



Acid/Alkaline Balance

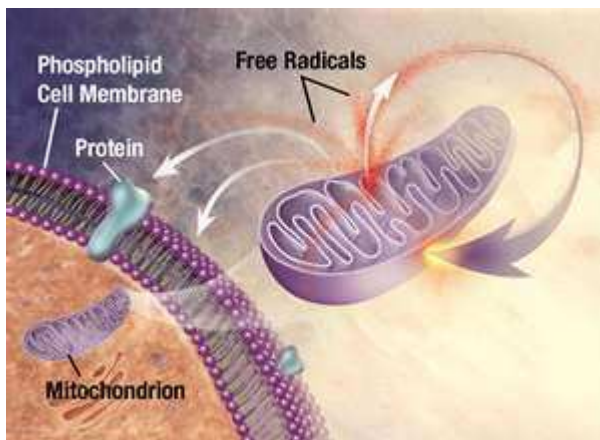
*Help To Reduce Pain & Inflammation with a Simple Saliva pH Test & Alkalizing Green Drink**

Introduction:

The relationship between chronic muscle and joint pain, inflammation and saliva pH should be understood in order to minimize the time for healing and the rehabilitation of injuries. A crucial fact to remember about the overwhelming majority of injuries presented at your office are that muscle and joint pain problems are more likely than not chronic in nature. These chronic muscle and joint pain problems may be secondary to acute or repetitive stress; but typically they develop from improperly managed inflammation and acid/alkaline imbalances in your patients' tissues. A major factor in the formation of chronic inflammation is the presence of free radicals occurring in greater abundance than the body's ability to remove them, frequently referred to as oxidative stress. Excess acid forming foods, drinks and acidic lifestyles in general, put an enormous strain on your patient's digestive system, liver, kidneys and areas of chronic inflammation. The body's attempt to neutralize all that acid creates free radicals which further damage inflamed tissue cells and rob electrons "your patient's life force" from existing healthy tissues. By integrating a simple saliva pH testing technology and offering the very alkaline, antioxidant and phytonutrient green drink such as **Greens First**, you may see improved outcomes and faster healing times.



How Does Quenching Free Radicals Reduce Inflammation?

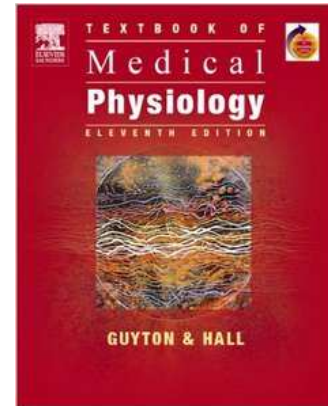


What makes free radicals so dangerous and difficult for you when treating inflammation is the fact that free radical molecules have lost one of their electrons, are very unstable and will "steal" an electron from other cells in the area. In turn, the next molecule becomes an unstable free radical starting a cascade of events that further damages the area of injury. The body

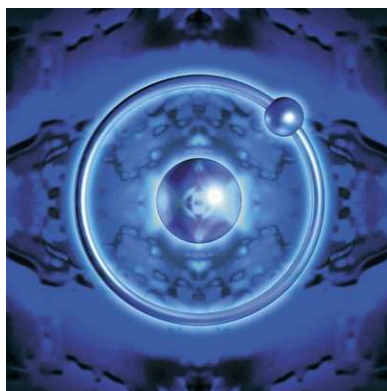
produces antioxidant enzymes designed to quench these free radicals. Antioxidants are substances that are termed “givers” because they donate an extra electron which stabilizes the free radical and prevents it from damaging other cells. But if patients have too many free radicals their body can’t keep up and their pain, inflammation and healing process becomes impaired. One significant way to combat free radicals is to educate patients on their first visit when they are most acute by suggesting they reduce their intake of acidic foods and drinks while monitoring their saliva pH and supplementing every morning with an antioxidant rich **Greens First** that gives their body plenty of free radical quenching nutrients.

