

3 days: 10- to 15-minute lessons

Day 1:

Teaching Guides

Brushing, Flossing and Rinsing

Children learn easy, everyday ways to prevent tooth decay

Time to complete: 5 minutes

Group size: Entire class

Fluoride, Checkups and Healthy Eating

Children learn simple steps to a lifetime of good dental health

Time to complete: 5 minutes

Group size: Entire class

Days 2 & 3: Activity

Tooth Decay in an Apple

Demonstrate to students that tooth decay and cavities are the results of a process that begins on the enamel of teeth.

Time to complete: 15 minutes per day; minimum 2 days

Group size: Groups of two or three students

Recommended book: "Little Bear Brushes His Teeth" By Jutta Langreuter/Vera Sobat

Brushing, Flossing and Rinsing

Everyday Ways to Prevent Tooth Decay

Brushing

- Dentists recommend a child-sized toothbrush with soft bristles.
- Use a pea-size amount of fluoride toothpaste with cavity protection that is also gentle on enamel, and spit out the remaining toothpaste when finished brushing. Children under 2 years should consult a dentist prior to use of fluoride toothpaste.
- Brush at least **twice a day**, morning and bedtime, for about 2 minutes each time.
- Toothpaste works with a combination of fluoride to help repair and strengthen tooth enamel; gentle abrasives (such as silica) to help remove stains and plaque, and polish teeth; detergents (such as sodium lauryl sulfate) to create a foaming action that makes brushing easier; and other ingredients to help whiten teeth, freshen breath, etc.

Flossing

- Helps remove plaque between teeth and below the gum line, and also helps prevent gingivitis, an early form of gum disease.
- Children should floss as soon as their teeth begin to touch.
- Until about age 8, most children need parents' help because they don't have the dexterity to floss. A plastic-handled "flosser" can make it easier.
- Floss regularly.

Rinsing

- An antimicrobial rinse can kill germs that cause plaque, gingivitis and bad breath. Rinsing for 30 seconds, twice a day, can kill more plaque than brushing alone.
- A fluoride rinse can help strengthen teeth and prevent cavities.
- Children 6-12 years of age can use a rinse with adult supervision. Always read and follow the directions for the mouthrinse that you use.
- After rinsing, spit the rinse in the sink (don't swallow it).
- Rinse should be used in conjunction with brushing and flossing.

How to Brush



Brush the outer tooth surface of 2-3 teeth at a time along the gumline using a gentle circular motion. Move brush to the next group of 2-3 teeth and repeat.



Brush the insides of the front teeth by tilting the brush vertically; use the "toe" of the brush (the front half) with gentle, short up-and-down strokes.



On the chewing surfaces hold the brush flat and use a gentle scrubbing motion. Don't forget to brush the top of your tongue to remove bacteria that can cause bad breath.

How to Floss



Hold the floss between your thumbs and forefingers. Leave about 1" of floss between your hands.



Gently work the floss between your teeth. When you reach the gumline, curve into a "C" shape around the tooth, making sure to go below the gumline.



Gently glide the floss up and down several times between each tooth, including your back teeth. Apply pressure against the tooth while flossing. Unwind new floss as needed.

When Using a Flosser



Guide floss between teeth using a gentle back-and-forth motion. Move up and down against tooth to remove plaque and food (repeat for each tooth). Discard after use.

Fluoride, Checkups and Healthy Eating

For a Lifetime of Good Dental Health

Fluoride

- A mineral that helps strengthen tooth enamel — and repair damaged enamel.
- Helps enhance tooth strength with the body's own minerals, such as calcium.
- Protects teeth from acid attack.
- Inhibits bacteria in plaque from producing acid.
- Children can get fluoride through:
 - Water
 - Fluoride supplements (usually tablets)
 - Professional fluoride treatments
 - Fluoride gels, rinses, toothpastes



Dental Checkups

Ideally, children should visit a dentist:

- Within 6 months of the eruption of their first baby tooth.
- Then twice a year or as recommended by the child's dentist.

At a checkup, the dentist and/or dental hygienist will:

- Examine the child's mouth for early signs of decay or other problems.
- Monitor tooth growth.
- Clean the teeth.
- If necessary, strengthen the teeth with a fluoride treatment.
- Dentists sometimes recommend sealants — clear plastic coatings over the chewing surfaces of back teeth, where decay most often occurs. Sealants shield uneven surfaces from food and plaque.

If children are anxious about going to the dentist, you can ease their fears with a few simple facts:

- Dentists and dental hygienists are friendly people who help to keep teeth healthy.
- Explain what happens at a dental checkup and why.
- Explain the instruments and equipment the dentist might use in the office.
- Explain why dentists and hygienists wear gloves and masks.
- Ask a local dentist or hygienist to visit your class.

Healthy Eating

Snacks – Sugars and starches can contribute to tooth decay. Encourage students to:

- Limit the number of snacks they eat.
- Choose nutritious snacks such as raw vegetables, fruits and low-fat cheese.
- Limit sugary sodas and sports drinks. Note: Snacking or sipping on sugary food or drink over extended periods of time throughout the day can be especially harmful.

Classroom Experiment

“Tooth Decay” in an Apple

Learning Objectives

Demonstrate to students that tooth decay and cavities are the results of a process that begins on the enamel of teeth. An excellent example of modeling and of a science experiment. Also meets the National Science Education Standard for science as inquiry.

Materials

Apples – 1 *experimental* apple per student, small group or class

1 *control* apple per class

Paper “lunch” bags – 1 per apple

Sharpened pencils

Preparation Time

Time to acquire apples and paper bags before beginning the lesson/experiment.

Average Activity Time

15 minutes per day; minimum 2 days

Group Size

This experiment can be conducted with a single *experimental* apple and *control* apple for the entire class (as below), with *experimental* apples for small groups of 2 or 3 students, or with an *experimental* apple for each student.



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Activity Description

1. Ask students how an **apple can be a “model” for a tooth.**

An apple’s peel/skin can be compared to tooth’s enamel, and its inside can be compared to dentin inside a tooth.

(Record student comments throughout the experiment on the board or a flip chart.)

2. **Ask what might happen** if someone used a pencil to poke a hole in the apple, and how this might be a model for tooth decay.

3. Invite a student to **poke a hole in the experimental apple.**

Place each apple, *experimental* and *control*, in its own paper bag, and label each bag.

Ask students to **predict what will happen** to the apples over the next day.

4. The next day, remove the *experimental* apple from its bag. Cut it open. (**This is a job for the teacher only – not for students!**) The fruit around the hole will have turned brown, soft and “rotten.” Cut the control open, too.

Ask students to **compare the appearance of the apples to their predictions**, and then discuss how accurate their predictions were and why.

Just like the pencil penetrated the peel and caused the fruit to rot, bacteria can penetrate a tooth’s enamel to cause decay.

5. Ask students to compare – in a discussion or in writing – what they’ve seen in the apples to what can happen to a tooth. Re-emphasize the **importance of dental hygiene** in removing plaque from teeth to promote dental health and prevent cavities.