Fluoride has a positive effect on oral health by making teeth stronger and more resistant to decay. It can also prevent or even reverse early tooth decay.

Fluoride is a natural element found in soil, water and various foods. Because it is present to some extent in all food and water, almost everyone ingests some fluoride on a daily basis. More than 50 years of extensive research has consistently demonstrated the safety and effectiveness of fluorides in the prevention of tooth decay.

**HOW FLUORIDE PREVENTS TOOTH DECAY**

Fluoride hardens and protects the outer layer of teeth, called tooth enamel. It makes the tooth structure stronger and more resistant to acids that dissolve minerals in tooth enamel. Acids are produced by bacteria in the mouth. The longer foods, especially sugary foods and drinks and carbohydrates, stay in the mouth, the more acids will be produced.

Fluoride reduces the ability of dental plaque, a thin film of bacteria and sugars constantly forming on our teeth, to produce the acids that contribute to decay. It also helps repair (remineralize) tooth enamel that has been attacked by acids.

**FLUORIDE TREATMENT**

Your dentist can advise you and your child of the risk of developing tooth decay and the need for a fluoride treatment in the form of a gel, rinse or varnish. Fluoride treatments provided at a dental office deliver a strong dose of fluoride directly to any weak areas in the enamel to help the repair process. This helps prevent cavities by fixing the first, tiny stages of tooth decay.

- Your dentist may apply fluoride to your child’s teeth after assessing the risk of cavities developing.
- In adults, fluoride can reduce sensitivity to hot and cold foods and drinks along the root surfaces of teeth - a common problem in older adults.
- Fluoride treatments can also help adults by stopping the progress of newly formed cavities.
FLUORIDE TOOTHPASTE

You should brush twice a day using a fluoride toothpaste. If your child is under the age of 6, follow these recommendations on the use of fluoride toothpaste:

**Children from birth to 3 years of age:** Parents should brush their child’s teeth and gums at this young age. Clean your child’s teeth with a toothbrush or clean cloth moistened only with water. If using toothpaste, use only a minimal amount (a portion the size of a grain of rice) of fluoride toothpaste. Because young children tend to swallow toothpaste when they are brushing, they may be increasing their exposure to fluoride, which may in turn increase their risk of dental fluorosis (white lines or specks on the tooth surface).

**Children from 3 to 6 years of age:** At this age, children still need their parents’ help brushing their teeth. Use only a small amount (a portion the size of a green pea – see figure) of fluoride toothpaste on the toothbrush.

All children should be supervised or assisted until they have the manual dexterity to brush properly. For example, if your child is able to colour within the lines of a colouring book, then your child can brush his or her teeth.

HOW TO DETERMINE YOUR CHILD’S RISK OF CAVITIES

If you answer yes to any of these questions, you should consult your dentist to discuss the most appropriate fluoride treatment for your child.

**QUESTIONS FOR PARENTS OR CAREGIVERS**

1. Do you live in an area with a non-fluoridated water supply and low natural fluoride levels? (If you don’t know, contact your municipal government to find out if your drinking water has fluoride).
2. Does your child have a visible defect, notch, cavity or white chalky area on a baby tooth in the front of the mouth?
3. Does your child regularly consume sugar throughout the day? This includes drinking from a bottle or sippy cup filled with any liquid other than water and sweetened medications.
4. Does your child have special health care needs that limits his or her ability to cooperate, making it difficult for you to brush your child’s teeth?
5. Are your child’s teeth brushed less often than once a day?
6. Was your child born prematurely with a very low birth weight (less than 1500 grams or 3 pounds)?
7. Does your child have any tooth decay (cavities)?
8. Does your child have an accumulation of white or yellow material on their teeth?

DENTAL FLUOROSIS

Dental fluorosis causes white specks or lines to appear on a child’s teeth and is the result of a child getting too much fluoride. This is a concern primarily for young children before age 3, but it can also affect children up to age 6. Most dental fluorosis is mild and barely visible. It is not a health issue but rather a cosmetic concern. In more severe cases, it can be easily treated by the dentist. To avoid this condition, parents should supervise their young children when they are brushing to ensure they use the right amount of fluoride toothpaste and encourage them to spit and not swallow.

RELY ON YOUR DENTIST

To find out if you and your family are getting enough fluoride, consult your dentist. Your dentist can best advise you and your family on the need for fluoride treatments. The use of fluoride, along with brushing, flossing, regular dental exams and a diet low in sugars will contribute to strong healthy teeth. You and your dentist are partners in keeping your oral health good for life.