

Is Heavy Metal Toxicity Affecting Your Health?

Long term, low level heavy metal toxicity is directly or indirectly linked to issues many people suffer from including:

Headaches	Anger	Irritability
Depression	Difficulty concentrating	Difficulty remembering things
High blood pressure	High cholesterol	Lack of energy/listlessness
Weight gain	Rashes	Allergic reactions or sensitivity
Bloating	Gas	Constipation

Heavy metals also have been found to contribute to:

Alzheimer's disease	Cardiovascular disease	Loose stools
Arthritis	Chronic fatigue	Multiple sclerosis
Asthma	Diabetes	Parkinson's disease
Arterial sclerosis	Fibromyalgia	Ulcers
Cancer	Heart disease	Many other health issues

Additional information, symptoms and diseases are available at www.ToxicWaterSolution.com.

Quick and reliable heavy metal testing is achieved with the Heavy Metal Screening Test.

The Heavy Metal Screening Test:

- Easy to use at home with quick and reliable results
- Obtains a base line for heavy metal concentration in your body using urine or saliva
- Tracks your body's detoxification/chelation capacity over time as you detoxify
- Objective, scientifically proven test procedure validated for over 60 years

You can use the Heavy Metal Screening Test to monitor:

- Urine, Saliva and Food
- Water – drinking, bottled, distilled, bath, shower, pool, hot tub and spa
- Food, dust and paint

Heavy Metal Screening Test identifies the following metals:

Zinc, Copper, Mercury, Lead, Cadmium and Nickel.

Research Supporting the Heavy Metal Screening Test

The Heavy Metal Screening test is the world's first immediate method of screening the body for heavy metals. This is scientific test that is fast, easy to do and can be an early warning system for environmental hazards that can affect YOUR health. This Heavy Metal Screening Kit enables you to determine the presence of ionic metals or how well your body can cope with heavy metal ions.

Excessive heavy metals increase oxidative damage and displace essential minerals. Both of these effects can have serious consequences in your body.

The World Health Organization (WHO 1974, Florence, Italy) estimated that at least 90% of all chronic diseases can be attributed to environmental pollution in one way or another. Heavy Metals are the major source for the production of free radicals as well as undermining the internal environment and body chemistry. Heavy Metals may reduce the efficacy of medical treatment by up to 60%. **There is little hope for antioxidants and mineral supplements to do their job properly, if the body is burdened with heavy metals!**

The scientifically documented Heavy Metal Screening Test allows the detection of free electrically active heavy metal ions in an aqueous solution by means of a simple procedure and in just a few minutes. This exploratory procedure, employed as a home or business test tube screening tool, is based on the dithizone reaction method which has been known to chemical science for more than 60 years. A summary of peer reviewed medical and science research journals follows:

