

Dr. Mark Sircus

*The Miracle
of Sodium Bicarbonate or Common
Baking Soda
The Least Inexpensive Cancer Treatment*

<http://www.youtube.com/watch?v=HQuODiMIUcs>.

Contents

Sodium Bicarbonate / Baking Soda

How can you tell when you are acidic

Product Quality and Cost

Common Cold and Influenza Virus / Nasal Wash

Pancreas, Baking Soda and Diabetes

Baking Soda - Every Cancer Patients Best Friend.

Baking Soda & Maple Syrup Cancer Treatment

Lessons in Cancer and General pH Management

Sparkling Water's Chemistry / Baking Soda & Carbon Dioxide Connection

Reducing Radiation Damages with Baking Soda

Medical Review

The use of sodium bicarbonate for cancer, kidney disease, diabetes, treatment of flu and the common cold, and other areas of general medicine is extremely successful. Truly sodium bicarbonate is a universal medicine that is nutritional as well as safe and is of help no matter what syndrome we are facing.

There are many reasons to use baking soda but one overall reason is that *sodium bicarbonate is a natural substance that will not harm us, our children or the environment because is it not a chemical compound that effects nature in any kind of negative sense.* Baking soda is actually a compound that is found throughout nature, in the ocean, in the soil, in our foods, and in our bodies. Baking soda is a neutralizer of many other compounds, which makes it extremely helpful as a medicine in the age of toxicity, which we are all presently passing through.

Life-threatening asthma in children is often resistant to treatment with bronchodilators and systemic corticosteroids. Recent research suggests that administering sodium bicarbonate—an ingredient commonly found in kitchens—in intravenous (IV) form can significantly improve pH and PCO₂ in children with life-threatening asthma.[\[1\]](#) *Sodium bicarbonate can save the day when nothing else can.* The only other substance we can say the same is with magnesium chloride, which when injected will save a person during cardiac arrest and pull one out of a stroke if given soon enough.

There has been work going on at the University of Arizona, using bicarbonate (baking soda) as a potential treatment for cancer. Robert J. Gillies and his colleagues have demonstrated that pre-treatment of mice with sodium bicarbonate results in the alkalinization of the area around tumors.

This year these same researchers reported that bicarbonate increases tumor pH (i.e., make it more alkaline) and also inhibits spontaneous metastases

(Robey 2009). They showed that *oral sodium bicarbonate increased the pH of tumors and also reduced the formation of spontaneous metastases in mice with breast cancer. It also reduced the rate of lymph node involvement.*

When it comes to sodium bicarbonate it is an open and shut case. It is already in wide use and has been for decades, even by oncologists who do not want their patients dropping dead too quickly because of the tremendous toxicity of their treatments. Sodium bicarbonate is used routinely to keep the toxicity of chemotherapy agents and radiation from killing people or from destroying their kidneys. In relation to bicarbonate, millions of people in the world either consume bicarbonate ions in drinking water or have been treated clinically with bicarbonate in hospitals, medical centers, or emergency. *Sodium bicarbonate helps to save countless lives every day.*

When combined with other strong but basic natural substances like magnesium chloride and iodine one has at ones fingertips a trinity of medical super heroes ready to perform scientific medical miracles in a single bound.

We are talking about serious medicine when we talk about sodium bicarbonate. Earlier and more frequent use of sodium bicarbonate is associated with higher early resuscitability rates and with better long-term neurological outcomes in emergency units. *Sodium bicarbonate is very beneficial during CPR.*[\[3\]](#)

Bicarbonate is present in all body fluids and organs and plays a major role in the acid-base balances in the human body.

Bicarbonate deficiency is the most unrecognized medical condition on earth even though it is extraordinarily common. Problems from acid pH levels (relative deficiency in bicarbonate ions) take a large toll from human physiology and the more acid a person gets the larger the problem for cell physiology. Every biochemical reaction is pH sensitive with enzymes being

especially sensitive. Our diet plays an important role in maintaining appropriate pH levels in the body.

Most modern diets give rise to unhealthy acidic pH conditions. An imbalanced pH will interrupt cellular activities and functions to extreme levels as pH drops further. Excessive acidic pH leads to cellular deterioration which eventually brings on serious health problems such as cancer, cardiovascular disease, diabetes, osteoporosis and heartburn. The fact that the biological life functions best in a non-acidic (alkaline) environment speaks miles about the usefulness of baking soda.

Sodium bicarbonate loading and continuous infusion was associated with a lower incidence of acute renal dysfunction in cardiac surgical patients undergoing cardiopulmonary bypass.[4]

Sodium bicarbonate is the time honored method to ‘speed up’ the return of the body’s bicarbonate levels to normal. Bicarbonate is inorganic, very alkaline and like other mineral type substances supports an extensive list of biological functions. Sodium bicarbonate happens to be one of our most useful medicines because bicarbonate physiology is fundamental to life and health. So helpful and elementary it’s even instrumental in helping sperm swim up and enter the cervical canal.[5]

It is not possible to be a fully educated medical professional without coming up to speed on vital medical information about sodium bicarbonate. This book is full of contributions from universities, hospitals and clinicians who have for decades been researching and using sodium bicarbonate for many medical applications. *Baking soda is an essential medicine*, which no emergency room or intensive care ward would be caught without. This book represents a full medical review that combs through all corners of the medical universe to lay bare the full knowledge and scope of sodium bicarbonates use in medicine.

Everything I know about bicarbonate you should know and when you do, you will know more than anyone else who has not taken the time or has had the interest to fully research the subject or read this book.

It's an experience to know much more about such a basic vital substance than your doctors. Take the journey and sail through bicarbonate seas. Read and learn and then begin to think of what is the medical truth about sodium bicarbonate as a treatment for cancer.

This book also gives the keys to understanding that vast fraud and the intended rip off of labeling Carbon Dioxide (CO₂) a poisonous gas. In these pages you will find the truth about CO₂ because it is a great part of the secret about sodium bicarbonate (baking soda), which turns to CO₂ in the stomach when mixed with water.

As we shall see sodium bicarbonate, CO₂ and Oxygen (O₂) are all tied together. All three are essential for biological existence on planet earth. CO₂ is no more of a poison than water.

Sodium bicarbonate (Baking Soda) is probably one of the most useful substances in the world; no wonder the pharmaceutical companies don't want doctors or anyone else to know much about it. Sodium Bicarbonate is an important medicine – of the safest kind – and it is essential when treating cancer, kidney and other diseases.

<http://imva.info/index.php/tag/sodium-bicarbonate/>.

<http://www.life-enthusiast.com/index/Articles/Sircus>

How can you tell when you are acidic

Steve Shapiro

There are too many symptoms of acidic fluids in the human body, but here are a few:

1) The quickest symptom to notice is indigestion... this is the first warning bell that should tell you that there is a problem.

Most proteins require an acid stomach to complete digestion – this can cause great amounts of acid to be used in order to move digestion along.

2) Usually after indigestion, you will notice a headache ... many times these symptoms appear together.

3) Almost immediately, you will notice a runny nose – mucus... this is most noticeable after consuming acid forming foods. Sinus problems are always due to acid in the body.

4) Burning urination... which is always accompanied by skin problems

5) Blurry vision - the eyes swim in fluid.. acid fluid will change the abilities of the eyes.

6) Aching joints, thin bones, & tooth problems - in order not to burn holes in your soft tissue from acid foods, the bones release calcium to help neutralize bodily fluids.

7) Infections will not easily go away on their own when the ph of the body is too low.

Taking antibiotics only destroys the flora in the gut so digestion will be impaired.

Testing your PH

There many other symptoms of low pH and of a pH that is too high. The only way to know for sure is to obtain litmus pH test paper. It is inexpensive and will let you know your ph immediately by simply urinating on a pH strip. These are available at most health food stores or online at the following:

www.vitaminlife.com

www.amazon.com

www.swansonvitamins.com

Adjusting your pH

As mentioned in this chapter, baking soda is the quickest and easiest way to raise your pH. By first testing your pH with the pH test strips, you can monitor your pH, then if you need to raise your pH, you can either make baking soda capsules or by dissolving baking soda in water and drinking.

The taste of the baking soda might be discouraging, so you may want to place the baking soda in capsules.

The best way to start any new health regimen is go slowly, so start with 1 capsule of baking soda between meals (with a large glass of water), wait an hour and test your pH. If the pH is still low, wait at least an hour till after your next meal and repeat the process.

There is a complex pH balance in your body, as there are many factors affecting your body's pH. Note: taking too many capsules at once can throw you into a healing crisis ... go slowly.

Baking soda capsules

This is easy to do, but you will need 2 items: Capsules and a Capsule Machine. 300 Empty capsules are under \$10 and a capsule machine (this is

more of a capsule holder than a machine) will cost about \$15. You should be able to make 50 capsules of baking soda in about 15 minutes.

These items are available at local health food stores or on line at:

www.vitaminlife.com

www.amazon.com

www.swansonvitamins.com

These items are also available at many other online stores.

Baking soda

Bobs Red Mill Baking Soda is aluminum free and available at:

www.amazon.com and at many health food stores or online.

Sodium Bicarbonate or Baking Soda Product Quality and Cost

Dr. Mark Sircus

The proper mixing of bicarbonate concentrate is an issue and certainly this is a major safety concern at every dialysis facility in the world, which use sodium bicarbonate every day. Oral sodium bicarbonate is used to treat metabolic acidosis in patients with renal tubular acidosis. Since infants and young children are unable to swallow tablets, those affected must ingest sodium bicarbonate in a powder or liquid form. Pharmacy-weighed sodium bicarbonate is expensive and inconvenient to obtain; some pharmacists are reluctant to provide it.

We determined that the sodium bicarbonate contained in 8-oz boxes of Arm and Hammer Baking Soda® was sufficiently constant in weight that dissolved in water to a given volume, it yielded a quantitatively acceptable therapeutic solution of sodium bicarbonate at a cost of approximately 3 percent of that of pharmacy- weighed sodium bicarbonate. Grocery store baking soda can be a safe, economical, and convenient source of sodium bicarbonate for the treatment of chronic metabolic acidosis in infants and young children.

Bob's Red Mill costs \$2.61 a pound and Arm and Hammers costs less making it the least expensive medicine in the world. Sodium bicarbonate is widely available in most supermarkets and discount chains across the country at a cost of just over \$2 per pound. Many different sizes are available depending on your needs ranging from 1 lb packages up to 14 lb packages. (normally used by people with pools to adjust pool water pH).

Do not confuse baking soda with baking powder which does or may contain aluminum. These are two very different products with baking powder having a mix of baking soda with various acidic ingredients. Make sure you are purchasing pure 100% baking soda or sodium bicarbonate.

Special Note: For perfect therapeutic bath add one pound or more of sodium bicarbonate with one pound or more of magnesium bath flakes.

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,[\[1\]](#) 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 alkalinized with bicarbonate of soda contracted the disease, and those who did contract it, if alkalinized 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 Bicarbonate of Soda in glass of cool water, at about two hour intervals.

