

Episode 5 - Heavy Metal Detox

The main problem with heavy metals is really with the detoxification pathways. We always harbor some degree of metals. They're always present in the body. It just can't be avoided. It's only when we have trouble detoxing them that they accumulate and cause trouble.

Being heavy metal toxic can be very, very debilitating, and fatigue is a huge telltale sign that the little energy powerhouses of your cells called mitochondria are being affected by heavy metal toxicity.

Because metals cross the blood brain barrier we also see neurologic problems. Normally there is a barrier between the blood circulatory system and the brain, and this is a protective mechanism to prevent baddies from getting to the brain. Metals trick the body and cross the blood brain barrier.

One thing that is important to understand about heavy metals and some chemicals is that they work similarly through actions on enzymes, proteins and hormones. Please keep in mind that although heavy metals may affect different areas of the body, they are all doing at least one of three things. One: they are inhibiting enzymes, especially specific enzymes which help the liver detox.

Here is an interesting story that I learned in graduate school. Native Americans don't have a specific enzyme called the cytochrome p450 enzyme (system) that detoxes some of these toxins like chemicals, alcohol, drugs. They don't have this enzyme. So there is the stereotype that Native American Indians can't drink and maybe they really can't because they can't detoxify the alcohol.

Now, I don't know if this goes across the board since there are mixed marriages and races. But this was just a story I heard back in in school that I thought was kind of interesting because it explained a few things.

The second way that heavy metals get into the cells and tissues is they hijack carrier proteins and hormones to get across membranes like the gut wall, for instance.

And the third way they get across the blood brain barrier is with the help of substances like the body's own white blood cells, glyphosate, which is the stuff that's in the herbicide roundup that's contaminating most of the planet's soil, and electromagnetic frequencies. These all assist toxins to get across the blood brain barrier.

How enzymes work

See short explanatory video here: <https://youtu.be/KWTXk7GhHiY>

Enzymes work as catalysts. They're made up of proteins and they work to get chemical reactions going. They pick up the substrate, which is another little thing that fits really nicely into a spot on the enzyme, and the enzyme carries it and drops it off somewhere that it will create the reaction that's needed.

So, what happens with metal toxicity and the enzymes is that those metals take the place of the substrate on the enzyme. It may have the same shape and shape is really everything when we're talking about enzymes. So it may have the same shape as, say, a vitamin that was supposed to be on that enzyme or an amino acid or something else that was bringing it to make that reaction.

But it's not the real thing that goes in there so it's not going to have a reaction. It's not going to create a product.

The way heavy metals inhibit enzymes is by displacing the nutrients that normally latch on to the enzymes. It's so important to make sure your mineral bases are covered because exposure to heavy metals will invite them to fit into enzyme mineral binding sites if those minerals are not around. The cells need something, some form of mineral or metal to function. So, using a heavy metal, if it's present and normal minerals are not, it's better than nothing to the cell. This allows the body to survive in the face of nutrient

deficiencies for a while, but the metal does not perform the activity the real nutrient would have, and the detoxification pathways get clogged.

ALUMINUM

Aluminum is a known neurotoxin. Most cookware, commercial deodorants, infant formulas, toothpaste and over-the-counter antacids are made with aluminum.

Aluminum causes inflammation in the body, particularly in the joints. High levels of aluminum are seen in the brains of Alzheimer's patients and in the breast of breast cancer patients.

Aluminum is used as an adjuvant in childhood vaccinations. (There is a problem with vaccines.)

The dangerous standalone aluminum that's in the environment is 64,000 times higher than it should be, than is considered safe to life. Much of this load, I believe, comes from stratospheric aerosol injections or chemtrails. But aluminum is also found in hundreds of cosmetics, prescription drugs and so many other commercial products.

Aluminum affects the bones, the heart and the brain. Serious symptoms include skin breakouts around temples and side of the neck, excessive sweating and odors, memory loss, mental confusion, and colitis.

A particular aluminum problem is when it enters the brain and contributes to sleep disorders because aluminum targets the pineal gland.

Silica is the antidote to aluminum toxicity. There are silica rich mineral waters in supermarkets that you can buy, such as Volvic from France and spritzer from Malaysia. The recommendation is one liter every day for 13 weeks, which has been known to work very well to remove aluminum from the brain and the bone, etc., and it gets excreted in the urine.

Women who have had adverse effects from the HPV vaccine have been helped greatly just by drinking silica rich water and peeing out aluminum shortly after. Make sure your

vitamin and mineral status is up to par, especially B vitamins, as long term silica use can deplete nutrients such as thiamin, which is B2.

Silica is the absolute best binder for aluminum in the body. But you must have these accessory nutrients present as well. Binders are nutrients that catch the toxins coming into the intestine with the bile and escort them out of the body through the stool.

ARSENIC

Like all metals and minerals, arsenic is found naturally in the earth. Highest levels are found near industrial and waste sites.

Type two diabetes connection. Brain fog, fatigue and liver, kidney and bladder and prostate are the targets for arsenic.

