



Phenols & Reproductive Health

Understanding everyday toxicants and how you can minimize your exposure



Additional Resources

Learn more about the chemicals in your everyday products and environment:

The Environmental Working Group: www.ewg.org

Explore our website:
www.seed-program.org

Contact & Follow us:
SEED@hsph.harvard.edu
(Twitter and Instagram)
[@drmesserlian](https://twitter.com/drmesserlian)



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How can I minimize my exposure to phenols?

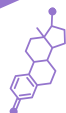


- Avoid foods and beverages in plastic or canned storage containers even if BPA-free
- Minimize single-use plastics (e.g., takeout containers, plastic lunchbags)
- Wash produce thoroughly and buy organic when possible
- Avoid using cosmetics and personal care products that contain phthalates
- Look for dental care products without triclosan or antibacterial properties
- Replace personal care and household products that have fragrance with safer products
- Review product labels and look for phenol or paraben-free (without BPA, BPF, BPS, BPB, BP-3, TCS, TCC, and 4-NP)

Phenols

Phenols are endocrine-disrupting chemicals (EDCs) that are rapidly removed from our bodies. Still, these chemicals are found in many everyday products that lead to chronic and dangerous exposure.

Endocrine-disrupting chemicals (EDCs) interrupt normal hormonal activity by mimicking, blocking, or altering hormones and changing the way that they function in the body.



BPA-free products are still harmful

Bisphenol A or BPA is one of the most studied and well known phenols. However, several BPA-free products and alternatives contain other harmful phenols like BPF or BPS (chemical analogs).

BPA, BFS, BPS, and other phenols have a variety of health consequences:

- ✗ Decreases brain and heart health
- ✗ Decreases immune function
- ✗ Increases adverse birth outcomes
- ✗ Increases loss of pregnancy



Phenols are often added to plastic products to increase the strength and durability, while reducing the potential for bacterial growth. Along with BPA, triclosan is a common phenolic EDC found in everyday items such as toothpaste and antimicrobial or antibacterial soaps.

Where are phenols found?

-  Personal care products, dental products, nail polish, and cosmetics
-  Takeout containers, plastic packaging and bottles, and plastic storage containers
-  Canned food and beverages (including some BPA-free cans)
-  Cleaning supplies, candles, air fresheners, antibacterial products, and household dust
-  Electronics, vaping mouth pieces, and medical devices