

Cavities & Tooth Decay

Tooth decay, also known by its technical term, dental caries, is a process by which bacteria in the mouth create a sticky film, called plaque, that builds up and spreads on your teeth surfaces over time. When you consume foods or beverages containing sugar or other carbohydrates, certain types of plaque bacteria constantly feed on these particles, producing acid as a by-product.

Plaque is inherently sticky, so the acid produced is held in close contact to the surface of your teeth. Over time, this acid eats away at the minerals (including calcium and phosphate) that form your tooth enamel in a process called demineralization. If plaque is not removed, your enamel is gradually eroded, and becomes porous – this is the early tooth decay process.

Now the plaque acids can seep through the porous enamel into the softer underlying tooth material, known as dentin. When enough dentin is destroyed that the tooth's enamel is undermined, it breaks down, creating a hole on the tooth's surface known as a cavity. Tooth decay can spread rapidly if left untreated, yet it's not always easy to detect on your own since, in the early stages, it typically does not cause any discomfort.

Tooth decay is a common oral health problem and affects all age groups, from the time the first baby tooth pops into the mouth through all stages of life (including children, teens, and adults of all ages). While tooth decay can be found on any tooth

surface, it's most frequently seen in places where bacteria can sit undisturbed for longer periods of time: In the gaps between teeth, for instance, or in the pits and grooves of chewing surfaces. Tooth decay is also common in areas surrounding orthodontic brackets or around any defects where fillings or crowns meet the tooth.

The best way to prevent tooth decay and avoid cavities is to cut off plaque bacteria's food supply. Limiting your consumption of sugary beverages, snacks, and refined carbohydrates (such as candy, cereal, cookies, sodas, and fruit juices) is an excellent way to limit bacteria growth. In addition, it's particularly important to remove as much plaque as possible each day by practicing good oral hygiene. This includes brushing with a fluoride toothpaste for at least two minutes twice per day and flossing daily. If you are at higher risk of decay, your dentist may also recommend adding an over-the-counter fluoride rinse to your daily routine.

Finally, make sure to visit your dentist regularly for check-ups and professional cleanings. Your dentist can work with you to address any existing cavities or decay, determine your risk factors for developing future decay and come up with a long-term prevention plan. Follow these simple steps, and you'll be able to enjoy a clean, healthy smile for a lifetime.