

SPECIAL REPORT

"Get TRUE Relief"

By Christopher Vasey, ND

How Have I Helped <u>Thousands</u> Of Heartburn, GERD & Reflux Sufferers Like You?

Discover The Answer Inside This Comprehensive, In-Depth Report.

Dr Vasey,

Thank you so much for sending me this free report. I've been suffering from stomach problems for the past 5 years. It all began when my doctor told me that I had Osteoporosis. He had me start taking a lot of calcium carbonate supplements. Within about 6 months, I started to develop heartburn, which then turned into reflux. It seemed like everything I ate was giving me fits. The pain became just too much to bear. I couldn't eat a thing for 2 hours before going to bed or the pain became even worse. A friend then ordered this report for me... WOW! After reading it (over and over again), so many things became clear about my condition. I began to implement some of your ideas and within a matter of months I was back to my old self again! I feel wonderful! I can even drink lemonade again (my favorite drink)! I am so thankful for your work and for the education you have provided me. I think that the work that you are doing is great. Thank you a million times over... you've helped me to help myself.

God Bless,

Doris H. ~ Minneapolis, MN

You're reading this because you're one of the 15 million people in the US who suffer from heartburn, GERD, or reflux.

You must also be tired of chasing your tail trying to relieve yourself of the constant pain.

Are you fed-up with the fact that nothing seems to be working, or that anything that brings even temporary relief comes at such a great cost – financially and physically? Consider this...

Sales for drugs intended to relieve heartburn/GERD/Reflux topped <u>\$13 BILLION</u> last year. Prescriptions for these meds have nearly doubled in the last 6 years to \$93 million. This is not to mention the over-the counter sales of antacids.

This is quite alarming, isn't it?

I submit that the information I'm going to share with you is simple, yet profound. I challenge you to read this report thoroughly, do your own homework, and continue your quest to inform yourself about the condition of your own health.

I've cited more than 40 scientific references from credible sources that support what I'm going to share with you.

One more thing to reflect on before we get going...

Nobody is going to care more about the quality of your health than yourself.... and why should they?

Is it in the financial interest of the drug companies and medical community for you to be well? Think about it for a moment.



My name is Christopher Vasey, ND. I'm a naturopathic doctor who specializes in detoxification, rejuvenation, and pH balance. I received my Doctor of Naturopathy degree at the Institut d'Hygiene Naturelle in Paris, France twenty-six years ago. I then founded The Clinic for Naturopathic Medicine in Switzerland. I have authored over a dozen books on natural medicine and holistic health, most of which have been published in Europe.

In my most widely read book, The Acid Alkaline Diet - Healing Arts Press 2003 – I explain how the abundance of highly processed foods ingested by the modern day person afflict us with many ailments (including reflux).

For a quarter of a century, I have had the privilege of helping thousands of people discover the key to vibrant health.

The <u>key</u> is this... Vibrant Health starts with proper pH Balance. As a matter of fact, from all of my research and practice I have come to discover that the root of your heartburn or GERD problem is that your <u>body is too acidic</u>, and your <u>stomach is not acidic enough</u>.

Let me say that again. <u>Your stomach is not acidic enough</u>, and as a result, a chain reaction has been set forth to cause what you experience as heartburn, GERD, or reflux.

I understand that this may seem backwards to what you have been told all along. I also understand that you associate the presence of TOO MUCH ACID to your condition and your pain, but it is my intention to teach you where the ROOT of the problem lies... so please stick with me.

Ultimately, the symptoms you experience are not the "problem". The problem is that the tissues, fluids, and cells within your body have become increasingly more acidic over the years. The buffering systems that your body uses to combat these acids have become exhausted, and a whole slew of chain reactions have occurred. The end result is the pain you're feeling in your stomach and lower esophagus.

I want to walk you past each "link" in this "chain" so you completely understand the factors that contribute to your condition. Once you're armed with this knowledge, you'll know how to proceed with a plan to recover.

This report will cover the following topics:

- 1. Understanding how pH affects your body
- 2. How eating acidifying foods lead to an acidic body
- 3. How you become depleted in alkaline mineral buffers
- 4. What happens when your alkaline buffering systems fail
- 5. Why your stomach is producing acid that is too weak
- 6. How damaging bacteria are a direct cause of your pain
- 7. The usual explanation for your condition
- 8. The true source of it
- 9. The dangers of antacids and drugs to "relieve" the pain
- 10. Steps to take in order to realize TRUE relief.

Let us begin.

Understanding How pH Affects Your Body

Defining pH

pH is a measure of acidity and alkalinity. The pH scale goes from 0 to 14. At pH 7, the half way point, there is a balance between acidity and alkalinity. The "p" comes from the word power or potential. The "H" is the symbol for the element of hydrogen. Together, the term pH means "Potential of hydrogen". The greater potential a substance has for freeing hydrogen ions, the smaller its pH value is. The pH scale is logarithmic, meaning that the values separating each unit are not of equal value along the scale but increase in proportion to their distance from the midway point of an even balance between acidity and alkalinity.

pH and Health

The body is alkaline by design, but can be acidic by function. This means that much of what the body does creates acids, but they need to be properly buffered in order to retain a proper state of alkalinity.

Your body functions at its best when the pH of its internal biochemical environment, measured as a whole, is equal to 7.39 (meaning slightly alkaline). The normal range of blood pH is very small, from a slightly more acidic reading of 7.36 to a more alkaline reading of 7.42. Blood pH that is higher or lower than these figures indicates acidity (from 7 to 7.35) or alkalosis (7.42 to 7.8). If these limits are exceeded, the body cannot function, and death results.

