



Acid - Alkaline Balance

The Cause of Disease

Have you ever wondered if many of the diseases raging through our society have a common cause? Many doctors, herbalists and nutritionists believe that the explanation may come down to three words:

Acid Alkaline Imbalance

Over acidity, which can become a dangerous condition that weakens all body systems, is very common today. It gives rise to an internal environment conducive to disease, as opposed to a pH-balanced environment which allows normal body function necessary for the body to resist disease. A healthy body maintains adequate alkaline reserves to meet emergency demands. When excess acids must be neutralized our alkaline reserves are depleted leaving the body in a weakened condition.

The concept of acid alkaline imbalance as the cause of disease is not new. In 1933 a New York doctor named William Howard Hay published a groundbreaking book, *A New Health Era* in which he maintains that all disease is caused by **autotoxication** (or "self-poisoning") due to acid accumulation in the body:

Now we depart from health in just the proportion to which we have allowed our alkalis to be dissipated by introduction of acid-forming food in too great amount... It may seem strange to say that all disease is the same thing, no matter what its myriad modes of expression, but it is verily so.

William Howard Hay, M.D.

More recently, in his remarkable book *Alkalize or Die* (see recommended reading), Dr. Theodore A. Baroody says essentially the same thing:

The countless names of illnesses do not really matter. What does matter is that they all come from the same root cause...too much

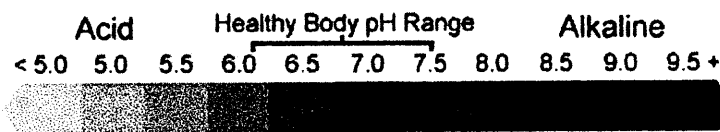
tissue acid waste in the body!

Theodore A. Baroody, N.D., D.C., Ph.D.

Understanding pH

pH (potential of hydrogen) is a measure of the acidity or alkalinity of a solution. It is measured on a scale of 0 to 14—the lower the pH the more acidic the solution, the higher the pH the more alkaline (or base) the solution. When a solution is neither acid nor alkaline it has a pH of 7 which is neutral.

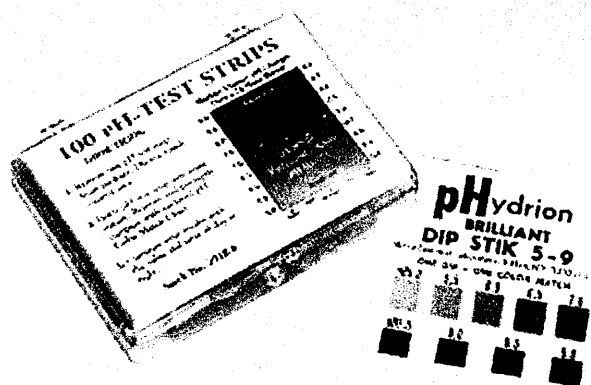
Water is the most abundant compound in the human body, comprising 70% of the body. The body has an acid-alkaline (or acid-base) ratio called the pH which is a balance between positively charged ions (acid-forming) and negatively charged ions (alkaline-forming.) The body continually strives to balance pH. When this balance is compromised many problems can occur.



It is important to understand that we are not talking about stomach acid or the pH of the stomach. We are talking about the pH of the body's fluids and tissues which is an entirely different matter.

Test Your Body's Acidity or Alkalinity with pH Strips:

It is recommended that you test your pH levels to determine if your body's pH needs immediate attention. By using pH test strips, you can determine your pH factor quickly and easily in the privacy of your own home. If your urinary pH fluctuates between 6.0 to 6.5 in the morning and between 6.5 and 7.0 in the evening, your body is functioning within a healthy range. If your saliva stays between 6.5 and 7.5 all day, your body is functioning within a healthy range. The best time to test your pH is about one hour before a meal and two hours after a meal. Test your pH two days a week.



Most people who suffer from unbalanced pH are acidic. This condition forces the body to borrow minerals—including calcium, sodium, potassium and magnesium—from vital organs and bones to buffer (neutralize) the acid and safely remove it from the body. Because of this strain, the body can suffer severe and prolonged damage due to high acidity—a condition that may go undetected for years.

