

How We Become Acid

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Clear and clean water is supposed to be neutral at a pH of 7.0. The pH of your blood has to remain *in a very narrow* range around 7.40, all the time... If the blood's pH rises or falls one tenth of a pH unit you are in intensive care in the hospital where the pH of your blood is monitored very carefully. If it moves two tenths either way it is lethal.

How your body always maintains a constant pH of your blood is a very complex matter. Everything in your body works to maintain it, as every metabolic process in your body depends on it. Healthy blood just transports things, in and out. Its composition must remain balanced.

As hospital medicine is concerned mainly with serious illnesses, the pH of your blood is taken very seriously. Arterial blood pH is measured frequently in intensive care because here the pH of the blood itself does change. Drop in your arterial blood's pH is considered *real* acidosis, not *latent* one, and it is considered a very serious condition.

Acid-alkaline balance of your blood is not treated by modern, allopathic doctors in their clinical setting. Because the process of becoming acid correlates directly with the onset of old age and the development of chronic degenerative disease, it becomes very important, in a way, to deal with it preventively, as an 'outpatient', rather than as a patient in the hospital.

Strong Acids, Weak Acids and Protein

The strong acids in our bodies are those that are formed by the degradation of protein. These are *sulfuric acid*, *phosphoric acid* and *nitric acid*. These are strong, like the battery acid in your car. Strong acids are strong compared to weak acids such as vinegar and citrus juices. Weak acids do not *ionize* (break apart completely) in solution whereas strong acids do. This is why vinegar does not burn holes in your clothes, or dissolve your bones; it does not break apart completely into an acid and a base part, it remains partly a salt. A salt is formed when an acid and a base combine and neutralize one another.

In fact, vinegar, although an acid when you ingest it, does not stay that way. Weak acids like the acetic acid in vinegar, and the acids in most fruits and especially lemons, contain lots of minerals which are basic, along with their weak acid part. The weak acid part combines with water and is converted into carbonic acid which then breaks apart into carbon dioxide and water. You breathe out the carbon dioxide and pass the water out through your kidneys. The minerals remain behind to *replenish* deficient minerals so in fact these weak acids in the end, alkalize your body by supplying more minerals to it.

A very different reaction takes place in the reaction with the strong acids as they react with or leach out minerals from your body.

This is where the acid-alkaline balance problem lies.

The main reason we become acid is from failed digestion of protein, due to bad food combining and subsequent toxicity

When protein breaks down in our bodies, it breaks down into the above mentioned strong acids. These three acids must be excreted by the kidneys because they contain sulfur, phosphorus or nitrogen that cannot break down into water and carbon dioxide to be eliminated as the weak acids would be. In their passage through the kidneys these strong acids *must* be neutralized by a basic mineral into a neutral salt so as not to burn your kidneys.

Sulfuric acid and other strong acids are excreted mainly as salts of sodium, potassium, magnesium or calcium as these are the main minerals used in your the body's metabolic reactions. The sulfur in sulfuric acid can and does combine with the calcium in your bones, and is excreted as the corresponding salt, calcium sulfate. This salt does not harm the kidneys on its way through them but it does rob your body of the needed calcium, its strongest alkalizing agent.

By leaching alkalizing minerals out of your body you make the body more acid. *Latent "acidosis"* develops then *because* your body becomes relatively *alkali deficient*. Becoming alkali deficient is the same as becoming acid. **Latent "acidosis"** is not the frank or real acidosis (so the quotes) of hospital medicine because the pH of the blood itself does not change.

We need protein, obviously, but we only need approximately 40 grams a day. An athlete in intense training may need 80 grams a day. The average American diet contains as much as 200 grams of protein per day: bacon and eggs for breakfast, chicken for lunch, steak for dinner, etc. We all know that the "richer" we became as a civilization and more "advanced", the more meat we eat. Plato knew this in ancient Greece and toward the end of that civilization I'm sure they had all the 'modern' degenerative diseases that plague us today and, "fast foods".

This is a reason postulated for the extinction of the Mayan Indians, their skeletons are demineralized, as if they too had been soaked in excess acid. Maybe toward the end they became so rich they ate Big-Mac Hamburgers too.

