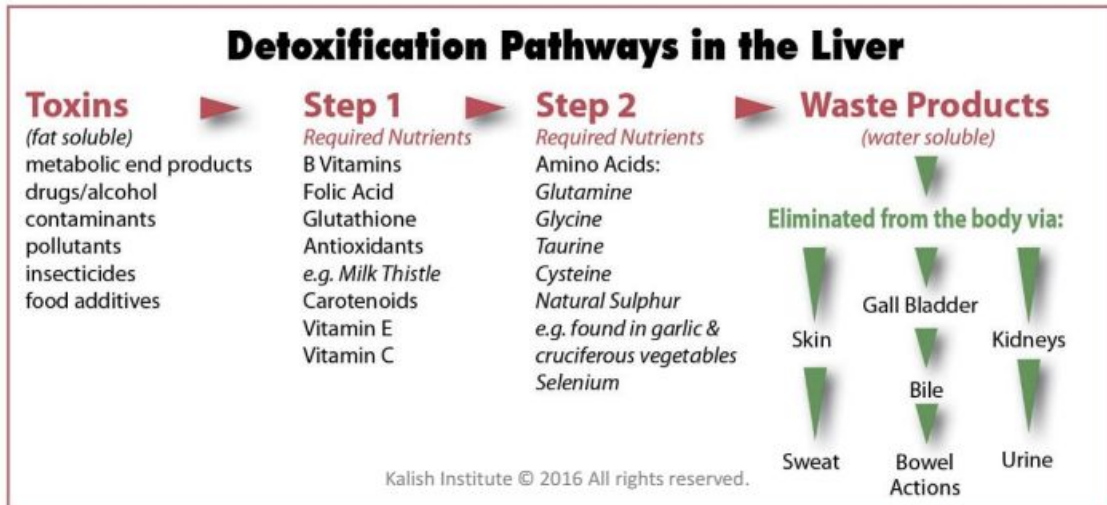


Heavy Metal / Mercury Detox Program:

Detoxification is the process of transforming fat soluble toxins into a water soluble form that may then be excreted from the body



Key to the treatment:

1. **Repletion of cellular nutrients**
2. **Repair of gut dysfunction**
3. **Bowel restoration** which may include anti-fungal drugs, antibiotics, herbs, probiotics, and glutamine
4. **Enhancement of liver detoxification:**
 - a. facilitated by Epsom salt baths
 - b. sauna therapy
 - c. oral, intravenous, or topical glutathione.
5. **Detoxification of heavy metals:**
 - a. DMSA provocation challenge of 20mg/kg with a 6-hour urine collection.
 - b. DMSA is given at a dose of **around 10mg/kg every eight hours for three days, with 11 days off. The cycle is repeated 4 - 6 times.** followed by another provocation challenge test.
6. **Supplements with Phase I and Phase II Nutrients:**
 - a. multivitamins and minerals, essential fatty acids, magnesium, digestive enzymes, Coenzyme Q10, and antioxidants like selenium, zinc, and vitamins C, E, and A.

Understand that this approach has **to be done carefully and systematically** to make sure you get your body ready for removing the metals.

Step 1: Getting Ready for Detoxification

This process can take a few months, and I can't stress enough how important this preparation step is. It is accomplished by optimizing your nutritional status and detoxifying ability. Once this is done you will begin mobilizing and binding the metals in your body and excreting them through your urine, bile, stool, and sweat.

1. **Optimize your gut function.**
Eliminate the common food allergens (dairy, gluten, corn, eggs, etc.), taking probiotics and enzymes for one to two months before detoxifying.
2. **Optimize your nutritional status for detoxification.**
Use healthy fats (omega-3 fats, olive oil, and flax oil), amino acids (which boost all your liver's detoxification capacity), and minerals, particularly zinc and selenium (which help your body detoxify metals).
3. **Enhance your liver's detoxification pathways.**
Take folate and vitamins B12 and B6 and eating sulfur-containing foods such as broccoli, collards, kale, daikon radish, garlic, onions, and omega-3 eggs.

