

pH: QUESTIONS AND ANSWERS

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What is pH?

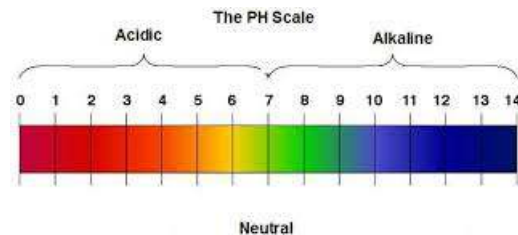
pH is an abbreviation for "potential hydrogen."

It is the measurement of hydrogen-ion concentration.

The pH scale ranges from 0 to 14.

The middle reading of 7.0 is considered to be "neutral."

A reading below 7.0 is acidic while a reading of 7.0 or above is alkaline.



The lower the pH reading, the less oxygen is in the fluid you are testing whereas the higher the pH reading indicates more oxygen.

How can I determine my pH level?

There are a variety of home test strips available that quickly and accurately measure the pH level of urine and saliva. A saliva pH reading of 6.4 – 6.8 indicates the body's pH lies on the alkaline side and is in balance.

Acids are eliminated through the urine, so it should be expected to be more acidic than a saliva reading, especially the first morning urine. If your pH registers as highly acidic, pay attention to your diet and include less acidic foods and more alkaline foods.

Cigarettes, alcohol and drugs also make the body more acidic. If you are on a detoxification regime or fasting, expect the acidic levels to be more pronounced as your body eliminates toxins from your body.

How does pH affect my body?

Human blood pH should be slightly alkaline (7.35 - 7.45). A pH below 7.0 means that the body is acidic, making it prone to ailments, fatigue and disease.

When the pH in body tissues are overly acidic, a state called "acidosis" occurs. Acidosis is one of the basic causes of many diseases as it creates a burden on the liver, kidney, digestive tract, heart and affects every cell in the body.

A healthy body stores large alkaline reserves to meet emergency demands if too many acid-producing foods are consumed. However, these normal reserves can be depleted. Balanced body chemistry is of utmost importance for the maintenance of health and correction of disease. When the body is in an alkaline state of 7.0 or above, diseases cannot gain a foothold.

What happens when my body is acidic?

Acidic conditions in the body often result in health problems such as cancer, chronic fatigue, Candida Albicans, depression, multiple sclerosis, fibromyalgia, arthritis, osteoporosis, viruses, ALS (Lou Gehrigs Disease), weight gain, skin conditions and more.

Acidosis decreases the body's ability to absorb minerals and other nutrients, decreases the energy production in the cells, decreases its ability to repair damaged cells, decreases its ability to detoxify heavy metals, allows tumor cells to thrive and creates fatigue and dis-ease. Cancer and most diseases cannot exist in an alkaline body.

What causes my body tissues to become acidic (acidosis)?

The body can become acidic due to a number of reasons, generally from a combination of the following. Eating a diet of mainly acidic foods can create a high acidic pH in your body. All foods are "burned" or digested in the body, leaving an ash. This food ash can be neutral, acidic or alkaline, depending largely on the mineral composition of the foods.

The reason acidosis is rampant in our society is mostly due to the "Standard American Diet" (SAD), which is high in acid producing animal products like meat, eggs and dairy, and relatively low in alkaline producing foods such as fresh fruits and vegetables. In addition, most foods are laced with chemicals that begin during the growing process of the plant or animal and continues through transportation and before being placed on the grocer's shelves. These include herbicides, fungicides, pesticides, growth hormones, ripening agents and retardants, insect repellents, etc.

Most people do not get enough minerals in their diet due to the loss of mineral content of the soil where plants are grown. This has occurred as a result of modern farming techniques. When the body becomes acidic, it will do all it can to balance itself. In order to do this, it will use the alkaline minerals found in the body. However, if the body does not have enough of these minerals in the blood or stored in the tissues, the acids will build up in the cells, creating acidosis and setting the stage for a variety of maladies.

