Understanding Acidosis

and What to Do about It

Overview: What is Acidosis?

Acidosis is an abnormal increase in the acidity of the body's fluids.

We are born with in a slightly alkaline body. We have optimum health with a slightly alkaline body. Unfortunately, our bodies are acid generating by function. And in order to protect itself from an overabundance of acid waste, it will do all sorts of things to keep our blood at a 7.35 to 7.4 pH level, including things that eventually do a lot of harmful damage over time.

We live in a world where acidosis is at the root of many health problems, diseases, and illnesses. Acidosis happens when the body has more acid than it can effectively process. Many people seeking relief from symptoms of chronic conditions and are not aware of where these symptomatologies originate. In each case, they stem from an increase in the amount of acid in the body. Such conditions include

- arthritis
- arteriosclerosis
- cancer
- diabetes
- emphysema

Acidosis is so common it is assumed to be normal; however, it is most definitely not what our bodies need to be normal. Acidosis is the forerunner of most, if not ALL, chronic degenerative diseases, including:

- arthritis,
- cancer,
- diabetes, and
- heart disease.

These particular diseases are so prominent in our society that they are considered an epidemic here in the US.

Acidosis is also linked to our mental and emotional state of mind. Did you know that negative thoughts can lead to creating more acid due to speeding up our body's metabolic activity? Our negative thoughts can become such an acid waste factory, that even when eating the right alkaline foods will not be enough.

In fact, the more acidic we become, the more unpleasantly negative, defensive, argumentative and depressed we become. People who are suffering with these attitudes on a chronic level are most certainly in some degree of acidosis. If those things are bad enough, acidosis corrodes arteries, veins and heart tissues. It is not surprising that the number one cause of death in the USA is heart disease. Many

people who eat low fat diets and maintain a healthy lifestyle, still have high cholesterol. This is due to the true enemy of high cholesterol being the pH levels in the blood.

The same applies to high blood pressure. The more acidic a person is the greater the heart's workload becomes leading to higher blood pressure.

Cancer is the second leading cause of death. Acidosis inhibits cellular regeneration and DNA-RNA synthesis. For cellular regeneration and DNA-RNA synthesis to occur, cell pH must NOT be acidic. Cancer cells however, thrive in an acidic medium. An acidic pH will accelerate and increase the possibility of cellular mutations, which is another word for cancer.

Terminal cancer patients are around 1000 times more acidic than normal healthy people.

Cancerous cells do not contain hydrogen atoms. When healthy cells have enough hydrogen they will not and cannot become cancerous. If we can get hydrogen into any unhealthy cell, they can become healthy again. ALL FORMS of cancer come from an acid pH. This includes the latest horrible scare, prostate cancer.

Medical research on the subject of pH levels shows that total healing of chronic illness only takes place when and if the blood is restored to a normal, slightly alkaline pH.

What exactly is pH?

pH is the abbreviation for potential hydrogen. The pH of any solution is the measure of its hydrogen-ion concentration. The higher the pH reading, the more alkaline and oxygen rich the fluid is. The lower the pH reading, the more acidic and oxygen deprived the fluid is.

A healthy blood pH ideally is 7.4 or just slightly alkaline. 7.0 is neutral. Our bodies have an incredible ability to heal itself. However, it must become pH balanced in order to do so. In fact, an acidic body will lose its ability to absorb minerals and other nutrients properly as well as decrease its ability to detoxify heavy metals, and become more susceptible to illness, disease and fatigue.

What can we do about our acidic bodies?

An acidic body is an unhealthy one. If you have health problems, most likely you are acidic. Research shows that the body cannot heal itself in an acidic pH balance.

Start washing away the acidic waste and heavy metal toxins in your body by drinking high pH water. The more you drink, over time, the more your body will rid itself of acid. The closer you bring your body to a level 7.4 pH, the more it will be able to heal itself. The healthier it becomes, the more it can assimilate the minerals and nutritional content of your diet.

