

DETOX YOUR LIFE

A COMPREHENSIVE GUIDE



Detoxification is simply the process of removing toxins from our bodies and, despite it being trendy today, detoxing is actually an ancient method of healing.

Most of us realize that we live in a very toxic world, with everything from glyphosate in our food to heavy metals in our water. Although we can't always choose our exposures, it is important to be aware of where toxins might be found in our bodies and then, how to detoxify, or cleanse, ourselves from them. There are many different ways to detox and many of them have merit. The liver is the primary organ for processing toxins but sometimes the liver becomes overwhelmed because of the sheer amount of toxins we give it to process. In this case, the body is smart and will try to hide toxins in places where they have less adverse effects—for example, in body fat. This is why sometimes when people lose weight, they begin to experience symptoms of a detox because toxins have lost their home in body fat and are now recirculating in the body. A lot of people associate detoxing, or cleansing, with something you do once a year and which possibly includes drinking something gross. However, our philosophy on detoxification is that it is something to incorporate daily and make a part of one's lifestyle while also being conscious of where toxins may be lurking.





FUNDAMENTALS OF DETOX

"TOXINS IN"

Avoid inputting new toxins

VS

"TOXINS OUT"

Work to detoxify stored

There are really two sides of the equation when it comes to detoxing-minimizing exposures and expelling toxins. It is just as important to bring awareness to how we expose ourselves to toxins as it is to expel the current ones.

Heavy metals can be very toxic to the body. The term "heavy metals" encompasses metals such as mercury, cadmium, arsenic, chromium, thallium, copper, aluminum and lead. Having a high amount of one or more of these metals in the body causes severe symptoms for individuals—symptoms such as brain fog and chronic fatigue. Heavy metal toxicity often goes misdiagnosed for a long time. There are a couple ways we acquire these metals—we inherit them from our mothers or acquire them through our environment.



Detox Your Life: A Comprehensive Guide

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SOURCES OF HEAVY METALS

MERCURY

Amalgam fillings

Vaccines

Seafood



COPPER

Tap Water

Intrauterine Device (IUD)



ALUMINUM

Deodorant

Vaccines

Pharmaceuticals



LEAD

Tap Water

Beauty Products

Lead Paint







Mercury is extremely toxic and is found throughout our environment. Many vaccines contain the ingredient thimerosal—a form of mercury. Amalgam dental fillings also contain mercury that over time "off gas" or emit gases that create mercury toxicity in the brain. Many ocean fish also contain mercury. Today most dentists avoid using amalgam fillings but if you need to have a cavity filled, confirm before the procedure that the dentist does not use amalgam. If you currently have amalgam mercury fillings and are interested in getting those removed, we recommend working with a skilled biological dentist who can remove them safely. Contact our office for the names of dentists with whom we have developed working relationships and who can safely remove amalgam fillings.

Aluminum is another element that is found in small exposures throughout our environment but which starts causing negative issues when we are chronically exposed to it. The most common exposures to aluminum are from conventional deodorant and immunizations. We recommend exploring non-toxic deodorants and other personal care products. We love <u>Pure Havens deodorant</u> because it works very well and contains "clean" ingredients. Aluminum found in immunizations is a highly contested topic but we encourage you to start by <u>exploring the ingredients in vaccines</u> and then make an informed decision based on full awareness.

Tap water can be a major source of lead and copper toxicity as well as environmental chemicals such as glyphosate (the active ingredient in the pesticide Roundup*). We recommend filtering your water as much as possible for your family. Berkey filters are a great option for drinking water and are also fairly economical. We also love deuterium depleted and hydrogen water for additional benefits, but step one is making sure your water source does not contain toxins. As far as a shower filter, we recommend an active carbon and silver filter that can be attached to your showerhead. If you are concerned about specific contaminants or how stringent a filter you may need, we recommend testing your city or well water using a test kit.

Copper is also a big deal for women who use a copper intrauterine device (IUD) for birth control. Dr. Jolene Brighten has written an informative <u>article on birth control</u> if you are looking for options beyond the pill and an IUD.



