

Fluoride

Fluoride helps prevent decay. It occurs naturally in varying amounts in water sources such as rivers, lakes and even the oceans. Fluoride is 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.

Fluoride can benefit both children and adults but in different ways. Before teeth are fully developed the fluoride taken in from foods, beverages and dietary supplements gets into the developing tooth making it stronger and more resistant to cavities. This provides what is called a “systemic” benefit.

After teeth erupt, fluoride helps rebuild (remineralize) decalcified 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.

Community water fluoridation is simply the addition of fluoride to drinking water to supplement what is already present naturally in order to bring the fluoride level up to the optimum level that helps prevent cavities. Areas of the country, particularly in the mountains and where underground volcanic rock is found, can have excessively high levels of fluoride the ground water. These high levels can produce fluorosis in developing teeth.

Enamel fluorosis can result from ingesting greater than optimal amounts of fluoride in early childhood while teeth are developing. Fluorosis, in its mild forms appears as barely noticeable tiny white streaks or specks in the enamel of the tooth. In its most severe cases, the tooth may exhibit discoloration or brown markings. The enamel can become pitted and rough. It is permanent but can be lightened with tooth whitening.

Though breast milk and most ready-to-feed formulas contain infant-safe fluoride levels, parents must be careful with concentrate formulas that require adding water. Community water or well sources often contain fluoride levels higher than 1.2 ppm, the highest amount proven to be beneficial in preventing tooth decay.

When formula concentrations need to be diluted, it is recommended parents use bottled water that is fluoride-free or low in fluoride water or tap water from a reverse osmosis home water filtration system, which removes most of the fluoride.

It is advised to check your water source's fluoride levels by collecting a fresh sample in a sterile container and taking it to your local health for testing.

Bottled water containing fluoride is commercially available for parents that have well water containing lower than suggested levels of fluoride. Although these are unregulated and can vary in concentration from batch to batch.

The bottled water craze has created an unconscious under fluoridation for those infants being fed concentrate formula being mixed with bottled water absent of fluoride. The affects will be seen with an increase in dental decay and consequently a lifetime of dental restorations for those individuals.

As toddlers drinking fluoridated water will help your child get the fluoride he or she needs to protect his or her teeth from decay.

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 strengthening tooth enamel.

Swallowing toothpaste can adversely increase the ingestion of fluoride and contribute to fluorosis. Do not use fluoride toothpaste until the child is two years old. When children's teeth start to appear, brush them with a child-size toothbrush. For children age two and older, place one pea-sized amount of fluoride toothpaste on the toothbrush at each brushing. Young children should be supervised while brushing and taught to spit out, rather than swallow, the toothpaste.

Dietary fluoride supplements should be prescribed only for children living in areas without optimal levels of fluoride in their community drinking water and typically would be prescribed by a pediatrician because in most instances dental visits do not start to about 3-4 years of age.

As of January 7, 2011 the American Dental Association (ADA) supports the Dept. of Health and Human Services recommendation for recalibrating the ratio of fluoride in water to below .7 ppm.

The ADA also states the need to consider all sources of fluoride taken systemically (ingested). Examples – drinking water (bottled, well water, city water), vitamins tablets or drops with fluoride, toothpaste that is swallowed.

ADA recommends – no fluoride for 6 months-3 years unless supply is less than .6 ppm.

	.3 ppm	.3 - .6 ppm	above .6 ppm
Birth – 6 months	0	0	0
6 mo. – 3 years	.25mg/day	0	0
3 yr. – 6 years	.50mg/day	.25mg/day	0
6 yr. – 16 years	1.0 mg/day	.50mg/day	0

Meijer brand infant water states “.3mg - .5mg per liter” There is 3.78 liters = 1 gallon.

Nursery brand infant water states “ up to .7mg per liter”

Vitamin tablets/drops with fluoride are available only by prescription and contains .25mg, .50mg or 1.0mg depending on the need and age.