A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

Keeping Plastic Toxicity Out of Your Food!

You've probably heard that we can be exposed to toxics in the plastic containers that hold our foods, beverages, condiments, and leftovers. They can even be in our dishes, straws, and food wraps!

It can seem overwhelming to consider how to avoid these. Where do we even start?

I'm here to help! I'll show you which plastics are more of an issue and some handy alternatives. And remember that you don't need to change it all at once. Every positive step you take reduces your risk.

What's the Problem?

The quick answer is that studies have shown that the toxics in plastic can leach into our food and thus into our bodies.

For instance, **bisphenol A (BPA)** was found in 95% of people's urine samples in a study by the Centers for Disease Control (CDC).

BPA is an endocrine (hormone) disruptor used in many common food and beverage containers. It can mimic estrogen and other hormones and promote breast, ovary, and prostate cancer. It's been linked to reproductive cancers, immune and neurological problems, cardiovascular disease, obesity, diabetes, autism,



disrupted sexual function, and more. Many countries, including the U.S., have banned BPA in baby bottles. (For more, see our Index under **BPA**.)

A big issue is that **BPA is soluble**. So when it's heated or comes in contact with liquids, it can be released into our food and drink.

OK, so we just need to avoid BPA? Well, that's a good start, but not sufficient. Plastics can contain other toxics. The common substitute bisphenol S (BPS) is also an endocrine disruptor and has similar issues to BPA.

Plastics can also contain phthalates (pronounced THA-lates), a type of endocrine disruptor that's used for softening. These are loosely bound to plastic and easily absorbed into food, beverages, and saliva. They're commonly found in our bodies, and can damage our livers, kidneys, lungs, and reproductive systems.

The American Academy of Pediatrics has called on families to limit their use of plastic food containers and demanded "urgently needed" oversight and reforms in the U.S. regulation of these substances.

Step 1: Evaluate Your Plastics

- Identify the plastics you most often use to buy or store food.
- Look them up on the code list on the other side of this page, to see the most and least concerning.
- Prioritize the plastics you want to explore changing. Look at what's most toxic that you're exposed to most often, closest to your

Local Toxics Disposal

- The next Sebastopol Household Hazardous Waste (HHW) Collection Event is August 3, from 4 to 8pm. To make an appointment, call 707/795-2025 or 877/747-1870 at least 24 hours before the event. Or email toxicsdisposal@clean harbors.com. You can also drop items at the HHW Facility.
- For more about local toxics disposal, see www. zerowastesonoma.gov or call 707/565-3375.

food, for the longest time. Also look for easy changes with impact!

Especially avoid plastics #3 (e.g. food wrap) and #7 (assorted), unless there's a leaf indicating that it's BPA-free. And avoid #6 (styrofoam). The #5 plastics (e.g. yogurt) are fairly benign.

Step 2: Reduce the Plastics in the Food You Buy

- Avoid water and beverages shipped in plastic, especially single-use. Shipping these with liquids makes it easy for the plastic to break down and leach. A study found microplastics in 90% of the world's leading water brands. Also don't reuse single-use bottles.
- Buy and use a personal water bottle instead ideally made from glass or stainless steel.
- Skip the to-go coffee cup. Even the paper ones are lined with plastic. Bring your travel mug instead!
- Minimize buying food shipped in plastic containers, plastic wrap, or plastic lined cans. The risk is lower if the item is in a better plastic or shipped cold. (Or buy fresh produce at a farmers' market!)

Step 3: Improve Your Food Storage Containers

How are you storing your food? See if you can shift to better materials. Here's the informal scale I use.

1) WORSE MATERIALS: Soft plastic. If you push the material in, does it go in softly and easily? That likely means toxic softeners

See Plastics, over

Summary of Common Plastics By Recycling Code

A quick way to see the risk of a plastic container is to look at the recycling code on its bottom (in a triangle). Here's some basic information about these codes.

Important: This is a rough system. Much is unknown about the health impacts of these materials. Manufacturers can add toxics to items in these categories. Or a manufacturer might make a product listed here in a less-toxic material.

