

What you need to know about “BPA-Free”

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Even after many plastic manufacturers have phased out the use of bisphenol A (BPA) in their products, the possibility of other hormone-disrupting chemicals in plastic continues to be a concern. NPR [recently reported on a dispute between Eastman Chemical, which makes Tritan, a BPA-free chemical used to make some water bottles, and two companies that test for plastic safety.](#)

By now most people are familiar with bisphenol A (BPA), a chemical component of polycarbonate plastic. BPA is a problem because it leaches out of the plastic and into the food or beverage contained within. The chemical is also linked to numerous health problems. BPA is a hormone disrupter, which means that it interferes with the delicate hormone balance in the human body. Exposure to BPA is associated with increased risk of cancer, reproductive problems and even diabetes.



But BPA is not the only chemical that can be released from plastics under the right conditions and it’s also not the only chemical in plastics that is hormonally active. The [study at issue here](#) was authored by Dr. Chun Yang and colleagues (Dr. George Bittner is a co-author on the study and was quoted in the NPR story) and found chemicals with estrogenic activity in a wide variety of plastic products they tested.

Their study found that hundreds of plastic food and beverage containers (including baby bottles, water bottles, deli containers, food wrap and more) leached detectable amounts of chemicals having estrogenic activity (EA), including products labeled “BPA-free,” when exposed to sunlight, boiling water or microwaving. EA means that the chemical can interact with estrogen receptors in the human body. Like BPA, other EAs are associated with an array of health problems, such as early puberty in females, reduced sperm counts, obesity, altered behaviors and reproductive cancers.

Eastman-Tritan [now labels their water bottles as not only “BPA-free,” but “EA free” as well.](#)

Comprehensive, independent, third-party laboratories using well-recognized methods have confirmed that Tritan does not contain estrogenic activity (EA) and androgenic activity (AA). Eastman is confident in these test results despite recent false and misleading statements about Tritan made by PlastiPure, Inc. and its sister company CertiChem, Inc. These companies rely on the results from a screening test (called the MCF-7 test), which is known in the scientific community to be a non-definitive, non-final test for EA.

I'm not in a position to question the credibility of Tritan's claims or of the testing methods used in the Yang study, but the controversy brings to light some important take home messages for consumers, citizens and policymakers.

Consumers:

While it might be hard to interpret what's behind the labels, whether it's "BPA free" or "EA free," you can follow a few precautionary guidelines for safe use of plastics, including:

1. At minimum purchase BPA-free plastics or consider alternatives to plastic such as stainless steel or glass.
2. Don't microwave anything in plastic.
3. Avoid using plastic containers for hot food and beverages. If you do, cool the contents first.
4. Keep plastic containers away from sunlight. If you plan to be in the sun, consider using a stainless steel or glass water bottle.
5. Discard old and scratched plastic containers that can experience increased chemical leaching.

For more helpful tips on how to avoid problem plastics, check out our [Smart Plastics Guide](#).

Policymakers and citizens:

We must ensure that all consumer plastic products are free of all chemicals that disrupt hormones. Please support policies that protect public health from hormone disrupting chemicals, for example:

1. Restrict uses of BPA in food can linings, an important source of BPA exposure especially affecting pregnant women and young children.
2. Ask the U.S. Senate to [pass the Safe Chemicals Act](#) to reform our outdated chemical regulatory system and require safety testing for all chemicals before they are used in products.

[Sign up](#) to hear from Healthy Legacy and Healthy Food Action on how to advocate for policies that protect our products and our food system from EAs and other harmful chemicals.

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