Heavy Metal Toxicity – Sources, Symptoms and Natural Solutions

## ALUMINUM

**Sources:** Alum, aluminum foil, animal feed, antacids, aspirin, auto exhaust, baking powder, beer, bleached flour, cans, ceramics, cheese, cigarette filters, color additives, construction materials, cookware, cosmetics, dental amalgams, deodorants, drinking water, drying agents, dust, insulated wiring, medicinal compounds, milk products, nasal spray, pesticides, pollution, salt, tap water, tobacco smoke, toothpaste, treated water, vanilla powder.

**Symptoms:** ALS, Alzheimer's, anemia, appetite loss, **behavioral problems**, cavities, colds, colitis, **confusion**, constipation, dementia, dry mouth, dry skin, **energy loss**, excessive perspiration, flatulence, **headaches**, heartburn, **hyperactivity**, inhibition of enzyme systems, kidney dysfunction, lowered immune function, **learning disabilities**, **leg twitching**, liver dysfunction, **memory loss**, neuromuscular disorders, numbness, osteoporosis, paralysis, Parkinson's disease, peptic ulcer, psychosis, reduced intestinal activity, senility, skin problems, spleen pain, stomach pain, weak and aching muscles.

## ARSENIC

**Sources:** Burning of arsenate treated building materials, coal combustion, insect sprays, pesticides, soils (arsenic rich), seafood from coastal waters, especially muscles, oysters and shrimp.

**Symptoms:** Abdominal pain, anorexia, brittle nails, diarrhea, **nausea**, vomiting, chronic anemia, burning in mouth / oesophagus / stomach / bowel, **confusion**, convulsions, dermatitis, **drowsiness**, enzyme inhibition, garlicky odor to breath / stool, hair loss, **headaches**, hyper-pigmentation of nails and skin, increased risk of liver / lung / skin cancers, low grade fever, mucous in nose and throat, muscle aches / spasms / weakness, **nervousness**, respiratory tract infection, swallowing difficulty, sweet metallic taste, throat constriction.

## CADMIUM

**Sources:** Airborne industrial contaminants, batteries, candy, ceramics, cigarette smoke, colas, congenital intoxication, copper refineries, copper alloys, dental alloys, drinking water, electroplating, fertilizers, food from contaminated soil, fungicides, incineration of tires / rubber / plastic, instant coffee, iron roofs, kidney, liver, marijuana, processed meat, evaporated milk, motor oil, oysters, paint, pesticides, galvanized pipes, processed foods, refined grains / flours cereals, rubber, rubber carpet backing, seafood (cod, haddock, oyster, tuna), sewage, silver polish, smelters, soft water, solders (including in food cans), tobacco, vending machine soft drinks, tools, vapor lamps, water (city, softened, well), welding metal.
**Syptoms:** Alcoholism, alopecia, anemia, arthritis (osteo and rheumatoid), bone disease, bone pain in middle of bones, cancer, cardiovascular disease, cavities, cerebral hemorrhage, cirrhosis, diabetes, digestive disturbances, emphysema, enlarged heart, flu-like symptoms, growth impairment, headaches, high cholesterol, hyperkinetic behavior, hypertension, hypoglycemia, impotence, inflammation, infertility, kidney disease, learning disorders, liver damage, lung disease, migraines, nerve cell damage, osteoporosis, prostate dysfunction, reproductive disorders, schizophrenia, stroke

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**COPPER**

**Sources:** Birth control pills, congenital intoxication, copper cookware, copper IUDs, copper pipes, dental alloys, fungicides, ice makers, industrial emissions, insecticides, swimming pools, water (city / well), welding, avocado, beer, bluefish, bone meal, chocolate, corn oil, crabs, gelatin, grains, lamb, liver, lobster, margarine, milk, mushrooms, nuts, organ meats, oysters, perch, seeds, shellfish, soybeans, tofu, wheat germ, yeast

