U.S. Army Public Health Command (Provisional)

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Just the Facts...

Are You at Risk for Dental Erosion?

Dental erosion is the process where the hard outer tooth structure (the enamel) gradually dissolves through repeated exposure to stomach acid or acidic foods and drinks. Over time, this erosion leaves the inner tooth structure (the dentin) exposed, weakened and sensitive. Back teeth can even become worn and shortened, causing changes in your bite (the way your upper and lower teeth come together).

Stomach acid

Teeth are exposed to stomach acid in three ways:

- Severe acid reflux (heartburn) or GERD
- Vomiting from illness or morning sickness
- Bulimia

Stomach acids irritate the gum tissues and soften the outer layers of tooth enamel, allowing them to be removed easily, often by simply brushing your teeth. If this happens repeatedly, the enamel will become thinned and your teeth will become more sensitive.

- Never brush your teeth immediately after your mouth is exposed to stomach acid.
- Rinse with a solution of water that contains baking soda to neutralize the acid.
- If baking soda is not available, liquid antacid or plain water may be used.
- Wait at least an hour after rinsing before brushing your teeth. This allows your saliva to remineralize (harden) your tooth surfaces.

If your teeth are exposed to stomach acids repeatedly on a daily basis, talk to your dentist. You may need a fluoride mouthrinse or prescription fluoride gel that can be used at home to prevent dental erosion.

Acidic Food or Drink

Many foods and drinks are very acidic. Sodas, even diet sodas, contain strong acids that soften the outer layers of enamel. Damage usually occurs to the teeth along the gumline, and is often followed by decay, as seen at right. Here are some examples of foods and beverages that are acidic:

Tomatoes Coffee
Pickles Apple juice
Citrus Orange juice
Tea Lemon juice



Soft drink (soda or pop) Sports drink White wine

- Drink water or eat cheddar cheese after eating acidic foods or drinks to dilute the acids.
- Wait at least 30 minutes, preferably an hour, before brushing after eating or drinking acidic foods. This will allow your saliva to remineralize (harden) your tooth surfaces as much as possible.