Bisphenol-A (BPA)

Kevin Rivoli/Associated Press¹

Bisphenol A, or BPA, is an estrogen-mimicking industrial chemical commonly used in some plastic bottles and food packaging.

BPA has been used since the 1960s to make hard plastic bottles, cups for toddlers and the linings of food and beverage cans, including those used to hold infant formula and soda. Until recently, it was used in baby bottles, but major manufacturers are now making bottles without it. Plastic items containing BPA are generally marked with a 7 on the bottom for recycling purposes.

Products made with BPA have many attractive properties. They do not absorb flavors or change the flavor of items stored in them. They are also light and difficult to break.

However, over time, the chemical can leach into food, particularly if the container is used in a microwave oven or cleaned in a dishwasher. A study of over 2,000 people found that more than 90 percent of them had BPA in their urine. Traces have also been found in breast milk, the blood of pregnant women and umbilical cord blood. Some animal studies have found that BPA apparently accelerates puberty and poses a cancer risk, and, while the issue's focus has been on the safety of children, the chemical has also been tied to an increased risk of heart disease and diabetes in adults.

In 2008, the Food and Drug Administration said that at levels found in products on the American market, it appeared to be safe. But in 2010, the agency began expressing concerns about possible health risks.

In July 2012, the F.D.A. announced that baby bottles and children's drinking cups could no longer contain BPA.

Manufacturers have already stopped using the chemical in baby bottles and sippy cups, and the F.D.A. said that its decision was a response to a request by the American Chemistry Council, the chemical industry's main trade association, that rules allowing BPA in those products be phased out, in part to raise consumer confidence.

But the ban does not apply more broadly to the use of BPA in other containers, said an F.D.A. spokesman, who emphasized that the decision did not amount to a reversal of the agency's position on the chemical.

BPA's potential to disrupt the hormonal system has made its use in plastics for food purposes controversial.

¹New York Times, 2012.

A report issued in April 2008 by the United States Department of Health and Human Services' National Toxicology Program cited "some concern for neural and behavioral effects in fetuses, infants, and children at current human exposures."

The government of Canada went further that same month. After seven years of study, it listed BPA as a toxic substance under its environmental protection act. Because of that listing, it has introduced regulations that will ban selling, advertising, manufacturing or importing baby bottles made with BPA-related plastics. It will also work with industry to minimize or eliminate BPA-based linings in cans used for infant formula.

The Canadian review, however, found "negligible risk" from BPA to those older than 18 months.

Despite that, most of Canada's largest retailers swiftly removed all food-related BPA products from their shelves.

No significant studies have suggested that other, widespread uses of BPA, which include everything from sunglasses to computer cases, pose any health risk.

On May 13, 2009, Chicago's City Council unanimously adopted a measure making Chicago the nation's first city to ban the sale of baby bottles and sippy cups manufactured with BPA.

Passage was driven by what Chicago officials call federal regulators' failure to take action on a grave public health issue.

Bibliography

New York Times. (2012, July 17). Article: Bisphenol-A (BPA).