



## HOW TO REDUCE TOXIC EXPOSURE IN YOUR ENVIRONMENT

To achieve optimal health and create sustainable wellness, it's imperative that you become aware of not only what you are putting in and around your body, but also, what you put on it. Between shampoos, toothpaste, face creams, deodorant, cosmetics and so on, most people are voluntarily dousing themselves daily with multiple chemicals, carcinogens and mutagens, adding to their toxic load and setting the stage for illness and disease. Seems like kind of a crazy habit, doesn't it?

The problem is that many cosmetics and personal care products contain undisclosed toxic chemicals that are dangerous to your health and are known to contribute to a variety of problems such as cancer, nerve damage, and infertility. And as your skin is an extremely permeable membrane, these toxins enter your body very easily, so the fewer you use the better, particularly with products that remain on the skin for long periods of time, such as facial makeup. The longer you are exposed to chemicals, the greater the opportunity for your body to absorb them.

Check out the [Shop My Home](#) page of my website to find my favorite products and brands that I use personally and recommend.

### My advice? Keep cosmetic self-pollution to a minimum by taking the following steps:

1. When choosing makeup, select unscented, fragrance free products that contain few or no petrochemical derivatives.
2. Avoid products that contain diethanolamine (DEA) and triethanolamine (TEA).
3. Avoid products with the preservatives imidazolidinyl urea and quarternium 15.
4. Look for nail polish products that are "3-free" meaning they do not contain the "toxic trio" of toluene, formaldehyde and dibutyl phthalate.
5. Look for skin care lines that are formulated with fewer dangerous ingredients, such as Living Libations, Dr. Hauschka, Eminence, Sunshine Botanicals, Aubrey Organics, Weleda and many more. To research the toxicity of a specific product before you buy, check out the Environmental Working Group's massive cosmetics database, [Skin Deep](#).
6. To cut exposure, use makeup sparingly, and only on the days you think you "need" it and not at all on the weekends. When you get home from work, take your makeup off right away – don't wait till bedtime.
7. Trade in your high-end perfumes and colognes for plant-based essential oils.
8. Opt for natural hair colorings like henna and other plant-based formulas.

9. Carry a copy of the Environmental Working Group's Shopper's Guide to Safe Cosmetics, to help you make the best cosmetics choices possible.
10. Do not use conventional deodorant that contains aluminum. Always use natural deodorants without aluminum or other chemicals.

### Here's my List of the Top 15 Skin Care ingredients to Avoid

1. **Aluminum Chloride:** in all antiperspirants – aluminum build up in the brain is linked to Alzheimer's
2. **Ammonium Xylenesulfonate:** in nail polish – inhalation can cause central nervous system damage and coma
3. **Benzalkonium Chloride:** a germicide – toxic if taken internally, skin allergies
4. **BHA/BHT:** a preservative for packaged dry foods and skin care products made from petrochemicals – causes benign and malignant tumors
5. **Butyl Alcohol:** in clear shampoos – causes dermatitis, breathing problems, dizziness, drowsiness and headaches
6. **Diazolidinyl Urea/Disodium EDTA/DMDM Hydantoin:** a preservative, made from formaldehyde - a known carcinogen
7. **Ethanol:** in acne products and skin toners gives cool feeling, perfumes – ingestion can cause nausea, stupor, coma, and death
8. **Ethylene Glycol:** in many shampoos, aka antifreeze- can cause respiratory problems
9. **Imidazolidinyl Urea/Urea:** a preservative synthesized from known carcinogens
10. **Lithium Chloride:** used in soap and long life batteries – very toxic to kidneys
11. **Methylene Chloride:** nail polish remover – skin irritant, narcotic when inhaled and carcinogenic
12. **PABA:** in sunscreen – causes allergic eczema, skin rashes, swelling
13. **Phenoxyethanol:** a preservative derived from poisonous Phenols
14. **Poly Quaternium 7, 10, 11, 15:** the American Academy of Dermatology lists this as a skin irritant and combines with natural body substances to form potent carcinogens called nitrosamines
15. **Talc:** implicated in causing ovarian cancer

### Other Common Chemicals to Avoid

Some of the most well-known chemical hazards that most people are exposed to on a daily basis include:

- BPA and BPS: Bisphenol-A (BPA) can be found in a wide variety of plastic products, such as water bottles, microwaveable plates, tooth sealants, canned foods, and baby toys. It's a potent endocrine disruptor that can also interfere with your thyroid hormones. Brain damage, decreased intelligence, attention deficit hyperactivity disorder and autism were also found to be potential side effects.

