

The Importance of Your Body's pH Balance

Each of us is at war and we don't even know it! The private war we each wage is a daily assault on our body by bacteria, virus, fungus, yeasts, and molds. We have entered what might be referred to as critical mass when it comes to this bacterial warfare onslaught being waged against us by stronger and stronger killer bugs and bad bacteria. Our immune systems are becoming weaker and over-taxed in this war. Even the medical profession's first line of defense (the antibiotic) is becoming less and less effective against resistant new strains being created daily as the bacteria mutate. Since Louis Pasteur discovered the germ theory of disease that states germs are the cause of disease, time has proven him correct. But note Dr. Pasteur's dying words: "The germ is nothing, the inner terrain is everything."

The inner terrain referred to in Dr. Pasteur's statement is now being called our biological terrain and comprises our body's digestive tract, lymph system, blood, urinary tract, interstitial and interstitial fluids. Our body's are alkaline by design and acid by function. Maintaining proper alkalinity is essential for life, health, and vitality. Simply put - an imbalance of alkalinity creates a condition favorable to the growth of bacteria, yeast and other unwanted organisms. All leading biochemists and medical physiologists have recognized **pH** (or the acid-alkaline balance) as the most important aspect of a balanced and healthy body. They have long known that the maintenance of an alkaline **pH** in our tissues and cells is critical to cellular health. In contrast, our digestive tract (except for our normally alkaline mouth) has varying degrees of acid by design, and our urinary tract should be slightly acidic for healthy function.

We live and die at the cellular level. All the cells (billions of them) that make up the human body are slightly alkaline, and must maintain alkalinity in order to function and remain healthy and alive. However their cellular activity creates acid and this acid is what gives the cell energy and function. As each alkaline cell performs its task of respiration, it secretes metabolic wastes, and these end products of cellular metabolism are acid in nature. Although these wastes are used for energy and function, they must not be allowed to build up. One example of this is the often painful lactic acid which is created through exercise. The body will go to great lengths to neutralize and detoxify these acids before they act as poisons in and around the cell, ultimately changing the environment of the cell. Most people and clinical practitioners believe the immune system is the body's first line of defense, but in actuality it is not. It is very important, but more like a very sophisticated clean-up service. We must instead look at the importance of **pH** balance as the first and major line of defense against sickness and disease and for health and vitality.

If we were to ask "What is killing us?", the answer might be "ACIDOSIS"! It has been demonstrated that an acidic, anaerobic (lacking oxygen) body environment encourages the breeding of fungus, mold, bacteria, and viruses. Let's look at an example. If we were to seal the door to our freezer and then unplug it, come back and open the door in two weeks, what would we find? Mold, bacteria, microscopic bugs. Things will be growing and multiplying. Where did they all come from? They did not sneak in - remember the door was sealed. The answer is . . . "they were always there". It is simply that the environment changed to a more inviting and healthy one for the "critters" to live in. This can be likened to a shift in our biological terrain from a healthy oxygenated, alkaline environment to an unhealthy anaerobic acidic environment. You see what is healthy for us is unhealthy for the body attackers and what is healthy for them is what is unhealthy for our body.

A state of acidosis is simply the lack of oxygen and available calcium which the body uses to maintain its alkaline balance. Calcium makes up 1.6% of our body weight. It is literally the human glue that holds the body together. Calcium is so biochemically active that it has been likened to an octopus. A calcium ion can hold onto seven other molecules while it grabs onto one molecule of water. No other ion can do this. And it is the right size to easily get in and out of the human cell. As it does this, it takes a chain of nutrients into the cell and then leaves to get more nutrients.

The biggest problem scientists have found is that over time the human body becomes depleted of calcium. A compound called mono-ortho-calcium phosphate is the chemical buffer for the blood. This buffer maintains the alkaline level (or the lack of acidity) in your blood. Without it you would die. But in order to supply enough calcium for buffering we must have enough calcium being absorbed from our diet or our body will simply rob the needed calcium from our bones and teeth. The more acidic we become, the harder it is for oxygen to be present, so our biological terrain also becomes more anaerobic. Without adequate oxygenation, unfriendly bacteria, viruses, molds, and fungus can live and prosper. Then our cells cannot carry on their life-giving functions in a very efficient manner because our biological chemical reactions need oxygen.

Life and death are in the biological terrain and the battle cry here is to reclaim your biological terrain. This is so important that some practitioners working with the inner biological terrain and its implications to the health of our body's are beginning to say "There are no specific diseases, only specific disease conditions, and there is only one disease. And that one disease is acidosis."

The human body is very intelligent. As we become more and more acidic the body starts to set up defense mechanisms to keep the damaging acid from entering our vital organs. It is known that acid gets stored in fat cells. After all, if the acid does come into contact with an organ the acid has a chance to eat holes in the tissue. This may cause the cells to mutate. The oxygen level drops in this acidic environment and calcium begins to be depleted. So as a defense mechanism, your body may actually make fat to protect you from your overly-acidic self. Those fat cells and cellulite deposits may actually be packing up the acid and trying to keep it a safe distance from your organs. The fat may be saving your vital organs from damage. Many people have found that a return to a healthy inner biological terrain helps them to lose excess fat.

