



Community Water Fluoridation *Information on fluoride and IQ*

The recent release of a study of pregnant women living in Mexico, which investigated the relationship between fluoride levels and children's IQ, has raised questions in parents seeking to understand how to interpret the results. The study, *Prenatal Fluoride Exposure and Cognitive Outcomes in Children at 4 and 6–12 Years of Age in Mexico*, analyzed fluoride urine levels in pregnant women and tracked intelligence test measures of children at ages 4 and 6–12.

As with all research, it is essential to understand what the results mean, the study's limitations, and what additional research is needed to draw accurate conclusions.

Here are some important facts about community water fluoridation and about this research:

- Community water fluoridation programs in the United States adjust naturally occurring levels of fluoride to meet the level optimal for strong teeth (0.7 parts per million).
- In Mexico, people receive fluoride through drinking water supplies that often contain high levels of naturally occurring fluoride – often many times more than levels used for water fluoridation programs in the U.S.
- In Mexico, wherever fluoride occurs naturally in drinking water at low levels, fluoridated salt is sold (fluoridated salt is not available in the U.S.). Salt intake in Mexico, as well as other countries, is known to be high, and people in Mexico are often exposed to high levels of fluoride in both water and salt.
- This study was not a study on fluoride per se, but instead was part of a larger study of environmental influences during pregnancy. It did not study cause and effect, and did not measure levels or quantity of fluoride intake, or sources of fluoride intake. Instead, it analyzed stored urine samples from pregnant women that were collected many years prior to this analysis.
- The study did not account for some important factors known to affect IQ, like arsenic. In Mexico, the high levels of fluoride in water have been associated with high levels of arsenic. Therefore, fluoride may be a proxy for arsenic.
- The study provides a single data point on this research question. An evidence-based conclusion about fluoride intake and IQ cannot be made by a single study, but results from the entire body of research; study results must be consistently reproduced to be valid. This concern is highlighted by the study's lead author, who advised that the results must be reproduced in other populations by other researchers.
- The benefits and safety of community water fluoridation are recognized by every national and international health care or scientific organization that has addressed the topic, including the U.S. Centers for Disease Control and Prevention, The American Congress of Obstetricians and Gynecologists (ACOG), the American Cancer Society, the World Health Organization, the American Academy of Pediatrics, the American Dental Association, and the American Medical Association.

For more information on community water fluoridation, visit the [American Dental Association](http://AmericanDentalAssociation.org) website or ilikemyteeth.org.