a feedback system. Implicit in this “vagal system” are motor pathways to change visceral state, sensory pathways to monitor visceral state, and brain structures involved in the evaluation of the input and the regulation of the output.”

We all have an internal assessment mechanism thought to be housed in the amygdala, the hypothalamus or mid-brain which acts as a central intelligence agency challenging every situation, scanning every perception; reacting instantly to the one key question, will it hurt “me.” Will it make “me” feel more or less secure? Will it fulfill or deny me my basic needs? Will it enrich my life or lead to separation and life alienating feelings? The heart is the center that houses our sense of self, the “me” or the ultimate “I.”



## 9 – Treat the Inflammation not the Cholesterol

*Posted by Dr Sircus on July 17, 2015*



Dr. Dwight Lundell, former Chief of Staff and Chief of Surgery at Banner Heart Hospital in Arizona told the world not to take statin drugs. “We physicians with all our training, knowledge and authority often acquire a rather large ego that tends to make it difficult to admit we are wrong. So, here it is. I freely admit to being wrong. As a heart surgeon with 25 years experience, having performed over 5,000 open-heart surgeries, today is my day to right the wrong with medical and scientific fact.

His frontal attack on the field of cardiology tears apart the practice of prescribing medications to lower cholesterol and a diet that severely restricted fat intake. Doctors in this field have been continually bombarded with scientific literature, continually attending education seminars, all of which insisted heart disease resulted from the simple fact of elevated blood cholesterol. They were wrong. Unfortunately for too many people—dead wrong.

Dr. David Brownstein has debated publically about this issue and many people do recognize how off base the world of cardiology actually is. I

have gone as far as writing an essay telling people to run from their statin prescribing cardiologist. And I have written an essay about The Statin Disaster and the recent increasing recommendation and prescription of this quite useless drug.

We know that inflammation in the artery wall is the real cause of heart disease. Simply stated, without inflammation being present in the body, there is no way that cholesterol can accumulate in the wall of the blood vessel and cause heart disease and strokes. Without sufficient magnesium in the body inflammation results and it is the inflammation that causes cholesterol to become trapped.

Magnesium, not statin drugs should be the foundation drug of for the prevention and treatment of heart disease, diabetes, and arteriosclerosis; it serves as a natural calcium antagonist, normalizes blood pressure and irregular heartbeat. Magnesium is The Ultimate Heart Medicine!

What are the biggest culprits of chronic inflammation? Quite simply, they are the overload of simple, highly processed carbohydrates (sugar, flour and all the products made from them) and the excess consumption of omega-6 vegetable oils like soybean, corn and sunflower that are found in many processed foods. Low magnesium though is the most basic culprit as is excessive irregular breathing, which reduces both CO<sub>2</sub> and O<sub>2</sub> levels in the body, both of which cause systemic inflammation.

Magnesium is the perfect medicine for cardiologists. It is the nutritional medicinal with pharmaceutical properties that no allopathic drug can hope to equal, yet doctors routinely ignore it. Worse, they use calcium channel blockers, statin drugs and other questionable substances with nightmarish side effects, which include suppressing already low magnesium levels.

Though magnesium is safe and easy to use and is available for immediate use in emergency departments, rarely is its full potential appreciated or harnessed.[1] The two forms of magnesium I recommend are magnesium chloride and magnesium bicarbonate. The magnesium bicarbonate is for oral use with all of one's water, and the magnesium chloride (oil) can be used both orally and topically.

## **Low Magnesium Hardens Arteries**

Dr. Russell Blaylock says, “There is evidence that magnesium deficiency may play a role in atherosclerosis, also called hardening of the arteries. In one study that used experimental animals, magnesium supplementation inhibited the deposit of lipids in the walls of the aorta that is, it inhibited plaque formation, a major factor in atherosclerosis.

“To see if there was a relation between ionized magnesium and blood lipids (such as cholesterol), researchers examined 29 men with an average age of 72.5 years, who had impaired insulin sensitivity, a common condition in the elderly. They found that the level of blood-ionized magnesium but not total blood magnesium correlated closely with levels of LDL (potentially harmful) cholesterol and total cholesterol. Because magnesium is a powerful anti-inflammatory element, it would be expected to help prevent cholesterol from oxidizing; this may explain why it reduces atherosclerotic plaque in experimental animals.”

Dr. Blaylock continues saying, “In my research, I came across a study from 1959 that demonstrated some remarkable findings concerning the interrelationship between calcium and magnesium and atherosclerosis. Researchers knew from previous studies that feeding animals large doses of magnesium markedly reduced the amounts of lipids deposited in the heart valves of the left side of the heart and in the aorta. This study looked not only at lipid deposits in the wall and valves of the heart, but also calcium deposits in the kidneys, which are common in people with kidney disease associated with atherosclerosis.”

## **More on Nutrition**

Dr. Lundell also points out that by consuming excessive omega-6, the cell membrane produces chemicals called cytokines that directly cause inflammation. Today’s mainstream American diet has produced an extreme imbalance of omega-6 vs. omega-3s. The ratio of imbalance ranges from 15:1 to as high as 30:1 in favor of omega-6. That’s a tremendous amount of cytokines causing inflammation. In today’s food environment, a 3:1 ratio would be optimal and healthy.

There is no escaping the fact that the more we consume prepared and processed foods, the more we cause inflammation in the body. The human body cannot process, nor was it designed to consume, foods packed with sugars and soaked in omega-6 oils. One tablespoon of corn oil contains 7,280 mg of omega-6; soybean contains 6,940 mg. Instead, use olive oil or butter from grass-fed beef.

## **References**

[1] P Kaye and I O'Sullivan. The role of magnesium in the emergency department Emergency Department, Bristol Royal Infirmary, Bristol, UK.

# 10 – Sodium Bicarbonate Cancer Treatment

## Overview

*Posted by Dr Sircus on April 25, 2010*

### Sodium Bicarbonate (Baking Soda): Every Cancer Patients Best Friend



Cancer cells have a lower pH than surrounding tissue, sodium bicarbonate cancer treatments work by increasing pH.

As if it were not humiliating enough for orthodox oncologists to learn that the lowly chemical sodium bicarbonate (baking soda) is important in the treatment of cancer now they have to swallow the research pointing to the fact that bicarbonate can also be used to diagnose cancer in its earliest stages. Oncologists do understand and know that bicarbonate is necessary to protect their patients from the toxicity and harm done by highly toxic chemicals used in chemotherapy. They also know it is of extraordinary help to patients receiving radiation treatments protecting as it does the kidneys and other tissues of the body from radioactive damages.

