

HEAVY METALS

1. Heavy Metals, other Neurotoxins and the Role of Candida and other Microorganisms.

There is a new saying:

Not to know is ignorance.
Not to want to know is denial.
Not to care is hopelessness.
Not to hope is an empty spiral.

This article begins a conversation about what we need to know about heavy metal poisoning and the overgrowth of Candida and other pathological strains of micro-organisms. And how we deal with these issues.

New evidence shows that Candida and other chronic fungal infections can be attributed to their protective role and adaptation of the immune system to an otherwise lethal heavy metal environment, especially mercury. **Mercury suffocates the respiratory mechanism of the cell** and creates severe cellular malnutrition and even cell death. So we make a deal with microorganisms, like Candida, to bind large amounts of heavy metals in their own cell walls. The gain is that our cells can breathe but it comes at a price because we now have to feed the fungus and bacteria as well as our own cells. This deprives our cells of needed nutrients and we also have to deal with the micro-organism's toxic metabolic waste because what goes in must come out! Depending on the internal environment and the amount of heavy metals we are exposed to, these tolerated guests can certainly grow out of control and create their own set of problems.

The list of organisms that can bind heavy metals reads like a "who's who" list of our typical infectious diseases like streptococci, staphylococci, and even amoebas, as well as acute and chronic syndromes caused by various species of Candida. There is a limited place for antifungal/antibiotic medicine, but only in the acute phase. It is very dangerous to take an aggressive approach even with herbs, as the die off of fungus/bacteria can release heavy metals like mercury, lead and cadmium that they are holding in their cell walls, into our cell walls.

The symptoms associated with an aggressive approach to killing these organisms have been attributed to the die off effect, but in fact it actually can be an acute case of heavy metal poisoning. It's important to understand that heavy metals are neurotoxins. In other words they attack the nerves as they are absorbed by nerve endings and travel into the interior where they disrupt the functions of the nerve cells and eventually cause the death of the cell.

The body is constantly trying to eliminate these neurotoxins via the liver, kidney, skin and lungs. The bowel and other tissues often get overwhelmed by these toxins and lose their ability to function properly. **Any illness can be caused by, or contributed to, or exaggerated by neurotoxins. A complete list** of other neurotoxins besides heavy metals follows. Also important to realize is that there is a synergistic effect between different metals as well as a simultaneous occurrence with other toxins. For example mercury will bond with lead. Therefore high mercury levels will predispose us to higher lead levels as well. There is a sieve like apparatus in the connective tissue which captures the heavy metals and the more clogged it becomes the more other toxins become stuck there too. Or worse yet, the tissue becomes overwhelmed freeing toxins to attack the nerves cells directly.

1. HEAVY METALS AND OTHER NEURO-TOXINS

Many micro-organisms create bio-toxins, which injure the nervous system, but **mercury** is the most lethal. It not only attacks the nerve cells directly but also sets up our internal terrain for overgrowth of many harmful organisms that cause **degenerative diseases**.

Studies show with new dental amalgam fillings mercury quickly appears in the kidneys, brain and wall of the intestines. The most dangerous mercury poisoning is when fillings are removed as this is when the mercury vapors are the most toxic. That is why **it is important to follow a strict protocol when removing amalgams!**

140 million Americans have dental amalgams, containing up to 50% mercury (about the amount in a thermometer)!
25% of Americans suffer from an accumulation of heavy metals, due to years of exposure.

Mercury in fish is another cause for mercury poisoning. **1 in 12 women** in the U.S. have dangerous levels of mercury in their blood from eating fish. Unborn children receive mercury via the umbilical cord, which may cause or contribute to **birth defects**.

Vaccinations- Thimerosal (containing ethyl mercury) is clearly a direct factor in Autism. New genetic studies show that children with Autism lack an important detox mechanism for heavy metals.

Common neurotoxins (in order of importance):

Heavy metals: including mercury, lead, cadmium and aluminum.

Biotoxins: tetanus, botox, lyme, staph, strep, chlamydia, tuberculosis, fungal and viral toxins.

Xenobiotics: (man-made toxins) dioxin, formaldehyde, insecticides, arsenic, PCB's, etc.

Food Preservatives, Excite-Toxins and Cosmetics: aspartame, food colorings, fluoride, methyl/propyl-paraben, and plasticizers in cosmetics, cling wrap, etc.

These neuro toxins can displace cell receptor sites. If those in the brain are displaced it can create depression, ADD and Parkinson's, and in the thyroid it can lead to hypothyroidism.

Other **neurological symptoms** include fatigue, insomnia, memory loss, migraine, sciatica, burning pain, seizures, numbness and premature ejaculation.

Here's a short list of other symptoms:

Emotional problems – anger, irritability, mood swings, bipolar disorder, addictions and obsessions.

GI problems - Candida, leaky gut, food allergies, parasites and inflammatory bowel disease.

