

## Support and Information



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Please help us to help you!

### Unique publishes a separate guide: **Teeth: Common concerns**

Unique acknowledges that this guide cannot be comprehensive. We welcome new information on the impact of rare chromosome disorders on teeth. Please email Unique at [info@rarechromo.org](mailto:info@rarechromo.org) or Prisca Middlemiss @ [prisca@rarechromo.org](mailto:prisca@rarechromo.org)

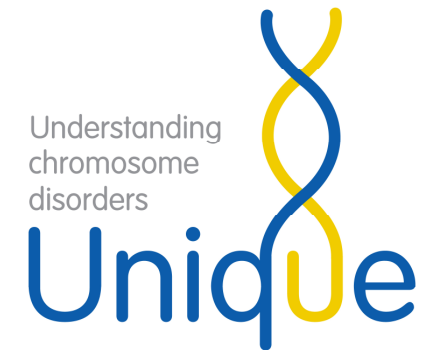
This guide is not a substitute for personal dental or medical advice. Families should consult a dentally or medically qualified clinician in all matters relating to genetic diagnosis, management and health. Information on genetic changes is a very fast-moving field and while the information in this guide is believed to be the best available at the time of publication, some facts may later change. Unique does its best to keep abreast of changing information and to review its published guides as needed.

This guide was compiled by Unique and reviewed by Dr Mike Harrison, consultant in paediatric dentistry, Guy's Hospital, London, United Kingdom, Dr Gill Davies, specialist in Dental Public Health, Public Health England, and Steve Quance B.D.S., dental surgeon.

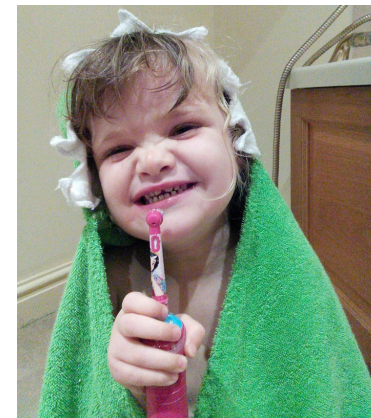
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# Looking after your child's teeth



## Looking after your child's teeth

Can't find what you are looking for?  
Look at Teeth:  
Common concerns

Many people with chromosome disorders have teeth that can be looked after like anyone else's. But some children and adults have teeth that need extra care.

### Why brush teeth?

- To brush away the sticky film of bacteria (plaque) that forms on everyone's teeth and causes decay and gum disease
- To get fluoride into the mouth to help control decay
- To lessen the risk of chest infections if your child has swallowing difficulties or is tube fed

Looking after your child's teeth is essentially the same whether s/he has a chromosome disorder or not. At home, it is best to start daily tooth cleaning as soon as teeth come through, using a small, soft-bristled toothbrush or a cloth and water and a pea-sized amount of children's fluoride toothpaste. When you are away from home, you can rinse your child's mouth with water after meals, snacks or sugared medicine, or if you can't rinse or your child can't spit out, wipe with a cloth or foam oral mouth swab dipped in water.

### How to brush teeth

The ideal is to brush your child's teeth last thing before bed and at least one other time in the day, and if they can, encourage them to spit out. If your child can't spit, wipe their mouth inside with a cloth.

#### *You can try:*

- You can brush anywhere – it doesn't have to be the bathroom. Some families find it easier in the bath.
- Make your own life easier by getting everything ready first.
- Try laying a baby or small child on someone's lap, or your child can sit or lie on the floor, or on a bed or beanbag. You can brush from behind. Support their head, make sure you can see inside their mouth, and make sure you can easily move the toothbrush. If your child cannot sit, you can lay them on their side and raise their head on a support covered with a towel. If sitting, tilt your child's head forwards when brushing to help prevent choking or aspiration. If aspiration is a serious problem, an aspirating toothbrush attached to suction may help. Ask your dentist about this.
- You may need two people to brush – one brushes while the other distracts, encourages or holds them still. If you think your child will need it, give them



## Resources and permissions

There are some excellent resources on dental care available on the internet for families with a child with extra needs.

