



Healthy Teeth
for

Life



A guide for your child's
dental health

(4th Edition)

by Dr. John S. Walsh

Published by the Dental Health Foundation, Ireland



Dental Health Foundation
Ireland

www.dentalhealth.ie

your child's teeth

It's getting easier to make sure that children have healthy teeth. There are two reasons for this. Firstly, fluoride, found in the water children drink and in the toothpaste they use, has made teeth stronger. But secondly, there is a growing realisation by parents that good dental health doesn't come about by accident; that it requires an important effort by parents and children to lay the groundwork from a very early age in order to create and maintain oral health which lasts all through life. This booklet is written to help you, the parent, follow a programme of appropriate steps in preventive dental care for infants and young children. The good habits started now will be of tremendous benefit to younger children as they grow into adulthood.



BEFORE BIRTH

About the fifth to sixth week of pregnancy a baby's teeth begin to develop. During this time the nutrients that the baby needs come from the food that the mother eats. It is important that the mother has a well-balanced diet with an adequate intake of calcium, phosphorus and other minerals and vitamins. It is equally important that the mother does not neglect her own dental health during pregnancy. Regular dental check-ups with increased emphasis on brushing and flossing will minimise the dental effects of hormonal changes that occur during pregnancy.

INFANCY

At birth, the twenty primary (first) teeth continue to develop in the jawbones and some of the permanent teeth begin their own development at this time. The baby's front teeth (incisors) usually begin to come through the gum between the age of six to twelve months. Over the following two years, remaining teeth will grow so that by the time the child is three years old the primary dentition is usually complete.



TEETHING

Myths have developed on the possible side effects of teething through the years. Many childhood illnesses are incorrectly blamed on it. Some babies may have sore gums, be irritable and may drool a great deal but that should be the extent of effects. Any other signs of illness should be checked out by a physician. There is no magical solution to teething but allowing the baby to chew on a clean, cold teething ring may bring relief. *Ointments that numb the gum should not be used unless prescribed.*



SOOTHERS

Not all babies need soothers or pacifiers. If you feel your baby needs a pacifier it is important to make sure it is of the correct design. An orthodontic type is the most suitable. Only use it when absolutely necessary and wean your baby off it as soon as possible. Otherwise it may have long term ill-effects on the way your baby's teeth grow. Never dip the soother into sugary liquid (honey, jams or syrupy medicines) to encourage the baby to use it.



THUMBSUCKING

Babies get a lot of pleasure and satisfaction from sucking things - including their own thumbs. There is no real harm in letting them suck their thumb. Most babies will stop of their own accord. You can expect children to have given up sucking by the age of 4 years. Thumbsucking is only really a problem if children go on sucking their thumbs after this age as some children may push their teeth out of shape. If you want to help your child give up sucking, remember that sucking makes the child feel contented and secure. Encourage the child to do other things instead.

nursing bottle mouth



A healthy mouth in a 3 year old child



Nursing bottle mouth in a 3 year old child

It is important to ensure that your child has a diet which contributes to rather than damages the health of their teeth during infancy. It is important to realise that as soon as the child's teeth appear they are at risk of tooth decay. One of the most common ways in which a child's teeth are damaged is to give the child a bottle containing sweetened liquids after the age of one year, either as a pacifier during the day, or at nap or night-time.

Allowing the sweetened liquid to pool around the teeth for long periods of time produces acid. This, in time, weakens and eventually decays the teeth. In severe cases Nursing Bottle Mouth can develop. It is a condition in which the infant's teeth are almost completely destroyed. All sweetened liquids, soft drinks, sugared waters, juices, vitamin drinks (even milk), will cause this problem. A similar problem can arise from giving the baby a soother dipped in honey or sugar.

Generally babies will be able to use a cup at 6 months and they can usually be weaned off a bottle at twelve months.

