

Living in a Toxic World Part 2 – Testing for Toxins

In Part 1 of “Living in a Toxic World – Sources and Symptoms of Toxicity”, we reviewed the common toxins that all of us are exposed to every day, the sources of these toxins, and the effects they can have on your health. Let’s look now at testing for toxicity.

IN-OFFICE SCREENING AND MONITORING METHODS

One method of testing for heavy metals is in-office urine screening. A random urine sample (meaning that it can be taken at any time of the day and no fasting is required) is analyzed at the clinic. The analysis will tell us whether you have heavy metals in your body and whether those levels are high, medium, or low. This screening test does not identify specific metals and is often used for tracking progress in a detox program.

Another method of toxicity testing is Bio Impedance Analysis (BIA). BIA testing assesses body composition, the amount of fat and muscle in your body, and is often used in developing a weight control program. It tells us much more than just the amount of fat and muscle a patient has, however. BIA testing also measures metabolic rate (the number of calories burned at rest without exercise) and also tells us the overall health of the cells.

More importantly, for purposes of testing for toxicity, BIA testing tells us the patient’s hydration level. Hydration is the measure of the amount of water actually inside the cells compared to the amount of water outside of the cells. Hydration is not simply a measure of how much water you drink; we need to know how much of it is getting into the cells. A rule of thumb is that there should be a minimum of 55 per cent water inside the cell for females and a

minimum of 60 per cent for males. If the hydration levels are lower than that, it is often an indication that there are toxins in the body that are pulling water from the cells.

Both the in-office urine test and the BIA test are used to determine whether toxins are present in the body but neither will identify the specific chemical composition of the toxin.

HAIR ANALYSIS

Hair analysis can be used to detect the presence of heavy metals but it is not the preferred method. Hair will grow with certain metals found in the hair cells; however, our hair is exposed to our environment and so heavy metals can settle on the hair from the atmosphere, from swimming pools, and from other sources. Hair analysis is used most often for patients where urine collection is difficult.

URINE TESTING FOR TOXIC CHEMICALS

Urine testing provides the definitive test for toxic chemicals present in the body.

The patient is provided a kit to collect a urine sample first thing in the morning, at home. The sample is sent to a lab where it is analyzed for a wide array of common toxins including VOCs (volatile organic compounds), plastics, and parabens.

URINE CHALLENGE TESTING FOR METALS

Also called “urine metals mobilization testing” or “provoked urine testing”, the urine challenge testing provides a definitive analysis of not only the presence

of heavy metals, but which specific metals are present in the body and the volume of these metals.

The test urine samples are collected at home, following the instructions contained in the kit. On the day of testing, the patient collects a urine sample first thing in the morning. This first sample is the control sample.

After the control sample is collected, the patient takes an oral chelator (a chelator is a natural substance that will bind to metal and remove it through urination). After taking the chelator, the patient collects urine in a large container for the next six hours. These two samples, pre- and post-chelator, are analyzed by the lab.

If the post- sample (the sample taken over the six hours after having taken the chelator) shows a significantly higher volume of metal present in the urine, metal toxicity is indicated.

Ordinarily the control sample will not contain any heavy metals. Because the body has no natural method of removing heavy metals from the body, there should not be any in the first sample collected. If some heavy metals do show up on analysis of the control sample, the probability is that the patient has a current source of heavy metals ingestion. In this case, the first step is to identify and remove the source of the metal exposure.

Urine challenge testing analysis will specifically identify a wide range of metals in the body including the most commonly found ones such as mercury, lead, aluminum and cadmium. The analysis will also identify uranium, tungsten, and even the nutritional metals. The analysis not only identifies the specific metals, it also measures the volume of each.

TREATMENT

Once the toxins that are affecting health have been identified, a customized program for detoxification can be designed and implemented.

Systematic detoxification that will yield effective and sustainable results is best done in consultation with a healthcare practitioner. The doctors at Green Apple Health Care will carefully design a step-by-step, systematic approach to assessing and treating toxicity that may be affecting you.

Call (780) 485-9468 today for an appointment with one of our experienced and skilled doctors.