

# Fluoride

#### What is fluoride?

Fluoride is a compound that contains fluorine, a natural element. Using small amounts of fluoride on a routine basis can help prevent tooth decay. In areas where fluoride does not occur naturally, it may be added to community water supplies. Research shows that community water fluoridation has lowered decay rates by over 50 percent, which means that fewer children will grow up with cavities. Fluoride can be found as an active ingredient in many dental products such as toothpaste, mouth rinses, gels and varnish.

## How does fluoride prevent cavities?

Fluoride inhibits loss of minerals from tooth enamel and encourages remineralization (strengthening areas that are weakened and beginning to develop cavities). Fluoride also affects bacteria that cause cavities, discouraging acid attacks that break down the tooth. Risk for decay is reduced even more when fluoride is combined with a healthy diet and good oral hygiene.

### Will my child need fluoride supplements?

The pediatric dentist considers many factors before recommending a fluoride supplement. Your child's age, risk of developing dental decay and dietary sources of fluoride are important considerations. Infant formulas contain different amounts of fluoride. Bottled, filtered and well waters also vary in the amount of fluoride they contain. Your pediatric dentist can help determine if your child is receiving – and not exceeding- the recommended amount.

#### How safe is fluoride?

Using fluoride for the prevention and control of decay is proven to be both safe and effective. Nevertheless, products containing fluoride should be stored out of the reach of young children. Too much fluoride could cause fluorosis of developing permanent teeth. Fluorosis usually is mild, with tiny white specks or streaks that often are unnoticeable. In severe cases of fluorosis, the enamel may be pitted with brown discoloration. Development of fluorosis depends on the amount, duration and timing of excessive fluoride intake. The appearance of teeth affected by fluorosis can be greatly improved by a variety of treatments in esthetic dentistry.

# What type of toothpaste should my child use?

Your child should use toothpaste with fluoride and the American Dental Association Seal of Acceptance. Brushing twice a day (after breakfast and before bedtime) provides greater benefits than brushing once daily. Parents should dispense toothpaste to prevent their young children from swallowing too much.

# How much toothpaste should my child use?

For children under two-years-old, use a smear of fluoridated toothpaste. For those aged 2 to 5 years, a pea-sized amount is recommended.

## What is topical fluoride?

Topical fluoride is a preventive agent applied to tooth enamel. It comes in a number of different forms. A dental professional places gels or foams in trays that are held against the teeth for up to 4 minutes. Fluoride varnish is brushed or "painted" on the enamel. Varnish is especially useful for young patients and those with special needs who may not tolerate fluoride trays. Children who benefit the most from fluoride are those at highest risk for decay. Risk factors include a history of previous cavities, a diet high in sugar or carbohydrates, orthodontic appliances, and certain medical conditions such as dry mouth.