Substances like coal and volcanic ash contain arsenic. And when arsenic and many other metals hit the air, like from a mining operation or a volcanic eruption, they become oxidized and bind to water molecules in the environment. This is hazardous to breathe in and also contaminates the water supply (the oxidation of many metals can be seen in much of the water supply). Our crops absorb them. This is known as bioaccumulation.

Rice crops are particularly vulnerable, making rice high in arsenic. Chicken feed contains high levels of arsenic, which gets passed along to people that eat them. So maybe chicken and rice should come off the menu if these are not organic and clean.

Beer, wheat and of all things, rice-based baby formula also have this type of bioaccumulation of arsenic.

Studies have shown that the highest percentage of disease due to heavy metal poisoning comes from arsenic: approximately 40% of gout cases, one third of prostate cancer, one third of pancreatic cancer, and 25% of lung cancer is from arsenic toxicity.

Arsenic also has an association with diabetes and has been shown to cause resistant weight loss. It does this by poisoning enzymes that transport triglycerides out of the fat cells, basically preventing fat from being released from the cells. Arsenic also poisons enzymes that transport nutrients into your mitochondria, which as mentioned earlier, are the little powerhouses of the cell that make your energy in the form of a substance called ATP (adenosine triphosphate). Arsenic and other metals interfere with this energy mechanism and is the main reason behind the fatigue that is so common among heavy metal toxic individuals.

Removing arsenic from the body is relatively easy in a process called methylation, followed by elimination in the urine. (See liver info below).

CADMIUM

Cadmium comes from cigarette smoking and marijuana (there's cadmium in the THC), and secondhand smoke.

Battery workers and welders in electroplating fields, these people are very high in cadmium.

Cadmium displaces zinc, which is a master detox mineral, and it also displaces calcium and selenium.

Cadmium causes leaky gut and other intestinal permeability problems, and there is a small intestinal bowel obstruction connection with heavy metal toxicity.

Cadmium, weakens arteries, joints and muscles, causes arteries to harden. And this is the reason why smokers get heart disease.

Cadmium is everywhere in the environment. It is a known carcinogen responsible for more cancers than all other heavy metals combined.

Foods with high levels of cadmium include cod, tuna and haddock. And I'm going to explain to you why these deep sea fish are so tainted. Big fish eat little fish, and the toxins that are in the ocean get absorbed into their own fat cells. And then when the big fish eat the smaller fish, they've got all of this toxic contamination in them.

I did hear something at the detox summit that I was at about the tuna that we eat might be okay because it's not really the big deep sea fish. It's something called skipjack.

Cadmium is found in refined grains, flours, especially white flour and cereals, and processed foods.

Cadmium absorption from the gut increases (goes into circulation instead of being eliminated) when iron stores are depleted. Another reason to keep your mineral levels balanced and where they should be.

Cadmium toxicity is implicated in osteoporosis, liver and kidney disease and practically all the major illnesses of our time.

Interestingly, cadmium levels in vegans are high enough to raise concern, and I believe that the reason for this is because they're not getting any source of the amino acid taurine, which is necessary for detox, so they accumulate cadmium and other heavy metals. I know that this is another sore point for some people, but I do not recommend veganism or vegetarianism while trying to detox the very debilitating condition of being heavy metal toxic. And if it's a thing where you refuse to change that, at least make sure that you're covered for all your amino acids, your vitamins, your minerals, your enzymes, all the nutrients.

Another problem with vegetarianism is vitamin B12 deficiency, which comes much later in life but it does come and when it shows up, it's irreversible. Neurological problems from B12 deficiency.

Cadmium is a powerful stimulant to the adrenal glands. The adrenal glands sit on top of each kidney and cadmium signals the kidneys that there is some incoming stress in the form of foreign substances. Stress hormones are released, which gives us a lift like adrenaline and cortisol. And very often this is the reason someone will reach for a cigarette or a highly processed food because it gives them a boost.

Removal of metals like cadmium from the body is done through a process called chelation, but certain chelating agents can also deplete calcium.

About calcium displacement

There's something called the calcium shell phenomenon, which is a situation where the body takes calcium out of the bones during a stress event. It does this because calcium is a buffer and this prevents any damage that might be done to the heart, the brain or other vital organs.

I experienced it myself several years ago when I had taken my first hair analysis. Sometimes it looks like you have an overabundance of calcium, but really what it is, is that calcium is not in the right places.

LEAD

We find lead in gasoline paints and pipes.

Lead can cause irritability because it affects our GABA, which is a calming neurotransmitter.

Lead blocks lymphatic channels.

Lead delays development in children; they often have learning difficulties.

Everyone is lead toxic due to one of the most egregious corporate schemes of the car and oil industries in the 1920s when they added lead to gasoline to make it a more efficient fuel. In the forties, there was another big lead boon when engineers discovered lead would take the knocking sound out of a combustion engine. In both cases, they knew about the dangers of lead.

Lead has always been highly toxic, especially to children's nervous systems. But in the gasoline case, of course, big profits won out and hundreds of thousands of tons of lead were spewed out of vehicles all over the world, causing millions of injuries, according to some sources. The lead is still present in the atmosphere from these events and the reason that we all have lead in our bodies.

