

pH Balancing Simplified



Our society is plagued with a torrent of health concerns. Many herbalists and nutritionists now believe the explanation for this may come down to two small words:

Acid & Alkaline

An Important Issue

An imbalance in the body's pH can affect all major body systems, especially the digestive, intestinal, circulatory, respiratory and immune systems. This imbalance disturbs the oxygen affinity of haemoglobin in the blood. A pH-balanced environment maintains proper metabolic function and allows the body to function optimally.

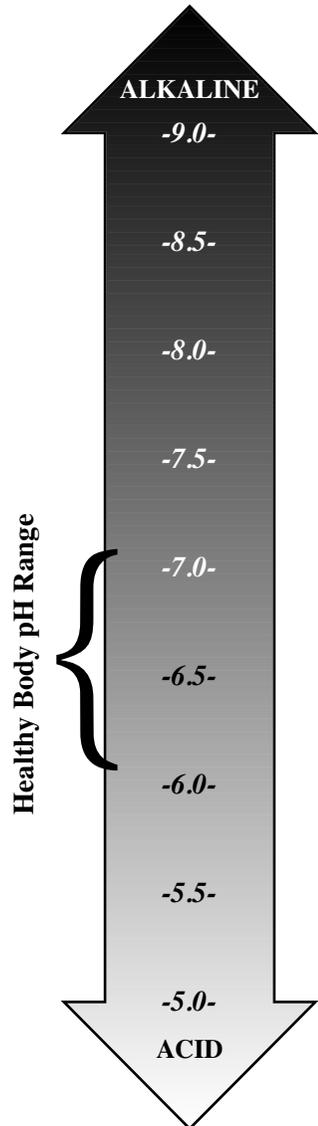
Understanding pH

pH is a measure of the acidity or alkalinity of a solution. The lower the pH number, the more acidic the solution is. The higher a pH number, the more alkaline the solution is.

Your Body's Chemistry

In a healthy young adult, water accounts for approximately 70 percent of the total body weight. This water, also known as the fluid of life, occupies two main compartments within the body; the intracellular (inside the cell) compartment and the extracellular (outside the cell) compartment. It is vital for these two compartments to balance and maintain an ideal pH range. Many vital bodily functions, including digestion, enzyme activity and hormone balance, are completely dependent upon the body to maintain this ideal balance. If the pH is properly balanced, the bodily fluids will clearly demonstrate this factor. Ideally, the pH of the saliva will be 6.5-6.8, and the urine pH will fluctuate between 6.0 and 7.0.

Maintaining a perfect pH can be difficult. Fortunately, the body has three primary systems for maintaining ideal pH: the respiratory system, the urinary system and the gastrointestinal system, including the liver and pancreas. Even with these built-in protective systems, the body can become unbalanced through poor diet, stress, dehydration, chemicals and lack of exercise.



What You Don't Know about Your pH Might Surprise You

High Acidity in the Body

Most people who have 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 the acid and safely remove it from the body. This process can weaken these organs and bones over time.

High Alkalinity in the Body

Though less common than high acidity, high alkalinity in the body causes many of the same kinds of problems as acidity. It often takes more support and time for a person who is "alkaline" to achieve balance than one who is 'acidic', because the body becomes less capable of excreting acids through the kidneys, and the liver and the bowel compensate by producing ammonia.

An imbalance in the body's pH may lead to serious health concerns, including:

- Hormone concerns.
- Cardiovascular weakness.
- Weight gain/loss.
- Bladder and kidney concerns.
- Immune deficiency.
- Acceleration of free radical damage.
- Structural system weakness, including brittle bones, hip fractures and joint discomfort
- Stressed liver function.
- Low energy.
- Slow digestion & elimination.
- Yeast/fungal overgrowth.

Alkalinity may be the result of:

- An over compensation of chronic acidity by liver production of ammonia.
- External exposure to alkaline chemicals, such as oral antacids and ammonia-containing fertilisers and cleaning solutions.
- Ammonia production from abnormal microbes in the gut.

Test Your Acidity or Alkalinity with NSP pH Strips

Balanced pH readings in urine and saliva means a balanced body. It is important for you to test your pH level to determine if your body's pH needs addressing.

By using Nature's Sunshine pH test strips, you can determine your pH factor quickly and easily in the privacy of your own home. The most accurate time to test the saliva and urine samples is first thing in the morning, before the teeth are brushed or any food or fluid is consumed. If your urinary pH *fluctuates* between 6.0–7.0 during the course of the day, your body is functioning within a normal range. If your saliva *stays* between 6.4 and 6.8 (averaging 6.5) all day, your body is functioning within a normal range.

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, 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 utilises 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.

What if I'm Acidic?
Basic Nutrition for an Over-Acid System
(if urine and/or saliva test below 6.5 pH)

Start with Steps 1, 2 and 3, and continue adding steps until desired results are achieved. Be sure to monitor your progress with easy-to-use NSP pH test strips.

- 1. Enzymes are essential.** Take 1-2 capsules Proactazyme (code: 1642) or Food Enzymes (code: 1836) with meals.
- 2. Correct calcium and magnesium intake is needed!** Take 2 tablets Skeletal Strength (code: 1356) twice daily. These contain a very absorbable form of calcium and magnesium to help build necessary buffers.
- 3. Alkaline minerals are essential.** Take 1oz. Colloidal Minerals (code: 4037) or, 1oz. Mineral Chi Tonic (code: 1818) once daily.
- 4. Alkalise with green foods.** Take 1 teaspoon Liquid Chlorophyll (code: 1683) in 8oz. water up to eight times daily.
- 5. Cleanse as needed.** Take 2 or more capsules each of Cascara & Buckthorn Combination (code: 990) and Psyllium Hulls (code: 545) at bedtime to maintain regular bowel movements. Use NSP's Healthy Starter Pack (code: 5882) at least twice a year.