Oncologists should also know that bicarbonate-induced extracellular alkalization leads to significant improvements in the therapeutic effectiveness of certain chemo agents. A number of studies have shown that the extracellular pH in cancers is typically lower than that in normal tissue and that an **acidic pH promotes invasive tumor growth in primary and metastatic cancers**. The external pH of solid tumors is acidic as a consequence of increased metabolism of glucose and poor perfusion. Acid pH has been shown to stimulate tumor cell invasion and metastasis *in vitro* and in cells before tail vein injection *in vivo*.

Researchers have investigated the very reasonable assumption that increased systemic concentrations of pH buffers would lead to reduced intratumoral and peritumoral acidosis and, as a result, **inhibit malignant growth**. It has been shown that increased serum concentrations of the sodium bicarbonate (NaHCO<sub>3</sub>) can be achieved via oral intake. These researchers found that consequent reduction of tumor acid concentrations significantly reduces tumor growth and invasion without altering the pH of blood or normal tissues.<sup>[1]</sup>

Oral NaHCO<sub>3</sub> selectively increased the pH of tumors and reduced the formation of spontaneous metastases in mouse models of metastatic breast cancer. NaHCO<sub>3</sub> therapy also reduced the rate of lymph node involvement and significantly reduced the formation of hepatic metastases. Acid pH was shown to increase the release of active cathepsin B, an important matrix remodeling protease.<sup>[2]</sup>

We know that bicarbonate turns to CO<sub>2</sub> easily when dissolved in water as it enters the stomach but few know that **cancerous tissue turns bicarbonate into carbon dioxide**. A few years ago a United Kingdom Cancer Research team found MRI scans were able to track changes in bicarbonate and therefore identify cancers even in the very early stages.

### **Sodium Bicarbonate and Cancer Research**

All cancer has a lower pH, meaning it is more acidic than surrounding tissue. Working with mice, the researchers boosted the MRI sensitivity more than 20,000 times. **Using MRI, they looked to see how much of the tagged bicarbonate was converted into carbon dioxide within the tumor. In more acidic tumors, more bicarbonate is converted into carbon dioxide.**

Lead researcher Professor Kevin Brindle, from Cancer Research UK's Cambridge Research Institute at the University of Cambridge, said: "This technique could be used as a highly-sensitive early warning system for the signs of cancer. By exploiting the body's natural pH balancing system, we have found a potentially safe way of measuring pH to see what's going on inside patients. MRI can pick up on the abnormal pH levels found in cancer

and it is possible that this could be used to pinpoint where the disease is present and when it is responding to treatment.”

**Special Note:** In Sodium Bicarbonate – Rich Man’s Poor Man’s Cancer Treatment it is stressed that sodium bicarbonate cancer treatment is not a standalone single shot treatment. It should always be used in conjunction with a full protocol that includes most importantly magnesium chloride, iodine and selenium plus a naturopathic approach to diet, intestinal cleaning, sun exposure and many other helpful things.

## References

[1] *Cancer Research* 69, 2677, March 15, 2009. Published Online First March 10, 2009; doi: 10.1158/0008-5472.CAN-08-2394

[2] *Cancer Res* 2009;69(6):2260–8

# 11 – Weight Loss Via Baking Soda and Reduced Breathing

*Posted by Dr Sircus on March 4, 2013*



Ever wonder why it is so difficult if not impossible to lose weight when you are eating practically nothing? Many people go on intensive diets and do lose weight only to see the pounds come back the moment they end their diet. This is more than frustrating! Everyone comes out with a different diet with fantastic promises but there is something that is not being addressed that is important to everyone—not just too overweight people.

Our weight depends on a variety of physical and psychological factors, from our heredity, to how we feel about ourselves, to what we eat, to our insulin sensitivity, to the amount of exercise we get, and so on. It also depends on our breathing, on how we actually breathe throughout the day. Those of us who are overweight often have a breathing problem. What most of us don't see is that as we become more acid and overweight our breathing becomes more rapid.

A report published in September 2009 in Medical Hypothesis Journal by science expert Shoma Berkemeyer addresses the issue of blood pH as it relates to weight gain. Berkemeyer acknowledges a relationship between



blood pH and weight and suggests that it might be less important to eat less of some foods, such as protein, and more important to eat more of other foods, such as fruits and vegetables.[1]

In a 2009 review Dr. Richard Brown and Dr. Patricia Gerbarg reported that yogic deep-breathing techniques were extremely effective in handling depression, anxiety, and stress-related disorders.. Emotionally calming breathing can easily become a dieter's best friend.

Naturopath Marcelle Pick says, “Can you guess the health habit my patients find the hardest to follow? It's regular exercise. Despite their best intentions, most of my patients allow exercise to fall by the wayside when life gets busy or stressful — which is all the time, right? But there is a way to begin or renew your commitment to physical fitness, something that should come easily to every woman because you have to do it anyway. The secret is simply to breathe...deeply and often.”

### **Breathing Slowly**

“Deep breathing is just another way of saying belly breathing as opposed to shallow, superficial chest breathing.[2] Deep breathing should be very slow so that one accumulates more CO<sub>2</sub> in the blood. Deep breathing means breathing less air not more. Some people actually think it is wrong to call therapeutic breathing "deep breathing". “If you breathe less and accumulate CO<sub>2</sub>, the correct name is "reduced breathing," writes Dr. Artour Rakhimov PhD.

“Deep breathing delivers many of the benefits of exercise, including facilitating weight loss. Though not a substitute for exercise, it's a great first step for women just beginning an exercise plan, and deep breathing enhances the benefits of any form of exercise,” reports Marcelle Pick.

While under treatment with a breathing device for heart disease and asthma many people not only improved their cardiac and respiratory function, but they lost weight as well. The theory behind the effectiveness of the Frolov device from Russia that became the Breathslim device in the United States, is that by using it you provide increased oxygen-rich air to your bloodstream. This oxygen in turn is utilized in metabolic processes, making

those processes more efficient. This more efficient metabolism thereby causes the "burning" of fat in the tissue.



A more alkaline environment is rich in life giving oxygen. When the pH balance of the human body approaches the 7.0 alkaline/acid balance health is improved. The slightly alkaline environment is an oxygenated environment. This is not to say that one can simply raise their pH and the weight falls off. No one is going to go sit in a room, breathe deeply and come out five pounds lighter. You can, however, use deep breathing as one part of a comprehensive life change to encourage weight loss. Breathing with the aid of this simple breathing device will make the entire process of weight loss easier.

