



Fluoride in drinking water has not been proven to affect children's IQ

CLAIM: Fluoride in water can lower children's IQ levels.

Unlikely but studies continue. No country has concluded that fluoridated water is harmful for children, but studies continue to be done to make sure.

Fluoride is a natural mineral that is found in water. Most Americans live in communities that add more fluoride to drinking water so that it is present at a level that protects teeth against cavities. Over time, this means fewer replacement fillings, root canals, crowns, and extractions.

Fluoride is not a medication. Adding fluoride to water is like adding iodine to salt or vitamin D to milk.

There is a national standard in the United States on what level of fluoride is safe. Local water authorities take daily readings of fluoride to see that this proper level is maintained. However, researchers and health officials continue to study fluoride's safety.

One concern is whether fluoridated drinking water can lower a child's IQ. International medical research has found that fluoridated drinking water is safe at recommended fluoride levels.

In 2014, [New Zealand published a long-term study](#) on fluoridated water. Participants' IQs were measured when they were 7, 9, 13, and 38 years old. This study concluded that there was no evidence that exposure to water fluoridation in New Zealand affects IQ. Studies in [Ireland](#) and [Australia](#) came to the same conclusion.

Studies that have found effects on IQ did not take into account other sources of harm or account for the amount of fluoride that children were exposed to. For example, [one review of studies](#) conducted in 2012 in rural China, Iran, and Mongolia did show reduced IQ in children. However, the children studied were exposed to fluoride levels much higher than the U.S. standard. This review included children in homes heated by high-fluoride coal.

[Another study in 2017 in Mexico City](#) focused on children born to women who did not drink fluoridated water but were exposed to fluoride from other sources. This study showed some loss of the children's IQ, but fluoride was only one of many possible causes. [Another study](#) pointed to nutrition as a far more likely cause.

Fluoride is one of many substances in a person's diet, so scientists have studied animals to try to isolate the effects of fluoride. Recently, [the U.S. National Toxicology Program did a major study](#) on rats. The study tested the effect of giving fluoride to pregnant or lactating animals. The test animals received 5 times the level of fluoride used to fluoridate U.S. drinking water. No ill effects were recorded in the test animals.

No country has concluded that fluoridated water is harmful for children, but studies continue to be done to make sure. Parents can take reassurance from the fact that community-based water fluoridation is recommended by:

- [American Academy of Family Physicians](#)
- [American Academy of Pediatrics](#)
- [American Association for Dental Research](#)
- [American Dental Association](#)
- [American Public Health Association](#)
- [U.S. Centers for Disease Control and Prevention](#)

SEE ALSO

- [Fluoride in drinking water helps protect your teeth](#)

ADDITIONAL RESOURCES

- [CDC – Community Water Fluoridation FAQs](#)
 - [American Dental Association – Fluoridation FAQs](#)
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500 Fifth Street NW | Washington, DC 20001

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