

Detoxification

As with the term “wellness,” “detoxification” (or “detoxing”) has also become somewhat of a buzzword. I’ll try to clarify some of the ideas behind detoxification because you can’t practice optimized wellness without knowing a lot about it. That’s why it’s one of my five key components for optimized living.

Few people, it seems to me, have been inspired to think this idea through, but “detoxification” in common use tends to have five different shades of meaning. These shades are usually jumbled together until mental confusion arises and people begin to talk past each other (do I sound too cynical?) In practice, “detoxification” takes on one or more of the following meanings in most people’s minds:

1. A bodily process in which toxins (unhealthy substances or molecules), are converted into less harmful or harmless substances and excreted. The liver is our body’s main detoxification and filtering organ, while the colon, kidneys, gallbladder, lungs, skin, blood, and lymphatic system serve (in part) to escort waste products and unhealthy substances out of the body. The general principle is that the liver, among its hundreds of functions, tries to convert harmful substances in the blood to less harmful or innocuous substances before sending them on their way to be eliminated.
2. A process in which the body attempts to achieve a new homeostasis¹ after some supposedly positive change is made in diet or other behavior. For example, quitting coffee requires a chemical rebalance in the body after caffeine—which was playing an addictive molecular role with cell receptors—is withdrawn. There are no “toxins” released to speak of, but one can sure feel lousy while the body’s chemistry adjusts itself to live in the absence of the chemical stimulant. Alcohol or drug withdrawal are other examples that can have even more potent side effects and dangers as homeostasis is set into motion.
3. An approach that intends, at least in the short term, to relieve stress on the liver and excretory organs so that they can better function at their jobs. This approach tends to remove barriers to the body’s ability to heal itself. There are many theories—some good, many not so good—related to “cleansing diets” and “cleansing agents” that a wellness practitioner must sort through before finding his or her best approach if needed. There’s a lot of myth and bad information out there. And, again, this has to do with relieving stress on organs and not directly with removing toxins.
4. The avoidance or reduction of environmental toxins that come from food, drink, and air. Of course, you can also absorb toxins through forms of physical contact other than food, drink, and air. As well, certain types of radiation can have toxic effects on your body. Awareness, reduction, and avoidance play large roles in preventing toxins from entering your system in the first place.
5. The reduction or avoidance of emotional or mental stress. This is one of the sneakier ways to “detox,” but we know that emotional and mental stress have negative physical effects on the body that can lead to real toxins developing, or to organs losing their ability to carry out their detoxification roles efficiently.

Where Do the Toxins Come From?

Toxins typically come from the world outside of us. They create physiological stress. However, mental and emotional stress can also lead to toxic body conditions. As well, normal metabolic processes can leave toxic residue behind if the liver and other excretory organs are not working up to speed. Simply put, our external and internal world has become a hazardous wasteland in which we must breathe polluted air, drink chemically polluted and “treated” water, eat processed and altered foods devoid of all nutrition or worse, take daily medications and synthetic hormones, and react to daily stress that is part of our culture. Technology and industrial advancement may have led to wonderful improvements to our lives, but they have also caused the toxins in our lives to increase dramatically. It is not surprising that our country has experienced rises in the incidences of cancer, diabetes, high blood pressure, viruses, Alzheimer’s, and virtually all other chronic and degenerative diseases.

What Have I Been Doing Wrong?

Most people experience significant toxin accumulation, detoxification insufficiencies, and suboptimal homeostasis conditions due to the content of their diets. The average American diet can render the liver sluggish so that it can no longer do its detoxification job well at all. The gallbladder can also become sluggish, if not clogged. This prevents certain wastes from being eliminated through the biliary system. The stomach can no longer digest food as it should because enzyme, acid, and pH levels degrade. The small intestine loses some ability to absorb the proper nutrients. Sometimes it even allows substances to reenter the blood stream that shouldn’t. And the large intestine (colon) slows down, leading to constipation, irritable bowel syndrome, and other diseases. Add in the large amount of sugar-laden food and drinks, artificial sweeteners, heavy metals in our air, food, and water supply, prescription and over-the-counter medications, and the average American body becomes a wonderful harbor for toxin build-up!

And here’s the clinker: Genetically, the liver cannot recognize many offending, environmental substances to be the poisons that they are. Therefore, they don’t get converted to less noxious substances or removed from the blood except by chance. They simply sneak through the liver’s natural screening process and accumulate in the bones, fat, and other tissues, unrecognized for what they are. Then they slowly kill us, or poison our system so that it can’t work properly. This generally means a lower quality of life.

In the meantime, the chemical industry and its regulatory minions say it’s okay to have these thousands of chemical substances swimming in our blood and lodged in our tissues! Fluoride in drinking water is one example. Its molecules displace iodine, leading to a weakened thyroid function and more than a hundred other, well-documented health issues. It gets very ugly. There are some very revealing books out there discussing this topic.