“The reason I lost weight, fat and inches was simply because I raised my body’s pH level. I’ve had people ask me how I went about losing the 20 pounds I’ve lost. So I’ve decided to put together this little sheet of the steps I took to raise my pH and lose 20 pounds.” states a writer on a [health care website](#).

Within a few breaths on the Breathslim a person learns to breathe more deeply and more slowly, assisted by the device. And when you breathe with the device it is a very noticeable and remarkable difference from normal, unassisted breathing. Deep breathing is something that most of us should do but fail to do because we haven’t learned how. It seems trivial to think that we’d have to learn to breathe correctly, since it’s such a natural part of life. Most of us breathe without thinking about it but our breathing is often shallow and rapid leading to loss of CO<sub>2</sub>, bicarbonates and oxygen delivery to the cells.

People who need to lose weight don’t take in enough oxygen. If you eat devitalized, cooked, excessively fatty foods and have inadequate breathing

you are not ridding yourself of toxins properly, nor can you burn the fuel you consume, regardless of its possible low fat content. The lack of adequate oxygen and low metabolism will add pounds no matter what or how little you eat.

The Breathslim device provides a definite, positive effect that can be noticed quite quickly and when used in conjunction with sodium bicarbonate and other helpful medicinals like magnesium chloride, vitamin C and iodine can help bring the overweight person back into a healthier and slimmer profile. Deep breathing changes the way that oxygen is delivered throughout the body. This creates a change in the way that the body works and will result in improved fat burning.

It isn't possible to state whether any individual will lose extra weight by training with the Breathslim alone. There are too many factors with weight loss and those mechanisms that lead to weight loss are too easily overcome by the individual. Thus a full protocol approach is always preferable but that said we have to look at the fact that breathing is fundamental to health and healthy changes that will occur with proper breathing and will affect our entire metabolism and general feeling about being alive.

“There is no method — whether diet or exercise or medication or surgery — that cannot easily be overwhelmed by the actions of the individual,” says Dr. Dan Curtis. This does not change the fact that all those things that lead to a higher metabolism all contribute to weight loss.

### **Losing Weight is Hard to Do**

Overweight teens actually eat fewer calories daily on average than their trimmer counterparts, a new study finds.<sup>[3]</sup> Among 12- to 14-year-old girls in the study, girls who were very obese ate about 300 fewer calories on average daily than obese girls, and obese girls consumed 110 fewer calories daily than healthy-weight girls.

When the researchers looked at calories consumed by 15- to 17-year old boys, they found that obese boys ate about 220 fewer calories a day than boys who were overweight (but not obese). And overweight boys consumed about 375 fewer calories than healthy-weight boys, the study showed. The findings illustrate the difficulty of losing weight by cutting

calories alone, especially when the weight is gained early in life but the researchers did not suggest why this was.

"For older children and teenagers, increasing involvement in physical activity may be more important to weight and health than is their child's diet," said study researcher Dr. Asheley Cockrell Skinner, an assistant professor of health policy and pediatrics at the University of North Carolina at Chapel Hill. "Parents of all children should aim for a healthy diet, but don't assume that overweight children are eating any worse than their peers," she said.

More than a third of children and adolescents are overweight or obese, according to the Centers for Disease Control and Prevention (CDC). The researchers concluded that weight-loss efforts for overweight and obese teens should focus on increasing physical activity. What happens that is so magical about exercise? It raises both CO<sub>2</sub> and thus oxygen levels which increases fat burn and cell voltage. Why do overweight people still have trouble losing weight?



Breathslim

Benefits to user:

- Boosts metabolism and dramatically lowers appetite
- Decreases sleeping problems such as insomnia and snoring
- As a result of fat burning, energy levels are increased
- No harmful or negative side effects
- Lifestyle changing device and method

- Extremely convenient-breathing exercises can be performed at the comfort of user's home
- One time purchase-not an endless buying cycle such as pills, meal plans, gym memberships

The entire metabolic process depends on a balanced pH.

The most successful weight-loss plan incorporates commitment, healthy eating habits and exercise. It can be helpful in achieving your goals to understand how factors such as blood pH affect the weight-loss equation. Because blood alkalinity has the potential to affect weight loss, it is important to understand the nature of blood pH, as well as its potential in the weight loss process.

Taking sodium bicarbonate will help get things started because slowing your breathing and taking baking soda arrives one at the same place—with increased Co<sub>2</sub> and O<sub>2</sub> levels. Drinking salt water during the morning alternating with sweet water would add to this dieting approach as would much of the rest of the *Natural Allopathic Medicine* protocol.

## Conclusion

Learning how to breathe more naturally and efficiently, the way our bodies were designed to breathe, can have a powerful influence on our metabolism and overall sense of well-being. Healthy, natural breathing makes us feel better physically, emotionally, and mentally. Our breath is an incredible gift, a fundamental force that has subtle interrelationships with all the different sides of us. Learning how to breathe correctly will help every overweight person regain their balance in life in terms of health and this can only have a lasting effect on the battle to lose and maintain weight.

Deep, active breathing can increase your oxygen intake even when done for just 1 to 2 minutes at a time. The Breathslim device makes those minutes count greatly amplifying the energy and time we put into breathing retraining. Improving your breathing will improve metabolism to burn off fat and soften emotional issues that lead to food cravings and unnecessary consumption. There is nothing like the Breathslim to calm oneself down and every dieter knows this will be more than helpful.

I included this short video of Dr. Sergey Zinatulin, who has been working with different breathing techniques including the Frolov and Breathslim devices for more than 15 years. He shows quite convincingly of the physical strength that comes to people who consciously breathe.

I myself lost a lot of weight four months ago when I used the Breathslim when I was in uncontrollable pain from a strong bout with GERD. The pounds came off but stopped coming off when I stopped using the device. Of course I am eating more now but eating less than I have ever eaten in my life!

## References

[1] Acid-base balance and weight gain: are there crucial links via protein and organic acids in understanding obesity?; Berkemeyer S.; Med Hypotheses. 2009 Sep;73(3):347-56;  
<http://www.ncbi.nlm.nih.gov/pubmed/19410381>

[2] Shallow breathing , thoracic breathing, or chest breathing is the drawing of minimal breath into the lungs, usually by drawing air into the chest area using the intercostal muscles rather than throughout the lungs via the diaphragm . Shallow breathing can result in or be symptomatic of rapid breathing and hyperventilation . Most people who breathe shallowly do it throughout the day and are almost always unaware of the condition. In upper lobar breathing, clavicular breathing, or clavicle breathing air is drawn predominantly into the chest by the raising of the shoulders and collarbone (clavicles), and simultaneous contracting of the abdomen during inhalation. Maximum amount of air can be drawn this way only for short periods of time, since it requires a lot of effort. When used for prolonged time, this is the most superficial mode of shallow breathing. Definition by Wikipedia.

