

Aluminium

Sources: Aluminum cookware and any food prepared in aluminum cookware, antacids, antiperspirant deodorant, astringents, aluminium cans (especially soft drinks, where the acid in the drink causes the toxic metal to leach into the liquid), kitchen utensils, paints, dental composites, baby powder, toothpaste, some teas, vaccines, infant formulas (whether from soy or dairy), aluminum foil, baking powder, adult and children's aspirin, many prescription drugs, food additives such as sodium aluminum phosphate (in processed cheese), potassium alum (which is used to whiten flour), table salt (which often contains silicoaluminate and/or aluminum calcium silicate to make it pour freely) Appliances, building materials, fireworks; and in the production of glass, rubber, and ceramics. Aluminium is also often used in water treatment plants and therefore is found in many municipal water supplies.



Effects: Impaired kidney function, anemia, (it affects iron metabolism), hyperparathyroidism, cumulative damage to brain tissue resulting in neurological problems, including cognitive and behavioral problems. (Clear links have been made to Alzheimer's disease.) Bone brittleness, fractures, and demineralization are common. Causes decreased immune function.

Counteract with: Zinc, Silicon, Selenium, Calcium, Magnesium and Chlorella help the body detoxify and excrete Aluminium. Apple Pectin binds with metals in the colon and excretes them from the body. Coenzyme A supports the immune system's detoxification processes and Garlic and Kelp are natural detoxifiers of the body. Lecithin heals the brain and cell membranes while L-Glutathione blocks damage from toxic metals and radiation.

SAME reduces stress and nervousness caused by excess aluminum. Vitamin B Complex rids the intestinal tract of excess metals and Vitamin E is a powerful antioxidant that protects cell membranes and improves circulation. Burdock Root, Echinacea, Ginseng, Ginkgo Biloba and Fiber can block damage to the body by toxic heavy metals and radiation.

Arsenic

Sources: Treated pressed wood, some garden pesticides and herbicides, many pigments, dyes, wood preservatives, wine, well water, seafood (mainly shellfish) cigarettes, commercially raised broilers (young chickens), beer, some table salt, tap water, paints, cosmetics, glass and mirror manufacture, fungicides, and contaminated food and coal burning.



Effects: Raises blood pressure, can contribute to heart attacks and cardiovascular disease, nervous system damage, possible links to diabetes, reproductive problems and cerebrovascular disease, cancer and neurological effects. Has been indicated in cases of abdominal pain, abnormal ECG, anorexia, dermatitis, diarrhea, edema, enzyme inhibitor, fever, fluid loss, goiter, hair loss, headaches, impaired healing, interferes with the uptake of folic acid, inhibition of sulfhydryl enzyme systems, can cause jaundice, keratosis, kidney and liver damage, muscle spasms, pallor, peripheral neuritis, sore throat, stomatitis, stupor, vasodilation, vertigo, vitiligo and weakness.

Counteract with: Garlic is a potent detoxifier. Vitamin C with Bioflavonoids and Selenium help remove arsenic from the body and are potent free radical detoxifiers. L-Cysteine and L-Methionine detoxify the liver and help eliminate arsenic from the body.

Cadmium

Sources: Cigarette Smoke, plastics, galvanized pipes, evaporated milk, shellfish, paint, air pollution, coffee, tea, coal burning, fungicides, organ meats. Nickel/Cadmium batteries, refined grains, rice, and soft drinks.



Effects: Cadmium accumulates in the body and replaces zinc stored in the liver and kidneys. Cadmium toxicity tends to affect people with zinc deficiencies more. It can lead to hypertension, dulled sense of smell and taste, loss of hair, dry scaly skin, loss of appetite, depressed immune function and T lymphocyte production. Also contributes to bone and joint aches and pains.

Advice: Tobacco Smoke is the single largest contributing source of Cadmium toxicity for most people. If you smoke, quit as soon as possible. Avoid smokers whenever possible. Correct any zinc deficiencies which would lead to increased cadmium absorption and damage.

Fluoride Compounds

(Actual Fluorine is a gas)

Sources: Fluoride toothpaste, mouthwash, pesticides & herbicides, fish & seafood, soy formulas, gelatin, black tea, Flouridated salt (common in Switzerland), tap water (some cities), most mineral waters, chewing tobacco, non-organic wines & grape juice (especially U.S varieties), processed breakfast cereals (Especially U.S varieties) many medications. Concentrated fruit juices and sodas, mechanically deboned chicken and pureed chicken products, teflon and any non-stick coated products.



Effects: Increased bone fractures, fluorosis (discoloration/mottling, softening/pitting of teeth), osteosclerosis, osteoarthritis, tinnitus, hearing loss, stomach ulcers, skin rash, tremors, delayed brain development, bone/arthritis pain, greater risk of some cancers, convulsions, increases lead and arsenic exposure. Inhibits key enzymes from functioning, suppresses thyroid function, impairs immune system, causes birth defects and behavioral problems due to brain lesions and adversely affects the nervous system

Advice: Fluoride antagonists are Iodine, calcium, magnesium and chloride. Avoid Fluoridated products. Vitamin D helps the body absorb and utilize calcium, displacing Fluoride in the bones.