FOOD PYRAMID

diet & snacks

Taken from the Department of Health (2012) Your Guide to Healthy Eating and Department of Health and Children and Health Service Executive (2009) The National Guidelines on Physical Activity in Ireland



Food Pyramid servings above are suitable for children from 5 years of age

All children and young people should be active, at a moderate to vigorous level, for at least 60 minutes everyday

Healthy meals and well planned snacks are important to a child's growth and development. Frequent snacking on high fat or sugar containing foods reduces a child's appetite for the more nourishing foods needed for proper development and will also contribute towards tooth decay. Start on the right track early by encouraging your child to eat a wide variety of foods in the recommended amounts from the Food Pyramid.

The Food Pyramid

The Food Pyramid is a colourful guide to the foods recommended as part of a healthy eating plan. Most of your child's food should come from the bottom shelves of the pyramid with a smaller amounts coming from food groups higher up the pyramid. Foods at the very top of the pyramid should be eaten sparingly. Because of the variety of foods on each shelf of the pyramid, it is easy to choose foods your child will enjoy from each shelf.

How to use the Food Pyramid

The number of servings recommended for children from 5 years is shown on the Food Pyramid. For younger

For smaller children, start with smaller servings (from the bottom shelf of the food pyramid) and increase as the child asks for more. It is important that children eat according to their growth and appetite

children, encourage them to eat a wide variety of foods, with most of their food intake coming from the bottom shelves.

Snack Foods

For snacks offer children fruit, raw vegetables, unsweetened breakfast cereals, bread, milk, cheese and yogurt, unsweetened juices or drinks. Try to limit to mealtimes, children's intake of confectionery especially chewy or sticky sweets, biscuits, cakes and pastries, high fat snack foods (e.g. crisps) sugar coated breakfast cereals and fizzy drinks.

Remember, foods containing sugar when eaten at mealtimes (with other foods) have a less damaging effect on your child's teeth than when they are eaten alone.

Snacking Tips

If children drink or eat snacks containing sugar, limit the number of times they take them throughout the day,

- Food or drinks containing sugar (limit intake to mealtimes) and juices should be taken quickly and

not over a long period.

- Fruit and vegetables are ideal 'tooth friendly' snacks and can be given instead of sweets and confectionery.
- Milk, cheese and yogurt are high in calcium, a mineral needed for healthy teeth. They are 'tooth friendly' and make good snacks.
- Read food labels. The nutrition label will tell you how much sugar a food contains. If there is no nutrition label then read the ingredients label. Don't just look for sugar - often sugar can be called sucrose, glucose, maltose, dextrose, invert sugar syrup or corn syrup. Try to choose infant foods with the least sugar content and don't add sugar to home-made baby food.
- Carbonated or fizzy drinks put the teeth at risk of enamel erosion.

primary teeth matter

Parents sometimes wonder why there is growing importance being placed on keeping a baby's primary teeth in good condition until they are replaced by their permanent successors. Many parents still feel that the primary teeth are not important because they are going to fall out anyway. Besides the obvious importance of healthy primary teeth for eating, appearance and speech, they are also essential for guiding permanent teeth which develop underneath, into their correct positions. Early neglect or loss can result in a number of problems. If a child's primary molar tooth has to be extracted early due to severe tooth decay then the guide for the permanent successor is lost. The space available for the permanent

