



## HEAVY METAL TOXICITY

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**Abstract:** One of the biggest health problems that our modern society faces is heavy metal toxicity. There are 16 different heavy metals that are most commonly found in the environment. These heavy metals are called aluminum, arsenic, barium, cadmium, chromium, copper, gold, iron, lead, manganese, mercury, nickel, silver, titanium, and zinc. There are all sorts of ways that people can be exposed to heavy metals. One of the most common sources of heavy metal exposure is from dental materials and the metal fillings that were commonly used 30 years ago. Nickel gold alloys are still used today and these also will release heavy metals into a person's body to carrying degrees depending on how old the gold fillings are.

**Key words:** Heavy metal poisoning, most common health problems, impact of house hold cooking utensils, common metals for toxicity, their sources.

### Introduction

The most common causes of heavy metal toxicity are a history of low water intake, vegetarianism/Veganism and hyochlorhydria (also associated with vegetarianism). Common exposures are cooking utensils, dinnerware, dental work and living on planet Earth. Heavy metals are not new and our body has the ability to detoxify them. The major metals found in dishes and cookware are lead, copper, cadmium, and nickel. It is best to use Pyrex, Corelle or glass when eating / cooking. Avoiding aluminum pans is an excellent idea. Avoiding aluminum tinfoil for cooking is necessary. It is best to use stainless steel with no aluminum or copper inserts. All cookware will leach into food, so only cook with things you don't mind in your food.

When detoxifying heavy metals, patients may become much better for a brief period of time and then much worse again. This is called a "healing crisis when patients experienced these hills and valleys of getting better and then getting worse, and then getting better and then getting worse; it can be rather discouraging for both the patient and the doctor. But this is part of the process of removing all of the metals from the patient's body.

It is important that people who are detoxifying heavy metals realize that they may not be mentally and physically alert enough to operate automobiles or heavy machinery for 24 to 36 hours after the process of detoxification begins. Also, patients should be aware that they may undergo mild to severe depression and even feel suicidal at times while detoxifying heavy metals. This is perfectly normal when undergoing heavy metal detoxification. For patients who live alone, special arrangements may be necessary when they are detoxifying lead, mercury, tin, and aluminum.

Patients who have the least number of side effects from detoxifying heavy metals are the ones who eat lots of red meat and drink lots of spring water. Sometimes Sulfur containing the nutritional supplements can help. A few of these sulfur containing nutrients are cysteine, methionine, cystine, and taurine. It can also be helpful to eat lots of garlic, onions, egg yolk, fresh kale and cilantro and parsley, and the legumes, as well as fresh Green vegetables and beets. However, recommendations are made more specifically for each individual patient. Cysteine, and glutamine are the precursors, with help from vitamin C and selenium, and from the antioxidant glutathione. Reduced glutathione may also be

taken as a supplement by some patients when under a doctor's supervision. Cruciferous vegetables such as broccoli and kale can also be quite helpful.

### **Silver/Lead**

Silver and lead veins run through the earth. They are toxic to sleep near or otherwise linger over (not altogether unlike naturally occurring radon gas). It may be the reason that you're feeling sick. Many health oriented people have been told that if they go to the health food store and purchase colloidal silver and take it as directed that they can then rid themselves of various bacterial, viral and fungal infections. This is true. In fact, it has been substantiated to get rid of more than 200 different pathogens. However, it is a Catch-22. While it is true that the colloidal silver gets rid of all these pathogens, it poisons you while doing so. It is believed that the cause of the fall of the Roman Empire was partly due to poisoning from the silver in the mugs that they used to drink out of. Many of the Romans went crazy and their lips turned blue from the silver poisoning. Common sources of silver poisoning in modern times are also dental fillings and jewelry. Lead used to be present in pencils prior to 1978. Lead can also be found in car exhaust, paint, Plumbing, canned foods, hair dyes, newsprint, and tapwater. In fact, San Francisco tapwater has always had some of the highest levels of lead in the entire country.

### **Aluminum**

Anyone with Alzheimer's disease should be screened for aluminum. Aluminum tends to freeze or irritate nerve endings, producing spasm and contracture. Detoxification can cause flu-like symptoms with a kidney pain as in cadmium detoxification, and mental confusion as in advanced Alzheimer's.

### **Sources of Aluminum**

Cooking utensils, antacids, baking powders, antiperspirants, some soft water, aluminum foils, and processed foods containing aluminum, some canned beverages (table salt, individually wrapped cheese slices).

### **Nutritional Support That May Be Indicated**

Vitamin C in high doses of usually 6 to 12 grams, calcium, magnesium, B6. (The vitamin C acts as a binding agent).

Aluminum appears to deposit in and around the spinal cord.

### **Arsenic**

People don't realize how common and arsenic toxicity is. Arsenic produces a generalized toxicity involving the digestive system. Detoxification can cause severe headaches. There can be involvement of the fourth ventricle of the brain. This means that the cerebrospinal fluid will be affected. Arsenic and lead seem to pair up quite frequently.

### **Source**

Cooking utensils, dishes, pesticides, wire, tobacco smoke, household laundry aids (absorbed through the skin), beer, table salt, agar, colored chalk, seafood, and industrial exposure in the metal, paint, dye, cosmetic, and insecticide industries, some supplements including kelp, dolomite, and bone meal. Some pine needles tend to concentrate arsenic and can transmit to those handling the pine needles.

### **Nutritional Support**

Selenium, sulphur-bearing amino acids, ascorbic acid, and tocopherols. The selenium is a binding agent.