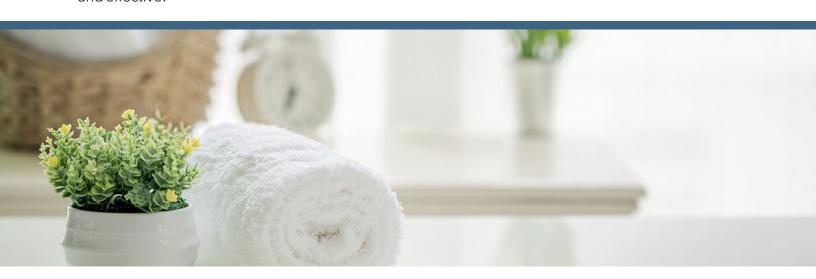


As mentioned previously glyphosate is the active ingredient in Roundup® and is extremely toxic to human health. It is classified as a Group 2A carcinogen by the American Cancer Society meaning that current research suggests it is "probably carcinogenic to humans." Our main office is located in an agricultural region of Kentucky which means that glyphosate is ever present in our environment. We may not be able to directly influence its presence in our environment, but we can somewhat control our exposure to glyphosate that comes through our food. We recommend buying organic produce according to the Environmental Working Group's Clean 15 and Dirty Dozen guidelines. Talking and shopping with farmers at your local farmer's market is a great way to find clean produce. Of course, cultivating your own home garden puts control of your food source into your own hands.

We also recommend making the switch from conventionally raised meats to grass-fed and grass-finished meats. Conventional meats are from animals often fed genetically modified organism (GMO) grain and soy which most likely were sprayed with toxic pesticides. Finding a local farmer who raises animals on a grass diet is a great option as a source for meats, but we realize this is not always feasible. We love <u>US Wellness Meats</u> because they are quality, non-toxic meats. They also offer organ meats and conveniently ship directly to your door. Look for bone-in and skin-intact meats if possible, as they provide more nutrients and flavor.

Vegetable oils are also something to consider when looking at toxins in your food. Vegetable oils that you should avoid include canola, soybean, sunflower, corn, safflower, grapeseed, cottonseed and peanut oils. This includes cooking with these oils as well as reading food labels to see if processed foods contain any of these oils; almost all processed foods will contain one or more of these oils. Safe oils that we recommend stocking are butter from grass-fed cows, ghee, coconut, avocado, macadamia and olive oils. For cooking at high temperatures, we recommend using avocado or macadamia oils.

In addition to inventorying what we eat and drink, we also need to strive for a non-toxic home environment. This includes everything from indoor air quality and cleaning products to your mattress. Most people would be surprised at how many toxic chemicals are in the products they use every day. One study even found a link to asthma in children who had frequent exposure to cleaning products in their home. Start by comparing your cleaning products to this list of ingredients to avoid and then switch out products at a rate practical for you. We love Pure Haven products because they are non-toxic and effective!





HEALTHY HOME



Mold in the basement - Mold is common with water damage in basements of homes. Mold has a tendency to incite allergies and sinus related issues but can be associated with a wide variety of symptoms.

Cleaning products in the kitchen - Cleaning products can be very toxic to human health. Some of these toxic chemicals to look for include Retinyl palmitate, Sodium lauryl sulfate (SLS), Sodium laureth sulfate (SLES), and polyethylene glycols-just to name a few.

EDCs in mattress in the bedroom - Endocrine-disrupting chemicals are common in and on furniture. Mattresses are a common source but not limited to.

Beauty products in the bathroom - Many beauty products contain similar toxic ingredients to cleaning products including formaldehyde and mineral oil.





"Endocrine-disrupting chemicals" (EDCs) is a term applied to chemicals that imitate hormones and thus disrupt the endocrine systems of our bodies. A lot of times this results in men beginning to show female characteristics, such as gynecomastia or developing breasts, due to estrogen mimickers. Women can also gain unnecessary weight because EDCs slow their metabolism. BPA (Bisphenol A) is one of the more prevalent endocrine disruptors. It made the news for being a toxic ingredient in plastics and as a result was removed from many mainstream water bottles. This is a step in the right direction, but we recommend avoiding plastics when consumption is involved. Glass and stainless steel bottles for coffee and water are safer alternatives. Prenatal exposure to phthalate (a common ingredient in plastics) has even been linked in research with cognitive shortcomings in children.