The Science Behind Acid-Alkaline Imbalance

Arthur Guyton, M.D., in his Textbook of Medical Physiology dedicated an entire chapter on this concept and stated that when the body is alkaline it converts free radicals to harmless water and oxygen which maintains energy and vitality. The acid-alkaline balance relates to the chemistry of the body’s fluids and tissues as measured by pH. The cells of the body must have a slightly alkaline environment to survive. With a blood pH of 7.365 the cells are in homeostasis and they receive nourishment and release waste with ease. But when you eat, drink and live an acidic lifestyle, your cells and the inner environment become toxic. Your patient’s diet and lifestyle choices will either help or harm their delicate pH balance and their overall health.



Basic pH Review



Technically, pH stands for “potential of hydrogen.” The pH of a fluid tells you how acid or alkaline it is. pH is measured on a scale from 0-14 with neutral being 7.0; below that acidic and above alkaline. More oxygen is present when pH is above 7.0 than below which is why all pathogens thrive in an acidic environment but can’t survive with alkalinity. An acidic condition is a breeding ground for unhealthy bacteria, yeast and fungi while an alkaline environment helps to keep things in check. Patients assume colds and viruses happen when they catch a bug when in fact many common infections are actually caused by bacteria that are part of the normal flora already

present in their systems. When their diet and lifestyle becomes too acidic, they create fertile ground for the pathogens to multiply and flourish.

Why is Measuring pH so Important?

The body is designed to operate within a very narrow pH range. Optimally you want to be a little on the alkaline side with a blood pH of around 7.365, with Dr. Guyton giving us a range of 7.34 to 7.45. Blood is the most important fluid and therefore is the most protected pH measurement. Even a minor fluctuation in the blood’s pH in either direction creates distress signals in the body causing various symptoms that start out small then ramp up as the imbalance continues. Everything from a runny nose to skin eruptions, heartburn, eczema, inflammation, arthritis, poor

circulation, chronic fatigue, irritable bowel syndrome, a weakened immune system to the chronic diseases of aging can be tracked back in some way to an acidic inner terrain. In fact a blood pH lower than 7.0 is extremely dangerous, causing oxygen levels to decrease, and cellular metabolism to become impaired. It's much easier for your patients to become acidic than too alkaline. The body regularly deals with naturally occurring acids that are the by-products of respiration, metabolism, cellular breakdown and exercise, However when patients add to that an overly acidic diet of processed foods, dairy, meats, drinks and an excessively stressful lifestyle, the load on the body becomes too much and it is easily overwhelmed. You can help your patients by shifting their pH balance toward the alkaline side by recommending they eat more of an alkaline diet that consists of more fruits and vegetables and other alkaline plant foods along with incorporating a more stress-free lifestyle.

Simplest Way To Monitor Your Patient's pH



The simplest and most accurate way to read your patient's pH is to test their saliva. Saliva pH is the most reliable body fluid to test outside of the blood and can easily be tested using litmus paper strips, available in most pharmacies. A lot of doctors buy small pH testing kits that contain a small number of test strips, around 15, and a pH color chart to measure results, all enclosed in a small sealed bag. Test strips purchased retail can be very expensive for patients and may not be the quality required to separate the pH ranges adequately.

Contact **Greens First** at **866-410-1818** to order pH Test Strips.

To test a patient's pH have them take the test kit home and first thing in the morning dip one paper strip into their saliva on a spoon for 1-2 seconds. In about 10 seconds simply have them compare the color on the test strip to the color on the pH chart and record the number. One reading of a test strip won't really tell you much, because levels fluctuate.