1. H.J. Wichmann, Isolation and Determination of Traces of Metals. The Dithizone System. Food and Drug Administration, U.S. Department of Agriculture, Washington, D.C; Industrial and Engineering Chemistry
2. Agarwal R, Behari JR. Screening for mercury in aqueous environmental samples and urine samples using thin layer chromatography. Water Environment Research 2007 Nov;79(12):2457-63.
3. Khan H, Ahmed MJ, Bhangar MI. A simple spectrophotometric determination of trace level mercury using 1,5-diphenylthiocarbazone solubilized in micelle. Analytical Sciences 2005 May;21(5):507-12.
4. Jackson MJ, Jones DA, Edwards RH, Swainbank IG, Coleman ML. Zinc homeostasis in man: studies using a new stable isotope-dilution technique. British Journal of Nutrition 1984 Mar;51(2):199-208.
5. Gonzalez-Fernandez E, Gonzalez Moreno P. Screening analysis for lead in whole blood and urine by Delves cup method using quality control samples. Comparison with the dithizone method. Industrial Health. 1983;21(2):91-105.
6. Tewari SN, Harpalani SP, Tripathi SS. Determination of thallium in autopsy tissues and body fluids by spectrophotometric technique. Mikrochim Acta. 1975;(1 Pt 1):13-8.
7. Wawschinek O. [Toxicologic analysis of mercury in biological material. Extractive-photometric dithizone method] Arch Toxikol. 1972;29(2):107-15.
8. Goldberg DM, Clarke AD. Measurement of mercury in human urine. J Clin Pathol. 1970 Mar;23(2):178-84.
9. Kamm G. [Determination of lead in biological matter by double, direct extractive titration with dithizone] Z Klin Chem Klin Biochem. 1968 May;6(3):182-5.
10. Troitskiĭ AA, Vertlib IG. [Quantitative determination of lead in the urine using the reaction with dithizone (modification of the method used by the Industrial Sanitation Laboratory of the Omsk Municipal Sanitation-Epidemiological Station)] Lab Delo. 1966;8:480-1
11. BUTLER EJ, NEWMAN GE. AN ABSORPTIOMETRIC METHOD FOR THE DETERMINATION OF TRACES OF COPPER IN BIOLOGICAL MATERIALS WITH DITHIZONE. Clin Chim Acta. 1965 May;11:452-60.
12. KUDSK FN. DETERMINATION OF MERCURY IN BIOLOGICAL MATERIALS. A SPECIFIC AND SENSITIVE DITHIZONE METHOD. Scand J Clin Lab Invest. 1964;16:575-83
13. JACOBS MB, HERNDON J. Simplified one color dithizone method for lead in urine. Am Ind Hyg Assoc J. 1961 Oct;22:372-6
14. TRUHAUT R, BOUDENE C. [Micro determination of lead in the blood and in the urine by titration with dithizone.] Ann Biol Clin (Paris). 1959 Mar-Apr;17(3-4):153-67
15. BESSMAN SP, LAYNE EC Jr. A rapid procedure for the determination of lead in blood or urine in the presence of organic chelating agents. J Lab Clin Med. 1955 Jan;45(1):159-66
16. ELKINS HB. Notes on determination of lead by dithizone method. Am Ind Hyg Assoc Q. 1953 Jun;14(2):109-12.

Explaining the Science behind the Toxic Metal Screening Test

Dr. Joachim Leman
Medical Laboratory Expert –Toxicologist
Germany

Heavy Metal Screening Test (HMT)

In the eyes of a chemist, this test is composed of two essential chemical steps. The first one is a complex forming reaction between metal ions and Dithizone at the phase border separating aqueous solution and Testsol-phase; the second one is an extraction of the performed complex into the organic layer. The two essential steps as well as the preceding one and the evaluation procedures are very common processes in analytical chemistry and form part of many other determination methods used in clinical chemistry.

Dithizone (1,5-Diphenylthiocarbazone) is a current reagent since it was introduced in trace-analytical chemistry in 1925. It is excellently suited for trace determination of one- to three valent ions of several transition metals. The formed complexes vary in composition and color depending on pH and dipole strength of the solvent in use. Thus they can be applied for the discrimination of different elements and their quantification by colorimetric.

Testsol is a proprietary product, which joins the advantages of ecological harmlessness, lack of toxicity and inflammability under normal conditions, whereas the chloromethanes used up to now are highly toxic and ecologically objectionable.

The comparative colorimetric evaluation is performed by matching color panels with printed colors based on the Pantone code defined colors of pure complexes. In our hands this match was astonishingly reliable.

We thoroughly investigated the sensitivity and specificity of the HMT- system and we can furnish the proof at any time that the detection of the claimed individual metal species of toxicological relevance is possible at the lower ppm- level. Under favorable circumstances we could detect metal ions even at the ppb –level. Thus one can obtain important preliminary information for clinical decisions in the medical cabinet or during a bed-side-examination.

The high sensitivity of this test-kit is naturally dependent on the correct test-execution and prone to failure due to e.g. omitted pH-adjustments, shortened waiting periods or wrong consecution of additions.

So you can see that there is no room for any doubts concerning the respectability and reliability of the HMT-Test-Kit. It is based on a scientifically approved method and suitable for clinical purposes so that health insurance companies are supposed to refund the costs for its execution.

Yours sincerely,
Dipl.-Chem.Dr.rer.nat. Joachim Leman

Further Excerpts from Expert Evaluations of Heavy Metal Test

[...] We thoroughly investigated the test system with regard to its sensitivity and its specificity and found consistent evidence that it is possible to detect individual toxicologically relevant metals in urine or water specimens in the range of a few ppm, at times even fractions of one ppm. This makes it possible to obtain on the spot clinically important preliminary data [...]

(J. Lemann, Dr. rer.nat., Toxicologist and Medical Expert, Institute for Toxicology and Medical Laboratory Diagnostics, Hirschberg, Germany)

[...] This report is intended to be an independent assessment of the claims of performance of a novel detection system for some transition metals. These materials are commonly known as toxic or heavy metals. [...] it was found that the system shows remarkable sensitivity for such a simple procedure [...]

