

CHELATION, why is it so IMPORTANT?

First, let's clarify a confusion, concerning our understanding of minerals, that very few people, even amongst health care professionals, are aware of. We often hear that minerals are essential for good health; but it seems as though no one has a clue that there are two kinds of minerals: "Organic" minerals and "Inorganic" minerals.

– "Organic" minerals are the type of minerals that "ONLY PLANTS" can convert into living organisms through a process known as photosynthesis. This type of minerals can be absorbed into your body to nourish your cells for energy and other healthy cellular activities such as natural apoptosis and unadulterated replication.

– "Inorganic" minerals, on the other hand, if ingested, are actually damaging to your health. These minerals are inert, sand-like microscopic particles which cannot be assimilated; they simply coat your cells obstructing oxygen and other nutrients from feeding your cells.

You may have heard the terms: "Metal and/or Heavy Metal Chelation"... This is the process of removing "inorganic" minerals such as: Mercury, Lead, Cadmium, Arsenic, Barium, Aluminum, Thallium, Cesium, Antimony, Tungsten, Beryllium and the like from your body and brain. They are the major causes of many debilitating diseases including neurological disorders such as Autism, ADD, ADHD, memory loss, Alzheimer's, Dementia, Parkinson's, Multiple Sclerosis and so many other physical and cognitive disorders.

So how do these inorganic minerals make their way into your body? Numerous ways unfortunately; it can be in the beverages you drink, the foods you eat, the air you breathe, and the lotions you slather on your skin. Even the clothes you wear and the sheets you sleep-in may contain metals like Antimony and Cadmium.

Well water and spring water are most often loaded with minerals. But sadly, these nano-size minerals are of the "Inorganic" type that were washed away from the ground and remain in suspension in the water. If this kind of water is used for making tea, coffee, juices or other beverages, the inorganic substances will be ingested into your body and blanket your cells causing arthritis, premature cell death, diminished quality of cell replication (premature aging), not to mention the many life-threatening diseases including tumors and cancers.

These inorganic minerals can also be found in processed, non-organic and GMO foods, especially vegetables and fruits that were sprayed with pesticides and other non-organic chemicals. Washing them may get rid of a certain quantity of the harmful minerals, but whatever has made its way into the vegetables or fruits, not converted into organic organisms, will be ingested into your body creating wreck havoc on your health. Aluminum, a toxic metal rather than a heavy metal, can be found in tap water, deodorants, medications, and even in salt and white sugar. (*Because aluminum is prominent among metal toxins, we will refer to metals and heavy metals interchangeably as: "metals".*)

Most sunscreens, antiperspirants, skin lotions and many beauty products like lipsticks contain Aluminum, Lead, Zirconium and other such inorganic minerals. As these lotions penetrate the skin, they interfere with the skin's natural cellular activities and apoptosis, calcifying the collagen causing premature aging and can ultimately lead to melanoma cancers.

Many pharmaceutical drugs contain poisonous substances used as preservatives like: Polyethylene Glycol (antifreeze), Formaldehyde and Polysorbate 80, 60, 40 and/or 20 which open up the Blood Brain Barrier allowing toxins to enter the brain, 80 being the most damaging. If you've ever read vaccine inserts, you'd know that every ingredient is a "POISON" you wouldn't want your children to come in contact with, such as: Thimerosal (Mercury), Aluminum, Polysorbate 80, Formaldehyde, SV 40 which promotes brain tumors in lab rats, Polyethylene Glycol (antifreeze), animal organ cells, fetal tissues,

and many others... These poisons are injected directly into your children's blood streams. And we wonder why children's mental disorders are on the rise.

These inorganic minerals can also make their way into your body via the air that you breathe. Since the 1960s the U.S. Military Industrial Complex (MIC) began experimenting for ways to control the weather for "*Military purposes*". By the 1980s, the spraying of chemicals into the atmosphere by way of "*Chem-Trails*", energized with trillion watt lasers fired from *HAARP* stations, allowed them to generate lightning storms, floods, and even hurricanes. Nowadays, the "*Geo-Engineering Program*" has expanded globally (If you're skeptical, just go to geoengineeringwatch.org). The technology is so far advanced that "*There is no natural weather at this point*"; they own full control of the weather. They have the capacity to ignite forest fires, even provoke tsunamis and earthquakes as if they were all natural disasters. "*Con-Trails*" (Condensation-Trails), you see forming behind aircrafts, only last 30 seconds to a minute before dissipating to nothing. But "*Chem-Trails*", mainly composed of Neurotoxins, Barium Chloride, Aluminum Oxide, Cadmium and many other inorganic minerals and carcinogenic substances, including Graphene Oxide, released into the atmosphere, widen unremittingly. They can last for days and, when carried by the wind, can spread out for hundreds of miles before making their way to the ground. Inescapably, these toxic substances fill the air that we breathe.

