# pH (potential hydrogen) - ACID-ALKALINE BALANCE

**All of the cells, organs and fluids in the body have their own ideal pH values in order to operate at peak performance. When the pH is higher or lower than the ideal level, the cells become stressed. Then these cells cannot utilize the nutrients they need, and can't eliminate wastes efficiently, until the proper pH is restores. Testing the pH on a regular basis can easily monitor the pH levels.**

**Cell pH refers to the degree of acidity or alkalinity (base) of the body's blood or other fluids. The number of hydrogen ions is calculated by measuring the pH levels in blood, saliva, and urine. The pH scale begins at 0.0 with a measure of the pH of sulphuric acid, and ends at 14.0 with the pH or pure calcium. The midpoint of 7.0 is a neutral reading. A number less than 7.0 pH indicates a more acid solution, and a number greater than 7.0 pH indicates a more alkaline solution. These numbers refer to how many hydrogen ions are present in the solution compared to a standard solution.**

**The pH values are on a logarithmic scale, indicating a ten-fold difference between each unit. For example, a pH of 6.0 is ten times more acidic than a pH of 7.0; but a pH of 5.0 is 100 times more acidic than a pH of 7.0. Most pH readings for urine and saliva variations are read on a tenths scale, since just a few tenths of a point can indicate a significant difference between ideal and health and illness. The pH reading is a measure of the resistance of your tissues to electrical energy. As the pH moves lower than 7.0, the current flow increases through the solution since the resistance is lower. In this case, digestive enzymes and minerals, especially calcium, move through the system too quickly to be absorbed effectively. When the pH is above 7.0 there is a decrease in the potential current flow and an increase in resistance. When the resistance is increased there is less energy for the minerals are enzymes to connect and reactions happen more slowly.**

**Each body system has its own preferred pH level that shifts during the day. Overall, the body's internal chemical environment normally changes from a weak acid to a weak base within a 24 hr period, usually more acid in the morning and more base in the evening. The slightly acid time period in the early morning is optimal for the activity of the nerves, hormones and neurotransmitters. During the morning the acid wastes are dissolved and eliminated in the urine. During the day, the body buffers the pH of the food and beverages consumed by releasing electrolytes, and then the pH level goes up. This process allows the kidneys to keep the elimination process balanced. When the pH level gets too high, it indicates the body is buffering with ammonia to compensate for a bio-chemical system that is too acid.**

**Digestion is a process of breaking down particles of food into smaller and smaller bits until they can be absorbed into the bloodstream. Food enters our mouth into a slightly acid (almost alkaline) environment - this environment does nothing to break down proteins and meats but the chewing does break down everything. However, the enzyme 'amalyse' in the mouth does help break down the starches. Then the food enters the stomach - soooo acidic - perfect for the proteins to be broken down, however the starches don't do well here, they were better off in the mouth. When everything passes into the small intestine (food is now referred to as 'chyme' the pH again changes back to a more alkaline environment. This is where 95% of the absorption of nutrients occurs.**

**It is generally believed that a pH acidic body (internally) invites disease. This is based on the fact that when sick people (as in people with cancer for example) are tested, their bodies reveal they have developed too much acid waste. Waste acids should be eliminated, and when they are eliminated, they are reabsorbed from the colon into the liver and put back into general circulation, then they are deposited into the body tissues.**

**Also, when the body is in an acidic condition, it provides an environment that is desirable for parasites, fungi, bacteria, viruses and basic diseases.**

**Many people believe that drinking lots of alkaline water will help their bodies be less acidic and therefore healthier. It is true that drinking lots of high alkaline water will help alkalinize the body, but if you drink water (any type) near your meal, it dilutes the acidic environment needed by the stomach. So eating a big steak and then drinking high alkalanized water which counteract the acid pH needed by the stomach to dissolve the steak in the stomach is an incorrect path to take.**

**The best way to keep the body slightly alkaline is to rely on the metabolism of foods. When foods metabolize or burn up in the body, they leave behind an ash so to speak which can be acidic, neutral, or alkaline. It is the pH of this metabolizing of foods that creates the pH of the body. Certain foods when**

**they metabolize make the body more alkaline (such as fruits and vegetables). Some foods make the body more acidic (meats, cheeses, coffee, sugar).**