[3] "Self-Reported Energy Intake by Age in Overweight and Healthy-Weight Children in NHANES, 2001-2008"; Asheley Cockrell Skinner, PhD,*et al*; *Pediatrics* 10th September, 2012. doi: 10.1542/peds.2012-0605;  
<http://pediatrics.aappublications.org/content/early/2012/09/04/peds.2012-0605.abstract>

# What is Natural Allopathic Protocol

## Useful For?



The answer to that question is just about everything! Composed of innovative and sophisticated therapies, each component is evidence-based integrative medicine, sourced from some of the finest physicians from around the world. What is so different about Natural Allopathic Medicine? It pays special attention to treating the underlying causes of sickness where mainstream medicine does not. Its approach is through fulfillment of nutritional laws via the use of concentrated nutrition. We concentrate oxygen and we concentrate medical marijuana as well as the rest of the protocol.

I have heard countless people say that magnesium, which is the first and most important medicinal in my protocol, seems like a “cure-all.” It really is not but when supported by the Natural Allopathic protocol it becomes true. Most regular doctors just do not get the truth about magnesium, health or medicine. Magnesium is a basic (foundational) building block meaning magnesium deficient affects every single physiological process so

if you do not include it in the treatment of disease one is not treating disease at all.

Below are 101 uses for magnesium. We can use this list for the protocol knowing that when we add oxygen, iodine, bicarbonate, selenium, sulfur, vitamin C, sun exposure, medical marijuana, good water, a probiotic, superfoods, breathing retraining, infrared radiation and other good and essential ingredients to good health, we get even better results for cancer and most of the major diseases that are plaguing humanity.

2nd- & 3rd-Degree Burns	Insulin	Parkinson's
ADD & ADHD	Drug Addiction (Withdrawal)	Periodic Limb Movement During Sleep (PLMS)
Alcoholism (& Alcohol Withdrawal)	Energy Levels (Low Energy)	Premenstrual Syndrome (PMS)
Allergies	Epilepsy	Postoperative Pain Management
Alzheimer's	Exercise Endurance	Pregnancy
Amyotrophic Lateral Sclerosis (ALS/ Lou Gehrig's Disease)	Fatigue	Fetal Circulation
	Fibromyalgia	Fetal Pulmonary
Arrhythmia	Floaters	Gestational Diabetes
Arthritis	Gitelman's Syndrome	Gestational Hypertension
Asthma	Head Injury	Preeclampsia & Eclampsia
Athletes Foot	Hearing Damage & Hearing Loss	Fetal Distress
Autism Spectrum Disorder	Heart Attack (Acute Myocardial Infarction)	Low Birth Weight



Back Pain (Lower Back Pain)	Heart Disease	Preterm Labor
Bartter's Syndrome	Heavy Metal Detoxification	Repetitive Stress Injury
Bed Wetting (Nocturnal)	High Blood Pressure	Restless Leg Syndrome
Blood Circulation	Hormone Imbalance	Seizure
Brain Edema	Hypertension	Sepsis
Bruxism (Teeth Grinding)	Idiopathic Infertility	Shock
Burning Mouth Syndrome	Inflammation & Swelling	Sudden Infant Death Syndrome (SIDS)
Calcification of Soft Tissues	Insomnia & Sleeplessness	Skin Dermatitis
Calcium Retention	Intelligence	Eczema
Cancer	Intractable Erythromelalgia	Psoriasis
Cavities	Kidney Stones (Calcium Oxalate)	Skin Barrier Function
Celiac Disease	Leg Cramps	Skin Tags
Cellular Detoxification	Liver Cirrhosis	Strength Training
Cerebral Palsy	Lyme Disease	Stress Management
Chemotherapy-Induced Nutrient Deficiency	Magnesium Deficiency	Stress Ulcers
Cholesterol	Menopause	Stroke (Cerebrovascular Accident/ CVA)
Chronic Fatigue	Metabolic Syndrome	Tendonitis
		Tetanus

Syndrome		Migraine Headaches	Thyroid Dysfunction
Colon Cancer		Mitral Valve Prolapse	Tics (Facial Tics/ Eye Tics)
Conjunctivitis		Mood Disorders	Tinnitus
Constipation		Multiple Sclerosis	TMJ (TemporoMandibular Joint)
Coronary Disease	Artery	Muscle Cramps (Muscle Spasms)	Tourette's Syndrome
Crohn's Inflammatory Disease (IBD)	& Bowel	Muscle Twitching (Fasciculation)	Toxic Shock Syndrome
Dementia		Nephritis	Urinary Incontinence
DHEA Production		Neuropathy	Varicose Veins
Diabetes (Types 1 & 2)		Nutrient Depleting Drugs (e.g. PPIs)	
Diabetic Neuropathy		Osteoporosis & Bone Mineral Density	
Diabetic Nephropathy		Pancreatitis	
Diabetic Retinopathy			

Numerous research studies that have tested magnesium up against commonly used drugs have found that magnesium comes out on top in terms of both effectiveness and lack of side effects.

Now imagine the full protocol and what you can do medically for yourself or your patients. The bottom line in all of this is that magnesium is the top item in the protocol and it deserves its place as the heavyweight champion of the medical world.

If you have any of these disorders, especially those related to the heart, muscle, nerve, and brain, and your doctor has not mentioned magnesium, it may be time to find a new physician

## **Conclusion**

The Natural Allopathic protocol is a sophisticated cancer treatment and is appropriate for most people's cancers. It also ensures that cancer is prevented or that it does not return once it has been eradicated. All components are safe, non-toxic medicinals. Together they will outperform any pharmaceutically oriented approach in terms of cost and effectiveness. In addition, it is easy to learn to apply at home.

“So-called health care might be perceived as a real service. In fact, it's a hostage racket, designed to victimize “patients” at their weakest, with a “protection” premium that easily runs to \$12,000-a-year for a married couple, even when they aren't sick, and vulnerable. Just see what happens if you go to an emergency room with an injury that requires six stitches,” writes James Howard Kunstler.

Each year people pay more for the privilege of being abused by the great medical establishment whose paradigm rests solidly on pharmaceutical terrorism. What is so terrible about drugs and the companies that sell them? Almost all pharmaceuticals are mitochondrial poisons, have strong side effects, which are actually the main effects one would expect when taking toxic substances.