(K.H. Bell, Ph.D., Professor and Head, Department of Chemistry, The University of Newcastle, NSW, Australia)

[...] Until the beginning of the nineteen-seventies this reagent was in predominant use for the detection of heavy metal traces in the water supply. It is a certified German Government Standard procedure for water supply analyses. [...]

(G. Schwedt, Dr. rer.nat., Professor and Director, Institute for Inorganic and Analytical Chemistry, Technical University of Clausthal, Germany)

Testing Samples

The Heavy Metal Screening Test was developed by Nissen Medica Inc. as an easy, accurate home-based process to determine the presence of toxic heavy metals in your body and/or environment. The exploratory procedure is based on the dithizone reagent, which has been known to chemical science for more than 60 years.

Use of the Heavy Metal Screening Test is intended as an aid in understanding your body's heavy metal detoxification capacities and may serve as an early indicator of heavy metal intoxication. Heavy Metal Screening Test identifies the following metals: **zinc, copper, mercury, lead, cadmium and nickel.**

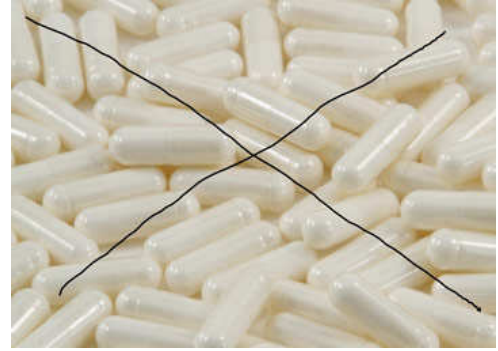
The information and the test kit provided is for general educational purposes only. The test is not intended to replace advice from a competent and knowledgeable healthcare professional. If you are experiencing serious symptoms (nausea, vomiting, headaches, sweating, difficulty breathing, convulsions, and trembling) or you believe you have acute heavy metal poisoning, contact your health care provider immediately. Seek qualified healthcare advice for the treatment of any illness or disease.

The Heavy Metal Screening Test is designed to be an effective component of your comprehensive health regime. Used in concert with other therapies proven to minimize the effects of environmental pollution, Heavy Metals Screening Test allows you, the health conscious consumer, to accurately assess your wellness action plan and take control of your health!

The Heavy Metal Screening Test is a **screening test for zinc, copper, mercury, lead, cadmium and nickel.** *These are not the only toxic heavy metals that our bodies can be challenged with.* The [Comprehensive Urine Element Profile](#), by Genova Laboratory, is available to test your urine for urinary excretion of nutrient mineral elements and toxic metals, including "classic" toxics such as lead, mercury, and arsenic. This is an ideal test for those suspected of toxic element exposure as well as potential nutrient mineral wasting. Additional information, sample reports and ordering pages are available on www.ToxicWaterSolution.com.

Urine Heavy Metal Screening Procedure

Step 1 Avoid vitamin and mineral supplements for at least 24 hours.



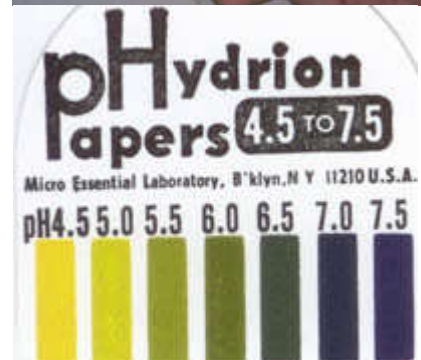
Step 2 Collect your first morning urine sample in a clean container.



Step 3 Test the pH of your urine. Quickly dip a small piece of pH paper into and out of your urine. Instantly compare the color of the paper to the pH chart provided.



Use the chart to the right to compare your urine pH.



Step 4 If your urine pH is 6.5 or higher you may continue to the Step 5.

If you urine pH is less than 6.5 your urine is acidic and you may not be eliminating metals properly. You should buffer your body, step 4a, to improve the removal of heavy metals and accuracy of the Heavy Metal Screening Test.

Step 5 Open test-tube and place one small square Test Paper into test tube solution.

