Health Letter ViD

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1. What are cavities (tooth decay) and how do they manifest?

Tooth decay, commonly referred to as "a cavity," is damage that occurs to a tooth when bacteria in the mouth produce acids in the presence of organic material (food). These acids attack the tooth surface or enamel. This can result in anything from a color change to a hole in the tooth's surface. If untreated, it can grow larger, cause pain, infection, and even tooth loss.



2. What causes cavities (tooth decay)?

Cavities are caused by several factors, including:

- Bacteria
- Frequent consumption of sugary foods
- Poor oral hygiene techniques
- Personal susceptibility (e.g., diseases that dry out the mouth)



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3. Who can get cavities (tooth decay)?

People of all ages can get cavities. Children can develop early childhood cavities, known as "baby bottle decay," and older adults can develop cavities due to inadequate hygiene, diets high in sugary foods, diseases that reduce saliva production, or cancer treatments.

4. How common are cavities (tooth decay)?

According to the World Health Organization, untreated tooth decay is the most prevalent condition worldwide, affecting an estimated 2.5 billion people. In Colombia, cavities are highly common, with nearly 97% of people experiencing them at least once by age 79, leading to many elderly individuals lacking a complete set of teeth.

5. How are cavities (tooth decay) diagnosed?

Cavities can be detected during a routine dental exam. They may initially appear as a white spot on the tooth, which can darken or turn into a hole if it progresses. Sometimes, a cavity can be seen or felt with the tongue. The dentist will determine the presence, location, depth, and type of cavity. Some cavities can be diagnosed through simple observation with a dental mirror and instrument, while others may require X-rays to detect or evaluate their depth or proximity to the tooth's nerve.



6. When should you see a dentist?

It is possible to be unaware that a cavity is forming. Regular dental visits every six months are important for prevention and cleaning, even if there are no symptoms. However, if you experience sensitivity or pain, you should see a dentist as soon as possible to avoid complications like nerve damage, facial infections, or tooth loss.

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7. How are cavities (tooth decay) treated?

Treatment for cavities depends on the extent of the damage. It can range from fluoride application to stop early-stage decay, along with dietary and hygiene changes, to filling cavities with various materials, crowning extensively decayed or weakened teeth, performing root canals for severely affected teeth, or tooth extraction when the tooth cannot be saved.



Treatment options include:

 Fluoride treatments: Helps stop earlystage decay in the enamel. It can be applied as a gel or varnish directly on the tooth.



- Restorations (Fillings): Used when decay has progressed beyond the early stage, involving the removal of decay and filling the cavity with materials like resin, ceramic, or zirconium.
- Crowns: Used for extensive decay or weakened teeth, covering the entire natural crown. Made from materials like porcelain, metal, or zirconium.
- Root canal treatment: Needed when decay reaches the tooth's nerve. The root is cleaned, sometimes medicated, and filled with a compatible material.
- **Tooth extractions:** For teeth with severe decay that cannot be restored, leaving a gap that may need to be replaced with a prosthesis (fixed bridge, removable bridge, or implant).

8. How can cavities (tooth decay) be prevented?

- Brush teeth at least twice a day to reduce gum inflammation and cavity risk, and clean any oral appliances (orthodontics, prosthetics, retainers).
- Use fluoride toothpaste to stop early decay and aid in remineralization.
- Use dental floss daily to remove bacteria between teeth.
- Complement oral hygiene with an alcohol-free mouth rinse.
- Change your toothbrush every three months, or sooner if worn or after an illness.
- Control sugary food and drink intake as recommended by the WHO, reducing sugar intake to less than 10% of daily caloric intake.



- Drink water after meals and snack on fruits like strawberries and apples or vegetables like carrots to help remove glucose deposits on teeth.
- Avoid tobacco and alcohol as they contribute to oral infections.
- Regularly visit your dentist for professional maintenance to reduce plaque, gingival inflammation, and cavity lesions.



Recommended Reading:

- "Restorative and Esthetic Dentistry, Chapter 1: Dental Caries" by Adair Luiz Stefanello Busato, 2005, AMOLCA.
- "Restorative and Esthetic Dentistry, Chapter 2: Diagnosis of Carious Lesions" by Adair Luiz Stefanello Busato, 2005, AMOLCA.

Websites Consulted:

- Mayo Clinic: Cavities Diagnosis and Treatment
- CinfaSalud: Cavities

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