

# What Causes Cavities?

In science classes, you've learned to be very careful with acid. Did you know that you can have acid in your mouth, and that this acid can cause a hole to develop in your tooth?



*Acid causes cavities*



*Microscopic view of plaque*



*The layers of a tooth*

## Plaque—enemy number one

Our enemy in the fight against cavities is plaque. Plaque is a sticky film of food and bacteria that forms constantly on your teeth. The bacteria in plaque thrive on the sugar in the food, and produce acid as a by-product when they break down the sugar. Like all acids, the acid produced by the bacteria is corrosive, which means that it dissolves other materials. Your teeth are the victims of this corrosive action; the acid wears away at them, eventually creating holes in the outer layer of your teeth, called cavities.

## Regular checkups are a must

The hard outer layer of your teeth is called the enamel. Cavities first form in the enamel layer of your teeth. Beneath the enamel is a softer layer called the dentin. If a cavity dissolves through the enamel and reaches the dentin, it can grow much more quickly. That's why regular checkups and cleanings are so important. If we find a cavity, we can restore your tooth while the cavity is still small and isolated in the outer enamel layer.

## Repairing and preventing cavities

To repair a tooth with a cavity, we usually remove the decayed portion of the tooth and replace it with a filling, provided the damage is not extensive and there is still plenty of healthy tooth structure remaining. However, preventing decay is the preferred solution. We'll be happy to work with you so you'll learn to keep your teeth free of plaque and decay.