**There are some supplements to kick start your body to become alkaline if you are in a diseased state and need to get there fast, but if you are relatively healthy, changing your diet will suffice. We do not believe in drinking high amounts of alkaline water all the time is the answer to your problems, although drinking alkaline water and/or taking alkaline producing supplements helps, the diet needs to be the basis to good health.**

**By the way, when you are emotionally upset, it can also put your body into an acid state which is one reason why stress can make you sick and invite disease.**

**In order to begin testing your pH you will need pH paper or a pH meter. The paper is limited in terms of range and accuracy, so a meter is a far better choice. If you have the budget for one, it is the best way to go - it will be a lifelong tool for you and your family to use.**

**SOME pH FACTS:**

**Baking soda is 9pH. (very alkaline)**
**Draino is 13pH (extremely alkaline)**
**Battery acid is 0pH (most acidic)**
**Seawater is about 8pH**
**Milk from magnesium is 10pH**
**Black coffee is 5pH**
**Grapefruit and orange juice pop is 3pH**
**Vinegar, Lemon Juice, and Gastric acid are about 1pH**
**pH of water: 7pH is neutral (neither acid or alkaline). Water in Medicine Hat is 7.1 - 7.3 pH which is quite alkaline.**
**Normal pH of our skin/hair: 4.5 - 6 pH. Our skin likes to be washed with slightly acidic water and therefore people find rinsing their hair and skin after bathing with diluted apple cider vinegar helps restore the acid balance of the skin and hair.**
**Normal pH of the body: 6.4-6.7pH**
**Normal pH of our mouth (saliva): Our mouth is 5.6 - 6.9 pH - just slightly acidic and the average body temperature is 37°C which is the environment in which the human amylase is most active to break down starches.**
**Normal pH of the body: 6.4-6.7pH (as in the blood, urine)Normal pH of the stomach: The pH of the stomach is usually about 2.0 but may go as low as 1.0. This is a very acidic level. Because the pH scale is a logarithmic scale, the pH of the stomach is hundreds or thousands or millions of times stronger than typical cellular fluids which are generally close to 7.0 (the neutral level on the pH scale.) When food comes into the stomach, the pH may rise to levels in the 3.0 to 4.0 level due to the buffering capacity of proteins. The high levels of hydrochloric acid and proteases help to break down proteins in digestion so it needs to be acidic.**
**Normal pH of small intestine: pH 6**
**Normal pH of pancreas: 7**
**Normal pH of colon: 6. Fungus needs pH of 5 or less to survive.**
**Normal pH of Blood: between 7.325 and 7.45. Small changes in blood pH results in death within a short period of time. Calcium that is stored in the bone is stolen to keep the blood pH in balance.**
**Normal pH of Stool: 6.2 - 6.8**
**Normal pH of Urine: 6.50-6.80**
**Normal pH of Bile: 3pH**

## What we usually measure - saliva and urine:

**Normal pH of saliva: To test the saliva, use a strip of pH test paper about 2" long and create a pool of saliva on your tongue. While holding one end of the test paper, dip the other end into the saliva, being careful not to touch your lips to the paper. After dipping in the saliva, immediately pull it out and read the paper. Optimal first morning readings after fasting all night is 6.4 to 6.8pH. The pH of your saliva moves from high to low according to what you eat during the day and how your body metabolizes your food. Saliva pH readings reflect the health of the lymph system, the upper digestive system including the stomach, pancreas and liver, and the state of the sympathetic and**

**parasympathetic nervous system. The saliva contains an enzyme that comes directly from the liver, so the saliva pH is a good indicator of the strength of the liver. The saliva pH reveals the level of energy coming into the body.**

**Normal pH of urine: Test the urine in mid-stream using either a cup to catch the urine or by using a longer strip of pH paper. First morning readings after fasting all night is 6.0 to 6.4pH. Urine pH indicates the overall function of cell metabolism, showing the level of metabolic wastes being removed. Urine pH reading should be lower than saliva pH in the morning since urine is dumping residues from nighttime fasting. However, when urine pH is under 6.0 for a long period of time, the body begins to age more quickly and enzymes that are needed to rebuild cells are inactivated. As urine pH gets above 6.4, it shows metabolism is moving more slowly and problems such as constipation may be occurring. Generally, when the urine pH level stays below 6.0 for an extended period of time, it is an indication that the body's fluids elsewhere are too acid, and it is working overtime to get rid of the excess acids. When the urine pH is too acid, the body releases many electrolytes to keep the pH level normal and maintain life.**

