

ACID-ALKALINE BALANCE

James H. Carraway
Eastern Virginia Medical School

With all of the new diets that have been presented to us and all of the new food products which are constantly showing up on the grocery shelves and specialty food stores, we may have lost sight of one very important part of our total health picture. We know that the acid/alkaline balance in the human body is an important one in terms of cellular function, energy levels, and even regulating obesity. This balance can be measured by a determination of the pH acid level in the body which is normally around 7.36 in the blood. If the pH level is below 7, then the body is more acid and if it is above 7, it is in the alkaline range. As it is more beneficial for normal human blood level to be in the alkaline range, we should be aware of what it takes to keep us there.

In general, a more acid pH in the body is caused by eating increased amounts of meat, non-cultured dairy, flour, sugar, canola oil, eggs, beer, and soft drinks. Chocolate, coffee, raw honey, and even wild rice can increase acidity. In a good diet oriented to maintaining alkalinity in your body, you need about 70% alkaline foods and 30% acidic foods. This is much like Weight Watchers, in that you get to eat some of the acidic foods but not let them dominate your total intake. A better balance can keep the pH in the normal range.

Taking supplements like magnesium help excrete the acid from your body, and vitamin D3 and omega-3 essential fatty acids will help as well. In order to test how you are doing, there are pH testing strips used to test on a urine specimen. A normal morning urine pH is about 6 to 6.5, and in the evening is about 6.5 to 7. Your saliva should be about 6.5 to 7.5 all day long.

A more alkaline diet needs to contribute buffers to the body so that they will combine with the H⁺ ion and be secreted by the kidneys. This includes citrate from lemons, malate from apples, lactate from cultured dairy products, phosphates from pumpkin seeds, sunflower seeds, and free-range eggs, and acetate from apple cider vinegar. Whenever you drink water, always put some lemon in it because it's a good acid buffer, and tap water or bottled water usually is slightly acid.

Foods that help to make your body more alkaline include olive oil, asparagus, onions, broccoli, spinach, garlic, , and sweet potatoes. Fruits that help are watermelon, limes, lemons, mangoes, papaya, dates, figs, grapes, apples, and sour cherries. Also flax seed oil, sprouted wheat bread, brown rice, and cottage cheese tend to be more alkaline.

Interestingly, there are holistic diets for people who are being treated for cancer, and most of these are alkaline oriented. One reference in the China Study notes that in one province with a more alkaline type diet as opposed to a province that was a high meat-

eating diet, the incidence of cancer was many times greater in the meat-eating, more acid-oriented diet group.

Another way that you can obtain a more alkaline pH in your system is to drink alkaline water. This is available by purchase in local health food stores. This water increases the body pH, offsets the acid producers, and even tastes good. Cooking with this is better and it improves the taste of beverages like tea or lemonade. Interestingly, the alkaline pH helps deliver nutrients better to the cells. It is clear from the literature that most diseases including cancer and heart disease thrive in an acid environment. Alkaline water is a powerful antioxidant, and we all know that those are important. There are a lot of references to the fact that obesity can be improved by more alkaline pH in the blood because it helps get rid of the toxic wastes which are deposited in the obese cells.

On the other hand, acid water is good for washing the face and hands because it gets the skin cleaner and tightens and smoothes the skin (it is even better for windows and dishes). Also, some grain sprouts can grow better in slightly acid water than alkaline water. However, the sprouts themselves tend to alkalinize the body when they are eaten.

Another way to obtain alkaline water is through the use of a water ionizer. This uses electric current to break down the molecule of water into H⁺ and OH⁻. By putting out two types of water, acid and alkaline, you can have one for drinking and the other for plants and washing your face. These ionizers can cost anywhere from \$1,000 to \$3,000, but over the long run if you get to be a user of alkaline water you will find it would be more economical to buy one of these ionizers. After all, alkaline water seems to improve cancer therapy, improves aging of cells, and helps weight loss. Staying away from drinks such as sodas which are pH 2.5 and other soft drinks that contain carbonic acid is a big help. There are multiple web sites dealing with alkaline body pH, alkaline water, and alkaline diets which can be found through a Google search. I would suggest that you research this, because even if you could make a little bit of improvement in your diet towards more alkaline foods and reduction of acid-stimulating foods and beverages, you will certainly be better off and probably have more energy. Although this is a little obscure for many people who are simply worried about counting calories and how much protein to eat, it is an important aspect of the whole picture of health in our bodies.