The Colloid Connective Tissue Organ Of Schade

As the blood can not change, it picks up the acids and transports them to the connective tissues of the body where they are stored. This is the largest organ of the body really. In Europe it is called the *colloid connective tissue organ of SCHADE*. The collagen fibers of the body are specific acid catchers. It is also called a pre-kidney as that is how it functions, storing acids prior to delivery to the kidneys for excretion. Also it is the organ that connects, holds everything in our bodies in place. It is composed of ligaments, tendons and the like obviously but as these break down into finer and finer fibers it becomes literally the scaffolding that holds every single cell in our body in place. If too many acids need storing in this organ, which includes your muscles, inflammation and pain develop. *Fibromyalgia* is associated with this acid overload.

The space enclosed by these very fine fibers, is called PISHINGER'S SPACE, after the German scientist that described it. Essentially, this is the extracellular space that contains the fluids that bathe and feed each and every cell. they also carry away the wastes from those same cells. There is no mention of this organ in American physiology text books, there is the extracellular space but no organ that stores acids like this, no pre-kidney.

Alkali Flood And Alkali Tide

There is also a daily rhythm to this acid-alkali ebb and flow called by Friedrich Sander the *Base Flood* and *Base Tide*. The stored acids are mobilized from the connective tissues and Pishinger's Space while we sleep. These acids reach their maximum (base tide) concentration in this fluid, and thereby the urine, at 2:00 AM, so the urine is the most acid at this time. The acid content of the urine directly reflects the acid content of the fluid in Pishinger's Space, the extracellular fluid compartment of the body.

By the time you get up though, in the morning, all the acids consumed and generated the day before should be gone, excreted while you slept, contained in your bladder and ready to be voided when you wake. This first urine *should be* acid when you get up in the morning. The urine whose pH you should check is the urine from the second time you empty your bladder in the morning. This reflects the pH of the body fluids at that time, in the morning, not the pH of the urine from the night before.

Your second voided urine specimen after you get up should be back to about neutral, close to pH 7.00 (pH 6.8 to be exact). Because most everyone is acid, this is seldom the case. More and more acids accumulate day after day and chronic, degenerative disease develops as the direct result of the pleomorphic changes that take place in the blood as discussed above. If we continue in our present course, we keep adding to the acids not disposed of the day before.

The Pishinger's Space becomes most alkaline around 2:00 PM, the *Base Flood*, as then the most bicarbonate is being generated by the cover cells of the stomach (see below), after your lunch and breakfast have been metabolized. If your urine is not alkaline at 2:00 P.M. you are definitely in an acid condition.

BICARBONATE

In a healthy body, hydrochloric acid is produced by the cover cells of the stomach. Salt, sodium chloride, is split and later reconstituted into hydrochloric acid and sodium bicarbonate. The production of each molecule of hydrochloric acid is matched by the production of an equivalent molecule of sodium bicarbonate.

The acid goes into the stomach and the sodium bicarbonate goes into the blood stream and circulates all around, first flushing out the excess acid in the tissues and especially, freeing the collagen fibers and the colloidal connective tissue organ from the adsorbed acids stored there. *Any bicarb that is left over*, is picked up by the alkaline glands, the liver, pancreas, etc.

Of course, this is why our bodies are most alkaline around 2:00 P.M. This is after our stomachs have pretty well digested breakfast and lunch. The stomach has made all the hydrochloric acid it needed for digestion, and also the equivalent amount of sodium bicarbonate that would be needed to neutralize the body and refill the alkaline glands of the body. After the breakfast and lunch are digested, liver and pancreas need to be filled up again. Where does their alkalinity come from? It comes from the blood and from the alkaline food we eat, mainly raw fruits and vegetables.

An imbalance develops if not enough alkaline food is eaten and the sodium bicarbonate generated by the stomach's cover cells does not reach the alkaline glands (pancreas, liver, salivary glands, and the alkaline glands in the duodenum). On the way to those glands, some of the alkaline minerals get used up in neutralization of acid residues from previous

meals that are stored in the connective tissue organ.

If there is not enough base left over after your meal to neutralize and clear the acids stored in the connective tissues, a relative latent "acidosis" (or base deficiency) develops. Your liver and pancreas won't be able to produce adequate alkaline juices to ensure proper digestion.

Since digestion can't proceed without enough of these alkaline juices for the liver and pancreas, etc., the stomach has to produce more acid, in order to make enough base. In this way one can develop stomach ulcers. The ulcer is not the result of too much acid, on the contrary, it is the result of too little base!

The 'excess' acid is there as a necessary byproduct of the organs having to generate it so that more bicarb can be made available to satisfy the needs of the liver and pancreas.

Replacement of Minerals

We can limit the loss of base minerals, caused by the excess protein acids we consume, by either cutting down on protein consumption or by replacing the minerals.

These lost base minerals can be replaced by eating raw fruits and vegetables, or by right mineral supplementation.

