# Detoxing

# Cleaning Up The Mess Left By Dead Spirochetes



Detoxing is an essential part of fighting Lyme Disease and achieving relief from a <u>herx</u>. Many people just think about what antibiotics to take and let the body do the rest from there but killing the bacteria is only half the job. One must help the body remove the <u>endotoxins</u> that spirochetes release in the body once they're killed. In fact, well over 90% of the time you're not feeling well is due to a a body that is not detoxing effectively.

# The Golden Rule Of Detoxing

The golden rule of detoxing states that <u>if you're going to intentionally help your body kill a foreign invader</u>, <u>you should intentionally help your body remove those foreign invaders from your body</u>.

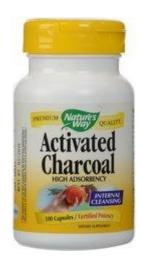
A <u>herxheimer reaction</u> is not an immediate reaction to spirochete die off but more of a result of an accumulation of toxins over a period of time. You can kill off spirochetes and have no herx reaction as this is due to the body's ability to effectively remove the endotoxins the spirochetes release, in a effective manner. When you start to herx, the body's tactics for removing the endotoxins are overburdened due to an accumulation of endotoxins. This is where detoxification comes into play.

Certain detoxification methods are used for near immediate relief from a <u>herxheimer reaction</u> such as an Epsom Salt Bath or Burbur Detox. Other detoxification methods such as Milk Thistle or Cruciferous Vegetables work in the long term by continuously cleansing the body of <u>endotoxins</u> in small amounts, which in turn decreases the likelihood of encountering a <u>herx</u> in the first place.

### **Detox Methods**

### **Activated Charcoal**

- <u>Activated Charcoal</u> comes in tablet, powder, or capsule form and is fundamentally known for adhering to the endotoxins responsible for a herxheimer reaction.
- It will work best if consumed a couple hours after a protocol.
- Activated Charcoal is said to pass through the body without causing a detox reaction.
- Used with <u>magnesium citrate</u>, a charcoal/magnesium flush will help soak up excess <u>ammonia</u> in the body caused by Lyme and/or a CBS gene mutation.



#### 365 Votes

# <u>Alka-Seltzer Gold</u> + <u>Glutathione</u> + Lemon

 Alka-Seltzer Gold combined with the antioxidant glutathione and lemon water are quite effective in reducing an acute <u>herxheimer reaction</u> according to <u>Dr. Richard</u> <u>Horowitz, M.D.</u>(Some 70% are expected to feel better within hours)

Recommended by <u>Dr. Richard</u> <u>Horowitz</u>, M.D.

- <u>2 Alka-Seltzer Gold tablets</u> in 8oz of water with lemon or lime juice for alkalization and vitamin C.
- Follow the Alka-Seltzer Gold with <u>6-8 capsules</u> (250mg/capsule) of glutathione or 1500-2000mg of <u>oral liposomal glutathione</u>.



# Apo-Hepat

- Apo-Hepat is a homepathic remedy that helps restore and assist the liver's phase 1 detoxification process that has been compromised by poor diet.
- It helps drain the liver when it has become overburdened with excessive toxins.
- It's one component of <u>Pekana's "Big 3" for</u> <u>detoxification</u>alongside <u>Renelix</u> (i.e., kidney drainage) and <u>Itires</u> (i.e., lymphatic drainage).



#### 3 Votes

# Alpha Lipoic Acid

- <u>Alpha Lipoic Acid</u> is an antioxidant made by the body, but is also obtained through certain foods such as broccoli, spinach, and potatoes.
- For those with chronic Lyme, <u>Alpha Lipoic Acid</u> helps the body recycle glutathione (i.e., the body's master detoxing agent) and vitamin C.
- Caution: Do not take alpha lipoic acid if you have mercury amalgams or toxicity [source]. Alpha lipoic acid is a phenomenal chelator, but taking high dosages with mercury toxicity can result in serious redistribution symptoms. You should also avoid alpha lipoic acid if you have a sulfur sensitivity.



# Apple Cider Vinegar

- When the body becomes ill or is over burdened with toxins, the PH level becomes very acidic and the body becomes an environment where illness can thrive.
- Apple cider vinegar is best known for its ability to alkalize the body which is a level of PH that allows the body to function much more properly.
- It can be used on salads or two teaspoons in a cup, add water and then drink.

