When a sip of iced tea, a cup of hot cocoa, or the sudden intake of cold air or pressure from your toothbrush causes pain you may have a common problem called “sensitive teeth.” Sensitive teeth can be experienced at any age as a momentary slight twinge to long-term severe discomfort. It is important to consult with your dentist because sensitive teeth may be an early warning sign of more serious dental problems.

Tooth Structure
To better understand how sensitivity develops, we need to consider the composition of tooth structure. The crown — the part of the tooth that is most visible — has a tough, protective jacket of enamel, which is an extremely strong substance. Below the gum line, a layer of cementum protects the tooth root. Underneath the enamel and cementum is dentin which contains tiny tubes. When dentin loses its protective covering (enamel or cementum) from cracks or decay the small dentinal tubules become exposed permitting heat, cold, certain types of foods or pressure to stimulate nerves and cells inside of the tooth. This causes teeth to be sensitive producing occasional discomfort.

Causes
Sensitive teeth can be caused by cavities, fractures (cracked tooth), worn tooth enamel, exposed tooth root, gum recession or periodontal disease.

Periodontal disease is an infection of the gums and bone that support the teeth. If left untreated, it can progress until bone and other supporting tissues are destroyed, exposing the root surfaces of teeth which may lead to sensitivity.

Brushing incorrectly or too aggressively may injure your gums and can also cause tooth roots to be exposed. Grinding your teeth can wear down tooth enamel. Some abrasive toothpastes, whitening toothpastes and tartar control toothpastes may increase tooth sensitivity by wearing down the enamel surfaces. Dental erosion (the loss of tooth enamel caused by attacks of acid from acidic foods and drinks) may also lead to sensitivity. Likewise, people suffering from bulimia or gastroesophageal reflux disease may also have sensitive teeth as a result of frequent contact between the teeth and stomach acid.

Practicing good oral hygiene is important to preventing tooth decay, periodontal disease and the pain associated with sensitive teeth.

Do I Need to See My Dentist?
If you have sensitive teeth, consult your dentist to get a diagnostic evaluation. This will determine the extent of the problem and the treatment. Your dentist will evaluate your oral behavior and recommend products that will best serve you.

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Dentists can provide mouthguards to minimize the impact of tooth grinding that is the result of clenching or bruxing. Dentists can restore damaged teeth, provide other advice (such as using de-sensitizing toothpaste) and recommend other techniques to eliminate or minimize the pain of sensitive teeth.

**Tips to Minimize Tooth Sensitivity**

1. Good oral hygiene is an important first step. Use the correct brushing technique with a soft-bristled toothbrush and use dental floss to keep your teeth and gums clean and healthy.

2. Obtaining regular dental care is essential, including the restoration of teeth that may be decayed or damaged.

3. Using fluoridated dental products can keep your teeth strong and reduce the likelihood that they will become vulnerable. In some cases, fluoride will act to remineralize teeth, rebuilding lost structure.

4. Decreasing the frequency of the consumption of acidic foods and drinks can be helpful for individuals with dental erosion.

5. See your dentist if you suffer from bulimia or gastroesophageal reflux disease to obtain advice on how to prevent damage to your teeth.

Sources:

Academy of General Dentistry: www.agd.org;
American Dental Association: www.ada.org