

# Dental Erosion

## What is Dental Erosion?

Erosion is the loss of tooth enamel caused by acid attack. Enamel is the hard, protective coating of the tooth, which protects the sensitive dentine underneath. When the enamel is worn away, the dentine underneath is exposed, which may lead to pain and sensitivity.

## How do I know I have dental erosion?

Erosion usually shows up as hollows called ‘cupping’ 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 hot, cold, or acidic foods and drinks.

## What causes dental erosion?

Every time you eat or drink anything acidic, the enamel on your teeth becomes softer for a short while, and loses some of its mineral content. Your saliva will slowly neutralise this acidity in your mouth and restore it to its natural balance. However, if this acid attack happens too often, your mouth does not have a chance to repair itself and tiny particles of enamel can be brushed away. Over time, you start to lose the surface of your teeth.

## Are there any medical problems which can cause dental erosion?

Bulimia is a condition where patients make themselves sick so that they lose weight. Because there are high levels of acid in the vomit, this can cause damage to tooth enamel. Acids produced by the stomach can 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.

## Can my diet help prevent it?

Food and drink that has a pH value lower than 5.5 is acidic and can cause tooth erosion.

Fizzy drinks can cause enamel erosion. It is important to remember that even the diet brands are still harmful. Even fizzy waters can have an effect if taken in large amounts, as they contain weak acids which can harm your teeth. Flavoured water is also acidic as it contains fruit acids.

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.

‘Alco pop’ drinks that contain acidic fruits and are fizzy can cause erosion too.

Still water is the best drink for teeth, and milk is also good because it helps to neutralise the acids in your mouth.

## How some everyday drinks may erode your teeth

	pH	Erosion potential
Grapefruit juice	3.2	High
Apple juice	3.3	High
Orange juice	3.8	High
Cola drinks	2.5	Medium
Carbonated orange	2.9	Medium
White wine	3.7	Medium
Beer – bitter	3.9	Low
Lager	4.4	Low
Buxton sparkling water	5.1	Low
Perrier water	5.2	Low
Buxton still mineral water	8.1	-----

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### Are sports drinks safe?

Many sports drinks contain ingredients that can cause dental erosion. However, it is important for athletes to avoid dehydration because this can lead to a dry mouth and bad breath.

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

- Limit acidic products and fizzy drinks to mealtimes to reduce the number of acid attacks on teeth.
- Drinks should be drunk quickly without holding in or ‘swishing’ around your mouth. Or use a straw to help drinks go to the back of your mouth and avoid long contact with your teeth.
- Finish a meal with cheese or milk as this will help neutralise the acid.
- Chew sugar-free gum after eating to help produce more saliva to help cancel out the acids which form in your mouth after eating.
- 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.
- Brush your teeth twice a day with a small-headed brush with medium to soft bristles and fluoride toothpaste.



### Should I use any special products?

We recommend you use a fluoride toothpaste twice a day. In severe cases fluoride supplements such as rinses and gels may be used once a day. Your dentist or hygienist will tell you the best supplement to use.

### **How can it be treated?**

Dental erosion does not always need to be treated. With regular check ups your dentist can prevent the problem getting any worse and the erosion going any further. In other cases it is important to protect the tooth and the dentine underneath to prevent sensitivity. In these cases, simply bonding a filling onto the tooth will be enough to repair it.

### **How much will treatment cost?**

Costs will vary, depending on the type of treatment necessary. Treatment options will be discussed with you and a written estimate of the cost will be given to you.