Step 6 Shake test-tube gently until solution turns green.(Within 30 –60 seconds)

Step 7 Add 3 ml of the urine with the help of the pipette into the test-tube. The test-tube is now filled up to the 4ml line. Place the red cap on the test-tube. Shake vigorously for 15-30 seconds, stop and allow the solution to react for 1 minute.

Step 4a

If you need to buffer your body:

- Consume 5 cups of vegetables and fruit the day prior to your morning urine collection.
- Take calcium 500mg and magnesium 250mg twice daily
- Mix two teaspoonfuls of baking soda into 4 oz of carbon filtered water and drink prior to going to bed.
- Return to Step 2








Step 8 Observe the band/ring of color at the top of the solution and compare with the color chart.

The green color changed to a pink color thus the heavy metal ion concentration is high.

Color remains green. No heavy metal ions are present.



Metal Concentration Chart

COLOR COMPARISON CHART				
Match the color band at the top of the test tube to the colors shown here to determine the level of heavy metals found in the test material.				
				
No metals present	Low concentration	Medium concentration	High concentration	Very high concentration

Interpretation

Any color change from green, viewed directly on the liquid surface level of the test tube, represents the presence of free metal ions. Compare with the color chart to find the degree of metal concentration.

Heavy Metal Screening Test reagents only bind to the unbound or free metal ions - metals which have not been neutralized by the body. In a healthy body with a well-functioning detoxification system, there should be no free heavy metals found in the urine. Heavy metal ions present in food, amalgam fillings, tap water, bathing water, pools, hot tubs, dust, dishware, etc. may contribute to heavy metal intoxication.

The color chart indicates the concentration of metals only; the type of metal present is secondary, since all free metal ions are toxic to our body. Free or unbound metals increase free radical production a million times - free radicals have been linked to all degenerative diseases, including cancer. If your self-test shows the presence of free heavy metals, a detoxification process should be undertaken and all potential sources of contamination should be tested and eliminated. Use Heavy Metal Screening Test to assess the effectiveness of your detoxification and water filtering process.

*When testing urine, test results indicating no metals present suggest one of two possibilities. Either the test liquid is indeed free of heavy metals, or the body is subject to advanced metal toxicity in which the body's capacity (through liver, kidneys, intestine, etc.) to cope with free metal ions is totally exhausted. If other members of your household have heavy metal concerns consult your health care professional for further investigation.

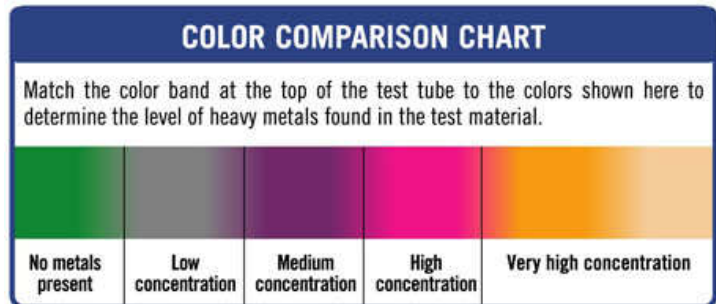
I'm available for Natural Care Consultations via telephone at established office charges. Please call 405.936.3333 to schedule a consultation if you have a need for additional information and guidance. Credit card payment of consultations is accepted. Additional information is available on www.ToxicWaterSolution.com.

Water Heavy Metal Screening Test Procedures

<p>Water Test</p>	<p>Add 7ml of water to the prepared test tube (8 ml line). Shake vigorously for 5-10 seconds. Color change occurs immediately.</p>	<p>Color remains green: No heavy metal ions</p>
<p>Dust, food, beverage, plastic, etc.</p>	<p>Take small amounts of desired material with 30ml of distilled water. Let it stand for 24 hours, filter particles and test water as described above.</p>	<p>Color turns to any other color: heavy metals are present</p>



Metal Concentration Chart



Interpretation

Any color change from green, viewed directly on the liquid surface level of the test tube, represents the presence of free metal ions. Compare with the color chart to find the degree of metal concentration. A white or clear color indicates a very high amount of heavy metals, including chlorine or chloramine, that oxidized or completely used up the reagent.

Heavy Metal Screening Test reagents only bind to the unbound or free metal ions - metals which are easily absorbed into the body. Heavy metal ions should not be present in food, drinking water, bottled water, bathing water, pools, hot tubs etc. The color chart indicates the concentration of metals only; the type of metal present is secondary, since all free metal ions are toxic to our body.