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

During the third day take two doses of half teaspoonful of 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,^[2] had just woken with it full on, and was planning on missing work.”

In order to secure the best results with 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 hyperchlohydria (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.”

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.

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.

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

Common Cold and Influenza Virus

Though we know by now that sodium bicarbonate is a most useful medicine for the treatment of cancer and kidney disease and have always known its good for stomach acid imbalances and for cleaning our pools and

refrigerators it is not likely we have thought about it to help resolve our common colds nor to alleviate they symptoms and dangers of influenza. Medicine does not have to be complicated and mysterious nor do we have to lay still and be run over by the Hun Hordes of Influenza viruses that the health authorities want us to be so frightened of.

Dr. Volney S. Cheney reported^[1] long ago that, “A number of cases of colds of varying severity were carefully studied in the laboratory. Observation was made as to the degree of acidity of the urine; the CO₂, combining power of the blood as an indicator of the alkaline reserve; tests were also made to determine the calcium content of the blood, the sugar content; non-protein nitrogen and the basal metabolism.

The urine invariably carried a higher degree of acidity than the normal-in some cases as high as 800 (normal 350); *the CO₂ combining power of the blood in all cases was low*, the highest being 52 per cent; the sugar content of the blood was generally decreased (below 100 mg. per 100 c.c.); the metabolic rate was always on the minus side. (These cases were carefully selected because of their lack of any symptoms of disturbed thyroid activity.) There is a change in the blood chemistry and, consequently, there must be a change in the tissues supplied by the blood.

There is a decrease in the bicarbonates or reserve bases contained in the blood plasma and the tissues. These findings seem to point the way to the conclusion that *a cold is a disturbance of the alkaline balance or reserve, in other words, a mild acidosis, or perhaps better stated, a lessening of the “buffer” action of the blood plasma through a decrease in its bicarbonate content.*”

Dr. Cheney further reported his “abortive treatment” of any cold or flu thusly:

If the disease is attacked when there is a beginning dryness in the pharynx or a slight corzya, or congestion of the mucous membrane of the nose, and

alkalinization is instituted by large doses of sodium bicarbonate, until the urine is alkaline to litmus paper, a “cold” can always be aborted. *Along with the sodium bicarbonate which I generally prescribe in 6 g. doses, accompanied by a large glass of hot water, every 2 hours for 3 doses, I give to an adult 1 g. of calcidin (a calcium and iodine combination) every half hour until 6 doses have been taken.*

Most colds begin to manifest themselves late in the afternoon or early evening and the abortive treatment is best given at this time up to retiring. At the time of taking the treatment, the usual meal should be dispensed with, or should consist of milk and some cereal, or soup or broth. If the bowels are constipated, they should not be moved by a cathartic or laxative but the lower bowels should be relieved by a soap suds enema. This treatment will abort colds, if taken in their incipiency.

Where a cold has advanced to the stage where there is hoarseness and a profuse coryza, or where this condition has advanced to what we generally term “a cold,” I use the following treatment:

Initial dose 6 g. of sodium bicarbonate and 1 g. of calcidin, then 3 g. of sodium bicarbonate and 1 g. of calcidin every 2 hours for 6 doses, then 20 g. of sodium bicarbonate with 1/3 g. of calcidin every 3 hours during the waking period until the cold is checked.

The administration of the sodium bicarbonate should always be in or followed by a large glass of hot water. Locally, spray the nose and throat with a 1 to 5000 solution of metaphen, or other alkaline solution (1 dram of sodium bicarbonate to one pint of water) morning and night. If the bowels are constipated, I prescribe no laxative or cathartic but use an enema of soap suds to relieve the lower bowels.

Prophylaxis is best maintained by exercise and a diet which is well balanced and thoroughly adapted to the individual’s physical activities.

When the cold or ‘flu germs enter your body they immediately lodge themselves in the membranes of your nose. Your immune system then resists them by releasing inflammatory mediators. These in turn cause excessive mucus gland secretion, which blocks the sinuses, leading to a runny nose and all the other unpleasant symptoms of a cold or the ‘flu.

Nasal Wash

Dr. Hana’s [Nasopure®](#) Nasal Wash System transforms the ancient technique of nasal irrigation into the most effective, convenient and inexpensive nose washing system available today. It is a modern day netti pot. It quickly and safely washes away pollen, **mold, dust, bacteria, viruses** and mucus— the primary causes of nasal and sinus allergies, infection and discomfort. The Nasopure sinus cleansing salt mixture contains pharmaceutical grade sodium chloride (salt) and **sodium bicarbonate**.

Do not add regular table salt to any solution used for nasal washing as it contains undesirable additives and throws off the saline concentration of the solution. **Salt** is both soothing and therapeutic (in the proper concentration). Too little or too much salt will cause the water to “burn” or irritate your nasal passages and sinuses. Pickling salt, which is usually pure salt, is preferable to regular table salt if making your own salt solution.[\[2\]](#)

For a 0.9% isotonic saline solution, the amount normally found in bodily fluids, use 1/3 teaspoon (approx. ¼ heaping teaspoon, or 1.85 ml) of salt. Anything less than this is hypotonic, anything greater is hypertonic. Some research suggests a hypertonic solution may be best when combating a runny nose (as it would have a drying effect), so you might want to go to the higher end of the salt range. Add baking soda (sodium bicarbonate) to help buffer the solution. A hypotonic solution, however, would tend to be moisturizing

(i.e. the lower end of the salt range), and may be what you want in a nasal spray for general prophylactic use.

If you want to take direct action against the virus or germs that are already attacking you, the battleground is inside your nose. Directions for common use of nasal washings include; pour a little warm water into a dish and add a level teaspoon of your sodium bicarbonate. Stir it well and then immerse your nose and surrounding parts of your face into it.

Slowly breathe the water up your nose until it reaches the point where it begins to overflow into your mouth. Then expel it and rinse your mouth out. Be careful not to add more than a teaspoonful to the water, and that the dish is of a size that enables you to fit your face into. If the mixture is too strong it will sting your nose for a while. A little trial and error will tell you how warm the water should be, which is warm enough but not hot. Do this three times a day, and it should ward off even the heaviest of colds well ahead of time.

Garlic nose drops. In his book [The Healing Power of Garlic](#) Paul Bergner writes: “Garlic nose drops directly kill the viruses that cause cold or flu.” He also writes about a study with mice where some were inoculated with garlic, and some were not. The flu virus was introduced to the nasal passages of each mouse.

Those mice that received the garlic remained healthy, where all the others got sick. To make nose drops, Bergner instructs us to crush some garlic to obtain juice, and add ten parts water and mix well. Eating garlic will also have a systemic effect, but deodorized garlic tablets or capsules reportedly do not work near as well.

Hydrogen Peroxide: Another method is to fill a spray bottle with a 50/50 mixture of hydrogen peroxide and water. Tilt your head back and spray it into your nostrils. It will bubble up and help to kill the bacteria in your nose. Hold

for a few minutes and then blow your nose into a tissue. One can also use hydrogen peroxide in a vaporizer as well.

If an individual cooperates in a cleansing process of Nature by performing enemas, nasal washes and gives rest to his digestive system by observing a modified fast at the very beginning of cold or flu they will reduce the severity and length of their suffering and with a little luck get rid of the problem within 48 hours.

During a fast, half lemon juice mixed with a glass of warm water may be taken several times a day. One or two spoons of honey may be added to this if desired. Not only does this help with the elimination process but it directs internal energies to healing instead of digesting and assimilating new food.

Zinc gluconate lozenges reduced the average duration of common colds with exceptionally strong statistical significance when taken in the first few hours.

Because most people don't understand what detoxification symptoms are, they head to a drug-oriented doctor, who also doesn't understand detoxification symptoms.

The doctor confirms that they are sick, and then puts them on some sort of drug that is designed to stop the symptoms and this short circuits the detox dump and actually prolongs suffering.

A real doctor will look at what is really going on and treat the problem on a fundamental level with medicinals that do not interfere with the natural process going on.

According to recent studies use of over-the-counter cold and flu medicines at any stage of the illness only act to make it worse by prolonging the disease^[3] and drugs like Tamiflu have their own dangerous toxicity that in certain cases is life threatening.

Pancreas, Baking Soda and Diabetes

Bicarbonate physiology is entirely ignored in diabetes as it is in oncology though a wide range of clinicians use sodium bicarbonate for a host of medical problems. Who would stop long enough to think deeply enough to make the connection between acid producing diets (junk foods) and destruction of the pancreas after decades of obsessing with sugar as the main culprit?

Parhatsathid Napatalung from Thailand writes, “*The pancreas is harmed if the body is metabolically acid as it tries to maintain bicarbonates. Without sufficient bicarbonates, the pancreas is slowly destroyed, insulin becomes a problem and hence diabetes becomes an issue.* Without sufficient bicarbonate buffer, the effect of disease is far reaching as the body becomes acid.”

Understanding of the use of sodium bicarbonate begins with a trip to the pancreas, which is the organ most responsible for producing the bicarbonate our bodies need. The pancreas is a long, narrow gland which stretches from the spleen to about the middle of the duodenum. It has three main functions. Firstly, it is to provide digestive juices, which contain pancreatic enzymes in an alkaline solution to provide the right conditions for the digestive process to be completed in the small intestines.

Secondly, the pancreas produces insulin, the hormone which controls blood sugar by the metabolism of sugar and other carbohydrates. Thirdly, it produces bicarbonate to neutralize acids coming from the stomach to *provide the right environment* for the pancreatic enzymes to be effective.

Allergies generally start with the body’s inability to produce a certain

enzyme, or to produce enough enzymes for the digestive process to work effectively. ***In conjunction with this is an inability to produce enough bicarbonate essential for the pancreatic enzymes to function properly.*** When this happens undigested proteins penetrate the bloodstream inducing more allergic reactions. Inflammation in such a scenario is systemic but can focus on the pancreas forcing decreases in the production of bicarbonate, insulin and necessary enzymes. [\[1\]](#)

The bicarbonate ion acts as a buffer to maintain the normal levels of acidity (pH) in blood and other fluids in the body. Bicarbonate levels are measured to monitor the acidity of the blood and body fluids. The acidity is affected by foods or medications that we ingest and the function of the kidneys and [lungs](#). The chemical notation for bicarbonate on most lab reports is HCO₃⁻ or represented as the concentration of [carbon dioxide](#) (CO₂).

The normal serum range for bicarbonate is 22-30 mmol/L. A bicarbonate test is usually performed along with tests for other blood electrolytes. Disruptions in normal bicarbonate levels may be due to diseases that interfere with respiratory function, kidney diseases, metabolic conditions and a failing pancreas. The pancreas, an organ largely responsible for pH control,[\[2\]](#) is one of the first organs affected when general pH shifts to the acidic. “Monitoring of blood-sugar levels, insulin production, acid-base balance, and pancreatic bicarbonate and enzyme production before and after test exposures to potentially allergic substances reveals that the **pancreas is the first organ to develop inhibited function from varied stresses,**[\[3\]](#) writes Dr. William Philpott and Dr. Dwight K. Kalita in their book *Brain Allergies*.