Employers are leaving a bigger chunk of the bill for care to workers who use their health insurance. Most companies now offer health coverage that requires employees to pay an annual deductible before insurance kicks in, and the size of that deductible has soared in the past decade. People pay a lot of money into a medical system that hurts more than it helps. It is easier, safer and a lot less expensive to use Natural Allopathic Medicine to treat yourself and your loved ones at home.



Through my writings and the basic structure of my site, I have tried to give people all the information they need to learn to treat themselves safely at home without having to pay for a personal consultation. However, when people have needed my personal attention it has been my great pleasure to help.

Fortunately, there is no law against learning about health and medicine so what I really do is teach people about themselves, their conditions and what to do about it. Though Natural Allopathic Medicine is simple in practice, (everything is easy once you know how) understanding our stress, our disease conditions and ourselves is not.

My purpose in doing consultations is to address as many fundamental issues as possible involved in a person's disease condition to increase their chances of recovery. I never promote one medicinal as a cure for anything because it makes no sense. A focus on combination therapy enables us to encompass and manage multiple causes of diseases simultaneously. Multidimensional etiologies call for multiple therapeutic interventions.

The most difficult part of dealing with the diseases of our bodies are the conflicts and issues of mind, emotion and spirit. Often the root causes are beyond the physical meaning many of us need to directly confront ourselves and change some of our lifestyles. When listening deeply to people often what these changes need to be becomes obvious.

Western medicine has no way of addressing problems and disease on a “being” level. Dr. Ryke Geerd Hamer, a German internist, surgeon, and creator of what is called German New Medicine, discovered that physical events combined with internal emotional reactions to create what he called a “biological conflict shock,” which will manifest itself as a visible physical transformation in the brain as well as measurable changes in physical-nervous parameters.

In my consultations online, I do my best to touch upon these issues when appropriate. It is often important and sometimes vital to correlate a person’s physical problems with emotional disturbances and conflicts that are happening on a deeper level.

### **Breathing for Better Health**

From now on, included with every consultation is Home Therapy volume one, which provides support for breathing retraining, since there is nothing more powerful for healing than getting conscious control of one’s breath. Most doctors regrettably ignore their patients breathing patterns.

Everyone who is breathing faster than 12 breaths a minute is running low on oxygen, which drives us deeper and deeper into various pathologies. It is simple, the faster we breathe the faster we die and certainly the sooner we will get cancer.

The sicker one feels the more of the Natural Allopathic protocol one needs to get involved with to support a full return to health. Unfortunately, a return to full health is not possible for everyone. Some people are very old and on death’s door. However, that does not mean that these patients cannot be comforted and have their pain and discomforts reduced. **No matter how sick one is and feels it is possible to be and feel better.**

## Will To Live

Sometimes it takes a lot of will to live, and what is will anyway, but something our hearts want to do. Most think that will has more to do with the mind but whatever we love we have unlimited will for. Take anglers who love to fish; they have no problem getting up before dawn to make their catches.

My will to live comes from several sources but primarily it is for the love of my wife and children as well as the people in my personal sphere who have helped me create Sanctuary as well as DrSircus.com Finding new will though can be as simple finding things you are passionate about. People are often robbed of their passions so it is a good idea to find things we can be passionate about because that is where real living is and that is what will create increased will to live.

It is when the going gets tough that we have to prove our willpower. I am writing this because I myself have needed will to not be overcome by chronic disease caused by stress. I am much better, look healthier and younger but I still have my bad days especially when I am super stressed out. I personally find it crucial to make lifestyle changes and in my case, it helps tremendously to leave my sugar addiction in the tomb.

Part of the will to live is directly tied to the will to change and this is especially true when one is trying to overcome a chronic condition.

# Treatment and Products

Below is an outline of my protocol components. The Natural Allopathic Protocol is powerful and at the same time extraordinarily safe because nutritional medicines, not pharmaceuticals, are employed.

Many of these medicines can be used to great advantage in emergency and intensive care situations, in hospice care as well as for the flu, metabolic syndrome, obesity, diabetes, neurological disorders, heart disease and stroke. Cancer patients should definitely consider using the full protocol.

When the below medicinals are used in combination with each other they constitute a new form of medicine that is powerful yet easy to learn.

The protocol is an anti-aging protocol; it pushes back against death even for healthy people meaning it prevents disease. For children it is ideal for it is mostly administered in liquid form.

In the book *Treatment Essentials* you will find the overview of the entire protocol and the most practical instructions on how to apply it to your situation.

Cancer patients have a 2,500 page cancer compendium called *Surviving Cancer* that includes materials from all Dr. Sircus's books.

In the list below you will find links, not only to the companies that sell the equipment and medicinals but also to videos that will introduce and provide some instruction in their use.

1. **Molecular Hydrogen** – Active H<sub>2</sub> tablet, Meghydrate
2. **Magnesium Medicine** – Magnesium Oil, Magnesium Bicarbonate Water [Watch Video](#)
3. **pH Medicine** (sodium and potassium bicarbonates) [Watch Video](#)
4. **Iodine Medicine** Nascent Iodine, Lugol's Iodine (with possible inclusion of natural thyroid hormone) [Watch Video](#)
5. **Selenium Medicine**, Selenium Tung Oil [Watch Video](#)
6. **Liquid Seeds – Super Nutrition**
7. **Breathing retraining** Breathslim [Watch Video](#)
8. **Cannabinoid Medicine** Cannabidiol (CBD) [Watch Video](#)
9. **Far-Infrared Biomats** [Watch Video](#)

10. **EarthPulse** – Frequency Medicine
11. **Exercise & Anti-Inflammatory Oxygen Therapy with Exercise LiveO2** [Watch Video](#)
12. **Stress Control and Testing** – VedaPulse

### **Additional Therapies**

1. **Sun exposure**, vitamin D
2. **Vitamin C** (high ORAC antioxidant therapy)
3. **Vitamin E**
4. **Clay**
5. **Glutathione Medicine** (sublingual, nebulization, suppositories) [Watch Video](#)
6. **Sulfur Medicine** organic sulfur (MSM)
7. **Enzyme Therapy** Prolyte
8. **Nutrition:** Super foods, spirulina, hydrochloric acid, natural chelation, vitamins A & B, juice fasting, aloe vera, alpha-lipoic acid, sodium thiosulfate, seawater, nano soap
9. **Intestinal health** (probiotics, restore, enemas, colonics, etc.)