Another example is mercury. It can mimic or cause just about any illness currently known, or at least contribute to it.

Along these lines, it’s important to understand that if you’re deficient in essential metals, your body actually uses toxic, heavy metals as “stand-ins” instead. For example:

- Lead will replace calcium, and will deposit itself primarily in bone, disrupting the formation of red blood cells. Lead also contributes to poor bone health such as osteopenia and osteoporosis.

- Cadmium will replace zinc, and will tend to accumulate heavily in your kidneys. Cadmium overload is associated with peripheral neuropathy.
- Aluminum will replace magnesium, and will, among other things, induce neurochemical changes. Aluminum has also been identified as a contributing factor to developing Alzheimer's.
- Nickel will replace manganese. Nickel is carcinogenic.

So, you do you need to make sure you're getting vital nutrients in your diet order to avoid this toxic metal replacement process.

A third example is the grease-resistant coatings of perfluorinated chemicals on paper products such as french fry boxes, popcorn boxes, candy bar wrappers, hamburger wrappers, carryout bags, pizza boxes, and hundreds of other food items. Yes, these Dupont-developed coatings keep grease stains from developing (wow, what an advance), but the coatings also leach into food and are now found in the bloodstreams of 96% of all Americans as well as wildlife in the most unexpected parts of the world. They even penetrate placentas to contaminate babies before birth. What's worse, when in the blood, the chemicals convert to likely human carcinogens, C8 and PFOA—compounds that Dupont uses to make Teflon.

As wellness practitioners, we need to think about how to avoid or reduce exposure to such chemicals—that is when we are even allowed to know about their presence or toxicity without whistle-blowers speaking up and having their lives turned upside down. So what can we do?

It's possible to filter most fluorine from your drinking water. And you may be able to find ways to avoid paper products that contain Dupont fat barriers (staying away from fast foods is one way). But, despite what some detox product venders and "cleansing" advocates claim in the alternative medicine fields, you simply may not be able to get certain chemical residues out of your system using natural approaches (although is possible to remove some heavy metals such as mercury by introducing natural chelating agents that bind with the metals). If your liver cannot recognize chemicals or molecular residues as toxins and selectively filter them out, how in the world are you going to get rid of them if natural chelation techniques don't work? Our only option right now may be medical intervention via drug chelation therapies, that is if Big Pharma deems such therapies to be profitable in the long term—which it probably won't because it would prefer to serve perpetually sick people by just masking symptoms and having the profits pour in. In any case, the science for removing most such chemicals—whether through herbal or drug means—just isn't here yet. So we must make due as wellness practitioners.

But here's an important point. It doesn't pay to get yourself all stressed out about the negative conditions present in our modern, chemical-laden world. That would just be jumping from the frying pan into the fire because emotional stress may be even more dangerous to your health than lingering chemical toxins. You are *much* better off taking an even-handed attitude toward what you can reasonably do, as an individual, to avoid or minimize such accumulations as you learn about them. Yes, do take reasonable actions to cleanse your body of toxins, but it would be foolish to think you can get them all out. A reasonable approach can definitely help you counteract some of the onslaught of "damage by chemistry." But then go on and live your life. Life is meant to be lived, not feared. If you have been practicing wellness, any toxin buildup will

not have as much of an effect on you as someone who abuses his or her health through ignorance or lack of discipline.

How Toxins Affect Your Body

There are a plethora of signs and symptoms that can result from toxins hanging around in your system, or your homeostatic balance not being optimal because of a poor diet and such. Problems include digestive issues, esophageal reflux, upset stomach, bloating and gas, diarrhea and constipation, low energy, PMS, headaches, irritability, skin rashes and conditions, chronic aches and pains, high cholesterol, food intolerances, alcohol intolerance, arthritic symptoms, weight gain, hormonal imbalance and more. Of course, any of these signs and symptoms may have nothing to do with toxin accumulation in the direct sense and more to do with poor homeostasis, too much stress buildup, or even disease, but you must be ready to think about detoxification as part of your optimum lifestyle.

Role of the Liver, GI tract, and Kidneys in Detoxification

Simply put, your liver is a vital and necessary part of your health. The liver's job is to detoxify your blood. All of the blood in your body runs through the liver, where it is cleansed. The liver is like an air conditioning filter. If you haven't changed your AC filter lately, you will notice that it is very dirty with a lot of dust and lint stuck to it. If you don't clean or change your filter regularly, your AC unit will become dirty, inefficient and possibly even break down from the stress. Your liver is no different. It filters and detoxifies the blood, and if it is not kept "clean" and functioning normally, it begins to break down and your body suffers due to the accumulation of toxins.

