

THE ACID ALKALINE BALANCE AND PATIENT MANAGEMENT

By **Dr. George J. Goodheart**
542 Michigan Building, Detroit, Michigan 48226



Dr. Goodheart

In a survey of patients in Southern California by Dr. Harold Hawkins he found that 48% were too alkaline and only 32% were too acid. Now in this survey he did not refer to the stomach but to the blood stream and he found that the saliva closely paralleled the blood and this provides an excellent method of measuring the patients progress as therapy continues. So specific stomach acid problems are measured by the DIAGNEX method and routine body measurement can be accomplished by the use of pH HYDRION test papers that can be obtained through your local supply sources.

The average case of acidosis or alkalosis can not be changed by changing the percentage of acid alkaline ash foods alone. The cause frequently lies in a structural fault in the upper cervical or the pelvic area. Correction of subluxations in these areas along with intelligent changes in the diet provides an excellent approach to these problems. The measurement of saliva is a much better index than the urine and is a much more convenient method, for the urine does not accurately reflect the blood reaction, where the saliva does. For example, fats and oils when oxidized and absorbed increase the alkalinity of the body but if there is liver sluggishness or poor choice of fats, the expected alkaline reaction from increasing these foods fails to appear.

The saliva will nicely show the success or failure of your efforts, where as the urine reacts in an opposite direction and is influenced by many other factors. (See previous article on Urinary testing methods.)

In general, alkalosis conditions are characterized by a slow pulse, itchy crawling sensations, stiffness of joints and symptoms which occur after rest such as night cramps, night coughs and an abnormally high hematocrit.

In general, acidosis symptoms relate to oxygen uptake patterns such as frequent sighing and breathlessness. They have insomnia associated with breathlessness and complain of a "lump" in the throat, have a cold sweat type of perspiration pattern alternating with a dry skin and a dry hard stool. Basically the pattern is one of dehydration.

A word of explanation on the oxygen pattern of the acidosis complex might be in order here. When Bicarbonates, which are the normal bases that the body uses to prevent acidosis symptoms, become depleted and the carbon dioxide accumulates in the tissues, oxygen cannot be utilized, is not taken up, and is carried off by the venous blood, unutilized. Thus the patient suffers from suffocation, dehydration and hyperirritability symptoms.

In alkalosis, many of the symptoms undoubtedly are due to calcium deposits forming in the increased pH environment. The paradoxical deposition of calcium with the obvious calcium deficiency has been discussed before but the key factor is the fact that calcium precipitates in an excess alkaline environment even though the patient is calcium deficient on a dietary level.

The orange juice or grapefruit habit so common in our urban diet with the usual lack of activity fails to allow the 48% of those tested by Dr. Hawkins for example, the opportunity to oxidize these acids and combining with the usual amount of sodium in the diet forming sodium citrate, an alkaline substance useful interestingly enough, as a means of alkalizing the urine.

The recent popularity of cider vinegar and honey as a universal remedy

Many individuals have symptoms of either acidosis or alkalosis and since these pH changes relate directly to the nervous system in that acidosis is an overactivity of the sympathetics and alkalosis is an overactivity of the parasympathetic nervous system. Changes in the acid-alkaline balances are very important. A high normal pH throws calcium out of solution, which inevitably becomes associated with an allergy, migrating neuritic and arthritic pains and complaints of a type of insomnia that is often associated with stiffness on rising. This dissipates with activity as the blood lactic acid begins to rise with muscular activity, since lactic acid dilates the capillaries. The human body is an acid consuming, acid producing and acid eliminating organism. It eliminates acid so that we find the expired air is acid, the skin is acid, the urine is acid as is the vagina. A gastric deficiency of acid is probably the most common condition after 50. Research has shown that at age 50 there is only 15% of the amount of acid present as there is at the age of 25.

Thirty-five percent of all individuals over 65 do not secrete any hydrochloric acid at all. Many individuals who have allergies also have a hypochlorhydria. These patients complain of fullness, nausea, even vomiting, and a confusing symptom of "heartburn".

They also have a palpitation and a complaint of shortwindedness and frequently complain of pruritus ani. These people have much flatulence and a sensation of distention of the stomach immediately after eating. This is sometimes relieved by belching. The pancreas is influenced by the degree of acidity of the stomach in that the pancreatic secretion is increased in quality and quantity through proper acidity of the stomach. DIAGNEX by SQUIBB procurable at your college or from your local pharmacist is a simple test that allows you to quickly tell if the patient is secreting enough acid. It is quick, simple, reliable and inexpensive. It relies on a simple color comparison on a urine sample which the patient brings in after taking the test (resin dye) by mouth. It is a standard method, well accepted.

as published in "Folk Medicine" was based on good common sense and is an excellent dietary approach to the prevalent alkalosis pattern masquerading as "arthritis, bursitis, neuritis, and sciatica.

The endocrine glands regulate the blood pH more than the diet as you have already imagined and therefore the support of the endocrines is important especially the kidney. In this regard adequate fluids and sufficient vitamin "A" are very important. Natural sources of this material are to be preferred since there are fourteen different forms of vitamin "A" in the whole Vitamin "A" complex.