Lead

Sources: Lead based paint) & old paint chips (Commonly used in houses and on toys before 1978) cheap plated jewellery, some tableware, all Crystal (Bohemian Crystal), pewter and some glazed pottery (mostly white or yellow glazes). Lead pipes, Lead lined water tanks, canning, cigarette smoke, and many cosmetics. Chocolate can also contain high levels of lead.



Effects: Aneamia, unexplained stomach aches, development delays (in children), abdominal pain, adrenal insufficiency, arthritis, arteriosclerosis, attention deficit disorder, back problems, blindness, cancer, constipation, convulsions, deafness, depression, diabetes, dyslexia, epilepsy, fatigue, gout, impaired glycogen storage, hallucinations, hyperactivity, impotency, infertility, inflammation, kidney dysfunction, learning disabilities, diminished libido, migraine headaches, multiple sclerosis, psychosis, thyroid imbalances and tooth decay.

Advice: Alpha Lipoid Acid, Garlic, Kelp and MSM help detoxify the body of metallic pollutants. Calcium and Magnesium prevent lead from being deposited in the body. SAME helps chelate heavy metals out of the body. Vitamin C with Bioflavonoids help neutralize the effects of lead and Glutathione plus L-Methionine are powerful antioxidants that protect the liver, kidneys, heart and central nervous system. Alfalfa and Cilantro also have a detoxifying effect on the body.

Mercury

Sources: Especially high in Tuna, Shark, Swordfish, Pike, Walleye, Bass, Atlantic Salmon

Methyl Mercury from Dental Amalgams (Fillings). Vaccinations (as a preservative called Thimerosal) Coal burning, Power plants.



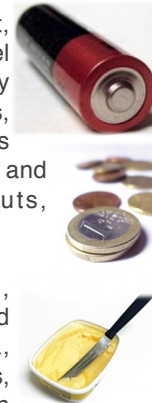
Effects: Generally affects the central nervous system. Symptoms include tremors, depression, memory loss, irritability, abnormal reflexes, lethargy, muscle weakness, inflammation of the gums, immune system dysfunction and renal damage. Children often display learning disabilities; exposure in adults can also contribute to infertility in men and women, cardiovascular disease. Adrenal gland dysfunction, alopecia, anorexia, ataxia, bipolar disorder, birth defects, depression, dermatitis, dizziness, fatigue, headaches, hearing loss, hyperactivity, insomnia, loss of self-control, mood swings, nervousness, numbness and tingling, pain in limbs, rashes, excessive salivation, schizophrenia, thyroid dysfunction, timidity, tremors, peripheral vision loss.



Advice: Selenium, and zinc are mercury antagonists and will help to get rid of mercury build up in the body. B Vitamin Complex aids proper brain and nervous system function. Glutathione detoxifies harmful metals from the body. Vitamin E works with selenium to neutralize mercury and Alfalfa helps rid the body of harmful toxins. Bioflavonoids promote healing and resistance to infection while Garlic is a natural detoxifier. Vitamin C removes metals and strengthens the immune system and L-Methionine detoxifies the body.

Nickel

Sources: Petrol and diesel exhaust, Nickel/ Cadmium batteries, stainless steel cookware and utensils, nickel in jewellery brass and iron plating, many coins, oysters, tea, herring, soybeans, hydrogenated oils (margarine, commercial peanut butter and shortening) some whole grains, nuts, buckwheat seed, peas, beans, lentils. .



Effects: allergic skin reactions, asthma, angina, hypoglycemia, decreased estrogen, nausea, vomiting, diarrhea, headache burning and itching in the hands, reduced lung function, carcinogenic in certain forms. Cancer (oral and intestinal), depression, heart attacks, hemorrhages, kidney dysfunction, low blood pressure, malaise, muscle tremors and paralysis, nausea, skin problems, tetany and vomiting.

Advice: Manganese, Zinc, Calcium, Copper, Cobalt, and Sodium are all antagonists of Nickel and can be useful in lowering Nickel levels in the body. Garlic, Apple Pectin and Kelp help remove harmful toxic metals from the body. L-Cysteine and L-Methionine detoxify the liver and Selenium destroys free radicals. Vitamin A is a powerful antioxidant and Vitamin C with Bioflavonoids strengthens immunity and helps remove metals from the body. Vitamin E improves circulation.

This information is intended for informational purposes only and is not intended to prevent treat or cure any illnesses or disease. The information is not intended as a substitute for a visit to a licensed healthcare provider.

References are available online at www.puresante.com in the article "Common exposure to Toxic Metals and their Effects"



Toxic metals are naturally present in the environment as part of the earth's crust, but our direct contact with them is limited. However, when they are mined, and used for industrial purposes we become exposed to them on a much greater scale. This increased exposure in our every day lives can lead to many health problems.

The sources where you are most likely to come into contact with these toxic metals are listed, as well as their known and implicated effects on human health. Advice is also given for natural ways to aid the body in detoxification and chelation.