Warning: <u>Apple Cider Vinegar</u> is also an excellent anti-fungal. If you're currently dealing with <u>candida</u>, Apple Cider Vinegar will likely induce a herx instead of reduce.



153 Votes

# **Benadryl**

- Benadryl is recommended by some LLMDs to reduce a herx.
- Most people find it brings a little relief for a <u>herx</u> though it seems to be quite effective against <u>herx</u> induced headaches.

**Warning:** Talk to your doctor first before adding Benadryl to your regimen.



# Bentonite Clay (Powdered)

• Bentonite Clay is an edible clay that collects toxins as it passes through the digestive tract and remove them from the body. The longer it is used, the more toxins it will remove.

Warning: Bentonite Clay can cause intestinal discomfort so it is important to consume plenty of water while taking it.



#### 366 Votes

# **Burbur Detox**

- <u>Burbur Detox</u> is a tincture produced by Nutramedix specifically designed to reduce a <u>herxheimer reaction</u>.
- It has the ability to cleanse the liver, kidneys, lymphatic system and blood.
- A <u>herx</u> can be significantly reduced, if not eliminated by placing 10 drops of <u>Burbur</u> into 4 ounces of water. Wait 1 minute before consuming. Repeat this every 15 minutes until herx has subsided.
- A person may find greater relief if they combine <u>Burbur</u> <u>Detox</u> with <u>Pinella</u> repeat dosage for Pinella.



### Castor Oil Pack

- <u>Castor Oil Packs</u> are very effective at helping the liver and lymphatic system detox from strong herxheimer reactions much like an <u>Epsom Salt Bath</u>.
- To create and use a <u>Castor Oil Pack</u>, pour the castor oil over the absorbent side of the flannel, lie down and place the side of the flannel with the castor oil directly onto your skin above the liver, and then place the heating pad on top. Leave the castor oil pack on for about 30-45 minutes.

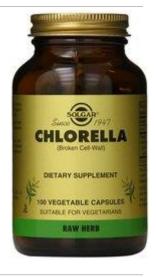


**Warning:** Do not ingest castor oil. It is for external use only. Women who are menstruating should not use castor oil packs as it can cause heavy bleeding. Castor oil will stain so be sure to lie upon a protective barrier.

#### 208 Votes

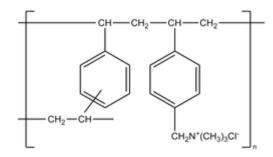
# Chlorella

- <u>Chlorella</u> has the powerful detoxifying ability to bind to toxins and prevent them from being reabsorbed in the digestive tract. It's commonly used in conjunction with cilantro for removing heavy metals.
- Some people can't digest the cell membrane of <u>Chlorella</u>, therefore finding a chlorella product with a "broken cell wall" would be best.
- <u>Chlorella</u> works best when taken on an empty stomach.



# Cholestryramine

- Cholestyramine is a prescription drug designed to bind to toxins extremely well in the body.
- In those with Lyme Disease, it has helped relieved <u>brain fog</u>and some neurological symptoms associated with the presence of recirculating toxins and <u>endotoxins</u> released from Lyme.
- Because the drug is so powerful and binds to nearly everything, a person can not take anything 1 hour before or 4-6 hours after taking the drug due to the possibility of inducing a nutrient deficiency.
- <u>Fractionated Pectin Powder</u> or <u>Modified Citrus Pectin</u> are popular natural alternatives.



### Coffee Enema

- Coffee enemas stimulate production of glutathione S-transferase (GST) in the liver. GST is a powerful enzyme that binds to, matabolizes, and removes toxic substances from the body.
- The constituents in the coffee are absorbed directly into the liver through the colon wall.
- Add 3 tablespoons of organic ground coffee to boiling water. Boil for 3 minutes, then reduce to a simmer for about 15 additional minutes covered. Strain if needed and let cool before administering. Lie on right side in the bathroom, and begin administering the coffee into the rectum via the enema. Hold the coffee for 5-15 minutes, and then evacuate the colon.

Warning: Don't hold the coffee for any longer than 15 minutes as it then will begin to be absorbed into the body at greater concentrations than desired, or what is considered to be healthy.

Also check with your doctor or treating physician first before performing a coffee enema to be sure that your body can tolerate it.

Malabsorption of certain vitamins and minerals may occur with long term use of coffee enemas, specifically calcium and fat-soluble vitamins.



