

Drink up!



Fluoridated water helps fight decay

Drinking fluoridated water is a safe and effective way to protect your teeth from decay—it is like drinking milk with vitamin D in it to help you develop and maintain healthy bones.

Water naturally contains fluoride. Community water fluoridation simply makes sure that the water that comes out of your tap has the ideal amount of fluoride for cavity prevention. Experts say that water with 0.7 milligrams of fluoride per liter of water (written as *0.7 mg/L*) offers the best protection from tooth decay.

HOW DOES FLUORIDE HELP PREVENT TOOTH DECAY?

Your teeth are coated with a film of bacteria called *plaque*. When you eat or drink foods containing sugars, plaque produces acids that attack the surfaces of your teeth and causes cavities or tooth decay. Fluoride can help keep these acids from breaking down your tooth surface. Fluoride can strengthen your teeth in 2 ways: systemically and topically.

Systemically means the fluoride is working from inside your body. When you eat or drink something that contains fluoride, it enters your bloodstream. In young children, fluoride travels with the blood to the site where teeth are developing, helping make the teeth strong. Systemic fluoride also is absorbed into your saliva. Your saliva then washes over your teeth, bringing the fluoride with it. Saliva acts topically to improve the surface of your teeth.

Topically, fluoride helps rebuild teeth that already have come into the mouth when it comes into contact with the tooth's surface. Anything that brings fluoride into contact with your tooth's surface—like saliva, water, or toothpaste—has a topical effect.

WHAT IS FLUOROSIS?

Dental fluorosis is a change in tooth appearance. In the United States, most fluorosis is the mild to very mild type that may result in light spots on the tooth's surface. This type of fluorosis is not easy to see and often requires a trained specialist to detect. Fluorosis occurs when younger children ingest too much fluoride during long periods when their teeth are developing under the gums. Once teeth have erupted, they cannot develop fluorosis. Fluorosis only affects the tooth appearance; it does not affect the tooth's ability to function. The rare, severe forms of dental fluorosis are not seen in fluoridated communities.

WHAT ARE SOME OTHER SOURCES OF FLUORIDE TO HELP FIGHT TOOTH DECAY?

Water fluoridation is one important way to deliver decay-fighting fluoride to everyone. Another popular source of fluoride is toothpaste. Fluoride-containing toothpaste not only helps remove plaque but also delivers a second punch to cavities by adding fluoride to make the tooth surfaces more resistant to decay.

The American Dental Association recommends brushing your teeth twice a day for 2 minutes with fluoride-containing toothpaste. Young children should be supervised when brushing their teeth. Parents and caregivers should make sure their children use the right amount of toothpaste and spit the foamy paste out—it should not be swallowed. Children younger than 3 years should use fluoride toothpaste in an amount no more than a smear or the size of a grain of white rice. For children 3 to 6 years of age, parents and caregivers should dispense no more than a pea-sized amount of fluoride toothpaste.

Teeth should be brushed thoroughly twice a day for 2 minutes or as directed by a dentist or physician.

Fluoride mouthrinses also can help fight decay. Unless a dentist or other health professional recommends otherwise, the American Dental Association does not recommend the use of fluoride mouthrinses for children younger than 6 years. Many children younger than 6 have not yet fully developed control of their swallowing reflex and may be more likely to swallow fluoride mouthrinse than spit it out.

Dentists may apply topical fluoride during an office visit to reduce the risk of decay. Fluoride supplements also can be prescribed by a dentist or pediatrician to children at high risk for tooth decay in areas where the amount of fluoride in their water supply is low. These prescription supplements come in the form of tablets, lozenges, or liquids and are intended for daily use from ages 6 months to 16 years. Where the drinking water has an optimal fluoride concentration, there is no need to have these supplements. ■

<http://dx.doi.org/10.1016/j.adaj.2015.06.009>

Prepared by the American Dental Association (ADA) Division of Science. Copyright © 2015 American Dental Association. Unlike other portions of JADA, the print and online versions of this page may be reproduced as a handout for patients without reprint permission from the ADA Publishing Division. Any other use, copying, or distribution of this material, whether in printed or electronic form and including the copying and posting of this material on a website, is strictly prohibited without prior written consent of the ADA Publishing Division.

“For the Patient” provides general information on dental treatments to dental patients. It is designed to prompt discussion between dentist and patient about treatment options and does not substitute for the dentist's professional assessment based on the individual patient's needs and desires.