

DENTAL EROSION

Dental erosion, also known as erosive tooth wear, is caused by **acid** contacting and dissolving the tooth surface. This creates thinning of the enamel which can weaken the tooth, causing defects and making it sensitive.

As the outer protective layer of enamel dissolves from the tooth surface, the dentine underneath is exposed which can make the tooth sensitive. The dentine is softer than enamel and dissolves much easier in acid. Preventing dental erosion is very important for protecting our teeth.

Where does the acid come from?

The acid that causes erosion mainly comes from **food or drink**. Common sources of dietary acids that have been linked to dental erosion are:

- Soft drinks
- Energy drinks
- Sports drinks
- Vinegar
- Citrus fruits
- Fruit juices
- Fruit-flavoured water
- Fruit-flavoured tea (e.g. lemon, peach, rosehip)
- Cordial
- Alcoholic drinks
- Sour (acidic) sweets/lollies
- Chewable Vitamin C tablets
- · Effervescent or dissolvable vitamins/medications

Remember, even sugar-free food or drink can cause dental erosion if it's high in acid. Common acidic food additives to be aware of are:

- Citric acid (food acid acidity regulator/antioxidant 330)
- Sodium citrate (food acid/acidity regulator/antioxidant 331)
- Malic acid (food acid/preservative 296)
- Ascorbic acid (Vitamin C/antioxidant 300)
- Fruit juice concentrate.

Acid rising from the stomach can also cause dental erosion. This can happen after vomiting, or in conditions such as gastroesophageal reflux (acid reflux), anorexia nervosa, bulimia, and pregnancy-related morning sickness.

What else can increase dental erosion?

As well as frequent exposure to acid, low salivary flow (dry mouth) can increase the risk of dental erosion. A healthy flow of saliva protects the teeth by washing away and neutralising acid. Dry mouth can be caused by:

- · Medications and taking multiple medications together
- Radiotherapy to the head/neck
- Stress
- Sjogren's syndrome (an auto-immune disease)
- Smoking
- Diabetes



Source: Galina Savoyarova

Caring for your teeth

February 2024





What about brushing my teeth?

Good oral hygiene is essential for oral health. Previously it was recommended to wait 30–60 minutes to brush your teeth after contact with stomach or dietary acid so that saliva could repair the acid damaged tooth surface. However, recent evidence has suggested this amount of time is too short for saliva to repair acid damage and there is no benefit to postpone tooth brushing for this length of time.

Therefore, it is recommended to:

- · Brush your teeth twice a day with a fluoride toothpaste
- · Use a soft toothbrush with gentle action
- Rinse your mouth thoroughly with water, plain milk or a fluoride mouth rinse as soon as possible if your teeth are exposed to acid.

Consider using a toothpaste containing stannous fluoride (SnF2) as it can be more protective against erosion than other types of fluoride. Most Oral B toothpastes available at supermarkets contain this ingredient.

How can I prevent dental erosion?

AVOIDING acidic food or drink is the best way to prevent dental erosion, and there are some other things you can do. It's important to remember:

- Only have acidic food and drink at meal times when your saliva levels are higher to protect your teeth
- When having something acidic, avoid keeping it in your mouth for too long and swallow it as quickly as possible
- Eat whole, low-acid fruit (e.g. banana, melon, pear, papaya) rather than drinking fruit juice
- Chill acidic drinks, as warm drinks are more likely to cause dental erosion
- After having anything acidic or after vomiting/reflux, rinse your mouth with water, plain milk, or a fluoride mouth rinse as soon as possible.

Speak to your dentist or medical doctor to find out if an underlying condition is increasing your risk of dental erosion.



Where can I get more information on dental erosion and products to use?

- · Speak to your dental professional
- Visit https://www.betterhealth.vic.gov.au/health/ conditionsandtreatments/dental-erosion

References available on request. Contact ask@adavb.org

Resources available at oralhealth.adavb.org