We have to eat our fruits and vegetables! "An apple a day does keep the doctor away." This is so because the minerals from plants, organic minerals, are readily absorbed by our bodies. Organic minerals are much different than the minerals from rocks, inorganic minerals. Sodium from a plant for example, is much different from the sodium in refined salt. We could assume that they are not the same at all. You can eat all the refined table salt you want and your cells will still be sodium or base deficient. The sodium used for building cells has to be organic, from plants and it is the main base mineral we have because there is so much of it. Only natural crystal salt can be used to supplement sodium to the body.

In the same way, calcium from a plant is a lot different from say "Tums for the Tummy". Tums are calcium carbonate or limestone, a ground up rock.

We can't readily digest rocks, that's what plants do.

We simply don't eat enough fruits and vegetables to compensate for the minerals lost, because of our "rich", fast life diets. To compound the matter, produce grown in mineral depleted soils, pushed by fertilizers, arrives with a much lower mineral content than it used to a mere 150 years ago. We are BASE DEFICIENT, and our whole body is in a relatively acid condition most of the time.

LATENT "ACIDOSIS"

In the acid condition we described you are not "acidic", you are **base deficient**. This is why so many 80 or 90 year old people are shrunk up, little people. They have no mineral stores left. When all the minerals are gone, so are we, our battery runs down.

Your metabolic system can be compared to a battery. The cells of your body carry a charge that can be measured as the oxidation/reduction potential (ORP) of your blood. This energy potential decreases with aging, just as the minerals do. We become more oxidized (so the higher need for antioxidants). Your acidosis occurs because of hyper-proteinization, too much protein.

We aren't acidic, or as they say in a hospital, in a toxic shock, when things have gone so bad that the very pH of the blood itself begins to change, Code Blue. In the state of **latent "acidosis"** we are full of stored acid residues stored in the Pishinger space waiting for a ride out on base minerals that never arrive. This is the latent in *latent "acidosis"*. Blood values have not started to change yet, so the acidosis is stored in the tissues. The tissues are acid, but technically this is not an acidosis yet, because the blood appears normal.

If things get worse, this *latent "acidosis"* can proceed into a *compensated acidosis*. This means the blood pH itself still hasn't started to change, but other values in the blood have had to change to keep the blood pH at the 7.40 that it is supposed to be. *Decompensated acidosis* is when the blood pH itself is affected.

Hospital Based Acid/Base Medicine

As the blood pH begins to shift, the *compensated metabolic acidosis* recognized by regular medicine is the next to develop. Your blood pH begins to be stressed. Compensated means the blood pH really doesn't change, yet. When it begins to change it is no longer compensated, it has become decompensated.

In a *compensated acidosis* the first event that starts the compensation process is that the breathing rate increases in order to blow off more carbonic acid. This helps keep the pH "normal", at 7.4. As your body can no longer keep up, the arterial blood gasses will show as a lower PCO₂ concentration (the measure of how much carbon dioxide there is in your blood). Carbon dioxide, CO₂, combines with water, H₂O, to form carbonic acid, H₂CO₃. Blow off carbonic acid, which will lower the carbon dioxide content of the blood, and you will increase the pH of the blood. This increased breathing rate is characteristic for diabetic acidosis for the same reason.

Your plasma bicarbonate level [HCO₃⁻] that is measured as part of the blood gasses, is decreased. Because of the relative base deficiency, the stomach can no longer produce the required amount of stomach acid so the corresponding bicarbonate that should come from the reverse synthesis of the hydrochloric acid, just isn't there.

Since sodium and other base minerals are depleted, bicarbonate is actually lost out the kidneys because there aren't enough bases like sodium to connect with the bicarbonate for the kidneys to reabsorb them.

This is the *compensated metabolic acidosis* of hospital medicine: low PCO₂ concentration, decreased bicarbonate level [HCO₃⁻] with little effect on blood pH yet.

In the type of *latent "acidosis"* we are talking about there are no changes in the blood gasses. The blood pH, PCO₂, [HCO₃⁻], are all normal. The *latent "acidosis"* we are talking about hasn't developed into the *compensated metabolic acidosis* described above.

When the breathing rate can no longer get any faster and when the kidneys can no longer increase their function to keep up with the acid load, the blood pH itself does start to change, it can fall from 7.4 down to 7.2. This is *decompensated metabolic acidosis* and it is a most serious condition. At blood pH of 6.95 your heart stops with coma and death soon to follow.

