

TOOTH DECAY

(DENTAL CARIES)

Tooth decay is the gradual destruction of your tooth enamel, leading to caries (cavities), infection, and loss of your tooth. Tooth decay usually begins on the biting surfaces of your teeth, between your teeth, and around existing fillings. It happens when certain bacteria (which are always in your mouth) feed on sugars and starches in your food and form damaging acids. Over time, these acids dissolve the minerals on the surface of your tooth and eat away at it.

After you eat, these acids attack your teeth for 20 minutes or longer. If they are not held in check, they create small erosions or pits that get larger over time, penetrating into your tooth and eventually destroying its structure. If you have roots that are exposed by gum recession, the acids may attack there, too.

Once tooth enamel has been destroyed, the damage cannot be reversed. If not treated, the decay will spread all the way to the root.

PREVENTION

You can take simple measures to prevent tooth decay. Your first critical step is good dental hygiene: brushing and flossing to remove plaque (the clear, sticky film that builds up on your teeth and gums). Plaque contains acid-forming bacteria, along with mucus and food particles.

You should also make sure you are getting enough fluoride through your dental products and your water. Fluoride strengthens your tooth enamel and helps to reduce mineral loss.

Your next step is to reduce the acid environment in your mouth by being mindful of the foods you eat and when you eat them. Your mouth remains acidic for several hours after you eat, therefore you should avoid all-day snacking. Try to avoid the carbohydrates (sugars and starches) that fuel the acid. Also, don't sip sweetened beverages and fruit juices, and steer clear of foods that stick to your teeth.

Another important element is the amount and type of saliva in your mouth. Saliva is beneficial: it neutralizes the acids. It also contains minerals that can rebuild areas of the tooth that are in very early stages of erosion.

During the early stages of tooth decay, you may not have any symptoms. Later, when the decay has eaten through the enamel, your teeth may be sensitive to hot and cold temperatures or sweet foods. If a cavity goes undiagnosed, your tooth will erode significantly. Eventually, the tooth may be lost to uncontrolled decay.

TREATMENT

A dentist will examine you for caries at every visit, whether or not you are experiencing pain. Your dentist will examine your teeth visually and probe them to determine if there are pits or other signs of damage. If the dentist suspects hidden caries, X-rays will be recommended.

The usual treatment is to fill the tooth. Your dentist will remove the decayed material in the cavity, and then fill it. Fillings are made of a dental amalgam (silver alloyed with copper or other metals) or of a composite resin, which is "tooth-colored."

If a cavity is large with extensive damage, your tooth may not be able to support the filling. Then your dentist will remove the decay, fill the cavity, and cover your tooth with an artificial crown (a cap that covers the tooth).

Sometimes there's more serious damage in the interior of the tooth, which may require a root canal treatment. In this case, the dentist (or endodontist) will remove the tooth's pulp and replace it with a special filler. Afterwards, the tooth will probably need an artificial crown.

