



Brush Up on Oral Health

Understanding How Fluoride Helps Prevent and Repair Tooth Decay

Fluoride is the safest and best way to prevent tooth decay. For generations, many communities have added fluoride to their public water (tap) supply to prevent tooth decay. Fluoride is also added to most toothpaste brands and can be professionally applied using varnish or gel.

This Brush Up on Oral Health tip sheet describes how fluoride works to prevent and repair tooth decay. It offers tips Head Start staff can use to help parents understand the benefits of fluoride.



Understanding Tooth Decay

To understand how fluoride works, it is important to know how tooth decay occurs. Tooth decay can be explained using two simple, related equations.



Bacteria + Sugar = Acid. Bacteria that causes tooth decay breaks down sugar in food to produce acid in the mouth.



Acid + Tooth = Tooth Decay. Acid removes minerals from the outer tooth surface (enamel). Over time acid breaks the tooth surface down, causing a hole (cavity) in the tooth.

How Fluoride Prevents Tooth Decay

Fluoride protects teeth from developing tooth decay in three ways:

- It makes teeth strong and more resistant to acid.
- It can stop early tooth decay by putting minerals back into teeth.
- It interferes with bacteria's ability to make acid.

Tips to Help Parents Prevent Tooth Decay with Fluoride

- **Reassure parents that fluoride is safe.** Fluoride is a mineral that is found naturally in water, soil, plants, and rocks. There is strong scientific evidence to show that fluoride does not cause health problems in children or adults. [Common Questions about Fluoride: A Resource for Parents and Caregivers](#) can help answer any questions parents have about fluoride. [Healthy Habits for Happy Smiles: Getting Fluoride for Your Child](#) also provides information that can be shared with parents. Post the [I Like My Teeth posters](#) to start a conversation about the importance of fluoride.
- **Urge parents to serve fluoridated water to their children.** Whenever possible, encourage parents to serve their children water from the tap. [Healthy Habits for Happy Smiles: Encouraging Your Child to Drink Water](#) [PDF, 443KB] offers tips on making water appealing to children. If parents prefer to serve bottled water, show them how to find out if the water has fluoride. Often, bottled water does not have fluoride.
- **Encourage parents to brush their child's teeth with fluoride toothpaste twice a day.** The best times to brush are in the morning and at bedtime. Parents should put a rice-size amount on the toothbrushes of children under age 3 and a pea-size amount on the brushes of children ages 3 and older. Children can spit out any remaining toothpaste but should not rinse after brushing. [Healthy Habits for Happy Smiles: Brushing Your Child's Teeth](#) [PDF, 883KB] provides additional tips and photos of toothpaste amounts that can be shared with parents.
- **Remind parents to ask their child's dentist or doctor about fluoride varnish.** Fluoride varnish can be painted onto a child's teeth in their dental or medical office. Varnish can be applied up to four times a year. It strengthens enamel, making teeth less likely to develop tooth decay. Fluoride varnish should be used in addition to fluoridated water and fluoride toothpaste.

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