Other helpful hints:

- Eat more alkalising foods (see chart page 8), especially those that contain calcium, magnesium, sodium and potassium.
- Drink 8 glasses of Nature's Spring water daily.

What if I'm Alkaline?
Basic Nutrition for an Over-Alkaline System
(if urine and saliva test above 6.8 pH)

Start with Steps 1, 2 and 3, and continue adding steps until you achieve desired results. Be sure to monitor your progress with easy-to-use NSP pH test strips.

- 1. Enzymes are essential.** Take 1-2 capsules Proactazyme (code: 1642) or Food Enzymes (code: 1836) with meals.
- 2. Correct calcium and magnesium intake is needed!** Take 2 - 3 tablets of Skeletal Strength (code: 1356) twice daily. These contain a very absorbable form of calcium and magnesium.
- 3. Vitamin C.** Use Timed-Release. (code: 1635) This will bring down high pH levels. Use 3,000 mg or more - to maximum bowel tolerance. (If diarrhoea occurs, reduce intake.)
- 4. Flax Seed Oil.** (code: 1770) Use 1 capsule three times daily.
- 5. Cleanse as needed.** 2 or more capsules each of Cascara & Buckthorn Combination (code: 990) and Psyllium Hulls (code: 545) at bedtime to maintain proper elimination. Take NSP's Healthy Starter Pack (code: 5882) at least twice a year.

Other helpful hints:

- Eat more acid-forming foods (see chart on page 8), especially those that contain phosphorus, sulfur and chlorine, including whole grains, beans and other proteins.
- Eat a lot of high-fibre foods.
- It may be necessary to avoid red meats, cheese, nuts and nut butters depending on your digestive ability.
- Drink 8 glasses of Nature's Spring® water daily.

What if My pH is within Normal Range?

pH Balance Maintenance Program

(if both urine and saliva average between 6.4-6.8)

1. ENZYMES

Without enzymes, the body cannot maintain a balanced pH.

Proactazyme (code: 1642) is a fantastic general purpose enzyme supplement from plant sources. It helps the body digest all food types and helps break down difficult to digest foods.

Food Enzymes (code: 1836) supplements the body's production of enzymes necessary for proper digestion and thereby supports correct mineral utilisation (especially calcium).

2. CALCIUM AND MAGNESIUM

These are two of the most important minerals in maintaining pH balance.

Bones are affected by pH perhaps more than any other part of the body.

Skeletal Strength (code: 1356) is highly beneficial, it provides nutrients including calcium and magnesium the body uses to manufacture bones.

Calcium - comprises half of all the minerals in the body and it helps replenish bone tissue that is constantly being replaced.

Magnesium - Activates more than 300 enzymes in the body and, with calcium, affects nerve and muscle functions. More than 80% of the natural magnesium in grains is lost by removal of the germ and outer layers, which happens in food processing.

3. MINERALS

Alkaline minerals are essential to a balanced pH.

Colloidal Minerals (code: 4037) and **Mineral Chi Tonic** (code: 1818) provide an array of essential trace minerals.

Liquid Chlorophyll (code: 1683) offers excellent body cleansing support while providing vital minerals (especially sodium) from green alfalfa plants that are easily assimilated by the human body.

4. CLEANSE AS NEEDED

Use Cascara & Buckthorn Combination (code: 990); *Psyllium Hulls* (code: 545) and *NSP's Healthy Starter Pack* (code: 5882).

5. DIET

Eat a balanced diet of 80% alkaline-forming foods and 20% acid-forming foods (see page 8).

Food Effects on Acid - Alkaline Body Chemistry, The Effects of Common Foods on pH Balance

				Lowest Acid	Acid	Most Acid
Stevia	Maple Syrup, Rice Syrup	Raw Honey, Raw Sugar	SWEETENERS	Processed Honey, Molasses	White Sugar, Brown Sugar	NutraSweet, Equal Sweet 'N Low
Lemons, Watermelon, Limes, Grapefruit, Mangoes, Papayas	Dates/Figs, 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	Carrots, Tomatoes, Fresh Corn, Mushrooms, Cabbage, Pars, Potato Skins, Olives	BEANS VEGETABLES LEGUMES	Cooked Spinach, Kidney Beans, String Beans	Potatoes, Pinto Beans, Navy Beans, Lima Beans, Soybeans, Carob	
	Almonds	Chestnuts	NUTS/SEEDS	Pumpkin Seeds, Sunflower Seeds	Pecans, Cashews	Peanuts, Walnuts
	Olive Oil	Canola Oil	OILS	Corn Oil, Flax 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	Pork, Beef, Shellfish
	Breast Milk	Goat Milk, Goat Cheese, Whey	EGGS DAIRY	Eggs, Butter/Yogurt, Buttermilk, Cottage Cheese, Soy Milk	Soy Cheese, Raw Milk,	Cheese, Homogenised Milk, Ice Cream
Lemon Water Herb Teas	Green Tea	Ginger Tea	BEVERAGES	Tea	Coffee	Beer, Soft Drinks

References: *Acid & Alkaline* by Herman Ahlbara, *Alkalise Or Die* by Theodore A. Baroody, Ph.D., N.D.

Eat 80% alkaline foods and 20% acid foods for perfect pH balance.

“Diets that are rich in animal foods and low in vegetable foods, typical of industrialised countries, lead to a dietary net acid load that has a negative effect on calcium balance.” *The American Journal of Clinical Nutrition*, Vol. 73, No. 1, pg. 118.