



Cristi Y. Cheek, D.M.D., P.C.

2872 Johnson Ferry Road
Suite 100
Marietta, Georgia 30062
(770) 993-3775

www.cheekdental.com

Fluoride (Preventing Tooth Decay)

In 1909 a dentist in Colorado noticed that many children were developing brown spots on their teeth. Those children also had fewer cavities than children living in other areas. It was later discovered that these children, who were living at the base of Pike's Peak, were receiving high concentrations of natural fluoride. As rain water ran down the mountain, fluoride was released from the rock and flowed into the town's water reservoir. Studies found that nearby children who drank water with lower fluoride concentrations (around 1ppm) had no staining of the teeth but also had the benefit of fewer cavities than children in areas farther away with water containing little to no fluoride. Since then, the American Dental Association has endorsed the fluoridation of community water supplies, finding evidence of a reduction in cavities by 20-40%. Many cities in the U.S., including Marietta and Roswell, have regulated levels (around 0.8ppm) of fluoride in the water supplied to their residents.

Today, however, many of us are consuming less tap and more bottled water. The majority of bottled waters on the market do not contain optimal levels (0.7-1.2 ppm) of fluoride. And, some types of home water treatment systems can reduce the fluoride levels in water supplies. Well water does not have the benefit of regulated fluoride levels.

The appropriate amount of fluoride is essential to help prevent tooth decay, but like a lot of things in life, it is possible to get too much of a good thing. Fluoride intake above optimal amounts creates a risk for enamel fluorosis in teeth during their development before they erupt through the gums. Enamel fluorosis affects the way the teeth look but does not affect their function. In most cases, it may be evidenced by faint white lines or streaks on the tooth enamel. In severe cases like those seen in Colorado, these fluorosis spots may appear brown, and pitting of the enamel may be evident.

Swallowing excess fluoride can cause not only enamel staining or streaking, but also can be toxic, causing nausea, diarrhea, and vomiting. Unless advised to do so by a dentist or other health professional, parents should not use fluoride toothpaste for children ages two and younger. Children over two should use only a pea-sized amount of fluoride toothpaste at each brushing. In addition, children should always be supervised while brushing and taught to spit out, rather than swallow, toothpastes and fluoride mouthrinses. Many children younger than age six have not fully developed their swallowing reflex and may be more likely to inadvertently swallow fluoride toothpastes and rinses.

Whether you drink fluoridated water from the tap or buy it in a bottle, you're doing the right thing for your oral health. But keep in mind, according to the American Dental Association: "Fluoride alone cannot prevent all dental diseases. Be sure to brush and floss daily. Eat nutritious foods and snacks low in sugar. See your dentist regularly. You can enjoy a healthy smile for life."

Smile Specialists!