Acids That Come From Outside The Body

The Latent acidosis described above is arrived at through base under-nourishment,

through not eating enough fruits and vegetables and consuming too much acid protein. This of course produces the relative base deficiency that we call "latent acidosis".

Acids That Come From Inside The Body

The other way this "latent acidosis" can develop or can be aggravated is through the pathological formation of acids in the organism. These are called endogenous acids (come from inside the body).

This can come as a consequence of intestinal fermentation, too many of the wrong kind of bacteria there (see below, Dysbiosis). This can also happen if there is a malfunctioning organ in the body, heart, liver, or other, a diseased or injured organ, either by accident or through genetics. Anything that doesn't work right, produces toxic, acid byproducts, oxidants.

These acid byproducts are the end result of base under-nourishment or malfunctioning organs with the symptoms described above or they can be the forerunners of or the cause of further degeneration of organs. When this comes, there is no more "latent", acidosis. It becomes a frank acidotic condition, compensated to decompensated acidosis, diabetic coma and the like.

With the above scenario come the diseases that call forth, through anomalies of their own metabolism, the more serious acid producing conditions such as diabetes, uremia or kidney failure, hepatic failure, heart failure and other such illnesses. In these conditions the acidosis is only latent in its beginning state.

As the illness progresses, the endogenous (from in the body) production of toxic, metabolic acids quickly becomes worse, attacking not only the alkali-reserve of the body, from the liver, pancreas, etc., but also the alkali-reserve of the blood itself.

Effects On Digestion

Acidification of the intestines

As we become base deficient, the digestion itself is affected. The bile from your gall bladder and the digestive juices from your pancreas all have to contain a lot of base minerals, mostly sodium bicarb, to be able to neutralize the stomach acid as it passes out of the stomach and into the intestine, and in order to activate the enzymes from the pancreas that require an alkaline medium in which to work. If the acid from the stomach isn't neutralized, colitis or inflammation of the intestine will likely follow.

As stated above, the main problem with decreased acid in the stomach is that as the cells in the stomach make acid, they also make the base, sodium bicarbonate. If these cells don't make enough acid they don't make enough base either.

The sodium bicarbonate (base) that is made as the stomach makes its hydrochloric acid is carried by the blood stream to the salivary glands, the gall bladder system, glands in the pylorus (the part of the intestine the stomach is connected to) and the pancreas. These are the alkaline glands of the body and essentially they neutralize the acid contents of the stomach. If there is not enough base to neutralize the acid from the stomach the intestines become acid too. Without enough of this sodium bicarbonate base for these organs, digestion cannot proceed properly and indigestion occurs.

Dysbiosis

When the pH of the intestines is not right, various bacteria and eventually yeast can grow there, resulting in dysbiosis (wrong growth). This causes its own set of problems.

If the environment of the intestines is not alkaline but acid, dysbiosis (wrong growth) occurs. The gut fills with and supports the growth of the wrong kind of bacteria, fungus, yeast, *Candida* sp., etc. These bacteria in turn generate their own acidic, toxic metabolic byproducts that further aggravate and promote the latent "acidic" condition.

This dys-biosis or wrong growth begins with fermentation, a process of eating, metabolizing and excreting by bacteria, resulting in alcohol productin. Fermentation like this can even cause cirrhosis of the liver in patients that have never drunk alcohol in their life.

As in making wine, this fermentation process can go 'bad' and begin to rot. Vinegar and other rotten things are produced. This vinegar acid and the other metabolites can cause "heart burn", along with bloating and gas that come with the fermentation process. This kind of heart burn is not from too much hydrochloric acid, it is from not enough. This kind of heart burn, that comes an hour or two after you eat, other acids form, acetic acid as in vinegar and other putrefactive acids. These acids cause your "heart" burn. The meal is not digesting well as it would have with a good amount of hydrochloric acid, it is fermenting instead.

These rotten things are reabsorbed back into the body and picked up by the blood in your intestine. These rotting things do not make you feel well. The constipation headaches, sleepless nights from food eaten too late to digest (nights where undigested food just ferments and rots all night, makes bad dreams). The skin also tries to expel such toxins, through pimples, rashes and other skin problems.

With this kind of "heart burn" one hurts after eating, soon after or an hour or two later, rather than before eating, as with an ulcer. This can burn with reflux up the esophagus, worse while lying down, or it can be just pressure over the whole abdomen from the gas. This gas can actually push the stomach through the diaphragm into the lung cavity, producing a hiatal hernia. Eating does not relieve this dysbiotic type of heart burn, as it would in the case of a peptic ulcer.