Emotional stress also creates acidic reactions in the body. Daily meditation or quiet time, exercise, releasing negative emotions such as anger, frustration and despair will help to increase your overall well-being and assist in balancing your pH levels to a more alkaline state. Lack of oxygenated blood due to shallow breathing, lack of exercise and dietary factors also inhibit proper pH balance.

Toxic overload creates acidic reactions in the body, these include but are not limited to the following: environmental pollution: industrial waste, air and water pollution, chlorine and fluoride water additives, plastic wraps and leaching plastic water bottles, herbicides, pesticides, chemtrails, exhaust fumes, (first and second-hand), X-rays, cosmetics and personal care products: these products abound with chemicals.

Two other areas of concern are mercury in seafood, vaccinations and amalgam tooth fillings and aluminum from cookware, baking soda, toothpaste, deodorant and many food products.

What can I do to balance my pH level?

DIET

The rise of cancer, obesity, malnutrition and disease is sky-rocketing. Most diseases can be cured and prevented through proper nutrition. It is vitally important to maintain a proper ratio between acid and alkaline foods in the diet. To maintain health, the diet should consist of 80% alkaline forming foods and 20% acid forming foods.

When the pH balance is maintained, the body has a strong resistance against disease. To assist in the curing of any disease, the higher the ratio of alkaline elements in the diet, the faster will be the recovery. Alkalis neutralize acids. Therefore, in the treatment of most diseases, it is important that the diet includes plenty of alkaline foods to offset the effects of acid-forming foods.

Animal products are highly acidic and lower in protein than many green leafy foods. Consider adding green leafy vegetables, spirulina, chlorella and hemp protein powders as a natural and alkaline meat replacement.

Read packaging labels and become aware of substances that are masked as food such as chemical sweeteners like NutraSweet, Sweet 'N Low and Aspartame that are added to many foods, especially diet products. Avoid drinking alcoholic beverages and soda pops, for these substances are highly acidic.

Did you know that to neutralize a glass of cola that has a pH of 2.5, one must drink 32 eight ounce glasses of alkaline water with a pH of 10?

The benefit of eating raw, organic foods is the ability to avoid ingesting chemicals added during normal farming practices of both animals and plants. These include herbicides, pesticides, fungicides, chemical fertilizers, preservatives, growth hormones, chemicals to slow and/or speed the ripening process, food additives and msg, to name a few.

In addition, organic farms grow in mineral rich soils, which enhances the mineral content in the plants you eat. Every phase of processing affects the nutritional value of foods. These include, chopping, packaging, bleaching, dehydration, chemical alterations, irradiation, homogenization and microwaving, Heat processes such as pasteurization and cooking kills the natural minerals and enzymes, rendering many foods into toxic, acidic non-food products.

The avoidance of harsh medications, whether they are prescribed or "over the counter" is another factor to consider. Once you are armed with information on how to balance your body through proper nutrition, many ailments will heal themselves.

MINERALS

When the body is acidic, there are always significant mineral deficiencies. There are a number of ways you can add minerals to your diet. Fruits and vegetables grown in soils that are mineral rich can provide all the minerals one needs, if a variety of plants are eaten on a daily basis. Unfortunately, due to modern farming practices, the vast majority of soils are mineral deficient. To make matters worse, the soil and plants are continually bombarded with pesticide, herbicides, fungicides and chemical fertilizers which all leads to genocide of the minerals normally found in live soil.

Growing your fruits and vegetables in rich humus and supplementing what you don't grow with produce from organic farms will increase the amount of minerals in your diet.