California recently added BPA to its "dangerous chemicals" list, which means any product using the chemical will likely be required to include a warning label.

- Bisphenol-S (BPS) has been shown to have estrogenic activity comparable to estradiol, the most potent human estrogen. It's also capable of enhancing estradiol-mediated cell signaling, making it a particularly potent endocrine disruptor. Furthermore, recent research has shown BPS can induce apoptosis (cell death) and interfere with cellular secretion of prolactin (PRL)—a hormone that regulates hundreds of biological functions, including metabolism, reproduction and lactation.
- Phthalates: Another chemical used in the manufacturing of plastics is phthalates, which make plastics like polyvinyl chloride (PVC) more flexible and resilient. They're also one of the most pervasive endocrine disruptors so far discovered. These chemicals have increasingly become associated with changes in the development of the male brain as well as with genital defects, metabolic abnormalities and reduced testosterone in babies and adults.
- PFOA: Non-stick cookware is the primary source of dangerous perfluorinated chemicals (PFOAs), which have been linked to cancer, birth defects and thyroid disease. I highly recommend you throw away your non-stick cookware immediately and replace it with either ceramic or glass. My personal choice is ceramic cookware, because it's very durable and easy to clean, and there's virtually no risk of exposure to harmful chemicals.
- Formaldehyde: Formaldehyde, most commonly known as embalming fluid, serves a number of purposes in manufactured products. It is actually frequently used in fabrics to give them a variety of "easy care properties" as well as being a common component of pressed-wood products. Formaldehyde has been shown to cause cancer in animals, and may cause cancer in humans. Other common adverse health effects include fatigue, skin rashes, and allergic reactions. Choosing all natural materials for your clothing and furniture can help cut down on your exposure.
- PBDEs: These flame-retardant chemicals have been linked to altered thyroid levels, decreased fertility and numerous problems with development when exposure occurs in utero. PBDEs are commonly found in household items like upholstery and television and computer housings. Fortunately, several states now ban the use of PBDEs, so there is some progress toward reducing exposure.
- Another common source of PBDEs is your mattress, and since you can spend up to a third of your life in bed, this is a significant health concern. Mattress manufacturers are not required to label or disclose which chemicals their mattresses contain. Look for 100 percent wool, toxin free mattresses. Another viable option is to look for a mattress that uses a Kevlar, bullet-proof type of material in lieu of chemicals for fire-proofing. Stearns and Foster uses this process for their mattresses, which is sufficient to pass fire safety standards.

### What Can You do to Reduce Unnecessary Chemical Exposure to Your Family?

Rather than compile an endless list of what you should avoid, it's far easier to focus on what you should do to lead a healthy lifestyle with as minimal a chemical exposure as possible:

As much as possible, buy and eat organic produce and free-range, organic foods to reduce your exposure to pesticides, GMOs and fertilizers. If your budget requires that you choose between organic meat and dairy products and organic produce, spend your money on organic meat and dairy always. Our highest exposure to toxicity (pesticides, hormones, antibiotics) comes from feedlot meat and dairy. Next, buy organic fruits and vegetables selectively but make no exceptions! According to the Environmental Working Group, up to 90% of our pesticide exposure comes from 12 crops. These crops are coined "The Dirty Dozen". When it comes to these most heavily sprayed fruits and vegetables, you should ALWAYS buy organic. Be sure to read labels on packaged foods and ensure that these foods are always organic.

