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FDA: Apple Juice is Safe To Drink

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On This Page:

- Hunting Inorganic Arsenic
- Levels Set for Water

Arsenic and apple juice. Not words you like to see in the same sentence.

There has been publicity recently over the amount of arsenic in the apple juice that many children drink.

But the Food and Drug Administration has every confidence in the safety of apple juice.

Donald Zink, Ph.D, senior science advisor at FDA's Center for Food Safety and Applied Nutrition (CFSAN), explains that arsenic is present in the environment as a naturally occurring substance or as a result of contamination from human activity. It is found in water, air, food, and soil in organic and inorganic forms.

As a result, small amounts of arsenic can be found in certain food and beverage products—including fruit juices and juice concentrates.

"As a parent and grandparent myself, I understand the concern over recent reports that arsenic has been found in apple juice," says Zink.

But, he says, there is no evidence of any public health risk from drinking these juices, Zink says. And FDA has been testing them for years.

[back to top](#)

Hunting Inorganic Arsenic

Organic arsenic is essentially harmless, according to Zink, but the inorganic kind can be harmful at high and long-term levels of exposure.

FDA has been tracking total arsenic contamination in apple and other juices for about six years, since foreign producers started gaining an increasing share of the juice market, says Henry Kim, Ph.D., a supervisory chemist at CFSAN.

The agency searches for potential contaminants in fruit juices and fruit juice concentrate in three ways:

- FDA issues import alerts to keep potentially dangerous products from other countries out of the U.S. marketplace. The agency has issued a specific alert that requires importers to prove their fruit juices and concentrates are safe for consumption before they are allowed to enter the U.S.
- As part of the FDA Total Diet Study program, the agency annually tests baby foods and apple juice samples for the presence of arsenic.
- The agency collects and tests food and beverage samples in another program that looks for harmful substances in foods. Apple juice is one of the targeted products because investigators want to check for total and, if necessary, inorganic arsenic.

[back to top](#)

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Levels Set for Water

Why hasn't FDA defined the point at which arsenic levels are unsafe in apple juice when such levels have been established for public drinking water and bottled water?

The Environmental Protection Agency (EPA) has set the arsenic standard for public drinking water at 10 parts per billion (ppb) to protect consumers from the effects of long-term exposure to arsenic, which could include skin damage, circulatory problems and an increased risk of cancer.

In concurrence with EPA, FDA has also set the arsenic standard at 10 ppb in bottled water.

So why not set safe levels for arsenic in apple juice?

Kim says that you can't compare water and juice for several critical reasons. They include the fact that inorganic arsenic is the form found in drinking water, whereas organic arsenic is the form mostly found in food, including juices.

FDA will continue to test juices and juice concentrate and evaluate data provided by industry, consumer groups and government agencies, as well as data published in scientific literature. If the agency finds too much inorganic arsenic in any juice, it will take steps to remove that product from the market, says Zink.

This article appears on FDA's Consumer Updates page⁴, which features the latest on all FDA-regulated products.

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For More Information

- Questions & Answers: Apple Juice and Arsenic⁵
- Letters from the FDA to the Dr. Oz Show Regarding Apple Juice and Arsenic⁶
- Talking About Juice Safety: What You Need to Know⁷
- Two Simple Steps to Juice Safety⁸

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