It isn't just plastics though–EDCs are also found in non-stick cookware and furniture materials and fabrics. We recommend investing in cast iron or stainless-steel cookware. Avoid storing food in plastic containers and use glass instead. Furniture and/or fabrics sometimes have flame-retardants of which you may not be aware. These flame retardants are extremely hazardous to human health and specifically have been known to disrupt the thyroid. Thankfully these are beginning to be phased out, but if you have old furniture, or are buying new furniture, it is worth investigating whether or not they contain flame retardants. For non-toxic mattresses, furniture and bedding, we recommend <u>Avocado Green Mattress</u>.

For improving indoor air quality, we recommend switching artificially scented products for essential oils and possibly investing in indoor plants. Pure Haven has a line of <u>organic essential oils</u> that we recommend. For a slightly larger investment an <u>Air Doctor</u> can be a game changer in filtering out airborne toxins—especially mold related toxins.

Elimination of mold plays a key role in a healthy home environment. We have a <u>whole resource on mold</u>, but we encourage you to at minimum bring it into awareness, because we realize this is an easy topic to discount. Mold affects many homes and workspaces in our region due to the humid climate in the Midwest and Southern United States. Mold can also be present in certain foods such as peanuts and coffee. We recommend drinking an organic mold-free coffee such as <u>Purity</u> and shying away from peanuts altogether. Substituting more nutrient dense nuts such as almonds or Brazil nuts is a great option.

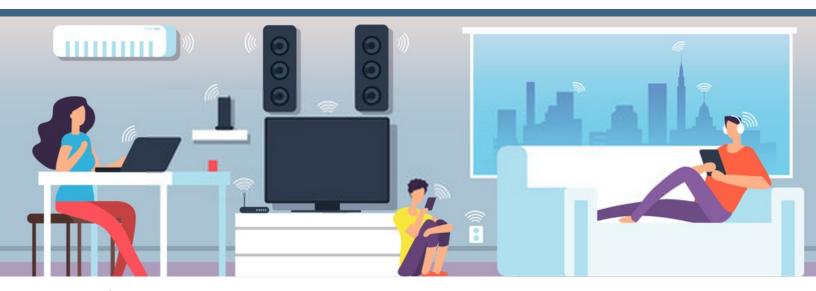
We mentioned deodorant in relation to aluminum, but products such as makeup, skincare, toothpaste and perfumes can also contain toxins. BeautyCounter and Pure Haven have great options for makeup and skincare that are also efficient. Toothpaste often contains fluoride which is extremely toxic to the brain as well as to gut microbiome (the microorganisms that make up the environment in your digestive tract). We love this probiotic toothpaste because it is non-toxic, fluoride free and also supports the oral microbiome. Perfumes generally contain artificial scents. We recommend finding essential oil-based products for anything scented. Check Pinterest for how to make your own essential-oil roller bottles and use them instead of perfumes. Bug sprays are another issue as they contain many toxic chemicals that harm you and the environment. doTERRA has a bug resistant blend that we recommend.



Many individuals, especially moms, worry about having extremely effective sunscreen to protect their skin and their children's skin. The reality is that sometimes the toxic sunscreen may harm more than would sun exposure. BeautyCounter has several sunscreen options that are clean, but we also encourage you to begin to shift your perspective on sunlight. Ever increasing research highlights the benefits of moderate sun exposure. Of course, try not to sunburn if you have a fair complexion, but exposing your eyes and skin to the sun without wearing sunglasses and sunscreen, even if just for five minutes, holds a multitude of benefits for sleep, mitochondria and heart rate variability.

Sun exposure brings us to our next toxin/nutrient—light (depending on how you use it). Our sleep and wake cycles, and therefore our daily energy, are heavily influenced by light. Light cycles that differ from what our eyes would see prior to the introduction of the light bulb can send signals to our brain that it is a different time of day than in reality. This false signal causes our bodies to manufacture incorrect hormones to deal with energy and sleep. This doesn't mean that artificial light is the same type of toxin as aluminum, for example. The body is not storing this toxin, but rather the wrong light is causing a less than desirable physiological response. Getting outside and exposing your eyes and skin, if possible, to natural sunlight at different points throughout the day is an easy way to combat this. We also encourage you to invest in a good pair of blue/green light blocking glasses to wear after the sun goes down if you have to look at artificial light. We love Ra Optics because their glasses are extremely effective at blocking out blue and green spectrums of light. It is important to understand that blue light is not bad or something to be avoided. Instead, blue light at the wrong time of day is counterintuitive because it signals to the body that it is the middle of the day.

