

Teeth matter!

Caring for your children's teeth

Advice for parents and carers of children with special needs



Why do teeth matter?

Good oral health is very important for everyone, but it is particularly important for children who may have medical, sensory, physical, learning or behavioural disabilities/special needs.

Teeth are used mainly for eating, speaking, singing and smiling, but they can also help us communicate in other ways. For example, they can be used by a person with a physical disability to hold objects that help them write or use a computer. Poor oral health can make all these things more difficult and can affect the general health, confidence and quality of life of the individual. It can also cause a lot of pain and discomfort, which a child with a disability may not be able to communicate.

Causes of poor oral health

The two main dental diseases are tooth decay and gum disease. Frequent and/or high intakes of sugar, in the form of both food and drinks, are the main causes of tooth decay. The more often sugar is taken, the greater the risk of tooth decay.

Gum disease is mainly caused by poor oral hygiene and the build-up of dental plaque and food debris around the teeth. It is also more common with certain medical conditions such as Down's syndrome and diabetes, or as a side effect of some medicines.

Children with disabilities are at greater risk of tooth decay and gum disease for a number of reasons:

- They may be taking medicines that contain sugar, which can cause tooth decay.
- Some medicines cause a dry mouth, which can put the teeth at greater risk of decay.
- The teeth may be overcrowded, which might make them very difficult to clean properly.
- Some children may not tolerate having a toothbrush in their mouth or may have a gag/choking reflex.
- They may have behavioural problems, which can make brushing their teeth difficult or impossible.
- Some children may tend to keep food in their mouth for a long time (food pouching), or they may have difficulty clearing leftover food from around their teeth and gums.
- Some children with behavioural problems develop a strong preference for sweet food and drinks, or food of one particular colour or texture, and will eat little else.
- Drooling can cause skin irritation and mouth infections.
- Some children may suffer from gastric reflux, which can cause erosion of the tooth enamel.

Providing dental care for children with disabilities can be difficult for a number of reasons:

- They may find it hard to accept dental treatment and may find the dental surgery quite a frightening place.
- They may have difficulty tolerating the noise produced by dental equipment.
- It may be necessary to provide dental treatment under general anaesthetic and this can present added health risks for the child.
- Certain behavioural problems may make it difficult for them to sit in the dental chair or carry out instructions.
- They may not be able to let you know if they are in pain or where the pain is coming from.

For all these reasons, it is very important to try to prevent the need for complex dental treatment, which in some cases may need to be carried out under general anaesthetic. Prevention is best carried out from a very early age.

Preventing tooth decay and gum disease

Sugar and teeth

Sugar is the main cause of tooth decay and most harm is done when sugary snacks and drinks are taken between meals. It is best for your child to keep sugary food and drinks to mealtimes only, and to provide healthier, sugar-free choices such as fresh fruit and vegetables, or bread-based snacks, if they need something to eat between meals. Dried fruit such as raisins or apricots have a high concentration of sugar. They are not suitable as a snack between meals, but can be taken at mealtimes.

Ideally, food or drinks containing sugar should not be taken more than four times a day. This will help to promote your child's general health and wellbeing.

Fizzy drinks (even diet drinks) are not recommended for children as they are acidic and can wear away the enamel surface of the teeth if taken too often. This is called 'dental erosion'. Pure fruit juices are also very acidic and can cause dental erosion if taken too often. Fruit smoothies can be made with yogurt, milk and ice (not ice-cream based) but they should not be taken too frequently between meals.

All the above drinks should only be given occasionally, where possible limited to mealtimes, and never given at bedtime. If fruit juices or cordials are given at mealtimes, they should be well diluted (about 1 part juice to 10 parts water).

Between meals, the best drinks to give your child are milk or water.

If your child is taking any dietary supplements containing sugar, where possible these should be given at mealtimes and not last thing at night. Let the dentist know if your child is taking dietary supplements.

If your child is being given any medicines, ask your doctor, nurse or pharmacist for sugar-free varieties. If sugary medicines are used, avoid giving them last thing at night and rinse the child's mouth with water after they are given.