As mentioned earlier, pancreatic function is influenced by the level of HCL in the stomach. Lack of proper triggering of pancreatic function may lead to improper protein digestion adding to the lack of initial protein digestion creating a state of hypoproteinemia. Inevitably this leads to further problems with digestion and protein levels, since all enzymes digestive or otherwise are protein in nature. The body will try to conserve protein in protein deficiency and the obvious but faulty reasoning of increasing the protein intake will usually be met with failure, since it cannot be digested and leads to accumulation of tissue poisons such as guanidine which precipitates calcium in a dreary round of pain patterns. Again, treat by the intelligent use of methods to raise the HCL content by upper cervical adjusting, attention to dorsal lesions and temporary HCL supplementation. The elimination of normal and abnormal protein waste is by way of the bile. Bile of some exclusive meat eating animals is so toxic that it is used by natives for arrow point poison.

The necessity of maintaining good liver function by the use of good quality fats and oils and the sharp decrease in baked and cereal goods is indicated in the initial stages of treating disturbances of the acid alkaline balance.

The liver and the pancreas are on opposite ends of a metabolic "teeter totter" and the indiscriminate use of vitamin "B" to pick up pancreatic function will depress liver function. It is best to use low concentration of these materials and to balance any Vitamin "B" depression of liver function and fat assimilation by using stimulation of bile production by bile itself temporarily and using liver pumping methods on patient's visit.

There is a definite antagonism between Vitamin A and Vitamin B, so the use of multiple concentrates in difficult cases is advised only after an initial period of careful observation and manipulative care. Liver function is greatly helped by sun exposure and is one of the best methods of improving it. An alkaline stool is generally

the indication for the use of bile and HCL stimulation. A high HCL as in peptic ulcers is a definite indication for the improvement of liver function by all means possible.

Phosphorus cannot pass thru the intestinal wall or be eliminated thru the kidney without the use of high quality fats and oils, for all food phosphorus passes into the circulation as phospholipids. The unsaturated unsatisfied chemical valences acting as attachment points. The whole problem of proper endocrine and acid alkaline balance is associated with proper fat intake, liver, and kidney function. The use of proper control of phosphorus metabolism is especially important in alkalosis and strangely enough in gastric hyperacidity, for it is deficient in both of the conditions even tho they apparently contradict. Phosphorus stabilizes and balances the overactive parasympathetics that are too active in gastric hyper acidity. It contributes to lowered blood viscosity and combats the calcium carbonate formation one finds in alkalosis.

Acidosis is often caused by pathology as in diabetes but hypoadrenia is a most common cause as is the excessive perspiration one finds in hot humid weather where there is NaCl lost by way of the skin. Restriction of sodium is also a source of acidosis since the sodium reserves are important in the alkaline reserve. An acid ash diet can cause a gradual shift to acidosis and this can be well shown by the saliva test. Normal blood pH is 7.3 to 7.4, 7.0 being the neutral point. The normal saliva pH range is about 6.5 to 7.0 but for all extents and purposes the saliva parallels the blood and is a good index of change. If the test paper is quite yellow as opposed to a definite green, the patient has an acidosis problem. These people can not hold their breath more than 20 seconds and complain of a dry mouth. They fail to calm down after excitement, respond violently to loud noises, have a dilated pupil and wink infrequently and also seem to stare a lot. They respond to upper cervical and pelvic correction remarkably well and are benefited by increasing the leafy vegetable content of the diet. They respond well to increased sodium such as crude or sea salt, calcium lactate such as in milk or in concentrated form and also respond to an increased urea function by increasing the liver function. Urea is naturally formed by the liver and it serves to open the flood gates of the kidney allowing the kidney to eliminate waste as well as water. The significance of a low specific gravity of the urine shows poor liver function and often is found with acidosis. Urea is formed of the carbon dioxide we breathe out which as you know is acid, and the ammonia from

the protein break down of the meat we eat. It can release ammonia when needed and is one of the means by which the body maintains a chemical equilibrium.

Normal blood contains buffering substances that prevent acids or alkalis from changing the pH. The blood is always alkaline in life but it can become less alkaline or more alkaline. Infectious diseases cause a rise in temperature but a drop in pH. Enzymes are regulated by pH changes and enzymes that are constructive in activity, reverse their activity and tear down tissues when the pH drops in an acidosis.

A particularly useful and dramatic method is to compare the appearance of the pH HYDRION test paper after the patient has placed the test paper in his mouth, with the appearance of the test paper of that of the doctor. Granted of course the doctor follows the ancient wisdom of "Physician heal thyself".

There seems to be little correlation between the pH test paper result and that of the Diagnex reagent which measures gastric HCL only. A general impression over a long period of time has shown a low pH test paper result, a yellow color, to accompany a lack of HCL in the stomach but as mentioned there seems to be no direct correlation. Both tests therefore are advised with the saliva test paper best for routine daily use. A low pH, a yellow color shows a need for alkaline minerals and leafy vegetables. A high pH, a blue color, shows the need for the acid minerals and noncitrus acids such as cider vinegar. Calcium and sodium are good examples of alkaline mineral, phosphorus and potassium are good examples of acid minerals. Cider vinegar is a dilute solution of acid potassium and is very useful in alkalosis.

*Dr. Manley's book on arthritis is highly recommended here for it deals very clearly with the acidosis alkalosis problem in arthritis. Potassium seems to be a mineral that can act equally well on either side of the acid alkaline fence. It is sometimes needed in both conditions.

An attempt has been made to show the interaction of the sympathetic and the parasympathetic nervous system with the endocrine system and the continuing interrelationship of calcium, phosphorus, potassium, and sodium. A few minutes thought on these relationships is just one more way to advance chiropractic, yourself and your practice. Copies of a diet helpful in acid alkaline imbalances are available from the author without charge. Please enclose a stamped self-addressed envelope.

*For copies of Dr. Manley's book, write to: The Endicotte Press, P. O. Box 2217, Vancouver, Wash. 98661.

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