WORSE PLASTICS

#3 PVC (polyvinyl chloride). Can be flexible or rigid. Used for clear food packaging and shrink wrap. Plus plumbing pipes, children's toys, tablecloths, vinyl flooring, and blister packs (such as for medicines). Can contain DEHP (a phthalate that can cause cancer), as well as dioxins, vinyl chloride, and other toxics that can cause birth defects, children's

learning difficulties, hormonal dysregulation, and cancer. DEHP-containing products are banned in many countries, but not the U.S.

#6 PS (polystyrene), aka Styrofoam. Used for cups, plates, takeout containers, and supermarket meat trays. Also packing peanuts. Can leach styrene, a suspected carcinogen, especially in the presence of heat. (So skip the hot coffee or takeout served in Styrofoam.)

#7 Assorted other plastics. Likely to leach BPA or BPS, potent endocrine disruptors. (See article.)

OK PLASTICS

#1 PET (polyethylene terephthalate). Bottles for drinking water, sodas, sports drinks, and condiments (like ketchup). Doesn't contain BPA. At high temperatures, can leach antimony, a toxic metalloid, which can cause vomiting, diarrhea, and stomach ulcers.

#2 HDPE (high-density polyeth-ylene). Milk and juice bottles, cereal

box liners, and grocery bags. Can contain BPA. Releases low levels of chemicals that raise estrogen levels, which are especially dangerous to fetuses and juveniles.

#4 LDPE (low-density polyethylene). Bread bags, produce bags, "paper" milk cartons, and hot/cold beverage cups. Doesn't contain BPA, but can leach estrogenic chemicals.

SAFER PLASTICS

#5 PP (polypropylene). Yogurt and deli containers. Inherently doesn't contain BPA. It doesn't seem to leach many of the chemicals other plastics do. No known cancer links.

For Summer's Hot Tips

Want handy tips for **avoiding toxics in sunscreen, bug sprays**, and other summer activities? Go to the STEP Index under **Sunscreen**, Issue XX/4.

Plastics, continued

were used. These empty containers often smell bad when first opened. IMPORTANT: This doesn't apply to silicone; see below.

- **2) GOOD MATERIALS: Hard plastic.** This ranges from the kind that's crinkly when pushed in to the thick hard stuff that won't budge. It isn't always perfect, but it's good.
- 3) BETTER MATERIALS: Glass, stainless steel, ceramic, and food-grade silicone. You can find

these at Whole Foods and Target! Also, Ball jars are a handy option.

Step 4: Improve Your Practices

- Avoid stressing your plastic with sunlight or heat, which increases toxic leaching into food.
- Don't expose food and beverages in plastics to heat or sunlight. This can happen in your car, backyard, or outdoor adventures.
- Never heat or microwave plastic. This includes storage and takeout containers, frozen food plastics, and infant formula! Also don't pour hot liquids into plastic.
- Don't put plastic containers in the dishwasher.
- Don't use plastic or coated roasting and steaming bags.
- Choose metal and wooden cooking and eating utensils instead of plastic.
- Use 100% polyethylene plastic bags and wraps (see Whole Foods 365). Or wax paper, parchment paper, or silicone.
- Discard plastic sippy cups and baby bottles from before 2012

(when the U. S. Food and Drug Administration banned BPA in them).

■ Support the groups working to remove these toxics from our food supply. That can save us all a lot of time, effort, and illness!

Through these actions, you can feel good knowing that you're nurturing your own health, and that of all living creatures and our natural world.

SOURCES: www.ecowatch.com/7-types-of-plastic-wreaking-havoc-on-our-health-1882198584.html • www.healthline.com/health/is-polypropylene-safe#safety-tips-for-plastic

Got a pest problem? Or a toxics question?

The STEP Online Index can help! It makes it easy to look up past newsletter issues by topic. There you'll find our well-researched, condensed, and useful information—to help you get up-to-speed and into action. It also makes it easy to share this information!

www.healthyworld.org/STEP

ABOUT STEP

The Next STEP (TNS) is published six times a year by the Sebastopol Toxics Education Program (STEP). STEP is a project of the City of Sebastopol, implemented by local citizen volunteers. STEP's mission is to support city residents in reducing their toxic use and exposure, creating a healthier and safer Sebastopol for everyone.

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