**Urine testing is best done upon first rising in the morning and because the body is removing wastes overnight, the body will tend to be more acidic in the morning. During the day the ideal urine pH is about 6.4, but first then in the morning it can range from 6.0 to 6.4pH. Urine testing is best done by testing the urine in mid-stream, using either a cup to catch the urine or by using a longer strip of pH paper.**

**As stated before, the urine pH shows the level of acidity of the cell metabolism. The pH of urine can range from 4.5 to 8.0pH. The kidneys maintain normal pH balance primarily by retaining sodium and excess acid retained by the body increases. Alkaline urine is normally excreted when there is an excess of base or alkaline substances in the body. Secretion of an acid or alkaline urine by the kidneys is one of the most important mechanisms the body uses to maintain a constant body pH.**

**A highly acid urine pH occurs in uncontrolled diabetes, diarrhea, dehydration and respiratory diseases in which carbon dioxide retention occurs. Highly alkaline urine occurs in urinary tract obstruction, kidney weakness, and respiratory diseases that involve hyperventilation. Most of the bacteria responsible for urinary tract infections make the urine more alkaline because the bacteria split the urea into ammonia and other alkaline waste products.**

**The formation of kidney stones is related to the urine pH. Those being treated for certain types of kidney stones are frequently given diets or medications to change the pH or the urine so that kidney stones will decrease. Calcium phosphate, calcium carbonate and magnesium phosphate stones develop in alkaline urine. Therefore in this case, the urine should be kept acid. Uric acid, cysteine and calcium oxalate stones form in acid urine, and in this situation, the urine should be alkaline or less acid than normal.**

**Note: when the urine and saliva pH are both acid, the whole system moves too rapidly and more energy is used to breakdown tissue than to rebuild tissue. When the pH of urine or saliva continues to be less than 6.0, the state of health varies between mildly poor to very poor.**

**Anxiety or chronic stress could also be affecting the physiology. If mental or emotional factors are not the cause, improving diet, detoxification and gentle exercise will move the values up to the correct range. The body will use acid-neutralizing minerals such as calcium that is stored in the bones, to maintain a healthy balance which is why as we get older, we have a greater tendency toward osteoporosis.**

**When the saliva pH is at least 6.2, it is within the healing range which indicates the body has the ability to come back into balance more easily with simple changes in diet. On the reverse side, when the body is too alkaline, the system moves more slowly. The longer the pH is out of balance, the worse the metabolism functions. Toxins will build-up more quickly and more damage will occur to our cells.**

## Acidosis

**This describes an imbalanced acid condition in all our body fluids. It occurs when too many hydrogen ions are measured in body fluids. Virtually all functions of the body are sensitive to the pH levels of their fluids. If pH deviates too far to the acid side, cells become poisoned in their own toxic acid wastes and die. Acidosis seriously obstructs the activities of enzymes involved in the digestive system, the nervous system and the energy operations of the body. Acidosis is caused by oxidative stress that builds up, eventually causing an increase in hydrogen ions. Acidosis also comes from weakened oxygen**

**metabolism in the cells and tissues. An acid pH if left unchecked, will interrupt all cellular activities and functions, including the regularity of your heart rate and the brain function required to remember simple things. When cells are blocked by toxins or by a lack of cell flexibility, oxygen is unable to penetrate into the individual cell. The cell begins to starve. This in turn causes pain, fatigue and many of the other symptoms related to fibromyalgia.**

**Some of the common symptoms of being too acid are:**

- **tiredness**
- **catching colds easily**
- **pain in the muscles and connective tissues**
- **reoccurring headaches**
- **indigestion**
- **tightness in the chest**

**When the acid condition continues over a long period of time, excess acid substances will be created and deposited in the weakened areas of the body, so that the blood will be able to maintain it's essential alkaline level. The cells around these weakened areas will either die or try to adapt to this acid environment. Since these cells are too acid, when these cells try to adapt, they can become malignant abnormal cells, creating cancer or other chronic disorders in the body. Chronic disorders are not contagious health conditions; we develop them slowly, most often as we get older. Examples:**

- **heart disease**
- **high blood pressure**
- **diabetes**
- **arthritis**
- **fibromyalgia**
- **gout**
- **asthma**
- **hay fever**
- **allergies**
- **headaches**
- **psoriasis**
- **obesity**