**Syptoms:** Acne, adrenal insufficiency, allergies, alopecia, anemia, anorexia, anxiety, arthritis (osteo & rheumatoid), autism, cancer, chills, cystic fibrosis, depression, diabetes, digestive disorders, dry mouth, estrogen dominance, fatigue, fears, fractures, fungus, heart attack, high blood pressure, high cholesterol, Hodgkin's disease, hyperactivity, hypertension, hyperthyroid, hypoglycemia, infections, inflammation, insomnia, kidney disorders, libido decreased, lymphoma, mental illness, migraines, mood swings, multiple sclerosis, myocardial infarction, nausea, nervousness, osteoporosis, panic attacks, paranoia, phobias, PMS, schizophrenia, senility, sexual dysfunction, spacey feeling, stuttering, stroke, tooth decay, toxemia of pregnancy, urinary tract infections, yeast infections

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**IRON**

**Sources:** Drinking water, iron cookware, iron pipes, welding, foods: blackstrap molasses, bone meal, bran, chives, clams, heart, kidney, leafy vegetables, legumes, liver, meat, molasses, nuts, organ meats, oysters, parsley, red wine, refined foods, shellfish, soybeans, wheat germ, whole grains

**Syptoms:** Amenorrhea, anger, rheumatoid arthritis, birth defects, bleeding gums, cancer, constipation, diabetes, dizziness, emotional problems, fatigue, headache, heart damage, heart failure, hepatitis, high blood pressure, hostility, hyperactivity, infections, insomnia, irritability, joint pain, liver disease, loss of weight, mental problems, metallic taste in mouth, myasthenia gravis, nausea, pancreas damage, Parkinson's disease, premature aging, schizophrenia, scurvy, shortness of breath, stubborness

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**LEAD**

**Sources:** Ash, auto exhaust, battery manufacturing, bone meal, canned fruit and juice, car batteries, cigarette smoke, coal combustion, colored inks, congenital intoxication, cosmetics, eating utensils, electroplating, household dust, glass production, hair dyes, industrial emissions, lead pipes, lead-glazed earthenware pottery, liver, mascara, metal polish, milk, newsprint, organ meats,
paint, pencils, pesticides, produce near roads, putty, rain water, pvc containers, refineries, smelters, snow, tin cans with lead solder sealing (such as juices, vegetables), tobacco, toothpaste, toys, water (city / well), wine.

**Symptoms:** Abdominal pain, adrenal insufficiency, allergies, anemia, anorexia, anxiety, arthritis (rheumatoid and osteo), attention deficit disorder, autism, back pain, behavioral disorders, blindness, cardiovascular disease, cartilage destruction, coordination loss, concentration loss, constipation, convulsions, deafness, depression, dyslexia, emotional instability, encephalitis, epilepsy, fatigue, gout, hallucinations, headaches, hostility, hyperactivity, hypertension, hypothyroid, impotence, immune suppression, decreased IQ, indigestion, infertility, insomnia, irritability, joint pain, kidney disorders, learning disability, liver dysfunction, loss of will, memory loss (long term), menstrual problems, mood swings, muscle aches, muscle weakness, muscular dystrophy, multiple sclerosis, myelopathy (spinal cord pathology), nausea, nephritis, nightmares, numbness, Parkinson's disease, peripheral neuropathies, psychosis, psychomotor dysfunction, pyorrhea, renal dysfunction, restlessness, retardation, schizophrenia, seizures, sterility, stillbirths, sudden infant death syndrome, tingling, tooth decay, vertigo

**Mercury**

**Sources:** Adhesives, air conditioner filters, algaecides, antiseptics, battery manufacturing, body powders, broken thermometers, burning newspapers and building materials, calomel lotions, cereals, congenital intoxication, cosmetics, dental amalgams, diuretics, fabric softeners, felt, floor waxes, fungicides, germicides, grains, industrial waste, insecticides, laxatives, lumber, manufacture of paper and chlorine, medications, mercurochrome, paints, paper products, pesticides, photoengraving, polluted water, Preparation H, psoriasis ointment, seafoods (especially tuna and swordfish), sewage disposal, skin lightening creams, soft contact lens solution, suppositories, tanning leather, tattooing, water (contaminated), wood preservatives