The Good Teeth Guide for Parents and Carers of Children with Extra Needs was published by Manchester PCT but is no longer available. Dr Gill Davies, specialist in Dental Public Health, Public Health England, and an author of the guide, has kindly allowed Unique to make use of material from this guide in this publication.

This excellent, clear illustrated guide is available on the website of the British Society for Disability and Oral Health (see below) under Oral Health Resources British Society for Disability and Oral Health [www.bsdh.org.uk](http://www.bsdh.org.uk)

Oral Health Care for Children with Special Health Care Needs. A Guide for Family Members/Caregivers and Dental Providers <http://okacaa.org>

It is easiest to find this excellent resource on the internet by searching under its title.

The text on page 11 is reproduced with kind permission The National Autistic Society, London © 2014 [www.autism.org.uk](http://www.autism.org.uk)

The National Autistic Society publishes information for dentists about treating patients with an autism spectrum disorder Dental Care and Autism as [dental\\_care\\_and\\_autism.pdf](http://www.autism.org.uk/dental_care_and_autism.pdf)

Brushing the Teeth of a Child with a Disability  
<http://ortodontia.ee/brushing-teeth-child-disability>  
[www.dentalphobia.co.uk](http://www.dentalphobia.co.uk)

A useful source of information on accidental damage to teeth and dental trauma can be found at [http://www.iadt-dentaltrauma.org/guidelines\\_book.pdf](http://www.iadt-dentaltrauma.org/guidelines_book.pdf)

## Sedation

Medication is used to lessen anxiety and discomfort. Sedative medications make most children relaxed and drowsy, but not unconscious. Sedation works well if the child is able to cooperate with the dentist once they are calm. The child stays awake and should remember a positive experience, so they may not need sedating for the same procedure in future. Sedatives can be given by mouth, through a mask or with a needle into a vein.

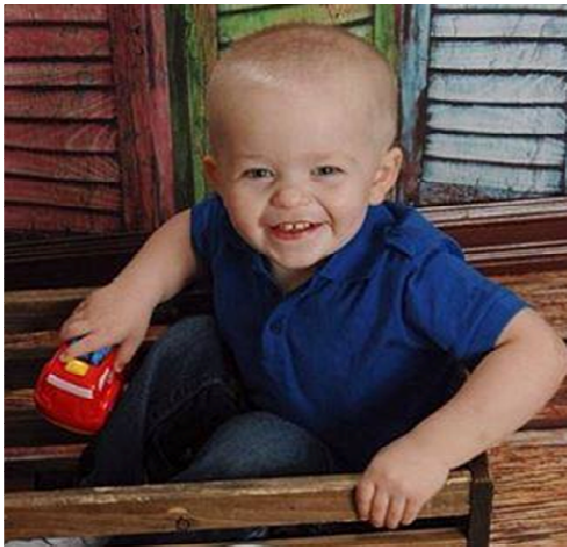
## Anaesthetic

The child is unconscious. Anaesthetics are usually only given in hospital.

## When a child is so frightened that they cannot let a dentist treat them

However careful you and your dentist are, children with a strong dislike of anything around their face and mouth – an oral aversion – may find dental treatment unsupportable. An aversion can develop in children who have had a feeding tube, been ventilated, had cleft lip or palate surgery, other surgery to their mouth or face, or for no clear reason. Your dentist will consider using sedation or anaesthesia for any child who cannot cope otherwise.

There are registers of dentists with special expertise in working with people who are frightened. If your child is terrified of the dentist, look for online information on dental phobia. In the United Kingdom there is a website at [www.dentalphobia.co.uk](http://www.dentalphobia.co.uk).