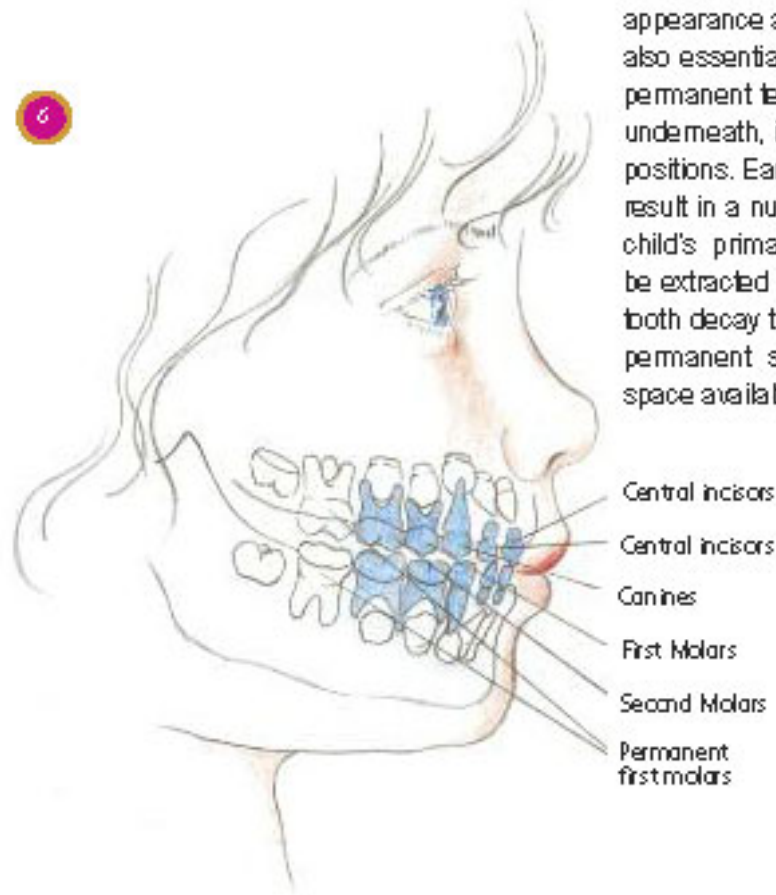
tooth can be reduced resulting in a crooked permanent tooth.

The possible complications caused by crooked permanent teeth are enough motivation for most parents to take proper care of their child's first set of teeth. It is also important to know that when permanent teeth start to erupt into the mouth around six years of age, they should ideally enter a mouth that is healthy and free from tooth decay. For this reason the patterns of dental care established during infancy can determine the long term health of the teeth.

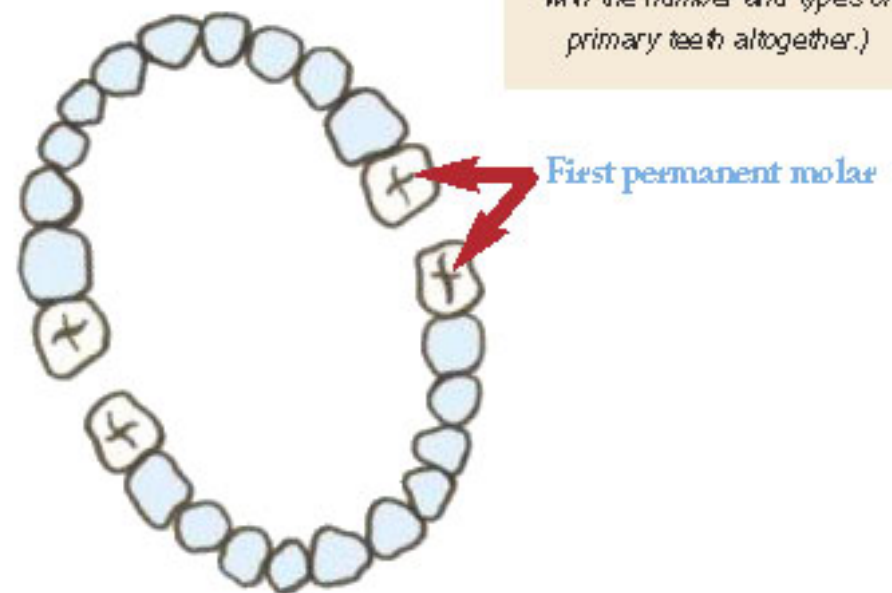
A SPECIAL WORD ABOUT THE 6-YEAR MOLARS

At about the age of six years, your child's first permanent molar arrives in the mouth: the 6-year molar. Because it does not replace a lost primary tooth but comes in behind the second primary molar, some parents do not realise that it's a permanent tooth. So keep a watchful eye out for these teeth.

(It is helpful if you are familiar with the number and types of primary teeth altogether.)



