

# Fluoride and Tooth Decay

## WHAT IS TOOTH DECAY?

Tooth enamel is hard yet porous. Plaque on the surface of your teeth can produce acids that seep into the pores (rods) of the enamel and break down its internal structure. This process, called **demineralization**, can create a **weak spot** on the surface of the tooth that may become a cavity if left untreated.



Decay often begins on biting surfaces, between the teeth, on exposed roots, and around existing fillings

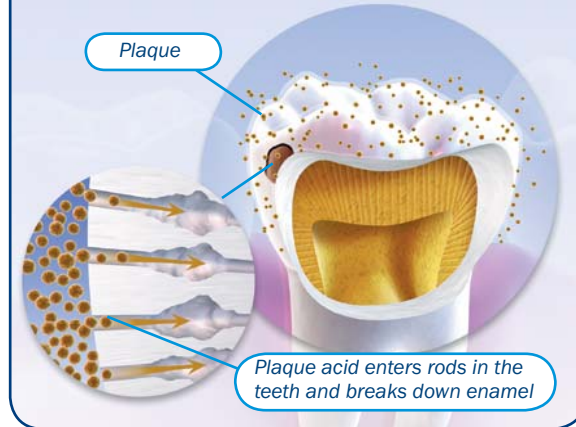


Untreated, decay spreads into the tooth and can destroy the tooth structure



Decay enters and infects the pulp

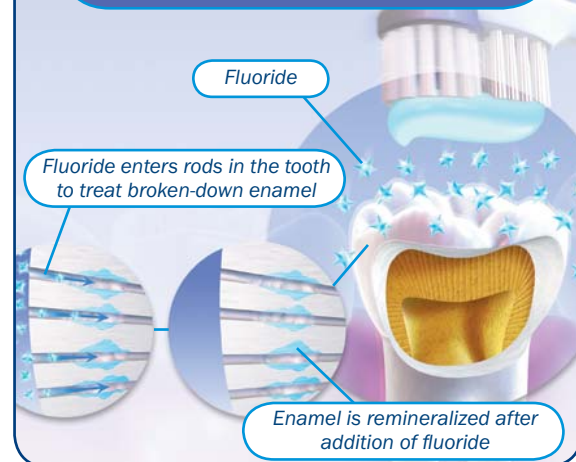
## Plaque acid causes demineralization



## THE ROLE OF FLUORIDE

Fluoride helps prevent tooth decay by slowing the breakdown of enamel and speeding up the **remineralization** process. The new enamel crystals that form are harder, larger, and more resistant to acid.

## Fluoride increases the rate of remineralization and protects against demineralization



### TREATING AND PREVENTING TOOTH DECAY

Common sources of fluoride are fluoridated drinking water, toothpaste, and mouth rinse. Inform your dentist if your drinking water is not fluoridated. He or she may recommend that you use high-concentration fluoride gels, mouth rinses, drops, or tablets.

To help strengthen weak spots and exposed roots and prevent the early stages of tooth decay, brush regularly with a fluoridated toothpaste like Crest<sup>®</sup> Cavity Protection. In one study, patients using Crest Cavity Protection developed **41% fewer cavities** than patients using a toothpaste without fluoride.\*



Daily brushing with Crest Cavity Protection, as well as regular flossing and professional cleanings, will help prevent cavities and preserve your oral health.

Ask your dental professional how this Crest product can help you:

- Crest Cavity Protection

\* Jensen ME, Kohout F. The effect of a fluoridated dentifrice on root and coronal caries in an older adult population. *J Am Dent Assoc.* 1988;117:829-832.