**“No dental problems. The dentist says he won’t even need braces. We hope to keep hearing that kind of good news at every appointment.”**

something to occupy them while you brush. Try brushing in front of a mirror, or distract with music, TV or a toothbrushing app.

■ If you can’t brush all the teeth at one go, try brushing a different part of the mouth each time. Speed up brushing with a curved or 2-headed brush that cleans top and both sides at the same time ([www.fledglings.org.uk](http://www.fledglings.org.uk); [www.colliscurve.co.uk/site/8.asp](http://www.colliscurve.co.uk/site/8.asp)), or an electric toothbrush.

**Different brushheads:**  
**2-headed brush**  
**Curved brush**



■ Try an electric toothbrush if this is easier and your child will tolerate it.

If your child has low muscle tone in and around the mouth (oral hypotonia) s/he may not be able to hold his/ her mouth open very wide or for long. You can keep your child’s mouth open with two toothbrushes taped back to back.

If your child dislikes the taste or froth of toothpaste, try the products available at these websites: [www.fledglings.org.uk](http://www.fledglings.org.uk), [www.oranurse.co.uk](http://www.oranurse.co.uk). Ask your dentist if you can brush with a fluoride mouthwash instead, although this would have a very low concentration of fluoride and so would not help with control of decay.

If your child wants to chew or gnaw the brush, try a bite and brush teether [www.fledglings.org.uk](http://www.fledglings.org.uk) or specialist brushes such as that seen at [www.colliscurve.co.uk](http://www.colliscurve.co.uk).

If your child likes to chew or suck their own fingers, try a finger toothbrush. These are also useful when a child will not allow a conventional toothbrush into their mouth.

**Bite and brush teether**

**Finger toothbrush**



Available from [www.fledglings.org.uk](http://www.fledglings.org.uk)

To help a child hold a toothbrush, wrap the handle in foam tubing or even a cycle grip. Pump operated dispensers and tube squeezers can help an older child put toothpaste on their own brush.

### *If your child refuses:*

If your child refuses to let a toothbrush past his / her lips, your dentist can prescribe a high fluoride toothpaste that can be wiped over the teeth with a finger. You can also use an oral swab for cleaning the teeth, gums and tongue. Ask your dentist if s/he can prescribe a chlorhexidine spray or chlorhexidine mouthwash: you can soak cloth wrapped round a gloved finger in the mouthwash, and clean the mouth and tongue, as a short term alternative.

Children who will not let their teeth be brushed can have them coated or sealed for protection. If necessary teeth can be cleaned under anaesthetic, but this may only be advised when the child is having an anaesthetic for another procedure.

## **Mouth sensitivity**

Many children have altered mouth sensitivity. Ask for help to decrease it and increase tolerance. Your child's occupational therapist or speech and language therapist should be able to help.

You can gently massage around your child's mouth and cheeks to improve their muscle tone, mobility and saliva flow, and to desensitise the area.

Gently stroking the face and cheeks also makes the saliva flow better. Practise play activities such as mouthing toys, or blowing.

## **Tube fed children**

Your child's teeth still need to be cleaned. They are still at risk of decay, particularly if sweet tasting foods are part of a prescribed regime, and a hard build-up called calculus ('tartar') is more likely to collect on their teeth. A clean mouth also feels more comfortable. Plaque bacteria can cause chest infections, as well as leading to bad breath. Brushing also helps to desensitise and stimulate the mouth.

## **Sore mouth**

A sore mouth is distressing and likely to make your child refuse to have his/ her teeth cleaned. Consult your doctor or dentist to find the cause. Chlorhexidine spray or mouthwash on a small sponge can be used to protect against secondary infection. Your dentist/ doctor can prescribe Difflam (benzylamine hydrochloride) as a spray or mouthwash to help numb the mouth before eating, or you can buy it at a chemist's.