Have the patient record their saliva pH every morning for 10 days. With the log of pH established, throw out the 3 highest and the 3 lowest values. Average the remaining 4 values to determine the patient's typical saliva pH. With the established number, adjust the dosage as follows in the guidelines below. A few weeks of this will give you and the patient a fairly accurate reading of their body chemistry. As your treatment program continues along with their daily intake of **Greens First**, a more alkaline diet and lifestyle, you may definitely see improvements.*

After a while, you won't even need to test, you and the patient will know exactly what will happen when they increase their acidic load. It's important to keep in mind that pH operates on a logarithmic scale, meaning that each increase of a single number in either direction away from 7.0 is a multiple of ten. So when your patient's pH moves from 7.0 to 6.0 on the scale, that's ten times more acidic; 7.0 to 5.0 is a hundred times more acidic and so on. Coffee, for example has a

pH of around 4.0 and soda a pH of 2.0. Dr. Guyton says that it takes 20 molecules of alkalinity to neutralize one molecule of acid, which means when your patient's drink one 8 ounce glass of cola, it will take twenty 8 ounce glasses of water to neutralize it. It's obvious how the Standard American Diet (SAD) is producing such devastating effects on our patient's health.

The Cycle of Destruction with pH Imbalance

The body will do whatever it must in order to keep itself alive, it's not really focused on good health as much as on survival. The body doesn't just find pH balance, it works very hard to create it. Since most people eat the Standard American Diet which is extremely acidic the body is left to deal with the cleanup. One of the ways it regains pH balance is by robbing precious body's mineral and enzyme reserves from your body.



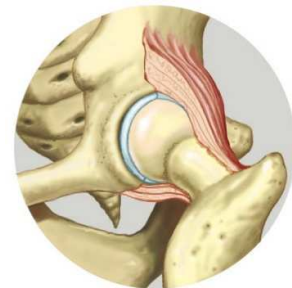
How Minerals Alkalize Body pH

Your body needs alkaline minerals in order to function properly, and since the body can't make them you must get them from your diet. In addition to primary alkaline minerals like calcium, magnesium, potassium and sodium, your body also needs trace minerals such as zinc, selenium, manganese, iodine, chromium and copper. The body uses these minerals to make enzymes, proteins, hormones and neurotransmitters necessary for good health. Foods rich in alkaline minerals such as calcium, magnesium and potassium create alkalinity in the body while foods containing acidic minerals such as sulfur and phosphorus increase the acidity.



A healthy alkaline diet stores your body up with plenty of alkaline mineral reserves, while an excessively acidic diet eventually drains all the alkaline reserves and forces the body to use its own alkaline minerals to neutralize acids in order to keep your blood pH at an alkaline level. One of the ways it does this is by robbing alkaline minerals from your bones, teeth, muscles and organs. When an alkaline and acidic molecule combine, they form a neutral salt. This salt no longer influences your blood pH and is "buffered" from causing harm. The biggest problem with losing alkaline minerals, is

losing calcium from bones leading to osteopenia and magnesium from muscles and organs leading to sarcopenia. A high-protein, animal based diet is extremely acidic and the only way the body can compensate for that overload is to mine calcium from your bones and magnesium from your tissues to neutralize the acids. When the acid overload gets too high for your blood, your body dumps the acid out of the bloodstream and into the acid catchers of the body, the lymphatic system, the joints, arteries and fat cells. The lymphatic system tries to neutralize all the acid and get rid of the waste, but the only way it can do that is to dump the acids back into the bloodstream. You can now see how this destructive cycle of acid buildup in the tissues and fat cells occurs.



The Power of Alkalinizing **Greens First**

As you probably guessed, plant-based **Greens First** helps to add a huge amount of alkalinity to the reserves of your body.* Barley grass, chlorella, spirulina, vegetables such as carrot, cauliflower, broccoli, spinach, parsley and kale along with fruits like blueberries, raspberries, strawberries, blackberries, plum, pear and many others flood our bodies with chlorophyll,



enzymes, vitamins, minerals, phytonutrients, and oxygen. Healthy alkaline cells thrive on an alkaline, oxygen-rich, plant-based diet, while unhealthy cells or viruses, bacteria and cancer hate oxygen. Pathogens prefer an acidic diet high in animal products, processed and refined foods and synthetic chemicals. When you eat a plant-based diet or supplement with an alkaline green drink you assist the body in maintaining an alkaline aerobic environment. The

more oxygen we get in our food, the more health we experience. Excessively acidic food creates an unhealthy cellular environment, which increases the chance of pathogen growth. Green drinks and living foods from fruits and vegetables are the most alkaline, oxygen-rich foods you can eat. They are the prescription for optimum health because they still contain their life force.