The zone of optimal blood health extends only from pH 7.36 to pH 7.42; illness will accompany any incidence of acidosis or alkalosis. Of these two, acidosis is by far the most common - more than half the population suffers from this condition.

The pH of the body's organic fluids and tissues varies from one part of the body to another. When we say the ideal pH of the body is 7.39, this refers primarily to the pH of the blood, and to a lesser extent that of the body's internal environment; meaning all organic fluids such as lymph and extra and intracellular serums (fluids surrounding or within the cells).

The pH of the internal environment, the basic "ground" biochemical terrain, can tolerate more significant changes than that of the blood, but the pH of the internal environment should never go beyond 7.36 or 7.42 if good health is to be maintained.

Many individual organs and organic fluids, however, have a pH that is normally far above or below this ideal pH. The pH of urine, for example, may be 6, or even as low as 5 or 4.5. This is possible because urine is regularly eliminated and thus does not remain in the body for long. Areas of the body that are essentially acidic include the colon (pH 6.8), the outer layers of the skin (pH 5.2), and the stomach (pH 2) (it is important that you note this). Others, in contrast, are quite alkaline: the inner layers of the skin (pH 7.35), the pancreatic juices (from pH 7.5 to 8.8), and the small intestine (pH 8).

These different values are all normal and correspond to precise needs of the body. For example, the extremely acidic nature of the gastric region is indispensable for protein digestion, and the high acidity of the skin helps it destroy microbes before they can enter the body.

Link 1 – Poor Diet: The Over Consumption of Acidifying Foods

This is where it all begins. The cycle of imbalance originated as a result of dietary choices that have worked against you instead of for you.

Foods create either an acid, alkaline, or neutral "ash" in your body. Acidifying foods include meat, processed sugar, processed grains, many condiments, etc. Alkalizing foods include vegetables, low sugar fruits, certain grains and legumes.

The cumulative effect of eating the wrong foods – acidifying ones - over the years has produced an abundance of excess acids in your body. Over the course of time, your body's ability to buffer these acids has become exhausted. Your mineral reserves have become depleted as a result(especially sodium, potassium, magnesium, and chloride).

There are two different classes of acids; strong and weak. The weak acids are easier to metabolize, and in many cases are required to maintain proper pH. Strong acids are very problematic.

The strong acids in our bodies are those that are formed by the degradation of protein. These include sulfuric acid, uric acid, phosphoric acid and nitric acid. These are strong, like the battery acid in your car.

In order for your body to neutralize these acids, they must use alkaline minerals. When an acid combines with an alkaline element, a neutral salt is formed. These neutral salts are able to pass through the blood stream, without compromising the pH of it, in order to be eliminated through the kidneys.

The production or ingestion of strong acids leaches minerals out of your body. This is where the problem lies.

The Main Reason We Become Acidic Is From Over Consumption of Protein & Sugar

Protein

When protein is broken down in our bodies, the end result is the creation strong acids. The body will use bicarbonates of sodium or potassium, calcium or magnesium in order to buffer these acids.

By taking all these alkaline minerals out of the body you make the body relatively more acidic.

We need protein, obviously, but all we need is 40 - 80 grams per day. The average American diet, however, contains as much as 200 grams of protein per day. The net result of all of this protein is excess build-up of strong acids in the body, and the corresponding loss of macro minerals.

Sugar

As your body's internal terrain becomes more acidic, oxygen levels decrease. This sets the stage for unwanted bacteria and yeasts to grow in an uncontrollable manner. These microforms feed on sugar. When sugar is metabolized in a low oxygen environment (anaerobic), the byproduct created is lactic acid.

Lactic acid is responsible for fatigue, joint pain, muscle aches, headaches, and energy loss.

Link 2 – The Lack of Alkaline Buffers In The Body

Your body operates in a very organized, efficient manner... usually. As with any other bodily function, there is an organized process of neutralizing and removing acids that are created. However, your body's systems will not work properly without the appropriate materials. Imagine having an intelligent, strong, and efficient construction crew to build your house. You visit the construction site one day only to find everybody sitting around. You'd probably be a little ticked-off... at least until they tell you that they can't work because you never ordered the lumber. The same is true in your body... it knows what to do, but you must supply it with the appropriate raw materials if it is going to work properly.

Storage

Remember... the pH of the blood MUST remain slightly alkaline. Because of this, acids can't be dumped into the bloodstream (the result would be acidic blood – a condition that would cause death). In order to compensate, the body will store these acids in connective tissues and fluids.

The connective tissues act as an entire organ in many ways – it is even referred to as such by many practitioners in Europe. This is the organ that connects, holds everything in our bodies in place. It is composed of ligaments, tendons and ultimately the scaffolding that holds every single cell in our bodies in place.

While the pH of these tissues and fluids should optimally be alkaline, they can tolerate a certain amount of acidity. However, when too many acids are stored in this connective tissue system, which includes the muscles, inflammation and pain develop.

The space enclosed by these fibers, is called Pishinger's Space, from the German scientist that described it. Essentially, this is the space that contains the fluids that bathe and feed each and every cell while carrying away the toxins and wastes from those same cells.