The Indican Urine Test

Indican is one of the rotten byproducts that is formed in the dysbiotic gut and it too is reabsorbed from the intestines, back into the blood stream to be finally excreted in the urine. The Indican Urine Test measures the amount of Indican in the urine. There should be none of course and this test can be used to measure the degree of dysbiosis occurring in a patient.

Digestive Enzymes

One can live without a stomach. That there is not enough acid to activate some of the digestive enzymes in the stomach is not the real problem as far as this indigestion is concerned. It is because there is not enough base in the liver, pancreas, etc.

Pepsin excreted by the stomach cells needs an acid environment in the stomach to work. Pepsin digests proteins. If there is no acid and no pepsin or if there is ineffective pepsin

from the stomach because of no acid (or if there is no stomach) the protein passes into the intestine where the enzyme trypsin from the pancreas does digest it. Trypsin can only work in an alkaline environment. Most of the digestion actually takes place in the alkaline environment of the intestines, not in the stomach.

Indigestion

If the food can't be digested properly, too much acid, not enough base, the wrong kind of bacteria in the intestines, whatever, one gets *in-digestion*. Things just don't digest right. This includes bloating and pressure because if the food doesn't digest, it in fact ferments and then rots. The fermentation part causes gas, the rotting part causes smelly putrefaction. Every organ is affected. In your body, everything is connected to everything else: it is Wholistic.

The process of deacidification (or alkalizing), with the use of *MMP Minerals* recharges your stomach acid system regardless of whether there is too much or not enough acid produced by the stomach cells. When the stomach cells make acid, they split the source NaCl or salt into separate sodium and chloride ions, which takes a tremendous amount of energy. Supplying both the minerals and the required acid (Betaine-HCl) makes the stomach be more effective, allowing the intestine to function better. This supports your other organs to clean up acid residues and replenish the alkaline digestive glands.

Increased Acid In The Stomach

As we know, as one gets acidic, first the body develops a latent "acidosis". If there is not enough base left over when the hydrochloric acid of the stomach is produced, the relative base deficiency develops, the latent "acidosis", because the liver and pancreas don't have enough alkaline juices.

Digestion can't proceed without enough of these alkaline juices so the stomach has to produce more acid, in order to make just a little more alkaline juices. The stomach lining fills up with stored hydrochloric acid, the tissues start to break down from the excess acid, ulcers form and then the *Hylicobacter pylori* bacteria come out of the cells and finish the job, cleaning up the ulcer in the process.

The stomach and its ulcers are one of the body's ways of trying to get rid of acid, through the only acid producing organ in the body, the stomach. By the time an ulcer has formed in the body, Pischinger's Space, all the connective tissues, everything will have become saturated with acid residues. In such a condition the body is trying desperately to rid itself of too much acid.

In the above condition the stomach makes more hydrochloric acid than the body needs just so it can make a little extra bicarbonate for the pancreas and liver. This acid is actually stored in the stomach itself and so this is the "deposit - hydrochloric acid" of Friederich Sander. The following quotes are from, *The Acid-Base Household of the Human Organism and its cooperation with the NaCl circulation and the rhythm of the Liver*, Friederich F. Sander, about 1930, translated from the German by Robert Miller, D.C. This book is not yet in print in English.

Deposit Hydrochloric Acid

The intestines become acid with a base deficiency because the stomach is pushed to make more base (but the byproduct of this is more acid). At first, the excess acid made in response to the need for bicarbonate, is actually stored as the deposit-hydrochloric acid in

the stomach, causing ulcers, gastritis and the like. Again and more importantly, if the stomach doesn't make acid, it doesn't make the base, sodium bicarbonate, which is the more important of the two for digestion. "The real problem here is that of a one sided scenario where regular medicine only views the stomach as a digestive organ, not a depot or deposit organ (for excess acid from the body itself) or as a regulation organ for the Acid-Base Management."

"As soon as one sees the stomach cells also as a deposit-organ, not only a digestive organ, for those hydrochloric acids that are being formed in the cover cells, because those cover cells are being forced to produce sodium bicarbonate as a consequence of the base-deficiency of the organism."

When one sees this and then sees that the stomach cells store the excess acid of the body (as do all cells of the body) so that the bicarbonate produced when the HCl was produced, can be used to make up for the bicarb used up in its passage through the body in the blood stream, cleaning up and neutralizing acid 'sludge' all along the way.