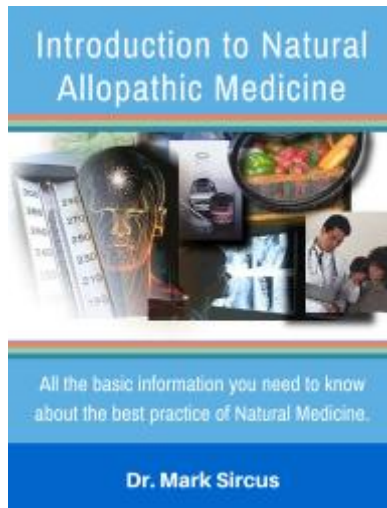
### **Basic Equipment**

1. **pH Test Strips**
2. **Oximeter** – blood oxygen levels

### **Emotional, Energetic and Spiritual Components**

1. **Tears of the Melting Heart** (connecting directly with one's vulnerability)
2. **Sexual Healing and Health**

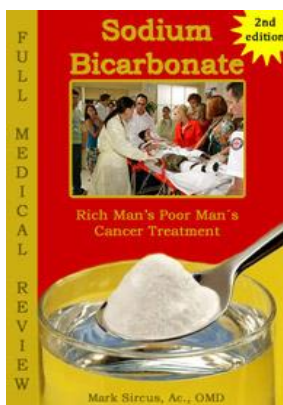




Learn how to treat yourself and your loved ones safely at home. We offer a FREE introductory guide to Natural Allopathic Basics, which outlines a simple to follow protocol that you can use inexpensively and safely at home. For more advanced and detailed presentation we offer Treatment Essentials, which has all the information for you to practice Natural Allopathic Medicine.

For questions pertaining to your own personal health issues or for specific dosing of Dr. Sircus's protocol items please seek a consultation. Please visit our knowledge base to see if your question may have been answered previously.

## Top Sellers

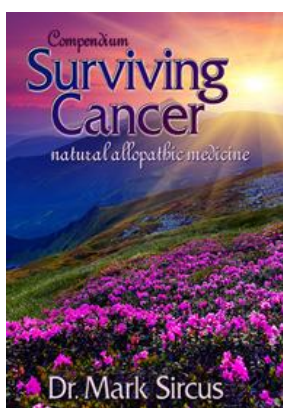


### Sodium Bicarbonate Second Edition

#### **E-Book**

Sodium bicarbonate happens to be one of our most useful medicines.

**\$24.90**



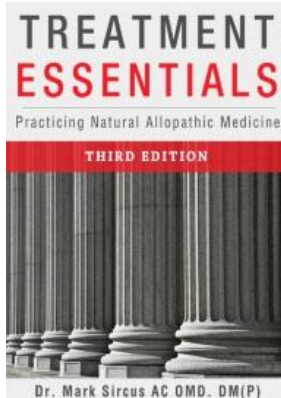
### Cancer Compendium

#### **E-Book**

This 2500 pages compendium contains a turnkey cancer treatment program.

**\$249.99**

**\$174.99**



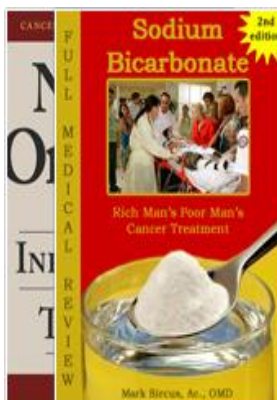
Treatment Essentials Third Edition

**E-Book**

Practical teaching manual including dosages and treatment methods.

**\$24.70**

**eBook Bundles *With Discount***

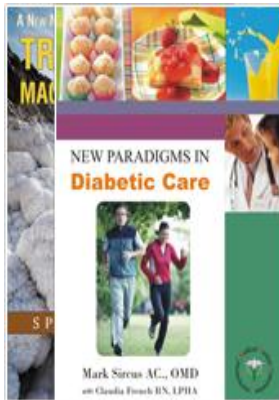


Cancer Bundle

Must have bundle for cancer patients. Learn about Sodium Bicarbonate and Natural Oncology treatments

**\$49.89**

**\$34.89**

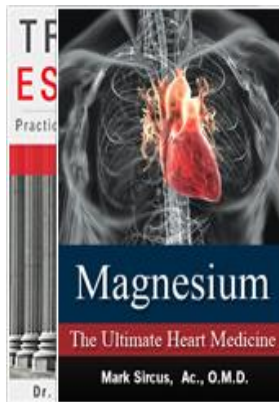


### Diabetes Bundle

Must have bundle for Diabetic patients. Learn about Magnesium and a new form of diabetic care.

**~~\$41.90~~**

**\$31.90**

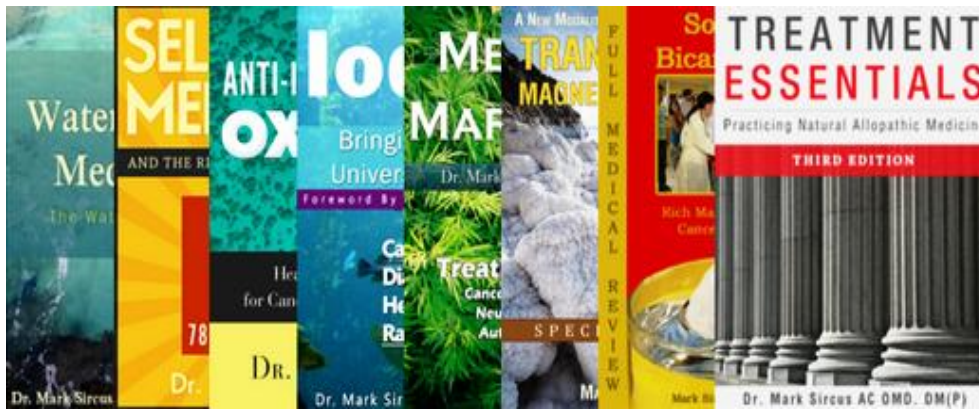


### Heart Bundle

Learn all about the link and benefits of Magnesium for a Heart Health and Dr Sircus full protocol

**~~\$54.60~~**

**\$39.60**



**Order 8 titles and save 30%!**

This library is an essential collection for anyone who wants to learn how to treat themselves with Natural Allopathic Medicine!



**Sodium Bicarbonate Bundle**

Learn all about Sodium Bicarbonate and Dr Sircus full protocol with this special offer.

**\$49.60**

**\$34.60**



### Magnesium Bundle

Learn all about Magnesium and Dr Sircus full protocol with this special offer.