**In general, to have a good pH, calcium, magnesium and potassium are needed. Calcium supplements should be of the natural type that are easily absorbed to avoid calcium storage problems.**

## Testing

**In order to test your pH you will need pH paper or a pH meter. Using saliva does not give you a very accurate picture. Best to take the measure in the morning. Many dip the saliva stick into their first urine of the morning, however there is some evidence that the first morning urine is quite acidic and the second urine might be more accurate. Try both and see what you get.**

**For those that have a fungal overgrowth, it is interesting to note that fungus needs a pH of 5 (acidic) to survive, so it would be good to have the colon at 6pH (most people are 4-5).**

**In extreme acidosis, the kidneys can produce ammonia (pH 9.25) to buffer the acids, and calcium is leached from the bones.**

**What pH do bacteria prefer:**

- **H pylori prefer pH between 3.5 - 8 (with best at 5.0)**
- **Salmonella typhi has optimum at 4pH**
- **Streptococcus bovis prefers 4.5-6.7 pH**

**Interesting that Viruses like a fairly alkaline environment; whereas Fungi like a more acidic environment; and Bacteria can thrive under various conditions, but their growth is stimulated in high-sugar conditions. An excess of toxins in your diet and environment tends to increase the production of acid within cells, forcing the body to compensate by producing a strong alkaline reaction in the blood - this favours the growth of Cancer cells.**

**At 5.8pH cancer cells begin to form and at 3.5 pH the human body cannot sustain life.**

# Moving Your pH

**If this information about moving your pH is too much technical overload, just skip it. Some people are really into this and so we pass on this information we obtained in case you are interested.**

**Here is one formula to get a quick "average" pH, you can measure yourself two hours after breakfast and two hours after lunch. Do this over a period of days and get your average numbers:**

**(Avg Urine pH ____ + Avg Saliva pH X 2 ____ ) / Divided by 3 = _____**

**Average pH Between 6 and 7**

**If your average pH is between 6 and 7 just use the neutral calcium of gluconate and orotate to build up your total alkalinity along with other minerals and trace minerals.**

**Average pH Above 7**

**If your pH is above 7, add calcium lactate and vitamin C (ascorbic acid). Clinicians have found about 1000mg twice a day of Vitamin C is good, and the higher above pH 7 you go, the more vitamin C you can take. Stop the calcium lactate when you come into range between 6 and 7 and pull back on the Vit. C. Do not take vitamin D.**

**Average pH Below 6**

**If your pH is below 6, add or Ionic calcium. With pH 5.6 to 6 clinicians have found that adding 1000 IU of vitamin D once or twice a day is beneficial and pH from 5.2 to 5.6 up to 5000 IU of vitamin D is good, while pH below 5.0 up to 50,000 IU of vitamin D once or twice a day would be ok as little vitamin D is being absorbed in the acid terrain. You can use the vitamin D to help push the pH up.**

**Stop the calcium citrate and carbonate when you come into pH range 6 to 7. Pull back on vitamin D and go to cod liver oil for vitamin D requirements. Do not take vitamin C.**

**Attached you will find lists of the pH foods as they affect the body after metabolizing. You will notice that most fruits and vegetables are high in alkalinity, whereas meats, dairy, cheeses, heavy grains, and processed foods are high in acid.**

**A general rule of thumb is to eat 80% of your foods from the alkaline forming list and 20% from the acid forming list. It is also beneficial if 60% or more of the diet can be taken in its raw state to obtain fresh enzymatic action.**

**Strangely, lemons and apple cider vinegar are very acidic to taste, but when metabolizing, they create alkalinity in the body. What makes a food more alkaline is the presence of organic minerals.**

**To help obtain and maintain an alkaline body, many people drink the juice of fresh lemons in water throughout the day. Fresh lemon juice in 4 oz of water, 1 teaspoon every 15-30 minutes can be very helpful in an acid crisis or in the case of kidney stones. Other people find adding a tablespoon of apple cider vinegar to a cup of water and drinking several cups a day helps keep the body more alkaline.**

**Cream of Tartar is high in potassium but also highly alkalizing and a 1/2 teaspoon can be used in emergencies to neutralize acid reactions such as allergic responses, panting, shortness of breath, and anxiety attacks.**