Non-native electromagnetic fields, or EMFs, fall into the same category as light in that our body is not storing this toxin, but it is still certainly toxic to the body. Although you can't see or feel EMFs (most of the time) they are caused by dirty electricity; their negative effects can be somewhat mitigated by putting your cell phone in airplane mode and turning off your Wi-Fi. You can also counteract this by purchasing a STETZERiZER® monitor, and then depending on what levels you find, buying plug-in filters that keep EMFs at bay. There is also new EMF-blocking technology from Synergy Science that is extremely comprehensive but also pricier. We recommend starting with Stetzer filters and if you find a significant EMF problem or are electro sensitive, look at Qi technology. The book EMF*D by Dr. Mercola is a great comprehensive guide on EMF's and how to mitigate their effects.





Grounding, also known as earthing, is great to combat the stress caused by EMFs-just be aware not to practice grounding right next to a cellphone tower. Grounding or earthing is simply physically connecting your body with the earth. This is generally done by walking barefoot, but can also be done by touching your hands to the earth or sitting on the ground. If your living or work situation doesn't allow for grounding, there are also grounding mats that help you get similar benefits. We love the mat from earthing.com as well as a documentary on their website that explains all about grounding.

Prescription and over the counter drugs can be toxic in their ingredient contents and also because they contribute to the overall load that the liver has to process. Common drugs that could pose an issue are hormonal birth control, statin drugs and psychiatric medications. Obviously don't stop taking medication that you are currently prescribed but do be aware that they are contributing to the burden on your liver. Over the counter medications can also play a role in increasing toxicity—Tylenol® and Ibuprophen® are two major culprits. There are alternative forms of pain relief if needed but at minimum be aware of the stress on your liver and avoid the chronic use of these medications.

This may go without saying but it is best to avoid alcohol if you have a sluggish liver and/or you are attempting to detoxify your body. Not only can alcohol be toxic, but your liver must process alcohol and doing so takes the liver away from detoxifying other chemicals. Instead of alcohol, take an Epsom salt bath for relaxation and stress relief.





HOW TO DETOX

Removing toxins from one's body may require a couple of different approaches. Unless your toxic exposure occurred very recently, most likely you will be dealing with stored toxins. Addressing stored toxins requires three concepts: challenging, binding, and then excreting toxins. In the process it is essential to look at how detoxification is related to bowels, sweat, breath, fasting, sleeping and the nervous system as well as testing for toxins with proper functional medicine testing.

CHALLENGING

Vegetables and Herbs

Epsom Salt Bath

Fasting

Oil Pulling



BINDING

Binding Supplements

Lymphatic Support

Hydration

Liver and Bile Supporting Supplements



EXCRETING

Coffee Enema

Sauna

Castor Oil Packs

Bowel and Microbiome Supporting Supplements





Challenging a toxin simply means to draw it out. There are several ways to do this, but the easiest and least abrasive way is to begin incorporating certain foods into your diet that naturally draw out toxins. Some of these foods include chlorella, ginger, turmeric, spirulina, leafy greens, broccoli and beets. If any of these foods are unfamiliar to you, and you're wondering how to consume them, juicing is one great option. Also, Pinterest is always full of ideas and recipes for incorporating these foods into your diet. It is worth mentioning that chelation therapy under the supervision of a medical professional is also a way to draw out toxins; this is not a service we offer at ChiRho.

Heavy metals can be especially hard to detoxify and we recommend using the supplement <u>Detox Synergy</u> for challenging and binding heavy metals. Epsom salt baths can also be beneficial when detoxifying not only heavy metals but other toxins as well. Use approximately four cups of Epsom salts in your bath for optimum detoxification benefits.

Another way to challenge toxins is by fasting. Because fasting involves burning fat while one's body is in a state of ketosis, toxins stored in fat cells will be released during the fast. Fasting also works as a detoxification method because it allows those organs that are generally impacted by food consumption (such as the stomach, small and large intestines, gall bladder and liver) to rest and repair. If you are interested in learning more about fasting, click here to read our fasting guide.