Metal toxicity is not restricted to particular organs, it is multi-systemic. In the central nervous system, metals can cause mental as well as degenerative neurological disorders. Additionally, damage to blood vessels may lead to hepatic, renal, and cardio vascular disorders. Metals, in the long run, also cause mutations in our cells' DNA, a high potential for cancers.

On a day-to-day basis we are exposed to metal toxins and many other harmful chemicals of which we aren't even aware of. Detox diets are mistakenly seen as strategies for losing weight. Although certain detox programs may help to loose weight, their main focus is to reestablish health. But metal detoxification should not be viewed as a temporary thing; it should be thought of as a means to rid your body from harmful chemicals that rob years out of your life, and especially your quality of life.

Those who do not understand the need for detoxifying from metals, especially with the barrage of assaults laid upon us day in and day out, will unfortunately suffer the health disorders associated with them. When we talk about metal or heavy metal detoxification, it also includes the removal of all other toxins in the body.

Organs like the liver, kidneys, and intestines work hard to detoxify the body. The body cleanses itself from most toxins through feces, urine, sweat and mucus. In order to help your organs and lymphatic system, you need to consider adopting healthy lifestyle choices that will help flush out these toxins.

To foster lifelong wellness and health, you need to adopt a detox program and make it part of your daily routine. The best way is to revise what you consume. It doesn't have to be difficult; there are so many ways to turn cleansing herbs and foods into delicious and nutritious meals. You may already be consuming many of them in your daily diet. Just make sure that everything you consume is clean and organic. Metal detox smoothies and drinks are easy to make and a good way to start your day while cleansing your body.

So what are Some of the Symptoms Associated with Metal and Heavy Metal Poisoning?

We've been exposed to metal poisoning since the day we were born. If left untreated, it can become life-threatening. Symptoms associated with these metals may include: headaches, nausea, diarrhea, fatigue, itching, brain fog and insomnia. In more severe cases, in addition to the neurological disorders mentioned earlier, you may experience burning and tingling sensations, abdominal pain and cramping, vomiting, difficulty breathing, chronic infections, visual disturbances, paralysis, and even cancer.

While detoxifying from metals and heavy metals, it is important to understand that, not only must the inorganic substances be dislodged from your cells, but a "*binding agent*" must attach to them to carry them out of your body. Foods high in vitamins and organic minerals can bind to metals to eliminate

them from the body via the digestive system. Here are easily accessible herbs and foods able to chelate your body from metals as well as other toxins:

Berries such as: Bilberries, Blueberries, Raspberries, Cranberries, Strawberries, etc.:

These berries are truly health promoting. They contain natural aspirin called “*salicylates*” which reduce inflammation and its damaging effects. They are also very high in “*antioxidants*”, a substance that helps eliminate free-radicals and prevent infections. Free-radicals are formed when metals and other toxins react with proteins and other substances. It has been proven that consuming organic extracts of these berries can help detoxify metals from the brain’s lymphatic system. A berry smoothie is a simple way to include healthy berries in your daily diet. *Bilberries* and *Wild Blueberries* are smaller in size because they have lower water content, but they make up for it by having about 4 times higher antioxidants than any other cultivated berries. Freeze-drying berries is a great way to preserve 97% of their original nutritional value, and can give them up to 2 years shelf-life.

Lemons and other Vitamin C Foods:

Fruits and vegetables high in vitamin C are also high in antioxidants. They can reduce the damages caused by metal toxicity. Vitamin C helps change toxins into water-soluble substances that can more easily be removed from the body. Lemon water, 20 minutes before breakfast, prepares you for healthy digestion by stimulating enzymes. An effective digestion is crucial for detoxifying the body. Here are a few foods high in vitamin C: Bell Peppers, Blackcurrants, citrus fruits, wild Blueberries, Blackberries, Bilberries, Guava, Parsley, Kiwis, Broccoli, Papayas, Strawberries, Raspberries, etc.

Here’s a healthy lemon water mix: Pour the juice of half a Lemon into a cup of hot distilled or purified water, then add a pinch of Cayenne Pepper, one tsp of Apple Cider Vinegar, and a slice of Ginger.

