

Fluoridation FAQs

There is a lot of misinformation in the media about fluoride. Here are science-based answers to questions you may have.

What is fluoride?

Fluoride is nature's cavity fighter and occurs naturally in varying amounts in water sources such as rivers, lakes and even the oceans. Fluoride is naturally present to some extent in certain foods and beverages but the levels vary widely. To help protect teeth from cavities, fluoride is also added to some dental products such as toothpaste.

How does fluoride protect teeth?

Fluoride benefits both children and adults. Here's how:

Before teeth break through the gums (erupt), the fluoride taken in from foods, beverages and dietary supplements makes tooth enamel (the hard surface of the tooth) stronger, making it easier to resist tooth decay. This provides what is called a "systemic" benefit.

After teeth erupt, fluoride helps rebuild (remineralize) weakened tooth enamel and reverses early signs of tooth decay. When you brush your teeth with fluoride toothpaste, or use other fluoride dental products, the fluoride is applied to the surface of your teeth. This provides what is called a "topical" benefit.

In addition, the fluoride you take in from foods and beverages continues to provide a topical benefit because it becomes part of your saliva, constantly bathing the teeth with tiny amounts of fluoride that help rebuild weakened tooth enamel.

What are the benefits of fluoride toothpaste?

All toothpaste helps remove plaque, a film of bacteria that forms on teeth and gums every day. Plaque can cause gum disease and tooth decay. In addition to helping remove plaque, fluoride toothpaste provides an extra benefit in preventing tooth decay by making tooth enamel stronger.

Should children use fluoride toothpaste?

For children younger than 3 years, parents and caregivers should begin brushing children's teeth as soon as they begin to come into the mouth by using fluoride toothpaste in an amount no more than a smear or the size of a grain of 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 (morning and night) or as directed by a dentist or physician. Children's brushing should be supervised to ensure that they use the appropriate amount of toothpaste.

What are the benefits of dietary fluoride supplements?

Dietary fluoride supplements can be as effective in preventing tooth decay as water fluoridation. With supplements, fluoride is incorporated into the tooth during its formation making the tooth more resistant to decay. In addition, supplements provide a topical benefit as teeth are bathed in fluoride while the lozenges or tablets are chewed. Once the fluoride is absorbed, it will be present in the saliva which delivers fluoride to the tooth surface to help repair the enamel.

Dietary fluoride supplements should be prescribed only for children living in areas without optimal levels of fluoride in their community drinking water and who are at high risk of developing cavities. Talk to your dentist, pediatrician or family physician about your child's specific fluoride needs.

Note: The ADA's dietary fluoride supplement recommendations remain unchanged in light of the new guidelines for community water fluoridation in the U.S. released in April 2015 by the U.S. Public Health Service. The recommendation for fluoride levels in drinking water is newly calibrated at 0.7 milligrams of fluoride per liter of water. The new recommendation, which was supported by the ADA, does not change the ADA Council on Scientific Affairs' [systematic review and clinical recommendation](#) for the use of dietary fluoride supplements that was released in 2010.

<https://www.ada.org/resources/community-initiatives/fluoride-in-water/fluoridation-faqs>