Make a DETOX SMOOTHIE daily

4 oz each : beet, collard, carrot juice 4 oz,
2 oz each : blackberry, pomegranate juice
green tea, honey

4. **Start sauna therapy.**
Make sure you take adequate electrolyte and mineral replacements to prevent dehydration and mineral loss from the sweat.
5. **Optimize elimination routes for metals including your urine, stool, and sweat.**
Drink 8-10 glasses of 8 oz water daily
Take soluble and insoluble fiber: 2 tablespoon flaxseed meal, oat bran, psyllium
Saunas to sweat twice a week

Step 2: Integrate Additional Steps to Support Detoxification

- Alginate from seaweed (this binds to metal in the gut)
- Selenium, zinc, n-acetylcysteine, lipoic acid, milk thistle, and garlic (e.g. EcoDetox by Econeugenics, Ultraclear by metagenics)

Step 3: The Metal Detoxification Period x 3 months

- Get a test to assess your total body load of mercury. With either DMSA challenge

test at a dose of 20-30 mg/kg for the challenge test. Or do a Mercury Tri-test. To get a Pre-treatment level.

- Find a biological dentist to evaluate the extent of your mercury fillings and options for replacing them.
- Eliminate metal sources from fish or environment
- **Treatment:**
 - Oral DMSA* is safe and effective. It is taken as follows: **One 250 - 500 mg capsule (5-10mg/kg) orally every 8 hours before meals (if can tolerate).**
 - **Take it for 3 days. Then take 11 days off. Do this for 6 cycles.**
 - Then recheck your level of mercury through the challenge test.
 - **Day 1,2,3 then 15,16,17 of the month x 3 month.**
- **Do saunas daily** — especially on those days when doing DMSA.
- **Must have sufficient antioxidant and vitamin doses** for 3 months while undergoing this process to help bind and remove the toxins:
 - Detox Antiox 2 twice a day :contains**
 - Vitamin C - 1000 mg daily
 - NAC - 600 mg twice a day
 - Lipoic acid: 200-300mg daily
 - Glutathione (liposomal) 400 mg -1000gm daily**
 - Magnesium citrate or glycinate 400mg daily** or until 2 x bowel movement daily
 - B complex** especially if you have MTHFR or COMT gene mutations
 - Milk Thistle**
- **Drink enough 10-12 glasses of filtered water and fluids to make urine clear.**
- **Make sure you have bowel movements twice a day.** This is very important or you will reabsorb mercury from the gut.
 - 2 tablespoon ground flax seeds to shakes or foods,
 - 1-2 150mg magnesium citrate capsules twice a day if you are not going regularly.
 - Take stronger laxatives if you have to such as senna or cascara.
- **Diet** with lots of:
 - Sulfur containing:** broccoli, asparagus, avocado, garlic, spinach
 - Vitamin C :** Lemon/lime
 - Selenium:** Brazil nuts

Flavonoids: berries, legumes, onion, parsley, cabbage, pear, apple, dark chocolate

Resources:

<http://drhyman.com/blog/2010/05/19/how-to-rid-your-body-of-mercury-and-other-heavy-metals-a-3-step-plan-to-recover-your-health/>

Other supplements useful for detoxification:

Nutrient or Herb	General Use (Total amt. per day)	Highlighted Properties
Modified citrus pectin and seaweed-derived alginates (Pectaclear by Econeugenics or Modified pectin from ALLergy research group)	3 caps 1-2 times a day on an empty stomach (1-2 hours from other supplements or food)	Toxic metal removal Environmental toxin removal
Phase II detox formula (Ecodetox by Econeugenics)	2-4 caps per day with food (after 1-3 months of above, use both together)	Toxic metal removal Liver detoxification
Vitamin C	1000-6000 mg per day	Toxic metal removal Antioxidant Multiple properties
Alpha lipoic acid	100-400 mg per day	Antioxidant Toxic metal removal
Magnesium	250-600 mg per day	Multiple properties
B complex w/folic acid, B-6, and B-12	As directed	Liver detoxification Multiple properties

<http://www.dreliaz.org/recommended-product/for-chelation-and-detoxification/>

*DMSA side effects:

Gastrointestinal side effects include nausea, vomiting, stomach pain, and abdominal pain and diarrhea.

Hematological (blood) side effects include neutropenia, eosinophilia, and increased platelets.

Other side effects include elevated liver enzymes, drowsiness, dizziness, sleepiness, rash,

decreased
urination, cardiac arrhythmia, leg and knee pain, and flu-like symptoms.