

CHILDREN'S ENVIRONMENTAL HEALTH CENTER OF THE HUDSON VALLEY

PROTECTING CHILDREN AGAINST ENVIRONMENTAL THREATS

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BPA and Phthalates

What in the world are BPA and phthalates? Bisphenol A (BPA) is a man-made chemical used in the making of plastic food containers since the 1950s. While low doses may be safe, there has been concern that this chemical may act as a so-called 'endocrine disruptor' (a substance that may be able to interact with the hormone system) or have detrimental effects on children's behavior and neurological development. Phthalates are a family of colorless, odorless, oily liquid chemicals that are used to soften plastics. They are known for their strength and stability. They are also the most popular type of plastic in the world. These chemicals may sometimes be in food packaging, which raises the concern that they could be released into food with heat, agitation, or prolonged storage.

Are these chemicals safe if they get into our food? The Food and Drug Administration (FDA) has stated that no one should be worried about BPA exposure. According to the FDA, BPA is safe at the very low levels that occur in some foods from their containers. They based this decision on research that indicated a consumer would have to ingest more than 500 pounds of food containing BPA every day to exceed the safe level of BPA set by U.S. government agencies.

Does everyone agree? No. In April 2008, the Canadian government took a precautionary approach, classifying BPA as 'toxic' under the 'Canadian Environment Protection Act' and is thinking about a limited ban. Also, with over 6 billion pounds of BPA produced globally every year in the U.S. alone and continued growth expected in the coming years, the market for BPA is growing on the large scale.

Why should you care? Perhaps infants and young children may be particularly vulnerable to potential effects from these chemicals. The immune system of children is immature, and the effects of chemicals on a growing child may be very different than in an adult. A growing body of laboratory research shows that exposure to phthalates and even very low doses of BPA—levels that fall below the regulatory safety standard—reports connections with many reproductive health and developmental problems such as...

1. high rates of breast and prostate cancer
2. obesity
3. reproductive issues (specifically chromosomal disorders)
4. changes in behavior
5. metabolic disorders
6. early onset of puberty
7. interfering with the male reproductive system's development (especially newborns)
8. lower sperm count in young and old males

These findings challenge the scientific and legal presumption of BPA's safety declared by the FDA. **But, it's important to emphasize that still is no conclusive evidence that exposure to these chemicals has a harmful effect on humans.**

What should you do? We are all exposed to a long list of chemicals every day. Parents can't wait for more research and must make decisions when their children are young. We all need to encourage state and federal authorities and industry to do more

studies so we can eventually have better answers. For instance, there may be concern that some of the chemicals that are being introduced into the marketplace designed to replace BPA may be just as bad, or even worse! In the meantime, if you would like to minimize your children's exposure, then here are some suggestions:

1. Get in the habit of reading labels.
2. Use BPA-free and phthalate-free products. Manufacturers are creating more and more of these products. So, look for products labeled as BPA-free/phthalate-free. If a product isn't labeled, keep in mind that some, but not all, plastics marked with recycle codes 3 or 7 may be made with BPA.
3. Cut back on cans. Reduce your use of canned food since most cans are lined with BPA-containing material.
4. Avoid heat. The National Institute of Environmental Health Sciences, part of the National Institutes of Health, advises against microwaving plastics or putting them in the dishwasher, because the plastic may break down over time and allow BPA to form inside foods.
5. Use alternatives. Use glass, porcelain, or stainless-steel containers for hot foods and liquids instead of plastic containers. People may also want to eat fewer meals out, and dining at places that use more fresh ingredients.
6. Avoid paper from thermal printers. The shiny coating contains BPA, so handle credit card and ATM receipts as little as possible.
7. Support companies committed to producing BPA and Phthalate-free products.

If you are worried that you or someone you know may have been exposed to BPA and phthalates, please consult your doctor or contact us at the Children's Environmental Health Center of the Hudson Valley.

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