### Eliminate Residual Contaminants with Two Simple Steps

For foods that are not classified as "The Dirty Dozen", you can reduce or eliminate residues and bacteria with two easy steps.

First, remove the outside leaves or peel - the outer surface is likely to have the highest concentration of pesticide residue.

Next, use a vegetable wash and rinse thoroughly. While commercial veggie washes are widely available, you can make your own at home for pennies. It's completely safe, nontoxic, and won't affect the taste of your fruits or vegetables.

Here are three simple recipes to have on hand:

#### Homemade Fruit & Veggie Wash #1

½ cup organic white vinegar  
4 tbsp. sea salt  
2 cups filtered water

Combine ingredients in a spray bottle and shake well. Spray directly on produce. Allow to set for a few minutes, then lightly scrub. Rinse well.

#### Homemade Fruit & Veggie Wash #2

4 tbsp. lemon juice  
4 tbsp. baking soda  
2 cups filtered water

Combine ingredients in a spray bottle and shake well. Spray directly on produce. Allow to set for a few minutes, then lightly scrub. Rinse well.

#### Homemade Fruit & Veggie Wash #3

1 tbsp. lemon juice  
2 tbsp. organic white vinegar  
1 cup filtered water

Combine ingredients in a spray bottle and shake well. Spray directly on produce, allow to set, then scrub. Rinse well.

In A Nutshell :

1. As much as possible, buy and eat organic produce and free-range, organic meats to reduce your exposure to added hormones, pesticides, and fertilizers. Also avoid milk and other dairy products that contain the genetically engineered recombinant bovine growth hormone (rBGH or rBST).
2. Rather than eating conventional or farm-raised fish, which are often heavily contaminated with PCBs and mercury, supplement with a high-quality purified krill oil, or eat fish that is wild caught and lab tested for purity.
3. Eat mostly raw, fresh foods, steering clear of processed, prepackaged foods of all kinds. This way you automatically avoid artificial food additives, including dangerous artificial sweeteners, food coloring and MSG.
4. Buy products that come in glass containers rather than plastic or canned, since chemicals can leach out of plastics and into the contents.
5. Store your food and beverages in glass rather than plastic, and avoid using plastic wrap and canned foods (which are often lined with BPA-containing liners).
6. Use glass baby bottles and BPA-free sippy cups for your little ones. Some manufacturers have even moved to glass, since BPA-free products may contain other toxic bisphenols.
7. Have your tap water tested and, if contaminants are found, install an appropriate water filter on all your faucets (even those in your shower or bath).
8. Filter your tap water - both for drinking and bathing. If you can only afford to do one, filtering your bathing water may be more important, as your skin absorbs contaminants. To remove the endocrine-disrupting herbicide Atrazine, make sure the filter is certified to remove it. According to the EWG, perchlorate can be filtered out using a reverse osmosis filter.
9. Only use natural cleaning products in your home. Avoid products that contain 2-butoxyethanol (EBE) and methoxydiglycol (DEGME)—two toxic glycol ethers that can damage fertility and cause fetal harm.
10. Switch over to natural brands of toiletries such as shampoo, toothpaste, antiperspirants and cosmetics. The Environmental Working Group has a great database to help you find personal care products that are free of phthalates and other potentially dangerous chemicals. My favorite personal care lines include Living Libations, Dr. Hauschka, Eminence and Sunshine Botanicals.
11. Replace feminine hygiene products like tampons and sanitary pads with safer alternatives such as a Diva Cup and reusable fabric pads.
12. Avoid using artificial air fresheners, dryer sheets, fabric softeners or other synthetic fragrances.
13. Replace your non-stick pots and pans, (i.e. Teflon) with ceramic or glass cookware, cast iron or a safe nonstick pan.
14. When redoing your home, look for "green," toxin-free alternatives in lieu of regular paint and vinyl floor coverings.