Neutralization

In order to be able to travel safely through the bloodstream for elimination via the kidneys, these acids must first be buffered. The body uses three primary buffering systems to neutralize acids- the bicarbonate buffer system (the primary system), the phosphate buffer system (within the cells, or intracellular), and the protein buffer system. Each of these buffering systems has its own optimal ph range. They also rely on an abundant supply and proper balance of minerals to work effectively. When these buffering systems are compromised, the assimilation of nutrients as well as the elimination of acids is decreased.

The optimal pH ranges of these buffer systems:

Phosphate buffer: 7.2

Bicarbonate Buffer System: 6.4

Protein Buffer System: 7.4

Since the subject here is your heartburn, GERD, or reflux, we're going to focus on the bicarbonate buffer system. The reason is this... it is the ineffectiveness of this system that has contributed to your woes.

The Bicarbonate Buffer System.

The primary organ responsible for generating the necessary bicarbonate that fuels the bicarbonate buffer system is the stomach. Here is how this buffer system works: Hydrochloric acid (HCL) is produced by the parietal cells of the stomach. Sodium Chloride is split 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 HCL remains in the stomach to digest food, and the sodium bicarbonate is deposited into the blood stream. The blood stream delivers the bicarbonate to the connective tissues and extracellular fluids in order to buffer or neutralize the excess acids stored there. Any bicarbonate that remains is delivered to digestive glands that require the bicarbonate to create alkaline digestive juices. These glands include the liver (produces bile) and the pancreas (produces pancreatic juice).

Many problems occur when this system is not running effectively, and the ultimate culprit responsible for the poor performance of this system is a lack of raw materials or minerals.

Link 3 – The Failure Of The Body's Buffering Systems

This part begins to get a bit technical, so read slowly and repeatedly until you fully understand it... then the "light bulb" will go off.

Once the bicarbonate buffer system starts to falter, a domino effect occurs. Here's what it looks like:

- 1. Bicarbonate is needed in order to buffer an excessive amount of acids that have accumulated in the tissues and fluids of the body. A larger than normal quantity needs to be created for this purpose. In order to produce the necessary bicarbonate, the stomach produces excess HCL or stomach acid at the same time. This is the first stage of heartburn.
- 2. In order to produce this bicarbonate and corresponding HCL, the stomach uses sodium chloride. However, due to the fact that the medical community has demonized sodium for the last 30 years, your diet is either too low in it, or something else is leaching it out of your body.

I must take a rabbit trail here for a moment.

First of all, understand that there are 3 primary macro electrolytes in the body: sodium, potassium, and chloride. These are all ESSENTIAL ELEMENTS that your body MUST HAVE in order to operate. The idea that you need to keep your sodium low is due to the fact that high sodium intake without a balancing amount of potassium can lead to high blood pressure, heart disease, etc. It is much wiser then to increase your sodium AND potassium intake than to simply limit your sodium intake. OK, let's continue.

- 3. Because of the excess acid (Point #1 above) produced in your stomach; perhaps you began taking antacids containing calcium carbonate (an alkaline element, but a very poor form of calcium). While this may have relieved the symptoms briefly, it has actually served to exacerbate the problem. When the calcium carbonate combines with the HCL, a chemical called calcium chloride is formed. This is then passed on through the digestive system and eventually eliminated. The net result here is a loss of chloride (which is needed to produce bicarbonate and HCL), which is NOT a good thing. I'll explain this more in depth in a moment.
- 4. As this sort of robbing-Peter-to-pay-Paul game continues, the eventual result is an inadequate production of HCL. "Great!", you say to yourself, "less acid (HCL) means less pain... right"? Wrong. Less acid means less bicarbonate, and more acidity in your body which will lead to other health complications. It also means a stomach that is TOO ALKALINE; this is the real kicker.

5. The stomach MUST maintain a pH of 2 to 4. This is pretty acidic. As a matter of fact, a pH of 2 is 100 times more acidic than a pH of 4 (and 100,000 x's more acidic than neutral, which is 7.0). When the stomach does not produce an adequate amount of HCL (a condition called Hypochlorhydria), the pH of it begins to climb too high. This rising pH becomes a perfect environment for the growth and proliferation of nasty bacteria called Helicobacter Pylori, or H. Pylori.

Incidentally, have you ever wondered how your stomach can handle such strong acid? After all, HCL with a pH of 2 can burn a hole through nearly anything. The answer is mucous. In the case of the stomach, the mucosal wall is extremely tolerant of strongly acidic conditions. If it's at all damaged, however, the acid in the stomach can damage the stomach lining beneath the mucous. I just wanted you to understand that – let's continue.

- 6. As these H. Pylori bacteria grow in your stomach, they begin to damage the mucosal lining of it. They also damage the lower esophageal sphincter (LES), which is the valve responsible for keeping your food in your stomach; not allowing it to back-up into your esophagus. As the mucous lining of the LES becomes more and more damaged, a "leaky seal" situation is created, and then stomach acid is able to back-up into your esophagus. Here in lies your "reflux" issue. Incidentally, these bacteria cannot survive in a pH below 4.0. I will expound on this subject later as well.
- 7. There's another problem associated with all of this; that is the stress on the other digestive organs (liver, pancreas, large intestines, and the colon). The increased stress on these organs creates their own set of health concerns:
 - When the food passes from the stomach to the duodenum of the small intestines, it is mixed with alkaline bile from the liver and alkaline pancreatic juices (pH of 8.0) which contain enzymes. These enzymes, including lipases, proteases and amylases, are <u>required</u> for digestion and absorption of food they also NEED an alkaline environment in order to work effectively. Without the appropriate amount of bicarbonate, the liver will produce weak bile (bile needs to have a pH of 8.3 to 8.6), the pancreas will produce weak pancreatic juice, and enzymes will not work effectively.
 - When food goes undigested in the intestinal tract, food will ferment, causing a whole other list of problems, including gastritis, irritable bowl syndrome, and even colon cancer.
 - Also, the stress of all of this has on the liver and pancreas can lead to pancreatitis, pancreatic cancer, liver congestion and disease.