Orthopedic problems - arthritis, fibromyalgia and muscular-skeletal pain, numbness, swelling.

Many types of **autoimmune diseases, fibromyalgia, and chronic fatigue**, can be attributed to the neurotoxins, as well as **Cardiovascular diseases**, including arrhythmia's and increased heart rate, and hypertension.

Even **ENT** diseases like **sinusitis** can come from the toxic burdens.

And **high cholesterol** can be a result of the body trying to use its fats to protect the nerve cells.

Many OB/Gyn problems can occur, including difficulties of pregnancy, impotence, fibroids, ovarian cysts and infertility.

Even **eye problems** like macular degeneration and deteriorating eyesight are symptoms of neuro-toxicity.

What do we do about these deadly poisons and their harmful and limiting effects?

1. **Detoxifying from Heavy Metals and other Neuro-toxins**

Slowly, safely and cautiously are the key words for detoxification from heavy metals and other neuro-toxins. In addition to any substance used to mobilize and excrete these toxins, the basic program includes good quality protein, plenty of minerals and essential fatty acids, lots of fluid and deep breathing.

Living in an **acid, oxidized and polluted world** means we are all acid and rusting on the inside. The more acid and oxidized the tissue the more vulnerable it is to harmful compounds and organisms.

Minerals and electrolytes are the base of any program (pun intended) because they literally buffer the tissue with their base ions and because metals attach themselves only to places programmed for attachment of metal ions. With a modern diet there is always a deficiency of minerals. The heavy metals attach themselves to these vacant binding sites.

Plant minerals are preferred as they are more bio-available. Green leafy vegetables, sprouted grasses, sea and fresh water algae are loaded with these organic minerals. It's difficult to eat enough of these to counter-act the toxins in our diet and environment so start the day with a green powder drink made with all of the above plus probiotics like acidophilus and bifidus to provide lots of trace minerals and friendly flora for daily maintenance. Also Standard process make a whole food organically bound mineral supplement that I really like. For someone with a high load of metals and acids creating inflammation and digestion problems, it may be necessary to add a teaspoon of baking soda or base powder in a little water taken in between meals. This will stimulate digestion, then production of bicarbonate from the stomach cells. No table salt please! Instead use a balanced salt like Celtic sea salt or Himalayan salt for necessary electrolytes like chloride, sodium and potassium.

The next generation products of cow and goat whey protein are excellent sources of protein. Their peptide bonded, branched chain amino acids act as shuttle agents for the detox process. Even vegans might consider them for a time. Although there are quinoa and hemp protein powders that are also good sources. And it is recommended we limit protein to no more than 50 grams/day to reduce our acid load. This is about 2.5 ounces of meat/fish/poultry a day.

Fish oil is also an essential nutrient even for vegetarians, especially EPA and DHA. Fish oil makes the cell wall more flexible, including the red and white blood cells, improving circulation. There are small structures in the cell called organelles responsible for specific jobs, including the production of neurotransmitters like dopamine and melatonin. The cells need an abundance of fatty acids to replace the organelles damaged by heavy metals, etc. for brain function, eyesight and protection from viral infections. Lower on the food chain is an oil from krill (tiny shrimp that whales eat) Take 1 capsule Omega 3 (360/240 EPA/DHA) or Krill oil 2-3 x/day during the active phase of treatment and then 1 capsule/day for maintenance. A good phospholipid exchange might also include phosphitydal choline.

Chlorella is a single cell algae and one of the best substances for binding heavy metals and environmental toxins like dioxin. It is a great way to begin detox as it targets the cells in the gut, restoring bowel flora while balancing the immune system. Chlorella has large amounts of fatty acids and lots of chlorophyll (the green energy engine of plants). Chlorophyll activates the receptor sites on the cells that code for the organelles we discussed above, opens cell walls to release toxins stored inside and normalizes insulin levels. Chlorella is a super nutrient like spirulina and is ideal for vegans. There are two types of chlorella - vulgaris (easier to digest with higher chlorella growth factor, but less metal absorbing capability) and chlorella pyreneidosa (better absorption of toxins, but slightly harder to digest).

Take chlorella 30 minutes before a meal so it is positioned in the intestine when the bile is released following food. Start with 1 gram (3-4 tablets) per day for maintenance and for 6-to-24 months. During the more active phase of detox, during amalgam change over or when cilantro is used, increase dose to 3 grams (7-10 tablets) 2-3 x/day. If a lot of gas is produced, the Pleo Sanum remedy, Pleo Pef, is most likely needed to reduce overgrowth of pathogenic forms of Candida.

Activated charcoal may also be used for excess gas (it's amazing for this) and to absorb the heavy metal toxins. However use sparingly as charcoal also absorbs nutrients and use it primarily during amalgam changeover. Take one to two capsules an hour or so after meals as needed.