**Charcoal capsules or powder can be used for acid food poisoning or stomach/gas upsets but should not be used continuously (take 5 caps or stir a teaspoon in 8 oz water). Baking Soda will neutralize almost any excessively acid condition such as food poisoning (1 teaspoon in 8 oz water, repeating if necessary).**

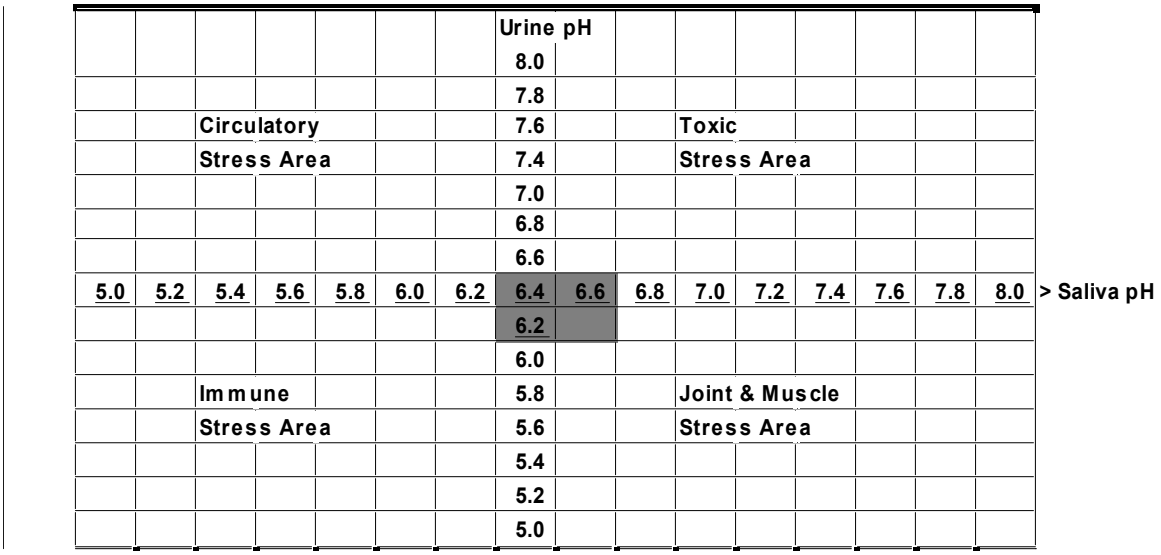
**Stress can make your body more acidic! November 11, 2004, Lorna Vanderhaege announced on t.v. that her lab discovered that when they tested regular commercial chicken and chicken eggs, they left an acid ash behind. However, when they tested the free run type - the ones that are allowed to run around the farm naturally and eat a natural diet - they tested alkaline instead of acid!**

**Lorna wondered if the commercial food was the cause of the chickens being acid, however she admitted that we can also turn our bodies acidic by our emotions. When we are unhappy, our bodies become acidic which invites disease.**

**Perhaps it was that the environment for the chickens - being cooped up in little cages and not allowed to move and run about like a normal chicken - perhaps that stress makes them acidic.**

## Saliva and Urine pH Chart

**Determine your tendency toward problems relating to imbalances in pH readings. Keep a record of your daily pH readings with this chart. The 2 intersecting lines come together at a pH of 6.4 with the urine pH going vertically from 5.0 at the bottom of the chart to 8.0 at the top of the chart.**
**The saliva pH is the horizontal line beginning at 5.0 pH on the left, going to 8.0pH on the right edge.**
**Plot your different pH readings and see which area they are located.**
**The region within the shaded square is the ideal urine and saliva ranges for first morning readings.**
**The square area represents the urine pH readings between 6.0 and 6.4 and the saliva pH readings between 6.4 and 6.8. The more often your readings are within the square in the middle of the chart, the better your potential health level.**