Link 4 – Weak Acid Production in the Stomach – Chloride Deficiency

The interesting paradox here is this: While you may think your stomach suffering from an acid problem, it is in fact suffering from a WEAK acid production problem. You don't have too much acid in your stomach... you have too much WEAK acid there. The ultimate culprit here is a lack of a macro electrolyte known as chloride.

What does it mean for the stomach acid to be weak? It means that the level of hydrogen ions is low. But this level is equal to the level of chloride ions, since the HCl in the stomach has equal numbers of hyrogen and chloride ions. Therefore, the lack of hydrogen ions that causes the low pH of the stomach acid is due to the lack of chloride. Chloride is introduced into the body primarily as sodium chloride (salt – which is 60% chloride and 40% sodium), potassium chloride (only in the form of dietary salt), or as organic chloride.

Chloride is an "essential" mineral for humans. It is a major mineral nutrient that occurs primarily in body fluids. Chloride is a prominent negatively charged ion of the blood, and it represents 70% of the body's total negative ion content. On average, an adult human body contains approximately 115 grams of chloride, making up about 0.15% of total body weight. The suggested amount of chloride intake ranges from 750 to 900 milligrams per day. The total obligatory loss of chloride in the average person is close to 530 milligrams per day. However, the person taking antacids could lose an ADDITIONAL 1000 milligrams or more per day. This is because the calcium carbonate in the antacids combines with HCL in the stomach to neutralize the acid (temporary relief) but then produces Calcium Chloride. Most of the Chloride is then expelled in the feces, though some of it is reabsorbed into the body via the intestines. You can see how you could develop a deficiency rather quickly.

Organic chloride (not combined to sodium or potassium) is not present in very many foods. These sources of chloride include kelp (seaweed), grasses, ionic trace mineral preparations, olives, rye, tomatoes, lettuce, and celery, although not in large enough amounts to supply the needs of an active adult. Chloride occurs naturally in foods at levels normally less than 0.36 milligrams per 1000 milligrams of food. The average intake of chloride during a salt-free diet is only approximately 100 milligrams per day.

Note: Within the body's fluids, sodium obtained from sodium chloride is NO DIFFERENT and NO WORSE than organic sodium from plants. In dry form, sodium and chloride bind together to create what is called an 'ionic bond'. When sodium chloride dissolves in water, the ionic bonds are weakened, and the sodium and chloride ions become mobile. They are then considered electrolytes. So, as far as your body and your health are concerned, sodium and chloride in organic form is no better for you than sodium chloride in salt form.

Most of the body's chloride is contained either in the blood, the interstitial fluid such as lymph which mimics the blood in mineral composition, or in the stomach. There is relatively little chloride within the body's cells.

Nobody within the medical community seems to dispute that that salt contains the chloride needed for hydrochloric acid. However, most of the guidance out there would suggest that salt is unhealthy, and that you should avoid it.

As I indicated earlier, what's more important to your health is the balance of sodium to potassium in your body, not necessarily the amount of sodium that you take in. Your body should contain twice as much potassium as it does sodium. If you ingest 2400 milligrams of sodium per day (the current US RDA), you should be taking 4800 milligrams of potassium per day to remain in balance. Most Americans, however, do not do this. The average American diet consists of 2400 – 3500 milligrams of potassium. This deficiency in potassium intake is ultimately what can lead to electrolyte imbalances that negatively impact the heart.

Perhaps instead of demonizing sodium, medical professionals should tout the need for potassium. I do find it interesting that the laws limit the amount of potassium in dietary supplements that are sold in capsule form to 99 milligrams per capsule. Evidently their reasoning for this is that a higher dose could lead to sudden heart arrhythmia. The person whose intake of potassium is on the low end would have to pop 25 potassium pills throughout the day in order to properly supplement their diet.

It is worth noting: Upon doing research, you may find some (uninformed) web sites that say that the only form of sodium you should get is organic in origin... from plants. This type of sodium is bound to a protein, and contains no chloride. These uninformed sources will try to pass on a myth that sodium chloride is bad for you, and is unnatural. This notion is simply ridiculous. Sodium is found in the form of sodium chloride all throughout the fluids of your body. While some salt is indeed overly processed, sources like sea salt are less so. If you relied simply on vegetables for sodium, you'd need to consume the equivalent of 50 stalks of celery (a high sodium content vegetable) every day.

Link 5 – Low stomach pH, The Growth of H. Pylori, and Damage To The Mucosal Lining



Helicobacter Pylori (H. Pylori) can infect the stomach as a result of an environment that is not acidic enough. When the pH of the stomach remains below 4.3, helicobacter can no longer reproduce.

The helicobacter bacterium can live and grow in the mucous lining of the stomach wall, of the duodenum wall, and of the esophagus wall. There it damages the protection that the mucous lining supplies to the wall of the digestive tract against the hydrochloric acid of the stomach. This damage leads to pain, sometimes called dyspepsia, and to ulcers.

