

Acid attack: A 21st Century threat to teeth

Recent studies have shown that our teeth are under threat from the acid contained in modern diets. Acid erosion – a condition that can affect all ages – is so widespread that in October 2005, 91 per cent of UK dentists reported seeing cases of acid erosion on a weekly basis, yet most of us might not even be aware that it's happening.

What is acid erosion?

Acid erosion occurs when we consume food and drinks that contain acid. The acid comes into contact with teeth, at which point the tooth's hard enamel surface temporarily softens. When we then brush our teeth, the enamel can be worn away more easily and become thinner over time. This wearing of enamel, caused by acid in our diet, is known as acid erosion.



Top nutritionist Anita Bean

What are the signs?

Early signs of acid erosion can include tooth sensitivity when consuming hot or cold food and drinks and a slight yellow appearance as the tooth enamel becomes thinner and the underlying dentine shows through. The later stages of acid erosion can include a darker yellow appearance of the teeth; transparency at the edges; sensitivity becoming more severe, small dents on the surface and small cracks at the edges of the teeth.

The effects of acid erosion cannot be reversed and if left to advance may require treatment from the dentist to restore and protect the affected teeth. In very extreme cases, the damage caused may require affected teeth to be extracted.

The Effects of Modern Diets

Food and drink in the modern diet, including fruit tea, balsamic vinegar, wine and some fruits have been identified as a cause of acid erosion. Acidic food and drinks do not have to be avoided, however care should be taken as to when and how often food and drink is consumed. Top nutritionist Anita Bean has examined modern diets and come up with some tips on how you can best protect your teeth from acid erosion.

Anita explains: "It is surprising how many foods and drinks can cause acid erosion, from fresh fruit to wine and salad dressings. It's not

just what is consumed that matters, but also how frequently you consume acidic foods and drinks through the day, and how long they are in contact with the teeth. For example, sipping acidic drinks slowly prolongs the exposure of the teeth to acid and increases the risk of erosion. Here are some ways you can help protect your teeth from acid erosion:

- Drink acidic drinks quickly or use a straw, placed towards the back of your mouth — don't swish them around or hold them for prolonged periods within your mouth
- If you are going to have acidic food and drink, try to have them at mealtimes rather than as a snack
- After consuming acidic food and drinks, drink water to help wash away the acid or chew sugar free gum to help stimulate saliva and neutralise the acid
- You could finish off a meal with milk or cheese, this will also help to neutralise the acid
- Replace some acidic snacks with enamel-friendly foods such as raw vegetable sticks (carrots, cucumber, peppers), yoghurt (plain or fruit varieties), nuts, and cheese

(Promotional feature)



Our teeth are under constant threat from the acid contained in modern diets

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Professor Jimmy Steele, Department of Dental Sciences at The University of Newcastle says: "I see many cases of acid erosion in my practice. By the time patients discuss symptoms with me it is often at an advanced stage meaning that treatment is difficult.



"Once the hard enamel is lost, it will not come back, so prevention really is the best policy." To minimise the risk, Jimmy recommends: "Avoid brushing teeth immediately after consuming acidic food or drinks – it's best to wait at least one hour."

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