**Results:**

1. **Urine and Saliva pH both high: tendency to toxic conditions in metabolism. When both urine and saliva pH are too high for a period of time, (above 6.4 pH for urine and above 6.8 pH for saliva), then body goes into toxic stress state. When this occurs, system is overloaded, producing constipation, congestion. Symptoms: intestinal gas, body odor, bad breath, distended abdomen, sinus and upper respiratory congestion, skin discoloration, disk deterioration along spine, increased tooth decay. Alkaline pH readings indicate metabolism has slowed down and can be caused by liver or kidney weakness.**
2. **Urine pH low, saliva pH high: tendency toward joint and muscle stress or pain from congestion in these tissues. When the Saliva pH is above 6.8 and Urine is lower than 6.0, body goes into a state of joint and muscle stress. Digestive system is out of balance since upper digestive system is moving slower than the lower digestive system, creating abdominal gas and bloating. This creates congestion and accumulation of toxins, knots and lumps in soft tissues. Energy is being lost. Pain in tender points comes from these toxins that have accumulated in the muscle tissues.**
3. **Urine pH high, Saliva pH low: can lead to stress in circulatory system. When Saliva pH is low (below 6.4), and Urine pH is above 6.4, there is a tendency toward slow circulation with movement toward having a stroke or heart attack. This patter can have digestive stress because the upper digestive system is moving quickly, and the colon is shifting toward a slow state. Excess wastes that are created when the body is too acid are unable to move out of the system. This is what causes the circulation problems, since the toxins created can't be released as needed.**
4. **Both urine and saliva pH low consistently: immune stress where oxidative stress causes the body to age more quickly. When the Saliva pH stays lower than 6.4 and the Urine pH is lower than 6.0 for a period of time, the immune system is affected. This acid state occurs because the digestive system is moving too fast and nutrients can't get into the cells. There will be a tendency toward fungal infections, leg cramping and joint aching. Calcium will be drawn out of the bones to balance this acid state, so osteoporosis occurs when the body stays in this pattern. When the urine and saliva measurements test regularly with lowered pH readings, less oxygen is in the cells. This lack of oxygen in the tissues increases anaerobic bacteria and fungal growth in the body. This immune system stress will cause shortness of breath as the lungs are drawn upon**

**for mineral energy. Chronic diarrhea and other malabsorption problems will be seen, such as colitis and Crohn's disease. Anemia comes from prolonged acid conditions and supplementing vitamin B12 and iron will not help unless pH levels are improved.**

**Diet should be 80% alkaline 20% or less should be acid**
**If you have tested negative against any of these foods, avoid them.**

**ACID-FORMING - ALKALINE-FORMING FOODS**

| PROTEIN FOODS<br>Acid-Ash<br>--eat 20% or less--<br>from this column | STARCH FOODS<br>Alkaline Ash<br>---------- eat 80% or more ----------<br>from these columns | BULK FORMING<br>Neutral Starches |
|---|---|---|
| Beef | Dates and figs | Asparagus |
| Liver | Honey and molasses | Celery |
| Lamb | Maple Syrup | Collards |
| Veal | Raisins | Cabbage |
| Pork* | Pumpkin and squash | Lettuce |
| Ham* | Tomatoes(fresh) | Beet tops |
| Poultry | Apples and grapes | Endive |
| Fish(most) | Currants and Peaches | Broccoli |
| Sea Foods | Pears and Pineapple | Green peas |
| Eggs(whole) | Plums and Melons | Beans |
| Buttermilk | Bananas and Cherries | Water cress |
| Yogurt | Apricots and Cantaloupe | Chives |
| Grain | Watermelon | Cucumbers |
| Wheat germ | Brown rice | Mustard |
| Rice(white)* | Millet | Garlic |
| Most whole grains | Buckwheat | Kale |
| Cooked prunes | Almonds | Eggplant |
| Nuts(most) | Potatoes, baked | Onions |
| Cheese | Popcorn | Radishes |
| Lentils | Okra, sorrel | Spinach |
| Cooked tomatoes | Macaroni* | Green Peppers |
| Cooked rhubarb | Okra, sorrel | Carrots |
| Coffee(black)* | Oily nuts* | Romaine lettuce |
| Soy beans | Macaroni* | Leeks, corn |
| Dried peas | Flour gravy* | Peppermint |
| Dried beans | White Flour* | Escarole |
| Carob | Spaghetti* | Dandelion |
| All nuts except almonds, chestnuts, brazil nuts | Cereals, processed* | Kohlrabi |
| Alcohol | Pastries and Peanuts* | Artichokes |
| White Sugar* | | Parsley, beets |
| Cranberry | | Brussel Sprouts |
| Chickpeas | | Parsnips |
| White Vinegar | | Rutabagas |
| Candy* | | Root celery |
| Cake, Pie, Ice Cream, Jams* | | Mushrooms |
| | | Avocado |
| | | Butter |
| | | Olive Oil |

