

# Tooth Sensitivity

Tooth sensitivity – also referred to as dentin hypersensitivity – is a fairly common problem and can be uncomfortable. Tooth pain and discomfort are triggered by hot, cold, sweet or sour food and beverages, or even by breathing cold air. The pain can be sharp, sudden and shoot deep into the nerve endings of one or more teeth.

**Good oral care and treatment by a dental hygienist can help relieve pain and correct the problem.**

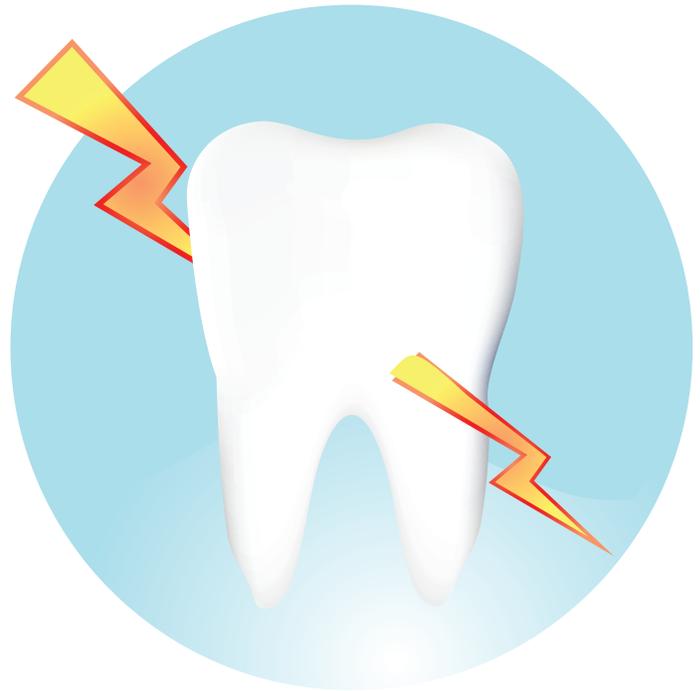
## CAUSES OF TOOTH SENSITIVITY

It has been estimated that approximately half the population experiences tooth sensitivity. Tooth sensitivity can come and go over time.

The most common cause of tooth sensitivity is enamel loss or receding gums, where the underlying layer of the teeth (the dentin) becomes exposed. The exposed dentin can be painful because temperature changes and certain food and beverages are able to reach the nerve in the tooth.

Many factors can lead to sensitive teeth, including:

- **Brushing too hard.** Over time, brushing aggressively or using a hard-bristled toothbrush can cause gums to recede and wear down enamel.
- **Abrasive toothpaste.**
- **Tooth decay near the gum line.**
- **Receding gums.** As gums move away from the tooth, the root surface becomes exposed.
- **Plaque build up.** The presence of plaque bacteria (a white, sticky substance that accumulates on teeth, especially at the gum line) can cause sensitivity.
- **Gum disease.** The loss of supporting tissue through gum disease can expose the root surface, making teeth sensitive.
- **Teeth grinding (bruxism).** Chronic clenching and grinding teeth may wear down enamel and expose underlying dentin.
- **Cracked teeth.** Chipped or broken teeth may fill with bacteria from plaque and enter the pulp, causing inflammation.



- **Acidic food and beverages.** Regular consumption of food with high acid content, such as citrus fruits, tomatoes, pickles and tea, can cause enamel erosion.
- **Tooth bleaching/whitening products.**
- **Bad habits.** Using teeth as tools or chewing on objects (e.g., pens) can wear away teeth.
- **Medical conditions.** For example, bulimia and acid reflux (GERD) can cause acid to collect in the mouth and erode enamel.

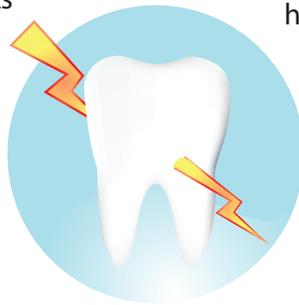
## PREVENTING TOOTH SENSITIVITY

- **Maintain good oral hygiene.** Follow proper brushing and flossing techniques to thoroughly clean all parts of teeth and mouth.
- **Use a soft bristled toothbrush.** Brush gently and thoroughly around the gum line twice a day for two minutes. Floss or clean between teeth daily.
- **Use desensitizing toothpaste.** There are several brands available. Dental hygienists can recommend products.
- **Watch food consumption.** A regular diet of highly acidic food can gradually dissolve tooth enamel and lead to dentin exposure. Do not brush after

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consuming acidic food and beverages or vomiting. Because acid softens the tooth's surface, brushing will cause more enamel loss. Wait 60 minutes until the natural flow of saliva washes away and neutralizes the acids. Instead of brushing right after eating, rinse mouth with water, chew sugarless gum (with xylitol), or eat a piece of hard cheese to increase saliva production and neutralize acids. (See *Erosion Fact Sheet*)

- **Use fluoridated dental products.** Daily use of a fluoridated mouth rinse can decrease sensitivity. Dental hygienists can recommend products for home use.
- **Avoid grinding and clenching teeth.** Use a custom-made night guard.
- **Visit a dental hygienist regularly.** Have teeth cleaned (scaled) professionally to remove plaque build up, receive oral hygiene instructions and a customized treatment plan.



**Dental hygienists will also provide:**

- Assessment of the teeth, gums and mouth.
- Fluoride applications or other agents to strengthen and desensitize teeth, as well as provide extra protection against decay.
- Instruction on the most effective way to brush and clean between teeth.
- Education on reducing risk factors for enamel wear and preventing gum recession.
  - Information on various oral care products and how to use them.
  - Counselling and educational materials on diet and nutrition.
  - Customized home-care programs.
  - A referral in the event other procedures are required to help reduce sensitivity.

*As professional health-care providers, dental hygienists are primarily concerned with promoting good oral health. Dental hygiene is among the largest of the regulated health-care professions in the province. In Ontario all dental hygienists are registered with the College of Dental Hygienists of Ontario, which regulates the profession to ensure the public receives safe and ongoing comprehensive oral care.*

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