**Symptoms:** Adrenal dysfunction, allergy, alopecia, anorexia, anxiety, birth defects, blushing, brain damage, cataracts, cerebral palsy, poor coordination / jerky movements, deafness, depression, dermatitis, discouragement, dizziness, drowsiness, eczema, emotional disturbances, excess saliva, fatigue, gum bleeding and soreness, headaches (band type), hearing loss, hyperactivity, hypothyroidism, forgetfulness, immune dysfunction, insomnia, irritability, joint pain, kidney damage, loss of self-control, memory loss, mental retardation, metallic taste, migraines, nervousness, nerve fiber degeneration, numbness, pain in limbs, rashes, retinitis, schizophrenia, shyness, speech disorders, suicidal tendencies, tingling, tremors (eyelids, lips, tongue, fingers, extremities), vision loss

**Nickel**

**Sources:** Butter, fertilizers, food processing, fuel oil combustion, hydrogenated fats and oils, imitation whipped cream, industrial waste, kelp, margarine, oysters, stainless steel cookware, tea, tobacco smoke

**Symptoms:** Anorexia, kidney dysfunction, apathy, disruption of hormones, fever, hemorrhages, headache, heart attack, intestinal cancer, muscle tremors, nausea, oral cancer, skin problems, vomiting
How to remove heavy metals from your body --

**Chlorella** -- Chlorella is one of the most researched foods. Because chlorella is a food, it is hard to take to much. It is considered to be one of the best detoxifiers and is able to remove alcohol from the liver and heavy metals, pesticides and PCBs from body tissues. Chlorella can also absorb toxins from the intestines, alter bacterial flora in the bowel (for the better), eliminate intestinal gas and help relieve chronic constipation. About a third of those who try chlorella can't tolerate it. It is possible this is due to a cellulase deficiency. If you have trouble with chlorella, you could try supplementing with cellulase. Because of its ability to bind to heavy metals and other toxins, it makes it a good partner to cilantro. Greenzone is a great source of Chlorella.

**Cilantro** -- Cilantro mobilizes mercury, cadmium, lead and aluminum in the brain and the central nervous system. It is probably the only supplement able to mobilize mercury stored in intracellular spaces and the nucleus of the cell. Cilantro, however, can mobilize more toxins then it can carry out of the body and so may just move the heavy metals to another part of the body. Because of cilantro’s inability to remove the mercury from the body after it has been mobilized, it should never be taken alone. It has been found that chlorella works synergistically with cilantro as it has better binding properties. If you don't want to buy cilantro as an herbal, you can buy cilantro and incorporate it in your meals -- salads, salsas or other dishes. Heavy Metal Detox is a great source of Cilantro.

**Garlic** -- Garlic contains sulphur which oxidizes mercury, cadmium and lead and makes them water-soluble. It is also a potent antimicrobial and antifungal making it effective against candida albicans and parasites. Garlic contains a mineral that protects the body from mercury toxicity. It's called bioactive selenium. Garlic selenium is the best form of selenium available. Raw garlic, of course, would be best. But if you don't like it raw, the next best form would be aged garlic extract such as Kyolic brand. As the sulphur found in garlic is the main reason it is able to oxidize heavy metals, then it might also be helpful to supplement with MSM as it is a form of sulphur. High Potency Garlic is a great supplemental source.

**Chlorophyll** -- Chlorophyll is another way to detox heavy metals and is found in large quantity in chlorella as well. In fact it's because of its high level of chlorophyll that chlorella got its name. If you have problems with chlorella then you could try liquid chlorophyll. It's usually advertised as a breath freshener but don't let that fool you. It is also very good at binding to heavy metals and helping to remove them from your body.