15. When buying new products such as furniture, mattresses, or carpet padding, ask what type of fire retardant it contains. Be mindful of and/or avoid items containing PBDEs, antimony, formaldehyde, boric acid, and other brominated chemicals. As you replace these toxic items around your home, select those that contain naturally less flammable materials, such as leather, wool, and cotton.
16. Replace your vinyl shower curtain with one made of fabric, or install a glass shower door. Most all flexible plastics, like shower curtains, contain dangerous plasticizers like phthalates.
17. Use a vacuum cleaner with a HEPA filter to remove house dust, which is often contaminated with traces of chemicals.
18. Limit your use of drugs (prescription and over-the-counter) as much as possible. Drugs are chemicals too, and they will leave residues and accumulate in your body over time.
19. Avoid spraying pesticides around your home or insect repellants that contain DEET on your body. There are safe, effective and natural alternatives out there.

### Do You Want to Clean Your Home Safely? Here are the Simple Tips...

Have a clean home should not mean sacrificing your health due to chemical exposures, plain and simple. In fact, some of the best cleaners are items you probably already have around your home, such as vinegar, baking soda, and lemon juice. Here's a simple starter list of what you need to make your own natural cleaning products:

- Baking soda
- White vinegar
- Lemon juice
- Hydrogen peroxide
- Liquid castile soap
- Organic essential oils (optional)
- Mixing bowls
- Spray bottles
- Microfiber cloths

Lemon juice is a natural whitener, vinegar and water makes an excellent window cleaner, and vinegar combined with hydrogen peroxide works exceptionally well as both a disinfectant and sanitizer.

Baking soda is also great to scrub your bath and kitchen. Put it in a glass grated cheese container with a stainless steel top that has holes in it, and just sprinkle the baking soda on the surfaces and scrub. You may add a few drops of your favorite essential oil to this, such as lavender and tea tree oil, which have added anti-bacterial qualities.

- Use baking soda as a safe, non-scratch scrub for metals and porcelain.
- To clean your oven, sprinkle a cup or more of baking soda over the bottom of the oven, then cover the baking soda with enough water to make a thick paste. Let the mixture set overnight. The next morning the grease will be easy to wipe up because the grime will have loosened. When you have cleaned up the worst of

the mess, dab a bit of liquid detergent or soap on a sponge, and wash the remaining residue from the oven.

- To unclog a drain, pour 1/2-1 cup of baking soda down the drain, then slowly pour 1/2-1 cup of vinegar in after it. Cover the drain and let it sit for 15 minutes. If it bubbles like a volcano, it means it's working as planned. Flush with a gallon of boiling water.
- Deodorize dry carpets by sprinkling liberally with baking soda. Wait at least 15 minutes, then vacuum.
- To rid your garbage disposal of foul smells, add vinegar to water for ice cubes, then let a few of them get chopped by your disposal.
- To clean your silver, boil 2-3 inches of water in a shallow pan with 1 teaspoon of salt, 1 teaspoon of baking soda, and a sheet of aluminum foil. Totally submerge silver and boil for 2-3 minutes more. Remove silver from the pan and wipe away the tarnish with a clean cotton cloth.

### Limiting Chemical Exposure is Important for Optimal Health

A typical American comes in regular contact with some 6,000 chemicals and an untold number of potentially toxic substances on a less frequent basis. Disturbingly, many of them have never been fully tested for safety. To protect your health, it's important to make these positive and gradual steps toward decreasing your chemical exposure.

While you make the switch to remove and reduce chemicals around your home, remember that one of the ways to significantly reduce your toxic load is to pay careful attention to what you eat. Organically-grown, biodynamic whole foods, along with fermented foods, are really the key to success here, and, as an added bonus, when you eat right, you're also optimizing your body's natural detoxification system, which can help eliminate toxins your body encounters from other sources.

Environmental pollution is a massive problem, but for most there aren't many immediate solutions to address it. Your time is better spent focusing on your environment; your home, and all the products you use or come in contact with on a daily basis. Cleaning that up can go a long way to reduce your toxic load, and hence decrease your risk of chemical-induced health problems.