

Digital guide to... Dental erosion

National Smile Month



Oral Health Foundation

A balanced diet is not only important for the health of your body, it also has an impact on the health of your mouth. Your teeth, gums and tongue can all be affected by what you eat and drink.

To develop and maintain good oral health, you need to learn what foods and drinks can be harmful and which ones you should favour. The effects of sugar on your teeth are well-known – it contributes to tooth decay which can ultimately lead to tooth loss. What you might not know is the impact that acidity has on your teeth.

That's why, as part of National Smile Month, the Oral Health Foundation, GSK and Sensodyne Pronamel have come together to create this digital guide to dental erosion.

By learning more about the effects of dental erosion, as well as how to spot and manage it, you will be in a better position to make healthier choices. This will ultimately benefit your health and also improve your quality of life.



Tooth enamel and dental erosion

The enamel on your teeth is the hardest and most mineralised part of your whole body. It covers the outer layer of each tooth, shielding the sensitive dentine underneath and protecting it from tooth decay.

Dental erosion is the loss of your tooth enamel and is caused by acid attack. When the enamel is worn away, dentine becomes exposed and it

could lead to pain and sensitivity.

Unlike other parts of your body (such as bones or muscles), tooth enamel is not made up of living cells. This means that once enamel is destroyed, your body cannot rebuild it. Because of this, it is important to prevent your enamel from eroding.

“The most common types of acid in your diet are carbonic acids, citric acids and phosphoric acids. These are the acids that weaken your enamel, leading to dental erosion.”

Dr Nigel Carter OBE, Chief Executive, Oral Health Foundation



Spotting dental erosion

Erosion usually shows up as hollows in the teeth and a general wearing away of the tooth surface and biting edges.

This can expose the dentine underneath, which is a darker, yellower colour than the enamel.

Because the dentine is sensitive, your teeth can also be more sensitive to heat and cold, or acidic foods and drinks. This sensitivity is the biggest clue about the health of your enamel.

How erosion happens

Every time you eat or drink anything acidic, the enamel on your teeth becomes softer for a short while. During this time, it loses some of its mineral content.

Your saliva will slowly cancel out this acidity in your mouth and get it back to its natural balance. However, if this acid attack happens too often, your mouth does not have a chance to repair itself.

When your enamel is weakened, it is more susceptible to damage and can be easily brushed away. Over time, you start to lose the surface of your teeth.



Acidic foods and drinks

Acidic foods and drinks can cause dental erosion. Acidity is measured by its 'pH value', and anything that has a pH value lower than 5.5 is more acidic and can harm your teeth.

Fizzy drinks, sodas, pops and carbonated drinks all have the potential to harm your enamel. Even sugar free or 'diet' brands can cause damage, as they are still highly acidic.



Acidic foods and drinks such as fruit and fruit juices – particularly citrus ones including lemon and orange – contain natural acids which can be harmful to your teeth, especially if you have a lot of them often.



Flavoured fizzy waters can have an effect if drunk in large amounts, as they contain weak acids which can harm your teeth.

'Alcopops', 'coolers' and 'designer drinks' that contain acidic fruits and are fizzy can cause erosion too.



Drunk in large quantities, certain types of alcohol may also harm your enamel. This includes beer, cider and prosecco. Fizzy mixers, tonics and squeezes of lemon could also lead to erosion.



Sports drinks

Many sports drinks contain ingredients that can cause dental erosion as well as decay. However, it is important for athletes to avoid dehydration because this can lead to a dry mouth and bad breath. As well as being healthy for our mouth, water is also the best source of hydration.

Top picks

Plain, still water is the best drink for teeth.

Milk is also good because it helps to cancel out the acids in your mouth.



“The best way for us to avoid the damage caused by acidic foods and drinks is to simply limit our exposure to them.”

Dr Soha Dattani, Director Scientific & Professional Affairs, GSK

Sometimes you need expert advice about your health. The Dental Helpline is there to provide you with the very best information and support about the health of your mouth.

Dental Helpline
01788 539780
Oral Health Foundation

Medical problems and erosion

Conditions that cause you to be physically sick can lead to the erosion of your enamel. This is because there are high levels of acid in vomit.

Morning sickness in pregnancy, bulimia and chemotherapy are just some

of things that could cause you to experience regular vomiting and therefore might harm your tooth enamel.

Acids produced by the stomach can also come up into the mouth (this is called gastro-oesophageal reflux).

People suffering from hiatus hernia or oesophageal problems, or who drink too much alcohol, may also find they suffer from dental erosion due to vomiting.

Preventing dental erosion

There are a number of things you can do to help reduce the erosion of your enamel:

- 1 Have acidic food and drinks, and fizzy drinks, sodas and pops, just at meal times. This will reduce the number of acid attacks on your teeth.
- 2 Drink quickly, without holding the drink in your mouth or 'swishing' it around your mouth. Or use a straw to help drinks go to the back of your mouth and avoid long contact with your teeth.
- 3 Finish a meal with cheese or milk as this will help cancel out the acid.
- 4 Chew sugar-free gum after eating. This will help produce more saliva to help cancel out the acids which form in your mouth after eating.
- 5 Wait for at least one hour after eating or drinking anything acidic before brushing your teeth. This gives your teeth time to build up their mineral content again.
- 6 Brush your teeth last thing at night and at least one other time during the day, with fluoride toothpaste. Use a small-headed brush with medium to soft bristles.
- 7 Children up to three years old should use a toothpaste with a fluoride level of at least 1000ppm (parts per million). Three-year-olds to adults should use a toothpaste that contains 1350ppm to 1500ppm.
- 8 Spit out after brushing and do not rinse, so that the fluoride stays on your teeth longer.

Managing dental erosion

Dental erosion does not always need to be treated. With regular check-ups and advice, your dental team can help you prevent the problem from getting any worse.

As well as using a fluoride toothpaste, your dental team may suggest you use a fluoride-containing

mouthwash and have a fluoride varnish applied at least every six months. They may also prescribe a toothpaste with more fluoride in it.

Some toothpastes are also specially designed to help re-harden and protect your tooth enamel while brushing

your teeth. This toothpaste also contains fluoride, which is really important for protecting our teeth against tooth decay. Brushing should be done for two minutes, twice a day.



Treatments

If your level of erosion is quite severe, the tooth or teeth affected will need treating. Treatment is important to protect the remaining enamel and the inner layers of the tooth. There are a few options for you to choose from.

Usually, simply bonding a filling onto the tooth will be enough to repair it. However, in more severe cases the dentist may need to fit a veneer.

It is important to talk about all the treatment options with your dental team.

Where to go for more information

National Smile Month is organised by the Oral Health Foundation and supports millions of people in developing and maintaining a healthy smile.

Everybody deserves the right to good oral health. By working together during National Smile Month, we can make this happen.

Please visit the National Smile Month website, where you can learn more about our amazing campaign and how to get involved.

www.smilemonth.org

#smilemonth

