

Dental care for children with heart conditions

All parents know how important it is to look after their children's teeth, but young people with heart disease are particularly susceptible and can pick up a life threatening disease called bacterial endocarditis which starts in the gums. This is why it's especially important to prevent bacterial infection with good dental care.

Children with heart problems are at increased risk of developing an infection within the heart (endocarditis). If this occurs it can have a damaging effect on the heart itself, particularly the valves within the heart, and will require aggressive antibiotic treatment. Some children may even require heart surgery to repair or replace damaged valves.

In the past, antibiotics used to be given at the time of dental or surgical treatment. This is no longer recommended in the UK (refs below) because it has been found that dental hygiene and excellent care of the teeth is more important to in the prevention of endocarditis: www.nice.org.uk/cg64

Why is dental health important for my child?

It is very important for your child's dental health to be optimum. Bacteria which cause dental decay and gum disease can enter the bloodstream, causing serious infections, the most severe being infective endocarditis. Bacteria can enter the bloodstream from

- Removal of teeth
- Scaling of teeth (cleaning)

What is tooth decay and what causes it?

Tooth decay causes damage to teeth resulting in the need for fillings or extraction of teeth if not treated in time. Decay is caused when bacteria (germs) in the mouth feed off the sugar we eat. They form acids which attack the enamel. Over time the enamel will break down forming a hole or cavity.

How can I prevent this from happening to my child? Decay can be prevented as follows:

Diet:

All sugars cause decay. Sugars occur naturally in foods such as fruit or added to food. It is important to reduce the amount of sugary foods especially between meals in order to prevent 'acid attacks' which cause dental decay. Foods stating 'no added sugar' still contain natural sugars which can also cause dental decay.

Many children with heart conditions need a high calorie diet, to keep their weight stable, but resist the temptation to give them foods with a high sugar content. It is important to restrict sweets and sweet containing food such as sweets, chocolate and cakes to meals times. Foods which are less likely to cause decay are called safe snacks. These include fresh fruit, cheese, bread, raw fruit and vegetable, rice

cakes.

Remember.....It is not the amount of sugar you eat or drink but how often you do it that is important. Restrict sweet foods or drinks to mealtimes.

For infants:

Breast and bottled milk should be weaned by your child's 1st birthday You should not allow your child to fall asleep with a bottle unless it contains plain water.

Brushing teeth:

Teeth should be brushed twice a day, using adult toothpaste. Ensure your child does not rinse out after tooth brushing. This will allow the toothpaste to have a maximum effect on the teeth. For children < 3 years use a small brush and a smear of tooth paste. For older children use no a pea sized amount of tooth paste. Younger children should be supervised by an adult. It is important than once the teeth are brushed, your child should not have anything else to eat or drink apart from water at bedtime.

Fluoride:

Apart from toothpaste another good source of fluoride is a mouthwash. We generally recommend using a mouth wash in children of 7 years of age or above or when your child is able to spit it out properly. It is important to use a children's mouthwash as these are alcohol free. Rather than rinsing after brushing, it is more effective to rinse after a meal so that the teeth are exposed to fluoride at another time in the day. From the age of two, ask your dentist to paint fluoride varnish onto your child's teeth twice a year, for extra protection.

What is dental erosion and what causes this?

Acidic food and drink can be harmful to teeth. The acids wear away the enamel and this is called 'erosion'. This can cause 'thinning' of the teeth which can damage them and make them more sensitive and. Acidic foods and drinks should therefore be limited to meal times. It is important to note that citric fruits such as oranges, apples, fresh fruit juices contain acid. Rinsing with a fluoride mouthwash after consuming an acid food or drink can help prevent erosion.

What is gum disease?

Gum disease is inflammation of the gums or 'gingivitis'. It is caused when plaque is not removed from the teeth and gums during brushing. The plaque causes the gums to become swollen and inflamed which can result in bleeding when brushing. If you notice the gums are bleeding it is important to keep brushing the area as it will reduce over time with good effective brushing. Please speak to your dentist or hygienist for advice of effective ways to brush the teeth.

Registering with a dentist

All children should be registered with a dentist once their teeth erupt. Routine check-ups for heart children are essential every 4-6 months. Make sure you tell your dentist about any changes in your child's medication. Heart children often suffer from acid reflux, which can damage tooth enamel. Make sure you mention this to your dentist so that any problems can be identified quickly.

Your dentist will be able to provide plastic coatings which are placed into the biting surface of the tooth by your dentist to protect the teeth from decay. These are called Fissure sealants.

Useful information

For useful information about dental care for children with heart conditions please contact: Department of Paediatric Dentistry Floor 22 Guy's and St Thomas' NHS Foundation Trust Tower Wing Great Maze Pond 0207 188 4419.

You can also find out more about looking after your child's teeth by visiting [nhs.uk](https://www.nhs.uk).