[Dr. Robert Young](#), states, “Excess acidity is a condition that weakens all body systems. The pancreas is one of our body’s organs charged with the awesome responsibility to “alkalinize” us. Can you start to see how our serious acidosis has overwhelmed our pancreas’ ability to operate effectively, which then results in a state called “diabetes?”

Vulnerable Pancreas

When one of many possible biological stresses weigh down on the pancreas it will, as any other organ will, begin to function improperly. When this happens the first thing we will see is a reduction in pancreatic bicarbonate production. Once there is an inhibition of pancreatic function and pancreatic bicarbonate flow there naturally follows a chain reaction of inflammatory reactions throughout the body. The reactions would include the brain as acidic conditions begin to generally prevail. Decreasing bicarbonate flow would boomerang hardest right back on the pancreas, which itself needs proper alkaline conditions to provide the full amount of bicarbonate necessary for the body.

A highly acidic pH level puts the pancreas, liver, and all the body's organs at risk. Because of the important role played by the liver in removing acid waste from the body, liver function is also particularly at risk when acids accumulate. When acidity prevents the liver and pancreas from regulating blood sugar, the risk of diabetes and thus cancer increases.

There are many causes of diabetes. Heavy metals, toxic chemicals and radiation contamination will affect, weaken and destroy pancreatic tissues. **When the body is bicarbonate sufficient it is more capable of resisting the toxicity of chemical insults.** That is why the army suggests its use to protect the kidneys from radiological contamination.[\[4\]](#) Much the same can be said for magnesium levels. Magnesium, bicarbonate and iodine all protect us from the constant assault of noxious chemicals and radiation exposure we are subjected to everyday in our water, food and air.

The Centers of Disease Control (CDC) in Atlanta declares that 33% of the babies born this year will be diabetic by the year 2050. Dr. Alan Cantwell

Diabetes, which is expanding rapidly, can in part be traced to the increasing radiation to which we are all being exposed. Every physician knows that

radiation can lead to cancer, but making a connection between depleted uranium (DU), for example, and diabetes seems ludicrous at first glance but is not. Most medical doctors have never heard of this but neither have they paid attention to the fact that mercury and other toxic chemicals are also primary causes of diabetes.

Diabetes is a fundamental disease that affects the entire colony of cells in a person because it has to do with energy metabolism and the vastly important hormone insulin and its receptor sites.

Diabetes is actually an extremely serious warning to civilization; it is an announcement that the rising tide of radiation, mercury, other deadly chemicals and pharmaceutical drugs are poisoning humanity. We even have to look at how antibiotics are leading to diabetes as well as a host of other problems for the human body.

These toxic insults are slamming head on to nutritional deficiencies in the body and the results are telling though still being ignored by the orthodox medical establishment, which has its heart dead set on adding not subtracting to these insults

Dr. Lisa Landymore-Lim in her book ***Poisonous Prescriptions*** explains how many drugs used by the unsuspecting public today, are involved in the onset of impaired glucose control and diabetes. She explains using the example of the drugs streptozocin and alloxan, which are both used in research to make lab rats diabetic.

Vacor is a rat poison known to cause insulin dependent diabetes in humans. Allopathic medicine will eventually have to face up to the fact that many drugs, including most surprisingly, the antibiotics including penicillin, as well as an entire host of others, causes changes in the beta cells affecting both insulin and bicarbonate production.

Baking Soda is Every Cancer Patients Best Friend

Cancer cells have a lower pH than surrounding tissue

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 (NaHCO₃) 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.[\[1\]](#)

Oral NaHCO₃ selectively increased the pH of tumors and reduced the formation of spontaneous metastases in mouse models of metastatic breast cancer. NaHCO₃ 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.[\[2\]](#)

We know that bicarbonate turns to CO₂ 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.

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 is not a standalone single shot cancer 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.

Sparkling Water's Chemistry

Baking Soda & Carbon Dioxide Connection

Carbonated water contains dissolved CO₂ gas.

The Journal of Nutrition conducted a study of sparkling and still mineral water. The study participants were asked to drink 1 liter of either the sparkling or still each day for two months, followed by two months on the other water. It was found that drinking sparkling water[1] brought about **significant reductions in the level of low density lipoprotein (LDL) cholesterol** (generally regarded as a risk factor for heart disease), as well as a **significant increase in levels of high density lipoprotein (HDL) cholesterol** (generally taken to reduce heart disease risk). These and other biochemical changes induced by drinking sparkling water were **estimated to reduce the women's risk of developing heart disease over the next decade by about a third.**[2]

The study participants were asked to drink 1 liter of either the sparkling or still each day for two months, followed by two months on the other water. During the study, the study participants underwent a number of tests including blood pressure checks and measurement of a variety of blood

components including cholesterol. Interestingly, the Journal of Nutrition study found that the drinking of the sodium-rich mineral water did not lead to any increase in blood pressure. One reason for this is that sparkling waters tend to be rich in bicarbonate. Sodium bicarbonate is not known to increase blood pressure despite the presence of sodium.

Carbonated water is made by passing pressurized carbon dioxide through water. The main point to understand is the connection between drinking sparkling water, which has had CO₂ injected into it to make it fizzy, and drinking sodium bicarbonate in water, which turns to CO₂ in the stomach. Some people think drinking bicarbonate is a waste of time because it turns to CO₂ in the stomach but they could not be more mistaken.

Baking soda (sodium bicarbonate) immediately reacts when it mixes with stomach acid. $\text{NaHCO}_3 + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O} + \text{CO}_2$. That is: Sodium bicarbonate + stomach acid yields salt + water + carbon dioxide.

Carbonation can occur naturally in spring water that picks up carbon dioxide stored in rocks, or it can be forced in by the manufacturer or by you at home with an inexpensive seltzer maker. Call it sparkling water, soda water, club soda or seltzer it's the same and those who avoid such drinks are missing a healthy and very delightful way to hydrate the body.

Claims have been made that carbonated water erodes teeth and bones, leaches calcium and increases acidity in the stomach have not been borne out by experiment. In a healthy human, carbonation of water does not lead to ill health effects. In fact it is quite healthy and can be made even more so by adding more bicarbonate and magnesium chloride to the mixture.

It is very simple to write off a good thing like bicarbonate when one does not understand the complexity of CO₂ and its relationship to bicarbonate. It is exactly because it turns to CO₂ that it provides such a great reason to use it in medicine and at home as a principle item for home care, oral treatment and

maintenance, sports medicine, and diabetes and kidney medicine as well as cancer treatment.

A lack of carbon dioxide (and thus oxygen) is a starting point for different disturbances in the body. If a carbon dioxide deficiency continues for along time then it can be responsible for diseases, ageing and even cancer.

Bicarbonate deficiency is the most unrecognized medical condition on earth. Clinical observation shows that low oxygen and low carbon dioxide occur together. Therapeutic increase of carbon dioxide, by inhalation of this gas diluted in air, is often an effective means of improving the oxygenation of the blood and tissues.[\[3\]](#) The same thing can be accomplished by taking bicarbonate orally and to everyone's surprise you can dive into a bath full of bicarbonate for intense therapeutic effect.

The reason this above study yields these surprising effects on blood chemistry is because increasing CO₂ levels is healthy. It supports the natural bicarbonate system of the body which in today's world is stressed to the limit. The pancreas is killed if the body is metabolically acid as it tries to maintain bicarbonates. Without sufficient bicarbonates, the pancreas is killed, insulin becomes a problem and hence diabetes becomes an issue.

The secret that everyone needs to understand is provided by a penetrating look at bicarbonate physiology. From my book Sodium Bicarbonate – Rich Man's Poor Man's Cancer Treatment we find:

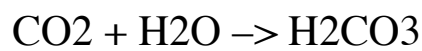
CO₂ is a gas at room temperature, and consists of a central carbon atom and two oxygen atoms arranged in a linear fashion. When dissolved into water, the CO₂ becomes hydrated to form carbonic acid (H₂CO₃). This hydration step takes a few seconds, though that may seem fast, many organisms from bacteria to humans use an enzyme called carbonic anhydrase to greatly speed up the process.

Once carbonic acid forms, it very quickly equilibrates with the other acids and bases in solution. It can, for example, lose one or two protons (H⁺). The extent to which this happens depends upon the pH and a variety of other factors. In seawater at pH 8.1, most of it (87 percent) will lose one proton to form bicarbonate, a small amount will lose two protons to form carbonate (13 percent), and a very small amount will remain as H₂CO₃ (<>1 percent). *All of these forms, however, interconvert faster than the blink of an eye, so one cannot identify one as carbonate and one as bicarbonate for more than a tiny fraction of a second.* All one can really say is that on average X percent is in the form of bicarbonate, and Y percent in the form of carbonate.[\[4\]](#)

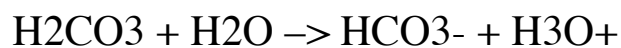
Total CO₂ is defined as the sum of carbonic acid and bicarbonate.

Carbonic acid plays a very important role as a buffer in our blood. The equilibrium between carbon dioxide and carbonic acid is very important for controlling the acidity of body fluids, and the carbonic anhydrase increases the reaction rate by a factor of nearly a billion to keep the fluids at a stable pH. Carbon dioxide does change the pH of water. This is how it works:

Carbon dioxide dissolves slightly in water to form a weak acid called carbonic acid, H₂CO₃, according to the following reaction:



After that, carbonic acid reacts slightly and reversibly in water to form a hydronium cation, H₃O⁺, and the bicarbonate ion, HCO₃⁻, according to the following reaction:



In the basement of human physiology are these lightening fast translations so for all intent and purpose drinking sparkling water is very similar to drinking bicarbonated water. And in fact we can add sodium bicarbonate to the sparkling water we can easily and joyfully make at home. *Scientists have*

found out in animal studies that sparkling water stimulates HCO₃- secretion in both the stomach and the duodenum but I am not sure whether it is actually being secreted or just transformed. The point is clear though that CO₂ and HCO₃⁻ (bicarbonate ions) are closely related and are interchangeable in the presence of water.

The normal ratio of bicarbonate to carbonic acid at normal pH is around 20:1; total CO₂ will therefore be about 5% higher than serum bicarbonate. When you observe a difference between total CO₂ and bicarbonate that is larger than 5%, the patient will be acidic. In aqueous solution, carbonic acid dissociates into a bicarbonate ion and a proton or into carbon dioxide and water depending on the conditions such as pH and the relative concentrations of each of the products, i.e., carbon dioxide and bicarbonate.

The carbonic acid, carbon dioxide bicarbonate axis represents the main buffers against dangerous pH changes; a buffer is a substance that resists changes in pH (acid concentration) by undergoing a reversible reaction. When weak acids are added to a buffer solution, the resulting change in pH is less than it would have been if the buffer were not present. When hydrogen ion (H⁺) is added, much of the hydrogen is taken up by the salt of the buffering acid. With bicarbonate, H⁺ bonds to HCO₃⁻ to form H₂CO₃, which is a weak acid. The main characteristic of a buffer is that the reaction is reversible — the hydrogen ion can be given back.