Like the stomach, the LES as well as the esophagus have a mucous lining. However, they are not able to withstand the low pH as the

stomach can. No doubt the LES lining can become infected in the same way as the rest of the stomach lining. This LES valve is located at the site of the pain experienced by many GERD sufferers. The site Introduction to GERD (www.gerd.com) lists "impaired tissue resistance" as one of the possible causes of GERD:

"The ability of the esophageal mucosa to withstand injury is a factor in determining whether reflux disease will develop, and seems to be influenced by the age and nutritional status of the individual. Tissue resistance in the esophagus consists of the cell membranes and intercellular junctional complexes, which protect against acid injury by limiting the rate of hydrogen ions diffusing into the epithelium. The esophagus also produces bicarbonate, to buffer the acid, and mucus, which forms a protective barrier on the epithelial surface. The resistance of the esophageal mucosa to acid damage is much less than that of the stomach lining. When esophageal damage occurs, there is too much acid and pepsin present for a given level of mucosal protection. Then the pepsin in the acid refluxate can damage the esophagus by digesting epithelial protein."

The damage that H. Pylori causes does not stop at ulceration and irritation. Gastric cancer, or cancer of the stomach, is the second leading cause of death due to cancer in the world. During the past twenty years, dozens of studies have concluded that H. pylori is the primary culprit in causing peptic ulcers, non-Hodgkins lymphoma of the stomach, and gastric adenocarcinoma, or stomach cancer.

Incidentally, studies have shown that a certain strain of beneficial bacteria (probiotics) know as a lactobacillus salivarius can help to reduce or eliminate the H. Pylori bacteria. This probiotic, however, can only colonize in the GI tract when it is properly pH balanced.

The Usual Explanation of GERD and Reflux

These explanations were taken from Web MD. My comments to each of them are highlighted below each one.

• A weak lower esophageal sphincter (LES). If this valve is weak, it will not close properly, and reflux will occur frequently. This is a rare cause of mild GERD, but among people who have severe GERD, about 25% have this problem.

I find that this is somewhat of a stretch. How did the valve suddenly become weak? If it did become weak, is there not a way to strengthen it again? I would argue that if there is any issue with the muscle or valve (LES), that it might me spasm related (the valve spasms and acid escapes into the esophagus). If it is spasm related, it would be a sign of magnesium deficiency, which would be connected with the high intake of calcium carbonate.

• Slow digestion. If food stays in your stomach too long before it goes to the small intestine (called delayed gastric emptying), the stomach contents are more likely to get pushed up into the esophagus and cause heartburn.

This is another interesting explanation. What is the reason for food remaining in the stomach too long? May I suggest that if this indeed the case it is because the HCL in the stomach is too weak to effectively digest the food? Therefore digestion time is prolonged. This however would support the argument that I've already outlined.

• Overfull stomach. Having a very full stomach—such as from eating a very large meal—increases the likelihood that the LES will relax and allow stomach juices to back up (reflux) into your esophagus.

I think that this argument relates to the previous point. The stomach is not equipped to do its job effectively because of a lack of minerals.

Heartburn sufferers report a wide variety of symptoms, some far removed from the esophagus. Tingling fingers, odd sensations in the ears have been reported. Many also experience heart irregularities. It is hard to see how acid in the esophagus could produce such wide-ranging sensations. It is easier to see how mineral deficiency or other electrolyte imbalances could have such effects. Chloride deficiency is known to produce abnormalities in the maintenance of proper osmotic pressure within cells, and proper pH values both inside cells and in body fluids. There may be other visible symptoms, such as loss of hair or teeth. Such effects are far removed from the LES.

But Why Does It HURT?

There is another important distinction I'd like to make. When acid "refluxes" into the esophagus, the body has a way of dealing with it. Bicarbonate in the saliva is intended to flow down the throat to neutralize the acid. Even if the fluid remains in the lower esophagus, it wouldn't normally be bothersome. Because your body is acidic, and buffer depleted, then there won't be much bicarbonate present in your saliva. You can test the pH of your saliva with pH test strips. The pH of it should be 7.0 - 7.5. As a result of the acid remaining in the esophagus in an un-buffered state, it becomes irritating.

The pain you're experiencing is more likely due to the fact that this acid (which is un-buffered due to lack of bicarbonate in the saliva) is irritating the actual muscle (Muscularis propria) beneath the mucosa – after all, mucous does not contain nerves, so how would you experience pain without irritation occurring below the mucosal layer?



So, then the real question is this: Did the stomach acid damage the mucosal layer, or did something else (like H. Pylori) damage it? Either case would be abnormal. If the acid is doing the damage directly, it would indicate a lack of buffers in your saliva (a sign that your body is acidic). If H. Pylori is damaging the lining, then your stomach pH is too high; as a result these bacteria are able to thrive and spread to the LES and esophagus. This bacterial proliferation again indicates acidification due to mineral deficiency.

Also, consider this: Most heartburn sufferers are unable to eat many foods, particularly if they are acidic (like citrus fruits, tomatoes, mint, etc.). This too is more consistent with my theory in which the GERD sufferer's esophagus has a faulty protective lining; versus the weak or defective valve theory. This is because the immediate ingestion of these foods can cause pain while passing through the esophagus and LES... well before stomach acid is even secreted.

Finally, let us suppose that the usual explanation the cause of GERD contains some truth; that the LES is weak and does function properly. If the LES has a defective mucous lining, then could it not become so inflamed by the acid as to affect its ability to function?