Dietary problems

Children with special needs often experience a number of dietary problems that can damage their teeth if special care is not taken. These include:

Food pouching

If food is held in the mouth or cheeks for a long time, this will increase the risk of tooth decay. If possible, residual food should be removed and the mouth rinsed with water after each meal.

Food choices and eating behaviour

Children with autistic spectrum disorder (ASD) often have unusual eating patterns or a limited range of food that they will eat, eg food of a certain colour/texture. If they have a preference for soft, sticky or sweet food, there is an increased risk of tooth decay.

These children could benefit from dietary advice from a dietitian to ensure that they are getting all the important nutrients they need. They could also benefit from advice from a dentist on fluoride supplements.

Treats and rewards

Well-meaning friends, relatives and care staff sometimes provide sweet food and drinks as a treat or reward, or to comfort children with special needs, without thinking about the effect these foods may have on their general and dental health. Most rewards are given between meals, and if they contain sugar, this is the time they are most likely to damage the teeth. They can also spoil the child's appetite for their main meals.

If giving treats or rewards to children, it is best to provide healthy options such as fresh fruit, eg strawberries, grapes, kiwi, plums, peaches, nectarines, melon, bananas, apples, pears, oranges. This will also contribute towards the recommended 5 portions of fruits and vegetables a day. Non-food items like stickers or badges, or simple rewards in the form of praise, smiles and personal attention, can also be given and make very welcome gifts.

Brushing the teeth

Regular toothbrushing is the most important way of preventing gum disease and there is very good evidence to show that brushing the teeth twice a day with a fluoride toothpaste will help to strengthen and protect them against tooth decay. Toothbrushing should start as soon as the first tooth appears in the mouth (when the child is about 6 months old). Teeth should be brushed twice a day – last thing at night and at one other time.

Choose a toothbrush with soft bristles and a small head, suited to the age and size of the child, so that you can reach all areas of the mouth. In some cases, you may find it easier to use an electric toothbrush.

For children up to 3 years, a small soft toothbrush with just a smear of fluoride toothpaste should be used.

From 3 years of age onwards, a pea sized blob of fluoride toothpaste can be used.

Use a regular family fluoride toothpaste (1,350 – 1,500 ppm fluoride) to get the most protection for the teeth. Children's toothpastes generally contain lower levels of fluoride and therefore do not provide the same level of protection. For greatest benefit from the fluoride, children should be encouraged to simply spit out excess toothpaste if possible. They do not need to rinse their mouth with lots of water after brushing.

Young children should learn to enjoy cleaning their own teeth but they will need help until they are at least 7 years old, to ensure teeth are thoroughly cleaned and that they do not eat or lick the toothpaste. Children with special needs may need help with brushing beyond this age, depending on their level of ability. For example, they may not be able to hold or control a toothbrush, they may be prone to gagging, or may be unable to open their mouth fully. If the gums bleed, keep on brushing, gently and thoroughly. If they continue to bleed, contact your dentist.

Advice on how to adapt toothbrushes for children with poor manual skills, and on helpful positions you can use when brushing their teeth, can be found in the final section of this booklet.

Fluoride

Many children with special needs are at increased risk of tooth decay because of behavioural problems or of limited cooperation with toothbrushing, diet and medication. As well as brushing twice a day with fluoride toothpaste, these children would benefit greatly from daily fluoride supplements, eg tablets or drops. Fluoride varnish can also be applied to the teeth 3 or 4 times a year to protect them. Ask your dentist for advice.

If fluoride supplements are being used, toothbrushing with a fluoride toothpaste should be carried out at a different time to get the greatest benefit from the fluoride and to reduce the risk of fluorosis (white spots or discolouration of the teeth).

Dental visits

It is a good idea to take your child to a dentist from a very early age – ideally as soon as the first tooth appears in the mouth, which is usually after approximately 6 months. This should help to get them used to the surroundings and allow them to meet the dental staff before they need any treatment. The dental surgery can be quite a frightening place with strange equipment, sounds, smells and sensations. Some children don't like people getting too close to them or having anything put into their mouth, especially a cold instrument, so it may take a few visits to get them used to this.