Effects of Acidosis

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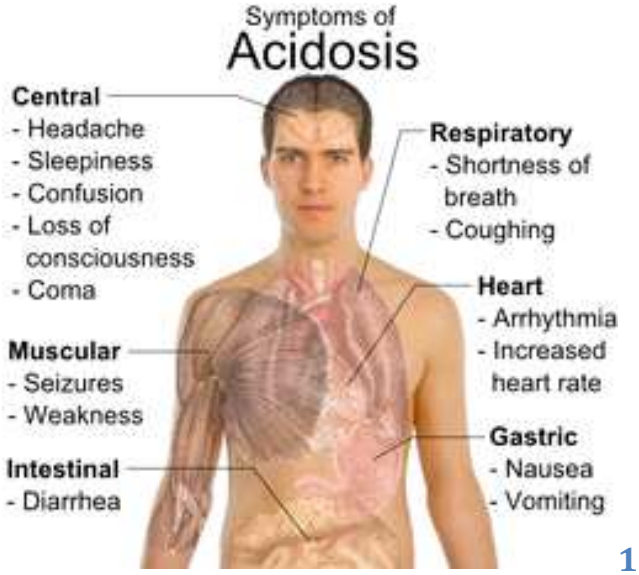
Excess acidity is a condition that weakens all body systems. Excess acidity forces the body to borrow minerals, including calcium, sodium, potassium and magnesium from vital organs, bones and teeth to buffer (neutralize) the acid and safely remove it from the body.

As a result the body can suffer severe and prolonged corrosion due to high acidity a condition that may go undetected for years. Acidosis leads to serious problems with major organs such as the liver, heart or kidneys. In this article, we will be looking into some of the reasons as to why we should avoid acidosis.



1.) It leads to weight gain and diabetes.

An acidic pH may result in weight problems such as diabetes and obesity. When our body is too acidic, we suffer from a condition known as Insulin Sensitivity. This forces excessive insulin to be produced. As a result, the body is flooded with so much insulin that it diligently converts every calorie into fat.

It is very likely that an acid pH, from an imbalanced diet, produces a condition, which stimulates the predetermined genetic response to starvation and famine. Thereafter, the body will have to increasingly hoard every calorie consumed and store it as fat.

Some people reckon that an acid pH immediately signals the powerful genetic response to an impending famine, directly interpreting with the all important and very sensitive Insulin-Glucagon Axis. When this happens, it makes the body produce more insulin than usual, and in turn, produce more fats and store it.

On the other hand, a healthy and slightly alkaline pH will yield normal fat burning metabolic activities, making no demands on the body to produce extra insulin and make fats. As such, this allows fat to be burned and naturally lost. A healthy pH diet is also less likely to have any yo-yo effects, or rebounding from a diet with additional weight gain.

We should try to maintain a healthy slightly alkaline pH so as to allow fats to be burnt normally for energy, rather than hoarded and stored under the mistaken biochemical belief of an impending famine.

Acidosis also disrupts the insulin producing pancreatic beta cells. These beta cells are especially sensitive to pH and cannot survive if the body is too acidic. When this occurs, beta cells will lose phase with one another. Their cellular communication will be thwarted and the body's immune system will start to over-respond. Stress within the cells will increase, making them more difficult to perform adequately and survive.

2.) It accelerates free-radical damage and premature aging.

Acidosis leads to partial lipid breakdown and destructive oxidative cascades accelerating free radical damage of cell walls and intracellular membrane structures. In this process, many healthy cells are destroyed.

Acidosis is the first step towards premature aging and accelerated oxidative cascades of cell wall destruction. Signs of acidosis may include wrinkling, age spots, failing hormonal systems, interfering with eyesight, memory, and a host of other age-related phenomena. Unwanted wastes not properly eliminated from the body actually poison the cells.

3.) It disrupts lipid and fatty acid metabolism.

Acidosis generally disrupts lipid and fatty acid, which are involved in nerve and brain function. This disruption causes neurological problems such as MS, MD as well as problems with hormonal balance within the endocrine system.

An acidic environment also causes LDL-cholesterol to be laid down at an accelerated rate in the heart, inappropriately lining and clogging up the vascular network. In other words, an acid pH initiates electrostatic potential, damaging arterial walls, which in turn initiates a PDGF-dependent immune response, causing cholesterol oxidation and the formation of plaque with heavy metals.

4.) It corrodes arteries, veins, and heart tissues.

Like acid eating into marble, acidosis erodes and eats into cell wall membranes of the heart, arteries and veins. During this process of erosion, our heart structures and inter connective tissues are weakened.

All living tissues are sensitive to their chemical environment. The muscle cells of the heart are no different. The entire cardiovascular system is directly affected by blood plasma pH and works as one large working "system of tubular muscles" to carry blood and nutrients to all living tissue in the body.

The pumping of the heart drives blood through the arteries, veins and capillary beds and helps to regulate blood pressure and the flow of blood circulation. The heart is normal when the pH of blood plasma is slightly alkaline, having a pH of 7.35 to 7.41. When the heart plasma rises to an acidic pH of more than 7.35, it gradually erodes away the smooth muscle tissues of the inner walls of the arteries and veins, as well as the heart itself. This process will start to weaken the structural composition of the heart, arterial and venous walls, causing lesions and microscopic tearing throughout its framework.

