Ph MONITORING FOR THE PATIENT

In this newsletter, we shall start with explanations as what do the numbers actually mean.

ANALYSIS OF Ph FINDINGS:
Record average pH of the urine over the five days

Urine pH 5.5-5.8
  The patient’s alkaline reserve is adequate. They still have enough alkalizing minerals in their body to handle daily dietary acids. Remind the patient that they should not get too smug about this and completely load up on dietary acid foods.

Urine pH 6.0-6.6
  This is the warning stage. The patient’s alkaline reserve is running low but they still have some alkalizing minerals available. In general terms, the workhouse mineral of the alkaline reserve - sodium-can weaken strong acid enough to protect their internal tissues during normal meals. The danger arises when they overdo high protein consumption and the body’s backup systems are called upon to neutralize (buffer) the blood. Calcium starts to be pulled from the bone to achieve this end.
  The patient will complain of being stiff in the morning but tends to loosen up as the day goes on. They may find themselves to be more short tempered and that they tire more easily. Their joints and muscles may be painful and they may complain of being more “sickly”.
  The patient should start to introduce more cooked (steamed) vegetables at first. Raw fruit and vegetables at this time generally will cause extreme abdominal distress. After two weeks instruct your patient to introduce one fruit serving or one small salad. As each day goes by, if their digestion permits, they could add one more serving of raw fruits or raw vegetables. The government guidelines are from five to nine servings of fruits and vegetables per day.

Urine pH 6.8-8.0
  This would seem to indicate that vast storehouses of alkalizing minerals are at work. However this is not the case, the body is actually saturated with dietary acid.
  Their alkaline reserve is virtually gone and their whole body is stressed.
  Ammonia is being produced in their bodies by the kidneys and all of the cells of the body in a last ditch effort to eliminate the acid ash of too much protein consumption. The more protein in the kidney fluid, the more ammonia is produced and the higher the pH goes.
  Your patient will complain of being tired all of the time. They will have stiff joints and sore muscles most of the time. They will start to notice a burning sensation on urination and very strong smelling urine (ammonia).
  First, instruct your patient to start to drink cranberry juice to relieve the burning sensation. In juice form, the acid of cranberries travels quickly through the digestive tract and “neutralizes” the strong alkali of ammonia.
  Second, instruct your patients to soak in a tub of warm water with one cup of Epsom salt and one and one cup of baking soda. Emphasize warm, not hot water especially for diabetic patients, as the soak will cause vasodilation of all of the surface blood vessels and they might faint when they stood up. This soak will pull the acidic toxins out of the body and put magnesium into the body (thus putting buffering alkaline magnesium into the body’s circulation) through the process of osmosis.
  Third, start the buffering of the body with a gradual introduction of alkaline foods into the body (such as brown rice). If the body is changed too quickly over to mostly alkaline foods, it will tend to magnify present symptoms and add a great deal of intestinal upset. After a week of brown rice added to the diet add one more cooked vegetable. Continue the-add-a-vegetable a week routine for about six weeks. Warn the patient that at any time symptoms seem to flare up then hold off for a week adding another cooked vegetable. Schedules and food preferences might hinder consuming all these vegetables and for those patients suggest alkalizing nutritional supplements such as barley grass tablets.
  Do not have the patients immediately track their urine pH. Have them wait for at least one week after the six-week period is over. Many times it will look worse (lower pH-more acidic). To correct very high ammonia type urine it has to first go to high acid levels before it can start returning to a healthy state.
  The urine pH of strict vegetarians can be as ammonia as the urine of avid meat eaters. Some will be openly defiant that you are telling them they are consuming too much protein. Just remind them that grains and nuts are acid-ash producers.
If after pursuing this dietary change for about eight weeks and nothing has changed, you should assure them that they did not fail. There are other factors to pursuing health than just eating right. That is why they were instructed to do the salivary pH for a week.

Record the 5-day average **Saliva pH**.

The average of the five days of saliva pH will give you an idea whether your patient’s physiology is being dominated by emotions. If emotional overload is a factor, this also needs to be addressed to prevent the patient from being disillusioned after trying to raise his/her urine pH and not getting anywhere. A simple key is when the pH readings vary greatly on arising each morning. It is almost certain that anxiety is influencing the individual’s physiology.