If your child has special needs, it is best to let the dentist know well in advance so that they can arrange an appointment at a time that suits you both. If necessary, they can then allow extra time for treatment. It might be best to go either first thing in the morning or immediately after lunch to avoid a long wait in the waiting room and to avoid feeling rushed. The dentist will also need to know details of your child's medical condition and any medicines they are taking.

Don't wait until your child is in pain before visiting the dentist

Children should go to the dentist for regular check-ups. This should be at least once a year but children at high risk of tooth decay may need to go more often, eg every 4 or 6 months. Your dentist can advise you how often this should be.

Dental treatment can be provided by general dental practitioners, the community dental service or the hospital dental service, depending on your child's special needs. If registered with a general dental practitioner, it is important to remember that to remain on their register, you must attend at least every 24 months – failing to do so may result in difficulty getting NHS treatment.

Remember, the three main things you can do to prevent tooth decay:

1. Where possible, limit sugary food and drinks to mealtimes and avoid taking them between meals or last thing at night.
2. Brush teeth twice a day with fluoride toothpaste.
3. Register with a dentist and go for a check-up at least once a year. Children with special needs should go more often – the dentist can advise on how often this should be.

The following pages provide information on:

- adapting toothbrushes for children with poor manual skills;
- helpful positions for toothbrushing;
- overcoming specific problems in providing dental care;
- management of specific complications;
- medical conditions affecting oral health and appropriate dental advice.

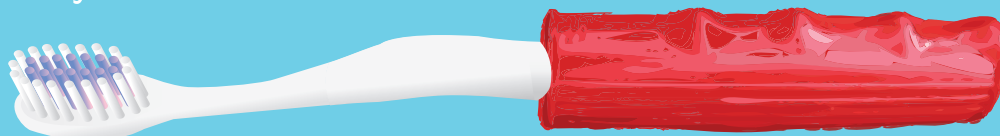
Toothbrush adaptations

Toothbrushes can be quite easily adapted for children who have poor manual dexterity. A chunky handle is often easier to hold, or polystyrene tubing pulled over the brush handle can be helpful. The handle can also be easily bent by gently heating it in very hot water. Inexpensive battery toothbrushes also have chunky handles and might be a suitable alternative. An occupational therapist can provide further advice.

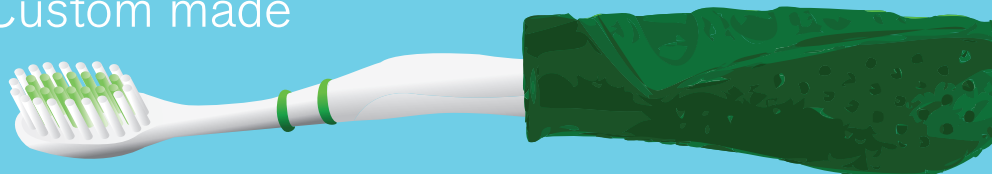
Foam handle



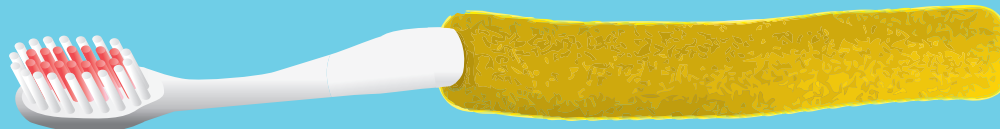
Bicycle handle



Custom made



Custom made



Helpful positions for toothbrushing

If your child has physical or behavioural problems, you may find it very difficult to brush their teeth. The child can either sit or lie down, depending on their capabilities. Whatever position you choose, it is important that they feel as relaxed as possible. The pictures below show some positions that you might find helpful. You might find other positions that work better for you, eg working from the front.



Overcoming specific problems in providing dental care

Biting on the toothbrush: Allow the child to continue biting the toothbrush while the teeth are cleaned with another brush.

Strong tongue thrust: A mobile tongue or tight lip may tend to push the toothbrush out of the mouth or away from the front teeth. A flannel or gauze-square wrapped around the forefinger to gently retract or hold back the tongue or lip may be used. It will need patience and perseverance.

