



## **Body Ecology's Detoxification Training: Handout #6**

### **Medical Secrets and Myths About Detoxification With Dr. Leonard Smith**

#### **The Toxic Burden:**

- A critical mass of toxicity can cause problems. A significant part of any illness or disease is toxic overload.
- Mainstream medical doctors typically do not have the time or expertise to deal with toxic overload.
- Environmental Working Group – [www.ewg.org](http://www.ewg.org) - found that everyone has fat soluble toxins in their body.

#### **What does your body do with these toxins?**

- **Lungs, skin, GI tract (digestive tract), urinary tract, liver, prostate & breast** (to some degree) – virtually every cell in your body has detoxification pathways. Each of these organs do their best to get the toxins out.
- **Liver and intestines** – have been studied most when it comes to detoxification. They have enzymes to take the toxins and restructure them.
  - **Liver:** Phase 1 detoxification enzymes – treats a molecule and phase 2 detoxification enzymes complete the treatment of the molecule so it can be excreted in your bile, carried

to small intestine and colon to be excreted. Toxins can be reabsorbed in your intestines. If this happens too much, it can be a problem.

- **Intestine** – small intestine and part of the large intestine – these cells have the phase 1 and phase 2 process so they process the toxins to go back to the liver or excreted. There is also a third pathway (in the tips of your intestinal villi), called phase 3, which is called antiporter, which takes toxins from intestinal lining cells and pumps them back to the gut lumen. This slows down how toxins get into your cells.

Critical for anyone having neurologic symptoms (migraines, OCD, depression) to be tested for gluten sensitivity, gluten intolerance or celiac disease.

If you are genetically predisposed to gluten sensitivity (wheat, barley, rye, spelt), go on a gluten free diet for a period of a few months to heal your gut lining.

- **Whole Grain Biotic** – fermented liquid with grain-loving bacteria. Drinking Whole Grain Biotic helps to return grain-loving bacteria into your inner ecosystem, so you can help your digestive system heal. Many people are able to tolerate grains once they re-colonize their gut with grain-loving bacteria.

## **Healthy Practices for Detoxification:**

- **Infrared sauna or the BioMat** – heats up your body, helps you sweat out toxins. You can also alternate between hot and cold showers to reset your autonomic nervous system.
- **Good elimination** – colon hydrotherapy can help cleanse your bowels and stimulate your colon's normal parastaltic response. The bacteria in your gut absorbs a lot of toxins so they can leave your body.
- **Bodywork** – massage, acupuncture, shiatsu
- **Dry skin brushing**
- **Exercise** – one of the best detox practices you can do. Aerobic and resistance exercise is important. Yoga, Qi Gong and T'ai Chi are also excellent. You mobilize toxins, sweat them out and improve elimination.
- **Food** – food combining is important along with how you cook your food. Slow cooking at low temperatures is recommended to avoid glycation. Glycation causes inflammation and aging. Overcooking or cooking at high temperatures can cause glycation.
  - 80% plant-based diet
  - Organic, unrefined fats, omega-3's

- Eliminate processed foods
- Eat 30% less than you think you want, but only do this if you are following a healthy Body Ecology diet because you want to make sure you are getting a wide spectrum of high quality nutrients. Listen to your body when it comes to the food your body needs and to keep your blood sugar level strong. It's important to keep your body strong when you are cleansing.
- Consume plenty of fermented foods and probiotic liquids.
- Miso soup with a kombu stock (optional: add shitake mushrooms). If you want, you can put in dried fish flakes and then strain them out when your soup is cooked.
- Plenty of fiber
- Plenty of protein (vegetarian protein when you are on a cleansing program).
- **Sleep** – 8 hours of sleep per night is the goal.
  - If you have too much inflammation in your body, your body will not be able to make melatonin, which helps you sleep. Too much cortisol will also keep you from sleeping.
  - If you are not having good REM sleep at night, your hormones won't be balanced.
    - **Book:** Light's Out, by T.S. Wiley and Bent Formby – too much sugar and carbohydrates and lights always being on interrupt our ability to sleep.
    - **Resource:** [Why You Should Say NO to Nightlights \(& Other Top Recommendations to Sleep Well\)](#)
  - If you can't sleep, some natural options are: spend 1 hour winding down before sleep, light candles and turn down the lights at night, spend time in bright sunlight during the day (to reset your pineal gland and help make melatonin) or consider the supplements: GABA, 5-HTP or melatonin. Consider wearing rose colored glasses or sunglasses while you are using your computer or watching TV at night.
  - Your intestinal tract makes 5 times more melatonin than your brain does.
- **Hydration** – drink plenty of water. Most people should have between 2 – 4 quarts of water per day. Follow the principle of uniqueness with how much you drink. Keep in mind that as people age, they lose their thirst and may need to focus more on drinking water. You might drink more water if you live in a humid environment, you drink caffeine or you drink alcohol.
- **Stress reduction** – cortisol, the stress hormone, can inhibit the function of your thyroid hormones and reduce your energy.

- **Supplementation** - While the goal is to get all of your nutrients from food, some people have nutrient deficiencies and can benefit from supplements:
  - Undenatured whey – <http://onegreenmom.com> – a good source of undenatured whey, called Vital Whey.
  - Vegetarian protein – Vitality SuperGreen
  - Vitamin D – responsible for at least 1,000 – 2,000 genes that have to do with inflammation.
  - Multi-vitamin with antioxidants, trace minerals and all of the B vitamins is good, but may not be needed every day.
  - Probiotics – fermented foods and drinks are best. If you can't get them because you are traveling, take probiotics.
  - Vitamin C – recharges glutathione, the most important detoxification molecule in your body.
  - Glutathione - if you are doing a detoxification program.
  - R lipoic acid – if you are doing a detoxification program.
  - Digestive enzymes
  - Tyrosine or Ocean Plant Extract for thyroid health
  - Fish oil
  - 5-HTP or GABA – can help your adrenals relax for a better sleep
- **Testing** – testing will show you what nutrition, supplements and protocols would best fit with your health situation:
  - **25-hydroxyvitamin D** – to see if you have enough vitamin D. Optomim range between 60 – 70 nanograms per meter is what studies are showing.
  - **Vitamin Levels** - Genova ([www.genovadiagnostics.com](http://www.genovadiagnostics.com)) or Metametrix ([www.metametrix.com](http://www.metametrix.com)) – you can get an organic urine test to look at your nutrition, neurotransmitters, cell metabolism, antioxidant status, bacteria in your gut, etc. You need a health practitioner to order this test for you.
  - **Chelation** challenge test for heavy metals
    - **Chelation therapy** - If you have a significant toxic load:
      - **Intravenous EDTA chelation** – for lead, cadmium and other toxins.
      - **Oral chelation** – DMSA, DMPS