~~\$40.70~~

**\$30.70**

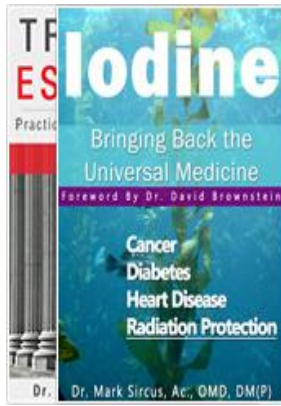


### Best Seller Bundle

Learn all about Sodium Bicarbonate, Magnesium and Dr Sircus full protocol with this special offer.

~~\$65.60~~

**\$45.90**

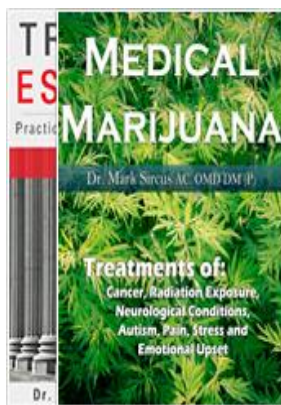


### Iodine Bundle

Learn all about Iodine and Dr Sircus full protocol with this special offer.

~~\$39.70~~

\$29.70



### Medical Marijuana Bundle

Learn all about Medical Marijuana and Dr Sircus full protocol with this special offer.

~~\$46.35~~

\$31.65

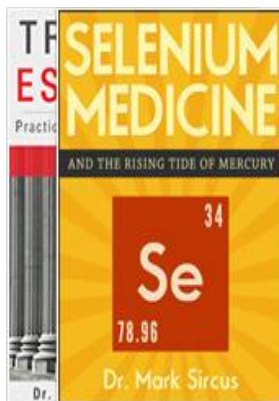


### Oxygen Bundle

Learn all about Oxygen Therapy and Dr Sircus full protocol with this special offer.

~~\$36.70~~

**\$31.70**



### Selenium Bundle

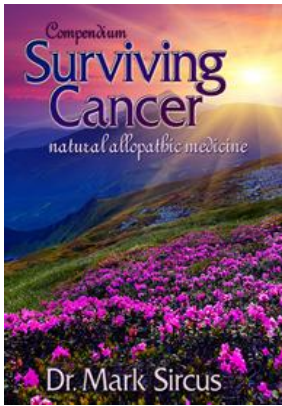
Learn all about Selenium and Dr Sircus full protocol with this special offer.

~~\$44.65~~

**\$29.65**

## Individual Books





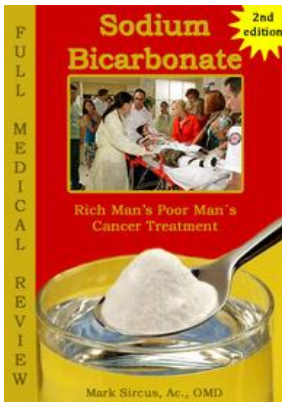
## Cancer Compendium

### **E-Book**

This 2500 pages compendium contains a turnkey cancer treatment program.

**\$249.99**

**\$174.99**

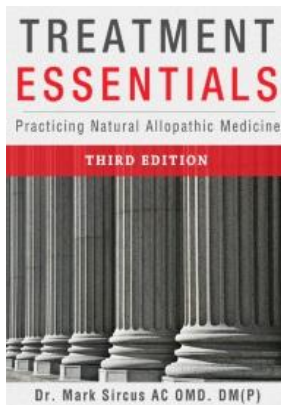


## Sodium Bicarbonate Second Edition

### **E-Book**

Sodium bicarbonate happens to be one of our most useful medicines.

**\$24.90**

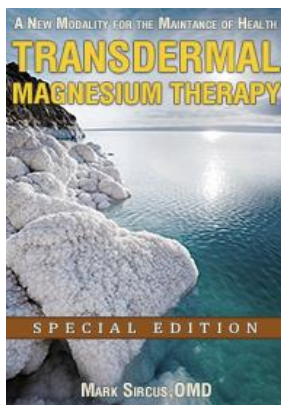


## Treatment Essentials Third Edition

### **E-Book**

Practical teaching manual including dosages and treatment methods.

**\$24.70**

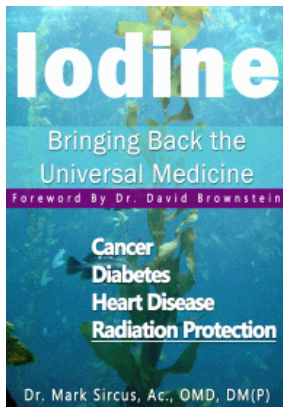


## Transdermal Magnesium Therapy

### **E-Book**

Magnesium has the potential to save your life.

**\$16.00**

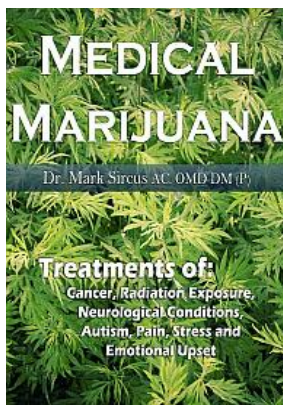


## Iodine

### **E-Book**

Iodine is by far the best antibiotic, antiviral and antiseptic of all time.

**\$15.00**

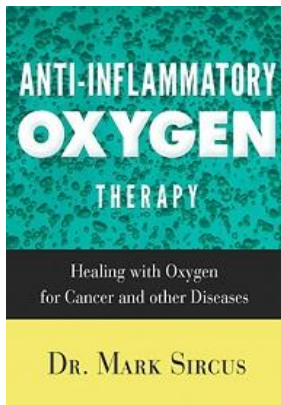


## Medical Marijuana

### **E-Book**

This book champions the use of marijuana in clinical practice for adults and children

**\$21.95**

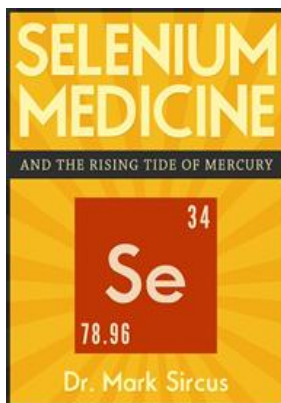


## Anti-Inflammatory Oxygen Therapy

### **E-Book**

The effectiveness of Anti-Inflammatory Oxygen Therapy .

**\$12.00**



## Selenium Medicine

### **E-Book**

Discoveries and secrets about selenium medicine.

**\$19.95**

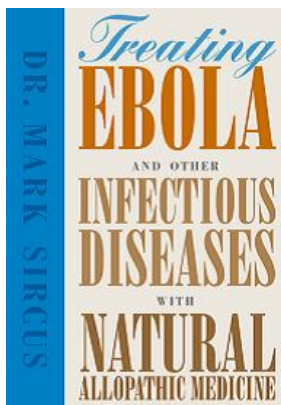


[Fukushima](#)

**E-Book**

How to Protect Ourselves and our Children from Radiation.

