Plastic feeding bottle might be harmful for your baby

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Bisphenol A (BPA) is a high production volume chemical used in the production of polycarbonate plastic and several types of resins. Polycarbonate plastics are widely used in a variety of products including food and drink containers, CDs, DVDs, electrical and electronic equipment, automobiles, and sports safety equipment. In vitro and animal data indicate that BPA may mimic the natural female sex hormone, estradiol. Exposure to the general population can occur through direct contact to BPA or by exposure to food or drink that has been in contact with material containing BPA.

It has been known for some time that scratched and worn polycarbonate feeding bottles will leach this chemical. A report published in the UK in March 2004 showed that polycarbonate bottles of all types leach increasing levels of Bisphenol-A as they are used and sterilized.

Those reports also prompted many of Canada’s largest retailers, including Wal-Mart Canada, to remove food-related products made with plastics containing the compound chemical, like baby bottles, toddler sipping cups and food containers, from their stores this week.

“Based on all available scientific evidence, we continue to believe that Nalgene products containing BPA are safe for their intended use,” Steven Silverman, the general manager of the Nalgene unit, said in a statement. “However, our customers indicated they preferred BPA-free alternatives, and we acted in response to those concerns.”

The National Toxicology Program in the United States released a draft report on Tuesday reporting that some rats that were fed or injected with low doses of the chemical developed precancerous tumors and urinary tract problems and reached puberty early. While the report said the animal tests provided “limited evidence,” it also noted that the “possibility that bisphenol-a may alter human development cannot be dismissed.”

Late Thursday, the American Chemistry Council, which says that there is no evidence suggesting that the chemical, has an adverse impact on people, asked the Food and Drug Administration to review the chemical.

“We hope that the leading regulatory agency charged with protecting the public’s health, including evaluating the safety of food containers, will put to rest questions about the safety of bisphenol-a,” the industry group said.

Nalgene’s decision to drop the plastic that transformed it from an obscure maker of laboratory equipment into a consumer brand does not mean the company is leaving the drinking bottle business. It has long made bottles from other plastics that lack the glasslike transparency and rigidity that made polycarbonate popular.

Last month, Nalgene introduced a line of bottles made from a relatively new plastic from the Eastman Chemical Company, Tritan copolyester that shares most of polycarbonate’s properties, including shatter-resistance, but is made without the chemical.

A person knowledgeable about Canada’s chemical review program said this week that the government had decided to list the compound as a toxic substance under the country’s environmental protection act. Because of confidentiality rules, he spoke on the condition he not be identified.

Tony Clement, the minister of health, has scheduled a news conference for Friday to discuss the issue.

Designation of the chemical will begin a two-year regulatory process that ultimately could lead to restrictions or a ban on

the use of the compound.

But some retailers in Canada say that interest in food-related products made with the chemical, particularly those intended for infants and small children, is fast vanishing.

“Consumer demand for BPA products had largely dried up,” said Hillary Marshall, a spokeswoman for the Hudson’s Bay Company. The retailer removed all baby-related products made with plastics that contained the chemical from its 94 department stores and 280 Zellers discount stores this week. It is working on removing other merchandise made with polycarbonates.

Not all consumers are pleased by the actions. Because of Health Canada’s review, London Drugs, which is based in Richmond, British Columbia, began withdrawing merchandise that contained the chemical Jan. 10 and replacing it with alternatives made of other plastics or stainless steel. Wynne Powell, the company’s president, said the last 10 products were taken away this week.

“I had some complaints come to my desk complaining that we were fear-mongering by pulling products,” Mr. Powell said. “The public was not totally on board.”

Asked whether it plans to follow the lead of its Canadian operations in the United States, Wal-Mart said in a statement, “We are working to expand our BPA-free offerings and expect the entire assortment of baby bottles to be BPA-free sometime early next year.”

A difficult question for retailers will be how to handle products, including soft drinks, that are packaged in aluminum or steel cans.

For the last two decades, the interiors of most cans have been coated with an epoxy resin that is made using the chemical to extend the shelf life of the contents and prevent the metal from affecting the flavors of food and drinks.

John M. Rost, the chairman of the North American Metal Packaging Alliance, an industry group, said that there was no evidence that the linings expose humans to significant amounts of the chemical, a position not shared by all scientists. He added that researchers had been unable to develop an alternative lining that performs as well as the current epoxy.

“The epoxy resins are the gold standard right now,” said Dr. Rost, who is a chemist. “The speculation of what’s to be published has led to reactions from retailers that are not based on any actual data from Health Canada. So we are encouraging a release as soon as possible.”

Previously Steven G. Hentges, the executive director of the American Chemistry Council’s polycarbonate group, takes issue with that report’s worries and points to a separate expert panel report published by the United States Department of Health and Human Services last month.

In its 396-page report, which looked only at the impact of B.S.A. on reproduction, the panel said it had “negligible concern” about the chemical’s effect on adult reproductive systems but raised some concerns about its impact on children and pregnant women.Bottle feeding position and frequency:

Babies, who are bottle-fed, especially while they are lying down, get more ear infections than breastfed babies. If you bottle-feed your child, hold his head above the stomach level during feedings. This helps keep the eustachian tubes from being blocked.

If you decide or your doctor recommends that you do not breastfeed for any reason, bottle feeding your baby is a good alternative. You should feed your baby on demand. A newborn usually needs a feeding every 2 to 3 hours in the first month and less frequently as he or she grows older. Each feeding should last no more than 10 to 20 minutes.

The flow rate of formula coming out of the nipple will also change as your baby gets bigger. For the first few months, the flow rate should be one drop per second. You can test this by holding the bottle upside down. Most packages will label the flow rate according to your baby’s age.Plastic vs. Glass:

There are many types of baby bottles and nipples you can buy. It may take several trials with various bottles and nipples before you find the one that works best for your baby. Some babies with heart disease have difficulty feeding from a regular nipple.

Bottles for feeding babies come in many varieties: plastic, glass, disposable. Glass bottles can be used for a long time, but be sure to check the bottle on a regular basis for any chips or cracks that can hurt your baby.

Glass is a safe and clean carrier for breast milk or formula comes with a one-size teat made from rubber and latex. Glass can then be recycled after use and feels wonderful and clean to use for your new baby. Glass bottles are less likely to

hold smells and tastes from previous feeds.

Glass baby bottles were once the norm. For the past few decades, parents have been opting for the more durable plastic bottles that can withstand the heat of modern dishwashers as well as an occasional drop on the floor. The trend is slowly moving back to glass bottles. Over time it was noted that plastic bottles contained hormone-disrupting phthalates to soften the vinyl, which can leach into baby's drink.

Glass bottles are made of tempered glass. Tempered glass is two or more times stronger than normal glass. When broken, it shatters into many small fragments which prevent major injuries. Never use a microwave to heat bottles. Always warm glass bottles gradually; sudden temperature changes can cause it to crack or break. Also, there is no chance of contamination by dangerous chemicals with glass baby bottles.

Plastic bottles are less expensive and come in more shapes and styles. It does not break or chip like glass baby bottles might. Plastic bottles can develop cracks after a while, which may harbor bacteria. Plastic bottles can sometimes harbor odors even after cleaning.

The study showed that plastic bottles heated at high temperatures were likely to leak toxic chemicals into milk that could have a negative impact on babies.

References:
http://www.nytimes.com