DETOXIFICATION:
An Important Tool for Surviving in a Toxic World

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As the number of chemicals and pollutants slowly increases in our environment, detoxification becomes an increasingly important part of a healthy life. Every person has a different capacity to detoxify efficiently, and those with the weakest detoxifying capability are the canaries of our world that experience the earliest symptoms.

Toxicity symptoms

In my clinical practice, there are several symptoms I use to gauge a person's toxicity. The most common are changes in short-term memory/concentration and fatigue. If you have symptoms such as low energy, brain fog, word-searching, loss of recent memory, forgetting why you went to another room, or to the refrigerator, or to a store, these could be the early signs of toxicity.

The fatigue experienced by my patients can be very gradual at first and appear to affect the morning and afternoon energy the most. Paradoxically, energy may go up in the evenings, causing difficulty in sleep initiation and insomnia. Other symptoms of toxicity include headaches, muscle twitches, indigestion, bowel changes, food allergies, sensitivity to chemicals and smells, sugar and/or salt craving, hypoglycemia (being unable to sustain blood sugar levels for more than two to three hours without eating), weight gain, fluid retention, metallic taste in the mouth, ringing in the ears, hormonal imbalance, PMS, low libido, infertility, skin changes and itching, yeast overgrowth, recurrent or persistent viral illnesses and depression & anxiety. As you can see by this list of symptoms, they can be very non-specific and may mimic other diseases.

How we detoxify

For many of my patients, removing their stored toxins can be quite challenging. Since most toxins are fat-soluble and poorly excreted from the body, they can often accumulate in your fatty organs or fat cells or in fatty organs, such as the nervous system.

The major function of the detoxification system is to change these lipophilic (fat-soluble) toxins into hydrophilic (water-soluble) ones. The body does this by adding electrons to the toxins, making them more ionic and water-soluble so they can be mobilized out of the cells. In the liver, toxins are further processed and eventually bound to amino acids, glutathione, glucuronic acid, methylatng agents, etc. so they are soluble enough to be excreted in urine and bowels (most common excretion pathways). Mobilized toxins can also be directly excreted from the skin through perspiration.

The problem of detoxification for most of my patients is the first step of mobilizing toxins from the cells. Detoxification involves attaching electrons from electron donors such as Vitamin C, and that requires energy. The problem in toxic patients is that their energy system is altered to a less energy-efficient process.

Normally, cells derive their energy from oxidative phosphorylation which uses fats called essential fatty acids as an energy source. But for those who are toxic, it can cause a shift in the cell metabolism so that it reverts to a less efficient system of energy supply called glycolysis. This happens when the body uses sugar and salt to produce energy, a much less efficient process of producing energy.

In this vicious cycle, toxicity begets fatigue, which causes decreased detoxification and more toxicity. The change to sugar metabolism can cause fatigue, muscle and joint pains, sugar and/or salt craving and increased acidosis, which can also enhance yeast overgrowth like Candida.

Enhancing detoxification

Improving excretion of toxins from the liver is an important part of an efficient detoxification system. There are two phases of liver detoxification; the first phase is the processing of the toxin to become more water-soluble, which requires various nutriaents, minerals, vitamins and antioxidants. The second phase involves the binding of the toxin to a compound that will complete its conversion to water-solubility. Glutathione (and its precursors like MSM, NAC, whey protein), taurine, glycine and methyl B12 are just some examples of these agents.

Cellular detoxification is more of a challenge because of the energy situation we described. In addition to the supplements for helping liver detoxification, specific measures can be helpful in mobilizing the intracellular toxins. First, the cells need more energy and that requires a healthy diet with a very strong emphasis on low-glycemic foods. Refined sugar products and trans fatty acids will make toxicity worse and complicate the situation. Essential fatty acids like fish oil and flaxseed oil are very helpful by providing more cellular energy and inhibiting cell membrane inefficiency.

Other agents that inhibit the toxic effects on cell membranes could be glycine, taurine, and the herb sophora. We mentioned this valuable herb in previous newsletters because of its value in supporting the body's ability to slow down cell membrane hyperexcitability and to make the cell membrane working more efficiently. Two other herbs that also support detoxification are smilax and dandelion root. These herbs have been used in eastern medicine for hundreds of years as blood and liver cleaning agents.

Simple steps to detoxify

If my patients are experiencing toxicity symptoms, I usually recommend they try the following:

- Stop any activity that is contributing to toxicity—living in moldy surroundings, drinking unfiltered water, eating too much food known to have arsenic, lead or mercury, avoiding exposure to pesticides and other chemicals. In other words, it's important to identify and avoid any further toxic exposure.
- Eat a healthy low-sugar, low-salt diet. Chew slowly and take a probiotics like lactobacillus. Drinking plenty of clean water (to flush them out of the kidneys) and regular bowel movements (constipation naturally impedes excretion) further enhances excretion of the toxins.
- Nutrients that could help Phase I liver detoxification are multi-mineral/multi-vitamins and sublingual Methyl B12. Phase II detoxifying agents may be natural foods like garlic, onions or other cruciferous vegetables (e.g. broccoli, brussel sprouts, cabbage, etc.). A supplement version could be N-Acetyl-Cysteine (NAC) or glutathione. Adding fish oil or flaxseed oil may also be helpful.
- Perspiration, either from exercise or a sauna, is an inexpensive detoxifier.
- There are also very effective herbs that work to support the body's natural ability to properly excrete stored toxins. Some of these include herbal extracts of sophora, dandelion root and smilax. Since kidney energy is depleted from over-toxicity, herbs that support kidney energy may also be helpful.

If you have any questions regarding the use of herbal dietary supplements to support your health, contact Get Well Natural at contact@getwellnatural.com or call 1-888-522-HERB (4372) or 408-260-9714, or visit the GWN website at www.getwellnatural.com or the offices at 4010 Moorpark Avenue, Suite 119, San Jose, Calif. 95117.

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