



## Acid and Alkaline Balance for Optimal Health

by Charlie Skeen

This month's newsletter has to do with something that most people never consider, but can have a major impact on your overall health in many ways, the pH balance of your body. In fact, many health problems can be made worse, or even caused by unbalanced pH. Problems such as osteoporosis, arthritis, low back pain, fibromyalgia, allergies, indigestion, constipation, joint stiffness and lack of flexibility, blood sugar imbalances, cancer cell growth, skin problems, dry skin, low energy, headaches, premature aging, suppressed immune system, cardiovascular diseases, and many other health problems.

### What Is pH?

pH means "potential of hydrogen", the amount of hydrogen ions in a particular solution. When you have many hydrogen ions, the pH indicates an acid solution, and when you have few hydrogen ions the pH indicates an alkaline solution. This pH is measured on a scale ranging from 0.00 to 14.00. A pH of 7.0 is neutral while anything above is defined as alkaline and anything below 7.0 is considered an acid pH.

In the body the normal pH for all tissues and fluids is alkaline, while the stomach is acid. The following list below will show the approximate pH ranges of the digestive system:

1. Mouth, saliva, Ptyalin - pH 6 - 7
2. Gastric Stomach - pH 2 -5
3. Digestive secretions of liver and liver bile - pH 7.1 to 8.5
2. Bile from gallbladder - 5.0 to 7.7
3. Small intestine - Bile and Pancreatic Enzymes - pH 7.5 to 8.3

The healthy pH level of the blood should be 7.4.

The body gives the highest priority to maintaining the alkaline state of the blood. When the pH of the blood begins to drop below 7.4, becoming more acidic, the body will take alkaline-forming elements, minerals such as calcium, magnesium, potassium, and sodium, from the small intestine, to buffer the acidity. Taking these minerals from the small intestine will not allow the digestive enzymes to work in the proper pH interfering with digestion.

### Proper pH Important to Maintaining Healthy Extracellular Fluids

Any disruption in the digestive process will prevent the assimilation and transport of nutrients to maintain the proper acid-alkaline balance of the body and blood. This will result in electrolyte imbalances, especially sodium, potassium, magnesium, and calcium ions, in the extracellular fluid that surrounds the cells. The extracellular fluids transport nutrients into our cells and carry away the waste material. The nutrients and electrolytes transported by the extracellular fluids are vital to carry on cellular oxidation, the transport of oxygen to the cells and the removal of carbon dioxide, and metabolic functions critical for the life of the cell. If these cells can not receive sufficient amounts of balanced minerals, nutrients, and oxygen, they can not function properly and will begin to die.

Research has shown that for the cells of the body to remain in a healthy state the extracellular fluid that bathes the cells must have all the elements controlled daily so that no single element is off by more than a few percentage points. This also includes maintaining the correct pH (acid-alkaline balance) of the extracellular fluid and the blood.

### **Proper Functioning Eliminative Organs for pH Balance**

Healthy extracellular fluid and blood are supported by proper functioning eliminative organs such as the kidneys, liver, large intestine, and skin. Besides the organs eliminating waste products and toxins, they also assist the body in eliminating excess acid and alkaline elements in its effort to maintain healthy blood and extracellular fluid pH. An examination of what is eliminated in the urine will reveal the body's electrolyte and acid-base buffering mechanisms. An example of this is when someone's extracellular fluid and blood systems are too acid resulting in their kidneys eliminating acid through the urine in an attempt to make the blood more alkaline. A pH reading of the urine will show that it is acid. The pH reading of the urine on a day-to-day basis can read anywhere between 4.8 to 8.4. Testing the pH of the urine is a preventative health measure assisting one to make needed corrections in their diet and lifestyle to head off future health problems. Significant deviations of our blood pH usually indicates disease.

### **Most People Are Too Acidic**

While there are some people who are too alkaline, the majority of Americans are too acid, and while there are a variety of things that cause this, diet is the major factor. Some of these acid forming foods are high amounts of flesh foods, grains, especially processed grains and cereals, white flour and sugar, candy, pastry, most beans, lots of fats, fried foods, sodas, coffee, Lipton tea and others that contain tannic acid, canned foods, commercially raised fruits and vegetables in soil too low in the alkaline minerals such as calcium and magnesium, fruit juice and fruit juice drinks, dairy, especially pasteurized, city water, synthetic vitamins, chemical additives, colorings, preservatives, prescription and synthetic drugs.

