



## **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. High consumption of fizzy drinks or highly acidic juices often leads to erosion. It also often happens when someone is repetitively being sick; for instance, in cases of Bulimia or long-term ill health.

### **How do I know I have 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. As the dentine that becomes exposed is very sensitive, teeth can also be more sensitive to hot, cold or sweet 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. This process takes up to 45 minutes. However, if this acid attack happens too often, the mouth does not have a chance to repair itself and tiny particles of enamel can be brushed away. Over time, you would start to lose the surface of your teeth.

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

Any conditions which cause a patient to be repetitively sick are highly likely to cause tooth erosion. Because there are high levels of acid in the vomit, this can cause damage to tooth enamel. There are many medical conditions which could help cause dental erosion. Acids produced by the stomach can come up into the mouth (this is called gastro-oesophageal reflux). Patients suffering from Hiatus hernia and other oesophageal problems, such as drinking too much alcohol, may also find they suffer from dental erosion due to vomiting.

### **What problems can it lead to?**

Dentine is the softer, sensitive part of the tooth. As this becomes exposed, it also becomes more likely to decay, leading to cavities and fillings. The dentine is also sensitive, which can cause pain when you have hot, cold or sweet foods and drinks. The parts of the tooth suffering from erosion can also be unsightly. The dentine is darker than enamel and the teeth can also become shorter and shorter.

### **Can my diet help prevent it?**

Acidic foods and drinks such as fruit and fruit juices, particularly citric ones including lemon and orange, can be harmful to teeth. Fruit juices and fruits contain natural acids, which can be just as harmful to teeth. Fizzy drinks are also a cause of enamel erosion. It is important to remember that even the diet brands are still as harmful. Even flavoured fizzy waters can have an effect if taken in large amounts, as they contain certain acids which can harm the teeth. It is important to have acidic foods and drinks at mealtimes only. Healthy foods such as fruit and fruit juices are not always the best options for teeth if you have too much of them. It is also recommended that you do not brush



your teeth for at least one hour after eating or drinking anything acidic, so that your teeth can build up their mineral content again.

#### [What about chewing gum?](#)

After eating, especially acidic foods, plaque acid attacks your teeth. This can lead to enamel erosion and tooth decay. You get the best results by chewing sugar-free gum for twenty minutes after eating or drinking. Chewing sugar-free gum makes your mouth produce more saliva. This neutralises the acid and helps the enamel build up its mineral content, preventing early tooth decay.

#### [Are sports drinks safe?](#)

Many sports drinks contain a lot of acid and can therefore cause dental erosion. However, it is important for athletes to avoid dehydration, and it is essential to drink plenty of fluids during training. Water or sugar - free drinks are ideal to sip during the session and sports drinks should be drunk more quickly without holding or 'swishing' around the mouth. It is important for everyone training and playing sports to have regular dental check-ups and keep to a good standard of oral hygiene and plaque control.

#### [How can I help my child prevent erosion?](#)

Giving your child acidic foods and drinks less often will help prevent erosion. Using a straw with drinks may also help to cut down the erosion. This allows the drink to go straight to the back of the mouth, which avoids long-term contact with the teeth. It is important to remember **prevention is better than cure**.

#### [Should I use a special toothpaste?](#)

We recommend you use 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.

#### [What about alcoholic drinks?](#)

Many of the popular 'alcopops' drinks have been proven to cause erosion. They usually contain citric fruits and alcoholic spirits, which can be harmful to teeth. It is therefore important not to drink too much of these.

#### [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 tooth decay and sensitivity. In these cases, 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.

#### [How much will treatment cost?](#)

Costs can vary, depending on the type of treatment necessary. In a few cases, the treatment may be covered by the National Health Service. More extensive treatment may only be available privately and can therefore be more expensive. It is important to discuss all the treatment options with your dentist and be sure to get a written estimate before starting treatment.