The usual explanation may not be a complete falsehood, but more a half-truth.

Lack of Warning about the Danger of Excess Antacids

First of all, I'd like you to understand that minerals – including alkaline ones - come in many different forms. They can be broken down into two different classes; organic or inorganic. Here are a few of the differences:

- Organic minerals are produced by living things. Inorganic minerals are produced by non-living natural processes or by human intervention in the laboratory.
- Organic compounds contain carbon-hydrogen bonds. Inorganic compounds don't.
- Organic compounds contain carbon. Inorganic compounds don't.
- Inorganic compounds can form salts. Organic compounds can't.

Let me use calcium as an example to explain the differences between organic and inorganic:

Organic calcium is present in many different foods like soy, collard greens, turnip greens, kale, sesame seeds, almonds, and broccoli. It is assimilated very easily by the body, given the right internal environment and the presence of other minerals needed for assimilation.

Inorganic Calcium would include sources from animals (even mother's milk), rocks, shells, coral, dolomite (potentially toxic) or chelated minerals (these act more like they're organic because they are bound to an organic acid). Examples of these inorganic sources would include calcium carbonate, calcium phosphate, calcium citrate, calcium hydroxide, or calcium gluconate.

The important thing to understand here is that all of these types of calcium (or any other mineral for that matter) are treated differently by the body. Some have better bioavailability (your body absorbs them better), some bind to other minerals to form different compounds, etc.

As an example, a study of calcium-fortified soy milk revealed that the calcium in it (calcium carbonate) was absorbed at only 75% of the efficiency of the calcium in cow's milk (calcium phosphate). An important factor impacting the absorption of calcium relates to the availability of vitamins and minerals needed for proper "uptake". These include phosphorous, magnesium, and vitamin D. What I want you to understand is that your body requires proper mineral balance in order to operate effectively and in order to utilize all minerals efficiently.

When you take an inordinate amount of calcium carbonate in the form of antacids, a whole slew of chain reactions can occur.

1. Magnesium Loss - The absorption of calcium requires magnesium. If you keep putting calcium into your body without adding the necessary amount of magnesium, you can become deficient in magnesium. This deficiency has been tied to muscle spasms (including the stomach and LES), twitches, cramps, muscle tension, muscle soreness, tension headaches, constipation, insomnia, anxiety, hyperactivity, numbness, and tingling.

2. Chloride Loss – As we've already discussed in depth, this will hinder the production of HCL in your stomach. It will also negatively impact your entire body.

3. Vitamin D Loss – Since Vitamin D is also required to utilize calcium, a dietary imbalance between the two may lead to deficiency... especially if you don't get much sun exposure. Vitamin D deficiency will limit the proper absorption of calcium and phosphorous. As a result, prolonged vitamin D deficiency has a negative impact on bone mineralization.

The Food and Drug Administration rates antacids like calcium carbonate as GRAS, meaning 'generally regarded as safe'. This allows their unrestricted use as food supplements without any warning on the label. This might not matter if doctors warned against their use, but in fact many doctors themselves prescribe calcium carbonate to be used for extended periods.

The Drugs Like H2 Blockers and Proton Pump Inhibitors

The drug companies, of course, want you to believe that excessive stomach acid production is the cause of your woes. These drugs actually stop the production of acid in your stomach! While it may be tempting to buy "instant relief" in the form of a magic pill, consider for a moment how unnatural this is.

H2 Blockers

This is a class of drugs that was designed to reduce acid production in the stomach by blocking histamine receptor sites. They are sold under the brand names Tagamet (cimetidine), Pepcid (famotidine), Axid (nizatidine) and Zantac (ranitidine). Use of these drugs will actually make your digestive problems worse in the long run.

Because they further reduce your already depleted stomach acid, H2 blockers interfere with your ability to absorb critical nutrients from your food that require hydrochloric acid to break them down. H2 blockers commonly cause deficiencies in calcium, phosphorus, magnesium, and vitamin B12.

In the normal course of digestion, once food is digested in the stomach, the pyloric sphincter opens to allow food to pass from the stomach into the duodenum of the small intestine. This process is triggered by the right amount of stomach acid; too little acid causes food to sit undigested in the stomach, resulting in more heartburn. Once again, this is a case of the "cure" making the problem worse.

Each of these individual drugs has its own side effects as well. Zantac interferes with the liver's ability to detoxify any other drugs you may be taking and can cause severe headaches, fatigue, diarrhea, stomach pain, and itching. Pepcid has similar side effects and should not be used if you have kidney or liver problems. Tagamet use has been associated with impotence, and there is some evidence that it may impair male fertility. It can also aggravate joint symptoms in patients with arthritis.

Proton Pump Inhibitors

This class of drugs is even more powerful at suppressing stomach acid production because these drugs actually interfere with the cellular mechanism that pumps acid into the stomach. The most often prescribed drugs in this category are Nexium (Esomeprazole), Prilosec (omeprazole) and Prevacid (lansoprazole). Like the H2 blockers, they complicate digestive problems even more by reducing available stomach acid. Common side effects from these drugs include headaches, dizziness, diarrhea, abdominal pain, nausea and vomiting, constipation, weakness, upper respiratory infection, rash, cough, and back pain.

Steps To Take To Find True Relief

There are some simple steps you can take to eliminate disturbances like heartburn, GERD, and reflux that will actually work without resorting to medication (which won't fix the real problems).