***not recommended at any time**
**Note: what makes a food more alkaline is the presence of organic minerals.**

**IF YOU TEST SENSITIVE TO ANY OF THE ABOVE FOODS, AVOID THEM!**

## FOODS MOST ALKALINE PRODUCING

| | |
|---|---|
| Lemons | 7.5pH |
| Watermelon | 7.5 |
| Melons, all | 7.0-7.5 |
| Agar Agar | 7.0 |
| Cantaloupe | 7.0 |
| Cayenne | 7.0 |
| Parsley | 7.0 |
| Kelp | 7.0 |
| Figs, dried | 7.0 |
| Dates, dried | 7.0 |
| Grapes-thompson | 7.0 |
| Limes | 7.0 |
| Mango | 7.0 |
| Papaya | 7.0 |
| Parsley juice | 7.0 |
| Seaweed, all | 7.0 |
| Watercress | 7.0 |
| Wheatgrass juice | 7.0 |
| Asparagus | 6.5 |
| Miso | 6.5 |
| Passion fruit | 6.5 |
| Pineapple | 6.5 |
| Raisins | 6.5 |
| Fruit juices | 6.0-7.0 |
| Pears | 6.0-6.5 |
| Alfalfa sprouts | 6.0 |
| Apricots | 6.0 |
| Arrowroot flour | 6.0 |
| Bananas, ripe | 6.0 |
| Berries (except blueberries) | 6.0 |
| Carrot juice | 6.0 |
| Celery &/or juice | 6.0 |
| Chard | 6.0 |
| Currants | 6.0 |
| Dandelion greens | 6.0 |
| Dates, fresh | 6.0 |
| Figs, fresh | 6.0 |
| Garlic | 6.0 |
| Gooseberry | 6.0 |
| Grapes | 6.0 |
| Grapefruit | 6.0 |
| Guavas | 6.0 |
| Lettuce | 6.0 |
| Nectarines | 6.0 |
| Persimmons | 6.0 |
| Rutabaga | 6.0 |
| Spinach | 6.0 |
| Tangarines | 6.0 |
| Apples | 5.5-6.0 |
| Peaches | 5.5-6.0 |
| Peas(fresh) | 5.5-6.0 |
| Pumpkin | 5.5-6.0 |
| Teas, herbal leaves | 5.5-6.5 |
| Bamboo shoots | 5.5 |
| Beets/juice | 5.5 |
| Broccoli | 5.5 |
| Cabbage | 5.5 |
| Carob | 5.5 |
| Cauliflower | 5.5 |
| Corn | 5.5 |
| Daikon | 5.5 |
| Ginger, fresh | 5.5 |
| Greenbeans,fresh | 5.5 |
| Green onions | 5.5 |
| Kale | 5.5 |
| Kohlrabi | 5.5 |
| Lettuce,iceberg | 5.5 |
| Lima bean, fresh | 5.5 |
| Mustard Greens | 5.5 |
| Oranges | 5.5 |
| Parsnips | 5.5 |
| Pepper, bell | 5.5 |
| Pomegranate | 5.5 |
| Potatoes | 5.5 |
| Strawberries | 5.5 |
| Tamari Sauce 5.5 | |
| Turnip | 5.5 |
| Squash | 5.0-6.0 |
| Almonds | 5.0 |
| Barley malt sweetener | 5.0 |
| Brown rice syrup | 5.0 |
| Brussel sprouts | 5.0 |
| Cherries | 5.0 |
| Chicory | 5.0 |
| Coconuts, fresh | 5.0 |
| Cucumber | 5.0 |
| Eggplant | 5.0 |
| Leeks | 5.0 |
| Okra | 5.0 |
| Olives | 5.0 |
| Pickles | 5.0 |
| Radishes | 5.0 |
| Seasalt | 5.0 |
| Taro | 5.0 |
| Waterchestnut | 5.0 |
| Artichokes | 4.5-5.0 |
| Mushrooms | 4.5-5.0 |
| Onions | 4.5-5.0 |
| Teas(herbal) | 4.5-5.0 |
| Tomato | 4.5-5.0 |
| Amaranth | 4.5 |
| Chestnuts | 4.5 |
| Egg yolks | 4.5 |
| Essene bread | 4.5 |
| Goatmilk, raw | 4.5 |
| granola | 4.5 |
| Horseradish | 4.5 |
