

# Tooth Decay (Dental Caries)

## What Is Tooth Decay?

Tooth decay, also known as dental caries, is a common oral disease that damages the hard surface of the teeth. It occurs when acids produced by bacteria gradually break down tooth enamel.

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## How Tooth Decay Develops

Bacteria in the mouth form a sticky layer called dental plaque. When sugary or starchy foods are consumed, these bacteria produce acids that lower the pH of the mouth and weaken the tooth enamel over time.

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## Common Causes of Tooth Decay

The main causes of tooth decay include frequent consumption of sugary foods and drinks, poor oral hygiene, lack of fluoride exposure, and reduced saliva flow. These factors allow bacteria to thrive and damage teeth.

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## Signs and Symptoms

In early stages, tooth decay may not cause noticeable symptoms. As it progresses, symptoms may include tooth sensitivity, pain when eating or drinking, visible holes, or dark spots on the teeth.

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## Stages of Tooth Decay

Tooth decay progresses in stages. It begins with enamel demineralization, followed by decay reaching the dentin layer. If untreated, it can infect the pulp and lead to abscess formation.

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## Risk Factors

Risk factors for tooth decay include poor brushing and flossing habits, frequent snacking, dry mouth, certain medications, and limited access to dental care. Children and older adults are at higher risk.

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## **Diagnosis**

Dentists diagnose tooth decay through visual examination, dental instruments, and X-rays. Early diagnosis helps prevent pain, infection, and tooth loss.

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## **Treatment Options**

Treatment depends on the severity of decay. Early decay may be treated with fluoride, while advanced decay may require fillings, crowns, root canal treatment, or tooth extraction.

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## **Prevention of Tooth Decay**

Tooth decay can be prevented by brushing twice daily with fluoride toothpaste, flossing daily, reducing sugar intake, and visiting a dentist regularly for checkups and cleanings.

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## **Role of Fluoride**

Fluoride strengthens tooth enamel and helps reverse early stages of decay. It is commonly found in toothpaste, drinking water, and professional dental treatments.

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## **Tooth Decay in Children**

Children are more vulnerable to tooth decay due to developing teeth and dietary habits. Early dental visits and proper oral hygiene education help reduce the risk.

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## **When to See a Dentist**

A dentist should be consulted if there is tooth pain, sensitivity, visible damage, or difficulty chewing. Regular dental visits allow early detection and treatment.

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## **Educational Disclaimer**

This content is provided for educational purposes only. It does not replace professional dental diagnosis or treatment. Always consult a licensed dentist for dental care.