Alkalize Your Body

This is done primarily through diet and proper supplementation. You can read my book The Acid-Alkaline Diet for optimum Health to get further insight. You may also click the link below to see the protocol I recommend for this particular subject.

By increasing your intake of "alkaline ash" foods, and decreasing your intake of acidifying foods, you'll begin the process of balancing the pH of your body. This is a process, however, and not an event. If what you're experiencing could be deemed as chronic, then the road to recovery will be longer than if you're experiencing only minor problems.

Drink Enough Water, and Good Water

Make sure you drink at least three to four liters of pure, mineral rich water a day. Water helps to protect the mucous lining in the stomach. It's important to also be getting the right type of water, and I always recommend to my patients that they drink alkaline water with a pH of at least 9, but no higher than 10.5. I do not recommend the use of water ionizers, however. These machines create alkaline water by reducing the positively charged ions in the water. Instead, it's better to add more negatively charged ions to the water in the form of ionic minerals.

Detoxify your body

As I stated earlier, the pain you're experiencing is only a symptom of a greater problem... acidification of your whole body. Since you're serious about recovering, it's a good idea to cleanse and detoxify your whole system, because your problematic areas are not the only areas under stress, and are a result of acidity and toxicity in your body in general.

Going on a 2 to 5 day cleanse will give your digestive system a well deserved a break. It will serve to eliminate accumulated toxins, bacteria, yeasts, etc. from your intestinal tract, will enable accumulated acids to be neutralized and released from your connective tissues and fluids, and will speed-up the process of your recovery. I outline a Cleanse & Detox program in my protocol for people in your condition.

Supplement Properly

Supplements like digestive enzymes, probiotics (some strains proven to eliminate H. Pylori), whole food or green food drinks, mineral complexes, and antioxidants will each serve in a different way to boost your body's ability to recover. Remember – without the appropriate raw materials, your body can't effectively do the work you're asking it to do.

In conclusion, I hope you understand at this point that the true root to your problems begins at one source... acidification. I'm also hopeful that because you are armed with this information, you'll be able to take the proper steps to regain the vibrant health that you deserve. The most important part of your recovery, however, is action.

Also, realize that when you get your body back into balance, the benefits will spread far beyond your current stomach problems. A pH balanced body is a body that is strong, vibrant, at the ideal weight, energetic, and free from illness.

I wish you the best, and hope that you've gained a lot from this report.

Wishing You Vibrant Health,

Christopher Vasey, N.D.

Click The Link Below To View The pH Balance Protocol For Heartburn, GERD / Reflux Sufferers <u>http://www.ph-ion.com/reflux.htm</u>

If a browser does not open, simply type in the following address into your web browser: www.ph-ion.com/reflux.htm

Or simply copy and paste the address into your browser:	
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 2. Highlight the web address, and then right-click your mouse and click "Copy to clipboard"



3. Then, simply place the curser in the address bar of your browser, right-click your mouse, and click "Paste". Then hit "Enter".



References:

Ahara, Herman. Acid & Alkaline - An overview of pH and human health. George Ohsawa Macrobiotic Foundation 1986.

Nielson, Mark T. Ions: The Body's Electrical Enegry Source. 1993.

Grogono AW, Byles PH, Hawke W: An in-vivo representation of acid-base balance. Lancet. 1976

Horne, M., Swearingen, P. Pocket Guide to Fluids, Electrolytes, and Acid Base Balance. St. Louis, Mosby. 1993

Arieff, Allen I., and DeFronzo, Ralph, A., (Editors) Fluid, Electrolyte and Acid-Base Disorders, Churchill Livingstone, New York, NY, 1995.

Bedani A, DuBose TD (1995). Cellular and whole-body acid-base regulation. IN: Fluid, Electrolyte and Acid Base Disorders (Arieff, AI and DeFronzo, RA, eds.). Churchill Livingstone. New York. p. 69-103.

Narins RC, Kupi W, Faber MD, Goodkin DA, Dunfee TD (1995). Pathophysiology, class and therapy of acid-base disorders. IN: Fluid, Electrolyte and Acid Base Disorders (Arieff, AI and DeFronzo, RA, eds.). Churchill Livingstone. New York. p. 104-198.

Berkow R, ed. (1982). Merck Manual (14th edition). Merck, Sharp & Dohme Research Labs, Rahwy, N.J. p. 945-52.

Rector FC (1973). Acidification of the urine. Handbook of Physiology Section 8: Renal Physiology (Orloff J, Berliner RW and Fieger S, eds.) American Physiological Society. Washington D.C. p. 431-54.

Sebastian A, et al. Improved mineral balance and skeletal metabolism in postmenopausal women treated with potassium bicarbonate.

Kaleita TA. Neurologic/behavioral syndrome associated with ingestion of chloride-deficient infant formula. Pediatrics 1986 Oct; 78(4): 714-5

Beard TC. A salt-hypertension hypothesis. J Cardiovasc Pharmacol 1990; 16 Suppl 7: S35-8

Seelig M. Cardiovascular consequences of magnesium deficiency and loss: pathogenesis, prevalence and manifestations--magnesium and chloride loss in refractory potassium repletion. Am J Cardiol 1989 Apr 18;63(14):4G-21G

Heller HJ, Stewart A, Haynes S, et al. Pharmacokinetics of calcium absorption from two commercial calcium supplements. J Clin Pharmacol. 1999; 39: 1151–1154.

Dawson-Hughes B, Dallal GE, Krall EA, et al. A controlled trial of the effect of calcium supplementation on bone density in postmenopausal women. N Engl J Med. 1990;323:878–883.