Lead, of course, has been a known poison for over 2000 years. I mean, it was common knowledge in ancient Greece and Rome that lead poisoning could cause insanity and eventually death.

Children absorb 4 to 5 times more lead from a given source than an adult. One of the more devastating effects of lead poisoning in children is lower IQ.

Lead has a similar charge as calcium, so if you are calcium deficient as well as other minerals, the body is going to put the lead into the bone, lead gets stored in bones. The effects of lead poisoning may be seen in the long bones, for example, osteoporosis in the brain and insanity.

The red blood cells in anemia: lead competes for the enzyme that makes the hemoglobin component in our iron and that's what causes the anemia, and drop foot

and drop wrists, which are permanent damage to the peripheral nerves. And these are just a few of the problems.

But in the case of osteoporosis, it's actually a kind of reverse toxicity whereby the bone loss is due to lead mobilization after menopause in women. Women are lower in estrogen and lose bone at this time. The lead that has been stored in bones possibly for

decades is released into the bloodstream. Symptoms include fatigue and brain fog due to lead toxicity, headaches and memory loss accompanied by encephalopathy or additional signs of lead poisoning, as are colic, constipation, fatigue and lack of attentiveness.

Lead also impacts the liver and kidneys, but the damaging effects are primarily to the brain, and are sadly often irreversible.

Cilantro is the most effective lead remover that you can do at home.

MERCURY

Mercury is the most toxic metal to living things. Mercury comes from airplanes, coal burning, fossil fuels and so many other things.

Mercury is antimicrobial and in many common drugstore products because of that reason.

Dental amalgam is a major contributor to the body burden of mercury. And I know that some of you are experiencing having your amalgams removed because they've impacted your life so negatively.

The association with mercury and aluminum with Alzheimer's disease is a perfect example of synergistic toxicity, where the presence of additional metals that may be only slightly toxic by themselves become exponentially more toxic when together.

Mercury vapors are capable of being in any part of the body. But mercury would rather be in fatty tissue, making the neurons of the brain a prime target.

Mercury is the most deeply seated heavy metal in the body, and it takes actively detoxing it to get it out.

Mercury displaces iron in the brain, making it, the iron, toxic. This is a situation of oxidative stress, which lays the foundation for cancer causing free radical formation.

I came across something that said our laptop keyboards emit mercury, which we may be absorbing through our fingers.

I know this stuff can be very depressing knowing that we can't escape the toxins, but don't despair. We have solutions.

GLYPHOSATE

I don't know how many of you know about glyphosate, but it is now found in every part of the planet, and no good toxic talk would be complete without mentioning it.

Glyphosate, also known as Roundup, is one of the most toxic chemicals to living things, and presently affects all of humanity to some degree.

Glyphosate accumulates in the body over time and incorporates into your proteins.

Glyphosate is an herbicide, which means it kills all plants except those that are engineered to resist it. It has been marketed as being non-toxic, but this is false. There's plenty of data to refute this. It's hard to find but I found it!

Glyphosate contains chlorophyll benzene, which is a toxic chemical that was banned in France in 2007, in the UK in 1992, and in Canada way back in 1985. But Roundup is



sprayed over crops from airplanes still today all across the USA and other countries where it isn't banned.

Glyphosate contributes to the ability aluminum and other heavy metals have to cross the blood brain barrier. The way it does this is it pretends to be glycine, which is an important amino acid.

Glyphosate disrupts normal liver detox processes by inhibiting CYP 450 detox enzyme.

There's evidence that glyphosate toxicity is everywhere but perhaps the very best example I can give you is the victory of a man in California who won several millions of dollars in a lawsuit against Monsanto, who, of course, Monsanto is saying that roundup and glyphosate and clear benzene and everything is really very safe. But they did pay out several million dollars.

Glyphosate is found in genetically modified foods such as corn, soy, canola oil, lentils, peas, beans and sugar beets, which is what most of our sugar is made from. It's also in cotton and in tampons, which is really concerning.

Wheat is not genetically engineered, but the crops are drenched with glyphosate before harvest.

Virtually 100% of the people that have been urine tested test positive for this herbicide in the US. In Europe the levels are half, probably because they have banned the use of glyphosate and depending on what country you're in, you will have more or less glyphosate in your system.

This is probably your number one reason for eating organic; it reduces the toxic burden of glyphosate.

They even found glyphosate in vaccines...ok... moving on.

So now that we have a little information about where some of the most toxic heavy metals come from and a few of the symptoms they produce, and a little about glyphosate, we're going to take a look at how our bodies become toxic from exposure. Remember, all of the metals discussed here are found in the body naturally in small amounts and don't cause problems until the detoxification organs become overwhelmed and levels become toxic.

So how and why do the detox organs become overwhelmed? As mentioned, all metals can take the place of other metals or minerals causing cells to malfunction. They perform this hijacking action in two ways by rendering important enzymes nonfunctional, or by attaching themselves to protein carriers and hormones and blasting their way through cell membranes.

When the detox enzymes are inhibited due to these types of actions, this leaves the liver and kidneys, the two major detox organs, in a weakened state and unable to effectively perform their normal detoxification job. Toxins accumulate and not just heavy metals, but detoxing the metals is a good place to start.