Garlic and Onion:

Garlic and Onion contain sulfur which helps the liver detoxify from Arsenic and Lead. They cause the liver to produce enzymes that help filter out toxins from the digestive system.

Flax, Hemp, Grape and Chia Seeds:

These seeds are high in fiber and contain essential omega-3 fatty acids. Fiber helps cleanse the colon and omega-3 reduces inflammation; they are important for healthy liver function and detoxification. Since fish and fish oils may contain heavy metals like Mercury, it is best to avoid consuming them during detox. Therefore, a better choice rich in omega-3 can be found in these seeds; they provide the body with the necessary essential fatty acids during cleansing. Hemp hearts are also very rich in organic minerals like Magnesium and Iron, as well as omega 3, 6, and 9 unsaturated fats.

Green Vegetables and Herbs:

Organic greens, because of their Chlorophyll content, are amongst the most powerful metal, environmental toxins and pesticide cleansing foods. Chlorophyll helps detoxify the liver, increases blood oxygen, and cleanses blood cells. The best way to detoxify from Aluminum is to add a lot of green leafy vegetables in your diet. Consuming a wide variety of leafy greens also increases the many different types and qualities of antioxidants able to cleanse the many different metal and heavy metal toxins. These can be found in vegetables like Broccoli, Cucumbers, Kale, Spinach, Celery, Sprouts, Arugula, Zucchini, etc. Because of its plentiful content of Chlorophyll, Broccoli is one of the most powerful metal/heavy-metal cleansers, especially when sprouted.

Beetroots:

Beetroots are important liver cleansers. They are full of vitamins B3, B6, and C, and also contain organic minerals like Magnesium, Calcium, Zinc, and Iron. These vitamins and minerals help the liver break down toxins. A fiber component known as “*betaine*”, in Beets, promotes effective digestion facilitating the harmful toxins to be excreted from the body. Beet leaves are also rich in Chlorophyll and fiber, they can also be added to your morning smoothie.

Cilantro:

High up in the list of chelators, when taken in a tincture or raw juice, especially when mixed with Celery, Parsley, Cucumber and Carrots is a powerful detoxifier for Mercury, Lead, Cadmium and Arsenic.

Milk Thistle:

Milk Thistle tea, from its seeds, is an excellent liver detoxifier that will in turn cleanse the body from metals and other toxins.

Chlorella:

Chlorella is a single-celled green algae. It is a great source of macro and micronutrients. It also has anti-bacterial and anti-tumor/cancer properties. Chlorella has the ability to detoxify the body from bio-toxins such as Tuberculosis, Lyme disease, Tetanus toxins and Mould. It also filters out xenobiotics such as phytates, dioxins, pesticides and industrial waste. It can bind to and remove metals like Mercury, Lead, Nickel and Aluminum from the body.

Chaga Mushroom:

Chaga is a type of fungus that grows on the bark of birch trees in cold climates. It has been used for centuries to boost immunity, detoxify, and promote overall health. Chaga contains a powerful antioxidant called “*Superoxide Dismutase*”, which is essential for both cleansings the liver and to promote healthy cellular replication. The Chaga Mushrooms, used for detox, must be organic and whole to take advantage of all their precious nutrients. Unfortunately, since wild, organic Chaga, handpicked from pristine, certified organic forests isn’t easily available; you may opt for organic Chaga mushroom powder. It’s easy to use in your tea, coffee, smoothies, protein shakes, porridge, or cereals. It is considered one of the best alternatives to your morning coffee; same flavor, but much healthier.

Zinc:

Zinc is a top organic mineral for boosting immunity and is essential for organ health. If it is deficient, inorganic cadmium tends to take its place. Taking a Zinc supplement (if you can find an organic one, that is) can dislodge the cadmium as it replaces it. Again, it is important to understand that a binding agent is needed to carry toxic metals out of the body to prevent them from affecting other parts of the body such as the brain for example. Here’s a couple of highly recommended binding agents: BioSil™ (silica) and Pectasol C™. Since Pectasol C™ is made from the Pectin of fruits such as Lemons, Grapefruits, Oranges, and the like, and more specifically from the peels and piths (white stuff) of the fruits, here’s a simple recipe you can make at home to make sure it’s organic:

- Place 4 Grapefruit peels, 4 Lemon peels, and 4 Orange peels (especially with their piths) into a pot with 10 cups of distilled water and bring to a boil, then simmer for the next 4 to 6 hours with the lid on.
- After cooling, squeeze as much juice out of the piths into the remaining water, then discard the peels.
- You can then freeze the liquid in ice cube trays.
- To use: Put 2 or 3 ice cubes into a cup of unsweetened, organic fruit juice (ex: Orange or Grapefruit) so it’s not so bitter: Take 2 to 3 ounces of the solution 2 to 3 times a day all the while you’re detoxifying. After detox, taking the solution once a day is a good prevention against the flue and other pathogens.

