

What would happen if fluoride were removed from the water supply?

November 12 2024, by Ella Gonzales, Fort Worth Star-Telegram



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Former presidential candidate Robert F. Kennedy Jr. claimed that if President-elect Donald Trump appointed him to a health leadership position, the first thing he would work on would be removing fluoride

from water.

Fluoride was first introduced to U.S. water in 1945 in Grand Rapids, Michigan. Scientists saw a direct impact of positive tooth health for those who drink water with fluoride, aiding in preventing tooth decay. Since then, 75% of Americans have access to fluoridated tap water, according to the Centers for Disease Control.

However, Kennedy, who is considered to be on Trump's short list of candidates for head of the Department of Health and Human Services, claims that fluoride in water causes other medical and other health issues. "Fluoride is an industrial waste associated with arthritis, [bone fractures](#), bone cancer, IQ loss, neurodevelopmental disorders, and thyroid diseases," said Kennedy in an X post.

When asked about this potential change in an NBC interview Trump said, "Well, I haven't talked to him about it yet, but it sounds OK to me."

So, what are the health benefits of fluoride in water, and what would removing it mean?

Why is there fluoride in water?

The CDC encourages the use of fluoride in water to prevent cavities. "Almost all water contains some naturally occurring fluoride, but usually at levels too low to prevent cavities," says the CDC.

The CDC does not mandate that fluoride be added to all state water supplies. Rather, local officials and communities vote for that standard themselves. The communities that added fluoride to their tap water have seen benefits in [oral health](#) and less tooth decay. On the flip side, those without fluoride in their water have higher rates of [tooth decay](#), according to a 2015 report from Hawaii, a state with no fluoride in its

water.

The U.S. Public Health Service mandates a certain level of fluoride that can be added due to the possibility of fluorosis. Although this is rare, fluoride levels are recommended to be around 0.7 ML/gallon of water.

Are there health risks associated with fluoride?

Kennedy wants to remove the fluoride in water because he claims that it leads to "arthritis, bone fractures, [bone cancer](#), IQ loss, [neurodevelopmental disorders](#), and thyroid diseases."

However, experts say that there are no health risks linked to fluoride in water, according to health.com. What officials can agree on is that fluoride in small amounts can be very beneficial, but in large amounts may be toxic.

While there is evidence of oral health benefits from adding the mineral to water, there is no evidence of the health risks that Kennedy claims from fluoride.

"According to the Centers for Disease Control and Prevention (CDC), drinking fluoridated water reduces cavities by about 25% in children and adults, resulting in less mouth pain, fewer fillings or teeth pulled, and fewer missed days of work and school," says health.com.

Kennedy's claim comes from concern about fluorosis, which is the intake of too much fluoride that results in other health issues.

What is fluorosis?

In 1936, when scientists were testing whether or not fluoride should be

added to water, Dr. H. Trendley Dean, USPHS officer and founder of the Dental Hygiene Unit found that fluoride levels at 1.0 ML/gallon were too low to cause fluorosis. His findings remain in medical use today.

Fluorosis happens when one ingests too much fluoride over a long period of time. According to the Cleveland Clinic, "Dental fluorosis causes tooth discoloration. You can correct it with cosmetic treatment. Skeletal fluorosis affects your bones and joints. It can cause pain, stiffness and bone deformities."

While [dental fluorosis](#) affects around 23% of Americans, skeletal fluorosis is extremely rare. Most areas in the U.S. that add fluoride to drinking water keep it at the suggested 0.7 ML/gallon.

What will happen if fluoride is removed from the water supply?

If fluoride is removed from water, it will still contain a fraction of fluoride (naturally), just not enough to see oral health benefits, Medical Today says.

Worse tooth health could mean more visits to the dentist as well as more dental bills.

"Previous research indicates that without the presence of optimal levels of [fluoride](#) in drinking water, and thus in the mouth and saliva, teeth may form with weaker enamel and lack the ability to remineralize early signs of decay," Jennifer Meyer, a researcher from the University of Alaska Anchorage says.

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Citation: What would happen if fluoride were removed from the water supply? (2024, November 12) retrieved 14 December 2024 from <https://medicalxpress.com/news/2024-11-fluoride.html>

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