Oil pulling is another way to draw out toxins, specifically toxins that lurk in the mouth. This is something we recommend as regular practice, not only for detoxification but also for general oral health. It is a great alternative to conventional mouth washes that contain many toxic ingredients. Oil pulling is fairly simple and involves swishing a tablespoon of coconut oil around one's mouth for 10 to 20 minutes. Click here for a how-to video on oil pulling.

Binding toxins is the second process of detoxification. A binder is simply something that "grabs" a toxin so it can be removed from cells and tissues and expelled from the body. If functioning properly, our bodies have natural binders, but if your detox pathways are dysfunctional, or if you are expelling an increased amount of toxins, it is a good idea to increase binders. Our favorite binder supplements are ChiRho Cleanse and Ultra Binder from Quicksilver Scientific.

The last process of detoxification to look at is expelling toxins. Toxins are expelled mostly through sweat, breath, urine and bowel movements but before we get to the point of expulsion, we need to look at lymphatics, liver and bile. The lymphatic system is a system throughout the body that helps detoxify our cells. Similar to a clogged pipe, lymph fluid can get stagnant or clogged due to an increased amount of toxins. You may have noticed when you had an infection that your lymph nodes were swollen or that your doctor checked your lymph nodes. This is because when we have an infection, the lymphatic system works extra hard. The best ways to support the lymphatic system are through dry skin brushing, exercise/movement (specifically inversions or getting upside down), vibration plate therapy and restorative sleep. Click here for more information on dry skin brushing.



In the process of challenging, binding and excreting toxins, the liver plays a big role. The liver can be overtaxed due to the sheer amount of toxins in our environment, so it is paramount that we support liver function. One great way to do this is through visceral manipulation. This involves a licensed therapist doing gentle physical manipulations to increase circulation in the area. There are also great supplements that aid liver function. One of these is <u>liposomal glutathione</u>. Glutathione is an antioxidant naturally produced by your body that assists your liver in the process of detoxification. Supplementing with extra glutathione can be beneficial when your liver is in a less than optimal state and cannot produce enough glutathione. Another liver supporting supplement we recommend is <u>Hepato Reset</u>; this supplement includes liver protective mushrooms and NAC that naturally optimize the function of liver enzymes, and upregulate the body's natural production of glutathione.

It is also important to support gallbladder and bile while detoxing. One way to do this is make certain you stay hydrated. We recommend making a gel water of lemons or limes, Himalayan pink salt and chia seeds. Check out a recipe for it here. Another way of supporting your gallbladder and bile is to make sure your body is not depleted of essential vitamins like A, D, E and K. It is a good idea to get baseline lab work that tests these levels as they are important for several different aspects of detoxification. If testing is not an option, we have a great multivitamin, Ancestral Multi, that contains essential vitamins. Another beneficial supplement for liver and bile is PC Max. This phosphatidylcholine supplement aids in bile production and has been shown to help prevent stagnation in bile fluid.

After the lymphatic system and gallbladder have done their thing, a toxin needs to be eliminated from the body through sweat, urine or bowels. An infrared, or full spectrum, sauna is a great way to detoxify through sweating. If you are near our office in Morganfield, Kentucky, we have a full spectrum sauna there and offer several different sauna packages. But, if this is not an option, we suggest you find a great sauna in your area or that you invest in an in-home sauna. Check out JHN Lifestyles for more information on the benefits of saunas; they also sell home sauna units. Other ways to detox are through sweating during activities that include regular exercise and hot yoga.





Making sure you are hydrated is vital to this form of detoxification. We recommend drinking half of your body weight in ounces of water, but from there upgrading it by adding lemons or limes, Himalayan pink salt or Celtic salt and chia seeds. We also recommend hydrogen and deuterium depleted water to aid in detoxification.

While detoxing, it is also important to support the bowels. In terms of detoxification, this means having two to three bowel movements daily. Castor oils packs and coffee enemas are a great way to encourage more frequent elimination. Castor oil packs work by reducing inflammation and increasing circulation. A castor oil pack can be placed anywhere on the abdomen and depending on your specific issues, we recommend alternating between targeting the liver and the bowels. Check out Queen of the Thrones for more information on castor oil. Doing a coffee enema is a great way to eliminate toxins and make the gut "happy." Read Ben Greenfield's article on how to do a coffee enema here. Also, a great supplement that supports bowel motility is GI-Moov.

