Where did your enamel go?

Erosion from acids may be destroying your teeth

any people recognize too late that their teeth appear darker, feel sensitive and/or have lost their shiny luster. If this describes your teeth, you may be experiencing a condition called erosion, where various acids are slowly destroying your teeth.

There are other ways you might loose tooth structure, both enamel and dentin, such as Caries disease (tooth decay), abrasion (mechanical wear from stiff brushes, coarse pastes and mechanical objects), attrition (wear and tear from grinding your teeth) and abfraction (notching at the gum line from grinding and flexing the tooth).

Erosion is unique in that it results from a simple acid-base chemistry equation. When the tooth sits in a pool of acid the calcium from your teeth leach out to buffer the acid in the environment.

Acid is measured on a scale from 1 to 14 called 'pH'. Saliva and tap water are considered neutral, at a pH of 7 which creates a very safe environment for teeth. However as we step to the left on this logarithmic scale, each number gets a multiplier of 10. For example, soda, coffee, sports drinks, fruit juices and even some bottled waters are at a pH of 3 which is 10,000 times more acidic that water. Unfortunately,

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enamel dissolves long before that, at a pH of 5.5!

The good news is your saliva is very protective for the occasional slug of an acidic food or beverage. So for most, it's the habitual consumption of these substances that causes a problem. If you happen to suffer from a dry mouth, as it is a common side effect from many medications, including marijuana, alcohol and caffeine, your erosion susceptibility soars.

Another common cause of erosion is acid reflux. When the slightest bit of stomach acid (at a pH of 2) urps up in to your mouth, the pH scale is tipped out of favor with enamel. Repeated vomiting from Bulimia or a chronic GI disturbance can certainly wreck havoc as well. And if erosion is not wounding enough, an overly acidic diet will also steal calcium from your bones,

influencing osteoporosis and seeding kidney stones.

So what can you do to avoid enamel erosion and weak bones?

- Get rid of habits and addictions to acidic drinks.
- Progress to a more plant-based diet, as meats and cheeses are much more acidic than plants.
- Stop buying commercially canned or jarred foods. They have added acid to avoid bacterial growth while on the shelf.
- Address food sensitivities that can quell your acid reflux—without medication.
- To get your saliva back, work with your preventive medical team to achieve better health and de-medicate.
- If you have a vomiting disorder, seek medical attention.

And by all means, if you now suspect you have enamel erosion, ask your dentist to help you evaluate cause and effects.



Dr. Susan Maples is a dentist in Holt. She is also a speaker, health educator and author of Blabbermouth. Learn more at drsusanmaples.com. or call (517) 694.0353.

Our mission is to help each person take a significant step toward his or her desired oral and overall health.





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