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# **Acid Attack!**

Many people consume carbonated beverages, fruit juice, and highly acidic foods every day but probably don't realize that they might be harming their teeth. The acid in the foods we eat and drink can cause tooth enamel to wear away, making teeth sensitive, cracked, and discolored.

### What is tooth erosion?

Tooth erosion, or tooth wear, is the loss of tooth structure. Basically, tooth erosion refers to the wearing away of the hard part of your teeth, which is called the enamel.

### What causes tooth erosion?

Tooth erosion occurs when the enamel on your teeth is worn away by acid. Usually the calcium contained in saliva will help remineralize (or strengthen) your teeth after you consume small amounts of acid, but the presence of a lot of acid in your mouth does not allow for remineralization.

Acid can come from many sources, including:

- Carbonated drinks. All "fizzy" drinks, including soda (even diet varieties), contain a lot of acid and can dissolve enamel on your teeth very quickly.
  More damage is done when you drink large amounts and or you hold the drink in your mouth for a long time.
- Pure fruit juice. Juice has similar effects on your teeth because it contains a lot of acid.
- Bulimia and acid reflux. Bulimia, a disease in which a person vomits to avoid gaining weight, and acid reflux also can cause tooth damage due to stomach acids. Medical and dental help should be sought immediately if you or anyone you know suffers from a condition such as this.



## What are some signs of tooth erosion?

Below are some signs of tooth erosion, ranging from its early stages (sensitivity, discoloration, rounded teeth) to the later, more severe stages (cracks, severe sensitivity, cupping).

- Sensitivity. Since protective enamel is wearing away, you may feel a twinge of pain when you consume hot, cold, or sweet foods and drinks.
- Discoloration. Teeth can become slightly yellow because the dentin is exposed.
- Rounded Teeth. Your teeth may have a rounded or "sand-blasted" look.
- Transparency. Your front teeth may appear slightly transparent near the biting edges.
- Advanced Discoloration. Teeth may become more yellow as more dentin is exposed because of the loss of tooth enamel.
- Cracks. Small cracks and roughness may appear at the edges of teeth.
- Severe Sensitivity. As more enamel is worn away, teeth become increasingly sensitive.
- Cupping. Small dents may appear on the chewing surface of the teeth.
  Fillings also might appear to be rising up out of the tooth.

### What can I do to prevent tooth erosion?

Because there are different reasons why you may experience tooth erosion (e.g., swishing carbonated drinks, drinking a lot of juice or wine, eating disorders), talk to your dentist about your habits so that a plan for preventive action can be determined. Here are some general things you can do to protect your teeth:

- Reduce or eliminate drinking carbonated drinks. Instead, drink water, milk, tea, or coffee—but skip the sugar!
- Drink acidic drinks quickly and use a straw so that the liquid is pushed to the back of the mouth. Don't swish them around or hold them in your mouth for long periods.
- After consuming high-acid food or drinks, rinse with water to neutralize the acids, and wait an hour before brushing your teeth.
- Chew sugar-free gum to produce more saliva so your teeth can remineralize.
- Brush with a soft toothbrush and be sure your toothpaste contains a high amount of fluoride.

Sensitivity can be reduced by using fluoride and brushing with toothpaste that is specially formulated to reduce sensitivity. There also are over-the-counter, enamelbuilding products available in stores. Be sure to check with your dentist before trying new products.



### Resources

### www.agd.org

At the AGD's Web site, you can search more than 300 oral health topics, post a dental question, sign up for e-newsletters, find an AGD dentist, and more.

### 1.877.2X.A.YEAR

AGD's toll-free referral number. Call to locate an AGD member dentist in your area.

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