

## **Mercols Detox Programme**

### **Diet**

Avoid all sugar and milk, limit all processed foods and most grains, especially wheat. Read the [Optimal Wellness Handout](#) every day for two weeks and follow it. Read the [detailed version](#) at least twice.

It will be important to have a high protein diet as the sulfur bearing amino acids in the protein will greatly facilitate detoxification. Do **NOT** attempt to fast during DMPS mercury detoxification. If you are a vegetarian you will be at **HIGH** risk for complications from DMPS unless you have a large amount of protein.

Whey protein can be used as a supplement as it is high in glutathione and branched chain amino acids. Two large tablespoons are used per drink and that can be taken once a day and twice a day for the week prior to DMPS chelation.

Autistic children can't use this product as it contains casein. They can use pure branched chain amino acids. You can start with one capsule twice daily and mix with food. Work up to two capsules twice a day for the week prior to DMPS chelation.

### **2. Beneficial Bacteria**

Take one quarter to one half teaspoon once a day of a high potency high quality strain. It is vital to have an optimized bowel flora for detoxification.

### **3. Maintain two to three bowel movements per day**

If you are not having this many bowel movements make certain that your thyroid status has been checked. It is very common for mercury to affect the thyroid. If your thyroid function is fine then you should add some magnesium.

If you are on long-term magnesium it is important to take some calcium with it or after awhile you will develop an imbalance in your calcium magnesium ratio which could result in severe cramping.

Freshly ground flax seed several teaspoons per day will facilitate intestinal movement and also contribute some healthy essential fatty acids.

### **4. Unload the connective tissue with Chlorella or ProChitosan**

Chlorella and ProChitosan are an important part of the detoxification program, as approximately 90% of the mercury in our bodies is eliminated through the stool. Chlorella is an algae and, unlike Protchitosan, has protein high levels of chlorophyll and other nutrients which can be used for nourishment.

The chlorella powder is the most cost effective approach but some people will prefer the tablets or capsules for convenience. A simple way to dissolve the powder is to place it in a container with a lid partially filled with water. Then tighten the lid and shake to dissolve and drink the solution.

**Caution:** About 30% of people can't tolerate chlorella. This may be due to optimized function of the enzyme cellulase. If you are unable to tolerate this it would be wise to consider adding an enzyme with cellulase in it to help digest the chlorella.

**Dose:** One can start out with a one quarter of a teaspoon of the powder (one 500 mg tablet) once a day initially to confirm that there is no hypersensitivity present. Work up slowly over one to two weeks to a dose of one teaspoon (ten tablets or capsules) per day. Once you tolerate this dose you are able to use it to bind the mercury. Use this dose starting two days prior to your chelation and for one day afterwards. The chlorella will thoroughly coat your intestine and bind like a sponge to any mercury that the DMPS liberates into the gut.

The above dose is based on a 150 pound adult. If you are using the program for children reduce the dose proportionately. (So a 30 pound child would have have 30/150 or 1/5 (20%) of the dose).

**Caution:** If at any time one develops nausea or starts "burping up" the chlorella taste then the chlorella should be stopped immediately as a food sensitivity is developing which will only worsen if you continue taking it. If this happens you should switch to ProChitosan This binds similarly to mercury. Its dose is dependent on your bowel movements.

If you have one bowel movement a day or less you should start two days prior to the DMPS . If you have two or more bowel movement you can start 24 hours prior to the DMPS. Stay on it for 24 hours after the DMPS. So you will be on it either two or three days. The dose is two capsules three times a day. Be sure to drink it with plenty of water and increase magnesium if constipation develops.

Porphrazyme from Biotics Research is another alternative to chlorella that many clinicians have had success with in mercury detoxification.

## **5. Start Garlic or MSM**

It would be wise to start on garlic regularly to enhance sulfur stores. Use the food, rather than the supplement garlic. Try to get in three cloves per day, but decrease the dose if your odor becomes socially offensive.

Again, as indicated in the chlorella section above, children will have proportionately lower doses.

MSM is a form of sulfur which will help your body to remove the mercury. The initial dose is one capsule twice a day. Increase by one capsule a day until you

are at three capsules twice a day. If you have root canals and are chronically sick you may want to increase to five capsules three times a day.

## **6. Start Cilantro**

Cilantro will help mobilize mercury out of the tissue so the DMPS can attach to it and allow it to be excreted from the body. The best form of cilantro is a tincture available from Dragon River (505-583-2348).

The dose is one dropper applied on the wrists and rubbed in twice a day for the two weeks preceding the DMPS IV. It is used the morning prior to the DMPS chelation but can be stopped for the following two weeks. The tincture is also particularly useful for any joint pain and could be rubbed on the joint that is hurting as an alternative.

You can also augment the tincture with using the herb. It is not as potent, but certainly will add to the program. However, like chlorella, many people are sensitive to oral cilantro. So, if you develop any nausea or discomfort after eating cilantro do not use it orally.