Once metal is released, other toxins go along. And just to reiterate here, the systems that are affected by heavy metals are the brain, the nerves mostly, and there is a gut connection, our energy due to the mitochondria being hijacked, digestion, absorption, the bones, the heart hormones and the immune system are all the systems that are affected by heavy metals.

And we breathe toxins in, that's another way we're exposed. We breathe in lead mercury, cadmium, arsenic, aluminum, thallium, cesium, strontium, barium. And the list just goes on and on. The most common way these enter the body is through inhalation, and we eat them.

For those of you that may not know, GMO stands for genetically modified organisms, and the term is associated with a company called Monsanto, who is also responsible for roundup glyphosate, chloro benzene killer genes and many other Frankenstein like

practices that they don't want you to know about. The reason I say this is because we have been trying to get GMO food labeled for two decades, and so far, labeling is voluntary.

It seems like a no brainer to me to put GMO on the label. All the other ingredients are there, but they say it will scare people. Yes, that's why we want labeling, because GMOs are scary and bring with them their own set of health problems.

The metals in the soil where our food is grown comes from the air, and from volcanoes. The accident of Fukushima coal plants and other industries spew toxic vapors into the atmosphere. And when these vapors join with the water molecules in the air, they precipitate out and end up in the oceans. This is one way heavy metals and other hazardous chemicals can get into the water supply. Another way is through leaching of agricultural runoff that ends up in creeks and rivers. Picture a cycle that is constantly looping.

Toxic metals attach to proteins and hormones that normally protect the thin gut lining. They hijack these substances, as we learned earlier, and use them to get across the gut wall and into the circulation.

ELECTROMAGNETIC FREQUENCIES (EMFs)

As early as 2007, studies concluded that there were biological effects from electromagnetic frequencies, or EMFs, if the World Health Organization is someone you trust. Even they said EMFs were a possible carcinogen in 2011. Now the threats are so enormous they're barely talking about it anymore because what can they do?

EMF levels are 1 quintillion times higher than before we had cell phones.

There is now information regarding the dangers of EMFs from the depletion of dopamine to anemia to chronic fatigue. There has been a 12,000% increase in chronic fatigue in the past decade.



When 5G goes live, which it is in many U.S. cities now, a spike in mitochondrial diseases is predicted, such as autoimmunity, obesity, opiate addiction and cancer, to name a few.

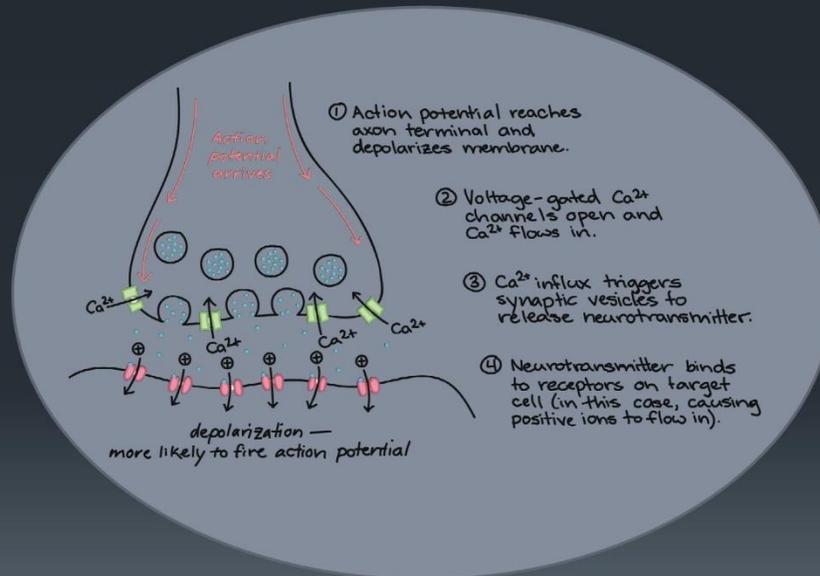
There are a couple of other observations about these types of non native EMFs, non native meaning artificial or not coming from the sun or a natural source. One is the

tendency for EMFs to permit a proton called deuterium to enter into our cells. Deuterium blocks specific enzymes in our energy pathways, another mechanism causing fatigue.

To top it off, the constant bombardment of frequencies, even though we can't see them, are still keeping our brains overstimulated, especially if we don't turn off some of the sources and especially at night when we're trying to sleep.

The way EMFs make certain cells malfunction like in neurons or muscle cells, is by stimulating channels to open, allowing too much calcium to flow into the cell.

Electromagnetic Frequencies (EMFs)



This sets off several cell effects, for example, inflammation or the formation and release of free radicals that can cause damage, including breaking your DNA. Also strongly linked to blood brain barrier penetration, heart defects, mental effects like stress, anxiety, depression, brain fog. Also strongly linked to infertility; has been shown to kill

eggs and sperm, and sleep deprivation due to the constant triggering of action potentials and neurotransmitters.

TIVON RIVERS

I'm just going to talk briefly about my experience and then I'll hand it back over to Val.

