

SPOTLIGHT ON BISPHENOLS

You have probably seen water bottles or food packaging bearing the label “BPA Free”. BPA, or bisphenol A, is only the best known of a very large group of substances used in a wide range of applications. For example, BPA and other bisphenols are used as the constituent monomer for some polycarbonate plastics; as a sealant in cans and dental fillings; as a coating in aluminium water bottles; and as an ink developer in thermal receipt papers.

Of all the bisphenols, only BPA—a known reproductive toxicant and an endocrine disruptor—has been partially restricted at European level (it is banned in baby bottles and restricted in thermal paper and toys for children up to three years old). Scientists have linked exposure to BPA to a number of health conditions including breast cancer, infertility, early puberty, epidemics such as diabetes and obesity, and neurological disorders in children.

Unfortunately, as concerns about BPA have grown, the chemical has increasingly been replaced by other bisphenols—including BPS, BPF, BPAF, and BPZ [1]. Many of these alternative bisphenols, which are closely related to BPA, also appear to have similar toxicity [2]. In 2017, the Swedish Chemical Agency identified some 37 bisphenols as potential endocrine disruptors [3]. Instead of continuing to regulate these substances one by one, we need a precautionary approach that regulates bisphenols as an entire group.

1. CHEM Trust, “From BPA to BPZ: a toxic soup?” Mar. 2018, [Online]. Available: <https://www.chemtrust.org/wp-content/uploads/chemtrust-toxicoup-mar-18.pdf>.

2. J. R. Rochester and A. L. Bolden, “Bisphenol S and F: A Systematic Review and Comparison of the Hormonal Activity of Bisphenol A Substitutes,” *Environmental Health Perspectives*, vol. 123, no. 7, pp. 643–650, Jul. 2015, doi: 10.1289/ehp.1408989.

3. KEMI, “Rapport 5/17 – Bisfenoler - en kartläggning och analys,” p. 177, 2017.



BPA

POTENTIAL HEALTH IMPACTS:

Breast cancer, infertility, early puberty, diabetes and obesity, and neurological disorders in children.

VISIT HEAL'S REPORT 'TURNING THE PLASTIC TIDE: THE CHEMICALS IN PLASTIC THAT PUT OUR HEALTH AT RISK' FOR MORE INFORMATION



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