Perfect Water

If all the above is confusing it's understandable unless you have a background in chemistry. What is vital to know and understand is that raising the pH increases oxygen binding to hemoglobin, allowing more total oxygen to be carried. Drinking alkaline water, ingesting sodium bicarbonate, and even drinking sparkling water, especially if it contains high bicarbonate

levels, will alkalize the blood and increase oxygen delivery to the cells.

The perfect water would be rich in [magnesium](#) (magnesium also increases O₂ carrying capacity) and calcium and low in sodium chloride,” says Roberta Anding, director of sports nutrition at the Texas Medical Center, and a dietitian for the Houston Texans football team. According to a study in the American Journal of Medicine, that means more than 48 milligrams of magnesium and 85 milligrams of calcium per liter, and fewer than 195 milligrams of sodium per liter. Just because water has bubbles, either because they’ve been forced in by the manufacturer, by you at home or because they occurred naturally from a spring, doesn’t mean it also contains more or less of certain minerals than still water.

When people consume carbonated water the experience is quite distinctive especially when one takes the care to do this oneself at home exactly to one's taste. Some people enjoy drinking carbonated water plain, enjoying the bubbly texture and the mild flavor.

Connoisseurs of carbonated water may even prefer waters from a specific spring or bottling facility, which is why some restaurants offer several sparkling water choices on the menu. Carbonated water can also be mixed with juice, flavoring syrups, and other ingredients to create a flavored drink.

Historically, some people thought that carbonated water was beneficial to health, and some people continue to believe that it can settle an upset stomach. Some companies add minerals to their carbonated water, or carbonate natural mineral water to produce a flavored sparkling water. Tonic water, a variation on carbonated water, is classically made with quinine, a bitter substance which prevents malaria.

Mineral water has been around for centuries, used for bathing and drinking due to its health benefits. The Encyclopedia Britannica states that since ancient times, the water from mineral springs, especially hot springs, have

been used for therapeutic purposes such as relief from skin ailments, arthritis and rheumatism.

Many of the natural springs have become sites for spas and resorts such as Bath, Somerset, England; and Saratoga Springs, New York. Since the 1970s, mineral water has become popular as a beverage and it has been bottled and exported from springs in France and Italy, along with locations in the United States and Canada with varying degrees of sparkle.

Staying Safely Hydrated

Diabetics and everyone else need to make a conscious effort to keep fully hydrated. Lack of water can lead to dehydration, a condition that occurs when you don't have enough water in your body to carry on normal functions. Even mild dehydration – as little as a 1 percent to 2 percent loss of your body weight – can sap your energy and make you tired. Dehydration poses a particular health risk for the very young and the very old.

Substitute sparkling water for alcoholic drinks, coffee and colas, all of which are acidic and dehydrating is a pleasurable way of increasing hydration. Water is the most basic of all medicines and it is possible to make increased water intake pleasurable and highly medicinal.

If you want to make seltzer water even more healthy for you, you may want to consider making your own mixtures. You can mix this carbonated water with various fruit juices to get a healthy drink, which is like a soda, to fill your “fizzy” craving. Seltzer water also make great additives with warm versions, like apple cider as well. Having a great tasting drink and a healthy drink no longer have to be different things. You can have a great tasting drink that is healthy for you as well, without drinking a great deal of empty calories that will add to your waistline.

All in all, more Americans should probably be making the switch to these seltzer and soda waters instead of drinking so much soda. While sodas tend to dehydrate you, these tasty waters can help you stay hydrated and will have you feeling much better as well. If you want a healthy alternative for you and even for your children, these drinks can be great choices.

Physical Activity Increases CO₂

Those who engaged in moderate- to high-intensity exercise for at least 30 minutes a day were 50 percent less likely to develop cancer compared with the other men.

Increased oxygen consumption associated with moderate- to high-intensity exercise appears to reduce the risk of cancer, a new study has found. The Finnish study included 2,560 men, aged 42 to 61, whose leisure-time physical activity was assessed over one year. None of the men had a history of cancer, according to the report published online July 28 in the British Journal of Sports Medicine. The researchers found that an increase of 1.2 metabolic units (oxygen consumption) was related to a decreased risk of cancer death, especially in lung and gastrointestinal cancers, after they took into account factors such as age, smoking, alcohol consumption, body mass index, and fiber/fat intake.

As we can see CO₂ is very important in health and medicine. CO₂ is the key to increasing Oxygen and is the main reason why sodium bicarbonate is so effective in the treatment of cancer or its prevention. Sparkling water is a delightful method of increasing ones intake of CO₂ and bicarbonate as well as a help in keeping the body full hydrated. Thus it would help prevent serious diseases like cancer, diabetes and heart disease.

Special Note: For those who can afford it one can purchase water filter and alkaline water making unit and hook it right to your kitchen faucet — filters tap water to remove contaminants, chlorine, and chemicals.

The water is treated with ultraviolet to disinfect germs, bacteria and viruses. Then the water is **ionized by an electric current, creating alkaline water**, which provides a host of important health benefits, as well as acidic water for external use. The Ionizer Plus is distributed all over the world by [High Tech Health International](#),

I know these reputable people who sell one of the best infrared sauna units and they claim that more than 1,000 health practitioners – mostly MDs – recommend ionized water to their patients for conditions ranging from digestive problems to cancer.

[1] Gas bubbles in carbonated water are created by adding carbon dioxide to plain water. Carbonated water does not contain phosphoric acid, which strips bones of calcium and causes blood acidity. Carbonated water has one [ingredient](#) that soft drinks lack: bicarbonate. Bicarbonate minimizes calcium loss from the bones. Since blood acidity is not excessive when consuming carbonated water due to bicarbonate, more calcium stays in the bones.

[2] American Society for Nutritional Sciences J.Nutr.134:1058-1063

[3] Henderson, Y. Carbon Dioxide. Article in Encyclopedia of Medicine.

[4] www.fishchannel.com/saltwater-aquariums/aquarium-frontiers/co2-friend-or-foe.aspx?cm_sp=InternalClicks-_-RelatedArticles-_-saltwater-aquariums/aquarium-frontiers/co2-friend-or-foe

[5] Stimulation by sparkling water of gastroduodenal HCO₃⁻ secretion in rats. Med Sci Monit. 2009 Dec;15(12):BR349-56. Division of Pathological Sciences, Department of Pharmacology and Experimental Therapeutics, Kyoto Pharmaceutical University, Misasagi, Yamashina, Kyoto, Japan.

Dr. Mark Sircus Radio Show

<http://viratolive.com>

For many years Virato's guest today, [Dr. Mark Sircus](#), has been researching into the human condition and into the causes of disease. His primary focus in recent years has been the study of environmental toxicity and iatrogenic diseases. He has written extensively on the poisons in the environment, in our foods, medicines and dental practices. Dr. Sircus is the director of the *International Medical Veritas Association (IMVA)*, advocating radical changes in orthodox medicine.

Today's program focuses on ***Sodium Bicarbonate—common baking soda***. Baking soda has always been known as a quick remedy for stomach acid imbalances and for cleaning swimming pools and refrigerators. Few know that it is a most useful medicine for the treatment of cancer and kidney disease or to help resolve common colds and to alleviate the symptoms and dangers of influenza.

Cancer, Baking Soda, Maple Syrup or Honey.

(Radio Show). Tonight we are going back to medical basics with the application of the least expensive, safest and perhaps most effective cancer medicine there is. Sodium bicarbonate has been on many cancer patients' minds this past year. It has not been easy though to get to Rome or even contact Dr. Tullio Simoncini for treatment. And doctors willing to give bicarbonate IVs are not on every corner so it's been somewhat frustrating to have something so simple and effective remain elusive. If doctors doing such treatments want to be listed by the IMVA for referral please contact us.

Though we have known that oral intake of sodium bicarbonate will have the "Simoncini" effect on oral, esophagus and stomach cancer we have not focused at all on the systemic effect of bicarbonate taken orally. Every cancer patient and every health care practitioner should know that oral intake of sodium bicarbonate offers an instant and strong shift of blood pH into the

alkaline. So strong is the effect that athletes can notice the difference in their breathing as more oxygen is carried throughout the system and as more acids are neutralized.[i]

The difference can be stunning for those whose respiration is labored under intense exercise loading.[ii] This tells us to take very seriously the oral use of bicarbonate for cancer treatment no matter what other treatment is used.

This diagram shows the diffusion directions for H^+ , CO_2 , and O_2 between the blood and the muscle cells during exercise. The resulting concentration changes affect the buffer equilibria, shown in the upper right-hand corner of the diagram (yellow). If the amounts of H^+ and CO_2 exceed the capacity of hemoglobin, they affect the carbonic acid equilibrium, as predicted by Le Châtelier's Principle or the quantitative treatment in terms of equilibrium constants. As a result, the pH of the blood is lowered, causing acidosis. The lungs and kidneys respond to pH changes by removing CO_2 , HCO_3^- , and H^+ from the blood.

When one reads my thesis on different medicinal substances one has to always remember that I am a protocol man who does not support single shot cures for anything. With the publication of today's chapter on sodium bicarbonate and maple syrup sodium bicarbonate slips securely into the number three spot right behind magnesium chloride and iodine. Each of these three substances effects directly onto basic human physiology in a way most pharmaceutical drugs do not.

When used together we have a super threesome that will inexpensively go far to resolving many of the physical and even some of the emotional problems we and our children face. And if you have not made the connection please note that all three of these substances are used in emergency rooms and intensive care wards and they do commonly save lives every day with their inherent healing powers. See my chapter on emergency room medicine and cancer treatment.

All cancer sufferers and in fact every chronic disease patient should hold clearly in mind that pH is the regulatory authority that controls most cellular processes. The pH balance of the human bloodstream is recognized by

medical physiology texts as one of the most important biochemical balances in all of human body chemistry. pH is the acronym for "Potential Hydrogen".

In definition, it is the degree of concentration of hydrogen ions in a substance or solution. It is measured on a logarithmic scale from 0 to 14. Higher numbers mean a substance is more alkaline in nature and there is a greater potential for absorbing more hydrogen ions. Lower numbers indicate more acidity with less potential for absorbing hydrogen ions.

Our body pH is very important because pH controls the speed of our body's biochemical reactions. It does this by controlling the speed of enzyme activity as well as the speed that electricity moves through our body; the higher (more alkaline) the pH of a substance or solution, the more electrical resistance that substance or solution holds. Therefore, electricity travels slower with higher pH. If we say something has an acid pH, we are saying it is hot and fast. Alkaline pH on the other hand, bio-chemically speaking, is slow and cool.

Body pH level changes are intense in the profundity of their biological effects. Even genes directly experience external pH. pH differentially regulates a large number of proteins. Increased oxidative stress, which correlates almost exponentially with pH changes into the acidic, is especially dangerous to the mitochondria, which suffer the greatest under oxidative duress.