# **Colon Hydrotherapy**

- Colon Hydrotherapy, also known as a colonics or colon cleansing, is a procedure in which a unique mixture of water, and sometimes herbs, is injected into the colon via the rectum to assist the removal of unwanted constituents.
- The colon is responsible for absorbing nutrients from food for the body and forming feces for evacuation.
- Overtime, as one ages and depending on a person's lifestyle, a colon can become sluggish, and detoxification becomes impacted. Such consequences include stagnant fecal matter, wallimpacted mucus, toxins being reabsored into the body, and even parasite thriving.



45 Votes

### Concentrace

- <u>ConcenTrace</u> is a mineral supplement containing over 72 trace minerals naturally derived from the Great Salt Lake located in the state of Utah in the United States.
- Trace minerals are absolutely essential for the human body to perform optimally, especially the methylation cycle which is responsible for detoxification, inflammation, neurotransmitter regeneration, and the immune system to name a few.
- Greater exposure to toxins coupled with nutrient depleted foods in the modern day warrant mineral supplementation to detoxify properly.



# **Cruciferous Vegetables**

- Cruciferous vegetables such as Kale, Collard Greens and Cabbage have the incredibly ability to increase the detox activity of cells in the liver.
- Steam Kale for 2 minutes or Collard Greens for 4 minutes to keep the living enzymes they contain alive. Then add Sea Salt, Black Pepper, Diced Avocado and Extra Virgin Olive Oil.



#### 142 Votes

# **Dandelion**

- <u>Dandelion</u> is most famously known for increasing bile production in the liver. Bile is the means of transportation for toxins from the liver to the colon.
- Works well at detoxing the kidneys as well.
- It has also been said to neutralize endotoxins which are the toxins responsible for causing a herxheimer reaction.



### Diatomaceous Earth (100% Food Grade)

- Diatomaceous Earth is a sedimentary rock with a hardness factor of 7 (Diamonds are 9) that allows it to scrub the inside of intestinal walls.
- Once it's consumed and enter the digestive tract, it beings to absorb bacteria, viruses, parasites, heavy metals and endotoxins (responsible for <u>herx</u>) which prevents reabsorption into the body
- The recommendation is to start with 1 teaspoon in a glass of water daily while while working up to 1-2 tablespoons daily.

**Warning:** Diatomaceous Earth acts much like fiber in that it can cause constipation. Be sure to drink plenty of water to counteract its potential to constipate.



#### 209 Votes

# **Dry Skin Brushing**

- Dry Skin Brushing utilizes a natural bristle brush to clear the pores of debris, thus allowing toxins to flow out easier.
- It also stimulates the lymphatic system, which harnesses toxins from the body.
- Dry Skin Brushing is most commonly used before an <u>Epsom</u> <u>Salt Bath</u> but can be used daily.



# **Epsom Salt Bath**

- Epsom Salt is magnesium sulfate. It is absorbed through the skin when taken in a hot bath.
- Magnesium acts as a muscle relaxer and the sulfur increases bile production in the liver. Bile is the means of transportation for toxins from the liver to the colon.
- <u>Dry skin brushing</u> before an <u>Epsom Salt Bath</u> will clear any debris from your pores.
- Pour 2-4 cups of Epsom Salt into a bath that is hot but not too hot and soak for 20 30 minutes.

**Warning:** Bath water that is too hot may have the opposite effect and cause die off by killing spirochetes. If you're sulfur sensitive, consider talking with your doctor before using epsom salt.



#### 207 Votes

# Exercise (Light)

- Light <u>exercise</u> such as walking or riding a bike is an excellent tool for expelling toxins from the body.
- It forces the muscles to contract which is the catalyst for the lymphatic system. The lymphatic system is in charge of transporting toxins throughout the body for disposal.
- Exercise will inevitably induce sweating which allows the body to remove toxins stored in fats cells through the pores of the skin.



95 Votes <u>Itires</u>

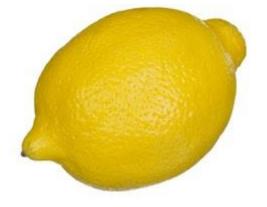
- <u>Itires</u> is a homepathic remedy specifically designed to drain the lymphatic system.
- The lymphatic system collects toxins, dead spirochetes, and fallen immune cells for removal from the body, but when it becomes over burden, it can become sluggish or backed up.
- It's one component of <u>Pekana's "Big 3" for</u> <u>detoxification</u>alongside <u>Renelix</u> (i.e., kidney drainage) and <u>Apohepat</u> (i.e., liver drainage).