Central incisors
Central incisors
Canines
First Molars
Second Molars
Permanent first molars



The purpose in cleaning teeth is to remove the almost invisible layer of bacteria that forms on every child's teeth regularly. This layer is known as dental plaque and if it is completely removed off the surface of the teeth then tooth decay and gum disease can be prevented. Begin cleaning as soon as the baby's teeth appear in the mouth.

cleaning



Teeth which appear clean before disclosing



Plaque stained by disclosing agent



Note the plaque on the chewing surface.

Initially do this by wrapping a piece of gauze around a finger and rubbing the teeth and gums gently. In this way establish a cleaning habit early and the baby will become accustomed to it.

When the baby's molars (back teeth) appear around fourteen months, start using a small soft toothbrush with tap water. From two years upward you will only need to use a little toothpaste – about the size of a small pea. Remember, toothpaste isn't meant to be eaten. Make sure your baby or young children never manage to eat toothpaste from the tube. Children up to the age of seven need help with cleaning their teeth - they cannot do a proper job before this age themselves.

Dental plaque is a colourless film of bacteria that grows on everyone's teeth. A disclosing agent, which stains the plaque and makes it visible, is a helpful aid to teeth cleaning. These agents come in both tablet and liquid form. Either chew the tablets or paint the liquid on the teeth with a cotton tip. Any colour remaining on the teeth after rinsing shows plaque. Clean this off with a toothbrush. These plaque disclosing tablets are available from pharmacies. Adults, as well as children, find this a helpful exercise in cleaning teeth effectively.

A variety of both brushing methods may be advised, yet, for children, over emphasis on a difficult technique may lead to confusion. It is better in many instances to instruct the child just to remove all the coloured plaque from the teeth. If areas are being constantly missed then assist the child to target the trouble spots. Brushing alone will clean three of the five surfaces of a tooth but to clean the remaining two surfaces in between the teeth, use dental floss. Hold the floss either between the fingers or in a floss holder, bend it around the surface of the tooth to be cleaned and move it up and down a few times. Some older children may find flossing difficult and like the child under seven do the cleaning for them.



Holding the toothbrush bristles at a 45° angle against the gumline, move the brush back and forward with short strokes - half a tooth wide - in a gentle, scrubbing motion.



Brush the outer surface of each tooth, upper and lower. Repeat the same method on the inside surfaces and chewing surfaces of all teeth.



Make sure to clean the chewing surfaces.



Use about 15 inches of floss, wind most of it around the middle finger of both hands. Hold the floss tightly between the thumb and forefinger. Use a gentle motion to guide the floss between the teeth.



Curve the floss into a C shape and slide it into the space between the gum and the tooth until you feel resistance. Now, gently rub the floss up and down against the side of the tooth.



Repeat this procedure on each tooth. Don't forget the last four teeth.

Children aged seven years and older should be encouraged to clean their teeth and gums at least twice a day, using a small pea-sized amount of fluoride toothpaste. A good rule of thumb is before school and last thing at night, just before bed time.

Good preventive dental care for children clearly begins in infancy by establishing a healthy diet avoiding sugar snacks in between meals and an effective tooth cleaning routine using a fluoride toothpaste. The child's first dental visit is ideally at age one when the dentist can advise on all aspects of infant dental care. After all, if parents begin good dental habits early after the baby is born, it is more likely that the growing child will develop these habits and carry them forward into adulthood.

Sealants

The permanent teeth begin to appear in the mouth around age six but this can vary. First permanent molars (6 year molars, see page 7) which appear at the very back of the mouth do not replace a first tooth. Often they are missed with the toothbrush. Because of the deep pits and grooves in the chewing surface of these teeth, food tends to get caught and if allowed to remain can quickly cause a cavity in that area. To prevent this, identify the tooth as soon as it appears in the mouth and make a conscious effort to clean it using a small brush to carefully clean the grooves.