My journey first started back in 2014 after an incident I had when I was just getting chronically ill. And this was during a time when I was working out a lot, you know, and going through some personal things in my life but I was trying to stay healthy.

But the more I worked out, the more tired and fatigued and sick, just generally sick with malaise I got, and I didn't know what the cause could have been. I had to figure out what was causing these problems.

I realized that it was a combination of two things: that I was toxic and I had elevated blood sugar. I wasn't diabetic, but I had a diet that was high in sugar, and I had heavy metals in my body. And the combination of those things made me very sensitive to wireless radiation from cell phones, wireless routers, or just any kind of electronic activity in an apartment complex.

I couldn't sleep and it got really bad for me. I was suffering from insomnia, so my performance at work was degraded and I think some of you might be experiencing that now. It can be reversed.

But the worst case scenario, there were days that were literally like two or three days in a row, four days in a row where I could not sleep at night. I was getting all kinds of muscle spasms and it was keeping me awake. It was starting to become a serious problem. So I had to really, over the past couple of years, find out how to reverse this condition that I was suffering from. And I had to stop working out, in fact, and actually start from the ground up. Basically, change locations, change my diet.

And after all those things, I realized that it was all about the heavy metals and it's also about the environment - that we're bombarded with this wireless energy. It's making more and more people electro sensitive.

So, I have some suggestions to try. In addition to Val's presentation on detoxifying your body from heavy metals that she's covering, some things to suggest that you try, at least on a technical hardware level, that you can do around the home.

Turn off all wireless hardware, the smart pads, the mobile phones, the TVs and computers and the smart equipment in your home before you go to bed. And a lot of the other things I'm about to mention are things you can do to help with sleep.

A lot of people sleep on mattress sets with bed springs. Now there's been some research you can look it up about research students and colleges taking AM, FM radio sets, taking the wire that would normally be connected to the aerial and connecting that to the bed springs of the mattress and found that they can receive all kinds of signals and a broad range of radio stations. Essentially the metal coils in the metal bed, spring mattresses receive all kinds of frequencies. And these are the things that your body is extremely sensitive to. We suggest with that is look at seriously, look at investing in getting a foam-based mattress ASAP. They've got these latex mattresses that are really nice. Without proper rest you cannot survive.

Also look into getting what are called electric EMI filters for your power sockets. These are little boxes that you plug into your outlet and it gives a plug on the other end of it. So you're not losing a plug.

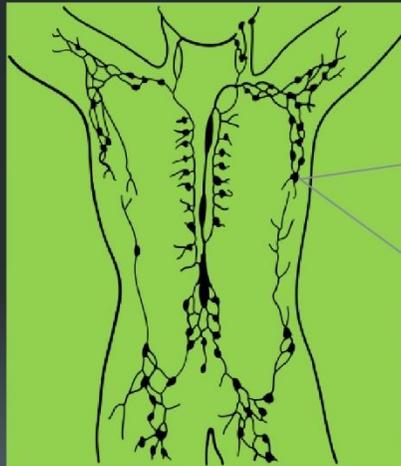
Make sure you have metal screens on your windows to block out signals coming in from the cell towers. It's a dramatic difference just by doing that. And also, if you have a grounding cable to connect to those screens, you're much better off.

Also if you have a smart meter look into putting aluminum screen mesh around your smart meter. There are videos online that can show you how to do that.

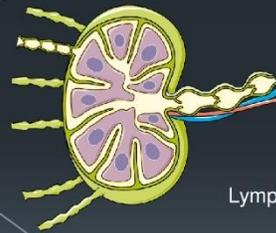
Purchase a ground grounding strap that's basically a copper band or conductive band with a wire that you can connect either to the house ground or to the earth ground outside your home. And you put that on you when you're about to go to bed so your body always remains grounded.

Reduce the amount of sugars and refined flour in your diet. There is a connection between the elevated blood sugar and electro sensitivity with these metals in our bodies.

The Body's Sewer System



The Lymphatic System



Lymph Node

The lymphatic system is the backbone of the immune system. It runs alongside the circulatory system and is a separate system that circulates a special fluid called lymph.

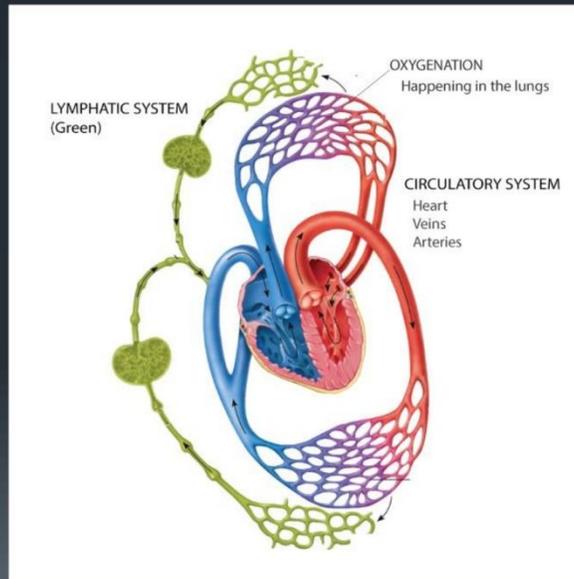
The lymphatic system's job is to catch metabolic wastes and toxins, filter them through lymph nodes and eliminate via the bowels.