Mild acidosis can cause such problems as:

- Cardiovascular damage, including the constriction of blood vessels and the reduction of oxygen.
- Weight gain, obesity and diabetes.
- Bladder and kidney conditions, including kidney stones.
- Immune deficiency.
- Acceleration of free radical damage, possibly contributing to cancerous mutations.
- Hormone concerns.
- Premature aging.
- Osteoporosis; weak, brittle bones, hip fractures and bone spurs.
- Joint pain, aching muscles and lactic acid buildup.
- Low energy and chronic fatigue.
- Slow digestion and elimination.
- Yeast/fungal overgrowth.



pH and Bone Loss:

A recent seven-year study conducted at the University of California, San Francisco, on 9,000 women showed that those who have chronic acidosis are at greater risk for bone loss than those who have normal pH levels. The scientists who carried out this experiment believe that many of the hip fractures prevalent among middle-aged women are connected to high acidity caused by a diet rich in animal foods and low in vegetables. This is because the body borrows calcium from the bones in order to balance pH. — *American Journal of Clinical Nutrition*

Urine pH

Urine testing may indicate how well your body is excreting acids and assimilating minerals,

especially calcium, magnesium, sodium and potassium. These minerals function as "buffers." Buffers are substances that help maintain and balance the body against the introduction of too much acidity or too much alkalinity. Even with the proper amounts of buffers, acid or alkaline levels can become extreme. When the body ingests or produces too many of these acids or alkalis, it must excrete the excess. The urine is the perfect way for the body to remove any excess acids or alkaline substances that cannot be buffered. If the average urine pH is below 6.5 the body's buffering system is overwhelmed, a state of "autotoxication" exists, and attention should be given to lowering acid levels.

Saliva pH

The results of saliva testing may indicate the activity of digestive enzymes in the body. These enzymes are primarily manufactured by the stomach, liver and pancreas. While the saliva also utilizes buffers just like the urine, it relies on this process to a much lesser degree. If the saliva pH is too low (below 6.5), the body may be producing too many acids or may be overwhelmed by acids because it has lost the ability to adequately remove them through the urine. If the saliva pH is too high (over 6.8), the body may suffer greatly, e.g. excess gas, constipation and production of yeast, mold and fungus. Some people will have acidic pH readings from both urine and saliva—this is referred to as "double acid."

Keeping the Balance Right for Excellent Health

Your body is able to assimilate minerals and nutrients properly only when its pH is balanced. It is therefore possible for you to be taking healthy nutrients and yet be unable to absorb or use them. If you are not getting the results you expected from your nutritional or herbal program, look for an acid alkaline imbalance. **Even the right herbal program may not work if your body's pH is out of balance.**

What if I'm Acidic?

By far the most common imbalance seen in our society is over acidity. If your urine and/or saliva test below 6.5 pH start with steps 1, 2 and 3 below and continue adding steps until desired results are achieved. Be sure to monitor your progress with easy-to-use pH test strips:

1. **Enzymes are essential:** Take 1-2 capsules of Food Enzymes or Proactazyme Plus with every meal. Also take 1-2 capsules of High Potency Protease and Nature's Noni between meals on an empty stomach.
2. **Correct easily absorbable magnesium is needed:** Take 2 Magnesium Complex with each meal which provides highly absorbable magnesium to help build necessary buffers. Magnesium is often lost in urine as a consequence of too much acid in the body. If your urine is 5.8-7.2 take Skeletal Strength as directed to support healthy bones.
3. **Alkaline minerals are essential:** Take 1 ounce of either Colloidal Minerals or Mineral Chi Tonic once daily.
4. **Alkalize with Green Food:** Take 1 teaspoon of Liquid Chlorophyll in water up to eight times daily.
5. **Vitamin A & D** hold calcium in the body. Taking NSP's Vitamin A & D will help the body buffer acid.
6. **What if my pH is still too acidic?** Use Coral Calcium according to label instructions

if saliva pH is 5.8-6.5. Use Coral Calcium cautiously if pH is below 5.8. Monitor your pH daily.

7. **Cleanse as needed:** Take a psyllium hulls supplement such as Psyllium Hulls Combination at bedtime to maintain regular bowel movements. Use CleanStart twice a year for liver, bowel and kidney detoxification.

