

Safer Use of Plastics

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Plastic is everywhere. We eat from it, drink from it, build with it, and our children play with toys made from it. Some of us even wear it. Unfortunately, the production, use, and disposal of plastics are all fraught with serious health and environmental consequences. Since plastics won't be going away anytime soon (give or take 1,000 years in your local landfill), here are some steps you can take to use them more safely.

Understanding the Numbers

Plastics are manufactured from petroleum, and different types of plastics are manufactured for different type of uses. For example, some plastics are made specifically to contain foods and beverages. Others are manufactured for building. Whatever their use, most plastics are stamped with a number between 1 and 7, that codes them according to their ability to be recycled. Note: The #7 stands for any plastics that fall outside the 1-6 code. While #7 (PLA) is safer, #7 (Other) is dangerous.

The "Safer" Plastics

It isn't the plastics that are so bad, it's the chemicals added to them during the production process that are dangerous to our health. These additives give plastics their various characteristics, like strength, flexibility, rigidity, and so on. No plastics are completely safe to use, because all of them can leach chemical additives. Plastics coded #1 (PETE), #2 (HOPE), #4 (LOPE), #5 (PP), and #7 (PLA)* are currently considered the safest to use (at least for now), because they are the least likely to leach chemical additives into what we eat and drink.

Spotting the "Safer" Plastics

- **#1 (PETE):** Polyethylene terephthalate ethylene
Used for water, soda, juice, and shampoo bottles; some detergents; peanut butter containers.
- **#2 (HDPE):** High-density polyethylene
Used for opaque milk and water jugs, bleach and detergent bottles; cleaning product containers; plastic bags.
- **#4 (LDPE):** Low-density polyethylene
Used for plastic wrap, grocery store bags, some baby bottles.
- **#5 (PP):** Polypropylene
Used for some food containers; plastic squeeze bottles.
- **#7 (PLA):** Polylactic acid and other bio-based plastics made from soy, corn, potatoes, and wheat.
Used for deli-take out food containers, cold beverage cups, straws, disposable cutlery, food wraps, and bags.

The "Unsafe" Plastics

Plastics coded #3 (PVC), #6 (PS) and #7 (Other) are the plastics to steer clear from. They all contain known or suspected carcinogens seriously detrimental to human health. Ironically, these plastics are also usually not recycled.

Spotting "Unsafe" Plastics

- **#3 (PVC):** Polyvinyl chloride: or vinyl chloride
Used for plastic cling wrap; to hold cooking oils and cleaning products; for plastic squeeze bottles, children's toys (banned or restricted in several European countries), water pipes, and phonographic records.
- **#6 (PS):** Polystyrene
Used in Styrofoam carryout containers and opaque disposable cutlery.
- **#1 (Other)** Usually PC, Polycarbonate (the plastic containing BPA recently in the news)
Hard plastics used for baby bottles and "sippy" cups, 5-gallon water jugs, sports water bottles, metal can liners.

Dos & Don'ts for Using Plastics More Safely

- DON'T mix hot foods and plastic. Never serve hot food or drink from plastic containers, and always allow food to cool down before transferring it to a plastic container, or covering it with plastic wrap.
- DON'T microwave food or beverages in plastic containers, or covered in plastic wrap (this is true even of for plastics labeled "microwave safe".)
- DON'T allow plastic wrap to come in direct contact with your food (especially fatty foods).
- DO toss out old, scratched plastic containers. These can leach chemicals more readily into food and drink.
- DO wash plastic containers by hand using a soft sponge. The hot water and detergents used by dishwashers can break down plastics, which increases their ability to leach chemical additives.
- DO switch to glass or stainless steel containers as plastic containers wear out.

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