

Why Patient pH is So Huge

“With so many physiologic factors tied into pH, I encourage you to start measuring your patients.”

I've discussed the value of making sure our patients are alkaline for many years. But just to review, when we are acidic, it is more difficult to detoxify. We have far more free radicals. We demineralize bone by pulling key minerals into suspension as buffers, enzymes, and hormones don't work as well, and our cell membranes become less efficient.

Speaking of cell membranes with an increased acid load, hydrogen ions displace intracellular potassium and magnesium. But if a buildup of toxins, weaker bones, excess free radicals, and inefficient cell membranes are not bad enough, an acidic chemistry affects the amount of oxygen our hemoglobin carries. This means that hemoglobin can absorb oxygen from the lungs and begin to carry it through-out the body. However, in an acid chemistry, oxygen is released prematurely and never gets to outer cells or tissue.

What thrives in an anaerobic state? Bacteria, viruses, and fungus. Remember, pH is a



logarithmic calculation. So, small movements in pH represent huge shifts in hydrogen ion concentrations. Optimal blood pH is 7.35-7.45. So, a pH change from 7.35 to 7.25 is a big movement. 7.35 to 7.15 is huge and to 7.05 is massive. Note that at 7.05, the pH is still not technically acid, but is relatively acidic compared to the optimal blood pH.

This concept of optimal pH goes beyond the hemoglobin's ability to hold on to oxygen. In a state of metabolic acidosis everything takes more energy. It's like pushing a boulder up hill.

Let's take enzymes. Even if all the nutrient cofactors are available to catalyze the enzymatic reactions, the enzyme activity will be greatly diminished if the body pH is not optimal.

Right now in the anti-aging field, hormones are the big buzz. But if hormones and their receptors are outside their optimal pH, they will still function, but at a reduced rate. For example, at the wrong pH, it may take twice as much of the same hormone to induce an equal response. Maybe we should be balancing pH before we embark on hormone replacement therapies.

Blood pH is regulated by the lungs, kidneys, and a series of intracellular and extra-cellular buffers. The intracellular buffers include proteins and phosphates. The extra-cellular buffer is the bicarbonate ion. When you hear the word buffer, think of it like a sponge soaking up extra hydrogen ions. You can use urine, saliva, and blood to screen for an overly acidic chemistry.

I heard an interesting lecture from Dr. Carlos Viana, C.C.N. and O.M.D. After being in this field for over 40 years, he shared a simple compilation that has brought consistent results and has served as a great monitoring tool for him and his patients. It comes from a simple blood test. Divide sodium by chloride. An optimal value would be 1.4. So, if a patient has a sodium of 140 with a chloride of 100, $140/100=1.4$. Dr. Viana commented that someone with a score of 1.35 is mildly acidic and is already beginning to mobilize calcium out of their bones. Patients will notice an increase of tartar buildup around their teeth, have an increase of kidney stones, and often wake up stiff in the am. Patients with a score of 1.3 are very acidic and have periodontal disease as well as a host of metabolic conditions. He suggests increasing the buffering agents that reduce the effects of an increased concentration of hydrogen ions.

The best buffering agents are plants. We've been told 10 servings of fruits and vegetables are optimal, but some researchers are suggesting that since our food is so depleted of key minerals we should aim for 12 servings per day. Of course, we want to reduce the amount of acidic foods that are over consumed. By that,

I am referring to simple carbohydrates and processed foods laden with chemical additives, flavoring agents, etc.

What else can we do to increase alkalinity? Biotics makes three outstanding products: NitroGreens, Potassium HP with magnesium, and a powdered form of vitamin C called Mixed Ascorbates. You can see links below on how to use them in combination with other urine and saliva indicators as well.

Dr. Harry Eidenier has articulated other correlations in blood, in his excellent work, "More than Just a Bunch of Numbers, Making Sense of Blood Chemistry Results." This text comes free with a seminar taught by Dr. Abbas Qutab called "Mastering the Science of Integrative Blood Chemistry." Dr. Qutab does an excellent job helping doctors to integrate laboratory testing into their practice. See links below for seminar dates.

I hope I am painting the picture that with an acidic pH, you can recommend bottles and bottles of supplements, but the patient will recover very slowly until you address the root cause, metabolic acidity. With so many physiologic factors tied into pH, I encourage you to start measuring your patients.

By the way, changing pH values for the good or the bad takes time. They don't happen overnight. So, these simple indicators will help you motivate your patients and give you the tools you need to monitor progress.

Thanks for reading this week's Tuesday Minute edition. I'll see you next Tuesday.