## **Fluoride**

Fluoride is a mineral that occurs naturally in some rocks and foods. Fluoride makes the enamel stronger but most tap water in the United Kingdom does not contain enough fluoride to strengthen children's teeth. Your child's dentist will assess whether your child needs extra fluoride. Extra fluoride for older children can be given in the form of high fluoride toothpaste, or rinses used at a different time of day from brushing. Dentists can apply fluoride varnish for children of all ages, especially those with special needs.

touching if possible. If touching is unavoidable - and it probably is, she or he can use body language to ask your child's permission. You may be able to interpret your child's answer, but if you are not, she or he may need to go ahead without a response.

- If your child's behaviour is unpredictable, the dentist may wish to have a clear zone around the chair and the treatment area.

- Many children dislike the standard flavours of dental mouth rinses. The dentist may be able to offer one with low or no taste. Many children cannot spit out, so the dentist may need to use gentle suction.

- Praise your child each time he or she is helpful. Have a reward ready for the end of the visit.

## **Some treatments**

### **Sealants**

Sealants protect the surfaces of the teeth that have grooves and pits, especially the biting surfaces of the back teeth. Sealants are made of plastic, and are applied to help protect teeth from decay. Sealants are especially helpful in children who have reflux, acid erosion, poor enamel, or who grind their teeth or bite hard objects.

Applying a sealant usually only takes one appointment at the dentist's. The tooth is first cleaned and prepared, and the sealant is then applied to the grooves of the tooth and allowed to harden, or hardened with a special light.

### **Capping/ crowns**

A crown is a covering shaped like a tooth that is fixed over the entire tooth. It can also be called a cap.

Having a crown on a first tooth can help your child to chew, with normal speech development, and with keeping the position and angle of the adult teeth correct. Some children with chromosome disorders need all their teeth capping.

For first teeth, preformed stainless steel crowns can be used. They are tough, safe, they last, and are quite simple to fix. But they are unsightly, so an alternative that looks more tooth-like is often used for the front teeth that are visible.

### **Extractions**

Children with chromosome disorders fairly often need teeth taking out. This may be because first teeth have not fallen out naturally, because the teeth are too crowded, because they are growing in the wrong position or at the wrong angle, or because the teeth are damaged or decayed and cannot be properly treated. Taking first teeth out may allow adult teeth to come through. After teeth are taken out a brace or retainer may be fitted to help the remaining teeth get into the best position.

- Offer an appointment at a time of day when your child is most likely to be feeling calm and cooperative. If this is suitable, offer appointments at the same time of day each time. Keep the visits short, regular and positive. Allow extra time during the visits for explaining and to give your child time to understand and adapt.
- Keep you waiting as little as possible.
- Once your child is comfortable with one particular dentist and assistant, if possible offer appointments with the same dentist and assistant each time.
- If your child can sit on their own, allow them time to sit alone in the dentist's chair until they are comfortable. Try to keep things familiar by using the same room and the same chair each visit. If your child cannot sit in the chair, there are many other positions they can be examined in, including standing up.
- If your child reacts in a frightened way to the dentist's mask, consider wearing a clear face shield.
- If your child reacts to bright light or unpleasant noises, try to adapt lighting and noise as much as possible. Some children cannot cope with the dentist's bright light shining in their eyes. Using shaded lenses in their protective glasses can help if your child will wear them.



A successful visit to the dentist

- At each step, explain what is happening. Tell your child what s/he is about to do. Tell your child if s/he needs to touch them. For each procedure, first tell, then show, and then do: after telling, show what they are going to do. Even if your child does not appear to respond, do it. It can be impossible to know what a child who does not respond actually understands.
- If the dentist has to give any instructions, keep them short, clear and concrete, and repeat them quietly.
- Move calmly and avoid sudden movements and noises. Some children are more relaxed with background music.
- Some children strongly dislike being touched. The dentist should then avoid

If young children eat or lick too much adult fluoride toothpaste they risk affecting their adult teeth which may have a lacy white appearance. More serious effects are rare and may include dark marks and pitting in the tooth's surface. Young children should use a children's fluoride toothpaste to avoid this.

