BPA in Food Cans

How a harmful chemical is contaminating our food





environmental defence

The Trouble with BPA

Bisphenol-A (BPA) is a synthetic chemical compound. BPA is one of the highest-volume chemicals produced globally. It is found in:

- Food and beverage cans: used as epoxy-resin linings to form a protective barrier between the metal and the contents.
- Plastic reusable water bottles, plastic food containers and beverage bottles made of polycarbonate plastic.
- Thermal receipt paper, which is the most popular type in cash register receipts today.

What is the health risk?

BPA is an endocrine disruptor that mimics hormones in the human body such as estrogen, and interferes with the cell hormone signalling that determines our development and affects how our reproductive, metabolic and immune systems function.

Hundreds of scientific studies have linked even low levels of BPA to increased risk of:

- Breast and prostate cancer
- Infertility
- Early puberty in females
- Type-2 diabetes
- Obesity
- Asthma
- Impaired neurological development in children, including hyperactivity

BPA has been linked to behavioural problems such as hyperactivity and low pro-social behaviour (like sharing and helping) among Canadian children between the ages of 6 and 17.

Who is exposed?

BPA's widespread presence in consumer products means that almost all Canadians are exposed. According to the Canadian Health Measures Survey, 95 per cent of Canadians between the ages of 3 and 79 have BPA in their bodies.

How are we exposed?

Our exposure to BPA largely comes from dietary sources - through the consumption of foods and beverages packaged in BPA-containing metal cans or plastic containers. BPA easily leaches into the food we consume via packaging materials. Heat or frequent use increases the rate of BPA transfer from food contact materials in cans or reusable plastic containers.

Non-dietary sources are also a concern and contribute to our body burden of BPA, especially thermal paper cash receipts. A recent <u>study</u> found that workers handling thermal paper receipts like cashiers and waiters have significantly more BPA in their bodies than workers who did not.

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Who is at most risk?

Babies in the womb, newborns, and young children are most at risk of developing reproductive, developmental and behavioural problems associated with exposure to BPA and other endocrine disrupting chemicals. Like other hormone disruptors, BPA is most potent and dangerous during these critical stages of development – even at low levels.

What Our Study Found

Environmental Defence collaborated with a coalition of U.S.-based organizations to test a wide variety of food cans including cans purchased from three major retailers in Canada.

- Canadian results: out of 21 food cans tested, 17 cans (81 per cent) contained BPA.
- All 3 Canadian retailers included in this study had BPA in their cans:
 - o Loblaw's
 - o Sobey's (FreshCo)
 - o Walmart Canada.
- Cans with BPA contained vegetables, beans, fruits, broth, and coconut milk.
- All tested private label cans contained BPA: No Name, Compliments, Great Value.
- Brands tested positive for BPA include Campbell's, Del Monte, Ocean Spray and Unico.
- Overall study results: Interior coatings and lids of 129 out of 192 (67 per cent) U.S. and Canadian cans tested contained BPA-based epoxy resin.
- U.S. results also showed brands like Kraft and Heinz containing BPA.

What is Canada doing about BPA?

In 2010, Canada declared BPA toxic and became the first country to ban BPA in baby bottles and sippy cups. However, no further regulatory action has been taken since then, leaving Canadians exposed to BPA. Environmental Defence is calling on the federal government to ban the use of BPA in all food contact materials.

What are the alternatives?

Food companies are employing a number of alternatives to BPA, including polyesters, acrylics, PVC, and oleoresins. However, the safety of most of the substitutes is not established. Among these, PVC is the most worrisome as the plastic has toxic properties as well. A safer alternative is oleoresin, a plant-based resin often derived from fir or juniper trees. However, it's not suitable for high-acid foods; material costs are also significantly higher compared to BPA-based coating.

Consumers should be cautious about products labelled BPA-free as these can contain unsafe substitutes. In reusable plastic bottles and thermal receipts, suspected endocrine-disrupting chemicals such as bisphenol-S (BPS) and bisphenol-F (BPF) are being used to replace BPA.

How can Canadians limit their exposure to harmful bisphenols?

Until there is a ban, here are some ways Canadians can protect their health:

- 1. Avoid eating canned food when possible. You can also buy many different kinds of tomato products, soups, and beans in glass jars.
- 2. Use glass or stainless steel refillable drinking bottles not lined with bisphenols instead of hard plastic ones. Avoid beverage cans when possible and opt for glass alternatives.
- 3. When shopping, ask for no receipt or an electronic receipt if offered by the store.