**Saliva pH 6.2-7.0**

This would indicate that the patient’s emotions are not overwhelming their physiology. They seem to handling the normal stress of life. They may experience occasional illness but will soon recover.

**Saliva pH 5.5 to 6.0**

The body’s alkaline reserve is holding its own but anxiety or similar stressful emotions are keeping the body “on guard” most of the time. Check to see if the patient is eating in a relaxed atmosphere. The key areas of concern:

- Are they eating while they are driving the car? Once in awhile is all right but if it is becoming the norm they must stop doing this.
- Are they eating too fast? Please see earlier article in Practice Builder section to measure how fast the patient is eating.
- Are they constantly watching the news or some other TV show that concerns violence? The eyes interpret the view of any threat as a sympathetic challenge and will respond by overwhelming the parasympathetic nervous system and its proper digestive function. Advise them to turn off the TV or at best find some comedy channel to watch.
- Are their meals constantly involved with discussions of family financial problems or squabbles in the family? Again the stress is overwhelming the parasympathetic system. These problems must be discussed but they should set aside some other time during the day to discuss these problems.
- Do they frequently have to eat at their desk at work? If they must, advise them to bring in a small cloth to cover their work while they take time to eat.

**Saliva pH 7.2 to 8.0**

This person’s body is moving toward total exhaustion. You must take caution not to make too many changes in their diet or lifestyle too quickly. They are at the breaking point and will feel overwhelmed and just give up. Suggest they start on one of the previously mentioned activities for at least a week before going onto the next. Then look at the following areas:

- Is the patient having a good hearty breakfast every morning? The patient with a pH in this range is generally “too busy to eat or reports they are not hungry.” Instruct them to prepare some hard boiled eggs on the Sunday before the work week. Another recipe is to crack open six to twelve eggs into a bowl and whip them up. Place the mixture into individual disposable cup cake holders and add cheese, or vegetables. Place the filled cup cake holders on a tray and cook in the oven for 30 to 35 minutes at 375 degrees in the oven. Take them out and let them cool. The patient can eat one or two of these in the morning before work. The average person needs a good hearty breakfast especially if they are at this point for their saliva pH. Hypoglycemia is an unneeded condition for an already stressed body.
- Are they having a snack in the morning and afternoon? If not, they must pack two snack bags (in addition to their lunch if they do bring their lunch to work) of different crunchy vegetables. (e.g. celery, carrots or cut up peppers). This can easily be done the night before. For a dip have them bring into work a small bottle of already mixed olive oil and apple or balsamic vinegar.
- Does lunch include protein? It should. The preferred size (length, width and thickness) is about the palm of their hand. The rest of the meal should be some form of salad with as many different colored vegetables as possible.
- What is your patient eating for dinner? Ideally it should consist of mostly vegetables. Cooked sweet potatoes are one of the more nutritious vegetables.
- Are they snacking after dinner? If a snack after dinner is necessary, mix apple cider vinegar and olive oil and then dip any type of crunchy vegetables into it. They should refrain from eating anything 2 hours before bed.
- Are they sleeping through the night? If not, instruct the patient to soak in a tub of warm water with one cup of Epsom salt and one cup of baking soda for at least 20 minutes. (Diabetics can
also do this but you must mention to all patients that the water must only be warm and not too hot. The diabetic patient, especially, should roll over onto their knees when they are in the tub and gradually raise themselves up to sit onto the side of the tub. After soaking, many tend to be lightheaded. Following this procedure will prevent falls by the patient.