Gagging or retching on brushing: To reduce gagging and retching, it may help to start brushing from the back teeth and move forward, starting on the outside and using a small headed brush.

Reduction in oral sensitivity: Some children who have disabilities may require a considerable amount of oral de-sensitisation. Various appliances are suggested by occupational therapists and speech and language therapists for this procedure. However, they do not remove plaque if used for cleansing.

Reduced cooperation: A different area of the mouth can be brushed on different occasions (several short brushing sessions), keeping note of the area brushed each time. Other distractions such as music and videos can be used. Brushing while in the bath can be of benefit. Make it fun. Talk and reassure the child.

Lack of cooperation: A degree of physical assistance may be required to accomplish satisfactory toothbrushing, such as holding hands or lying a small child back into the lap. The parent or carer may need to take care not to be accidentally bitten. A second person may be required to hold hands to prevent the child from pulling the toothbrush out of their mouth. This should be done in a non-threatening way.

Child refuses toothbrushing: Choose a time that suits the child, keeping brushing time short and brushing often. Try different flavoured toothpastes, eg fruit rather than mint flavour.

Management of specific complications

Drooling: It is believed that inadequate swallowing and lip closure and head forward posture are the main causes of drooling. It can cause irritation and infection of the skin, bad breath and dehydration. There is no clear guidance on how to manage drooling; however, keeping the head in an upright position may help to reduce the symptoms.

Bruxism (grinding of the teeth): This can lead to the wearing down of teeth. It is quite common in children with learning disabilities but little is known about how it can be treated. In some cases, specialist dental advice may be required.

Erosion: As well as being caused by acidic food and drinks, erosion of the dental enamel can be caused by gastric reflux, vomiting and rumination. In addition to consulting the child's doctor about the medical aspects, good dietary and oral hygiene practices will help in the management of dental erosion.

Dry mouth: Dry mouth can be a side effect of some medicines and medical conditions. Children who suffer from a dry mouth are more prone to tooth decay and mouth or gum infections, and should be seen promptly by a dentist. Use of saliva substitutes can be helpful. Ask your doctor or dentist for advice.

Children who are tube-fed or fed directly into the stomach via a 'PEG':

Daily mouth cleaning is very important for these children, irrespective of their age. Regular visits to the dentist are also important so that individual advice can be given and modifications to toothbrushing technique can be suggested. A visit to the dentist may also be needed when baby teeth become loose and, occasionally, referral for specialist dental advice/treatment may be indicated, eg to a hospital paediatric dental service. Nevertheless, twice daily toothbrushing by the parent or carer will help to avoid or minimise common problems such as: recurrent chest infections, bleeding gums, bad breath (halitosis), increased deposits of tartar/calculus.

The following suggestions may help in the provision of home dental care:

- Sit the child upright/semi upright, with the head supported.
- The carer should position him/herself where a clear view of the child's mouth is achieved best. This may be in front of the child. Sometimes by using two carers, a better result can be achieved.
- Use a small, dry toothbrush with a smear of fluoride toothpaste to minimise the amount of froth produced (a non-foaming toothpaste is also suggested).
- Clean all surfaces of the teeth, paying particular attention to the tooth gum margin.

- Gently clean the tongue, roof of the mouth (palate), and inside of the cheeks.
- Use clean gauze to mop up froth or saliva, or use suction where it is available in the home (and carers have been shown how to use it).
- Use of pink sponge sticks are no longer recommended (they can come apart in the mouth).
- Try to make toothbrushing fun. Experiment with different times of the day to get the best cooperation. Try to toothbrush last thing before bed.

All children, irrespective of their special needs/medical condition, should see a dentist early and frequently!