We want to keep our lymph moving. When you hear the term lymphatic drainage, this means opening up your lymphatic system to drain toxins. This will reduce detox reactions or what we call healing crises that are the unpleasant aspects of detoxing that you may or may not experience.

If you do experience reactions, there are techniques that help. For example, dry brushing with a natural bristle brush helps keep the lymph circulating. Anything that exerts muscles helps lymph flow. Exercise.

The Body's Sewer System

The Lymphatic System



DETOX TIP
Lymph drainage is a prerequisite to heavy metal detox

A little more about the term lymphatic drainage. We are referring to opening up the lymphatic system to release toxins and what goes on in the liver, gall bladder and intestinal tract to remove them. There are specific nutrients involved here.

I don't know why the medical establishment practically ignores the lymphatic system whose functioning is vital to our health. We can't ignore the lymphatic system and we must prime it before actively detoxing heavy metals. And as the brilliant nutritionist, Dr. Robert Morris puts it, your lymphatic system is your sewer system, and your lymph nodes are your septic tanks. Clean them out!

THE GLYMPHATIC SYSTEM

The glymphatic system is the star of the show! The glymphatic system, or glial dependent lymphatic system, glial, referring to brain cells, is the brain's private waste management operation. This system clears metabolic waste and foreign substances from the brain while we sleep.

The way it works is when you are sleeping, the brain shrinks to about 60% to make room for the flow of lymph. When the lymph arrives at the brain, it literally bathes the brain in an ocean of nutrients while simultaneously picking up the metabolic wastes for removal. The brain returns back to normal size before awakening. This is one of the main reasons sleep and getting enough of it is so very important. This is doubly true if

you're going to begin a detox.

Here are just a handful of symptoms that many people are experiencing these days that can be cleared up with a good detox protocol. Confusion and brain fog, headache, chronic fatigue, weakness, fatigue or muscle pain, weight gain, joint pain, low energy numbness. Adrenal fatigue, chronic pain. Thyroid Issues. Low Libido. Constipation, nausea, or other digestive issues.

Now I know that many are frustrated with conventional medicine. Those of you who have chronic illness may have been to many doctors and they have not helped much. I myself am frustrated with conventional medicine and I don't go to doctors. I don't recommend that, but I don't go. I had about two years of the experience of tests and recommended prescriptions, and I was done.

Being toxic is life draining. And some people don't ever hear the detox message, which is a message of hope on so many levels. So many have regained a joie de vivre, an exuberant enjoyment of life.

Although I've given you some information about five of the most common troubling heavy metals, there are more to consider like strontium, barium, tin, etc. Therefore, it's good to start thinking about how to make detoxing part of your lifestyle, since I don't think the toxic assault is going to end any time soon.

Thanks for hanging in there with me. Just a couple more technical concepts before we get to the best part; what you can do to get started getting those metals out of your body so that you can enjoy life again.

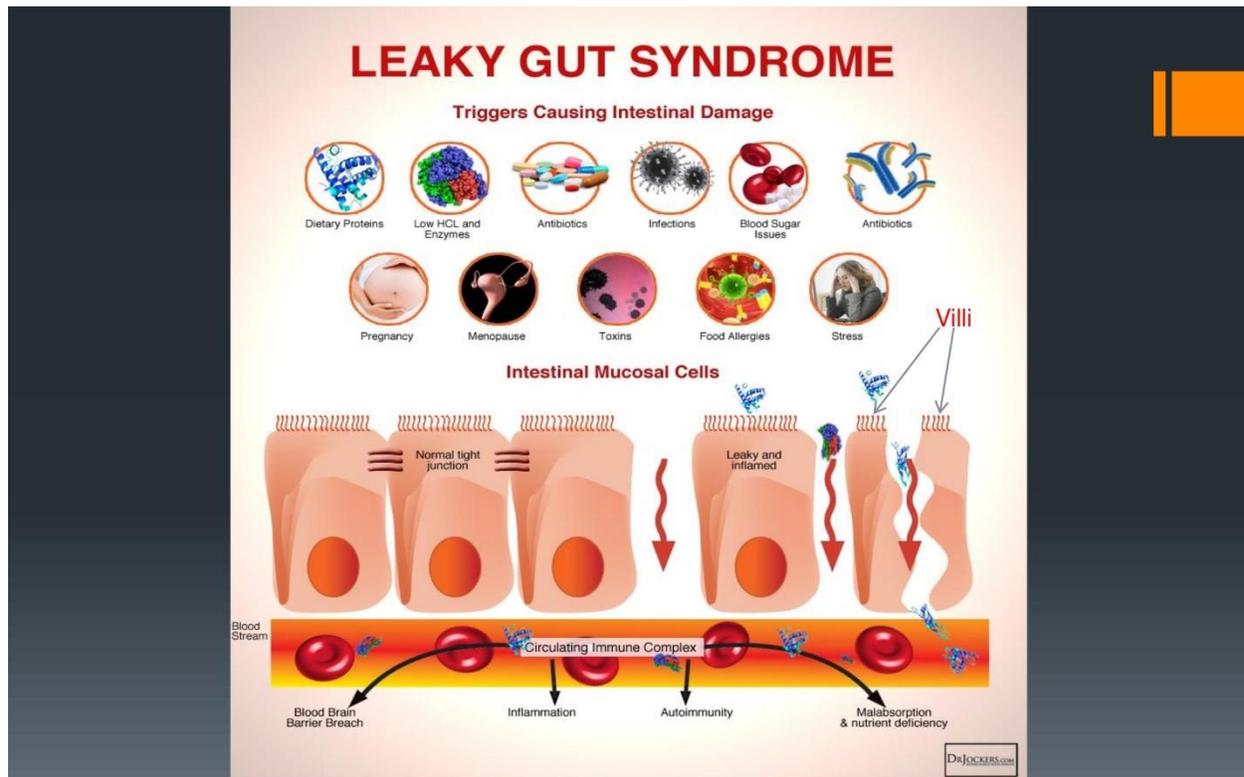
If you are one of the millions who suffer from heavy metal toxicity, you'll feel regenerated and renewed and so much better about life, relationships and everything.