Sheikh MS, Santa Ana CA, Nicar MJ, et al. Gastrointestinal absorption of calcium from milk and calcium salts. N Engl J Med. 1987; 317: 532–536.

Miller JZ, Smith DL, Flora L, et al. Calcium absorption from calcium carbonate and a new form of calcium (CCM) in healthy male and female adolescents. Am J Clin Nutr. 1988; 48: 1291–1294.

Heller HJ, Greer LG, Haynes SD, et al. Pharmacokinetic and pharmacodynamic comparison of two calcium supplements in postmenopausal women. J Clin Pharmacol. 2000; 40:1237–1244.

Nickel KP, Martin BR, Smith DL, et al. Calcium bioavailability from bovine milk and dairy products in premenopausal women using intrinsic and extrinsic labeling techniques. J Nutr 1996; 126: 1406–11

Heaney RP, Dowell MS, Rafferty K, Bierman J. Bioavailability of the calcium in fortified soy imitation milk, with some observations on method. Am J Clin Nutr 2000; 71: 1166–9.

Roberts HJ. Potential toxicity due to dolomite and bone meal. South Med J. 1983; 76:556-559

Shils ME. Magnesium. In: Shils M, Olson JA, Shike M, Ross AC, eds. Nutrition in Health and Disease. 9th ed. Baltimore: Williams & Wilkins; 1999:169-192.

Food and Nutrition Board, Institute of Medicine. Magnesium. Dietary Reference Intakes: Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride. Washington D.C.: National Academy Press; 1997:190-249.

Hoglund P, et al. Distinct outcomes of chloride diarrhoea in two siblings with identical genetic background of the disease: implications for early diagnosis and treatment. Gut. May2001; 48(5): 724-7.

Blaser MJ, Parsonnet J: Parasitism by the "slow" bacterium Helicobacter pylori leads to altered gastric homeostasis and neoplasia. J Clin Invest 94: 4-8, 1994

Dooley CP, Cohen H, Fitzgibbons PL, et al: Prevalence of Helicobacter pylori infection and histologic gastritis in asymptomatic persons. N Engl J Med 321: 1562, 1989

Goodwin CS, Armstrong JA, Chilvers T, et al.: Transfer of Campylobacter pylori and Campylobacter mustelae to Helicobacter mustelae comb. nov. respectively. Int J Syst Bacteriol 39: 397, 1989

Graham DY, Klein PD, Evans DJ Jr, et al.: Campylobacter pylori detected non-invasively by the 13C-urea breath test. Lancet i: 1174, 1988

Allos-Mishu B, Blaser MJ: Campylobacter jejuni and the expanding spectrum of related infections. Clin Infect Dis 20: in press, 1995

Penner JL: The genus Campylobacter: A decade of progress. Clin Microbiol Rev 1: 157, 1988

Perez-Perez GI, Dworkin BM, Chodos JE, et al: Campylobacter pylori antibodies in humans. Ann Intern Med 109: 11, 1988

Bell NJV, Burget D, Howden CW, Wilkinson J, Hunt RH. Appropriate acid suppression for the management of gastro-oesophageal reflux disease. Digestion. 1992;51(suppl 1):59-67.

Dent J, Holloway RH, Toouli J, Dodds WI. Mechanisms of lower oesophageal sphincter incompetence in patients with symptomatic gastrooesophageal reflux. Gut. 1988;29:1020-1028.

Fennerty MB, Sampliner RE. Gastroesophageal reflux disease. Hospital Medicine. 1993;29(4):28-40.

Gudmundsson K, Johnsson F, Joelsson B. The time pattern of gastroesophageal reflux. Scand J Gastroenterol. 1988;23:75-79.

Orlando RC. Reflux esophagitis. In: Yamada T, ed. Textbook of Gastroenterology. Philadelphia, Pa: JB Lippincott Co; 1991;1:1123-1147.

Dr K B Hahm. Oxidative stress is more important than acid in the pathogenesis of reflux oesophagitis in rats. Gut. 2001; 49:364-371 (September)

Batchelder HJ, et al, "Naturopathic specific condition review: Peptic ulcer," Protocol Journal of Botanical Medicine, 1996 Winter; (1)3:191-196.

Golan R, Optimal Wellness, Ballantine Books, New York, 1996.

Goso Y, et al, "Effects of traditional herbal medicine of gastric mucin against ethanol-induced gastric injury in rats," Comparative Biochemistry and Physiology, 1996; 113C; 17-21.

O'Keefe SJ, "Nutrition and gastrointestinal disease," Scandinavian Journal of Gastroenterology, 1996 Suppl; 220: 52-9. Prochaska LJ, Piekutowski WV, "On the synergistic effects of enzymes in food with the enzymes in the human body, a literature survey and analytical report," Medical Hypotheses, 1994 Jun; 42(6): 355-62.

Roan S, "Revolution in ulcer treatment," Los Angeles Times, August 29, 1995.

Saliminen S, et al, "Gut flora in normal and disordered states," Chemotherapy, 1995; 41(suppl. 1): 5-15.

Santillo, Humbart, Food Enzymes: The Missing Link to Radiant Health. Hohm Press, Prescott, AZ, 1993.

Hunt, RH. The role of Helicobacter pylori in pathogenesis: the spectrum of clinical outcomes. Scandinavian Journal of Gastroenterology. 1996; 31[Suppl. 220]: 3-9.

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