Zinc is an essential trace mineral, which means the bodies only need a small amount of it (8mg for adult women and 11mg for adult men) for the recommended daily intake (RDI). But don’t underestimate its vital need. If you’re on a plant-based diet, you can still get enough Zinc if you are diligent about it; although you may need 50% more than the RDI. *On the other hand, this is the ONLY WAY to make sure that the Zinc you take is organic.* Here are some great sources of Zinc:

- Eggs, although animal based (some vegetarians still consume eggs), contain about 0.6 mg of Zinc per large egg. Obviously, this is not for vegans, but the remainder is.
- Vegetables like Mushrooms, Spinach, Broccoli, Kale, and Garlic contain Zinc. One cup of sliced raw Mushrooms contains 0.36mg of Zinc, while Kale 0.3mg in 1 cooked cup.
- Legumes like Chickpeas, Lentils, and Beans can also provide Zinc. Foods like Hummus, Edamame, and Black Beans also contain Zinc. 1 cup of Lentils offers 2.52 mg per cup, the same serving sizes of cooked Edamame (2.13 mg), Black Beans (1.93 mg), and Chickpeas (1.66 mg).

- Nuts and Seeds: One ounce of Pumpkin seeds or Pine Nuts provides 2.17mg and 1.8 mg respectively. 1 oz of dry, roasted Cashews 1.6 mg, and 1 oz of Chia seeds 1.3 mg of organic Zinc.
- Whole grains also contain Zinc. 1 cup of raw Oats 2.95 mg, one regular slice of whole-wheat Bread has 0.56mg, and cooked Quinoa 1.85 mg of the organic mineral per cup.
- Save the best for last: “Dark Chocolate” is a good source of calcium and Zinc; the darker, the better. Generally, the 60 to 69% cacao varieties offer nearly 0.75mg per oz, while 70 to 85% varieties 0.9mg among other health benefits. Just keep in mind that commercially made chocolate has LOTS of sugar, so no more than 1oz per day. Mind you, in homemade recipes, you can use Stevia instead of sugar.

Fulvic Acid:

Fulvic Acid, a biological chelating agent, results from the decomposition of organic matter into humus. It is then microbially processed into humic acids to further produce Fulvic Acid. Fulvic Acid has the unique ability to chelate (break down) toxins reducing them to a harmless state. It is also effective at neutralizing a wide range of toxic materials, everything from metals and radioactive waste to petrochemicals.

Shilajit:

Shilajit is a sticky tar-like resinous substance that is closer to a fungus or mushroom. In nature, Shilajit is a type of mineral pitch made up of humus and decomposed plant remains, exuded from the rocks present in the Himalayas at an altitude of 1000 to 5000 meters above sea level. Shilajit can help eliminate free-radicals and heavy metals such as Mercury and Lead from the body. It also has the ability to regulate hormones by creating balance in different immune functions.

Activated Charcoal:

Activated Charcoal from Coconut shells has a large surface area per unit of mass. This makes of it an excellent absorbent able to strongly bind to toxic substances and more easily excrete them from the body. Many dieticians and naturopathic practitioners advocate charcoal to be taken with EDTA (ethylenediaminetetraacetic acid), claiming that the activated charcoal absorbs the residues while EDTA acts as a chelating agent that binds to metals to eliminate them from the body. Incidentally, most intravenous chelation treatments are performed using EDTA as the chelation agent. Before taking that route, however, you should know what ingredients EDTA is made of: EDTA is mainly synthesized from **ethylenediamine** (produced as the result of the reaction between ethylene glycol (antifreeze) and animal urine), **1-2 diaminoethane** (a derivative of ethylenediamine), **formaldehyde** and **sodium cyanide**. This is a clear example revealing that most professionals don't bother investigating what they've been told to promote. If a practitioner only advocates intravenous chelation solutions, this should be a red flag. Unless you are in a heavy metal distress state, it is always better and safer to detox slowly adopting a long term lifestyle regime.