Chlorophyll and Phytonutrients

At the top of the alkaline supercharged food list is the king chlorophyll. Chlorophyll is what allows plants to absorb light from the sun and convert it into usable energy. Chlorophyll in plants is what makes their leaves green and healthy, in fact it's referred to as the "blood" of the plant. Chlorophyll is a powerful blood builder because it's so similar to human blood with the only difference being that chlorophyll has magnesium at its center and human blood has iron. Chlorophyll literally helps heal and detoxify the blood of the body. It increases red blood cell production and enhances the cells ability to carry oxygen. Chlorophyll strengthens the immune system, improves circulation, eases inflammation and counteracts harmful free radicals. By eating a plant-based diet or supplementing with a powerful alkaline green drink, you're ensuring a large quantity of chlorophyll and are dining on liquid sunshine and oxygen. Phytonutrients protect and fight off disease in plants. When you eat a diet rich in phytonutrients they help your body fight free radicals and disease. Phytonutrients give plants their characteristic colors and flavors. Phytonutrients have at least one extra electron and are the ultimate electron donors.



People who get lots of phytonutrients in their diet tend to live longer healthier lives. **Greens First** is a delicious and convenient superfood which is rich in natural antioxidants and phytonutrients.

How Did We Get So Acidic?

The problem isn't that we're eating acidic foods, it's that we're eating more acidic foods than alkaline foods. In the Standard American Diet, the typical ratio of acidic to alkaline foods is about 80/20, which means 80 percent of the diet is acidic foods while only 20 percent comes from alkaline foods. We need to flip the ratio to between 60 to 80 percent of your foods coming from the alkaline side and only 20 to 40 percent from the acidic. Remember that this is not an absolute, regular bad eating habits deplete your core energy. As long as the majority of the time you are giving your body what it needs, a more alkaline plant-based diet the body will reward you with good health.



Patient Protocols For Acid/Alkaline Imbalance



Since the majority of injuries in your office are muscle and joint pain related and are chronic in nature from improperly managed inflammation and acid/alkaline imbalances, it's best to assume that tissues surrounding the area of main complaint are acidic and loaded with free radicals. As part of your routine treatment of inflamed tissues it makes sense to recommend a change in dietary and lifestyle habits that favor alkalinity. Knowing that most patients are more interested in "getting out of pain" than changing their lifestyle habits in the initial phase of care, it seems most prudent and beneficial to consider offering them an easy and simple way to alkalize their body and quench free radicals as part of their initial treatment program.

The recommendation of **Greens First** and **Greens First Boost** together (which makes the **Wellness Shake**) is a chlorophyll-based, phytonutrient-rich, "alkalizing" drink perfect for the first visit. The **Greens First Wellness Shake** contains 49 different superfoods and all three food groups, complex carbohydrates (fruits and vegetables) alkaline protein (pea and brown rice) and vegetable based healthy omega oils (flax and olive oil powder) will provide a substantial amount of antioxidants with an abundance of free electrons to help quench free radicals, decrease inflammation, alkalize surrounding tissues, provide acid/alkaline balance and may help to significantly improve outcomes.*

When to Measure Saliva pH

It's typically not necessary to measure saliva pH in your office on the first visit to determine the need for a free radical quenching



whole food green drink supplement. Simply conducting the typical patient workup that includes main complaint, history along with examination findings should be enough for you to make the determination to add the antioxidant-rich supplement. In fact, many health providers have **Greens First** mixed up and available to patients to drink in the reception area on a daily basis. Patients can be sent home with **Greens First Wellness Shake** and a saliva pH test kit to record their pH over the next couple of weeks to monitor improvement, or the need for additional lifestyle changes.