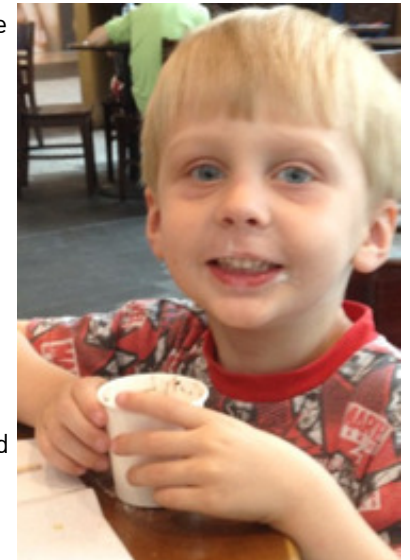
Fluoride toothpaste is the easiest way of getting fluoride onto teeth and should be used at least twice daily, with no rinsing out afterwards. The fluoride content is stated on the toothpaste packet, and usually on the tube as well. Only toothpaste with at least 1,000 ppm (parts per million) fluoride can prevent decay. Children under three should use only a pea-sized amount of children's fluoride toothpaste.

### Decay

Many children with chromosome disorders have risk factors that can make decay more likely:

- They may need to have sugary food, drinks, medicines or diet supplements often in the day
- They may need sugary food, drinks, medicines or diet supplements last thing at night
- A dry mouth, although this is very difficult to diagnose as children tend not to complain
- Long term bottle feeding, especially at night
- Uncoordinated chewing, an underactive tongue and food pooling or pouching can leave food in the mouth, creating a good place for the bacteria that cause cavities to grow. If your child does this, you need to inspect their mouth after meals/ snacks.
- They may choke on the toothbrush, paste or their own saliva
- They may not be able to spit
- They may have a very high pain threshold, so you do not know when they are teething, or when they have painful decay, or even an infection or abscess
- Soft foods and liquids do not give the teeth, gums and mouth muscles the stimulation and exercise that they need.

Many Unique families report that their child's teeth are soft, rotten or decayed, or that they crack or crumble from within, despite their child eating a healthy, low sugar diet. It is more difficult when your child resists their teeth being cleaned, or going to the dentist. Other families say that their child's teeth form excessive plaque. At Unique this has been reported in children with a 10q25q26 deletion and with extra X and Y chromosomes, and it may well affect other children.



Two teeth were extracted because of decay

### *What you can do:*

- Try to keep sugar to mealtimes only. Wiping or even spraying your child's mouth with water afterwards may help to clear food debris but there isn't any evidence that it helps with decay
- For drinks between meals only give water or plain milk
- Change from a bottle to a trainer cup as early as possible
- Ask for a sugar-free medicine. If there isn't a sugar-free version, ask if you can give the medicine at mealtimes or, better, an hour before bed, allowing saliva time to neutralise the acids from sugars
- If you can't change your child's diet, you may have to consider extra fluoride. Ask your child's dentist about high fluoride toothpaste, fluoride varnish or fluoride mouthwash.

## Medicines

Many children with chromosome disorders take medicines that can affect their teeth. Sometimes you have to balance benefit and risk in giving your child medicine. These medicines can harm teeth:

- Any drugs that cause a dry mouth (xerostomia)
- Sugary medicines, including some antibiotics
- Drugs for epilepsy [AEDs] Long term use of phenytoin (Epanutin, Dilantin, Phenytek, Eptoin), phenoximide, ethosuximide, methsuximide, valproic acid, cyclosporine, verapamil, nifedipine, carbamazepine and phenobarbital can cause overgrowth of the gums, especially between the teeth at the front of the mouth, making them bulbous and puffy. The overgrowth starts 1-3 months after the beginning of treatment. The puffy tissue is not painful, but it can become tender if it is chewed or ground. It also creates conditions that allow plaque to accumulate readily and makes it difficult to clean the teeth properly. Severe gum overgrowth can cover the child's teeth completely. Your child may need to see the dentist more often than normal to have their teeth cleaned of plaque and calculus. A mouth rinse containing chlorhexidine can help to reduce enlarged gum tissue, but should be used at least 2 hours after brushing with toothpaste. In severe cases it can be removed surgically.
- Tetracycline antibiotics discolour any teeth that are still forming or mineralising in the jaws. The discolouration looks generally greyish in different shades, and can have a striped appearance. Because this problem is well known, these antibiotics are not usually given to children under 12 years, in pregnancy or to breast-feeding women. Beyond the age of 12, there is no further risk that tetracycline antibiotics will stain teeth.

