

# How Teeth Decay

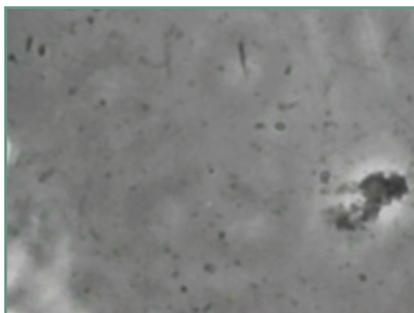
We want you to understand the process of tooth decay, so you can take action to prevent it and keep your teeth healthy for a lifetime.

## Causes of tooth decay

Tooth decay is caused by the action of bacteria on the foods you eat. Thousands of bacteria exist in everyone's mouth. Most of these bacteria are beneficial, but some of them form tightly-knit colonies called plaque, which is the sticky, colorless film that develops constantly on your teeth.

The bacteria in plaque survive by digesting the foods you eat, specifically the ones that are broken down into simple sugars. These include candy and sweets, as well as other high-carbohydrate foods like pasta, bread, cereals, milk, dried fruits, juices, and sweetened drinks.

When the plaque bacteria digest these sugars, a chemical reaction occurs, and the bacteria produce acid.



*Bacteria live in the mouth*



*Acid causes decay*



*Brush and floss regularly*

## The process of decay

Tooth decay starts when the acid slowly dissolves the minerals in the enamel layer of your teeth. This forms a demineralized area that appears as a white or brown spot on a tooth's surface. This is the first visible sign of tooth decay.

In the best circumstances, saliva balances the effects of the acid. It helps wash away bacteria, neutralizes the acids, and replaces the minerals that were lost to acid attack. However, if you eat too many sugary or starchy foods or if you eat too often, your saliva can't keep up with the bacteria. These conditions allow the bacteria to reproduce wildly and develop even thicker accumulations of plaque.

The accumulations of plaque keep saliva away from the tooth surface, and eventually the acids create a hole in the enamel layer of your tooth. This hole is called a cavity. Areas in the mouth that trap plaque are especially at risk for decay. These include the grooves in the biting surfaces of teeth, in between teeth, along the gumline, and on any exposed tooth roots.

## How to avoid decay

You can resist tooth decay by regularly taking action to slow acid production, remove plaque from your teeth, and strengthen the tooth enamel. Here are some tips:

- Cut down on acid production by limiting the number of times you eat each day and reducing the sugary and starchy foods in your diet.
- Brush after meals to remove plaque, and floss at least once a day to get at the plaque trapped between teeth.
- Use a fluoride toothpaste because fluoride strengthens tooth enamel.
- When you can't brush, rinse with water to help wash away food and bacteria, and chew sugarless gum to stimulate the saliva. Choose a gum sweetened with xylitol, which inhibits decay-causing bacteria.
- Come see us regularly for checkups and preventive care.