

Minimize Risk of Contact with Harmful Chemicals (Poisons)

There are millions of chemicals in our world. Some are natural, required substances, such as water (H₂O), a combination of two hydrogen atoms with one oxygen atom. Others are useful, such as hydrogen peroxide (H₂O₂). Many chemicals are manmade and can be found in pesticides, cleaning or industrial products, and plastics. The [New York State Department of Health](#)⁵⁰ provides a useful summary about the toxicity of various chemicals. In general, you can be exposed in a variety of ways, such as through inhalation, touch, and consumption. Although some people are more sensitive to certain substances than others, generally, the larger the dose, the longer the time of contact, and the more vulnerable the host, the greater the consequences. The repercussions can include burns, compromised metabolism, changes in hormone production, and excess work for your liver and kidneys. Sometimes your body can flush out or neutralize the invading substances, as antioxidants do for free radicals, but other times the body doesn't have adequate defense mechanisms, leading to a toxic buildup that affects our overall health and energy and increases our risk of cancers.

Activity 11.1: Avoiding Chemical Exposure

Use this activity as a broad scale of key things to do to limit chemical exposure.

If you don't actively prevent exposure to dangerous chemicals, you can easily suffer an overload of foreign substances in your body, which will, particularly over time, compromise your health and well-being. Minimizing exposure to toxins requires you to value your health over other commodities, such as your time and money. The information provided truly represents just the tip of the iceberg of what's possible.

- ◇ Do not smoke or chew tobacco. Call 1-800-784-8669 to be connected to your state and local smoking cessation resources.
- ◇ Alcohol and drug abuse are addictions that require assistance. See <http://www.recovery-world.com/National-Hotline-Phone-Numbers.html> for a list of hotline numbers including the National Drug and Alcohol Treatment Hotline (800-662-HELP)

Limit harmful chemicals in all products that you buy. Read labels. Follow instructions. Here are some key things to focus on:

- Avoid BPA (see below) and phthalates.⁵¹
 - Use soap without antibacterial chemicals (triclosan and triclocarban).
 - Be aware of mercury in seafood.
 - Avoid these other chemicals known to cause problems: asbestos, arsenic, formaldehyde, hexane, hexavalent chromium, methylene chloride, the flame retardants TDCP and TCEP, trichloroethylene (TCE), and vinyl chloride
- ◇ When handling chemicals, wear gloves and a face mask and wash your hands often.
 - ◇ Beware of fumes. Maintain distance from chemicals, and maintain airflow.
 - ◇ Label and store dangerous cleaners, pesticides, medicine, and so on, safely, away from all food.

⁵⁰ New York State Department of Health, "What You Know Can Help You – An Introduction to Toxic Substances," retrieved on June 4, 2016, from https://www.health.ny.gov/environmental/chemicals/toxic_substances.htm.

⁵¹ See NHRD fact sheet on phthalates for more information: <http://www.nrdc.org/health/files/phthalates.pdf>.

- ◇ Dispose of chemicals properly (not down the drain).
- ◇ Buy organic versions of these foods with known pesticide or antibiotic problems: apples, berries, bell peppers, carrots, celery, cherries, grapes, hot peppers, kale, lettuce, nectarines, peaches, pears, potatoes, strawberries, and sweet peppers.⁵² Other organic foods that are very beneficial are meat (choose meat from animals not treated with antibiotics), milk, peanut butter, and baby foods. The following fifteen foods are least likely to have pesticide residues: avocados, bananas, sweet corn, pineapples, cabbage, frozen sweet peas, onions, asparagus, mangoes, papayas, kiwis, eggplants, grapefruits, cantaloupes, cauliflower, and sweet potatoes.

Useful links for more information

- ★ **Poison Center Hotline (1-800-222-1222):** Poison help
<http://poisonhelp.hrsa.gov/>
- ★ **Natural Resource Defense Council (NRDC):** A wide array of useful information
<http://www.nrdc.org/health/>
- ★ **Environmental Working Group:** Guide to healthy cleaning (also see guide to healthy cleaners)⁵³
<http://www.ewg.org/guides/cleaners>
- ★ **US Environmental Protection Agency:** Reduce, reuse, recycle
<http://www.epa.gov/wastes/consERVE/materials/hhw.htm>

Do You Need to Detox? The Author's Personal Reflection.

Fortunately our miraculous bodies, particularly our liver and kidneys, are constantly detoxing—purging our body of toxic chemicals. Water, fiber, and sweating (yes, exercising) all facilitate natural cleansing. Unfortunately, at this time, there are no general public health recommendations for detoxification. Instead, the mysterious process remains in the realm of naturopathic and alternative-care practices. However, this nutritionist, with a lifetime of experience, believes that cautious periodic detoxing of the body is beneficial, particularly after the holidays or vacations when we tend to overeat, or if one feels sluggish, is slow to recover from disease, has allergies, or is constipated. While many hard-core detoxifiers recommend stringent two-week fasts that deplete energy stores and literally leave you starving, I suggest consideration of a more cautionary short-term approach to cleansing.

- ◇ *Start with your body's regular elimination processes.* Are they working well? Are you drinking enough water and eating enough fiber to have regular bowel movements? Are you urinating at least four times a day (ideally much more)? Is your urine light colored in the afternoon? Are you always thirsty? Are you getting enough exercise and fresh air? What could you change?

⁵² Environmental Working Group, "EWG's 2016 Shopper's Guide to Pesticides in Produce," 2016, retrieved on June 4, 2016, from <http://www.ewg.org/foodnews/summary.php>.

⁵³ The author likes and uses many Melaleuca products that are not reviewed on the EWG website. For more information, go to <https://www.melaleuca.com/>.

- ◇ *Consider the health of your gut.* Many people, particularly after taking an antibiotic or when consuming a diet high in sugar and sugar alternatives, have an overload of detrimental bacteria in their gut and an insufficient supply of the good bacteria their lower gut needs to digest foods well. If you are having diarrhea and lots of gas, adding good bacteria into your gut may be just what you need for better health. You can do this by adding a daily serving of kefir, a fermented milk product containing multiple strains of good bacteria, or a high-quality multiple-strain probiotic supplement. What could you change?

- ◇ *Eat well and consider a multivitamin mineral supplement.* This will ensure you are getting enough of the nutrients you need to optimize your health. This also means reducing excessive intake of sugar, additives, alcohol, and caffeine, and making sure you get enough fresh leafy greens and healthy oils (olive, sesame, and nut oils). For people who have known food sensitivities, eliminating problem food can make a huge difference in how they feel. What could you change?

- ◇ Some people also benefit from additional support of liver or colon cleansing. But beware! Liver cleansing can affect the processing of medications, so you really should discuss it with your doctor before you do it. Also, the long-term dietary restrictions required by some cleanses can result in short-term nutritional deficiencies.

More about how to detox effectively

- ★ *7-day Detox Miracle: Revitalize Your Mind and Body with This Safe and Effective Life-Enhancing Program.*⁵⁴

⁵⁴ P. Bennet, S. Barrie, and S. Faye. *7-day Detox Miracle. Revitalize Your Mind and Body with This Safe and Effective Life-Enhancing Program*, 2nd edition (Roseville, CA: Prima Health, 2001).