Epigenetics, which may now have begun eclipsing traditional genetics, commonly describes how factors such as diet and smoking, rather than inheritance influence how genes behave.

The following chapter comes after 100 pages of text in the Yeast and Fungi Invaders section of the Winning the War on Cancer book. Please note that sodium bicarbonate taken in water alone will have a powerful effect on entire body physiology because of the instant shift into alkaline pH levels.

Bicarbonate can be taken frequently throughout the day with half teaspoons amounts though for long term use lower doses are safer. For cancer patients initial use should be heavy and frequent to force a greater shift because smaller pH shifts can actually stimulate cancer growth.

Baking Soda & Maple Syrup Cancer Treatment

The Baking Soda & Maple Syrup cancer treatment focuses on delivering natural chemotherapy in a way that effectively kills cancer cells but significantly reduces the brutal side effects experienced with most standard chemotherapy treatments. In fact so great is the reduction that the dangers are brought down to zero.

Costs, which are a factor for the majority of people, of this particular treatment are nil. Though this cancer treatment is very inexpensive, do not assume it is not effective. The bicarbonate maple syrup cancer treatment is a very significant cancer treatment every cancer patient should be familiar with and it can easily be combined with other safe and effective natural treatments.

This cancer treatment is similar in principle to Insulin Potentiation Therapy (IPT). IPT treatment consists of giving doses of insulin to a fasting patient sufficient to lower blood sugar into the 50 mg/dl. In a normal person, when you take in sugar the insulin levels go up to meet the need of getting that sugar into the cells. In IPT they are artificially injecting insulin to deplete the blood of all sugar then injecting the lower doses of toxic chemo drugs when the blood sugar is driven down to the lowest possible value. During the low peak, it is said that the receptors are more sensitive and take on medications more rapidly and in higher amounts.

The bicarbonate maple syrup treatment works in reverse to IPT. Dr. Tullio Simoncini acknowledges that cancer cells gobble up sugar so when you encourage the intake of sugar it's like sending in a Trojan horse. The sugar is not going to end up encouraging the further growth of the cancer colonies because the baking soda is going to kill the cells before they have a chance to grow. Instead of artificially manipulating insulin and thus forcefully driving down blood sugar levels to then inject toxic chemo agents we combine the sugar with the bicarbonate and present it to the cancer cells, which at first are

going to love the present. But not for long!

This treatment is a combination of pure, 100% maple syrup and baking soda and was first reported on the Cancer Tutor site. When mixed and heated together, the maple syrup and baking soda bind together. The maple syrup targets cancer cells (which consume 15 times more glucose than normal cells) and the baking soda, which is dragged into the cancer cell by the maple syrup, being very alkaline forces a rapid shift in pH killing the cell. The actual formula is to mix one part baking soda with three parts (pure, 100%) maple syrup in a small saucepan. Stir briskly and heat the mixture for 5 minutes. Take 1 teaspoon daily, is what is suggested by Cancer Tutor but one could probably do this several times a day.

“There is not a tumor on God’s green earth that cannot be licked with a little baking soda and maple syrup.” That is the astonishing claim of controversial folk healer Jim Kelmun who says that this simple home remedy can stop and reverse the deadly growth of cancers. His loyal patients swear by the man they fondly call Dr. Jim and say he is a miracle worker. “Dr. Jim cured me of lung cancer,” said farmer Ian Roadhouse. “Those other doctors told me that I was a goner and had less than six months to live. But the doc put me on his mixture and in a couple of months the cancer was gone. It did not even show up on the x-rays.”

Dr. Jim discovered this treatment accidentally somewhere in the middle of the last century when he was treating a family plagued by breast cancer. There were five sisters in the family and four of them had died of breast cancer. He asked the remaining sister if there was anything different in her diet and she told him that she was partial to sipping maple syrup and baking soda. Since then, reported by a newspaper in Ashville, North Carolina, Dr. Jim dispensed this remedy to over 200 people diagnosed with terminal cancer and amazingly he claims of that number 185 lived at least 15 more years and nearly half enjoyed a complete remission of their disease. When combined with other safe and effective treatments like transdermal magnesium therapy, iodine, vitamin C, probiotics and other items like plenty of good sun exposure, pure water and clay treatments we should expect even higher remission rates.

It is very important not to use baking soda which has had aluminum added to it. The Cancer Tutor site reports that Arm and Hammer does have aluminum but the company insists that is not true. One can buy a product which specifically states it does not include aluminum or other chemicals. (e.g. Bob's Red Mill, Aluminum-Free, Baking Soda). Sodium bicarbonate is safe, extremely inexpensive and unstoppably effective when it comes to cancer tissues. It's an irresistible chemical, cyanide to cancer cells for it hits the cancer cells with a shock wave of alkalinity, which allows much more oxygen into the cancer cells than they can tolerate. Cancer cells cannot survive in the presence of high levels of oxygen. Studies have already shown how manipulation of tumor pH with sodium bicarbonate enhances some forms of chemotherapy.[iii]

“The therapeutic treatment of bicarbonate salts can be administered orally, through aerosol, intravenously and through catheter for direct targeting of tumors,” says oncologist Dr. Tullio Simoncini. “Sodium bicarbonate administered orally, via aerosol or intravenously can achieve positive results only in some tumors, while others – such as the serious ones of the brain or the bones - remain unaffected by the treatment.”

The maple syrup apparently enables and increases penetration of bicarbonate into all compartments of body, even those which are difficult or impossible to penetrate by other means. These compartments include the central nervous system (CNS), through the blood-brain barrier, joints, solid tumors, and perhaps even the eyes. IPT makes cell membranes more permeable, and increases uptake of drugs into cells. The maple syrup will make tissues more permeable, too. It will transport the bicarbonate across the blood-brain barrier and every other barrier in the body for sugar is universally needed by all cells in the body.

The essence of IPT is that it allows cancer drugs to be given in a smaller dose, far less toxic to normal cells, while building up lethally toxic concentrations in cancer cells. Both IPT and bicarbonate maple syrup treatments use the rabid growth mechanisms of the cancer cell against them.

Dr. Jim did not have contact with Dr. Simoncini and did not know that he is the only oncologist in the world who would sustain the combining of sugar

with bicarbonate. Dr. Simoncini always directs his patients to dramatically increase sugar intake with his treatments but has never thought to mix the two directly by cooking them together.

Because his treatments depend on interventionist radiologists who insert catheters to direct the bicarbonate as close to the affected area as possible, or physicians willing to do expensive intravenous treatments, I pushed bicarbonate up into the number six slot in the IMVA cancer protocol. With the discovery of Dr. Jim's work bicarbonate comes back into our number three spot right behind magnesium chloride and iodine.

That number three slot for a brief time was held by hemp oil containing THC. The great advantage that maple syrup and bicarbonate treatment has over this type hemp oil is that it is legal thus easily obtainable. The two together, backed by a solid protocol of other nutritional substances makes winning the war on cancer almost a certainty.

When using these substances it is safer to change one's vocabulary and not say one is treating and curing cancer. Far better to conceptualize that one is treating the infectious aspect of cancer, the fungus and yeast colonies and the yeast like bacteria that are the cause of TB.

Dr. Simoncini says that, "In some cases, the aggressive power of fungi is so great as to allow it, with only a cellular ring made up of three units, to tighten in its grip, capture and kill its prey in a short time notwithstanding the prey's desperate struggling.

Fungus, which is the most powerful and the most organized micro-organism known, seems to be an extremely logical candidate as a cause of neoplastic proliferation." pH of the blood is the most important factor to determine the state of the microorganisms in the blood.

"Sodium bicarbonate therapy is harmless, fast and effective because it is extremely diffusible. A therapy with bicarbonate for cancer should be set up with strong dosage, continuously, and with pauseless cycles in a destruction work which should proceed from the beginning to the end without interruption for at least 7-8 days. In general a mass of 2-3-4 centimeters will begin to consistently regress from the third to the fourth day, and collapses

from the fourth to the fifth,” says Dr. Simoncini.

There are many ways to use sodium bicarbonate and it is a universal drug like iodine and magnesium chloride. Raising pH increases the immune system's ability to kill bacteria, concludes a study conducted at The Royal Free Hospital and School of Medicine in London.

Viruses and bacteria that cause bronchitis and colds thrive in an acidic environment. To fight a respiratory infection and dampen symptoms such as a runny nose and sore throat, taking an alkalizing mixture of sodium bicarbonate and potassium bicarbonate will certainly help.

The apple cider vinegar 1/4 teaspoon and 1/4 teaspoon baking soda taken 2 times or more a day is another treatment as is lemon and baking soda, or lime and baking soda formulas. Perhaps honey could be substituted for maple syrup for those who live in parts of the world where maple syrup is not available but to my knowledge no one has experimented with this.

Mark Sircus Ac., OMDDirector International Medical Veritas Association
<http://imva.info>

Lessons in Cancer and General pH Management

by the International Medical Veritas Association

Most of us are going to be surprised to find out that there is an oncologist in Rome Italy, Dr. Tullio Simoncini, destroying cancer tumors with sodium bicarbonate.[i] Sodium bicarbonate is safe, extremely inexpensive and unstoppably effective when it comes to cancer tissues. It's an irresistible chemical, cyanide to cancer cells for it hits the cancer cells with a shock wave of alkalinity, which allows much more oxygen into the cancer cells than they can tolerate. Cancer cells cannot survive in the presence of high levels of oxygen. Sodium bicarbonate is, for all intent and purposes, an instant killer of

tumors. Full treatment takes only days, as does another cancer treatment that heats the cancer cells with laser generated heat. (At bottom see combining pH shift with heat.)

The extracellular (interstitial) pH (pHe) of solid tumors is significantly more acidic compared to normal tissues. [ii]

Case one: A patient diagnosed with pulmonary neoplasm of the lung, underwent treatment with sodium bicarbonate, before submitting to surgery to remove part of the lung. Treatment consisted of sodium bicarbonate administered orally, by aerosol, and IV. After first treatment reduction of nodules and absorption was evident, and after 8 months was no longer visible at all. Treatments also reduced size of the liver and results were confirmed by both X-ray and CAT scan.

Studies have shown how manipulation of tumour pH with sodium bicarbonate enhances some forms of chemotherapy.[iii] Proteins can be modified both in vivo and in vitro by increases in acidity. In fact pH is the regulatory authority that controls most cellular processes. The pH balance of the human bloodstream is recognized by medical physiology texts as one of the most important biochemical balances in all of human body chemistry. pH is the acronym for "Potential Hydrogen". In definition, it is the degree of concentration of hydrogen ions in a substance or solution. It is measured on a logarithmic scale from 0 to 14. Higher numbers mean a substance is more alkaline in nature and there is a greater potential for absorbing more hydrogen ions. Lower numbers indicate more acidity with less potential for absorbing hydrogen ions.