356 Votes

### **Lemon Water**

- Lemons are known for their exceptional ability to cleanse the body of toxins.
- <u>Squeeze</u> 1 whole lemon into a measuring cup (around 1/4 cup of lemon juice -- you may need 2 lemons depending on their size), add water until the volume reaches 8 ounces, and sip this concoction slowly over a half hour's time.



# **L-Ornithine**

- <u>L-Ornithine</u> is an ammino acid that is used for removing high levels of <u>ammonia</u> from the body which is a toxin created by Lyme bacteria and the excessive byproduct of a CBS gene mutation.
- Ammonia, when in excess within the body, can cause great cognitive disruption and hinder a person's ability to read, think, or talk.
- The body's natural ability to remove <u>ammonia</u> may be hindered by a CBS gene mutation. Testing for a CBS gene mutation can be done through 23andMe, and then running your test results through geneticgenie.org



#### 133 Votes

# Lymph Drainage Massage

- Lymph massages help to stimulate the lymph flow of the lymphatic system as it can become sluggish while battling Lyme Disease.
- The lymphatic system is responsible for collecting toxins from cells; thus allowing the body to remove them through sweat, bowel movements, and urine.
- A lymph massage is recommended 3 or 4 times during first part of Lyme treatment and 2 times after.

**Warning:** The masseuse must be certified in lymph massage specifically. Avoid deep tissue or muscle massages as they will expel toxins from the tissue and leave you feeling worse for a day or two.



# Methyl-Guard

- <u>Methyl-Guard</u> is a product made by Thorne used to treat the <u>MTHFR</u> gene mutation, which may be the silver bullet for why many with chronic Lyme never feel better toxins aren't leaving the body.
- People with an MTHFR gene mutation have a difficult time converting folic acid (inactive form), which is obtained through diet, into folate (active form), which results downstream into less glutathione the body's master detoxing agent.
- Taking <u>Methyl-Guard</u> will begin to open up blocked detox channels and more fatigue and pain may result because more glutathione is being produced due to the folate in Methyl-Guard.
- Dosing for Methyl-Guard, <u>recommended by Dr. Marty Ross, MD</u>, is 1 pill a day for 7 days, then 2 pills a day for 7 days, followed by 3 pills a day for 7 days. The key is to only increase if you're stable and not suffering at your current dosage.
- Drink lots of water.



#### 159 Votes

### Milk Thistle

- Milk Thistle is an herb synonymous with maintaining healthy liver function as well as the kidneys.
- Milk Thistle has the ability to protect the liver from toxic damage while at the same time helping it to detoxify.
- Milk Thistle comes in capsule form but eating Milk Thistle Seeds is best. Grind 1 teaspoon of Milk Thistle Seeds and place them in your oatmeal for breakfast.
- It won't provide immediate relief from a <u>herxheimer reaction</u>but using it every so often can decrease the frequency of a <u>herx</u> due to a clean liver.

**Tip:** Milk Thistle is great for the liver, but it only helps with phase I detoxification. To completely support the liver, phase II detoxification of the liver must be supported as well and <u>liposomal glutathione</u> should be considered.



### **Modified Citrus Pectin**

- <u>Modified Citrus Pectin</u> is a powdered derivative from the peel and pulp of citrus fruit.
- It is commonly used as a detoxifer of biotoxins produced by mold, lyme, etc that were left behind in the body and continue to cause symptoms through their presence (i.e., inflammation).
- Modified Citrus Pectin has also been shown to be a gentle detoxifier
  of heavy metals, specifically aluminum, from the circulatory system
  (i.e., blood). Because of its gentle nature in removing heavy metals, it
  often used before more aggressive chelators like cilantro and DMSA
  in people who have strong detox reactions.



59 Votes

# Molybdenum

- Molybdenum is a trace mineral that is used specifically for the reduction of a candida herxheimer reaction.
- <u>Candida</u> releases a toxin know as acetaldehyde which can't be detoxed from the body without molybdenum converting it to acetic acid.
- People have reported that a dosage of 1000mcg of molybdenum daily for up to a couple of months is needed to notice a difference.
- Molybdenum is also used for bringing down excess sulfites in the body that may result from a CBS gene mutation.

**Warning:** Molybdenum can potentially block the absorption of copper, which is a metal needed by the body to function properly.



