How do cavities form?
The germs that cause tooth decay use sugar to grow and live.
When you eat or drink sugary foods, germs feed on the sugar and make plaque.
Plaque is a sticky, smelly substance that forms on the teeth after eating.
Regular brushing and flossing your teeth removes plaque.
If plaque is not removed, it makes acid, which attacks tooth enamel — the hard outer layer that protects your teeth.
Frequent acid attacks weaken tooth enamel and create holes — or cavities.
The tooth hurts when the cavity grows bigger and gets closer to the tooth nerve.
See a dentist to stop the cavity from getting larger and to repair the damage.

How does fluoride help?
Fluoride strengthens tooth enamel and kills the germs that cause tooth decay.
Health experts agree that water fluoridation is one of the most effective ways to improve oral health.
Use fluoride toothpaste and ask your dentist about fluoride varnish. Fluoride varnish is a safe and effective way to prevent, reduce, or even reverse the onset of tooth decay.

For more information on oral health, visit health.maryland.gov/oral-health.

To avoid tooth decay:
1) Brush your teeth at least twice a day with toothpaste that has fluoride.
2) Floss at least once a day.
3) Do not share toothbrushes, eating utensils, or cups.
4) Visit your dentist twice a year for a routine checkup and cleaning.
5) Drink plenty of water. Avoid sugary foods and drinks. Watch for acids in soda and juices.
6) Drink tap water if your community system or private well has fluoride in it.
Keeping your smile healthy — no matter your age — includes brushing, flossing, and limiting sugary foods.

**How to Brush:**

Place a soft-bristled toothbrush against your gum line at a 45-degree angle. Use a back-and-forth motion to brush your teeth.

Brush back-and-forth on the chewing surfaces of your mouth, holding the brush flat. Remember to brush the back of your teeth.

Brush your tongue to freshen your breath and remove germs. Brush with fluoridated toothpaste at least twice a day for at least two minutes.

Brush at bedtime to remove bacteria that can cause decay while you are sleeping.

**Brushing Tips:**

- Always use fluoride toothpaste
- Replace your toothbrush every three months
- Never share toothbrushes, it spreads germs
- Children at high risk for tooth decay should use fluoride toothpaste as early as possible
- Spit, do not rinse, after brushing

**How Much Toothpaste?**

- Under age 3: Rice-sized amount
- Over age 3: Pea-sized amount

Images courtesy of Dr. Norman Tinanoff, University of Maryland School of Dentistry

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**How to Floss:**

Wrap about 18 inches of floss around your middle fingers.

Slide the floss between your teeth. Do not snap the floss into the gums, but guide the floss gently, just below the gum line.

As the floss reaches the gum line, make a C-shape around the tooth until you feel pressure against your tooth.

Gently scrape the tooth surface with the floss.

Move the floss as it becomes soiled and repeat the process for each tooth. Floss every day.

**Flossing Tips:**

- Pre-threaded flossers are helpful for children, or for those who have trouble with arm movement
- All types of floss are acceptable: flavored or unflavored; wide or regular; waxed or unwaxed
- Always help children floss; ask a dentist or dental hygienist to show you how to floss your child’s teeth

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**Acid and Sugar Intake**

<table>
<thead>
<tr>
<th>Acid*</th>
<th>Sugar** Per 12 oz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure water</td>
<td>7.00</td>
</tr>
<tr>
<td>Barq’s Root Beer</td>
<td>4.61</td>
</tr>
<tr>
<td>Diet 7 UP</td>
<td>3.67</td>
</tr>
<tr>
<td>Sprite</td>
<td>3.42</td>
</tr>
<tr>
<td>Diet Coke</td>
<td>3.39</td>
</tr>
<tr>
<td>Mountain Dew</td>
<td>3.22</td>
</tr>
<tr>
<td>Fresca</td>
<td>3.20</td>
</tr>
<tr>
<td>Orange Slice</td>
<td>3.12</td>
</tr>
<tr>
<td>Diet Pepsi</td>
<td>3.05</td>
</tr>
<tr>
<td>Nestea</td>
<td>3.04</td>
</tr>
<tr>
<td>Gatorade</td>
<td>2.95</td>
</tr>
<tr>
<td>Dr. Pepper</td>
<td>2.92</td>
</tr>
<tr>
<td>Hawaiian Punch</td>
<td>2.82</td>
</tr>
<tr>
<td>Orange Minute Maid</td>
<td>2.80</td>
</tr>
<tr>
<td>Coke Classic</td>
<td>2.53</td>
</tr>
<tr>
<td>Pepsi</td>
<td>2.49</td>
</tr>
<tr>
<td>Battery Acid</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* Laboratory tests, University of Minnesota School of Dentistry, 2000
**USAD: 4.2 grams = 1 tsp. of sugar

The lower the acid number, the stronger the acid.