## **7. Mineral Replacement**

It is important to have a generally healthy mineral base. The body works better with toxic metals than no metals at all. Enzymes have certain binding sites that require a metal for them to perform their function as a catalyst. When you are deficient in magnesium, sodium, zinc and other minerals, the body does not let go of the toxic metals very easily.

Selenium and zinc are particularly important trace mineral in mercury detoxification and should be used for most people.

Generally the citrate form of minerals works quite nicely unless one has an low blood phosphorous level. It is important to not take copper or iron though unless a clinician has examined a hair analysis and or blood work and recommended these minerals. Thorne Research has Citramins II which is citrated minerals without copper or iron.

### **Hydrochloric Acid:**

If you do not have a sufficient amount of hydrochloric acid secreted by your stomach then it will be very difficult to ionize mineral supplements to absorb them properly. There is a hydrochloric acid reflex present on the lowest rib approximately one inch lateral to the midline. If this area on the rib is tender to palpation there is a strong likelihood the person is deficient in hydrochloric acid and would benefit from supplementation.

This is especially common in individuals over 50 years old, and also in individuals with food allergies. One to six capsules or more of Betaine hydrochloride is

generally taken with the first bite of every meal for proper digestive support. The Betaine can be discontinued once the reflex point is non-tender to deep palpation.

### **Monitoring Your Mineral Dosing**

It will be very important to monitor your mineral levels during the detoxification program. This should be done initially and at least **every 6-12 weeks**. I only recommend two labs to do this work. Trace Elements and Analytical Research as they are the only two labs that do not wash the hair samples prior to analysis.

### **8. Digestion and Gall Bladder Support for Autism**

Liver and gallbladder congestion are major issues in states of toxicity. To insure that your gallbladder bile flow is functional add magnesium taurate or taurine, butyric acid (Butyrex 559-433-3110)

The dose of the Butyrex initially is 1/8-1/4 of capsule. Gradually increase the dose to 5 capsules 3 times daily. The Butyrex has a offensive odor which is lessened by keeping it in the freezer. Additionally inserting the powder in applesauce, raw honey or elderberry cough syrup may improve compliance.

Digestive enzymes (containing lipase) and CCK (stimulates contraction of the gall bladder. These can be used one hour after meals containing fat. CCK is taken after dinner (high fat meal)

- young children 1/4 tablet
- older children 1/2 tablet
- teenagers 1 tablet
- adults 2 to 4 tablets

Your ability to clear toxins will be impaired if you do not have proper fats to support digestive function. Your diet should contain adequate fat from unprocessed pure oils. Omega Nutrition, Flora or Arrowhead Mills

- sunflower
- safflower
- sesame

**OR** fats naturally found in foods:

- seeds
- nuts
- avocado
- free range organic poultry, eggs, or meats

## 9. Antioxidants

Vitamin C and E. It would be wise to take Unique vitamin E one capsule per day and about 250-500 mg of vitamin C with each meal. If you are exercising aggressively you can take 1000 mg of C 15-30 minutes prior to exercising. It is also wise to consider adding 2-4,000 mg of Vitamin C powder to a half gallon of water and drinking that throughout the day.

It will be **VERY** important to take 2000 units (typically five of the 400 unit capsules) of vitamin E the day of and the day after the DMPS injection as this will decrease the side effects of the detoxification reaction considerably. You can also take 1-2 grams of vitamin C immediately prior to the DMPS injection.

## 10. Start Monthly DMPS Injections, Suppositories or Transdermal

You should **not** have DMPS if you still have amalgam fillings. If they have been removed the injections can be started on a monthly basis. Collection of the urine is then done to analyze how much mercury is being excreted. One must urinate completely prior to the injection.

I perform the analysis at 90 minutes as that is most convenient, but others do four or 24 hour collections. The DMPS injections are generally given about six times or until the level drops into single digits or you are feeling better.

### For pediatric patients

You can [click here](#) to find out why I don't recommend DMSA mercury chelation. Since an IV is such a traumatic event for most children it is probably wise to use a rectal suppository version of DMPS which is available from most compounding pharmacists. Another alternative is to apply the dose transdermally with DMSO. This is very similar to the way that the hormone secretin is being used for many autistic patients.

The dose is 5 mg of DMPS per kg of body weight and is generally given once a month. The urine collection for pediatric patients incorporates a bag to collect the urine for mercury analysis.

## 11. DMPS Alternative

Some people do not tolerate DMPS well. This is especially true for those who have damage in the central nervous system, such as those with MS or ALS or children with fragile brain architecture. If this is the case there are several options. PCA (peptid clathrating agent) spray can be used. The dose is 4 sprays under the tongue every day or every other day. One may use a dipeptide amino acid or mixed mineral succinates such as Champion Nutrition Muscle Nitro.