

## **Binders - What Are They and Why Use Them?**

***What is a Herxheimer Reaction?*** Chlorine dioxide is an oxidizer and wreaks havoc on biofilm, chemicals, heavy metals, pathogens, and small parasites. After their destruction, the waste particles circulate in the bloodstream until the liver, kidneys, bowel, lungs, lymphatic system, and skin remove them. If pathogens and toxins are being killed/oxidized faster than the body can eliminate them, or if detox pathways are compromised, the excess toxins may cause flu-like symptoms, a runny nose, nausea, vomiting, skin rashes, headaches, diarrhea, constipation, excessive tiredness, etc. This is called a “Herxheimer” reaction and is common when going through a detox program. It doesn’t feel so great, but, a “herx” reaction is a sign that healing is happening.

***What are binders?*** Binders (and chelators, which are binders used specifically for removing heavy metals) are a critical part of a detox protocol. They’re used to attract or “grab” toxins, metals, pathogens, and oxidized particles for elimination through the kidneys and bowels. **Using binders can reduce a herx reaction and help prevent reabsorption of toxins back into the body.** When shopping for a binder, look for “food grade” or “for internal use”, to avoid contaminants. ALWAYS drink plenty of water when using binders. Take most binders 2 hours away from meds and at least 1 hour after your protocol is finished for the day. (Unless doing the mold and fungus protocol per Jim Humble’s instructions.) Follow directions on the binder package for your particular binder.

### **Bentonite/Montmorillonite Clay**

*-Removes mycotoxins, aflatoxins, pesticides, herbicides, heavy metals.*

*-Kills candida and E. coli.*

*-Take clay at least 2 hours after food, supplements, and meds. Take at least 1 hour after protocol.*

*-Can also be applied to skin to draw out toxins transdermally.*

*-Drink plenty of extra water when taking clay to avoid constipation.*

### **Chlorella/Spirulina**

*-Removes heavy metals, biotoxins, chemical food additives, candida, xenobiotics, and pesticides.*

*-Diarrhea, gas, bloating, or mild headache can occur when starting chlorella due to detox power.*

*-Do not take with vitamin C or hot liquids/foods. Can be mixed with smoothies or cold foods.*

*-If choosing chlorella, the bottle should say, “broken cell wall”.*

*-Spirulina is an excellent source of iron in higher doses (around 10 grams per day).*

### **Diatomaceous Earth**

*-Removes aluminum, viruses, fungi, bacteria, heavy metals, pesticides, parasites, and candida.*

*-Provides silica to the diet for strong bones, joints, hair, ligaments, and nails.*

*-Slices through parasites and candida, while protecting the GI tract and being gentle on the liver.*

*-Can be mixed with food and beverages, hot or cold.*

### **Zeolite/Clinoptilolite**

*-Removes metals, including lead, cadmium, arsenic, mercury, nickel, tin, and aluminum.*

*-Binds aflatoxins, nitrates, pesticides, glyphosates, histamine, and viruses.*

*-Does not dissolve in stomach acid, water, or fat. Passes through body completely intact.*

*-Avoid raw, zeolite. Zeolite **must** be cleansed of heavy metals, and micronized or nanosized.*

*-Research companies for scientific documentation of purity; don’t just buy from anywhere.*

## **Pectin**

- Removes medication residues, cesium-137 and strontium-90, lead, cadmium, and mercury.
- Provides fiber and can help normalize bowel movements.
- Can naturally lower cholesterol, fight diabetes, and support weight loss.

## **Fulvic/Humic Acid**

- Helps cells absorb minerals and discard waste. Removes mycotoxins and heavy metals.
- Excellent source of micro/macro nutrients: iron, manganese, magnesium, potassium, and sodium.
- Improves iron absorption, makes iron bioavailable to bone marrow cells for blood formation.
- Releases hydrogen ions, producing an electric charge which attracts free radicals.
- Natural antidote for graphene and mitigator of graphene induced toxicity. ([Link](#))

## **Activated Charcoal**

- Removes poisons, environmental toxins, heavy metals, intestinal gas, bacteria, viruses, and fungi.
- Removes radioactive elements: radon, iodine, cobalt, cesium, uranium, thorium, and lead.
- Take activated charcoal at least 2 hours away from supplements and meds, as it will absorb them.
- Drink extra water when taking activated charcoal, as it can cause constipation and black stools.

## **Selenium**

- Binds to and helps remove methylmercury, elemental mercury, thallium, arsenic, and cadmium.
- Potent antioxidant which supports kidney and liver function.
- Crosses the blood-brain and blood-cerebrospinal fluid barrier to remove metals.
- Can remove fluoride from the body, and mitigate fluoride damage.

## **Silica**

- Removes aluminum, heavy metals, and chemical toxins.
- Creates stronger bones, joints, hair, ligaments, and nails.
- Protects and heals the G.I. tract.

## **EDTA Chelation**

- Binds to and removes most heavy metals.
- Done with medically supervised IV, transdermally with skin cream, or orally (not as effective).
- May chelate/remove beneficial minerals. Vitamin and mineral supplement is recommended.