Get the book! Get a copy of the book *Alkalize or Die* by Dr. Baroody (see recommended reading below) and carefully follow his dietary recommendations choosing more foods that are alkaline-forming and less that are acid-forming. The food chart below briefly summarizes this information for some of the more common foods. A healthy diet should consist of 80% alkaline-forming foods and 20% acid-forming foods.

What Causes Me to be Acidic?

The reason acidosis is more common in our society is mostly due to the typical American diet, which is far too high in acid-producing animal products like meat, eggs and dairy, and far too low in alkaline-producing foods like fresh vegetables. Additionally, we eat acid-producing processed foods like white flour and sugar and drink acid-producing beverages like coffee and soft drinks. We use too many drugs, which are acid-forming; and we use artificial chemical sweeteners like NutraSweet, Equal, or aspartame, which are extremely acid-forming. One of the best things we can do to correct an overly-acid body is to clean up the diet and lifestyle. Refer to the recommended reading for specific help with diet and lifestyle.

What if I'm Overly-Alkaline?

Alkalinity is relatively rare, but if your urine and/or saliva consistently test above 7.0 pH, start with steps 1, 2 and 3 below and continue adding steps until the desired results are achieved. Be sure to monitor your progress with easy-to-use pH test strips. You will notice that some of these steps are the same as those recommended above for an overly acidic condition. This is because these steps have a buffering effect, or in other words they are **balancing**, tending to bring the pH back toward normal no matter which direction it has gone:

1. **Enzymes are essential:** Take 1-2 capsules of Food Enzymes or Proactazyme Plus with every meal. Also take 1-2 capsules of High Potency Protease and Nature's Noni between meals on an empty stomach.
2. **Support urinary and lymphatic systems' ability to excrete toxins:** Take Kidney Drainage and Lymphatic Drainage in water according to directions. Then use Lymphomax and Urinary Maintenance to maintain.
3. **Correct calcium is needed:** Use NSP's Liquid Calcium.
4. **Vitamin C:** Use Timed-Release Vitamin C. Use 3,000 mg or more, to maximum bowel tolerance. (If diarrhea occurs, reduce intake.)
5. **Flax Seed Oil:** Use 1 capsules of Flax Seed Oil 3 times a day or 2 tablespoons of Liquid Flax Seed Oil daily.
6. **Cleanse as needed:** Take a psyllium hulls supplement such as Psyllium Hulls Combination at bedtime to maintain regular bowel movements. Use CleanStart twice a year for liver, bowel and kidney detoxification.

Most Alkaline	Alkaline	Lowest Alkaline	FOOD CATEGORY	Lowest Acid	Acid	Most Acid
Stevia	Maple Syrup, Rice Syrup	Raw Honey, Raw Sugar	SWEETENERS	Processed Honey, Molasses	White Sugar, Brown Sugar	NutraSweet, Equal, Aspartame, Sweet 'N Low
Lemons, Watermelon, Limes, Grapefruit, Mangoes, Papayas	Melons, Grapes, Papaya, Kiwi, Berries, Apples, Pears, Raisins	Oranges, Bananas, Cherries, Pineapple, Peaches, Avocados	FRUITS	Plums, Processed Fruit Juices	Sour Cherries, Rhubarb	Blueberries, Cranberries, Prunes
Asparagus, Onions, Vegetable Juices, Parsley, Raw Spinach, Broccoli, Garlic	Okra, Squash, Green Beans, Beets, Celery, Lettuce, Zucchini, Sweet Potato, Carob	Carrots, Tomatoes, Fresh Corn, Mushrooms, Cabbage, Peas, Potato Skins, Olives, Soybeans, Tofu	BEANS VEGETABLES LEGUMES	Cooked Spinach, Kidney Beans, String Beans	Potatoes (without skins), Pinto Beans, Navy Beans, Lima Beans	Chocolate
	Almonds	Chestnuts	NUTS SEEDS	Pumpkin Seeds, Sunflower Seeds	Pecans, Cashews	Peanuts, Walnuts
Olive Oil	Flax Seed Oil		OILS	Corn Oil		
		Amaranth, Millet, Wild Rice, Quinoa	GRAINS CEREALS	Sprouted Wheat Bread, Spelt, Brown Rice	White Rice, Corn, Buckwheat, Oats, Rye	Wheat, White Flour, Pastries, Pasta
			MEATS	Venison, Cold Water Fish	Turkey, Chicken, Lamb	Beef, Pork, Shellfish
	Breast Milk	Goat Milk, Goat Cheese, Whey	EGGS DAIRY	Eggs, Butter, Yogurt, Buttermilk, Cottage Cheese	Raw Milk	Cheese, Homogenized Milk, Ice Cream
Herb Teas, Lemon Water	Green Tea	Ginger Tea	BEVERAGES	Tea	Coffee	Beer, Soft Drinks