Oral health advice for specific medical conditions

Medical condition	Dental problem/s	Appropriate dental advice
Asthma	<ul style="list-style-type: none">• May be on regular antibiotics and cough mixtures, many of which contain sugar.• Inhaled steroids may cause oral thrush.• There may be additional risks to health if treatment is to be carried out under general anaesthetic.	<ul style="list-style-type: none">• Brush teeth twice a day with fluoride toothpaste (morning and night).• Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian).• Fluoride supplements may be of benefit – get advice from a dentist.• Use sugar-free medicines.• Use a spacer device with inhaler and rinse the mouth with water after use.
Attention Deficit Hyperactivity Disorder (ADHD)	<ul style="list-style-type: none">• Hyperactivity and impulsive behaviour.• May find dental treatment difficult to accept.	<ul style="list-style-type: none">• Get preventive oral healthcare from an early age to avoid the need for dental treatment.• Brush teeth twice a day with fluoride toothpaste (morning and night).• Snacks and drinks between meals should be sugar-free.• Fluoride supplements may be of benefit – get advice from a dentist.• Use sugar-free medicines.

Medical condition	Dental problem/s	Appropriate dental advice
Autism	<ul style="list-style-type: none"> • Unusual eating habits may result in a high sugar diet, which can cause tooth decay. • Problems with communication and behaviour may make it difficult to carry out dental treatment. • May find the dental surgery quite frightening. • Tongue thrusting, grinding and self-injurious behaviour can be experienced by children with autism. 	<ul style="list-style-type: none"> • Brush teeth twice a day with fluoride toothpaste (morning and night). • Assist with toothbrushing if your child is not able to brush their own teeth properly. • It may be helpful to have a few visits to a dental surgery to get used to the setting and build up the child's confidence before having any treatment. • Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). • Fluoride supplements may be of benefit – get advice from a dentist. • Use sugar-free medicines where possible.
Cerebral palsy	<ul style="list-style-type: none"> • May have problems with clearance of food from around the teeth and gums, and this, along with poor oral hygiene, can result in poor gum health. • Late eruption of teeth. • Gastric reflux can cause erosion of tooth surfaces. • Drooling can cause chronic skin irritation, mouth infections, bad breath and dehydration. • Grinding of teeth is quite common (bruxism). 	<ul style="list-style-type: none"> • Brush teeth twice a day with fluoride toothpaste (morning and night). • Assist with toothbrushing if your child is not able to brush their own teeth properly. • Ensure that food is cleared from the mouth after each meal. • Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). • Fluoride supplements may be of benefit – get advice from a dentist. • Use sugar-free medicines where possible. • Refer to a dentist to monitor and treat any oral infection. • Orofacial massage may be helpful – speak to a speech and language therapist.

Medical condition	Dental problem/s	Appropriate dental advice
Children on special diets, eg children with cystic fibrosis, phenylketonuria, chronic renal failure	<ul style="list-style-type: none"> Owing to difficulty metabolising fats, frequent intakes of sugar taken to boost calorie intake may present dental problems. Seek dental advice as soon as possible after diagnosis. High risk of developing dental calculus (tartar). 	<ul style="list-style-type: none"> Brush teeth twice a day with fluoride toothpaste (morning and night). Specialist dietetic advice is essential. Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). Fluoride supplements may be of benefit – get advice from a dentist. Use sugar-free medicines.

Diabetes	<ul style="list-style-type: none"> May develop gum disease or oral thrush (candida) if diabetes is poorly controlled. General anaesthesia for the extraction of teeth can interfere with diabetic control. If needed, extractions must be carried out in a hospital paediatric unit. 	<ul style="list-style-type: none"> Brush teeth twice a day with fluoride toothpaste (morning and night). Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). Fluoride supplements may be of benefit – get advice from a dentist. Use sugar-free medicines.
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Down's syndrome	<ul style="list-style-type: none"> These children are more likely to have gum disease. The first teeth may not appear until 2 years of age. All the baby teeth may not come through until 4 or 5 years of age. The teeth may be a slightly different shape or size. 	<ul style="list-style-type: none"> Brush teeth twice a day with fluoride toothpaste (morning and night). Assist with toothbrushing if your child is not able to brush their own teeth properly. Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). Fluoride supplements may be of benefit – get advice from a dentist. Use sugar-free medicines where possible.
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Medical condition	Dental problem/s	Appropriate dental advice
Epilepsy	<ul style="list-style-type: none"> Overgrowth of the gums can be caused by some medication. Children with poorly controlled epilepsy may experience more accidental dental trauma/injury. 	<ul style="list-style-type: none"> Brush teeth twice a day with fluoride toothpaste (morning and night). Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). Fluoride supplements may be of benefit – get advice from a dentist. Use sugar-free medicines. Seek urgent treatment following dental injury.