There's simply no escaping the airborne toxicants or even what's in the food supply. Of course, making changes like going organic is a good step, but you'll have to actively purge the excess metals out of your body.

Whether you do it slowly or slightly aggressively, I don't recommend aggressive heavy metal detox at home, you've got to get those metals out. They are a tremendous drain on the body. And the unhappy news, as we now know, is we all have them.

Our bodies sequester away metals and other substances in storage areas to keep them out of circulation. This is to keep the brain and heart protected. So, we need to focus on basic detox principles in general and ask ourselves, how am I pooping? How are my kidneys working? Is my liver sluggish? Is my gall bladder doing its job? Am I sweating three times a week (because metals come out through the skin)? Is my lymph draining? Am I doing cleansing breaths or aerobic exercise? And as soon as the detox systems begin functioning, the body will let go of metals in waves.

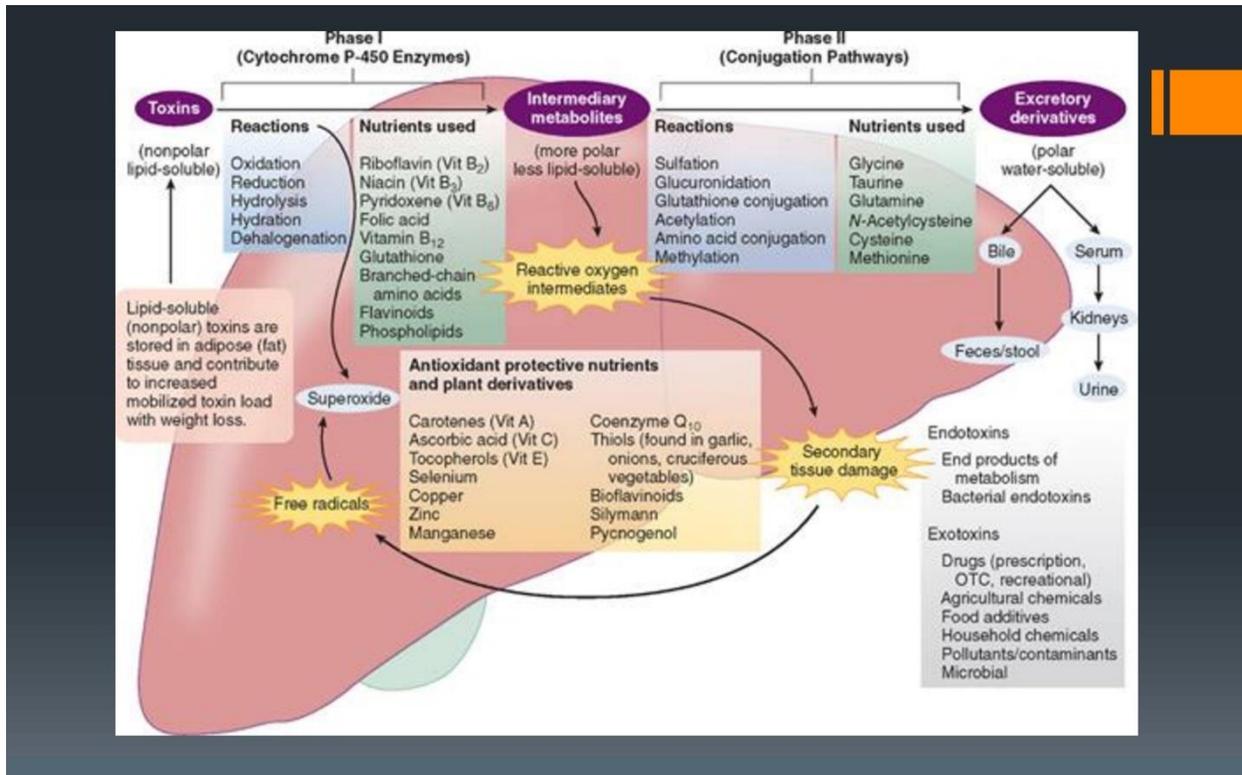
A large swath of nutritionists, myself included, believe disease begins in the colon and along with some lymphatic drainage, this is the place to start your heavy metal detox or any kind of detox. Throw good after bad, getting certain heavy metals out of the digestive tract allows other metals to be mobilized.