Greens First Wellness Shake Protocols

1st Visit/Acute Care Protocols:



The Greens First Wellness Shake is made by mixing **Greens First** (Original or Berry) together with either flavor of **Greens First Boost** (Vanilla or Chocolate) in 10-12 oz. of cold water in a shaker cup. **Greens First** provides the organic fruits and vegetables and 49 superfoods, while **Greens First Boost** is a nutritional booster that provides all 3 Food Groups (vegetarian/vegan brown rice and vegetable pea protein, good carbohydrates & healthy oils).

The Wellness Shake should be consumed **within 30 minutes of rising**. Consider adding a second alkaline shake in the afternoon as well as recommending **pH Alkalizer** once per day. Most acute patients will benefit from an additional daily scoop of a very alkaline powder blend of **pH Alkalizer** containing potassium bicarbonate, magnesium citrate, calcium citrate in a vegetable base that includes grape seed extract, especially during the first month of treatment.

Ongoing Saliva pH Protocols:

This is the same protocol as stated earlier. Have the patient record their saliva pH every morning for 10 days. With the log of pH established, throw out the 3 highest and the 3 lowest values. Average the remaining 4 values to determine the patient's typical saliva pH. With the established number, adjust the dosage as follows:



After the initial acute phase of care along with a log of the patients saliva pH recorded by them from home, you can adjust the dosage as follows.

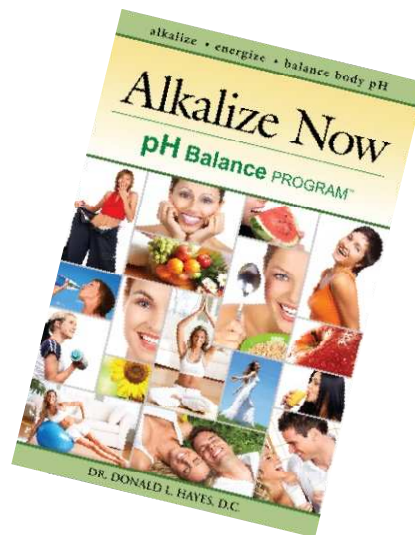
Saliva pH: Below 7.0: Two **Greens First** Wellness Shakes per day and one **pH Alkalizer**.

Saliva pH: 7.0 – 7.2: One to two **Greens First** Wellness Shakes per day and one **pH Alkalizer**.

Saliva pH: Above 7.2: One alkaline **Greens First** Wellness Shake per day to maintain the alkalinity. Some patients may also continue to benefit from one **pH Alkalizer** per day.

Patients that remain below a 7.0 saliva pH reading may need the additional help of dietary and lifestyle changes. Provide them resources to improve three critical areas of an alkaline lifestyle, how to eat, drink and exercise in a more alkaline fashion. You can provide my book entitled, *Alkalize Now – The pH Balance Program*, for your patients. It is also available as an E-Book on the general or your personalized **GreensFirst.com** website.

Help patients realize that alkalizing the tissues of the body is an ongoing daily event if they want to maintain health. With the onslaught of acid foods and lifestyles the body struggles on a daily basis to maintain its delicate acid/alkaline balance and a simple whole food antioxidant green drink can help.



How to Easily Educate Patients on the Importance of pH Balance

Most patients that go to healthcare providers are in pain and right or wrong relate to us through their spine and nerves. Since most will have difficulty in connecting their pain to an alkalizing green drink supplement, it will be most helpful if you can quickly and easily connect the dots from their spine, to their nerves, to their end organs and finally to pH imbalance. In this high-tech computer dominated world, consider using an inexpensive software program that can load onto a laptop that shows patients the connection between where they hurt in their neck or low back, the route of the affected nerves to the end organs and a correlation to pH imbalance. Studies show that over 80 percent of the general population know about and take antioxidants. The problem is most don't know why they're taking them or which are the best. Use software to have them fill out a simple checklist on the computer screen that quickly demonstrates how their current lifestyle is contributing to their acid/alkaline imbalance, free radical production and exacerbating their current pain and inflammation. Use software that is capable of instantly and dramatically correlating the spine to the peripheral nerves, to the viscera and finally to your recommendation of an antioxidant-rich superfood supplement at the click of a vertebral level on the computer.



