

US opts not to ban BPA in canned foods

Status quo decision unlikely to be final word on controversial chemical.

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Bisphenol A (BPA) will continue to be a part of the US diet.

Today the US Food and Drug Administration (FDA) announced that it would not ban the chemical from food and beverage containers.

BPA is a ubiquitous chemical that has been linked to a range of conditions, including heart disease, reproductive problems, behavioural problems and breast and prostate cancers. Scientists believe that it produces such a wide range of health effects in low doses because it mimics the hormone oestrogen, disrupting human development and making it particularly potent for infants.

However, industry groups have contended that such conclusions have been derived from academic studies hindered by problems such as poor experimental controls, inadequate sample sizes or inappropriate methods. Nevertheless, Campbell's Soup announced this month that it would be phasing out BPA from its products, setting the stage for an industry-wide shift.

Envision/Corbis
Campbell's is shifting away from using BPA in its soup cans even though the United States has not yet banned the chemical.

The FDA was forced to make its determination as part of a settlement to a lawsuit filed in August by the National Resources Defense Council, an environmental group based in New York. In a statement, the FDA said that the decision was not a "final safety determination" and that the agency "continues to support research examining the safety of BPA". Indeed, new data coming out of its lab at the National Center for Toxicological Research in Jefferson, Arkansas, indicates that dietary exposure to BPA in infants was one-tenth of previous estimates.

Canada added BPA to its list of toxic substances in 2010, and Canada, the European Union and eleven US states have banned the chemical in baby bottles.

In holding back from a ban, the FDA is sure to rile environmentalists, but some researchers are staying on the sidelines. "My opinion is that it is prudent," says Scott Belcher, an endocrine-disruptor expert at the University of Cincinnati in Ohio. "There are still a lot of data coming out."

Indeed, the news comes at a time when the US National Institute of Environmental Health Sciences (NIEHS) in Research Triangle Park, North Carolina, completes an ambitious, two-year, US\$30-million effort to evaluate the chemical and launches a new set of cooperative research agreements with independent scientists.

"I don't think the BPA story is complete," says NIEHS head Linda Birnbaum, who helped to design the BPA research programme. "There is nothing in the new findings that would lead us to have less concern, and the concern is still highest for prenatal development, infants and young children." Birnbaum notes that the lower levels of exposure the FDA reports may be a result of the agency's recommendation, two years ago, to avoid BPA in baby bottles.

Diabetes link

One of the major areas scientists have been investigating under the programme is the link between BPA and diabetes, which has shown up in correlational studies. Beverly Rubin, a reproductive neuroendocrinologist at Tufts University School of Medicine in Boston, Massachusetts, has now found that mice exposed to realistic levels of BPA needed three times as much insulin to control their glucose levels after a meal, which is a sign of diabetes. "It's worrisome," Rubin says.

Although much of the new work has strengthened suspected links between BPA and human-health problems, one rigorous study has come back with negative results. Because oestrogens affect the immune system, researchers hypothesized that low levels of BPA could be harmful. So far, however, Paige Lawrence, a toxicologist at the University of Rochester Medical Center in New York, has not found that to be the case in mouse studies. "We turned over a lot of rocks, looked under them, and consistently saw little effects,"

Lawrence says. "I think it's good news."

Belcher, who is also funded by the NIEHS, says that the programme was successful but the results are still too preliminary and mixed to lead to any firm conclusions. "I have ten years of research sitting in my freezers and on my computers," he says. "We had the opportunity to collect millions of data points from this, and we are just beginning to scratch the surface of the analysis."

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