## **Glutathione**

- Potent antioxidant...do not take at the same time as oxidants.
- Naturally produced by the body to move toxins and heavy metals out of cells.
- Raise glutathione levels with selenium, N-acetylcysteine, alpha lipoic acid, vitamin D3, or SAMe.
- Can be given intravenously under a medical professional's care.

## **DMSO**

- Binds to and removes mercury, lead, aluminum, cadmium, arsenic, and nickel.
- Perhaps the most potent free radical scavenger known to man. Dissolves blood clots.
- Can get inside cells and helps them flush out toxins. Potent anti-inflammatory and pain reliever.

## **Suggested Adult Binder Dosage and Binder Brands**

*\*This is not medical advice. Do your research or consult your health provider when starting a binder or chelator, especially if on meds, pregnant, nursing, or suffering from intestinal issues. If a binder causes health issues or constipation, discontinue the binder. **A vitamin and mineral supplement should be taken, separately from binders, to replenish nutrients.***

### **Chlorella/Spirulina**

**Choose “organic” if possible. Some brands are from polluted water or contain pesticides.**

It's important to find a quality supplement with third party contaminant testing. Powder can be mixed into cold beverages or smoothies. Take 2 hours before or at least 1 hour after protocol. Take 2 hours away from meds. For chlorella, start with 1 gram (1000 mg) daily, and work up to 3 grams daily if desired. For spirulina, start with 1 gram (1000 mg) daily, and work up to 8 grams daily if desired. Spirulina can cause a flare-up of symptoms in some people with auto-immune issues. If taking tablets or capsules, follow directions on package.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Prescribed for Life, HCL, Micro Ingredients, NOW, Lone Star Botanicals, Triquetra, Vimergy.

### **Diatomaceous Earth**

**Important: The product package must say “Food Grade” or “Safe for internal use.”**

Start with 2.5 grams per day. DE can be mixed with smoothies and beverages. One can work up to 15 grams daily, split into morning and evening doses. Drink plenty of extra water when taking DE to avoid constipation. Take 2 hours away from meds. Take 2 hours before or at least 1 hour after protocol. Every few weeks, take a week off of DE to give the body a break. If using DE capsules, follow package directions.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

KVLab, Prescribed for Life, Harris, DiatomaceousEarth, Fossil Power, Earthborn Elements.

### **Zeolite/Clinoptilolite**

**Important: The product package must say “Food Grade” or “Safe for internal use.”**

**Avoid** raw, powdered zeolites. Zeolite **must** be cleansed of heavy metals, and micronized or nano sized. Look for scientific documentation of purity. Start with 15 grams of powder per day as a daily detoxifier. Can be mixed with food, smoothies, and hot/cold beverages. Take 2 hours before or 1 hour after protocol. If liquid zeolite/clinoptilolite binder is not effective for easing herx symptoms, try switching to a powder form. Drink at least 1 extra liter of water per day to avoid constipation. If using zeolite capsules, follow package directions.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Heiltrophen, ZEO Health, Waiora, GlycoLife Sciences, G-PUR, Coseva-TRS, TODICAMP.

### **Pectin**

Start with 5 grams per day dissolved into a 240 mL beverage, hot or cold, on an empty stomach. One can slowly work up to 20 grams of pectin powder in a 240 mL beverage. Some people are sensitive to pectin. If dizziness, nausea, joint or muscle pain, weakness or fatigue occur with the use of pectin, decrease dosage or try switching to a different binder. Drink extra water when using pectin. Take 2 hours away from meds. Take 2 hours before or at least 1 hour after protocol. If using pectin capsules, follow the package directions.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Certo, NOW Foods, EcoNugenics, Ball, Prescribed for Life.

## **Fulvic/Humic Acid**

**Important: The product package must say “Food Grade” or “Safe for internal use.”**

Follow package directions to determine dosage. Always take with filtered water, as chlorine will interfere with effectiveness. Take with food to detoxify contaminants or if stomach sensitivity is an issue. Avoid fulvic/humic supplements that say that the product is sterilized. Take 2 hours away from medications. Take 2 hours before or at least 1 hour after ending your protocol.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Trace Minerals, Pure Himalayan Shilajit, Inner Vitality, Outback Naturals, Double Wood.

## **Activated Charcoal**

**Important: The product package must say “Food Grade” or “Safe for internal use.”**

Take activated charcoal 2 hours before meals on an empty stomach, first thing in the morning, or last thing at night. Take at least 1 hour after your protocol has ended. Do not take if you are on prescription meds. Activated charcoal can cause constipation, so at least 1 extra liter of water must be ingested per day. Do not take activated charcoal long term. Do not take activated charcoal if you have intestinal bleeding, intestinal blockage, dehydration, slow digestion, or recent surgery.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Nature’s Way, NOW Foods, Schizandu, Horbäach, Prescribed for Life.