Saliva and the pH challenge
The patient kit that we have at council headquarters also contains a chewable vitamin C tablet with a very pleasant berry flavor to it. Instruct the patient to place the tablet into their mouth, without chewing it and to leave it there until they taste a sour taste. They are then instructed to remove the tablet and swallow four times. Then they are to retest their saliva and record the results. If they want to, they may chew up the tablet after they have completed the measurement.

pH goes from 6.8 to 8
This is the preferred response. They are exhibiting a balanced autonomic nervous system. The Vitamin C chew has stimulated the body to respond naturally to the acid of the tablet. This person would do well on a diet of 50% fruits and vegetables, 20% fat, and 30% protein.

pH goes from 5.5 to 8
Their alkaline reserve is satisfactory but the body is stressed from emotional overload. Their anxiety must be dealt with. Simple stress relieving techniques will be addressed in the next newsletter. This person should limit their meat consumption to 15 to 20% and raise their consumption of vegetables and fruits. Fat consumption will remain at 20%.

pH goes from 6.2 to 6.8
Alkaline reserve is still available but becoming exhausted from fear, anger, or rage. These strong emotions are a greater challenge to the body than the “C” acid. This patient will exhibit heart palpitations, elevated blood pressure, dilated pupils, and constipation. They need to address the causes of these strong emotions for their long term health. In the short-term, they should decrease their protein consumption to 10 to 15% and increase fruit and vegetable consumption 5%. Once again, fat consumption should remain at 20%.

pH goes from 7.2 to 8.0
This individual had an alkaline pH prior to the vitamin C Challenge. Their alkaline reserve is present, however, the patient is a worrier headed for exhaustion. They will tend to have either an elevated or decreased heart rate, esophageal spasm (GERD), increased peristalsis (diarrhea), constricted pupils, and they will complain of stiff, sore joints, especially in the morning (arthritis complaints). Their parasympathetic system is able to elicit the normal alkaline response at the present time. Without making changes in their life, this individual will move into one of the more serious states discussed above. They must also limit protein consumption to 10 to 15%. They may add brown rice to each meal to improve their alkalinity. Fat consumption should remain at 20% with fruits and vegetables filling the remainder of their meals.

pH drops from 8.0 before to 6.4 after OR 6.4 down to 5.0 after
This patient is headed for serious trouble. This patient may exhibit hypo reflexes, flaccid and sore muscles, excessive tearing, and excessive saliva production. Parasympathetic response is maximized due to stress and worry. The body is slow to respond to the “C” acid because worry has exhausted the alkaline reserve. A vegetarian diet should be followed for two to three weeks. Brown rice should be eaten with every meal. The vitamin C Challenge should be repeated after three weeks on a vegetarian diet.

pH remains at 5.5
This is the most serious finding of all. The alkaline reserve is completely depleted. The sympathetic nervous system is dominant with elevated blood pressure, heart palpitations, dilated pupils, tight muscles, increased, strength, constipation, cold sweaty palms, increased mental activity, indigestion, and dry mouth. Sympathetic excess has shut down digestion (part of the parasympathetic nervous function) and the body is unable to respond to the vitamin C “acid”. The excess acidity will foster bacteria in the mouth with bad breath resulting. Taste bud count would be very low. (See previous issue on how to count taste buds.) As discussed above, the patient should be on a vegetarian diet for two to three weeks. All vegetables must be cooked. With the digestive dysfunction, they are unable to tolerate raw vegetables. You must advise the patient to change their lifestyle slowly. Too many changes too quickly will also be perceived as a stress.
Conclusion

pH testing may be a significant tool in clinical nutrition. Like any tool, the results should be looked at in conjunction with physical findings, subjective complaints and lab work. In my personal experience, it is helpful to have pH strips that measure a fairly limited range. Anything below 5.5 or above 8.0 indicates serious problems. Knowing that is precisely 5.1 or 8.6 does not significantly increase the value of the finding.

pH Test Kits

Each test contains:

1. PH strips with a special vitamin C tablet along with an instruction pamphlet for the doctor to give to the patient.
2. Descriptive handout with places for the patient to record their urine and saliva pH for five days.
3. Explanation of how to do the salivary challenge test and a place to record it.

These assembled kits cost $2.00 and can be ordered through the Council of Nutrition. This kit allows the nutritionist to quickly assess the acid/alkaline balance of the patient.

To Order pH Test Kits:

Fax or Email this completed form to Council Headquarters:
540.635.3669 or info@councilonnutrition.com

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If you are not already a Council Member, would you like to join? □YES □No

For more valuable information, our annual symposium is coming at the end of April. Check out our website for more information.