

Patient Instructions for Heavy Metal Testing



Your doctor has recommended that you complete a series of tests in order to determine the heavy metal burden in your body. Heavy Metal Testing can be completed via hair or urine sample. Hair testing is considered a general screen and can indicate whether levels of heavy metals are very high warranting further testing. Urine testing is more specific and is the test of choice to establish a baseline prior to beginning chelation therapy or if monitoring of heavy metal levels is desired. Urine testing can be done unchallenged (without administration of a chelator) to determine the baseline level of heavy metals being excreted or challenged (with administration of a chelator) to determine if a chelator is able to pull stored heavy metals out of the body.

Please note that for any test refrain from taking any supplements for at least 24 hours. Consult with your prescribing physician whether it is ok to stop your pharmaceutical medications for a 24 hour period prior to testing. For the unchallenged and challenged urine testing please refrain from taking a sample during menstruation.

Screening Tests – Hair Analysis

This test involves a sample of hair being cut close to the scalp and evaluates levels of heavy metals. This is a qualitative analysis and as such is a screening test that does not provide absolute numbers that correlate to the increased metal burden.

NOTES

Unchallenged and Challenged Urine Testing (Pre and Post provocation)

Urine testing is a quantitative test and provides your doctor with numbers that are associated with the level of heavy metals in your body as compared to established normal levels. This test involves a 6-8 hour urine collection and may be done either with or without administration of a chelator also known as an agent that helps to bind heavy metals and promotes excretion in the urine.

Often you will first complete the test unchallenged, meaning you pick-up the urine collection kit from our office and choose a 6-8 hour time frame to collect urine before returning it to our clinic. This test allows us to see what your baseline level of heavy metal excretion looks like and naturally how well your body is releasing heavy metals.

Next you will complete the test challenged with a chelator (EDTA, DMPS or DMSA). Your doctor will pick which chelator(s) will be used based upon your symptoms as each one has a different capability of binding specific heavy metals. You will first empty your bladder and then have the chelator administered, generally via an IV. Following administration of this chelator you will collect your urine for the next 6-8 hours and then return the sample to our office. This post-provocation test is important as it shows whether you are storing heavy metals in your tissues that the chelator is capable of binding to and excreting. Comparing the challenged and unchallenged test gives us the most information; however your doctor may recommend that you do one of the tests as a stand alone. Please note that the unchallenged and challenged test can be spaced as is convenient for your schedule and do not need to be completed back to back or on sequential days.

Once your doctor has this information they will decide on an appropriate course of treatment for you.