Decreased Acid In The Stomach

Achlorhydria, Absent or Decreased Acid causes indigestion for sure and is more common than "heart burn" or real over acid production, especially in older folks. As above, this condition begins as the over-stimulation of the cover cells of the stomach, over-stimulated so they can make more bicarbonate for the liver and pancreas because of the underlying latent "acidosis" and relative base deficiency. After awhile the stomach cells just can't do it anymore, make more and more acid while trying to generate more base to correct the base deficiency, the latent acidosis.

The treatment of the over-acid and under-acid conditions is the same as it is with any other disease.

Treatment Is Holistic and Generic

When the stomach makes too little acid, the whole process of using up the hydrochloric acid in the stomach with the MMP Minerals does restart the system, makes it work harder and in time better. Digestion improves.

the alkaline minerals in the MMP Minerals react with the acids of the body mopping up the excess acid out of the lymphatic system. In time the acid residues are cleared and the base deficiency is restored so the stomach doesn't have to make so much acid anymore. In an under acid condition, baking soda would stimulate the production of more hydrochloric acid, and therefore blood borne bicarbonate, which clears latent "acidosis", restores the base mineral deficit so that stomach cells can heal. This, in time, really works. Baking soda speed both these processes up considerably. The treatment for both conditions is the same as one is just an extension of the other, the hyperacid condition leading to the condition where little or no hydrochloric acid is produced by the cover cells of the stomach.

Cow's Milk

The phenomenon of hyper-proteinization is best illustrated by the drinking of milk. Cow's milk contains three times more protein than human mother's milk. We know how to measure the amount of calcium one puts in one's mouth and the amounts that are passed through the urine and feces. When drinking cow's milk, large amount of protein is converted into acids, and these acids leach more calcium out of the bones than was

provided by the milk in the first place! Cow's milk causes osteoporosis! It is an absolute lie when the dairy board commercials say, "Milk builds strong bones". It does not. Add to this the fact that 50% of the calcium that is ingested by the drinking of pasteurized milk is not absorbed, because it is pasteurized. Pasteurization does not kill all of the bacteria in the milk. Salmonella can be transmitted via pasteurized milk. As far as pasteurized milk is concerned, any farmer knows that if you feed a baby calf pasteurized milk for a few months it will die. We aren't even baby cows.

Add to this that about 80% of people are allergic to milk and it seems to be not such a good food to eat.

Cholesterol

These facts are not unknown. In 1977, senator George McGovern introduced a list of dietary guidelines for the American people. On top of the list was the recommendation that we decrease our consumption of protein. One year later this was removed from the record by the meat and dairy industries and replaced with the cholesterol scare. Please be advised: Cholesterol is not the problem, protein is.

Cooked Protein Is Stimulatory And Is Therefore A Negative Energy Source

Besides this, in the long run protein is not a positive energy source. Although protein can, in starvation, yield 4 kilo calories per gram of mass, the same as carbohydrate (compared to 9 kilo calories per gram of fat) its effect is mainly stimulatory. Next to drugs, pharmaceutical or otherwise, protein is the most stimulating thing we consume. Coffee for example, will get you going for about an hour. A T-bone steak on the other hand will keep you pumped up for four to five hours.

The fact is that, it takes so much energy for the body to process cooked meat, digest it and then eliminate it, that it ends up being a negative energy source, taking more energy from the body than it gives to it. This is the basis of the so called 'high protein', weight reduction diets. You will loose weigh on a high protein diet but the long term consequences of this are not told by those that advertise such procedures.

Drugs

As far as acids are concerned, the only things more acid than protein are pharma drugs, all of them. Most drugs are alkaloids that, as with protein, contain nitrogen. These drugs have to be converted first to their corresponding strong acid, nitric acid in this case, and then to the mineral salt, sodium, potassium or calcium nitrate before they can be excreted.

Aspirin, Motrin, all such anti-inflammatory medicines for arthritis, make the arthritis worse in the long run. This is so because the aspirin and the rest are alkaloids that are converted to strong acids in their excretion. Strong acids don't help joints and aching bones. When the body can't deal with the excess acids we consume, one of the places these acids are stored is in the joints. Fluid taken from a swollen joint is always acid.

Coffee is a drug, herbal medicines are drugs. All substances that have alkaloids as their active ingredients are drugs. Pharmaceutical drugs are essentially synthetic alkaloids.

Over The Counter Antacid Drugs

Pepcid, Zantac, Axid, Tagamet and the like, block this excess acid outpouring. These drugs stop the acid production of the stomach. This produces only symptomatic relief.