Minerals are destroyed when subjected to heat, which means any plants you ingest that are cooked are likely to have lost their mineral content. Salt is a wonderful mineral supplement, unless it has been bleached and processed. There are several natural salts available that are tastier and more nutritious than toxic table salt. Himalayan salt contains 84 essential minerals whereas Celtic salt contains 72 essential minerals. These salts can be obtained at most health food stores or better yet, ask your grocer to stock them. Do not cook with the salt, since heat destroys minerals; add it to your food after serving or place some crystals under your tongue any time during the day. You can also purchase minerals in tablet or liquid form.

EMOTIONAL STRESS

Chronically happy people are rarely chronically ill. Scientists are finally discovering what indigenous people have known for centuries: negative thoughts create disease in the body. Louise Hay has a remarkable small reference book called, *Heal Your Body*, which accurately shows specific places in the body where negative thoughts and emotions are stored. These emotions, when festered over long periods of time will eventually manifest as diseases. The implications of this knowledge are huge!

By understanding how you create with your thoughts and being shown how to "undo" them with affirmations and lifestyle changes is the stuff miracles are made of. My books, *Mayan Messages* (and coming in 2016 "The Soul Connection" is designed to help master thoughts, fears, belief codes and transcend these into higher frequencies in the body that do not resonate with fatigue and dis-ease.

OXYGENATED BLOOD

Every cell in the body needs an adequate supply of oxygen to function properly. The air we breathe today is not as purely oxygenated as it was before the advent of technology. Shallow breathing, lack of exercise and dietary factors that inhibit properly oxygenated blood also causes acidosis, less oxygen in the blood. Deep breathing, physical exercise and proper diet can help to eliminate many of the problems associated with low blood oxygen count.

ENVIRONMENTAL POLLUTION

Environmental pollution surrounds us every day. Some are out of our control, however, there is much that you can do to become less affected by these pollutants.

It is within your power to stop and/or avoid being around those who are smoking cigarettes. It was the power of the people that have created indoor smoking bans. With this same power, you can help stop much of the industrial pollution, as well.

If your municipal water supply adds fluoride or high elements of chlorine, educate yourselves on the dangers of these toxic substances, gather together and address those in power with your choice to stop these toxic and costly additives.

Much has already been done to help stop air and water pollution from huge corporations, kudos to those who have orchestrated and monitor these changes.

Toxins from plastic wrap, plastic containers and water bottles can be avoided by using glass products. If you must use plastic water bottles, then buy higher quality plastics that do not leach and avoid setting them in the sun. Heat in glass containers rather than plastic and let your foods cool before storing them in plastic.

Look into healthier ways to control weeds and insects in your garden and lawn. Several cities use steam from hot water to kill weeds along the highway. Check into various alternatives and present to your City Council alternatives to using these toxic substances.

If you have a home garden, look into "guilds" in which plants that grow together support each other. For instance, plant marigolds (which deters many insects) throughout your garden. Weed pulling can be done by hand. In many cases, those weeds you pull may be beneficial to your health, such as dandelions and mustard greens.

COSMETICS AND PERSONAL CARE PRODUCTS

Your skin is the largest organ of your body. Anything you place on the skin is readily absorbed by the body. The US Food and Drug Administration (US FDA) does not regulate these products since they are not food products. This allows manufacturers free reign to add toxic chemicals and misleading labeling on the safety of products.

At greatest risk are products labeled for infants and children. When you eat toxic substances, they are processed through the liver and have a chance of being eliminated from the body. However, when absorbed through the skin, the same toxic substances generally do not reach the liver and often are stored in the tissues of the body where they accumulate and are the cause of cancer and many other debilitating diseases.

Take time to educate yourself before using cosmetics, sunscreen, shampoo, soap, body lotion, toothpaste, deoderant, powder or any other substances on your body. A general rule of thumb is, If it isn't safe to eat, then don't place it on your body.

MERCURY and ALUMINUM

Both of these metals are neurotoxins, meaning they are toxic to the brain. Any amount of mercury is toxic in the human body. Most people acquire mercury through dental amalgam tooth fillings which continually leach small amounts into the bloodstream, often accumulating in the brain and other cells, causing many diseases, including fatigue.