Prader-Willi syndrome	<ul style="list-style-type: none"> Tooth decay can arise due to poor eating habits. Rumination, xerostomia (decreased saliva flow or saliva may be thick and ropey), and poor toothbrushing due to limited motor skills cause additional problems. Overcrowding of the teeth can also occur. 	<ul style="list-style-type: none"> Preventive oral healthcare programme and supervised toothbrushing are essential. Brush teeth twice a day with fluoride toothpaste (morning and night). Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). Fluoride supplements may be of benefit – get advice from a dentist. Use sugar-free medicines. Use of toothpaste and other products (eg mouthwash, sugarless gum) can help to increase saliva flow.
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Medical condition	Dental problem/s	Appropriate dental advice
Williams syndrome	<ul style="list-style-type: none"> • Children may have a high tooth decay rate and the teeth are often smaller and badly aligned. • They may also have problems with sucking, chewing and swallowing. • Many children have difficulty coping with routine dental treatment and some find the noise of the drill a problem. 	<ul style="list-style-type: none"> • Brush teeth twice a day with fluoride toothpaste (morning and night). • Early assessment and specialist dietetic advice is essential to maintain good general and dental health. • Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). • Fluoride supplements may be of benefit – get advice from a dentist. • Use sugar-free medicines. • If the child cannot cope with routine care, then specialist care may be required.

Children with the following medical conditions may need specialist dental care. This is usually provided in a hospital setting.

Medical condition	Dental problem/s	Appropriate dental advice
Bleeding disorders	<ul style="list-style-type: none">• Prevention of tooth decay is very important for these children to avoid the need for dental extractions.• Special precautions are required when dental treatment is needed.• Dental care is usually provided in a hospital setting.	<ul style="list-style-type: none">• Get preventive oral healthcare advice and dietary counselling to maintain the best possible oral and general health.• Brush teeth twice a day with fluoride toothpaste (morning and night).• Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian).• Fluoride supplements may be of benefit – get advice from a dentist.• Use sugar-free medicines.
Heart problems	<ul style="list-style-type: none">• In the past, people at risk of infective endocarditis were given antibiotics to prevent this when having certain medical or dental procedures. The National Institute for Health and Clinical Excellence (NICE) now recommends that this is no longer necessary.• Dental treatment is more complicated with this condition and is usually provided in a hospital setting.	<ul style="list-style-type: none">• It is no longer considered necessary for children with heart problems to take antibiotics when undergoing dental treatment. If you have any concerns, talk this over with your doctor or dentist.• It is still important to maintain good oral health from an early age to avoid the need for dental treatment.• Brush teeth twice a day with fluoride toothpaste (morning and night).• Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian).• Fluoride supplements may be of benefit – get advice from a dentist.• Use sugar-free medicines.

Medical condition	Dental problem/s	Appropriate dental advice
Leukaemia	<ul style="list-style-type: none"> • Painful swollen gums and mouth ulcers. • Dental treatment is more complicated with this condition and is usually provided in a hospital setting. 	<ul style="list-style-type: none"> • It is important that dental care is carefully managed by a consultant paediatric dental surgeon, oncologist and haematologist • Fluoride supplements may be of benefit – get advice from a dentist.
Sickle cell disease	<ul style="list-style-type: none"> • Tooth decay and mouth infections must be avoided. • Dental treatment is more complicated with this condition and is usually provided in a hospital setting. 	<ul style="list-style-type: none"> • A preventive oral healthcare programme is essential. • Brush teeth twice a day with fluoride toothpaste (morning and night). • Snacks and drinks between meals should be sugar-free (unless advised otherwise by a dietitian). • Fluoride supplements may be of benefit – get advice from a dentist. • Use sugar-free medicines.

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