One of the bigger crimes of the petro-chemical drug industry in recent times has been the ease with which these recently reclassified to over-the-counter drugs like Histamine, H2-blockers can be obtained. These include Tagamet, Pepcid, Zantac, Axid and a host of newer more expensive ones. They are all the same. These drugs block the production of the hydrochloric acid by the stomach, and thereby relieve your "acid indigestion".

If one blocks hydrochloric acid production by the stomach with these medicines, where does this excess acid go (it has to be excess or one wouldn't have an ulcer)? Does the toxic acid then become buried, impregnated in the body somewhere? Does this then proceed on to the Neoplasm phase or does the excess acid just accumulate more in the muscles and tendons, causing you to hurt more with fibromyalgia? Do your bones dissolve more or your heart skip more beats? It will take years for this message to reach the public (thanks to huge advertising and propaganda budgets), so the pharmaceutical companies won't be held liable. As these medicines are relatively new, the side effects of the blocked acid excretion "remain to be seen" as far as regular medicine is concerned.

Consider this: if the body is so full of stored acids that the stomach has to work overtime to get rid of them, then to block the excretion of those acids - how does that help? Where does that blocked hydrochloric acid go? It aggravates the acid condition that caused its over production in the first place, so now it has to push back up farther into the system. It just puts the acid problem off until later, symptomatic relief that will result in a crisis.

That you can buy these drugs over the counter without a prescription is abominable. They should not be used even with a prescription, except in a hospital setting, in an emergency where there is no other recourse.

To get at the cause of the excess acid production, rather than blocking it with pharmaceutical H2 blockers, is the obvious and most desirable therapy.

Chronic Degenerative Disease

The point of this article is that if the condition of "latent acidosis" is not acknowledged, if the above non-specific symptoms are not recognized and dealt with for what they are, then, SPECIFIC DISEASES do develop. The above GENERIC SYMPTOMS, 'localize' in the body's weakest place, the locus minoris resistentiae, and frank organ degeneration begins to take place. This "localization in the body's place of least resistance" can take the form of any of the specific, named, chronic, degenerative diseases. **Chronic Degenerative Disease** is holistic, it affects your whole body.

As this base deficiency begins to develop all the things mentioned above begin to happen:

General Results Of Base Deficiency:

1. The acidity leads to the pleomorphic changes in the blood. As stated above, whenever there is anything in nature that is dying, beginning to decay, something comes and eats it up. When things get old in the body, acidic and toxic, organisms do come out of the cells. Organisms that devour old cells come out first. In other words, the Protists in the cells change, stick together and become viruses, bacteria, fungi, molds, and so on. That is what microbes, or germs, are for.
2. Sodium becomes deficient first from the blood serum (most of the sodium in the body is in the serum whereas the potassium is inside the cells). The acids and even excess protein itself can be, as one of the last resorts, stored in the cells themselves. This causes the cells to swell and edema develops. Of course one is

sick by this time. The cells swell in order to dilute the acids in them, the acids that shouldn't be there. High blood pressure can develop because of this.

3. Potassium leaves the cells and weakness, tiredness, and wasting develop. Low blood pressure can be a result of this.
4. Calcium leaves the bones and osteoporosis sets in. The bone calcium goes into your blood and you get muscle cramps. The blood has to get rid of the "extra" calcium very quickly or one develops tetany. Tetany is a Charlie Horse type cramp, of every muscle in the body. The body doesn't mess around with calcium, it gets rid of it, deposits it or excretes it. Calcium should only be used, as a medicine, in a hospital. All the organic, good calcium that our bodies can use, is contained in the vegetables, especially the dark, green leafy ones. We don't need milk, and we don't need mineral calcium supplements.

There are many studies from around the world that show that the more protein a society consumes, the more osteoporosis they have. Osteoporosis is definitely an acid disease. The calcium is just leached out of the bones by these metabolic acids. Calcium, or lack thereof, is not the problem, over acidification is.

This calcium has to be excreted by the kidneys or in the feces or it will be deposited, somewhere in the body. It can be measured in the urine. It can be deposited in the lining of the arteries, kidney or gallbladder - stones can develop. It can be deposited in the brain causing dementia or in joints as arthritic deposits, and on and on... and then the microbes come out of the acidic, hurt, swollen cells to help get rid of the deposits. Inflammation develops, pain, more swelling, blocked arteries. The amount of calcification in the body correlates directly with the onset of 'old age'. All these old micro-organisms are being re-discovered, inside the diseased tissues effected by Chronic Degenerative Disease, cancer, the bacteria *Chlamydia pneumoniae* being isolated from the arteries in most cases of hardening of the arteries... Stomach ulcers have been treated for some time with antibiotics. Where is this going? Vaccines and antibiotics for arterial disease? How foolish!

pH Balance

Success in natural farming is derived from the balance between acids and alkalinity in the soil. When the soil is properly balanced, insects cannot thrive and are not drawn to plants. The same is true for us. Our biological terrain, our fluids, must also be balanced. Our bodies cannot function in a neutral state, for no chemical reactions would take place. The stomach is the only part of the body that is always acidic (hydrochloric acid), while the remainder of the bodily fluids are supposed to be alkaline.

