

# What is Water

By Dr. Johnny Johnson

Nearly all naturally occurring water sources contain fluoride, which is a mineral that has been proven to prevent — and even reverse — cavities. Water fluoridation is the precise adjustment of the natural levels of fluoride in the water to the level that prevents cavities. This level, called the optimal level of fluoride in water, is 0.7 mg of fluoride per liter (ppm=parts per million). In Florida, most communities have 0.2 ppm of fluoride in the water. This amount comes from the rock formations in the earth's crust that the water passes through on its way to our aquifer.

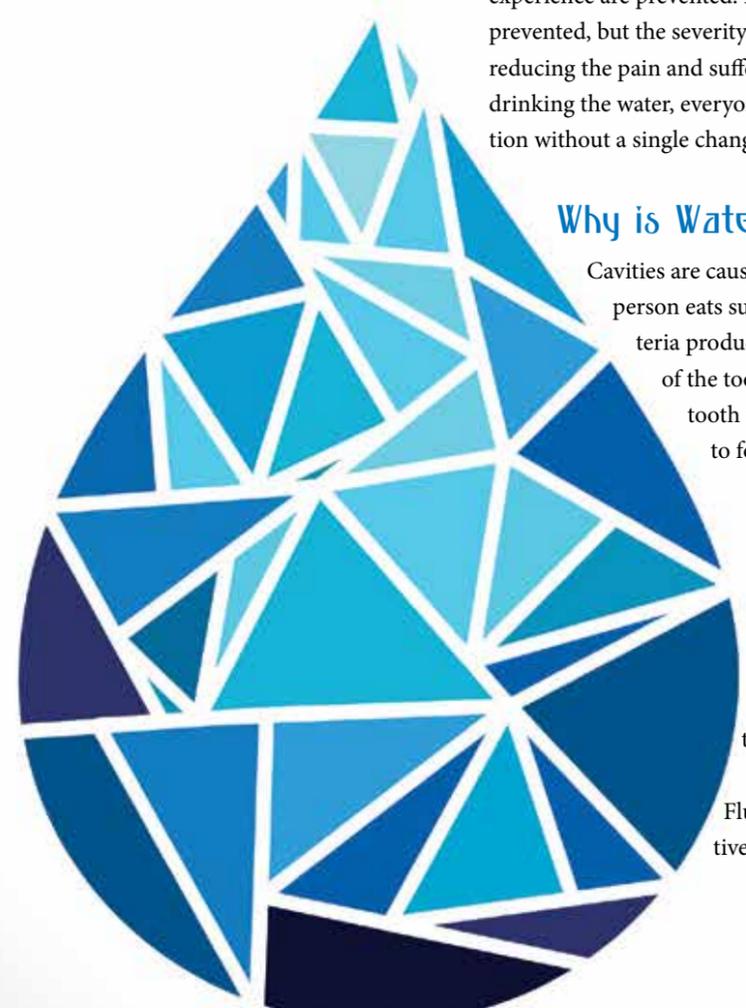
At 0.7 ppm, 20-40 percent of all cavities that children and adults would experience are prevented. Not only are 20-40 percent of the cavities prevented, but the severity of those cavities is greatly reduced, thereby reducing the pain and suffering that these cavities can cause. Put simply, by drinking the water, everyone in a community benefits from water fluoridation without a single change in their daily behaviors.

## Why is Water Fluoridation Important?

Cavities are caused by certain bacteria in the mouth. When a person eats sugar and other refined carbohydrates, these bacteria produce acid that removes minerals from the surface of the tooth. Fluoride helps to remineralize (re-harden) tooth surfaces and prevents cavities from continuing to form.

Water fluoridation is just one of the tools to fight cavities. Brushing your teeth twice a day with fluoridated toothpaste, flossing, eating a well-balanced diet and the use of topical fluorides like mouth rinses and fluoride varnish, all work together to prevent even more cavities than by water fluoridation alone.

Fluoridation has been practiced safely and effectively in the U.S. for more than 71 years, and more



# Fluoridation?

than 13 million of the 17 million Florida residents who are served by community water systems (or 78 percent), receive optimally fluoridated water. We continue to strive to expand coverage in our state to bring this valuable public health measure to the poorest of our rural areas, where cavities remain extremely high.