Our body pH is very important because pH controls the speed of our body's biochemical reactions. It does this by controlling the speed of enzyme activity as well as the speed that electricity moves through our body. The higher (more alkaline) the pH of a substance or solution, the more electrical resistance that substance or solution holds. Therefore, electricity travels slower with higher pH. If we say something has an acid pH, we are saying it is hot and fast. Alkaline pH on the other hand, biochemically speaking, is slow and cool.

Cancer tissues have a much higher concentration of toxic chemicals, pesticides, etc then do healthy tissues.

In 1973, a study conducted by the Department of Occupational Health at Hebrew University-Hadassah Medical School in Jerusalem found that when cancerous breast tissue is compared with non-cancerous tissue from elsewhere in the same woman's body, the concentration of toxic chemicals such as DDT and PCBs was "much increased in the malignant tissue compared to the normal breast and adjacent adipose tissue." [iv] This should say something to the oncologists of the world about chemical etiologies that are going undiagnosed and untreated.

Part of any successful cancer treatment includes chelation and detoxification of heavy metals and a host of toxic chemicals, which are all invading our bodies' everyday. It is literally raining mercury, uranium contamination is increasing, lead we are discovering is even more toxic than anyone ever believed and is even in the bread that we eat, arsenic is in our chicken, the government still wants you to get your yearly mercury flu shot, dentists of course are still using hundreds of tons of mercury exposing patients to internalized toxic waste dumps (mercury vapors from hell), fluoride is still put in the water and chlorine is breathed in most showers. This just covers a small slice of the toxic disaster that is the hallmark of life in the 21st century. But oncologists have just not been able to understand that cancer patients are suffering from poisoning on a massive scale with all the chemicals scientists have already established cause cancer.

The IMVA recommends alkaline foods and sodium bicarbonate so that the pH of the blood remains high, which in turn means that the blood is capable of carrying more oxygen. This in turn keeps every cell in the body at peak efficiency and helps the cell eliminate waste products. Detoxification and chelation will proceed more easily and safely under slightly alkaline conditions. Increased urinary pH reduces oxidative injury in the kidney so it behooves us to work clinically with bicarbonate.

Patients receiving sodium bicarbonate achieved urine pHs of 6.5 as opposed to 5.6 with those receiving sodium chloride. This alkalization is theorized to have a protective effect against the formation of free-radicals

that may cause nephropathy. [v]Dr. Michael Metro

Body pH level changes are intense in the profundity of their biological effects. Even genes directly experience external pH. pH differentially regulates a large number of proteins. Increased oxidative stress, which correlates almost exponentially with pH changes into the acidic, is especially dangerous to the mitochondria, which suffer the greatest under oxidative duress. Epigenetics, which may now have begun eclipsing traditional genetics, commonly describes how factors such as diet and smoking, rather than inheritance influence how genes behave.

The great advantage of knowing the prime cause of a disease is that it can then be attacked logically and over a broad front. Dr. Otto Warburg

Dr. Otto Warburg, two times Nobel Prize winner, stated in his book, *The Metabolism of Tumors* that the primary cause of cancer was the replacement of oxygen in the respiratory cell chemistry by the fermentation of sugar. The growth of cancer cells is initiated by a fermentation process, which can be triggered only in the absence of oxygen at the cell level. What Warburg was describing was a classic picture of acidic conditions. Just like overworked muscle cells manufacture lactic acid by-products as waste, cancerous cells spill lactic acid and other acidic compounds causing acid pH.

After we just saw how important sulfur is in human health and how useful a basic chemical like sodium thiosulfate can be, we now get a crash course in the power of sodium bicarbonate and the act of instantly turning cancer cells alkaline. Might as well shoot a guided cruise missile at them - so effective, safe, quick and precise is sodium bicarbonate, inexpensive as well. Just a few pennies a day of it will keep cancer further away, keeping it at arms length from ourselves, patients and loved ones. It is something we can use to treat our water with as well, excellent to put in distilled or reverse osmosis water or any water for that matter.

A true understanding of cancer is impossible without understanding why some tissues in the body are deficient in oxygen and therefore prone to cancer. Cancerous tissues are acidic, whereas healthy tissues are alkaline. Water (H_2O) decomposes into H^+ and OH^- . When a solution contains more

H⁺ than OH⁻ then it is said to be acid. When it contains more OH⁻ than H⁺ then it is said to be alkaline. When oxygen enters an acid solution it can combine with H⁺ ions to form water. Oxygen helps to neutralize the acid, while at the same time the acid prevents oxygen from reaching the tissues that need it. Acidic tissues are devoid of free oxygen. An alkaline solution is just the reverse. Two hydroxyl ions (OH⁻) can combine to produce one water molecule and one oxygen atom. In other words, an alkaline solution can provide oxygen to the tissues.

The pH scale goes from 0 to 14, with 7 being neutral. Below 7 is acid and above 7 is alkaline. The blood, lymph and cerebral spinal fluid in the human body are designed to be slightly alkaline at a pH of 7.4.

At a pH slightly above 7.4 cancer cells become dormant and at pH 8.5 cancer cells will die while healthy cells will live. This has given rise to a variety of treatments based on increasing the alkalinity of the tissues such as vegetarian diet, the drinking of fresh fruit and vegetable juices, and dietary supplementation with alkaline minerals such as calcium, potassium, magnesium, cesium and rubidium. But nothing can compare to the instant alkalizing power of sodium bicarbonate for safe and effective treatment of cancer.

Like magnesium chloride or sulfates are excellent emergency medicines, basic chemicals, nutritional in nature, sodium bicarbonate is a nutritional medicine meaning it cannot and will not end up controlled by CODEX. To control bicarbonate they would have to demand mothers stop making cake with it. We might thus identify sodium bicarbonate as an emergency medicine for cancer with the above supporting approaches working on broader levels to help overall physiology change to a degree where body chemistry is unfavorable for new cancer growth.

Cancer seems to grow slowly in a highly acid environment (because the acids cause it to partially destroy itself) and may actually grow more quickly as your body becomes more alkaline prior to reaching the healthy pH slightly above 7.4 where the cancer becomes dormant. Therefore it is important to get pH above 7.4 quickly. Once one has achieved a pH above 7.4, it is useful to monitor saliva pH regularly to ensure that the body remains sufficiently

alkaline.

Earlier and more frequent use of sodium bicarbonate was associated with higher early resuscitability rates and with better long-term neurological outcome. Sodium bicarbonate is beneficial during CPR.[vi]

“The therapeutic treatment of bicarbonate salts can be administered orally, through aerosol, intravenously and through catheter for direct targeting of tumors.” All of Dr. Tullio Simoncini’s treatments with sodium bicarbonate are directed as specifically as possible to the organs involved, for example, vaginally as well as abdominally into the peritoneal space for cervical cancer, through the hepatic artery for liver cancer in order to get the solution as close to the affected area as possible. Sodium bicarbonate administered orally, via aerosol or intravenously can achieve positive results in most tumors, including the brain, while others, such as the serious ones of the bones can remain unaffected. Dr. Simoncini, with the help of interventionist radiologists was able to reach those areas of the body that had previously been inaccessible. This was achieved through positioning appropriate catheters either in cavities for peritoneum and pleura, or in arteries to reach other organs.[vii]

The most effective measure to treat RT-induced mucositis in patients with head and neck cancer is frequent oral rinsing with a sodium bicarbonate rinse, to reduce the amount of oral microbial flora.[viii]

Case two: A nine-year-old child is hospitalized and diagnosed with Ewing’s Sarcoma on the right humerus. Despite several chemotherapy cycles surgery removed the humeral bone. Growth of three tumor masses continued despite continued efforts to stop progression. Sodium bicarbonate salts treatment were then started administered by catheter into the right sub-clavian artery in order to administer the salts (phleboclysis of 500 cc at five per cent) directly on the tumoral masses. Of the 3 masses shown by the scographic scan of May 7, 2001, whose size is respectively: a. 6.5 cmb. 4.4 cmc. 2.4 cm

After the sodium bicarbonate salts treatment only one tumor was left, with a size of only 1.5 cm, which is most likely residual scarring, as shown by the echography of September 10, 2001.

Sodium bicarbonate injection is also 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. Sodium bicarbonate is further indicated in the treatment of drug intoxications, including barbiturates. Sodium carbonate has been found effective in treating poisoning or overdose from many chemicals and pharmaceutical drugs by negating the cardiotoxic and neurotoxic effects. [ix]

Sodium bicarbonate is useful in treating neurological disorders in children.

An extremely simple therapy used by physicians who treat autism is to supply a mild antidote that neutralizes the excess acids. The most convenient product is a nonprescription drug called AlkaSeltzer Gold™. Do not use any other kind of AlkaSeltzer™. AlkaSeltzer Gold™ is simply a very safe product (sodium and potassium bicarbonate) that helps to neutralize excess acids of any kind.

Dr. William Shaw. Biological Treatments for Autism and PDD

Knowledge of sodium bicarbonate is important for parents because the rate of childhood cancer is growing exponentially. But parents who resist the radiation burning, cutting and the lethal chemicals are regularly hauled before the courts only to have their children taken away from them. Oncologists are increasingly resorting to the justice system to have children made wards of the courts who then turn them over to medically irresponsible practitioners. It is inexcusable separating a child from his mother and father in the middle of a medical crisis. Adding to the stress by tormenting patients' hearts and souls has nothing to do with safe or effective medicine. The naked truth is doctors and medical institutions have not earned the necessary trust for this level of intervention in people's lives. With patient safety slipping year by year,[x] children are not safe in hospitals, much less so if forced at gunpoint from their parents embrace.

One mother wrote, "It worked so well for both of my children that the die-off was an uneventful experience, even though they both had very high levels of

yeast.” The restoring of acid/alkaline balance also relieves many allergies. “These children also had grave disturbances in electrolyte chemistry, and tended to be acidotic (low CO). The data that unfolded was fascinating and clearly earmarked the acidosis and hypoxic state (low serum bicarbonate = low O₂ levels). Potassium bicarbonate, sodium bicarbonate, magnesium carbonate and the like were used. Now we began to understand why so many children responded to Buffered C (potassium bicarbonate, calcium carbonate, magnesium carbonate), and others needed a more specific buffer (in some children for example niacin was grossly depleted and they required niacin bicarbonate),” wrote Patricia Kane.

The acid/alkaline balance is one of the most overlooked aspects of health, though many have written much about it. In general, the American public is heavily acid, excepting vegetarians.

Case three: A 62-year-old patient undergoes surgery in December 1998 for endometrial adenocarcinoma, followed by successive cycles of radiotherapy and anti-hormone therapy. Following the thickening of the peritoneum and the growth of several lymph nodes due to carcinosis; from the clinical point of view, the patient’s condition decayed with the presence of exhaustion, general swelling, intestinal meteorism, irregularity of evacuation, steady feeling of heaviness and blood pressure instability.

Treatment with a 5% sodium bicarbonate solution administered alternately thru an endoperitoneal catheter and via IV showed rapid improvement to a normal condition of health. A final CAT scan confirms the regression of the peritoneal carcinosis and a stabilization of the size of the lymph nodes when compared to the preceding year.