Supporting the bowels also means supporting the gut microbiome, because an inflamed gut will have trouble moving waste appropriately. Visceral manipulation can also be beneficial here as well as avoiding inflammatory foods and taking certain gut soothing supplements. Inflammatory foods will be different for each person, but we recommend checking out our <u>Anti-Diet food guide</u> as well as considering having yourself tested for food allergies. The supplements we recommend for soothing the gut include <u>GI-Vive</u> and <u>ChiRho Cleanse</u>. These supplements are powders and can easily be added to a smoothie. <u>Liposomal Cats Claw</u> is another supplemental option for reducing inflammation and soothing the gut.

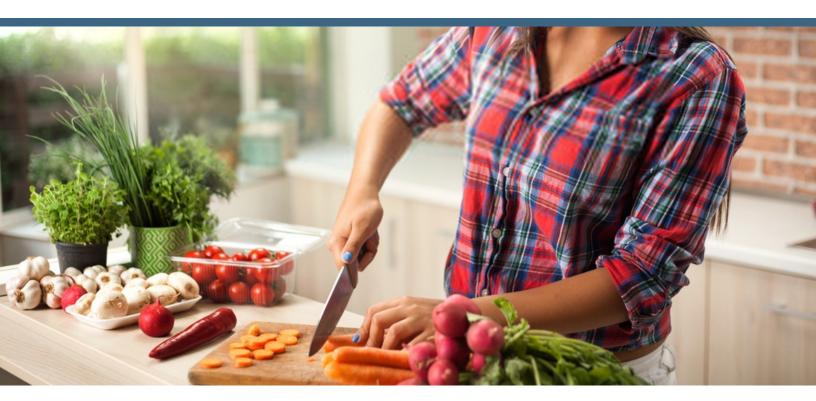
The body also detoxifies during sleep, so getting adequate sleep and tracking to see if you get adequate sleep is of paramount importance. An Ōura Ring uses several metrics to calculate an overall sleep score. These include total sleep time, sleep quality, how many times you wake during the night, sleep timing and amounts of REM and deep sleep. We recommend <u>purchasing an Ōura Ring</u> because all of the information it provides. If you would like more detailed information on strategies for improving sleep, please <u>click here</u> to visit the sleep section of our Ōura Ring Guide.

Some external factors can affect the body's ability to detox effectively. The detoxification process is significantly impacted by stress and the nervous system—specifically by the autonomic nervous system (ANS). At ChiRho, we look at wellness through a lens of C.A.M.P., where the "A" stands for the autonomic nervous system. The ANS has two branches, the sympathetic and parasympathetic. The sympathetic state is our body's fight, flight or freeze response to stress. The parasympathetic state is one of rest, digest and detoxification. Detoxing is more difficult for individuals who are stuck in a sympathetic dominant state. The sympathetic dominant state can be measured through Heart Rate Variability testing, which we encourage you to further investigate in our HRV and Ōura Ring Guide. Our recommendations for getting into a parasympathetic state include getting regular chiropractic adjustments, spending time in nature, in prayer, gratitude journaling and meditation.

Controlling toxins in our bodies involves a two-part approach: minimizing exposure to toxins and eliminating stored toxins. Changing one's environment can seem to be overwhelming, but making gradual changes that are scalable to your individual situation is easier.



As you read through this guide, you can see that detoxifying stored toxins can be complex and you may find the process more productive with the guidance of a health care provider. At ChiRho, we would love to work with you on this journey. We offer functional medicine testing that specifically identifies which toxins you are dealing with, and then we partner with you to develop a personalized detoxification plan. Some of the testing we offer includes mycotoxin testing for mold, heavy metal testing, comprehensive bloodwork, stool testing for identifying any potential gastrointestinal issues, and a toxicity panel that covers a multitude of toxins in our environment. If you are interested in becoming a ChiRho client, click on this link for new patient information. As with changing your environment, we suggest taking the lifestyle recommendations associated with detoxification and integrating them into your daily lifestyle. This definitely doesn't mean doing everything we suggest every day but we can help you gradually integrate various suggestions into a lifestyle that continually supports detoxification.



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