## Erosion

Acid erosion occurs when a tooth wears down without any action from bacteria, as in decay. Erosion makes teeth more vulnerable to decay by damaging and weakening the outer enamel tooth covering. Erosion tends to leave shallow, broad hollows with polished surfaces.

### *What you can do:*

Contact the dentist before a first visit. Tell the dentist about any behaviour concerns, including being unable to wait, or to stay still.

The dentist needs to know:

- How your child communicates
- Your child's medical problems. Some children with heart and other conditions need to be given protective antibiotics before some dental work.
- If your child has seizures. If so, what the triggers are, so that s/he can prepare
- The medicines your child is taking
- Any sensory problems, and especially any oral sensitivities
- Your child's likes and dislikes. Your child may not like people being very close to them, or they may not like being touched

If you have any concerns that your child will be frightened, ask if you can have a first visit to show your child the dental surgery. Tell the team there if anything needs to be changed, such as moving instruments out of reach. You could ask if you can take photos, which you can make into a picture sequence or story book to prepare for the next visit. A reward picture at the end of the sequence or story gives your child the idea that there is something to look forward to.

Ask the dentist what position s/he needs your child in for treatment. Practise this at home. If your child cannot sit or stand, this may be lying on your lap, or lap to lap positioning where you lay your child facing you on your knees with their head cradled on the dentist's knees.

Play going to the dentist at home: swap roles if your child is able to do so. Let your child play being the dentist with a puppet or doll, using toy or safe plastic instruments.

If your child finds waiting difficult, and you can manage the timing, ask for the first appointment of the day, so the dentist is not running late.

The United Kingdom National Autistic Society has a useful trifold leaflet with a tear-off sheet telling the dentist about your child's likes and dislikes. This includes: being unable to wait so needing to be seen promptly if possible; behaving oddly or in a challenging way when frightened in a strange environment; being upset by loud noises; being upset by bright lights; being upset by smells, tastes or textures; not feeling pain, or knowing where it hurts; responding to pain in an unusual way; not liking to be touched, but touching others; not liking the dental chair to be laid right back; not liking the dental chair moving; best ways to communicate.

See [Resources, page 15](#)

### *What your dentist can do:*

- Alert everyone in their team, so everyone from the receptionist onwards understands something about your child's needs.

term problems can take several years after the accident to become obvious, and may sometimes involve root canal treatment, or even extracting the tooth. A broken front tooth, with no nerve exposure, can be repaired with tooth-coloured adhesive filling (known as 'composite'). Permanent (porcelain) crowns are not normally made until young adulthood. Any signs of the pulp (nerve tissue) dying off can make treatment more complicated.

If adult teeth are knocked out, the dentist can make a replacement in various ways: a clip-on removable denture, a bridge, or possibly an implant. However, implants are expensive, need invasive surgery and are at risk from repeat accidents.

## Going to the dentist

*"Unfortunately watching Mr Bean goes to the dentist where Mr Bean drills and fills his own teeth put her off the dentist's chair from an early age!"*

New experiences can be difficult. With planning and thought, going to the dentist need not be difficult.

Many children and adults are nervous of dentists. They may resist going, refuse to open their mouth, be unable to open their mouth - or even try to escape. They may feel overwhelmed by the dentist being so close to them, especially to their face, and may over-respond to any work inside their mouth, however gentle.