The kidneys are usually the first organs to show chemical damage upon uranium exposure, military manuals suggest doses or infusions of sodium bicarbonate to help alkalinize the urine if this happens. This makes the uranyl ion less kidney-toxic and promotes excretion of the nontoxic uranium-carbonate complex. The oral administration of sodium bicarbonate diminishes the severity of the changes produced by uranium in the kidneys.[xi]

Case four: A 40-year-old patient underwent surgical intervention (left radical mastectomy) for mammary carcinoma seven months earlier. After three months of chemotherapy, the patient is affected by: “diffused pulmonary and hepatic metastasis; bone metastasis particularly to the fifth and sixth lumbar vertebrae, with invasion and compression of the medullar channel, which is causing extreme pain which makes the patient unresponsive to any treatment.” All pain suppressant drugs – morphine included – are totally ineffective and the patient is totally prostrate even unable to sleep. Believing that fungal colonies amassed in the medullar channel will respond to administration of sodium bicarbonate salts, lumbar injections are begun.

Dr Tullio Simoncini recounts: "As I administer it by slowly injecting 50 cc of sodium bicarbonate solution at 8.4 %, the patient tosses and with a thread of a voice confesses to me that she has slept only two hours in the last week. Exhausted, she whispers to me: “If only I could sleep half an hour tonight.” But the day after, she calls me on the phone and says: “I have slept all night”. After two more lumbar injections of the bicarbonate salts in the next month, the pain disappeared completely. Magnetic Resonance imaging reports performed before and after treatment were defined by hospital head of the radiology department as "shocking."

Sodium bicarbonate is the chemical compound with the formula NaHCO_3 . Sodium bicarbonate (baking soda) is commonly used as an antacid for short-term relief of stomach upset, to correct acidosis in kidney disorders, to make the urine alkaline during bladder infections and to minimize uric acid crystallization during gout treatment. Prescription sodium bicarbonate products are given by injection to treat metabolic acidosis and some drug intoxications. Sodium bicarbonate is available as a nonprescription medical as well as a general house hold item. It is also used with other non-prescription drugs for short-term treatment of various conditions to treat anything from fever to moderate pain.

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 neutralizes acids present in gases (in particular hydrochloric acid, sulphur dioxide, hydrofluoric acid) to form sodium salts (sodium chloride, sodium sulphate, sodium fluoride, sodium carbonate), which are all known as Residual Sodium Chemicals. Sodium bicarbonate can be made into a paste salve with vinegar, it relieves burning from bug stings (particularly bee stings), poison ivy, nettles, and sunburn. It is used as an antacid to treat acid indigestion and heartburn. Mixed with water in a 10% solution can soften earwax for removal.

Substituting a sodium bicarbonate solution for saline infusion prior to administration of radiocontrast material seems to reduce the incidence of nephropathy.[xii]Dr. Thomas P. KennedyAmerican Medical Association

Because sodium bicarbonate has long been known and is widely used, it has many other names including sodium hydrogen carbonate, sodium bicarb, baking soda, bread soda, cooking soda, bicarb soda, saleratus or bicarbonate of soda. It is soluble in water. This white solid is crystalline but often appears as a fine powder. It has a slight alkaline taste resembling that of sodium carbonate. It is a component of the mineral natron and is found dissolved in many mineral springs. It is also produced artificially. World wide production is on the scale of 100,000 ton/year. Sodium bicarbonate is primarily used in cooking (baking) where it reacts with other components to release carbon dioxide, that helps dough "rise."

It is commonly used to increase the pH and total alkalinity of the water for pools and spas. Sodium bicarbonate can be added as a simple solution for restoring the pH balance of water that has a high level of chlorine. It is sometimes used in septic tanks to control pH and bacteria.

Sodium bicarbonate-rich mineral water in conjunction with a low-salt diet may have a beneficial effect on calcium homeostasis.[xiii]

Distilled water is not safe, it lacks bicarbonates and minerals and yes, it is acid forming to the body. Yet it is an excellent aid in detoxification and chelation for its purity pulls on toxicities in the body. Part of the reason why our body is acid is that it lacks enough bicarbonate necessary to neutralize the acid. Whenever the water lacks the proper bicarbonates to neutralize the

water in distilled water your body basically becomes a little more acid. But we can easily treat distilled or reverse osmosis water by adding bicarbonate and magnesium and perhaps even some sodium thiosulfate.

pH of the blood is the most important factor to determine the state of the microorganisms in the blood.

The native chemical and physical properties of sodium bicarbonate account for its wide range of applications, including cleaning, deodorizing, buffering, and fire extinguishing. Sodium bicarbonate neutralizes odors chemically, rather than masking or absorbing them. Consequently, it is used in bath salts and deodorant body powders. Sodium bicarbonate tends to maintain a pH of 8.1 (7 is neutral) even when acids, which lower pH, or bases, which raise pH, are added to the solution. Its ability to tabletize makes it a good effervescent ingredient in antacids and denture cleaning products. Sodium bicarbonate is also found in some anti-plaque mouthwash products and toothpaste.

Sodium bicarbonate also is indicated in severe diarrhea which is often accompanied by a significant loss of bicarbonate. Vigorous bicarbonate therapy is required in any form of metabolic acidosis where a rapid increase in plasma total CO₂ content is crucial † e.g. cardiac arrest, circulatory insufficiency due to shock or severe dehydration, and in severe primary lactic acidosis or severe diabetic acidosis.

Sodium Bicarbonate Injection, USP is administered by the intravenous route. In cardiac arrest, a rapid intravenous dose of one to two 50 mL vials (44.6 to 100 mEq) may be given initially and continued at a rate of 50 mL (44.6 to 50 mEq) every 5 to 10 minutes if necessary (as indicated by arterial pH and blood gas monitoring) to reverse the acidosis. Caution should be observed in emergencies where very rapid infusion of large quantities of bicarbonate is indicated. Bicarbonate solutions are hypertonic and may produce an undesirable rise in plasma sodium concentration in the process of correcting the metabolic acidosis. In cardiac arrest, however, the risks from acidosis exceed those of hypernatremia.

In the current system, if a promising compound can't be patented, it is highly unlikely ever to make it to market — no matter how well it performs in the

laboratory or in emergency room situations. The hormone melatonin,[xiv] sold as an inexpensive food supplement in the United States, has repeatedly been shown to slow the growth of various cancers when used in conjunction with conventional treatments. Dr. Paolo Lissoni, another Italian oncologist has written many articles about this hormone and conducted clinical trials. But he has despaired over the pharmaceutical industry's total lack of interest in his treatment approach.

We need a new approach to fight cancer, one that will work safely and effectively since the majority of us are now destined to have to suffer through cancer at one point or another in our lives. The situation in the field of oncology is horrendous and in the area of childhood oncology they have earned their place in the book *The Terror of Pediatric Medicine*, (which one can download as a free e-book.)

Most people today cringe at the idea of finding a cancer then slashing, burning and poisoning it to smithereens. Most would agree that the mainstream cancer approach offers only marginal benefits at best, and providers push screening and aggressive treatment in part because they have nothing else to give, and also because it's very profitable.

If the body's cellular metabolism and pH is balanced it is susceptible to little illness or disease.

Since 1971, when President Nixon declared war on cancer, the budget of the National Cancer Institute has increased to \$4.8 billion from half a billion and cancer rates are still going up. For most of the past half-century, medical treatment of invasive tumors like those of the breast and colon has relied mainly on drugs, radiation or both, in effect carpet-bombing the DNA of cancer cells. These highly toxic treatments do not address the root causes of cancer and are extremely dangerous, medical approaches involving the highest risks.

The great variety of cancers must reflect a fundamental mechanism by which the disease arises, one that has not been so clearly apparent until now.

Though allopathic medicine already uses sodium bicarbonate it will not any day soon turn to its own arsenal of already available safe and inexpensive medications like sodium bicarbonate or magnesium chloride. The medical industrial complex seems unwilling to change its views on cancer so patients will need to quietly ask their doctors for intravenous bicarbonate without specifying it as a substance they want to use to cure their cancer. It will be easier to find someone if one approaches with a need to treat acidic conditions than the actual cancer. Few doctors are willing to risk their licenses so it is better not to put them in an uncomfortable situation that they cannot control.

The closer the pH is to 7.35 - 7.45, the higher our level of health and well being and our ability to resist states of disease.

Sadly this does not address the need for the use of catheters which target tumors more directly thus pushing us toward a more complete protocol that will target cancer in a more general and comprehensive way. This needs to be done anyway because killing the tumor with a rush of alkalinity that provokes an oxygen rush into the cells will not prevent the condition from reoccurring. Though we can think that acidity is a basic cause of cancer a more basic cause is addressed when we look at what leads to the acidic conditions that are so prevalent in our bodies today.

Sodium bicarbonate is an anti - fungin substance that is very diffusible and thus very effective.

Dr Tullio Simoncini says, “It is useful to consider the extreme sensitivity of fungi to saline and electrolytic solutions. These solutions, because of their extreme capacity for diffusion, are able to reach all the myceliar biological expressions, including the most infinitesimal ones. Salts and bicarbonates, by making the “terrain” completely inorganic, eliminates the slightest organic fonts that fungi could use for nourishment. In this context, sodium bicarbonate, which is currently used in children’s oral candidiases, appears to be a simple and handy weapon capable of uprooting, inhibiting, or attenuating any neoplastic formation wherever it is possible to easily apply it.”

Cancer is actually a four - letter word — ACID, especially lactic acid as a waste product due to the low oxygen level and waste products of yeast and fungus.

For centuries, medicated baths have been one of the first lines of treatment for psoriasis. Even today, with sophisticated immunosuppressive treatments available, Dead Sea salts and spa waters are recognized to be beneficial in the management of psoriatic patients.

To assess statistically the efficacy of sodium bicarbonate baths in psoriasis patients, thirty-one patients with mild-moderate psoriasis were studied. Almost all patients who used NaHCO_3^- reported a statistically valuable improvement. NaHCO_3^- baths reduced itchiness and irritation; in general, the patients themselves recognized a beneficial impact on their psoriasis, so much so that they have continued to bathe in NaHCO_3^- even after the end of the study. [xv]

“Sodium bicarbonate therapy is harmless, fast and effective because it is extremely diffusible. A therapy with bicarbonate for cancer should be set up with strong dosage, continuously, and with pauseless cycles in a destruction work which should proceed from the beginning to the end without interruption for at least 7-8 days. In general a mass of 2-3-4 centimetres will begin to consistently regress from the third to the fourth day, and collapses from the fourth to the fifth. Generally speaking, the maximum limit of the dosage that can be administered in a session gravitates around 500 cc of sodium bicarbonate at five per cent solution, with the possibility of increasing or decreasing the dosage by 20 per cent in function of the body mass of the individual to be treated and in the presence of multiple localisations upon which to apportion a greater quantity of salts,” instructs Dr Simoncini.