Some six year permanent molars that are at risk may require fissure sealants. Here, a plastic coating that sets is placed in the grooves and fissures, protecting the surface



Chewing surface before sealant



Tooth protected by fissure sealant

from the effects of retained food. Although this is an excellent technique it is important to remember that the sealant protects the chewing surface but there are other surfaces that are still vulnerable to decay. Other preventive measures may be taken: dietary control and tooth cleaning are essential, flossing is advisable and a fluoride mouthwash may be recommended by your dentist.

Mouth Guards

With the increasing popularity of contact sports, mouth injuries are becoming more common. To prevent many of these injuries, a good mouth protector is essential. Using one can dramatically reduce injuries to the teeth, lips, gums and cheeks and in addition cushion the effects of blows that would normally result in head and neck injuries.

There are many different types of mouth guards and the type that is most suitable will be apparent to your dentist. The most important factor is to select one that will be comfortable enough to encourage the child to wear it.



Mouth protector



Mouth protector in place

Injuries & traumas

Probably one of the most upsetting things - to parent and child - is an accident on which a child's tooth is fractured, displaced, or knocked out.

The majority of these injuries result from simple accidents - minor falls when the infant is learning to walk and childish pranks or accidents as they get bigger. You should bring your child to see a dentist if they hurt their teeth and

the bleeding doesn't stop, or if they damage a tooth, or if they fall and drive a tooth back up into their gum. Your dentist will be able to take an x-ray and decide if anything needs to be done. Very often, all that is needed after an injury is to keep a close eye on the child's teeth and gums for a while, but you should check with your dentist to make sure.



Your child's

1st

dental visit



Nowadays children like to go to the dentist. This is because dentists today can make a child's check-up a pleasant experience, using a **tell-show-do** approach for explaining what they are doing. It is important to be as positive about a trip to the dentist as possible, remembering that children will not be afraid of treatment unless they hear it from someone. Keeping calm yourself will transmit confidence to the child.

The recommended age for the first visit is age one year, although surveys show that on average, children first attend at age four years. The reasons for seeing children at age one include providing advice on early infant practices in order to prevent decay, especially in relation to nursing bottle mouth; identifying cavities in primary teeth at an early stage so that they may be saved; recognising bite problems early to improve the chances of successful treatment; having a pleasant first visit rather than attending with a painful tooth as a first experience.

Orthodontics

Some children have problems with crowded or crooked teeth or with incorrect bites. Sometimes the problems are inherited, for example, missing teeth or extra teeth, while other problems are caused by other factors such as thumb sucking or early loss of primary teeth. It is important to check with your dentist at an early stage of your infant's oral development so that emerging problems can be identified and treated at the appropriate stage. Early treatment can sometimes eliminate or reduce more extensive treatment later.



Crooked teeth before braces.



Braces in position

Most orthodontic problems are treated when the child has the majority of permanent teeth, from 10 years of age upwards. The problems of crowded, crooked or prominent teeth, for example, are usually treated with orthodontic appliances (braces) which can be either fixed (train tracks) or removable.



After tooth straightening

Straight teeth are easier to keep clean and less susceptible to tooth decay and gum problems.



Preventing dental decay in children requires a combination of limiting the harmful effects of sugary foods and drinks on teeth, reducing the presence of dental plaque by correct cleaning and increasing the resistance of the teeth by fluoride.

Fluoride works by making the outer layers of the tooth, enamel, tougher and thereby less prone to the harmful effects of acid produced by sugar in the diet.

In the Republic of Ireland, the benefits of fluoride are available from its presence in community water supplies and fluoride toothpaste. Your dentist can also apply concentrated fluoride as a preventative measure based on individual clinical assessment.

Fluoride can reduce decay by up to 70% when used in the correct way. Check with your dentist regarding the best advice for your child.

8 Rules for a cavity free child

Eat well during pregnancy	Take care of primary teeth
Avoid nursing bottle mouth	Clean their teeth for them until seven years old
See a dentist early and regularly	Use fluoride toothpaste from age 2
Ask your dentist about sealants	Snack wisely