Contact **Greens First** at **1-866-410-1818** for more information on the **Alkalize Now Patient Education Software**.

Effective Implementation of pH Testing and Green Drinks

Antioxidant supplementation has become increasingly popular among healthcare providers due to the understanding that free radicals contribute to pain and inflammation and by quenching them, patient outcomes can be improved.

Integrating With a Decompression Program

Doctors have successfully integrated pH testing and the antioxidant-rich superfood **Greens First** as the nutritional component to a decompression/traction package. Decompression/traction



therapy is viewed as a high-end specialty service.

Offering a high-quality anti-inflammatory green drink supplement and a method to monitor saliva pH at home on a regular basis is an extension of that and the perceived value is higher than for antioxidant products purchased at health food stores.

Integrating With a Fitness Program

When patients experience the rapid relief of symptoms from combining treatment protocols with the anti-inflammatory benefits of **Greens First Wellness Shake** and choose to become regular clients on a fitness

program, you now have a long-term customer. Patients may come in multiple times a week for their fitness program, and will more than likely want to continue to use the **Greens First Wellness Shake** on a daily basis.

Integrating With a Weight Loss Program

The **Greens First Wellness Shake** is an effective component of a successful weight-loss program and fits within any weight-loss system you may be using. The majority of the overweight/obese patients that come into a healthcare provider's office have medically associated conditions that would benefit from regularly alkalizing themselves with a high quality fruit and vegetable green drink. In addition, monitoring their saliva pH will demonstrate the need for additional alkaline lifestyle changes that are so important in losing weight.



Integrating With a Cleanse/Detoxification Program

Patients today are spending millions of dollars in an attempt to clean up their diets and cleanse toxins from their systems. Doctors who can

provide a simple and easy detox/cleanse program in combination with their regular chiropractic care will experience not only an increase in immediate revenues short term but should realize long-term financial profits as well.

Cleanse/Detoxification Strategy Using pH Testing and a Green Drink

Every day for one to two weeks, have patients eat one solid meal and consume two **Greens First Wellness Shakes**. Instruct the patient to have **Greens First Wellness Shake** for breakfast, a healthy snack at 10AM, a healthy solid food meal for lunch, a snack at 3pm and another **Greens First Wellness Shake** for dinner. (Patients should not go below 1200 calories per day.) Have patients monitor their saliva pH three times a week and record the results. You are looking for a saliva pH in the range of 7.2 to 8.0 during the cleanse, however with a detoxification program saliva pH often becomes acidic as a bi-product of the cleansing process. Eating the food meal at night will be less effective because the twelve hour fast that the body will experience overnight will be most effective after a liquid green drink dinner. Make sure the patient consumes enough calories in their solid meal for the day since most green drinks will be nutrient dense but low in calories. In addition, have patients consume extra water to enhance the detoxification process by increasing the kidney's elimination of toxins. **Greens First Wellness Shake** has all three food groups including alkaline amino acids such as brown rice and vegetable pea, contain all the nutrients, vitamins, minerals, antioxidants and phytonutrients needed to support daily cell metabolism and the additional work of detoxification specifically phase 1 and phase 2 of liver detoxification.

The **Greens First Wellness Shake** and **pH Alkalizer** can become an essential part of acute care protocols in your office.

For more information on our products and services,

*please visit **GreensFirst.com** or call us at **1-866-410-1818**.*

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*These statements have not been evaluated by the Food & Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.



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