ADACommunity Water Fluoridation

Fluoride helps rebuild (remineralize) weakened tooth enamel and reverses early signs of tooth decay. When the natural level of fluoride in drinking water is very low, communities can add a small amount to bring it to a level to help prevent tooth decay. The current recommended amount of fluoride in water is 0.7 parts per million (ppm) which is comparable to 3 drops in 55 gallons of water. Nearly 3 of 4 people served by community water systems in the US have fluoridated water.

Frequently Asked Questions

How does fluoride protect teeth?

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 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.

What are the benefits of fluoridated water?

Fluoridated water helps prevent tooth decay in children and adults. Studies prove water fluoridation continues to be effective in reducing tooth decay by at least 25% in children and adults, even in the era of widespread availability of fluoride from other sources, such as fluoride toothpaste. Simply by drinking water, people can safely benefit from fluoridation's cavity protection whether they are at home, work or school.

Why would communities want to fluoridate tap water?

Communities fluoridate their water supply because it is one of the safest, most beneficial and cost-effective ways to prevent cavities at the community level. Providing optimally fluoridated water to US communities for one year saves \$6.5 billion in dental treatment costs and offers an average return on investment of \$20 for every \$1 spent. On average, communities with water fluoridation save \$32 per person annually by avoiding dental treatment costs and experience fewer missed work and school days.

How effective is water fluoridation?

Even when fluoride-containing oral health care products like toothpastes and mouthwashes are used, fluoridated water reduces cavities. It reduces cavities in adults from 20-40% and caries in children have been found to be 60% lower if they drink fluoridated water. Researchers have suggested that access to fluoridated water during a person's lifetime costs less than the cost of one restoration used to repair a cavity.

Is water fluoridation safe?

Public water systems have been fluoridated in communities for nearly 80 years. The health effects have been studied for decades and researchers have not found health problems associated with the water fluoridated level of 0.7 ppm which is the US recommended levels followed according to the US Public Health Service. The fluoride at the recommended level in community water fluoridation programs is not toxic as toxicity is related to dose. The recent National Toxicology Program monograph on fluoride examined only high concentrations of fluoride (more than double the optimal level) and concluded that more studies are needed to assess the effects of low fluoride levels used in the U.S. and Canada.

For more information on fluoride, visit ADA.org/fluoride.