

# Mercury, Heavy Metal Detoxification and Alloy Removal

By David S. Banks, DDS

Most individuals would benefit from some form of detoxification of heavy metals, especially mercury and lead, metals that pervasive in our environment. Individual exposure and natural detoxification ability will dictate how much one needs to do to improve their health through heavy metal removal.

First and foremost, you must limit your exposure to heavy metal to allow the body to gradually remove what you have already accumulated. This means avoiding most fish (although wild salmon has minimal amounts of mercury compared to other fish), avoiding shell fish totally and being otherwise careful about what you ingest by eating organically whenever possible and only drinking spring water from a safe source or filtered water if you are lucky enough to live in an area that has not been artificially fluoridated. I recommend Palomar Drinking water delivered in #2 plastic containers if you live in North San Diego County. Omega 3 fatty acids that are found in fish are still important in your diet but may be supplied by using a high grade fish oil supplement (molecularly distilled) such as Carlson or Nordic Naturals. A high ratio of DHA to EPA is desirable in fish oil, as too much EPA will depress the immune system. If you currently have mercury fillings, avoid hot liquids and chewing gum to minimize to off gassing of mercury from your fillings.

One of the primary sources of exposure to mercury is from mercury silver fillings, which contain as much as 50% mercury. There is ample evidence that mercury from these fillings leaks into the patient's mouth and increases their body burden significantly. An excellent source of information is the web site of a scientific dental organization, The International Academy of Oral Medicine and Toxicology. The site address is IAOMT.ORG on which you will find valuable information on both mercury toxicity and the IAOMT approved safe protocol for mercury removal.

Should you choose to have your mercury silver fillings removed it is imperative that someone who is trained in safe removal care for you, preferably someone who follows the IAOMT protocol, otherwise you risk increasing your body burden of mercury from exposure during the filling removal. At my office we use the Clean Up Aspirator, an aspiration device that surrounds the tooth completely and greatly reduces patient and staff exposure to mercury vapor generated during the removal. We also employ the use of room ionizers designed to quickly remove residual mercury vapor from the room and an additional high volume air filtration device that is placed a few inches from the patient's mouth during the procedure. Copious amounts of water should also be used to reduce vapor formation and to flush debris from the area. Further protection with activated charcoal tablets before the procedure is also recommended. If an isolating dam is used in the procedure, we use only non-latex nitrile dams because mercury vapor can easily penetrate the rubber dams commonly used in dentistry.

Several methods have been shown to remove mercury from the body and in the process reduce the burden of other toxic heavy metals such as cadmium and lead. It is always advisable to seek medical care with someone who has experience with metal toxicity; a good source for physician referral would be The Academy for the Advancement of Medicine (ACAM). That being said, following are some of the methods that I have found most useful and least dangerous for mercury removal.

The best natural method of removing mercury and other toxins from the body is to consume garlic, onions, and sulfur containing vegetables such as broccoli. Cilantro has been shown to mobilize mercury but does not cause the body to remove it. Beware of chlorella supplements, as most of these products contain mercury that was absorbed from the ocean. Also exercise care with alpha

lipoid acid that has often been touted as useful in chelation but has been shown to increase mercury levels in the brain by mobilizing mercury and opening the blood brain barrier. One of the ways that metals are removed from the body is via cholesterol so increased whole egg consumption can be helpful for many individuals. Foods that contain the detoxification amino acid glutathione such as lamb and parsley may also be of benefit.

Longevity Plus makes an excellent detoxification product that contains EDTA, garlic and other detoxification ingredients that is called Essential Daily Defense. This product is safe to be taken daily and will help reduce the body burden of heavy metals over time. Also beneficial are the products PCA-Rx and PC3x made by Maxam Labs. These products are designed to safely remove heavy metals and other toxins and in my experience have been found to be helpful and effective. Recently two products have been made available that change the face of detoxification. Zeo Gold is an advanced zeolite product that includes cofactors that make the product much more effective than other zeolites. Use of this form of zeolite is an excellent way to trap toxins in the body including heavy metal and pesticides so that they may be easily excreted. The second relatively new product is called Readisorb, a liposomal-coated form of glutathione. Glutathione is involved in one of the body's main detoxification pathways but previously it was difficult to raise blood levels significantly with an oral supplement. Liposomal coating makes the glutathione much more available. Raising glutathione levels is beneficial for detoxification and also for immunity. Both products may be found online or are available at my office.

Also worth considering is the removal of toxins though the skin, a route that does not stress the kidneys or liver as the prescription chelators have been shown to do. BodyPure foot pads are absorptive pads that are placed on the bottom of the foot at night. These pads absorb toxins and heavy metals from the body in a very gentle way but have been found to be minimally effective. Far infrared sauna is a superior method for removing toxins through the skin. It has been shown that the sweat brought forth in an infrared sauna has a far greater degree of toxins than normal athletic sweat. If you use a sauna for detoxification be sure to replace beneficial minerals that are also lost through sweat with supplementation. Especially beneficial are excess zinc and selenium, both of which compete in the body for molecular sites taken by mercury and cadmium. High Tech Health is an excellent source for infrared saunas.

Since metal ions are a source of free radicals in the body it is wise to supplement with anti oxidants. Longevity Plus makes an excellent vitamin C product called Bio En'R-G'y that is formulated to allow one to take large doses without gut reaction.

One important thing to be aware of is that you cannot remove metals from your system quickly. It simply is not possible. The metals are bound to molecules in the body and the only portion of the molecular metal that can be removed is at the end of the molecular chain. Thus as a small ion of metal is removed from the molecule, another ion moves up the molecular chain and makes itself available for removal. The process is slow and can take years for significant reduction of body burden, but the health effects of beginning the process can often be experienced in a few months.

Gary Gordon, MD, the founder of ACAM physicians, has stated that our generation has 1000 times as much lead in our system as pre industrial humans had. We are all exposed to greater amounts of mercury and other toxins than any other generation has faced, so personal efforts at detoxification are both important and beneficial for all of us, regardless of our diet and life style. For individuals who have had or presently have mercury fillings, detoxification is especially warranted. Be patient and persistent, and any efforts you make to purify your system will be rewarded with improved health and well being.