Mercury, in the form of thimerosal, is used in vaccinations and immunizations, especially those using multiple formulas such as the DPT shots as a binding agent and preservative. See the "Resources" page for several articles on the dangers of these shots and their relationship to Autism, Attention Deficit Disorders and general health.

Medical studies have shown that ALL Alzheimer's patients have increased levels of aluminum stored in their brain tissues. Even though this correlation exists, many manufacturers still use aluminum in products such as baking soda, toothpaste, cosmetics and deodorant. And, let's not forget to mention all those aluminum cans that food, beer and sodas come in!

Food contamination also exists when using aluminum cookware and heating foods in aluminum foil. Never use aluminum foil to store foods with mayonnaise; the chemical reaction between the two is a cause of food poisoning. One source for aluminum free baking soda is Bob's Red Mill which can be purchased online or at many health food stores. Ask your local grocer to supply it at your favorite store.

Which foods are alkaline and which are acidic?

Download the "pH Food Chart" for information on which foods are alkaline and which are acidic. The following section will tell you some of the reasons why some foods fall on both sides of the pH chart.

Why are some foods listed on both the alkaline and acidic side of pH charts?

There are several versions of the Acidic and Alkaline Food chart. Some foods at times are listed on the Acidic side of the chart and other times on the Alkaline side. Some foods are alkaline by nature but turn acidic after the digestion process. There are several other factors to take into consideration.

The more a food is processed, the more acidic it becomes. This includes: heating, microwaving, dehydrating, drying, chopping, addition of sugars, chemical preservatives, artificial coloring and flavoring. Other considerations include the minerals in the soil during growth, applications of chemical fertilizers, herbicides, fungicides and pesticides in the soil and directly on the plants during farming and transportation.

Chemicals, growth hormones, vaccinations and improper diets are given factory farmed animals and which you ingest when you eat their flesh.

Packaging can also affect the food by leaching, sunlight absorption and chemical preservatives. The farther a food is to being eaten fresh from the plant, the more acidic it becomes in your body.

Purchase organic whenever possible. Many complain that organic foods cost more, but the toll on the toll on your body and health is more costly when an over abundance of toxic substances are ingested on a daily basis. The key factor to remember is to eat a diet of around 80% alkaline foods and the remainder can be acidic. A purely alkaline diet will create imbalance in the body.

Below are some other reasons why certain foods can fall on either side of the neutral zone on the pH chart. Several fruits, such as bananas are alkaline when they are ripe, yet slightly acidic when not fully ripened. Various fruits such as apples have many varieties. Generally, the sweeter varieties are more alkaline than tarter ones. Most seeds and grains are acidic, but become more alkaline when they eaten after they are sprouted.

All vegetable and fruit juices are highly alkaline. The most alkali-forming juices are: fig juice, green juices of all green vegetables and tops, carrots, beet, celery, pineapple and citrus juices. Vegetable broth is an extremely alkalizing drink. The juices remain in an alkaline state when ingested while fresh and contain live enzymes. However, most commercial juices have added sugars and bleached salt, preservatives and food coloring, rendering them more acidic.

Some foods such as lemons test as acidic while in their natural form, yet have an alkalizing effect during digestion. On the other hand, meats are alkaline before digestion, but leave acidic residues in the body. Honey and sugar yield as alkaline in their raw, unprocessed state, yet due to their high concentration of sugar, they can become form acid. When subjected to heat during processing, they become more acidic.

[Is it necessary to detoxify if I change to better eating habits?](#)

The body is designed to eliminate toxins from the body. However, due to the increased exposure in today's world, the body is unable to keep up with the amount of toxins bombarding it every day. Many chemicals in the air, food and water are unnatural and the body does not have the resources to totally eliminate them. As a result, through time, these toxic substances accumulate in the cells and are the cause of a myriad of maladies.