What makes these foods and items so acidic is that they have very little or do not contain alkaline-forming minerals such as calcium, magnesium, potassium, and sodium because they either were processed out or did not contain them to begin with.

### **Acid Forming Foods**

As a rule then foods that contain the elements of sulfur, phosphorus, chlorine, and iodine are acid forming. And foods that contain the elements of sodium, potassium, calcium, magnesium, and iron are alkaline forming.

### **Over Acidity and Disease**

If we take in too many foods that contain mostly the acid forming elements, our blood and extracellular fluid will become too acidic. In an effort to control this acid the body will give up the minerals calcium, magnesium, potassium, and sodium from where ever it can obtain them, in this case from the bones and any other place the body would have these elements available. By robbing the bones and other areas of the body of these elements, an individual over time would lose bone and cartilage tissue contributing to osteoporosis and arthritis. Other signs of a degenerating health would be the joints would dry out and become stiffer and less flexible, pain in the lower back and generalized local muscle stiffness, risk of heart attack and stroke increases dramatically due to plaque buildup and weakening blood vessels, high blood pressure, signs of aging such as dry and wrinkled skin occur more rapidly, blood sugar fluctuations and diabetes are more likely, allergies, digestive problems, constipation, increased risk of cancer which grows quickly in an acid environment, weight gain with a difficulty in losing weight, weakened immune system, weakened glands and organs, headaches, depression, and many other ailments that plague people today as a result of over-acidity.

### **Balancing pH Contributes to Good Health**

By learning how to eat foods to balance our acid-alkaline pH properly we can better maintain a balanced pH improving our overall health, energy, and prevent disease. And, for those women and men who are trying to reverse osteoporosis and overcome arthritic conditions of all sorts it is imperative

that the pH be properly maintained for maximum relief and healing. While it is good that supplements are taken to support the body, we have to remember that as long as the blood is over-acid these conditions and others, will never fully reverse themselves until the excessive loss of the alkaline elements are halted and proper balance is restored to the body.

### **Determining pH**

To assist you in determining whether you are too acid, or too alkaline, I have included two procedures to test your pH. To perform these two tests you will need to go to the local drug store in your area and purchase pH tape. Also, check your local health food stores as some may carry pH tape.

#### **Procedure #1**

24 hour urine test.

When you start a new day in the morning start by collecting the second urine of the morning until the first urine of the next morning in a glass jar.

Then shake the total collection a few times. Now dip in a strip of pH tape to get a reading. Compare the color of the tape to the reading on the box and record it.

If you are not a vegetarian or you are a lacto-vegetarian (a vegetarian who uses dairy), a generally good pH range would be from 6.3 to 6.9. Anything below 6.3 would indicate that you are too acidic. For vegetarians who do not eat dairy and for raw food vegetarians, 6.3 to 7.2 is within a safe range.

#### **Procedure #2**

Saliva Test

Testing the saliva with pH tape is thought to be a good indicator of the alkaline reserve in the body and the condition of the pH of the cells.

Before eating in the morning take a strip of pH tape and touch it to your tongue. Make sure you have worked up adequate saliva to wet your tongue thoroughly.

Record your reading. The normal range before eating is 6.8 to 7.2.

Now go ahead and eat breakfast, wait 30 minutes and touch your tongue again to take another reading. If what you are eating is balancing your pH your reading should be more alkaline up to a pH of 7.2. If you dip below 6.8 or lower this indicates that what you are eating and drinking is making you more acid.

Research in the area of pH testing by Dr. Morter indicates that if the morning saliva pH is below 6.2 it suggests an acid system with an inadequate amount of alkaline minerals, but with some alkaline reserve.

But, if the saliva pH is between 5.5 and 5.8 with no rise in pH after a meal, this indicates that the body is extremely acid and there are no alkaline reserves left.

If an individual finds that he or she is leaning lightly or heavily toward the acid side corrective measures could be put in place. For example, eliminating as many acid causing foods and drinks as possible. To assist individuals in doing this I will prepare a list of examples of things that can be eliminated and a list of things that can be included in my next newsletter. To help you get started now, always remember that the less processed your food is and the more natural it is the easier it will be to balance your pH, nourish your body, and maintain a healthy state.

As individuals make these changes they can continue to test their pH with pH tape to determine if the changes are helping them to be more alkaline and less acid.

Remember that everyone is unique and you will have to experiment to find what works best for you.

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