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Tooth decay

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Tooth decay can occur when acid is produced from plaque, which builds up on your teeth.

If plaque is allowed to build up, it can lead to further problems, such as dental caries (holes in the teeth), [gum disease](#) or [dental abscesses](#), which are collections of pus at the end of the teeth or in the gums.

Symptoms of tooth decay

Tooth decay may not cause any pain. However, if you have dental caries you might have:

- [toothache](#) – either continuous pain keeping you awake or occasional sharp pain without an obvious cause

- tooth sensitivity – you may feel tenderness or pain when eating or drinking something hot, cold or sweet
- grey, brown or black spots appearing on your teeth
- [bad breath](#)
- an unpleasant taste in your mouth

Seeing a dentist

Visit your dentist regularly, so early tooth decay can be treated as soon as possible and the prevention of decay can begin. Tooth decay is much easier and cheaper to treat in its early stages. Dentists can usually identify tooth decay and further problems with a simple examination or [X-ray](#).

[Find your nearest dentist](#).

It's also important to have regular [dental check-ups](#). Adults should have a check-up at least once every two years and children under the age of 18 should have a check-up at least once a year.

Read more on:

- [how to find an NHS dentist](#)
- [what to expect when you visit your dentist](#)
- [getting over a fear of the dentist](#)

Treatments for tooth decay

Treatment of tooth decay depends on how advanced it is.

- For early-stage tooth decay – your dentist will talk to you about the amount of sugar in your diet and the times you eat. They may apply a [fluoride](#) gel, varnish or paste to the area. Fluoride helps to protect teeth by strengthening the enamel, making teeth more resistant to the acids from plaque that can cause tooth decay.

- Your dentist may discuss a [filling or crown](#) with you – this involves removing the dental decay, offering [local anaesthetic](#) to numb the tooth and filling the hole. Read about [what NHS fillings and crowns are made of](#).
- If tooth decay has spread to the pulp (in the centre of the tooth, containing blood and nerves – this may be removed in a process known as [root canal treatment](#)).
- If the tooth is so badly damaged that it can't be restored – it may need to be removed. Your dentist may be able to replace the tooth with a partial [denture](#), [bridge or implant](#).

Cost of NHS treatment

NHS charges are set by the government and are standard for all NHS patients. Charges are assessed each year and usually change every April.

Some people don't have to pay for dental treatment, including children, pregnant women and new mothers. Financial help may also be available to those on a low income.

Read more about:

- [NHS dental charges](#)
- [Getting help with dental charges](#)

The cost of private dental treatment varies between practices, as there is no set charge. If you choose to see a private dentist, make sure to agree the cost before having treatment.

Preventing tooth decay

Although tooth decay is a common problem, it's often entirely preventable. The best way to avoid tooth decay is to keep your teeth and gums as healthy as possible. For example, you should:

- visit your dentist regularly – your dentist will decide how often they need to see you based on the condition of your mouth, teeth and gums
- cut down on sugary and starchy food and drinks, particularly between meals or within an hour of going to bed – some medications can also contain sugar, so it's best to look for sugar-free alternatives where possible
- look after your teeth and gums – brushing your teeth properly with a fluoride toothpaste twice a day, using floss and an interdental brush at least once a day
- avoid [smoking](#) or [drinking alcohol](#) excessively – tobacco can interfere with saliva production, which helps to keep your teeth clean, and alcohol can contribute to the erosion of tooth enamel
- see your dentist or GP if you have a persistently [dry mouth](#) –this may be caused by certain medicines, treatment or medical conditions

Read:

- [how to keep your teeth clean](#)
- [lifestyle tips for healthy teeth](#)
- [how does sugar in our diet affect our health?](#)
- [reading food labels](#)

Protecting your child's teeth

Establishing good eating habits by limiting sugary snacks and drinks can help your child avoid tooth decay. Regular visits to the dentist at an early age should also be encouraged.

It's important to teach your child how to clean their teeth properly and regularly. Your dentist can show you how to do this. Younger children should use a children's toothpaste, but make sure to read the label about how to use it.

Children should still brush their teeth twice a day, especially before bedtime.

Read more about:

- [how to look after your baby's teeth](#)
- [how to look after your children's teeth](#)
- [tips on giving your child sweets, fizzy drinks and using bottles](#)

How plaque causes tooth decay

Your mouth is full of bacteria that form a film over the teeth called dental plaque.

When you consume food and drink high in carbohydrates – particularly sugary foods and drinks – the bacteria in plaque turn the carbohydrates into energy they need, producing acid at the same time.

If the plaque is allowed to build up, the acid can begin to break down (dissolve) the surface of your tooth, causing holes known as cavities.

Once cavities have formed in the enamel, the plaque and bacteria can reach the dentine (the softer, bone-like material underneath the enamel). As the dentine is softer than the enamel, the process of tooth decay speeds up.

Without treatment, bacteria will enter the pulp (the soft centre of the tooth that contains nerves and blood vessels). At this stage, your nerves will be exposed to bacteria, usually making your tooth painful.

The bacteria can cause a dental abscess in the pulp and the infection could spread into the bone, causing another type of [abscess](#).

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