Leaky gut is a situation where the delicate villi on the inside of the intestinal wall and the cells they are attached to become damaged and misshapen, allowing particles larger in size than normal to go through the gut wall and back into circulation.

This is due to lifestyle factors like stress, poor diet and lack of exercise. Also overuse of antibiotics and other prescription drugs, heavy metal exposure, etc. The space between the cells called the tight junctions become not so tight. They literally flatten out and all that stuff goes through.

3 PHASES OF LIVER DETOX



Phase 1 requires all the B vitamins, all the C and E, folic acid glutathione and flavonoids, phospholipids antioxidants and the CP450 enzymes. And what this phase is doing is it's breaking down the toxins into that come in into the liver in fat, it has to break down that complex. When they're more manageable sizes, then they can be excreted.

The first phase is an oxidizing phase where fat soluble toxins are broken down by those enzymes and converted to less toxic particles that are ready for Phase 2 liver detox, after which the toxins are now able to be excreted in Phase 3 via the urine, colon and even the skin through sweating.

Now, although Phase 1 is called Phase 1, Phase 2 and 3 must be functioning well before we actively start breaking down toxins because we are going to start nudging the toxins from their hiding places. We have to make sure they have a quick exit out of the

body or they will redistribute and get reabsorbed into storage areas such as the organs, tissues and cells.

LUNGS

Love Your Lungs



Lungs

DETOX TIP

Cinnamon, clove, lemon, eucalyptus and rosemary essential oils are naturally antibacterial.

5 Ways To Help Your Lungs

- Breathing/Cardio Exercises
- Essential Oils – Diffuser, Inhalations
- Check for mold
- Limit exposure to known pollution/pollutants
- Improve diet with more water, fruits and vegetables (spicy foods help break down mucus in the lungs)



Because we inhale toxins, we don't want to forget about our lungs in the detox process. Most essential oils are powerful lung cleansers when diffused.

There's something called thieves oil that you may be familiar with based on a story from the 15th century, when Europe and Asia were being devastated by the bubonic plague.

The European group of four thieves seemed completely indifferent to the disease while robbing hundreds of corpses. According to the story, not even one of the thieves

contacted the deadly and highly contagious disease. When they were finally caught and sent to court, the magistrate offered them a deal, their secret for a reduced sentence.

KIDNEYS

Our kidneys are amazing. Every 30 minutes, they filter all the blood in our body. By filter, I mean they remove toxins from the blood and excrete them in the urine. Our kidneys also regulate the PH of our bodies, preventing us from becoming too alkaline or too acidic. These are big, important jobs, especially when you are actively detoxing heavy metals.

The importance of drinking enough water cannot be overstated. You can prevent and even get rid of kidney stones just by drinking enough water. Your kidneys love to be flushed. Move those toxins out!

When you are actively detoxing, there are bacteria and viruses that will be dying off. This causes some discomfort, usually in the joints. Epsom salt baths are amazingly effective here. When the salts hit the water, they turn into magnesium sulfate. We learned about the importance of sulfate on the inside, but it also has the benefits on the outside of the body as it helps the body flush out the toxins.

SKIN

When I see people with great glowing skin, I take that as a sign of health.

Dry brushing boosts circulation and stimulates the lymphatic system to release toxins as it exfoliates any sloughed off dead skin cells that can clog pores.

Because sauna encourages sweating, they are one of the best ways to detox through your skin.

One cup of apple cider vinegar and one cup of Epsom salts in a hot bath helps draw out toxins through the skin, as do clay masks. Hydrogen peroxide sprayed on the skin after showering delivers oxygen to your pores. You can also add 1 to 2 cups to a bath. These practices help relieve joint pain and skin conditions like eczema and acne.

Detox is a normal physiological process; the cells of the body detox naturally all the time.

What we are really doing when we go on a detox is helping, urging or forcing, if you will, the detoxification process to speed up a little. It's not realistic to think we'll ever be toxin free, there are just too many environmental toxins these days. But we can have a detox lifestyle that is a slow and even process, and incorporate periodic advanced detoxes to counteract exposures.

Please go organic in addition to eating more sulphur foods. Eat plenty of greens and other non-starchy veggies, herbs and spices, algae and other superfoods.

Bone broth is a wonderful, nutrient-rich choice for your detox journey, and don't buy into the cholesterol myth! You need cholesterol to be able to synthesize sulfate, another very important player in the detox process - a huge player as many of the processes involved require a process called sulfation which happens in the liver, brain, small intestine, kidneys and blood platelets.

These are the areas where you can expect improvement. After your detox, you'll have more energy. That's number one for me. Your metabolism goes up. Digestion is better. Cognitive function is better. Way, way, way reduced pain. Much better sleep and rest. Libido (always good), and longevity.