### **Lead**

Lead can be the most difficult heavy-metal to detoxify. Lead usually has an emotional component that comes with its detoxification. There is a relationship between holding onto something emotional in the past, and holding onto lead in the body. Failing to deal with the emotional component first can stop the detoxification process. The doctor must handle this component first. THIS IS HUGELY IMPORTANT. And furthermore, it is missed by most healthcare practitioners due to their lack of training at being able to help with emotional imbalances. Lead will mimic multiple sclerosis. Anyone with a diagnosis of MS should be screened for lead. The binding agents for lead are vitamin C and calcium.

## Source

Dinnerware, cooking utensils, auto exhaust, or topical exposure to lead in gasoline. Calcium supplements such as bone marrow and dolomite frequently contain lead since lead is deposited in the bone tissue. Colloidal mineral supplements may have high heavy metal content. For example, one such company that sells these trace mineral supplements sources them from a large inland sea here in the United States. Certain cosmetics and foods that have been contaminated by insecticides, fertilizers, and atmospheric pollutants, are also sources of lead. Polluted water, lead-glazed pottery, lead-lined storage containers, "tin" cans soldered with lead solder, canned tuna and marijuana all may contain lead.

Formaldehyde is an activator for lead. Morticians habitually have lead toxicity because of the formaldehyde. Other toxic sources that include chemically aged beer, cosmetics, carpeting, drapes, particle board, glues, and car interiors.

Formaldehyde is the most common toxic chemical to which we are exposed.

## Nutritional Support

Calcium (dolomite is limestone and it is a terrible source of calcium because it may contain lead), vitamin C, pectin, cysteine, methionine, cystine, ascorbic acid, the tocopherols (vitamin E), iron if indicated, B complex vitamins, chromium, and algin. Some binding agents for lead are vitamin C and calcium. Garlic may reduce blood lead levels in key organs such as the kidneys and liver. Garlic may also help to improve balanced blood sugar and the biochemical pathways that support balanced blood sugar. There is some research showing that garlic may also be neuroprotective against lead induced brain damage. This range of effects is probably due to a range of sulfur-based compounds including methionine that play a key role in the synthesis of amino acids and antioxidants such as glutathione. However, significant human studies are needed to demonstrate the applicability of the animal test results to humans. Some studies indicate that fresh garlic may be more effective than garlic

capsules, but again, more research is needed to know for sure. It might be noted that odorless garlic does not necessarily reduce the effectiveness of the garlic substance. We have the sources of all of this research in the office if you happen to need it before, during or after a treatment session.

It is common for multiple sclerosis, muscular dystrophy, and ALS to be misdiagnosed when they are actually the results of heavy metal toxicity due to lead and / or arsenic.

## Mercury

In a similar way to the way in which lead is difficult to detoxify from body, Mercury is also very difficult to detoxify. Detoxification will typically take 4 to 7 weeks.

## Source

Dental fillings, shellfish, tuna, plastics, ointments, printer's ink, some water-based paints, organo-mercurial pesticides with fungicides, grains and seeds treated with methyl mercury, water based house paints, chlorine bleaches, contaminated fish, and cosmetics.

## Nutritional Support

Selenium, sulfur-bearing amino acids (cysteine, cystine, and methionine), pectin, vitamin C, and the tocopherols. Binding agents for the mercury are selenium and sometimes other things will bind as well.

## Copper

Copper causes irritation to the digestive tract resulting in nausea and indigestion. Nausea can be prolonged and severe when detoxifying, and it may be accompanied by vomiting. Pathognomonic signs experienced by the patient are: patients can only sit small amounts of water. Detoxification takes 3 to 4 weeks.

## Source

Copper plumbing, copper bottom stainless steel pans, dishes, swimming or bathing in a pool or hot tub where copper compounds are used as algicides. Teflon seems to block the effect of the copper, but it may lead to cadmium poisoning.

### **Nutritional Support**

Zinc, sulfur bearing amino acid such as those contained in eggs, onions and garlic, vitamin C, iron, bioflavonoids, and pectin. Binding agents are zinc, and sometimes selenium and chromium. The use of zinc must be carefully controlled because otherwise it will deplete and imbalance other needed minerals.

### **Cadmium**

Cadmium is easily detoxified. Detoxification symptoms can be flulike with generalized back pain or kidney pain. Cadmium will destroy the kidneys eventually, resulting in hypertension. Detoxification takes 3-5 weeks.

### **Source**

Dishes, cooking utensils, (especially Teflon-coated). It is present in measureable amounts in virtually all foods and beverages, but is highest in seafoods (especially shellfish), teas, and cigarette smoke. Additional sources are paints, pigments, some drinking water, galvanized pipes, batteries, auto exhaust, industrial smoke and wastes, some natural supplements such as dolomite and bone meal and marijuana.

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### **Nutritional Support**

Zinc, eggs, onions, garlic, selenium, manganese, calcium, vitamin C, and sulfur-bearing amino acids. Zinc is the binding agent.

### **Nickel**

Detoxification mimics a mild case of flu. Sites of infection seem to be a focus of nickel toxicity. Detoxification takes 2 to 3 weeks.

### **Source**

Dishes, cooking utensils, nickel mining, batteries, ceramics, ink. Nickel can be found in spark plugs, jewelry, and various rubber materials. Nickel coins have some nickel in them as well. Nickel is used to harden stainless steel, gold, and amalgam.

### **Nutritional Support**

Vitamin C, sulfur-bearing amino acids, pectin, and the tocopherols (Vitamin E). The binding agent for nickel is vitamin

### **Zinc**

Zinc affects the nervous system, causing peripheral neuritis and a sensation of bugs crawling on the skin. Calcium is the binding agent for zinc.