Thus, it is good to periodically do herbal detoxifications. However, it is advisable to do them under the care of a naturopathic physician, especially in cases where the body is already compromised with cancer and other intensive maladies. Detoxing when the body is already under tremendous stress can be enough to place the organs into shock which could result in traumas such as heart attacks, comas or sudden death.

Also, detox effects such as headaches, muscle aches, etc. can mask symptoms or just plain cause a person to feel even worse, which may result in frustration leading back to bad dietary habits.

A good habit is to start changing your dietary habits by adding more fruits and vegetables and going light on meats, sodas or other acidic foods that you are currently addicted to. There are many fruits and herbs that have naturally occurring detoxifying effects on the body, such as asparagus which is a natural diuretic, helping to eliminate excess water from the tissues. There are also many products that can aid the body in releasing toxins and assisting it to become more alkaline.

It takes disease and illness a long time to develop in the body. However, as the excess acids are removed, the burden on the kidneys, liver and digestive system is reduced. The body can then begin to heal itself. It is then that you can consider a more comprehensive herbal detox program. As time progresses, your body will begin to rid itself of stored chemicals that have accumulated through the years.

However, some chemicals such as mercury need special assistance in order to be chelated out of the body. Seek out a professional who is knowledgeable in these areas. You will know that you are on the right path when your dis-eases and discomforts lessen. Congratulate yourself on a job well done!

What is cancer?

Herman Aihara in his book, *Acid & Alkaline* defines cancer as such: "If the condition of our extra-cellular fluids, especially the blood, becomes acidic, our physical conditions will first manifest tiredness, proneness to catching colds, etc. When these fluids become more acidic, our condition then manifests pains and suffering such as headaches, chest pains, stomach aches, etc.

According to Keiichi Morishita in his *Hidden Truth of Cancer*, if the blood develops a more acidic condition, then our body inevitably deposits these excess acidic substances in some area of the body such so that the blood will be able to maintain an alkaline condition. As this tendency continues, such areas increase in acidity and some cells die; then these dead cells themselves turn into acids.

However, some other cells may adapt in that environment. In other words, instead of dying – as normal cells do in an acid environment – some cells survive by becoming abnormal cells. These abnormal cells are called malignant cells. Malignant cells do not correspond with brain function or with our own DNA memory code. Therefore, malignant cells grow indefinitely and without order. This is cancer."

What can I do if I already have cancer, candida albicans, chronic fatigue or another serious disease?

When the body's pH level reaches an alkaline state of 7.4, cancer cells become dormant. When the body's pH level reaches 8.5, cancer cells die!

Cancer can be cured simply by maintaining your pH level at 8.5 or higher!

An alkaline pH means an increase in oxygenated blood. Many diseases such as cancer, viruses and candida albicans cannot exist in a highly oxygenated, alkaline environment.

If your body is already seriously compromised, you would do well to research the works of professionals who specialize in your specific area. You can begin by changing your diet and learning how to safely release the accumulation of toxic substances in your body. Often, these toxins inhibit the body's ability to properly absorb nutrients, especially minerals needed to balance pH levels. Even if your diet is pure, you still may not be absorbing the vitamins and minerals necessary to fight disease and sustain health.

Are there other factors that I should be aware of?

When faced with all this information, most of which is highly debated, it is easy to become discouraged and resignedly go back to old habits. However, be patient, follow advice that makes sense and pay attention to your body. Start with simple changes such as choosing Himalayan or Celtic salt rather than table salt.

Each week, try something new. Consider learning to cook one new item you have never tried before, such as having amaranth instead of boxed cereal for breakfast. Try new items that are chemical free, perhaps spending some of your leisure time researching one topic each week, like sunscreen or soap.

Be patient with yourself; take one step at a time. In the beginning, you may have detox symptoms such as headaches, depression and a feeling of being overwhelmed. Go at your own pace with an attitude of gratitude and self-empowerment and before long, you will find excitement as you begin to change your lifestyle to match the new inner you!