### **Parsley**

- Parsley can be consumed with food but is most effective for reducing a <u>herx</u> when taken in tincture form.
- <u>Nutramedix Parsley Detox</u> is designed to reduce a <u>herx</u> by helping to drain the lymphatic system. 8-10 drops in 4 oz. of water every 15 minutes until symptoms subside.



#### 168 Votes

### **Pinella**

- <u>Pinella</u> is a combination of herbs in tincture form produced by Nutramedix and is commonly used for its unique ability to reduce brain fog.
- <u>Pinella</u> cleanses the nerves and brain of toxins which results in a reduction of <u>brain fog</u> and toxin induced seizures.
- Can be paired with equal parts of <u>Burbur Detox</u> to further enhance a reduction of a herxheimer reaction.



#### 67 Votes

### Red Root

- Red Root is an excellent herb to help drain the lymphatic system after it has become sluggish.
- The lymphatic system is the location where dead spirochetes and fallen immune cells are taken for removal from the body.
- The lymphatic system relies on the physical contraction of muscles for stimulation and to move toxins along. Red rootisn't a replacement for physical activity but if you're immobile or living a sedentary lifestyle, it can help.



# Renelix

- Renelix is a homeopathic remedy that helps support excretion of the kidneys and lymphatic drainage. Itires is recommended though for a more complete lymphatic drainage.
- It's one component of <u>Pekana's "Big 3" for</u> <u>detoxification</u>alongside <u>Itires</u> (i.e., lymphatic drainage) and <u>Apohepat</u> (i.e., liver drainage).



56 Votes

# Sarsaparilla

• <u>Sarsaparilla</u> is an herb that has a proven ability to bind to endotoxins (responsible for <u>herx</u>) in the blood stream and forces them to be eliminated by the digestive tract.

Warning: Sarsaparilla also possesses antimicrobial properties.



### Sauna

- <u>Utilizing the skin as a means of detoxification</u> is genius as 20 minutes of sweating is equivalent to the work the kidneys accomplish in 24 hours.
- Portable Saunas are available on <u>Amazon</u> for around \$100.
- Don't use soap after a <u>sauna</u> as even after you're done, your body is still removing toxins through the pores. A cool shower without soap will suffice.

**Warning:** Heating up the body too much can induce a <u>herx</u> by killing off spirochetes. Those who are <u>heat intolerant</u> should be wary about using a sauna as a means of detoxification.



#### 75 Votes

# **Shower (Cold)**

- Jumping into a cold shower forces the muscles to contract, which in turn moves toxins along to be processed. It also opens the arteries allowing a fresh supply of blood to infiltrate the organs.
- Once jumping into a cold shower, it takes about a minute for the body to adjust and become comfortable.
- 3 minutes in the shower will suffice

**Warning:** Make sure the environment you'll endure after a cold shower allows the body temperature to rise.



# Sparga

- Sparga is an extract from the root of asparagus made by Nutramedix.
- Sparga is designed to help purge excess sulfites and sulfa drugs from cells within the body. Once the cells are purged, they can more efficiently produce glutathione (i.e., the body's master detoxing agent) by taking in the appropriate sulfur amino acids.
- Caution: If you have a CBS and/or SuOx gene mutation -- which can result in excess sulfur building up in the body -- you will likely need molybdenum so these genes can efficiently process sulfites that are being purged by Sparga.



#### 193 Votes

### Turmeric (Curcumin)

- <u>Turmeric</u> is one of the best herbs for detoxification of the liver as it's well known for increasing bile production. Bile is the means of transportation for toxins from the liver to the colon.
- <u>Curcumin</u>, the active ingredient in Turmeric, is known for its exceptional anti-inflammatory properties. Shutting down inflammation (i.e., cytokines) helps reduce the symptoms of a herxheimer reaction.
- Add a teaspoon of turmeric to your eggs for breakfast or enjoy it on chicken.

**Warning:** Turmeric is also an exceptional anti-fungal so if you notice a <u>herx</u> arising after a few days of use, discontinue use and consider a <u>yeast</u> problem.



# Zeolites

- <u>Zeolites</u> are minerals formed when molten lava comes in contact with a water source.
- Zeolites possess the ability to attract and remove, specifically heavy metals, but also chemicals and toxins in the body. One of the better binders for ammonia.
- Some reputable brands that sell zeolites are <u>ACZnano</u>, <u>ZMP</u> 400 and <u>Nutramedix Zeolite HP (high potency)</u>.