**\$21.95**

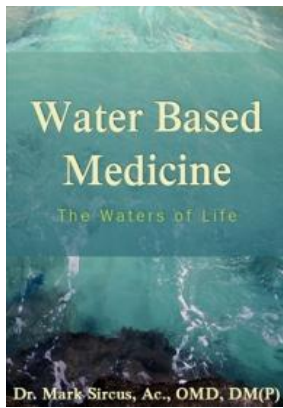


[Treating Ebola](#)

**E-Book**

Treating Ebola patients with Natural Allopathic Medicine.

**\$20.00**

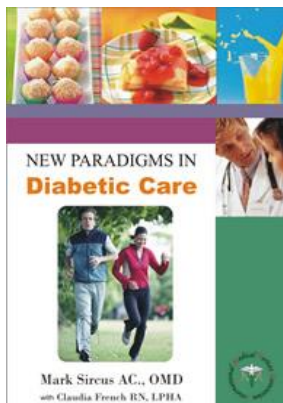


## Water Based Medicine

### **E-Book**

Introduces water as our most basic medicine and the benefits of alkaline water.

**\$19.99**

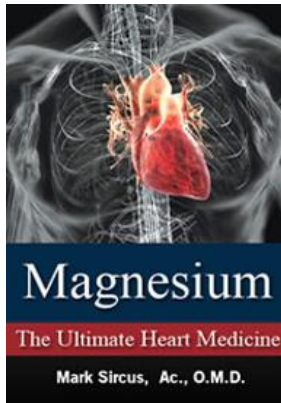


## New Paradigms in Diabetic Care

### **E-Book**

This book provide cutting edge information for a new form of Diabetic patient care.

**\$25.90**

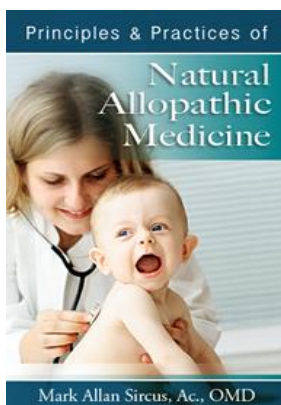


## Magnesium – The Ultimate Heart Medicine

### **E-Book**

This book is a paradigm breaker in the field of cardiology.

**\$29.90**



## Natural Allopathic Medicine

### **E-Book**

This book introduces new principles and practices of medicine.

**\$20.90**

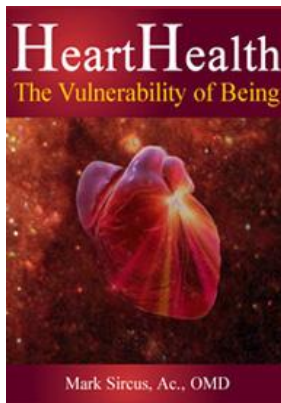


## Natural Oncology

### **E-Book**

New form of treating cancer in a natural non-pharmaceutical way.

**\$24.99**



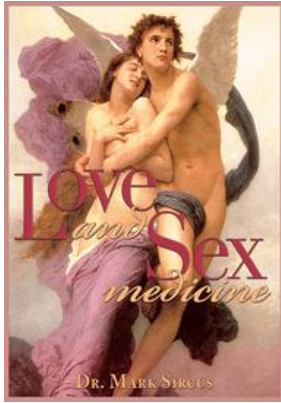
## HeartHealth

### **E-Book**

HeartHealth is a book about spiritual psychology, a psychology of feelings and emotions.

**\$18.00**



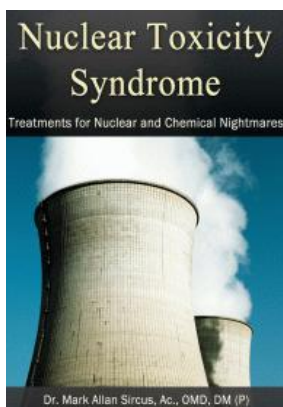


## Love and Sex Medicine

### **E-Book**

This book is a complex weave of love, sex and spirituality.

**\$19.95**

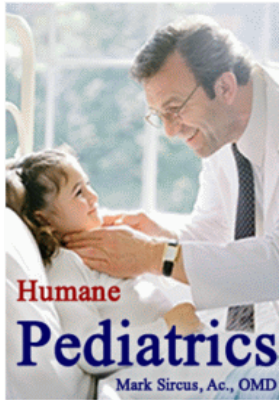


## Nuclear Toxicity Syndrome

### **E-Book**

This book teach you to heal yourself of the effects of radiation exposure

**\$22.90**



## Humane Pediatrics

### **E-Book**

This book offers a complete revolution in pediatric care.

**\$24.80**

## **Home Therapy Program**

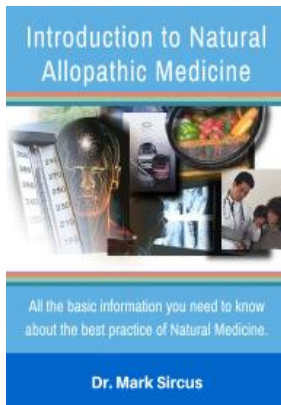


## Home Therapy Program 1

Program of 30 days. Everyday a new lesson that will help you regain both health and happiness.

**\$39.00**

## **Dr. Sircus Free Ebooks**

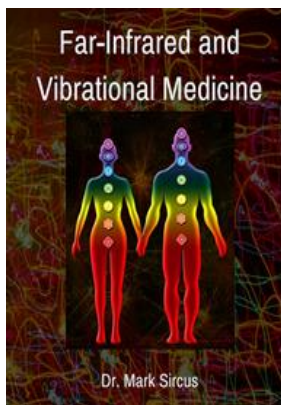


## Introduction to Natural Allopathic Medicine

### **E-Book**

This is the first step to teach you to take care of your own health.

### **Free**

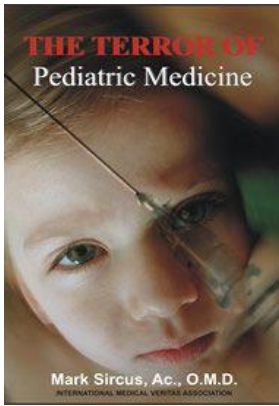


## Far-Infrared and Vibrational Medicine

### **E-Book**

This book is about light and heat medicine and about Far Infrared BioMats that offer comfort and

### **Free**



## The Terror of Pediatric Medicine

### **E-Book**

What is happening in the world of pediatric medicine?

### **Free**