The liver has two detoxification phases. In Phase 1, a toxin is altered into a less harmful, intermediate metabolic product. However, undesirable free radicals form during this phase. Your body must supply an adequate amount of anti-oxidants to neutralize the free radicals. This rids the body of unnecessary toxic activity. But without an adequate supply of anti-oxidants or a properly functioning liver, liver cells can be damaged from the presence of the free radicals.

In Phase 2 of the detoxification process, a substance is added to the less harmful, intermediate product to form a water-soluble substance so that it can be moved out of the body via the colon or the kidneys. The result is an end of the toxic activity and a cleansing of the body. For this phase to work, the liver, gastrointestinal tract, and kidneys, and other excretory systems all have to be functioning well.

The gastro-intestinal (GI) tract works in conjunction with the liver in the detoxification system by providing a direct portal of exit for unwanted waste. The problem today is that the average American has a dysfunctional GI tract. From improper digestion to improper absorption of nutrients to improper elimination of waste, GI problems are pandemic. Acid-reducing medications such as the "Purple Pill" are advertised to "relieve" all problems associated with upset stomach and heartburn. The problem is that the stomach requires acid to digest food properly. By taking these meds, digestion is greatly hampered if not halted. Improper digestion leads to improper nutrition and consequently lower-bowel problems including constipation, IBS, ulcers, and in extreme cases, cancer of the colon. Easy, basic steps can be followed to avoid these pitfalls and the need for such medications. They can also ensure proper GI function and detoxification.

The kidneys further aid in detoxification by filtering out toxins and waste from the blood and eliminating them from the body through the urine. Simply drinking the right amount of water and avoiding the types of drinks discussed above can help the kidneys work efficiently and effectively.

Benefits of Detoxification

A properly executed detoxification protocol includes:

Cleansing the body and bloodstream of harmful substances where possible, thus

- Restoring more normal detoxification processes and functions
- Eliminating free radical damage that speeds up the aging processes
- Strengthening the immune system
- Improving overall health and organ function
- Eliminating old, unhealthy, detrimental habits, and substituting new, restorative, health-building habits so you can reclaim your health, your youth, your life!

The detox process should be safe, simple, comfortable, and rewarding. Not all detoxification programs are effective, safe, or even based on decent evidence. Much comes from myth and is fear-based. Some comes from sleight-of-hand that leads you to believe toxins and other nasty looking stuff is being extracted from your body. The Internet and infomercials are chock full of opportunities to lighten your wallet if you decide to hop onto the detox bandwagon.

Constipation is one area. For example, you're probably much better off changing your diet to eliminate constipation than using herbal detox products that are primarily laxatives. After all, taking laxatives will not cure constipation, and could easily make it worse. That's no better than the medical approach of masking symptoms!

Be wary of poorly researched techniques like footpads, colonics, or footbaths that claim the color of the water tells you anything useful. It doesn't. And steer clear of long-term fasting techniques like the "Master Cleanse," a 10-day detox plan that consists of nothing but lemon juice, maple syrup and cayenne pepper. Fasting was all the rage about 20 or 30 years ago, but today we know that your body actually *needs* specific nutrients to aid its natural detoxification process. Heavy fasting doesn't supply those nutrients. However, short-term elimination fasts can identify the source of food intolerances and allergies, especially if the fasts are professionally supervised.

When Is It Best to Detox?

In 2008 outside Los Angeles, a 3-day think-tank was set up involving some of the top experts in autism detoxification. By consensus, that group came up with the following *priority list* for achieving optimal health:

6. Healthy Living
7. Avoiding Electromagnetic Fields (EMF)
8. Clean Water

9. Healthy Food
10. Healthy Movement
11. Emotions & Relationships
12. Tests
13. Organ Support
14. Supplements
15. Detox Tools

Note that detoxification tools are on the list, *but at number 10*. Nine other factors come before it to help build health and provide support. Unfortunately, many people first consider detoxing when they're not feeling well. If you fail to follow an orderly process and instead begin a detoxification processes prematurely, it can deteriorate your health even further, making you very sick.

Unless you are under the care of a doctor, you should avoid starting any toxin-removal regimen while you are sick. You need to establish a healthy lifestyle and dietary habits first, so that you have a reserve your body can draw on to allow your liver to do its job properly. Fail to do this properly and you can easily overwhelm your liver's ability to process the toxic substances being eliminated and you will become even sicker, wishing you had never done the detox in the first place. Please use caution and evaluate your current state of health before embarking on any kind of detoxification program. Allow your 5% of professional care to weight in!

Finally, if you're just starting out with your wellness practice, work with a professional who has a good reputation for safe, effective, comfortable detoxification protocols, and who is willing to tell you how and why they work. I've now given you enough background to ask some very good questions about detoxification!

ⁱ The body's natural tendency to maintain—or attempt at maintaining—an internal stability or balance. The organ systems of the body coordinate biological responses that automatically compensate for environmental changes.