| Millet | 4.5 |
| Olive Oil | 4.5 |
| Quinoa | 4.5 |
| Rhubarb | 4.5 |
| Sesame seeds | 4.5 |
| Soybean product | 4.5 |
| Soy sauce | 4.5 |
| Whey, goat | 4.5 |
| Acidolphilus | 4.0 |
| Almond oil | 4.0 |
| Avocado oil | 4.0 |
| Butter, unsalted | 4.0 |
| Canola oil | 4.0 |
| Castor oil | 4.0 |
| Corn oil | 4.0 |
| Cranberries | 4.0 |
| Cream, fresh/raw | 4.0 |
| Margarine | 4.0 |
| Safflower oil | 4.0 |
| Safflower oil | 4.0 |
| Sesame Oil | 4.0 |
| Soy oil | 4.0 |
| Sunflower oil | 4.0 |
| Whey, cow | 4.0 |
| Yogurt, plain | 4.0 |
| Raw cows milk | 3.5-4.0 |
| Butter, salted | 3.5 |
| Aduki beans | 3.5 |
| Black beans | 3.5 |
| Blueberries | 3.5 |
| Bread: Sprouted millet | 3.5 |
| Brazil nuts | 3.5 |
| Broadbeans | 3.5 |
| Cheese, mild | 3.5 |
| Cheese, crumbly | 3.5 |
| Dried beans | 3.5 |
| Egg whites | 3.5 |
| Garbanzo beans | 3.5 |
| Goatmilk, homo | 3.5 |
| Kidney beans | 3.5 |
| Mung beans | 3.5 |
| Navy beans | 3.5 |
| Pecans | 3.5 |
| Pinto beans | 3.5 |
| Plums | 3.5 |
| Prunes | 3.5 |
| Red beans | 3.5 |
| Spelt flour | 3.5 |
| White beans | 3.5 |
| Barley | 3.0 |
| Bread: Sprouted rye | 3.0 |
| Cheese, med. | 3.0 |
| Chicken fat | 3.0 |
| Cornmeal | 3.0 |
| Filbert nuts | 3.0 |
| Fruit juice | 3.0 |
| Honey | 3.0 |
| Macadamia nuts | 3.0 |
| Maple Syrup | 3.0 |
| Milk, homo | 3.0 |
| Molasses (org) | 3.0 |
| Pistachios | 3.0 |
| Rye flour | 3.0 |
| Lentils | 3.0 |
| Sunflower seeds | 3.0 |
| Turbinado sugar | 3.0 |
| Walnuts | 3.0 |
| Beef fat | 2.5 |
| Buckwheat | 2.5 |
| Cheese, sharp | 2.5 |
| Eggs | 2.5 |
| Ketchup | 2.5 |
| Mayo | 2.5 |
| Pasta,wholegrain | 2.5 |
| Pastry, whole grain/ Honey | 2.5 |
| Rice, basmati | 2.5 |
| Rice, brown | 2.5 |
| Oats (steelcut) | 2.5 |
| Peanuts | 2.5 |
| Bread: Wheat sprouted | 2.5 |
| Tapioca | 2.5 |
| Fructose | 2.0 |
| Molasses, refined | 2.0 |
| Pork fat | 2.0 |
| Shellfish | 2.0 |
| Wheatgerm | 2.0 |
| Wheat, whole | 2.0 |
| Wine | 2.0 |
| Yogurt, sweet | 2.0 |
| Fish | 1.5-2.0 |
| Chicken (organic) | 1.5 |
| Deer | 1.5 |
| Pheasant | 1.5 |
| Rabbit | 1.5 |
| Turkey | 1.5 |
| Wheat (white) | 1.5 |
| Pop | 1.0-3.0 |
| Black tea | 1.5 |
| Pasta (refined) | 1.5 |
| Beer/liquor | 1.0-2.0 |
| Coffee | 1.0-2.0 |
| White rice | 1.0-1.5 |
| Bear meat | 1.0 |
| Beef, organic | 1.0 |
| Goat | 1.0 |
| Lamb | 1.0 |
| Pastry (refined flour with sugar) | 1.0 |
| Pork | 1.0 |
| Soft drink with Artificial sweeteners | 1.0 |
| Sugarcane | 1.0 |
| Artificial sweeteners | .5pH |

## FOODS MOST ACIDIC PRODUCING