In the early stages of acidic pH in the body’s tissues, the warning symptoms are mild. These include such things as skin eruptions, headaches, allergies, colds, flu and sinus problems. These symptoms are frequently treated (manipulated) with antibiotic drugs and suppressive medications. The longer and the deeper we become acidic the more our illness takes hold so it’s best to fight acidic conditions early on and in every presenting clinical situation.

Certainly a highly toxic drug like anti viral Tamiflu won't do a fraction of the job sodium bicarbonate will do especially if it's combined with magnesium chloride and iodine as well as high levels of vitamin C.

In late stages of acidic pH we need to turn to the most alkaline minerals to increase our throw weight of alkalinity into cancer cells. Mass spectrographic and isotope studies have shown that potassium, rubidium, and especially cesium are most efficiently taken up by cancer cells. This uptake was enhanced by Vitamins A and C as well as salts of zinc and selenium. The quantity of cesium taken up was sufficient to raise the cell to the 8 pH range. [xvi]

There seems little grace left in medicine and it is a disgrace that allopathic medicine does not even use its own emergency medicines, proven heavies like magnesium sulfate and chloride, sodium bicarbonate and iodine to anywhere near a thousandth of a percent of their real medical potentials.

Combining pH shift with Heat

In the opening paragraph of this article we mentioned killing cancer cells with lasers, with heat.

**“Give me a chance to create fever and I will cure any disease”.
Parmenides 2,000 years ago.**

Fever is one of the body's own defensive and healing forces, created and sustained for the deliberate purpose of restoring health. The high temperature speeds up metabolism, inhibits the growth of the invading virus or bacteria, and literally burns the enemy with heat. Fever is an effective protective and healing measure not only against colds and simple infections, but against such serious diseases as polio and cancer.

The idea of destroying cancer with heat is certainly not new and has been widely accepted for a very long time, but has had very limited applications because it was finally concluded that, in order to ensure destruction of the

cancerous growth, it is necessary to reach a temperature deadly to healthy cells as well. Many attempts have been made to bypass this problem and some methodologies have been developed like: localized hyperthermia, laserthermia, radio-fractionated hyperthermia and TTT. But they all have limitations and cannot complete the job, because they cannot achieve total necrosis and, unless the entire mass of neoplastic tissue is destroyed, the cancer will continue to grow. But:

Hyperthermia gives cancer a hard time: removing accumulations of stored toxic chemicals that cause cancer improving circulation so that tissues are both nourished with oxygen and flushed of acidic metabolic wastes weakening or even killing cancer cells that have a lower tolerance for heat than healthy cells. Thus we should easily conclude that far-infrared sauna treatments are going to help a cancer sufferer no matter which way we slice the treatment protocol.

But for a more targeted heat to kill cancer tumors we have Dr. Antonella Carpenter who has perfected the treatment of cancer cells with heat through her use of lasers. She generates the death of the cells by suffocation via heat. Dr Carpenter, a physicist with a clinic in Little Rock, says, “As long as the entire neoplastic mass is exposed to the laser light, for the correct amount of time, the success is complete and the results, as well as the healing stages, are always the same.”

Her cancer treatment is called Light Induced Enhanced Selective Hyperthermia, which in itself pretty much summarizes all the characteristics of this new therapy. With this form of treatment cancer cells reach a deadly temperature level quickly and are subject to irreversible damage and therefore die, either immediately or within 48 hours.

In a separate chapter we will be talking about hyperthermia in another context, that of the hot bathtub which we will learn to fill with healing substances like sodium bicarbonate. We will be creating our own hot springs, healing pools that will do wonders for our health. Medical treatments of the first order can be had right inside your very own bathtub.

Mark Sircus Ac., OMDDirector International Medical Veritas Association

Reducing Radiation Damages with Baking Soda

So deep are the protective, buffering and neutralizing properties of bicarbonate that it is used even with radiation exposure to protect the kidneys and other tissues. In a world that is already overexposed to uranium and mercury, sodium bicarbonate becomes even more important because mercury and uranium oxide directly attack the nuclear material and mitochondria of the cells.

The oral administration of sodium bicarbonate diminishes the severity of the changes produced by uranium in the kidneys.[\[1\]](#)

The kidneys are usually the first organs to show chemical damage upon uranium exposure. Old military manuals suggest doses or infusions of sodium bicarbonate to help alkalinize the urine if this happens. This **makes the uranyl ion less kidney-toxic and promotes excretion of the nontoxic uranium-carbonate complex.** The oral administration of sodium bicarbonate diminishes the severity of the changes produced by uranium in the kidneys.

It does this for all the heavy metals and other toxic chemicals including chemotherapy agents, which are highly lethal even in low dosages. After depleted uranium weapons were used starting in the first Gulf War, the United States has polluted the world with uranium oxide and it is showing up more and more in tests doctors perform. With a half life of several billion years we had better be prepared to get used to dealing with the toxic effects and help our bodies clear it more easily through the kidneys. Sodium bicarbonate is an absolute must item in any field hospital and it should be in used and recommended in all clinics and be present in every home medicine cabinet.

In reality we need a more descriptive image for bicarbonate. Its pharmacological characteristics, even though widely used, are not well understood. What does bicarbonate really do? Well, instead of a muscleman with a mallet, an even better image would be a strong janitor mopping up the messes and carrying the poisons away. This strong janitor protects tissues and leaves an alkaline film or trail behind to make sure everything stays safe. In medicine, sodium bicarbonate is the cleaning and security man proven loyal through decades of faithful service and he can be brought in to provide some sort of protection in cases where people are suffering from radiation toxicity.

So useful and strong is sodium bicarbonate that at Los Alamos National Laboratory in New Mexico, researcher Don York has used baking soda to clean soil contaminated with uranium. **Sodium bicarbonate binds with uranium, separating it from the dirt; so far, York has removed as much as 92 percent of the uranium from contaminated soil samples.** I started writing about baking soda after discovering that the United States Army recommends the use of bicarbonate to protect the kidneys from radiation damage.

Blaise W. LeBlanc, a former research chemist with the Dep. of Agriculture identified the byproduct hydroxymethylfurfural, (HMF) as a potential culprit in colony collapse disorder of bees. LeBlanc has a solution to minimize HMF toxicity: **By adding bases (such as sodium bicarbonate, or baking soda, lime, potash or caustic soda) to HFCS, the pH rises and HMF levels drop.** Baking Soda can safely remove paint, grease, oil and smoke residue, decreasing workers' exposure to harsh chemicals and eliminating much of the hazardous waste associated with other cleaners. "Baking Soda is able to clean in areas where other substances pose fire hazards, because baking soda is a natural fire extinguisher," says Kenneth Colbert, a general manager for Arm & Hammer. This is the reason it's used by oncology centers to control chemo agent spills and its actually used intravenously to protect patients from the hazardous toxicity of chemotherapy.

Bicarbonate and Nuclear Fallout

If the bombs start dropping anywhere on earth you will need to have a large amount of sodium bicarbonate on hand. Minimum stocks should be 25 or 50 pounds. You will also need iodine, magnesium chloride, spirulina and a long list of survival items. I am recommending that one stocks up on bicarbonate, which is extraordinarily inexpensive.

Normally I recommend someone start with using one pound of bicarbonate in a bath but that could easily be two or three pounds in an emergency situation. It is not a joke that one can get fifty pounds of the most powerful medicines on earth for thirty five bucks. You will also need a lot of magnesium salts and the very best and most penetrating of them is the magnesium chloride in the form of magnesium bath flakes.

I was able to talk to the folks at [LL's Magnetic Clay](#) Company and for two weeks they will give 40 percent off of their normal retail price for 32 pounds of bath flakes. That translates to 90 dollars for Ancient Minerals bath flakes which come from ancient deep underground deposits that are the purest you can find.

They also sell the Nascent Iodine which I recommend and you will want on hand for yourself and children. The time to start strengthening your thyroid is now. This is not a scare tactic it is just prudent preventative medicine.

The Magnetic Clay Company obviously sells a lot of clay and this is also very important to have on hand for medical, environmental and nuclear emergencies. Clay baths are a very strong way of removing heavy metals from the body and would increase our chances of survival if exposed to nuclear fallout. Spirulina has been used heavily by the Russians after the Chernobyl nuclear plant disaster. And the Japanese love their miso soup and that was said to help some of their citizens survive the fallout after the Americans attacked two of their cities full of innocent men, women and

children. Sadly, it appears that few Americans lost any sleep over it, for it was fully justified in the history books if you can believe any of them.

On Wednesday the 14th of April 2010 four top representatives of the Obama administration told Congress they are urgently pursuing new sanctions on Iran and added that **a military strike has not been ruled out**. President Barack Obama has said he won't "take any options off the table with respect to Iran," Undersecretary of Defense Michele Flournoy said. "Now, that means to me **that military options remain on the table.**"

Smart people today are preparing for social, economic, climate change and even disaster. There is no longer war without nuclear materials (depleted uranium weapons) being spent on the battlefield as it has already happened in Iraq twice, in Afghanistan, and even in Lebanon. That nasty stuff called uranium oxide is going to be kicking up dust among us for the next several billions years, so get used to it. Being told to get used to it by a psychopath talking to the families of his victims is one thing but being told as I am doing here, suggests defensive medical preparations and for that you have magnesium chloride, iodine, sodium bicarbonate, spirulina and clay.

The prices listed below are available through LL's Magnetic Clay at: www.magneticclay.com The special 40% pricing on the 32 lb. size of bath flakes is only available for 2 weeks via the discount code I requested for my readers "**imvabaths.**" This is a very special offer that I hope you will take advantage of as it won't be offered at this discount again, anytime soon. IMVA thanks [LL's Magnetic Clay](#) for making this possible. As you can see below the discount is very good.

Dead Sea salt is another option and is slightly less expensive than pure magnesium flakes. It is high in magnesium chloride and also high in potassium chloride. I highly recommend the use of this salt but also recommend that one use the Ancient Minerals in combination to get the magnesium concentration even higher.

[1] *A study of the acidosis, blood urea, and plasma chlorides in uranium nephritis in the dog, and the protective action of sodium bicarbonate.*

The Journal of Experimental Medicine, Vol 25, 693-719, Copyright, 1917, by The Rockefeller Institute for Medical Research New York.

www.jem.org/cgi/content/abstract/25/5/693

Download Free E-Books

[Book of Kindness](#)

[Timeless Wisdom](#)

[The Practice of Kindness](#)

[The Flower of Life](#)

[The Birth of a New Humanity](#)

[Sunlight - The Miracle of the Ages](#)

[Living on Sunlight](#)

[Diet by Design](#)

[How to Prevent Diabetes](#)

[Cancer the Deadly Deception](#)

[Cancer Preventing Nutrition](#)

[Coffee & Cocoa, The Deadly Poison](#)

[The Dangers of Eating Grains](#)

[The Invasion of the Mind Snatchers - Effect of Fluoride on the Pineal Gland](#)

[Dr. John McDougall](#)

[Is Your Favorite Ice Cream Made With GMO Artificial Hormones?](#)

