

Question

Do the chemicals dioxin and benzene form in carbonated soft drinks after they are manufactured? I've read that they do and can cause cancer and other diseases.

Answer

Benzene

Under some unusual conditions, vitamin C (ascorbic acid) could react with widely used preservatives, potassium or sodium benzoate, to form trace amounts of benzene over time.

In 2005-2006, the U.S. Food and Drug Administration (FDA), Food Standards Australia New Zealand, Health Canada, Finland's National Food Agency, South Korea's Food and Drug Administration, and the U.K. Food Standards Agency analyzed beverages in the marketplace for benzene, including products from The Coca-Cola Company. A few companies were notified because higher-than-expected benzene levels were found in a small number of products from other companies. Importantly, there was no concern expressed about our Company's products.

In truth, benzene is common in our environment and occurs naturally in many foods, but most human exposure comes from breathing air. The FDA specifically indicated that the levels of benzene found in other companies' products do not pose

a health risk. Regulatory agencies worldwide are working with industry, trade associations and other groups to further understand the issue and to determine what, if any, additional actions are needed. Working this way means that science and facts—not just rumors or theories—will be completely reviewed.

Dioxins

Dioxins are colorless, odorless organic compounds. Humans will always be exposed to some low level of dioxins because these compounds occur throughout our environment as a result of the burning of organic materials, such as wood from forest fires. However, the U.S. Environmental Protection Agency (EPA) estimates that backyard trash burning is the single largest source of dioxins in the environment. It is estimated that 95 percent of human exposure to dioxins comes from the diet through food, meat, milk and poultry and through human breast milk. We have not seen any health effects in humans from this low-level exposure, and there are no specific problems with carbonated soft drinks.

Sources

- American Beverage Association, Statement on benzene. March 2006. <http://www.ameribev.org/about/issuesBenzene.asp>
- Food Standards Australia New Zealand. Benzene in flavoured beverages. June 2006. <http://www.foodstandards.gov.au/mediareleasespublications/factsheets/factsheets2006/benzeneinflavouredbe3244.cfm>
- International Food Information Council, Questions and answers about dioxins. Jan. 2006. <http://www.ific.org/publications/qa/dioxinqa.cfm>
- UK Food Standards Agency. Benzene in soft drinks. March 2006. <http://www.food.gov.uk/news/newsarchive/2006/mar/benzene>