

Dental erosion is the irreversible loss of the tooth structure caused by acids not of bacterial origin. Enamel is the hard, protective coating of the tooth, which covers the sensitive dentine underneath. When the enamel is worn away, the dentine underneath is exposed, which may lead to pain and sensitivity.

#### How common is erosion?

At Studental we see erosion very commonly in all age groups. It often starts in childhood, most commonly due to the drinking of carbonated drinks or fruit juices. Once the enamel is damaged it cannot grow back. Erosion continues to progress throughout life and can become very severe with time.

#### How do I know if I have dental erosion?

Erosion usually shows up as hollows in the teeth and a general wearing away of the tooth surface and the biting edges of the teeth. This can expose the dentine underneath, which is a darker, yellowish, colour than the enamel. As the dentine is exposed, the teeth can become sensitive to hot, cold or sweet food and drinks. The front teeth may begin to look short and square, with sharp edges that break easily.

#### What causes dental erosion?

Every time acid touches the surface of your teeth the enamel becomes softer and loses some of its mineral content. The acid that causes the problems can come from food, from drinks or from your stomach. Your saliva will slowly neutralise the acid in your mouth and restore it to its natural balance. However, if the acid attack happens too often, the teeth do not have a chance to repair themselves and tiny particles of enamel can be washed or worn away.

#### What lifestyle factors contribute to erosion?

- Drinking carbonated drinks, fruit juices or other acidic liquids
- Frothing or swishing acidic drinks around the mouth increases the risk of acid erosion
- Eating fruit or other acidic foods
- Acid erosion often coexists with dental abrasion. Abrasion is most often caused by brushing teeth too hard and exacerbates erosion if the tooth surface is already softened by acid.
- Grinding of the teeth can worsen erosion and is a common side effect of taking recreational drugs.

#### Which medical problems contribute to erosion?

- Vomiting
- Acid reflux (eg, from gastroesophageal reflux disease or Hiatus hernia)
- A number of medications such as vitamin C, aspirin and some iron preparations are acidic and may contribute towards acid erosion



Moderate erosion seen in a 24 year old student at Studental

#### What changes can I make to help prevent dental erosion?

- Have treatment for any underlying medical condition
- Avoid acidic food and beverages
- If you do have acidic foods and drinks, you should have these at mealtimes only- not as snacks between meals.
- Drink through a straw
- Decrease abrasive forces. Use a soft bristled toothbrush and brush gently. Do not brush immediately after consuming acidic food and drink because the teeth will be softened at this time. Leave at least half an hour before brushing. Rinsing with water is better than brushing after consuming acidic foods and drinks
- Drinking milk or using other dairy products.
- Using a neutralizing agent such as antacid tablets.
- Use a high fluoride toothpaste and a fluoride mouthwash to strengthen your enamel against erosion
- Apply a remineralising and/or desensitizing toothpaste or gel to the teeth. Leave this on the teeth without rinsing before going to bed.