This can make even simple, painless investigations like X-rays very difficult. Some children are not able to sit still for long enough to finish treatment, or they may find aspects of treatment like the drill unbearable. Your child may be happy to see your family dentist. If not, they can be seen by a specialised dental service. This may be in a community health clinic, a local hospital, or a specialist hospital. Your child may need a referral from their family dentist, doctor or another health professional.

Some children can manage a compromise: they will open their mouth for an inspection, but not for treatment. Many children need treatment such as drilling or fillings done under sedation or a general anaesthetic, and some children need an anaesthetic just for their mouth to be inspected and thoroughly cleaned.



In the dentist's chair

Children with chromosome disorders have a number of risk factors for erosion. Gastro oesophageal reflux is extremely common, even when it is silent, without obvious symptoms. Children who have acid gastro oesophageal reflux usually have a pattern of erosion that mostly affects the inner surfaces of the top teeth. If the cause of erosion is dietary, the inner surfaces of both top and bottom teeth and the outer (cheek) surfaces of the upper teeth are often more affected.

Rumination – bringing food back and chewing it again – also occurs. Many children also have difficulties in swallowing, in some cases leading to pooling in the mouth, which can make erosion worse. Children with little saliva are likely to be even more affected. This is worse when a child is asleep or lying down. Some Unique children have teeth whose enamel has dissolved away completely.

### *What you can do:*

- Wait for an hour after an episode of reflux or after acidic food or drink before brushing. The natural flow of saliva helps to neutralise the acids in the mouth and washes them away. Gently stroking or massaging your child's cheeks can help stimulate the flow of saliva.
- Rinse your child's mouth with water. If your child can't spit out, give small sips of water to drink. Milk or cheese also help to neutralise acids.
- Avoid swishing or pooling drinks. If this is possible for your child, use a spouted cup or a straw.
- Avoid fizzy drinks, and even fizzy water, as they are all acidic. Diet versions have no sugar but are just as acidic as the originals. Frequent fruit juice or diluted squash also causes acid erosion.
- If your child is able to, chew sugar-free gum.
- Fluoride has the same protective effect on the enamel surface in acid erosion as it does in decay. High-concentration fluoride toothpaste, spit without rinsing after brushing, and professionally applied fluoride varnishes can all help to slow the enamel loss. Plastic coatings on the biting surfaces ('fissure sealants') are not particularly helpful in protecting against acid erosion.

## Discoloured teeth

There are many causes of discoloured teeth. Children and adults with disorders that affect the enamel sometimes have discoloured teeth. Babies who have severe jaundice at birth or liver disease in infancy may have green-stained teeth. Liquid iron drops can stain teeth a greyish-black. This staining can be controlled by good brushing, and removed by cleaning by a dentist.



**A beautiful smile, but her teeth are discoloured because they came through too early and lack enamel.**

Dental plaque is usually white, but some people have plaque bacteria that are orange, green or black. These are soft and can be removed if you are able to brush meticulously, especially around the edge of the gums. Occasionally the black stain can be particularly difficult to remove. If it is not possible for you to brush your child's teeth as thoroughly as you would like, they can be cleaned by the dentist, although your child may need sedation or an anaesthetic for this.



**There are many causes of discoloured teeth. Here they are stained with bile pigment.**

Chlorhexidine mouthwash is another common cause of brown tooth discoloration but can be removed by polishing.

In Unique, families with children with many different chromosome disorders report stained or discoloured teeth, most frequently extra X chromosomes. Other reported disorders include 3q terminal deletion; 6q14 duplication; 6q26 deletion; 7q22q31 deletion; 7q34 deletion; 8p23 duplication; Koolen-de Vries syndrome (17q21.31 deletion); 16p deletion with 16q duplication; 18q23 deletion; and

22q11.2 deletion.