Cilantro is the most powerful agent we have for mobilizing mercury, cadmium, lead and aluminum from the bones and central nervous system. Stay clear of cilantro during amalgam change over. Enough is being stirred up without releasing more from the bones or tissues. And always, always take chlorella when taking cilantro to bind the heavy metals in the intestines so they are excreted and not re-absorbed where they can do worse damage. I love cilantro but I've found a little goes a long way. Dumping too much too fast can create anxiety, headaches, tingling or burning of nerves and muscles.

Currently available is a negatively charged crystal formed over thousands of years, where volcanic lava and salt water meet. These zeolite crystals have a unique structure like a honeycomb of cavities that act as "cages" to capture heavy metals and other compounds. Because they have such a strong negative charge they can dislodge the strong negative bonds that the GAGS (proteoglycans) have with the heavy

metals within the connective tissue matrix and then capture them efficiently. They also buffer pH levels in the tissue by exchanging an electrolyte like magnesium or potassium for the heavier metals and substances. Once the toxins are caged in the zeolite crystals they cannot be re-circulated. This safety feature cannot be over-emphasized. The toxins are 100% excreted predominantly through the kidneys. **Natural Cellular Defense (NCD)** is a high quality zeolite that was developed for pregnant women. It has been called an alchemical gift from God just when we need it so greatly! NCD has been patented as an epithelial cancer cell treatment for its ability to clean out the connective tissue. Start with 3 drops 3x/day and the day of dental work increase to 5 drops 3x/day. Maximum dose 15 drops 3x/day.

Heavy Metals always accumulate the most in the area of our weakest function or “Achilles Heel” and accumulate along with old unresolved emotions and limiting thought-forms. Incorporate some type of energy work to encourage the release from those especially vulnerable and stuck places. And re-member to breathe deep and wide to release stress and balance the nervous system.

1. 🌱 **Dental Prep for Amalgam Change Over:**

Find a Biological Dentist if you can. If not ask your dentist to work with you on this protocol and make sure your dentist uses a rubber dam and a strong vacuum to suck the mercury vapors away while the tooth is being drilled. Long term detoxification for mercury removal is usually necessary but increase dosage of NCD and Chlorella, and add a few more nutrients and antioxidants for several days before, during and after (7-10 days total).

With the following supplements it is best to work with a practitioner that can test to see which ones are best for you and how you might use them in a progression.

Natural Cellular Defense (Zeolites) 3 drops 3x/day and day of change over 5-15 drops 3x/day.

Vitamin C (non-corn derived) 1 gram 3 times a day with meals.

Vitamin E 200 IU 3 times a day with meals, mixed tocopherols from www.acgraceco.com

Selenium twice the suggested dosage on bottle or eat two Brazil nuts/day.

(MSM with chondroitin sulfate capsules 3 times a day with meals - optional).

Chlorella 2-3 grams a day divided into 2 doses (8-10 tablets), half an hour before breakfast & before dinner. E-lyte chlorella vulgaris from www.emersonecologics.com or Biopure chlorella pyrenoidosa from www.biopureus.com


Or a combination of NCD and chlorella, or activated charcoal (2-2x daily) on days of change over.

Another detox formula is Standard Process Cholecal II with bentonite clay, collinsonia root and bile salts. It absorbs the heavy metals while stimulating the gallbladder to release bile, heavy metals and fat soluble toxins.

Fish oil or Krill oil 2 capsules per day. www.emersonecologics.com

In the chair: dissolve a chlorella tablet in water and rinse your mouth and swallow. Then once the dam is in place, coat your mouth and dam. And as soon as dam is removed have them rinse your mouth with another sip or two and then suction it out to bind and clear any residue. . The same can be done with the NCD.

1. 🌱 **For more information on quality brand supplements and where you can purchase them or for a personal detoxification program:**
2. 🌱 **Christine Simmons @ wellspringvalley@lhtot.com 724-593-6237**

1.  A final note on all this complicated detox stuff. It is important to tonify and cleanse the spring organs of the liver and gallbladder. The liver is the most important of the detoxification organs and most toxins are expelled with the bile from the liver through the gallbladder into the small intestine and ideally they are excreted through the stool. However because most of the neurotoxins are fat-soluble they are most often reabsorbed by the abundant nerve endings of the intestinal wall and just continue to get re-circulated into the brain and spinal cord, the blood and back to the liver, the lymph, and the bowel bacteria and then into the tissue of the intestinal tract. Phase II of the detoxification process makes these fat-soluble molecules water-soluble so we can pee, poop and sweat them out. If there is a genetic malfunction of the Phase II enzymes necessary for this step then there is a greater chance that these toxins will create health problems. Increasing Phase II processes with glutathione (found in the whey protein), and substances to increase acetylation, methylation and glucuronidation factors will also decrease the detox time and lessen reactions.



