

The Problem with Plastics

Many of the chemicals used to wrap and bottle our food may be carcinogenic, hormone altering, or at the very least be a cause for allergic reactions ranging from skin irritation to breathing problems. The toxic chemicals can migrate directly into our food.

Plasticizers used to soften PVC have been shown in animal studies to be especially harmful to pregnant mice and their babies. Animal studies have linked even low doses of BPA (one of these plasticizers) to chromosomal abnormalities, hormonal imbalances, high rates of spontaneous abortions, decreased sperm counts in male mice, and early onset of puberty in females. BPA mimics estrogen and can impair the reproductive organs of rats and mice and bring about changes in tissue that resemble early-stage breast cancer, among other effects. Most at risk in the human population are people with developing endocrine systems: pregnant women and newborns, followed by young children and women who may get pregnant.

Controversy still exists, however, over to what extent plastics affect humans. Most of the bigger studies were put out by the plastics industry and did not look at eggs or embryos. The independent studies are relatively small and hard to interpret. So while the jury is still out, are we willing to wait to find out whether plastics pose a significant risk? If we wait for really hard evidence in humans, it will be too late. Even if it turns out that plastics pose no specific risk, we can be comforted by the knowledge that reducing our consumption of it is good for the environment (millions of pounds of plastics find their way into landfills each year, and 14% of air pollution nationwide is from plastic production).

So which are the plastics to avoid? In a nutshell: #3, 6, and 7.

#3 Vinyl or PVC. Most commercial cling wrap, bottles used for olive and cooking oil, some water bottles. The risks are suspected endocrine disrupters and carcinogens.

#6 PS (Polystyrene). Disposable plastic cups and bowls, most opaque plastic cutlery. The risks are carcinogens and suspected hormone disrupters.

#7 "Other" (Usually PC – Polycarbonate). Most clear plastic baby bottles, 5-gallon water jugs, clear plastic sippy cups, some clear plastic cutlery, and Nalgene drink bottles. The risks are that many contain BPA, which is known to be an endocrine disrupter.

Deplasticizing your food

Chemicals are most likely to migrate into food when exposed to high heat, harsh soaps, and fat. Here are some ways to help you play it safe.

- **Avoid microwaving in plastic.** Heat speeds the release of chemicals into food. Use ceramic or glass instead. There is no "microwave safe."
- **Explore the alternatives.** Glass, ceramic containers, waxed and brown paper bags, metal canisters (thermos).
- **Use paper, not cling wrap.** Especially for fatty food. Use waxed paper. Cut off cheese's outer layer before transferring it to something safer.
- **When in doubt, throw it out.** Discoloration, cracks, or other signs of wear suggest that the plastic is degrading and may be leaching chemicals into food. Replace them with glass or Pyrex®.
- **Limit your exposure.** The longer food sits in plastic, the greater its time of exposure to chemicals that could migrate into it. Transfer food to another container when you get home from the store.
- **Wash plastic by hand.** It only takes 20 washings in the dishwasher for BPA to start leaching, and the amount increases as the plastic ages and is degraded by use. Even new polycarbonate has been found to leach. Wash even "dishwasher safe" plastics by hand in warm water and mild detergent.

- **Read the label.** The numbers to avoid are #3, 6, and 7. The safest are #1 single use (but do not reuse), 2, 4, and 5. Look for brands that say "PVC free."
- **Buy glass bottles.** Use glass bottles for drinking water and baby bottles. Avoid drinking water from 5-gallon plastic water coolers. Drink filtered water from the tap.
- **Buy in bulk.** Health food stores sell most things in bulk, and the plastic used to bag bulk products isn't known to be toxic. Transfer items to glass containers at home.

Other ways to avoid hormone-disrupting compounds

- Take off your shoes as you enter the home.
- Buy hormone-free meats, and avoid eating the fat of the animal.
- Buy fresh or frozen foods, and avoid canned foods.
- Drink water out of glass rather than plastic.
- Filter your own water rather than drinking filtered water out of plastic jugs.
- Use simple detergent, soap, cleaning products, and cosmetics with fewer chemicals.
- Avoid birth control pills if possible, and consider using a diaphragm, cervical cap, IUD, or condoms without nonoxynol-9.
- Replace vinyl mini-blinds, shower curtains, and placemats with fabric.
- Buy in bulk to decrease plastic packaging.
- Use and reuse paper sacks instead of plastic bags; use cloth bags to bag groceries.
- Buy organic fruits, vegetables, meats, etc., whenever possible.
- Use an earth-friendly, nontoxic dry cleaner.
- Use natural, organic, non-bleached pads or tampons without a plastic applicator.

References

"Containing Plastics," Leslie Crawford, *Alternative Medicine*, February 2004

"Hazards of Hydration," *Sierra Magazine*, November/December 2003

"Graduate from Plastic," *Natural Home*, May/June 2003

Healthy Living in a Toxic World, Cynthia Fincher, book on how to avoid synthetic chemicals

Staying Well in a Toxic World, Lynn Lawson

Creating a Healthy Household, Lynn Bower

Our Stolen Future, Theo Colborn, book about endocrine (hormonal) disrupters

Tired or Toxic, Sherry Rogers

Resources

Plastics for Kitchen Use:

<http://www.thegreenguide.com/products/Kitchen/Food%20Wraps%20&%20Plastic%20Baggies>

Database of links and information about plastics and other environmental issues:

<http://www.mindfully.org/Plastic/plastic.htm>

Glass

The Container Store: www.containerstore.com

Crate and Barrel: www.crateandbarrel.com

Kmart's Martha Stewart Everyday: www.kmart.com

Ball Mason Jars: www.ball.com

Stainless Steel

Thermos www.thermos.com

Baby Items

Evenflo: www.evenflo.com

Lansinoh: www.lansinoh.com