Also, it is important to mention that EDTA is used in many processed and canned foods as preservative, notably in most canned beans. *For any foods or beverages you purchase, or medications you've been prescribed, if you read or research the ingredients; you may be shocked to find out all the poisonous substances they contain.*

A less toxic alternative to EDTA would be to use DMPS (2,3-Dimercapto-1-propane-sulfonic acid) as the chelating agent. Dimercapto is related to Dimercaprol, which is made from peanut oil, and a sodium salt monohydrate (Unithiol). Dimercaptopropane Sulfate can be taken orally, or intravenously for a more aggressive treatment where the patient is in a distress state due to excessive heavy metal toxicity.

Soil Based Organisms (SBOs) and Clay:

SBOs and Clay are said to have the ability to cling to the metals in your body and carry them out of your system. One study found that Bentonite and Montmorillonite Clays, due to their negative charge, were effective at removing Lead from waste water. It is claimed that a teaspoon of Clay dissolved in a cup of water, once a day for 3 days ought to be a positive step towards chelating your body from metal toxins. Another study added Bone Broth to the Clay solution claiming that it boosts its effectiveness. Here again, it is important for you to be aware that chelating with Clay does not work for everyone,

because it may already contain inorganic metals. Although some dieticians advocate for this type of detoxification, for certain individuals it turns out to actually do more harm than good. Since there are so many other options, is it really worth taking the risk in the hope of expediting the process?

Other Natural Detoxifiers:

Without going into the details of each and every one of them, there are many other metal detoxifiers. Any natural herbs or foods that are healthy antioxidants can also help cleanse the body allowing it to be more efficient in getting rid of all kinds of toxins. A few of these detoxifiers are: Cayenne Pepper, Thyme, Turmeric, Spirulina, Barley Grass juice or powder, Atlantic Dulse, Curry, Green Tea, Tomatoes (cooked), and Probiotics like Sauerkraut, Kefir and Apple Cider Vinegar. If you are not getting an adequate daily intake of vitamins and organic minerals, you may consider taking supplements; just make sure they come from “*certified organic*” sources. If you are deficient in vitamin B1, B-6, B-12, and/or C, you are at greater risk to metal toxicity. Vitamin C, because of its antioxidant content, apart from detoxifying from other toxins, has been reported to have a special chelating effect on Iron.

Coffee Enemas:

A Coffee Enema does not detoxify your body from metals per say; instead, it detoxifies the Liver and Gallbladder which is an essential first step in any detox program. The effects on the Liver and Gallbladder by the caffeine and palmitic acids in coffee enema are immediate and brought about by the caffeine, which is an irritant to the Liver. This irritant stimulates the Liver bile ducts to open. Once open, the toxins in the Liver and Gallbladder can be released.

The caffeine in coffee enemas is absorbed in the hemorrhoid veins and then goes up to the Liver via the hemorrhoid portal system which causes an increase in bile flow. The bile, in turn, causes the accumulated poisons and toxins to be released and evacuated from the body. The Liver and Gallbladder, once detoxified, can, in turn, more easily remove a variety of toxins and free-radicals from the bloodstream.

Caffeine taken in an enema is very different from drinking coffee; drinking coffee causes digestive problems and negatively affects the Liver. Coffee enemas are not given to improve elimination; they do not affect the normal evacuation processes. Coffee Enemas assist the Liver so as not to overburden the Liver while a flood of toxins are dislodged during a detox program. *After each Coffee Enema, it is important to replenish the lost electrolytes with organic fruit and vegetable juices.*

Foods to avoid:

For a successful detox, not only do you need to consume chelating herbs and foods, you must also avoid those that sneakily infiltrate metals and other toxins into your body. This is especially true for processed and GMO foods. Some of these foods are: rice (brown rice especially, since it often contains Arsenic), some fish, especially large and long-living ones, because they tend to accumulate more Mercury. It is also best to avoid non-organic foods and alcohol, especially commercially brewed beers; many contain *Polyethylene Glycol* (antifreeze). Saturated fats (except for coconut oil which has demonstrated healthy brain properties) as well as excess unsaturated fats should also be avoided or moderated, because they have minimal nutritional value and soak up the harmful substances making them more difficult to eliminate.

Although it may take time to naturally and safely detoxify your body, it is very possible. As you begin detoxifying, depending on your level of toxicity, you may experience some discomforts like strong perspiration and feces odors, irregular bowel movements, lost of smell and taste (everything smells and tastes metallic), headaches, rashes, nausea, intestinal cramps and possibly other reactions. If such discomforts become intolerable, find the culprit detoxifier and ease on it or simply avoid it. The good news is that this tells you that metal detoxification is taking place. When the detox nears completion, your smell and taste will return, but far more acute than before, and your entire metabolism will resurge more vibrant and energetic.

May God bless you and your loved ones.