## Fluoridation is:

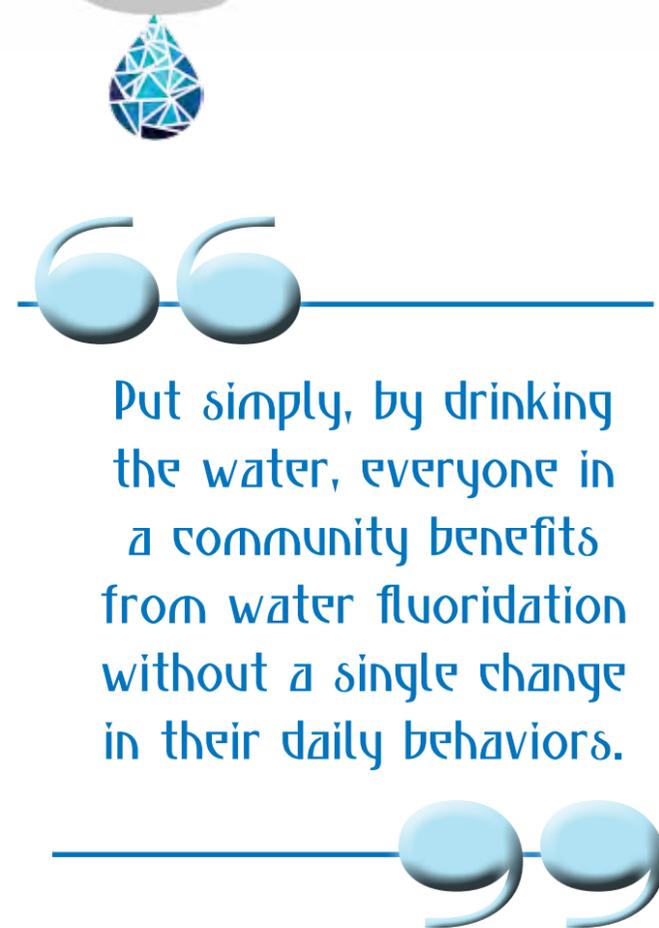
-  **safe.** There are no known adverse health effects from water fluoridation at optimal levels.
-  **effective.** At optimal levels in the water, at least 20-40 percent of cavities for children and adults are prevented by simply drinking the water.
-  **cost-saving.** Fluoridation benefits everyone regardless of socio-economic status, race, age or educational level. For every \$1 spent on fluoridation, \$43 is saved per person per year in dental treatment costs.

Fluoridation benefits adults more than children by preventing cavities on their root surfaces as well as the crowns of their teeth.

## Opposition to Fluoridation:

A small, but vocal group of opponents of fluoridation have been in existence since fluoridation was first introduced in the U.S. in 1945. Today, this group uses the Internet to voice their personal opinions about fluoridation in an attempt to invoke fear in the public, to make them think that it is evil and harmful. Nothing could be further from the truth. In fact, nearly every major scientific organization in the world supports water fluoridation as safe and effective. No credible scientific group supports a single claim made against fluoridation that is made by those who oppose it.

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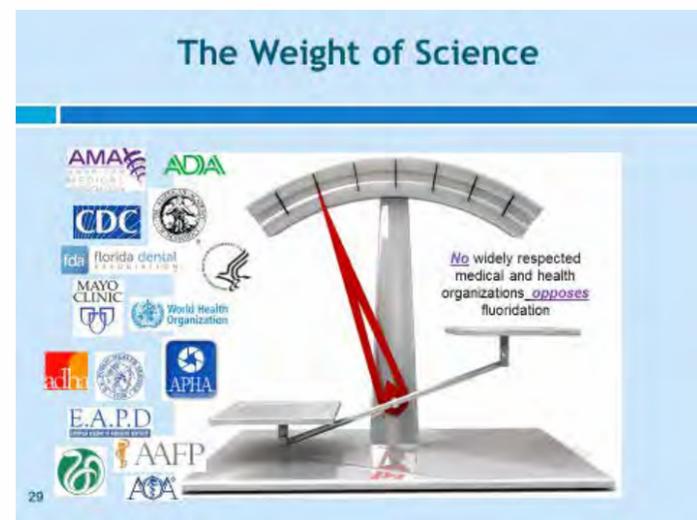


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**Resources:**

- ◆ **American Academy of Pediatrics:**  
[http://ilikemyteeth.org/wp-content/uploads/2012/05/QandAonCommunity-WaterFluoridation\\_v1b.pdf](http://ilikemyteeth.org/wp-content/uploads/2012/05/QandAonCommunity-WaterFluoridation_v1b.pdf)
- ◆ **Centers for Disease Control and Prevention (CDC):**  
<http://www.cdc.gov/fluoridation/index.htm>
- ◆ **Florida Dental Association:**  
<https://www.floridadental.org/public/the-importance-of-water-fluoridation>
- ◆ **American Dental Association:**  
<http://www.ada.org/en/home-ada/public-programs/advocating-for-the-public/fluoride-and-fluoridation>
- ◆ **American Fluoridation Society:**  
<http://americanfluoridationsociety.org/>



FLUORIDATION from 33

**Sources for Credible Information on Fluoridation:**

Google and other search engines are very good resources to establish a starting place for a lot of research, but not when it comes to medical science. The Internet has given everyone the ability to promote their own opinions as facts without anyone to differentiate truth from myth. In short, everyone can be perceived as an “expert” by simply composing their own website. We must look at the source of the information to determine whether it is trustworthy or not.

Trust the resources that we trust the health of our children and families with: the American Dental Association, the American Academy of Pediatrics and the Centers for Disease Control and Prevention (CDC).

*Dr. Johnny Johnson is a pediatric dentist in in Palm Harbor, Fla.*

**The Plaqster, Den and Buck are sure having fun! You can join in. Can you find 25 differences between the two pictures?**

