

# HEALTH ADVISORY



## The Importance of Detoxification

The notion of detoxification conjures up many ideas about special supplements or a special program that one might need to accomplish this task. In reality, detoxification is a process that the body does all the time without your knowledge. The body is designed by nature to regulate and repair itself, and this includes mechanisms for the removal of wastes and toxins. Your body has elaborate detoxification mechanisms that protect it naturally from exposure to environmental toxins as well as to those toxins created within the body. Some of these toxins are stored in fatty tissues for which the body has no removal system. These would be the toxins that detoxification programs are usually aimed at. According to Dr. LaValle, “studies report that our bodies store toxins from a lifetime of accumulated exposures”. He adds, “...studies conducted by the Environmental Protection Agency (EPA) show that 100 percent of the people studied had fat stores containing chemicals such as styrene from Styrofoam, dioxin from pesticides and xylene, a solvent”. And the list goes on.

There is significant evidence that these various toxins reduce our immune capacity by as much as 50 percent and is a major contributing factor in many diseases. Toxins alter metabolic pathways, cellular metabolism, and genetic expression. They damage the endocrine system (hormonal system), destroy necessary enzymes, alter energy production and can cause direct neurological damage. Most importantly, they can permanently impair the immune system. All of this serves to accelerate the aging process causing biological age to exceed chronological age.

Though 75 percent of detoxification takes place in the liver, a significant amount of detoxification activity occurs in the lining of the digestive tract, the intestinal mucosa. Frequently, the function of the gastrointestinal tract is impaired with aging which results in poor digestion, reduced absorption of nutrients, and an abnormal intestinal environment (dysbiosis). In addition, inhibition of different liver detoxification enzymes can impede the detoxification process. This may occur through genetic deficiencies, conflict and/or competition in activity with various toxic substances and the residues of pharmaceutical drugs. Some of these drugs include antidepressants, antibiotics, H-2 blockers like Zantac and HIV medications, to name a few.

Although the body normally handles the detoxification process, the problem begins when the toxic burden from our modern lifestyle exceeds our toxic threshold. This is when we need to take measures to assist the body in this process by proactive detoxification not only by nutraceutical support, but by a therapeutic detoxification program.

It is necessary to protect our genomic stability and enhance our body's detoxification processes with antioxidants, a healthy diet, exercise, specialized nutrients and herbal medications. Cellular renewal begins with detoxification. The detoxification pathways require steroid hormones, fatty acids, enzymes, vitamins and minerals to complete their functions of detoxification.

Some of the key nutrients required by the liver for detoxification include glutathione. This is an antioxidant used by every cell in the body. Dietary sources include fresh fruits and

vegetables, fish and meat. Also, there are amino acids from which the body can synthesize glutathione like NAC, methionine and glycine. Two other supplements that can increase glutathione levels are alpha lipoic acid and milk thistle. Other key nutrients include beta-carotene, vitamins C, E, B3, choline, copper, magnesium, zinc and the essential fatty acids omega-3 and omega-6.

In addition to nutraceutical support, one can also choose to undergo a specific detoxification regimen. However, this should only be undertaken after much education and a thorough understanding of the process because of the great demands that it puts on the body's reserves and metabolic processes. For these reasons, naturopathic physicians frequently refer to detoxification and fasting as "nature's operating table".

Merely by optimizing key nutritional factors, your body will automatically begin its own intracellular detoxification. As a result of this, your body will restore glutathione reserves, improve organ function, restore organ reserve, improve management of oxidative stress from free radicals, improve gut ecology, and improve strength and endurance.

Call Total Health Solutions today for a comprehensive evaluation of your health status.

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