**Magnesium Malate or Malic Acid** -- Malic acid is one of the most potent aluminum detoxifiers. It helps reduce aluminum toxicity of the brain and for that reason could be used to help Alzheimer's Disease. Malic acid has been shown to increase fecal and urinary excretion of aluminum. It can also reduce the amount of aluminum found in the organs and tissues of the body. Magnesium Complex and Fibralgia are good supplemental sources.

**N-acetylcysteine or N-A-C** -- N-A-C can detox heavy metals as well as raise the level of glutathione. Glutathione is an important antioxidant amino acid which protects against mercury toxicity. N-A-C binds to heavy metals and removes them from the body. N-A-C is one of the most effective oral chelating agents, and if it is taken regularly over a period of time, it will remove many toxic heavy metals. Heavy Metal Detox is a great source of N-A-C.
**EDTA** (*ethylene diamine tetra acetic acid*) -- EDTA is an amino acid. It has been so effective at removing heavy metals from the blood, it has been the standard, FDA-approved treatment for lead, mercury, aluminum and cadmium poisoning for more than 50 years. It is a chelating agent designed to bind and inactivate certain trace metals. EDTA may deplete important vitamins and minerals so you should supplement with a daily multivitamin.

**Far Infrared Sauna** -- This type of sauna can really make you sweat and at lower temperatures than conventional saunas. One of the most important pathways for eliminating heavy metals is through the skin by sweating. Most really serious heavy metal detox programs include sweating as one of the primary elements of the program. Below is an article about far infrared saunas to give you a little more information.

**When sweating out the heavy metals replace them with minerals.....**

Whenever you cause sweating, such as mentioned above, your body is depleted of minerals. Always take an electrolyte drink and a mineral supplement to replace lost minerals. You can drink mineral water while in the sauna or bath. You can create an electrolyte drink using 1/4 teaspoon sea salt and 1/2 lime or lemon squeezed in a glass of water. Doesn't taste so good but it works. You may add a little orange juice or apple juice to sweeten it up a little bit. This is very important. Don't begin any sweating program without planning a way to replace the minerals that are lost.

**Note:** 2 great sources of trace minerals are Essential Liquid Minerals and Chinese Mineral-Chi Tonic.

[Click here](#) to see an herbal remedy that helps the body to detoxify in the case of heavy metals poisoning.

Click [here](#) for complete ordering instructions on any of the above mentioned remedies.

**Resources:**

**Books about heavy metal poisoning and its effect on the brain:**

Toxic Metal Syndrome: How Metal Poisonings Can Affect Your Brain

It's All in Your Head

**Helpful Articles:**

The Effects of Mercury Exposure

Mercury And Its Use In Fillings

**Chelation Therapy and Detoxamin Studies**

Comparison of the Absorption, Brain and Prostate Distribution, and elimination of CaNa2 EDTA of Rectal Chelation Suppositories to Intravenous Administration. Published in JANA 2007. (pdf)
Interim report of Clinical Observations of the Effects with Detoxamin and Supportive Combination Therapy on Prostate Conditions

CaEDTA Suppositories to Treat Elevated Blood Lead Levels in Children
by Ted Rozema, MD

Ninety Percent Reduction in Cancer Mortality after Chelation Therapy With EDTA
Walter Blumer, M.D. and Elmer Cranton, M.D.

Other Chelation Studies

Benefits of EDTA Chelation Therapy in Arteriosclerosis a Retrospective Study of 470 Patients
by C. Hancke, MD, and K. Flytlie, MD

A Pilot Double Blind Study of Sodium Magnesium EDTA in Peripherral Vascular Disease
by Efrain Olszewer, MD, Fuad Calil Sabbag, MD, and James P. Carter, MD, DrPH New Orleans, Louisiana

EDTA Chelation Therapy Efficacy in Arteriosclerotic Heart Disease
by H. Richard Casdorph, MD, PhD

EDTA Chelation Therapy III Treatment of Peripheral Arterial Occlusion an Alternative to Amputation
by H. Richard Casdorph, MD, PhD and Charles H. Farr, MD, PhD

Reference websites:

http://www.tiarca.com/sources.html#treatment