Blood, spinal fluid and saliva should be slightly alkaline, the stool, liver bile, pancreas or gall bladder bile can be either acidic or alkaline (the range for these organs and glands is broader). When they become acidic, the imbalance allows parasites to establish a foothold, creating even more stress on the system.

Hyperacidic tendencies and symptoms include cold sores, herpes, arthritis, rheumatic conditions, parasites, cancer, candida, insomnia, headaches and migraines, water retention, bladder infections, constipation or diarrhea, teeth sensitivity, burning sensations, ulcers (also bacteria related), hypotension, stress, cravings for certain foods, allergies, asthma, skin disorders of all types and gastric problems.

There are many more ailments related to acidosis. Your cellular terrain requires frequent adjustments to maintain balance and health. When acids are allowed to build up over time, they create a place for illnesses and conditions that support their growth.

The ways you can start to re-balance your pH include dietary changes, nutritional supplements, Hydrotherapy and Herbs.

Foods:

Practice food combining, and increase your intake of water rich foods. Eat more alkaline producing foods. Drink structured water.

There are a variety of books available to assist in determining which foods are best suited for your particular needs.

Supplements:

Add free form amino acids, sulfur (MSM), add minerals (Ca, Mg, K, Na) in the form of natural salts; all vitamins, and proteolytic enzymes; enzymatically rich living foods; antioxidants, such as Alpha lipoic acid, grape seed extract, green tea, Olive leaf extract and Vitamin E; essential fatty acids, especially omega-3 (flax, borage, primrose).

Hydrotherapy:

Baths can both cleanse and rejuvenate. Start every other day, with weekends off. Drink plenty of pure structured water after the bath and try to have the bath as hot as possible to open the pores and allow the bath ingredients to penetrate. Add soap to lower the water surface tension.

Do these separately, not combined:

Alkaline bath:

Baking soda/Epsom salts, about one pound of each (Twilight Bath Crystals, Miracle II Soap and Neutralizer, Himalayan Crystal Salts work even better).

Acid Bath:

apple cider vinegar, about 2 cups.

Oxidizing bath:

hydrogen peroxide 3%, about 2 pints.

Skin Cleanse:

Peelings (or cleansing salts), mixed with castor or ayurvedic oil, rubbed thoroughly into the liver area, the kidney/adrenal area, thymus area, stomach and abdomen, either before or after the bath.

Add essential oils for aromatherapy effects.

Herbs:

Alfalfa; Aloe vera; Comfrey; Cramp Bark; Garlic; Ginger; Slippery Elm; Parsley; Peppermint; Cornsilk;

These are best taken in single doses, liquid form, about 40 drops, once a day. Taking all of them is unnecessary, and you may need to experiment to determine the ones that work best for you.

You can easily determine your pH balance by purchasing pH paper. The paper changes color and indicates your acid or alkaline state. Best to take this test first thing in the morning, before eating, using two strips, one for saliva and the other for urine. By re-establishing balance in your system, you can eliminate the parasites that create illness and provide a terrain that repels further infestations. Why harbor unwanted disease? We can't tolerate pH imbalance in our swimming pools, allow it in our body? More information is available in the book "A New Biology" available at [Dennis Myers' website](#).

Disclaimer: In our regulated society we are not permitted to make claims to consumers in support of health benefits derived from foods. This means we cannot make specific statements as to how food-based, non-drug products may help prevent or treat diseases. If we were to succeed, our government would attempt to re-classify that food as a drug! Eating any food or a concentrated natural product should be a decision based on your personal research and understanding. Food-derived antioxidants, minerals and enzymes play an important role in your health. The information we provide in this website is for informational purposes only and is not intended as a substitute for advice from a health care professional. It should not be used for diagnosis or treatment of any health problem or construed as a prescription of a medication or other treatment. We cannot and do not claim that the products we offer will prevent, cure, treat or diagnose a disease in humans or animals. Natural healing is inherently unpredictable, and results will vary widely.