### **Grinding** Bruxism

Many children with a chromosome disorder grind, or less commonly gnash their teeth. Some children grind for a time, but outgrow it, while others continue. Their teeth may not be properly aligned with their bottom teeth. They may enjoy the sensation, or it may distract them from an emotion they cannot control such as excitement, anxiety or frustration, or from physical discomfort or pain. They may grind when they are concentrating, or when they are asleep. Usually the noise of grinding is caused by only a small number of tooth surfaces being ground together. Dentists can sometimes see small flattened areas on the teeth called 'wear facets', but initially the damage to enamel can be limited.

The effects of long term grinding on teeth can be quite damaging. First the cutting edges of the front teeth are worn flat, then the biting surfaces of the molars are ground down. Once the enamel is worn through and the dentine is exposed, it usually becomes discoloured brown. Dentine wears down faster than enamel, so a severely ground tooth can become cup-shaped, hollowed out. The grinding sequence is worse in some children because of the abnormal position and structure of their teeth. In the end the remaining stumps may have to be removed.

#### *What you can do:*

Massaging your child's mouth and cheeks may help your child to relax. Try rubbing your child's jaw; pushing against the jaw, so the child feels the sensation of pressure, can help. Find something that your child likes to chew. Some children are able to handle chewy or crunchy foods such as raw carrots throughout the day and at bedtime to help with any sensory overload. Others suck sugar-free freeze pops. More likely your child will need a teether, ideally

clipped to their clothing. This may be a standard one, or it can be a toothbrush or a toddler teething spoon, or any of the huge range of chewable special needs toys available. These include chewable sticks, tubes, letters, toothbrushes bangles, wrist bands, pendants (for older children because they hang on a cord) and jewellery.

When your child starts grinding, put your finger on their lips and say No, at the same time giving them the chewable toy or teether; if they chew on it, praise them.

A dentist can sometimes protect your child's teeth by making a mouth guard (bite guard; soft/ hard acrylic splint), but many children with special needs simply will not wear it. You can buy a mouth guard from a pharmacist, but for a child with special needs you should only use one made by a dentist. Usually a dentist will want to wait until your child's adult teeth start to come in before preparing a mouth guard. The dentist may also suggest removing one or more teeth if that will help prevent grinding.

<http://www.especialneeds.com>

<http://www.fledglings.org.uk>

### **Accidents: dental trauma**

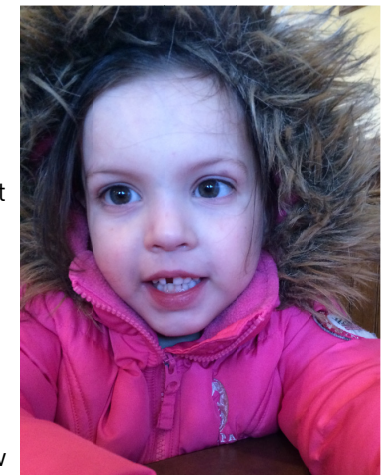
Many children fall and chip or – more rarely – knock their teeth out. Children with chromosome disorders are as a group more likely to fall because they take longer to establish steady walking, and they may be ambitious beyond their capabilities. When they do fall, they are more likely to damage their teeth because they may not have a proper saving reflex. If they hit their teeth, the teeth may be weakened by poor structure, irregular placing, erosion or decay, and so be more liable to crack or chip. Already weakened teeth are more liable to be knocked out, especially if the roots are shallow.

Children with any chromosome disorder can chip or knock out their teeth, but Unique records show this is especially common in children with a 2q37 deletion.

Any dental accident needs immediate advice from a dentist, even if the advice is that no treatment is needed.

Chipped or knocked out first teeth can often be left alone, but may need smoothing down if the broken edges are sharp.

Accidents to young adult teeth can damage the pulp (nerves and blood vessels inside), the root or the attachment of the root to the surrounding jaw. The long-



**A common accident: one tooth is knocked out.**