

## A MADE SAFE® Guide for Safer Options

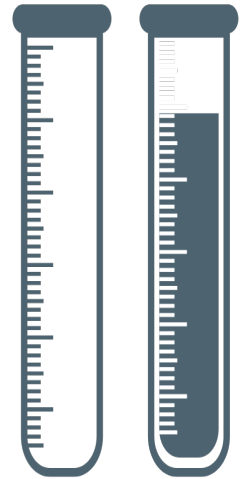
# Endocrine-Disrupting Chemicals IN THE HOME



**E**ndocrine disrupting chemicals (EDCs) are substances in the environment, usually manmade, that mimic, block or interfere with hormones in the body's endocrine system. They're found in a wide variety of consumer goods including carpets, cookware, household dust, fragranced products, furniture, paints, personal care products, plastics, pesticides, pharmaceuticals, and unfiltered drinking water (due to contamination).

The old tenet of the field of toxicology, "The dose makes the poison," has been found to be an inaccurate measure for many chemicals currently in use. Current research suggests that for some adverse health outcomes, a variety of substances are actually toxic at lower doses. Numerous endocrine-disrupting chemicals have been shown to be **potent at low doses**. Plus, some substances are not only toxic at low doses, but also **toxic at high doses** for totally different adverse health outcomes.

What's all this mean? Some substances are affecting us at low levels, and some substances are affecting us at both low levels and high levels!



## Examples of EDCs & where they're found:

**Bisphenol A (BPA) and other bisphenols**  
Commonly found in plastic, canned goods

**Chemical flame retardants**  
Commonly found in furniture, mattresses, kitchen items

**High-risk pesticides**  
Commonly found in personal care, conventional food, weed killers, unfiltered water

**Methylisothiazolinone**  
Preservative commonly found in cleaning and personal care products

**Oxybenzone**  
Commonly found in sunscreen, fragrance as a stabilizer

**Parabens**  
Commonly found in personal care

**Per- & polyfluoroalkyl substances (PFAS)**  
Commonly found in stain resistant carpeting, nonstick cookware, cosmetics, some food packaging materials, some period products

**Phthalates**  
Commonly found in plastics, canned goods, fragrance

**Polychlorinated biphenyls (PCBs)**  
Commonly found in fish

**Triclosan and triclocarban**  
Commonly found in cleaning products labeled as "antimicrobial"

## What are the concerns?

Due to the ubiquity of endocrine-disrupting chemicals in our modern world, many people find themselves virtually inundated in a sea of constant chemical exposure. The problem is that continuous exposure to EDCs, **even at low levels**, can disrupt the intricate workings of our body's endocrine system. Consider this analogy: What a choreographer is to a dance crew, the endocrine system is to the body. The endocrine system oversees and choreographs nearly every bodily function from conception until death: Growth, reproduction, metabolism, and organ function are just a handful of the many critical functions executed by the endocrine system.

The problem arises when the endocrine-disrupting chemicals in our environment **interfere with the signaling** of the endocrine system, thereby throwing the normal functioning of the hormone (endocrine) system out of whack. Because the endocrine system oversees so many different functions, the effects of endocrine-disrupting chemicals are wide-ranging, contributing to or causing things like **altered fetal development**, **issues with fertility**, increased risk of **cancer**, **obesity**, and much more.

## Tips for reducing your exposure to EDCs

### — Big Picture Tips for a Healthier Home —

- ✓ **Refuse single-use plastic.** Prioritize reusable items and non-plastic options.
- ✓ **Ditch plastic products.** Find glass and stainless steel alternatives.
- ✓ **Keep it natural.** Search for more natural personal care products, cosmetics, household goods, clothing etc.
- ✓ **Less is more.** Simplify and streamline – ask yourself if you really need to use a particular product. A good way to simplify is to use products that have multiple uses (e.g. multipurpose household cleaners).
- ✓ **Cook at home.** Prepare simple, fresh, whole foods, which can save you money and help you avoid excess exposure to EDCs.
- ✓ **Go organic wherever possible.** Buy organic if you can. And where you can't, prioritize buying organic for the most heavily sprayed foods such as dark leafy greens (spinach, kale, etc.), strawberries, grapes, and apples. Peel fruits and veggies that aren't organic.
- ✓ **Stick with what you know.** Buy foods and personal care products with recognizable ingredients. While not all hard-to-pronounce ingredients are harmful, this rule of thumb can help you spot safer alternatives.
- ✓ **Repurpose items you already have on hand** instead of buying new.

— *More Tips for a Deeper Dive* —

### Shop smarter.

- ✓ **Shop the MADE SAFE® seal** - MADE SAFE prohibits the use of known endocrine-disrupting chemicals in certified products.
- ✓ **Read ingredient labels, always.** Don't recognize an ingredient? Look it up to see if it's on our [Banned List<sup>SM</sup>](#) of over 6,500 substances barred from use in MADE SAFE certified products. The Banned List contains hundreds of endocrine-disrupting chemicals and other harmful toxicants and pollutants.
- ✓ **When it comes to food and beverages, buy fresh and make-your-own** whenever possible.