## **Selenium**

The best forms of selenium are organic, such as selenomethionine or liposomal. Brazil Nuts aren’t a reliable source of selenium, as their selenium content depends on the soil in which they were grown. Those with the MTHFR mutation should use caution when using selenium, as it can drive selenium levels too high. Those with thyroid issues, AIT (Hashimoto’s), or an iodine deficiency (about 1/3 of the population) should use an iodine/iodide supplement with the selenium to prevent exacerbating thyroid issues. Take 2 hours before or at least 1 hour after ending your protocol. Start with 200mcg of selenium, with a meal, and work up to 400-600 mcg if desired. (For reference, five drops of 2% Lugol’s iodine or one 12.5 mg Iodoral tablet are general starting dosages.)

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Thorne Research, NOW Foods, Life Extension, Dr. Mercola, Codeage, Go Nutrients.

## **Silica**

**Important: The product package must say “Food Grade” or “Dietary Supplement.”**

Silica is available in liquid form, capsule form, and infused mineral water. It is sometimes made with plant based silica from horsetail. Take 15 minutes before a meal, or on an empty stomach. Take 2 hours away from medications. Take 2 hours before or at least 1 hour after ending your protocol. Follow the instructions on the package for desired daily amount.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

NOW Foods, Solgar, Carlyle, Orgono, Cellfood, Natural Factors, Swanson.

## **EDTA Chelation**

For IV EDTA chelation, follow your health provider’s instructions. IV administration usually requires 20 or more treatments depending on the severity of health problems, a person’s response to therapy, and their diet and lifestyle. EDTA can also be used topically in skin cream. Oral supplementation of EDTA is also common, but it’s not as efficient because of digestion.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

SomaHealth (topical cream), Nutrousa (topical cream). A healthcare professional can advise you on brands and forms of EDTA for use in IV treatments.

## **Glutathione**

Can be found in liposomal form, or increased through use of supplements: N-acetylcysteine, alpha lipoic acid, Vitamin D3, and/or SAME. Take these according to package directions. Take these supplements 2 hours before starting your protocol or at least 1 hour after finishing your protocol.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Prescribed for Life, Core Med Science, NOW Foods, Cellfood, Pure Encapsulations, Horbäach.

## **Zeolite/Clinoptilolite**

**Important: The product package must say “Food Grade” or “Safe for internal use.” Avoid raw zeolites. Zeolite must be cleansed of heavy metals and micronized or nanosized. Look for lab documents detailing purity.** Start with 15 grams of powder per day as a daily detoxifier. Zeolite can be mixed with food, smoothies, and hot/cold beverages. Take 2 hours before or 1 hour after protocol. For liquid zeolite/clinoptilolite, follow package directions. If a liquid clinoptilolite binder isn't easing herx symptoms, try switching to a powdered form. Drink an extra liter of water daily to avoid constipation while taking zeolite/clinoptilolite.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Heiltropfen, ZEO Health, Waiora, GlycoLife Sciences, G-PUR, Coseva-TRS, TODICAMP.

## **DMSO**

**DMSO must be pharmaceutical grade, 99.995% purity. Do not use industrial grade. Do not use DMSO if on medications. Don't use DMSO if you have chronic kidney or liver issues, or vaccine damage to your liver or kidneys. DMSO is a diuretic, don't use with other diuretics.**

For topical use, skin must be free of any chemicals, soaps, perfumes, lotions, etc., as DMSO is a solvent and will carry whatever it contacts directly into the bloodstream. For a complete list of precautions and instructions read:

-*Forbidden Health*, by Andreas Kalcker. Chapters 2, 6, and 7.

-*MMS Health Recovery Guidebook*, by Jim Humble. Chapter 4.

-*Healing with DMSO*, by Amandha Vollmer. Read all; chapter 4 has instructions and precautions.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

KVLab, Heiltropfen, Dr. Moran's, DMSO Store.

## **Bentonite/Montmorillonite Clay**

**Important: The product package must say “Food Grade” or “Safe for internal use.”**

Always prepare clay for internal or external use with non-reactive materials, such as glass, plastic, or wood to help protect the clay's electrical charge. Let stand 12-24 hours before use. Do not store clay in a metal container. For internal use: Start with 1.25-2.5 mg of clay once a day in 500 mL of water. It's easiest to mix clay by shaking it with water in a glass jar/bottle with a lid. To avoid constipation, drink at least 1 liter of extra water daily. One must have a healthy diet, free of processed foods, to continuously move clay through the intestinal tract. Do not take clay within 1 hour of food, or 2 hours of meds or supplements. Take at least 1 hour after protocol, unless following mold and fungus protocol per Jim Humble. Do not consume for more than 4 weeks in a row. Stop use if digestive issues, constipation, or skin rashes occur. If using clay capsules, follow package directions. For topical application: mix 1 part clay to 3 parts water to a consistency of sour cream. Let sit 12-24 hours in a non-reactive container before use. Apply a light coat to face and/or body. Let dry for 20 to 30 minutes then rinse clean with warm water.

***Brands we like, as of this writing. (Always do your own research to be sure.)***

Earth's Natural Clay, KVLab, Lone Star Botanicals, Smart Solutions, Prescribed for Life.