Note that a food's acid or alkaline-forming tendency in the body has nothing to do with the actual pH of the food itself. For example, lemons are very acidic, however the end-products they produce after digestion and assimilation are very alkaline so lemons are alkaline-forming in the body. Likewise, meat will test alkaline before digestion but it leaves very acidic residue in the body so, like nearly all animal products, meat is very acid-forming.

ACIDITY

pH VALUE OF FOODS

pH is a method used to express the level of *acidity* and *alkalinity* on a logarithmic scale of 0 to 14. A value of 0 denotes extreme acidity; 7 is neutral and 14 is extreme alkalinity.

(Most acid)

2.04 Lime juice	3.99 Nectarine	5.49 Onion
2.10 Lemon juice	4.16 Sweet cherry	5.49 Green pepper
3.00 Pomegranate	4.24 Tomato	5.72 Radish
3.20 Cranberry	4.40 Apricot	5.75 Casaba melon
3.21 Blueberry	4.65 Red banana	5.77 Leek
3.43 Strawberry	4.77 Date	5.78 Red cabbage
3.44 Pineapple	4.80 Red currant	5.95 Cos lettuce
3.45 Grapefruit	5.04 Coconut water	6.05 Common cabbage
3.55 Apple	5.12 Common banana	6.10 Coconut meat
3.59 Grapes	5.12 Fig, fresh	6.16 Chinese cabbage
3.73 Raspberry	5.33 Watermelon	6.58 Honeydew melon
3.76 Orange juice	5.42 Walnut	6.42 Avocado
3.92 Pear	5.48 Cucumber	6.52 Cantaloupe
3.95 Raisin	5.49 Papaya	<i>(Least acid)</i>

ALKALINITY – ACIDITY OF FOODS IN METABOLIC REACTION

When foods are eaten they are oxidised in the body, which results in the formation of a residue or ash. In this residue, if the minerals sodium, potassium, calcium and magnesium predominate over sulphur, phosphorus, chlorine and uncombusted organic acid radicals, they are designed as **alkaline** ash foods. The excess of one group of minerals over the other is expressed as cubic centimetres of normal acid or base (alkaline) per 100 grams edible food. The values below represent degrees of acidity or alkalinity.

(Most alkaline reaction)

47.5 Fig, dried	8.2 Plum	5.0 Mango
41.6 Lima beans	8.2 Peach, fresh	4.9 Mushroom
36.6 Apricot, dried	8.1 Celery	4.8 Radish
25.3 Raisin	8.1 Watercress	4.5 Orange juice
20.4 Swiss chard	7.7 Blackberry	4.5 Eggplant
30.5 Prune, dried	7.7 Lemon	4.5 Okra
15.8 Spinach	7.5 Cantaloupe	4.5 Brussels sprouts
14.2 Cucumber	7.5 Coconut milk	4.2 Broccoli
14.0 Lima beans, fresh	7.3 Leek	4.0 Lemon juice
13.5 Almond	7.2 Potato	3.9 Red cabbage
10.7 Avocado	7.1 Orange	3.2 Cauliflower
10.2 Carrot	7.0 Lettuce, cos	3.2 Pumpkin
9.9 Endive	6.7 Prickly pear	2.7 Grapes
9.6 Date	6.7 Sweet potato	2.7 Savoy cabbage
8.6 Parsnip	6.6 Apricot, fresh	2.6 Strawberry
8.5 Lemon, with peel	6.2 Common cabbage	2.2 Apple
8.5 Coconut meat, dry	6.0 Banana	2.2 Watermelon
8.4 Onion	5.8 Pineapple	0.1 Olive oil
8.3 Tomato, ripe	5.7 Raspberry	<i>(neutral reaction)</i>