



Managing Caries

Tooth decay, also known as dental caries, and better known as cavities, is a breakdown of teeth due to acids made by bacteria. Tooth decay targets your tooth enamel; the hard, outer layer of your teeth. This issue can affect children, teens and adults. Plaque, a sticky film of bacteria, is constantly forming on your teeth. When you consume substances containing sugars, the bacteria in plaque produces acids that attack tooth enamel. The stickiness of the plaque keeps these acids in contact with your teeth, and over time the enamel can breakdown. Types of caries can be classified into two major groups, pit and fissure caries, and smooth surface caries.

Pit and Fissure Caries:

These are often found on the chewing surfaces of the back, molar and premolar teeth, and the back of the front, anterior teeth. Your teeth are composed of several sections of enamel, and where these sections meet, pits and grooves can trap plaque, which causes decay. The proper application of pit and fissure sealants, a hard-plastic material applied to seal the grooves and pits where the teeth have erupted, can prevent this type of dental caries. The use of sealants also makes it less likely that you will need restorations on those surfaces of the teeth.

Smooth Surface Caries:

These are often found along the gum line or where two teeth touch, the interproximal area, if plaque forms in these areas. You can prevent caries in this area with the proper use of dental floss, and using a manual or electric toothbrush along the gum line.

Oral Hygiene Tools and Preventative Products:

There are many dental health aids available that can help you avoid dental caries. Fluoride toothpaste is a great way of preventing dental caries, as the fluoride in the toothpaste provides a protective coating that neutralizes the acid attack caused by plaque. It's always best to ask your dental hygienist or dentist for a professional recommendation.

Fluoride varnish is another oral health aid available at your dentist's office. During your routine checkup, your dental hygienist can apply a thin coat of fluoride varnish to your teeth after the cleaning portion of your visit. This varnish contains a concentrated form of fluoride, which



when left on for an hour, is incorporated into the surface of your teeth, making the enamel and exposed root surfaces more resistant to the acid attack from plaque. Fluoride varnish also reduces your teeth's sensitivity to heat and cold, and it can reverse caries that are just forming by strengthening the layer of enamel and remineralizing the surface.

Restorations:

Dental restorations, commonly known as fillings, require two major steps in order to restore a tooth to good form. First, the doctor prepares the tooth for the placement of restorative materials. Second, the doctor places the restorative materials into the prepared tooth. To prepare for placement, the doctor cuts the tooth with a rotary dental handpiece and dental burr to make space for the restorative materials. The soft or malleable filling is then placed into the prepared tooth, and the doctor slowly builds up the tooth. The material is then set and hardened; restoring the tooth.

During this process, the doctor attempts to remove a little of the tooth as possible, to retain as much original structural integrity as possible. The two most common materials used are amalgam and composites. We prefer to use composite due to its white aesthetic and absence of mercury, compared to amalgam.