



HEAVY METALS MAY CAUSE NEUROLOGICAL DISORDERS AND AFFECT YOUR HEALTH

The Great Plains Laboratory, Inc. metals testing (hair, blood, urine, and fecal)

Why metals testing is important?

The test is important for measuring toxic metals that can impede development and normal brain functioning, as well as measuring levels of minerals essential for normal growth and good health.

The Great Plains Laboratory, Inc. can check metal levels in hair, urine, blood and stool, using samples appropriate for each specific situation. How can you determine the most sensitive and exact testing method for your case?

Hair is ideal for the initial evaluation because of easy sample collection procedures, accuracy and economic price. Blood, which contains high levels of metals immediately after exposure, transports them to body tissues and hair follicles well supplied by blood vessels. Toxic elements get incorporated and excreted in the hair tissue.

The hair test also provides exact ratios between nutrients and toxic metals. The results show levels of 39 toxic and essential elements, 5 ratios and come with an individual interpretation.

The blood test is best for detecting recent heavy metals poisoning and for measuring levels of minerals in the body.

Urine and fecal tests are most sensitive after taking a chelating agent. Chelating agents help extract heavy metals deposited in the tissues and bone. These tests are also important for evaluating the efficiency of chelating treatments since they measure levels of metals excreted from the tissues during the chelation. Urine and fecal elements tests are not recommended unless you are using a chelating agent before sample collection.



Feeling bad and don't know why?

Toxic metals, such as mercury, lead, aluminum, cadmium and others, can affect development, neurological functioning and overall health.

Today, with increasing pollution levels, the presence of toxic metals in the environment is constantly growing. Chemical products, fertilizers, industrial paint, building materials, fish, silver dental fillings, and vaccines are just some of the sources of heavy metals in everyday life. Toxic metals may normally be present in the body in very low levels, but continuous exposure or metabolic abnormalities can cause accumulation of heavy metals in body tissues, and subsequently, in the brain.

Many symptoms of heavy metals poisoning are identical to symptoms of neurological and psychiatric disorders. Therefore, it is difficult or impossible to identify their cause without expert laboratory testing.

(continued on back)

Recommended for the following disorders:

- ☀ AD(H)D
- ☀ Alzheimer's Disease
- ☀ Anemia
- ☀ Anxiety or Excessive Stress
- ☀ Autism Spectrum Disorders
- ☀ Chronic Fatigue
- ☀ Depression
- ☀ Digestive Disorders
- ☀ Food Allergies
- ☀ Migraines & Spasms
- ☀ Mood Swings
- ☀ Movement Disorders
- ☀ Obsessive-Compulsive Disorder
- ☀ Psychosis
- ☀ Reproductive Problems
- ☀ Skin Problems & Acne
- ☀ Sleep Disorders
- ☀ Tic Disorder
- ☀ Tourette Syndrome
- ☀ Weak Nails



“There are many new cases of heavy metals poisoning because of increasing pollution levels”

Heavy Metals Test



It is equally important to measure levels of minerals, which play an essential part in numerous physiochemical reactions within body cells. These reactions include receiving nutrients, filtering, emulsifying, absorbing vitamins, transforming energy and eliminating toxins, and many others. Toxic overload and metabolic imbalances favor minerals depletion.

Test results frequently show high heavy metal levels coupled with low mineral levels in people with developmental and neurological disorders, chronic fatigue, as well as apparently healthy individuals not feeling "at 100 percent". Our nutritional counselor will help you interpret test results and explain ways to bring metal levels to normal.



Sample Lab Report

HAIR ELEMENTS

The Great Plains Laboratory, Inc.

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LAB#:
PATIENT:
SEX:
AGE:
CLIENT#:

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	33	< 8.0		
Antimony	0.091	< 0.066		
Arsenic	0.036	< 0.080		
Beryllium	< 0.01	< 0.020		
Bismuth	0.009	< 0.13		
Cadmium	0.021	< 0.15		
Lead	1.6	< 1.0		
Mercury	1.6	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.091	< 0.060		
Nickel	0.24	< 0.40		
Silver	0.26	< 0.20		
Tin	0.37	< 0.30		
Titanium	0.92	< 1.0		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Calcium	484	125- 370					
Magnesium	73	12- 30					
Sodium	55	12- 90					
Potassium	110	12- 40					
Copper	22	8.0- 16					
Zinc	180	100- 190					
Manganese	0.10	0.20- 0.55					
Chromium	0.41	0.26- 0.50					
Vanadium	0.075	0.030- 0.10					
Molybdenum	0.072	0.050- 0.13					
Boron	1.9	0.60- 4.0					
Iodine	0.30	0.25- 1.3					
Lithium	0.010	0.007- 0.023					
Phosphorus	195	160- 250					
Selenium	0.82	0.95- 1.7					
Strontium	4.7	0.16- 1.0					
Sulfur	49300	45500- 53000					
Barium	0.41	0.16- 0.80					
Cobalt	0.017	0.013- 0.035					
Iron	11	8.0- 19					
Germanium	0.048	0.045- 0.065					
Rubidium	0.087	0.016- 0.18					
Zirconium	0.68	0.040- 1.0					

SPECIMEN DATA

RATIOS

COMMENTS: 23456

Date Collected:

Sample Size: 0.199 g

ELEMENTS

RATIOS

EXPECTED RANGE

What some test compounds mean

- **Mercury** can cause depression, fatigue, developmental disorders, neurological and movement disorders, and more.
- **Aluminum** can be an important factor in Alzheimer's disease.
- **Lead** can cause depression, nausea, fatigue, communication and concentration problems, developmental problems, neurological and movement disorders, and more.
- **Zinc** deficiency can be responsible for allergies, developmental problems, hair loss, acne, weight problems, and more.
- **Magnesium** deficiency can cause anxiety, depression, spasms, movement disorders, and more.
- **Copper** deficiency can cause increasing cholesterol levels, anemia and chronic infections, and more.
- **Cobalt** deficiency can be responsible for bad circulation, migraines and spasms.

Testing Procedure

1. Contact The Great Plains Laboratory, Inc. via phone, fax, e-mail, or on our website to order a test kit.
2. Fill out the Test Requisition Form, have this form signed by a medical practitioner.
3. Indicate the payment method or insurance information on the Test Requisition Form.
4. Follow the instructions to collect the sample.
5. Send the sample with the paperwork in the pre-paid express overnight envelope included in the test kit (shipping cost is included in the price for U.S. clients).
6. The results will be mailed with a detailed explanation to the patient and medical practitioner in approximately one to three weeks after receiving your sample, unless the practitioner has specified otherwise.
7. A free phone consultation with our nutritional consultant is available to practitioners and patients upon request.

Heavy Metals Test