

Tooth Sensitivity

What is tooth sensitivity?

It can be defined as a painful reaction in one or more teeth triggered by hot, cold, sweet, or sour foods & drinks. This pain can be sharp, sudden & shoot deep into the nerve endings of your teeth.

Apart from a cavity or a missing filling, the most common cause of tooth sensitivity is exposed dentin on the roots of your teeth. Normally, the dentin (the second, more sensitive layer of the tooth) is surrounded & protected by your enamel, cementum (special root covering) & gums. The cause of dentinal sensitivity is that the little tubes that connect the dentin to the nerve or pulp serve as sensory conductors. That sensation may be one of pain. OUCH!

Causes of Exposed Root Surfaces

- Brushing too hard: over a period of time, brushing too hard or using a hard-bristled toothbrush may wear away enamel or cementum & cause the dentin to be exposed.
- Recession of the gums: movement of gums away from the tooth due to periodontal disease will expose the root surface.
- Gum disease: inflamed & sore gum tissue may also cause sensitivity due to the loss of supporting ligaments which exposes root surface.

Other Causes of Sensitive Teeth

- Cracked teeth: chipped or broken teeth may fill up with bacteria from plaque & enter the pulp causing an inflammatory reaction.
- Grinding your teeth: grinding or clenching your teeth may wear down the enamel & expose underlying dentin.
- Plaque: the presence of plaque on the root surfaces can cause sensitivity.



Tooth Sensitivity (continued)

Professional Care

Ask your oral health professional, for example a dental hygienist or dentist, about professional products that may be used to help reduce sensitivity. Some of the most common treatments are:

- White fillings to cover exposed root surfaces
- Fluoride varnish applied to the exposed root surface
- Dentin sealer applied to the exposed root surface
- Gum grafts to cover the exposed root surface

What To Do at home

- Maintain good oral hygiene: continue to clean all parts of your teeth & mouth thoroughly.
- Use a soft bristled toothbrush: this will result in less toothbrush abrasion of the tooth surface.
- Use desensitizing toothpaste: there are many on the market. With regular use you should feel a decreased sensitivity. Try spreading a thin layer on the exposed roots with your finger or a Q-tip before you go to bed. You'll need to find the product that works for you, likely through trial & error.
- Consider what you eat: if you frequently eat foods high in acids, such as citrus fruits (example: sucking on lemons), they can gradually dissolve the enamel over time, leading to dentin exposure. The citric acids may aggravate the hypersensitivity & initiate a painful reaction.
- Use fluoridated dental products: as an example, with a daily application of a fluoridated mouthrinse, hypersensitivity usually decreases. Ask your dental hygienist about a daily fluoride rinse for home use.