At the same time, an acid pH destabilizes free ionic balances within circulation, increasing the populations of positively charges particles (cations, an ion with a positive charge of electricity: H , Ca)

which directly interfere with the muscle contractility (contraction and relaxation) of the heart and arteries.

Acid pH changes of blood are now thought to result in the following:

- Development of arteriosclerosis (hardening of the arteries)
- Aneurysm (widening and ballooning of artery walls)
- Arrhythmias (abnormal rhythms of the heart including tachycardia)
- Myocardial infarction (heart attacks)
- Strokes (a cardiovascular accident).

The structural weakening of the cardiovascular system also creates irregularities of blood pressure, which further exacerbates the above problems.

5.) It alters the energy metabolism and reserve.

When your body has an acidic pH, it will prevent efficient cellular and body metabolism. Acidosis results in chemical ionic disturbances, interfering with cellular communications and functions. Acidosis reduces plus calcium binding of plasma proteins, therefore reducing the effectiveness of this intracellular signal. It also results in a disease of calcium cations (positive calcium) entry through positive calcium channels. This leads to a reduction of cardiac contractibility, or the ability of the heart to pump efficiently and rhythmically.

Positive calcium and hydrogen regulate the activities of intracellular proteins and are driven out of the cells by the "Sodium-Potassium pump" (Na-K pump). This pump provides a strong incentive for sodium to be driven into cells. It also regulates the amount of both sodium and potassium in the body stores, and uses as much as 25 percent of our caloric input daily.

Positive calcium exchanges the plus sodium, being forced out of cells, but naturally, the electrochemical gradient for positive calcium favors both positive hydrogen and positive calcium entry into cells, as there is less calcium and positive hydrogen in cells than in the extra-cellular fluids. In extra-cellular fluids, there is 10 times more the amount of positive sodium.

In acidic solutions, less plus sodium is available, therefore slowing down the processing and induction of nutritional items going into the cells. This increases positive hydrogen and calcium buildup within the plasma, making it more available to electro-statically bind with LDL-Cholesterol.

As a result, with free positive calcium populations and channels being disrupted, calcium may become inordinately leached from the bone masses. This causes osteoporosis. In a nutshell, an acidic pH drains us of energy and disallows stored energy reserves to be used.

6.) It is slow in the delivery of oxygen into the cell.

Acidosis reduces oxygen in the blood. As all living tissues, especially the heart and brain need oxygen to function; a lack of it will lead to eventual death. Having an acidic pH will reduce the amount of oxygen that is delivered to the cells. They will eventually die.

Diseases Associated with Acidosis.

It is important to note that the body's biochemistry is an important one, but it is just one of many tools to help the physician understand the whole body. pH in and of itself is not a diagnostic tool and is not a medical diagnosis as a disease entity.

What then happens when the body is too acidic? An acidic balance will:

- Decrease the body's ability to absorb minerals and other nutrients
- Decrease energy production in the cells
- Decrease the body's ability to repair damaged cells
- Decrease the body's ability to detoxify heavy metals
- Enable tumor cells to thrive
- Make the body more susceptible to fatigue and illness.

Some people who have high acidity levels tend to exhibit these symptoms such as:

- anxiety
- diarrhea
- dilated pupils
- extroverted behavior
- fatigue in early morning
- headaches
- hyperactivity
- hyper sexuality
- insomnia
- nervousness
- rapid heartbeat

- restless legs
- shortness of breath
- strong appetite
- high blood pressure
- warm dry hands and feet

Most of the time, the body becomes acidic due to a diet rich in acids, emotional stress, toxic overload, and/or immune reactions or any process that deprives the cells of oxygen and other nutrients. When this happens, the body will try to compensate for acidic pH by using alkaline minerals such as calcium. As a result, calcium is removed from the bones, causing osteoporosis.

Acidosis, which is an extended time in the acid pH state, can result in rheumatoid arthritis, diabetes, lupus, tuberculosis, osteoporosis, high blood pressure and most cancers.

Acidosis and Cancer

Two main factors leading to cancer are an acidic pH and a lack of oxygen. As such, are we able to manipulate these two factors so as to prevent and control cancer?

Cancer needs an acidic and low oxygen environment to survive and flourish. Research has proven that terminal cancer patients have an acidity level of 1,000 times more than normal healthy people. The vast majority of terminal cancer patients have a very acidic pH.

Why is this so?

The reason is simple. Without oxygen, glucose undergoing fermentation becomes lactic acid. This causes the pH of the cell to drop to 7.0. In more advance cancer cases, the pH level falls further to 6.5. Sometimes, the level can even fall to 6.0 and 5.7 or lower. The basic truth is that our bodies simply cannot fight diseases if our pH is not properly balanced.

About The Author

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