### Limit plastics.

*Limiting your use of plastic can lessen your exposure to EDCs such as phthalates and BPA (and other bisphenols). Some ideas include:*

- ✓ **Replace plastic food storage containers** with glass or stainless steel.
- ✓ **Bring reusable produce bags** to the grocery store.
- ✓ **Swap out your plastic water bottle** for a glass or stainless steel one instead.
- ✓ **Opt for a toothbrush made from natural materials**, like responsibly-sourced bamboo.
- ✓ **Ditch the plastic wipes** and choose options made with natural materials like compostable or reusable cotton.
- ✓ **Choose products packaged in glass, bamboo, or other innovative packaging.**

- ✓ **Bypass plastic toys for children**, especially infants and toddlers, as they tend to put toys in their mouths. Better choices include wood and silicone.
- ✓ **Limit your use of canned goods**, as many cans are lined with BPA or other bisphenols.
- ✓ **Keep plastic out of the microwave.** Heating up plastic [accelerates the leaching of chemicals](#) into your food. Plastic containers and baggies — even the frozen plastic baggies that are “safe” to cook in the microwave — simply do not belong in the microwave. Don't trust any plastic labeled as “microwave safe.”
- ✓ **Be wary of BPA-free claims.** There are numerous other bisphenols (the chemical class BPA belongs to). Some products labeled as “BPA-free” have just swapped BPA for another bisphenol, which can be just as problematic.



Many published scientific papers now show that doses way below the 'no effect' dose can cause serious adverse effects. It isn't that the high doses are safer. They, too, cause problems. It's that the effects are different."

— **PETE MYERS**

FOUNDER AND CHIEF SCIENTIST  
ENVIRONMENTAL HEALTH SCIENCES,  
MADE SAFE ADVISOR

## Steer clear of high-risk pesticides.

- ✓ Reduce your pesticide exposure by eating organic food whenever possible.
- ✓ Peel skins off conventional fruit and veggies to remove pesticide residues.
- ✓ Leave your shoes at the door – pesticides are everywhere, and wearing shoes inside your home can allow for pesticides to be tracked indoors.
- ✓ Clean up your lawn game by skipping lawn applications (professional or DIY) that contain high-risk pesticides.
- ✓ Avoid antibacterial and antimicrobial products as they likely contain pesticides. Examples of household goods where you might run into this problem are:
  - \* Hand wash
  - \* Dish soap
  - \* Laundry products
  - \* Room sprays
  - \* Cleaning products
  - \* Toothpaste

## Steer clear of fragranced products.

- ✓ Avoid undisclosed fragrance formulas as many fragrances use phthalates (a plasticizing chemical) in their formulations. This includes personal care and cleaning products, air fresheners, plug-ins, scented candles, laundry detergents, dryer sheets and more.
- ✓ Avoid added scent, parfum, Eau de Parfum – all of which are code words for fragrance – on packaging labels.

- ✓ Open windows, create your own simmer pot, or diffuse 100% essential oils instead of air fresheners when you want to freshen up your home.

## Cook better.

- ✓ Avoid “nonstick” cookware (even those labeled as “green”). Look for safer cookware such as stainless steel, glass, cast iron, and carbon steel.
- ✓ Choose wood and metal cooking utensils, in lieu of plastic.

## Clean cleaner.

- ✓ Vacuuming with a HEPA filter and/or damp dusting frequently can help reduce your exposure because EDCs can ride on dust particles.
- ✓ Choose nontoxic cleaning products to reduce your exposure to problematic chemicals.

## Filter your drinking water.

- ✓ Drink tap water out of a glass to reduce your exposure to BPA and other chemicals in cans and plastic bottles.
- ✓ Filter your water. Tap water can contain a bevy of its own potential hormone disruptors, including residue from birth control pills, according to [NRDC's Drinking Water Project](#). Running water from the tap through an NSF-certified water filter can, when properly installed and maintained, decrease the level of some endocrine-disrupting chemicals. There are many other home filtration options to choose from; any filter is better than none.

## Additional Resources

- [Video Interview on EDCs with Dr. Shanna Swan](#)
- [MADE SAFE's 10 Ways to Live Less Toxic](#)
- [MADE SAFE Chemical Profiles](#)
- [MADE SAFE Product Profiles](#)
- [Other MADE SAFE Reports, Fact Sheets, & Guides](#)
- The MADE SAFE [Banned List<sup>SM</sup>](#) of harmful substances prohibited from use in MADE SAFE Certified products.
- [The Healthy Pregnancy Guide](#) by Sydney Cook
- [Our Stolen Future: Are We Threatening Our Fertility, Intelligence, and Survival?—A Scientific Detective Story](#) by Theo Colburn, Dianne Dumanoski, and MADE SAFE Advisor, John Peterson Myers
- [COUNT DOWN: How Our Modern World Is Threatening Sperm Counts, Altering Male and Female Reproductive Development, and Imperiling the Future of the Human Race](#) by MADE SAFE Advisor, Dr. Shanna Swan
- [Sicker, Fatter, Poorer – The Urgent Threat of Hormone-Disrupting Chemicals on our Health and Future...and What We Can Do About It](#) by Leonardo Trasande, MD, MPP

