

Loomis 24-Hour Urinalysis

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03/07/2005

The 24-hour urinalysis according to Loomis is a very important part of my method to determine enzyme deficiencies. Let me tell you why I think it is such an important test and how it differs from other urinalyses. First, do not confuse this test with the 24-hour urinalysis test that is done by medical doctors to determine kidney function, or with the Reams urinalysis test, which is based on a single random catch and varies widely according to whether the person has recently eaten. Urine samples collected every two hours will be significantly different. Everything changes: the pH, specific gravity, calcium content, and so on. This test is not a medical diagnostic test.

The Loomis method requires collection of all urine produced in 24-hours. These fluctuations are averaged to give a complete picture of digestive and absorptive functions. Looking at a Loomis 24-hour urinalysis is also a sneaky way of peeking at the blood (the ECF or extracellular fluid). Why? The blood holds nutrients it needs and dumps what it doesn't want into the urine. If a substance does not appear in the urine, we know the blood needs it and has kept it. Conversely, sometimes we see higher levels of substances in the urine than should be there, plus things that shouldn't be there at all (abnormal solutes). This tells us that the blood has dumped them. The blood also takes what it needs from the cells. In fact, cells will sacrifice themselves to the blood in order to maintain homeostasis. Also, the blood dumps what it doesn't want into cells. So, if we see no-no's in the urine, we know that these same no-no's are in the cells.

Let me describe what we measure in this 24-hour urinalysis. Except for the chemstick, which reveals abnormal solutes, this test is prognostic rather than diagnostic. In other words, you can predict what lies ahead if you do not clean up your diet and digestion act. Enzyme deficiencies lead to deviations in the normal physiology characterized by inflammatory conditions. If left untreated, these conditions may lead to diseases.

In the following discussion, I have listed the most common concerns. I want to tell you just how much information can be gleaned from this simple test.

The pH: When a healthy person eats, the urine becomes alkaline from the alkaline tide, the body's method of dumping alkalinity to compensate for HCl losses during digestion. In a healthy person, a first morning urine is very acidic because of the prior eight hours of fasting during sleep. The acid reserves are then released during the first meal and the urine then becomes alkaline. In a 24-hour volume, the average pH range in a healthy person is from 6.3 to 6.7. Most people are more acidic (lower pH) than 6.3, while fewer are more alkaline (higher pH) than 6.7. Of the two, it's better to be more acidic than alkaline because the body has more buffer systems to handle excess acidity than excess alkalinity. The further from normal the 24-hour pH is, the more potential problems. For example, excess alkalinity leads to calcium metabolism problems, anxiety, immune dysfunction and indications connected with protease deficiency.

On the other hand, excess acid reserves mean not enough alkalinity is present to activate pancreatic enzymes in the duodenum.

Specific Gravity compared to Volume: The normal 24-hour volume should be greater than 800 ml and less than 2400 ml with an optimum range of 1200 to 1800 ml. Five cups is equivalent to 1182 ml and 8 cups to 1892 ml. People should drink enough liquids daily to give an optimum urine volume but forced

liquid intake is not healthy. The kidneys can only handle about 1/2 cup an hour, so its better to sip than to glug!

You can determine kidney function or lack of it by comparing the urine volume to the specific gravity. However, the extent of kidney damage cannot be determined by this test and a physician should be consulted in such cases. Just by comparing the specific gravity to the volume, we can determine the following [where I refer to medical conditions or terms in the following, I am doing so only for convenience; where a medical condition is indicated, you should consult with your physician]:

Polyuria: (excess urine volume above 2400 ml) may mean the patient is drinking too many liquids, eating a junk food diet, taking diuretics, or has allergies or underactive adrenals.

Oliguria: (inadequate urine volume of less than 800 ml) may mean the patient is not drinking enough liquids, is dehydrated, has overactive adrenal glands, impaired circulation (edema), or is recovering from fever, vomiting or diarrhea.

A high specific gravity with a high or normal urine volume: indicates the presence of abnormal solutes such as glucose (diabetes), protein (kidney disease) and so on. Which solutes can be determined by looking at the Chemstick, described below.