Osteoporosis is very confusing for many people. Most people think they can eliminate it by increasing their consumption of milk and dairy products. But in the countries where the consumption of dairy products is very low the instances of osteoporosis is very rare. Osteoporosis is an acidosis problem. As the body becomes more acidic, to protect against the event of heart attack, stroke, illness, or even cancer, the body attempts to remain healthy. So, it steals calcium from the bones, teeth, and tissue. As bone mass becomes depleted, this is what we call osteoporosis. As we saturate the body with calcium this brings the alkaline **pH** up and drops the acid levels down.

One of the first warning signs of an acidic biological terrain is calcium deposits. A little known fact is that there has never been a scientifically proven association between calcium deposits in the body and nutritional calcium. In fact quite the opposite is found in the results of testing calcium deposits of the body. Calcium deposits come not from dietary calcium but from the structural calcium of our bones and teeth!

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

WHAT ARE THE FIRST THINGS WE CAN DO TO CHANGE ALL THIS?

We must get in there and cleanse the body to get it under control. After it is under control, we have to support the body nutritionally to build new cells. We are in an era of malnutrition because the minerals aren't in the soil and they can't possibly get into our food chain. What we have is lots of food but very little nutrient value in it.

I've heard experts comment "if you don't want to take supplements, you haven't got a chance". The quality of the supplements you do decide to take will make all the difference in the world because not all supplements are created equal.

Calcium is the one mineral that can really alkalize your body. It produces the calcium buffering compound Mono-ortho-calcium phosphate which raises your **pH** (makes your biological terrain more alkaline). There are many ways to keep your body's biological terrain at a healthy alkaline environment. These include: eating alkalizing foods including lots of green foods and super foods limiting our intake of phosphates which bind to calcium and prevent its absorption. Dietary phosphates are commonly found in all carbonated drinks, and in all animal protein. Adding dietary calcium in the form of supplementation is generally difficult because of our body's inability to absorb and assimilate most forms of commonly available calcium. This all takes time. It is not easy to reverse acidity once we become too acidic. The extreme importance of cellular environment has been mostly overlooked in the past, but has recently been recognized.

Scientists who describe the environment of our cells measure three conditions of certain body fluids - in blood, saliva, and urine: **pH**- Acid or Alkaline; Antioxidant power; Electrical conductivity.

During this century, despite many technological advances in our society, we have seen many threatening declines. One of the most obvious and dangerous is the nature of food consumption. Food consumption in our most advanced countries has changed from nutritious raw foods to highly processed foods low in nutritional value. Over 100,000 new chemicals have been introduced to our foods, air, and water. All of these changes have put even greater stresses on our body's innate ability to affect the chemistry of our body fluids, and therefore our Biological Terrain. As a result we see huge increases in the incidence of chronic and life-threatening diseases.

INCREASED pH - Pollution, stress and our consumption of highly processed foods tend to create acidic body fluids, a characteristic compatible with certain diseases. All cellular waste, and most internally generated toxins are acidic.

INCREASED ANTIOXIDANT POWER - Free radicals are compounds which have lost an electron and which tend to steal electrons from healthy cells, which can cause malignancy, loss of energy, accelerated aging, and other diseases. Damaging free radicals are created by normal activities, but also from contamination of our food, air and water. An antioxidant is a compound that gives up an electron to a free radical, making it harmless. Vitamin C gives up an electron, and becomes a weaker free radical. It then steals an electron from Beta Carotene which becomes a weaker free radical and steals from Vitamin E.

ELECTRICAL CONDUCTIVITY - Water without minerals will not conduct electricity. Messages from cells to other cells are vital to their functions, but will not be transmitted if minerals are inadequate in the body fluids between and inside the cells. Because our soils and the vegetables we eat are often depleted of trace minerals, our body fluids tend to be low in the minerals necessary to transmit vital messages. This can lead to frequent fatigue, poor mental function, and other diseases.

You'll have to ask yourself, "is **pH** balance a luxury or a necessity?" When we get the body alkaline it can function correctly and utilize all nutrients better. The most important thing that you can do for your body is reclaim your inner terrain. Once you do, the parasites, fungus, mold, yeast, and bad bacteria should begin departing because they cannot exist in a healthy alkaline environment. Our private war against the daily assaults of stronger and deadlier organisms and our fight to stay alkaline will not end with a magic cure. Good health requires getting the proper nutrition on a daily basis.

**Permission to use this informative article was graciously given from Dr. Darrell L Wolfe. Dr. Wolfe holds a PhD in Nutritional Philosophy, and a Doctorate in Homeopathic Acupuncture. He is a Registered Massage Therapist, Deep Muscle Therapist, Certified Colon Therapist, and Nutritional Consultant. As well, for the past 14 years, he has operated a Correspondence School for Deep Tissue Massage.