



NUTRITION / DETOXIFICATION

## **Detoxification: Exploring a New 21<sup>st</sup> Century Model**

Jack Tips, PhD, CCN

The word "detoxification" is a natural health term in the public domain that specifies the body's innate process of removing or altering metabolic wastes and acquired toxins so that the body can perform its life processes unencumbered by detrimental elements and disruptive molecules. Thus, detoxification is the body's natural, innate processes to "recycle," or "take out the trash." This is necessary for survival, as well as optimal cellular health.

### **Dumpsters in Your Body**

Along the way to various exit portals, the body has a choice to drop toxins off at a storage depot if its innate wisdom determines that it cannot properly dispose of the "toxic burden" at that time. A handy place for the body to "lay its burden down" is in the fat cells, as well as the collagen (extracellular matrix). For example, if the body's chief detoxification organ — the liver — does not have enough nutrients (methyl molecules, sulfur-bearing amino acids, antioxidants and enzymes) available, then toxins may be stored in the adipose (fat) cells pending future ability to complete the task. Adipose storage is one reason why the fat cells enlarge and water-infiltrates the surrounding extracellular matrix. The body uses the lymph fluid to protect itself from the inflammation associated with the stored toxins.



## Inflammation: The Real Price of Toxins

What causes the inflammation? The answer is "toxins," for the most part - including wastes from pathogens, allergic reactions, heavy metals/chemicals, food additives and cosmetics. Dutifully, the immune system addresses toxins with free radicals that cause collateral damage to cell membranes. The resulting cell fragments alarm the immune system and incite an automatic, chronic inflammatory response.

The root cause of the disease dilemma is the body's protective use of inflammation. The inflammation that causes autoimmune and chronic-degenerative diseases stems from molecules that the body does not want, but struggles to get rid of — particularly if a person's diet and intestinal microbiome contribute even more inflammation from refined sugar, genetically-modified foods, altered probiotic colonies. Couple the onslaught of toxins with a dearth of protective nutrients and voila! - The recipe for a personal toxic waste disaster.

Further, the lack of the body's chief antioxidant, glutathione, and other antioxidants can allow the mitochondria to engage in a perpetual cycle of free radical destruction. This vicious cycle inhibits proper ATP production (low energy), and also damages chromosomes, thus is directly linked to unleashing diseases from within the body.

Detoxification is chiefly a nutritional issue. If you have the nutrients, the body will use them to detoxify itself. This is also why unrestricted access to nutritional supplements such as anti-oxidants is a basic human right and a solution to the economy-busting healthcare dilemma. Supplements help counter the onslaught of cellular damage of living in the 21st Century.

## The Best Way To Detoxify

It's always best to work with the body's own systems. This is really the essence of natural health — working with the body rather than inflicting chemical demands on the body.

Here is a sequential plan to BUILD the body nutritionally so it can detoxify itself.

1. Support the liver with phytonutrients (organic fruit/vegetables, herbs). Build liver function nutritionally and the liver will detoxify the body according to the innate processes.
2. Assist the body to remove toxins from the storage depots (fat cells and extracellular matrix) by increasing its overall nutritional health (organic fruit/vegetables, and herbs) using superfoods such as chlorella and chelating herbs.
3. Support the intracellular processes (methylation, ATP production, free-radical quenching, telomere repair, membrane fluidity, etc.) nutritionally for optimal health. This phase is cutting edge and there are marvelous supplements to help cellular health and healing.

Today, more than ever, we all need good detoxification programs that nourish the body, so the body is unshackled to do what it does best — adapt, survive and maintain its cells in optimal health.

The detox programs from the 20th Century are well and good, but they are not helping people in the 21st Century like they used to. The world has changed. In the past, toxins were stored in the fat cells and could more easily be removed when the body was able. For example, it was expected that the body would handle the toxic mercury in vaccinations. But today, the children's intestinal microbiomes are deranged by antibiotics and less-than-optimal maternal seeding. Their blood/brain barriers are weakened and mercury can more easily enter the brain and contribute to autistic-spectrum disease. Some intestinal bacterial species methylate mercury from dental fillings and increase mercury's toxicity tenfold.

### Assault On The King

Today, there is direct damage occurring inside the cells. Rampant cellular inflammation inhibits the body's ability to detoxify itself because inflamed cell membranes lack fluidity. They resist nutrient induction, as well as toxin egress. Lack of phytonutrients in the diet means that the mitochondrial production of ATP causes both inflammation and damaged DNA due to free radical processes.

This is why a 21st Century detoxification program is necessary. The game has changed from the extracellular matrix to the intracellular life processes. In chess terms, 20th Century toxin assaults were fielded by pawns. In the 21st Century, the assaults are directly impacting the king. (Fortunately, there are herbal/nutritional solutions that address the three phases of detoxification:

1. Build the liver, cleanse the bowel;
2. Cleanse the extracellular matrix; and
3. Cleanse and restore the cellular functions — fluid membranes, adequate antioxidants, methylation support and boost ATP production.

Once the intracellular function is healthy and working, the body can more easily focus on removing toxins and heavy metals from the brain and/or deeper tissues. This can be accomplished by increasing glutathione (the body's premier antioxidant nutrient).

### Everyone Needs to Detoxify

Even vegetarians and organic foods devotees must detoxify! In testing hundreds of natural health aficionado's urinary malondialdehyde — a marker for cell membrane inflammation — most score in the "rapid aging, cell membrane inflammation" range. Today, there are so many ways the body is being damaged — nuclear radiation; air, food, and water quality; prescription medication side effects; vaccinations; amalgam dental fillings; household products and plastics; genetically-modified non-foods, etc.— so even natural health practitioners must detoxify and require the advantages of a 21st Century solution.

Detoxification must be done right to be effective in the 21st Century. Poor health, symptoms and diseases predominate our global culture. The practice of assisted detoxification is more important than ever before. And more than ever before, the body needs help — nutritional support that enhances the body's innate processes — to detoxify the new challenges to its established life processes.

Detoxification sets the stage for the body to heal itself.