A low specific gravity with a low or normal urine volume: indicates difficulty concentrating the urine. This means that the kidneys are not cleansing the blood due to a congested lymphatic system. This can produce swollen glands, allergy, low back pain, frontal headaches, and nausea. In women, these may worsen during menses or pregnancy, and may lead to vomiting during either time. There is a special enzyme formulation for this, which contains enzymes plus herbs, which nourish the kidneys and help relieve lymphatic congestion.

Chlorides: The normal person will dump chlorides to compensate for excess acid reserves or hold chlorides to compensate for excess alkaline reserves. Thus, normally we should see a low (acid) pH with high urinary chlorides or a high (alkaline) pH with low urinary chlorides. There are common variations of these patterns. For example, people can become potassium deficient because of a junk food diet or taking diuretics. This produces an acid pH with low chlorides and polyuria. Low pH plus low urinary chlorides without polyuria is observed in individuals who are salt deficient.

Calcium: Of all the nutrients measured in the urine, the calcium level is the hardest to correct because of the many requirements of calcium metabolism, including normal pH, adequate protein digestion, proper hormonal balance plus certain vitamins and minerals. Most of the patients I test are low in calcium, including those who eat organic whole foods and take calcium supplements. The only way to maintain adequate calcium is to eliminate refined foods which have been stripped of most nutrients, optimize digestion and balance the endocrine (hormonal) system.

Vitamin C: Vitamin C is a threshold substance, meaning it is not excreted until the ascorbic acid level in the blood exceeds a certain value related to the degree of tissue saturation. Vitamin C deficiency is very common in people who eat refined foods, women during pregnancy and lactation, children, immune suppressed people and people with many diseases. The most common results of this deficiency include fatigue, joint pain, bleeding gums and adrenal exhaustion.

Most people confuse ascorbic acid and ascorbates with vitamin C. They are not the same. Ascorbic acid is the antioxidant portion of the vitamin C complex. Many people who take megadoses of ascorbates show severe vitamin C deficiency in this test. The enzyme formula for vitamin C contains a food source

of vitamin C and no ascorbic acid or ascorbates. I have seen severe vitamin C deficiencies corrected in days with this enzyme formula.

Indican: The indican level tells about your digestion is. The higher the indican, the greater the need for colon cleansing and food enzyme therapy. Partially digested food may directly enter the blood causing allergic reactions, or remain in the colon where it putrefies (rots), forming a group of toxic phenolic substances called indican. Although the undigested food never goes back into the blood from the colon, the indican does and must be detoxified by the liver. But the liver can't detoxify all of the indican. What is not detoxified passes through the kidneys and can be measured in the urine. The higher the indican level, the worse the potential problems, such as gas, diarrhea, constipation, halitosis, incompetent ileocecal valve, hiatal hernia, skin problems, breast pathology, sciatica and even cancer. Dr. Ian Immerman found over 100 different conditions associated with high indican levels. While the indican should be low, a zero indican is not good and it indicates severe sugar intolerance, because undigested sugar interferes with the indican test.

Sediment: The sediment test can help determine the multiple digestive enzymes needed. A normal 24-hour urine has about 1/2-ml of sediment, the "ash" resulting from digestion, absorption and assimilation of foods. A normal sediment is calcium phosphate, the result of carbohydrate metabolism. Malabsorption, decreased cell permeability and sugar intolerance reduce the sediment, sometimes to a trace. A high sediment means poor use (assimilation) of food and indicates nutrient deficiencies as well as fat and protein intolerance. Urinary sediment increases with fat or protein intolerance due to the presence of oxalates (fat intolerance) and uric acid (protein intolerance) in addition to the phosphates normally present.

In addition to enzyme formulas for fat and sugar intolerance, there is a multiple digestive enzyme for maintenance in adults with good digestion, and a formula to help relieve gastric irritation, including ulcers.

Abnormal Solutes: This is the only part of the urinalysis test that is routinely done in a pathology lab. A chemstrip is dipped into the urine to check for abnormal solutes such as glucose (diabetes), blood, protein (kidney disease), bilirubin (liver pathology), nitrites (bacteria) and so on. This test is very important for me because it tells me when I should refer an individual to a medical doctor for a pathological condition.

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