Tooth Decay

What is tooth decay?

A healthy mouth usually fights tooth decay successfully. The mouth contains protective bacteria and is bathed in saliva, which neutralizes acids, remineralizes teeth, and washes away food particles. However, if this balance is disturbed, harmful bacteria can cause tooth decay.

Tooth decay refers to an area on a tooth that has been destroyed by acids created by bacteria in dental plaque. Plaque is a sticky material made of mucus and saliva, food particles, and bacteria. Even after a thorough cleaning, plaque begins to form within hours. Because plaque forms on your teeth every day, brushing on a regular basis is very important and necessary to help avoid or reduce decay.

What is the cause?

The main cause of tooth decay is plaque. Bacteria in plaque feed mainly on simple sugars and starches in food. Bacteria create an acid that gradually destroys the enamel of a tooth, forming a cavity. Enamel is the outer, hard, glossy layer of the chewing surfaces of a tooth.

After the enamel is destroyed, the acid attacks the soft inner layer of the tooth (the dentin). This causes pain and the cavity gets bigger. Bacteria can next invade the exposed pulp at the center of the tooth and destroy the nerve. At this point root canal therapy (to remove the damaged nerves in the tooth) or pulling the tooth is necessary.

What are the symptoms?

Early dental decay often causes no discomfort. After decay has destroyed much of the hard, outer portion of the tooth, you may get a toothache when you eat hot, cold, or sweet foods.

If the cavity is not treated, decay destroys more of the tooth and the pain worsens. In addition to pain, you may have bad breath, a bad taste in your mouth, and possibly swelling and bleeding.

How is it diagnosed?

When checking for signs of decay, your dentist and dental hygienist look for:
- Destruction of tooth structure
- Broken or leaking fillings or crowns
- Softened areas on the enamel or root surface.
- Bleeding and swelling of the gums.

In addition, your dentist or hygienist will regularly take X-rays to check for decay.

How is it treated?

To treat tooth decay, your dentist removes the decayed portion of the tooth and restores the tooth with a filling or crown.

Fillings and crowns last 4 to 20 years, depending on the material used. As filling materials age and break down, they need to be replaced.

How can I take care of myself?

If you are having pain from a decaying tooth, call for an appointment to see your dentist for treatment. Until you can see your dentist, take these steps to help relieve the pain:

- Take pain medicine recommended or prescribed by your dentist.
- Stay away from foods or liquids that cause discomfort.
- Chew on the side that doesn't cause pain.

Ask your dentist what symptoms or problems you should watch for and what to do if you have them.

Make sure you know when you should come back for a checkup.

How can I help prevent tooth decay?

To prevent tooth decay, follow these guidelines:

- Brush your teeth correctly for at least 2 minutes twice a day. The most important time to brush is before you go to bed at night.
- Floss correctly between your teeth once a day.
- Gently massage your gums with a soft toothbrush.
- Rinse daily with a nonprescription fluoride or antibacterial, alcohol-free rinse.
- Eat healthy foods, low in sugar and carbohydrates. Avoid foods that are very sticky and high in sugar.
- Don't eat a lot of snacks between meals. If you do eat a snack, brush or rinse as soon as possible. Chewing sugarless gum that contains Xylitol can also cleanse teeth between brushings and help control the amount of bacteria in your mouth.
- Schedule regular dental appointments for an exam and cleaning, including yearly X-rays. You may want to ask your dentist about a fluoride treatment and sealants for teeth.

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