



Erasmus + 2019-1-R001-KA202-063820 Project
Oral Special Care Academic Resources



illustrations

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With the support of



Partners:



SPECIAL ORAL CARE FOR SPECIAL KIDS, THEIR PARENTS AND CAREGIVERS

For children with special healthcare needs, dental treatment can be difficult and, in some cases, even at risk. That makes careful preservation and maintenance of oral and dental health even more important.

General rules of oral health apply to all children, even to the most special ones. That's because among the special needs of every single child there is also need for healthy teeth and gums.

These rules focus on the PREVENTION of dental caries and periodontal diseases by means of:

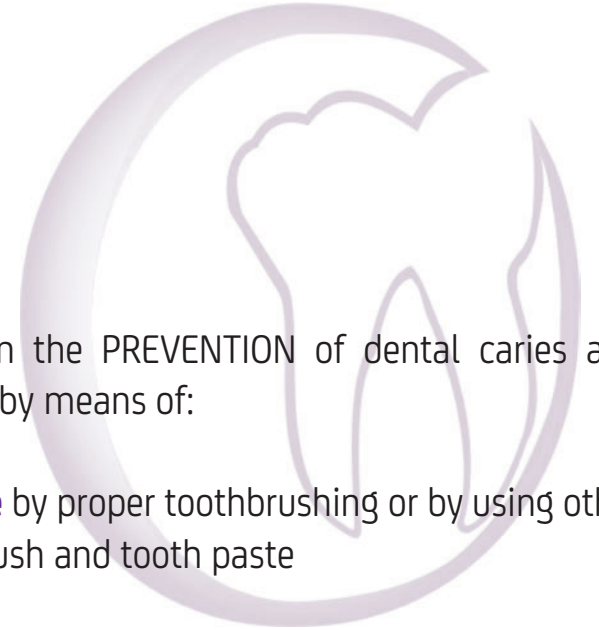
A. Daily oral hygiene by proper toothbrushing or by using other devices than toothbrush and tooth paste

B. Balanced diet

C. Regular dental visits – the **Dental Home** concept



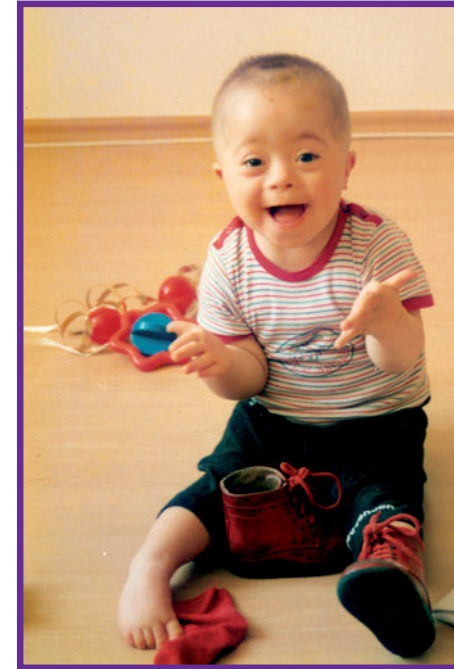
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A. DAILY ORAL HYGIENE

The first thing to know about oral hygiene is that it is MANDATORY for all of us, therefore it is also extremely important or even more for special needs children. Taking into consideration that anyway these kids have more problems than other children, sometimes we may be tempted to make concessions due to the desire to protect and indulge the child and avoid potential discomfort that oral hygiene routine might cause. However, we must be aware that by breaking the hygiene rules we do not do them a service but, on the contrary, we expose them to an increased risk of tooth decay and diseases of the supporting teeth tissues (gums and maxillary bones), problems that will eventually convert into PAIN.

Is this what we want for them? Surely NOT.
SO WHEN is the right time to introduce oral hygiene into daily routine?



Though it may seem excessive, the best moment to **start brushing** your baby's teeth is **when the first tooth emerges** in the oral cavity. Why? Because:

1. Prompt removal of milk residue will prevent the formation of dental plaque, protecting the baby from the so-called baby bottle tooth decay. Baby bottle tooth decay, also called severe early childhood caries (S-ECC), is not necessarily related to the use of the bottle itself. Breast milk, infant formula, sweetened tea - even with honey - and even administered with a baby cup, soups or purees fed with a spoon - all are perfect culture media for microbes (bacteria) that will first cause a tooth demineralization, possibly with

color change, followed by dental substance loss (cavity). From this point, occurrence of complications like PAIN, swelling and difficulties in feeding shall only be a matter of time.



2. We will create a routine, **a conditioned reflex**: the child will get used to associating the end of the meal with brushing; he/she will know that in the evening, after bath and milk and before sleep oral hygiene is mandatory. With a little bit of luck and a lot of consistency, this reflex will be maintained over time. **IMPORTANT**: All children love -and need- routines. And **routines are more easily introduced at young ages**.

HOW do we clean the teeth of a baby/toddler with special needs?

We have a few options:

- ▶ Toothbrush - chosen according to the age of the child, with a small amount of fluoride toothpaste (from the size of a grain to the size of a pea if the child cannot spit)

- ▶ “Baby finger toothbrush” made of silicone - with a very small amount (grain) of fluoride toothpaste



- Gauze swabs with a weak antiseptic solution - chamomile tea or mouthwash (the latter for older children or adults); pre-impregnated gauze swabs specially made for oral hygiene are also available through specialized companies that sell dental products, but regular ones will do very nicely.



As the child grows, depending on the skills he/she acquires, he/she can gradually take over, usually partially, the responsibility of brushing.



All in all, help and supervision of the parent or of a close other adult in the entourage are necessary in order to obtain a satisfactory result. Many children, teenagers and even adults with special needs cannot achieve proper dental care by themselves.



IMPORTANT: Healthy gums do not bleed. Therefore, if you notice some pink shade in the child's mouth while brushing or in the sink after spitting, try to figure out the area the bleeding comes from and pay particular attention to cleaning it. DO NOT AVOID touching and cleaning that area, that would only worsen the bleeding.

Bad breath can be due to inadequate hygiene, but it may also be caused by tummy problems or respiratory infections. When the child is unwell, the tongue may have a “coated” appearance and brushing it will help. Consider changing the toothbrush after such episodes.



It is not easy to brush someone else's teeth, especially if the person doesn't want the granted help. Sometimes, more than one person may be needed to perform daily dental care.

Other means may help:

ELECTRIC TOOTHBRUSHES

For children with neuro-muscular coordination deficits, brushing can be a real challenge. An electric toothbrush may help a lot. The head of the electric brush does its own movements, therefore it can improve cleaning - particularly for these children. Even so, **parental help is mandatory.**



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LARGER, ADAPTED HANDLES FOR TOOTHBRUSHES (manual or electric)

Another way to ease brushing for children with neuro-muscular coordination problems is to make bulky toothbrushes handles for a better grip. This can be done by filling a small ball or a rubber sleeve (e.g. from a bike handlebar) with plastic material, gypsum or “fimo” polymer clay and insert the brush before the setting point of the material. The paedodontist could help you make such personalized handles.



RUBBER MOUTH-PROPS



Some children with special needs may oppose brushing by biting the toothbrush. Children with neuromuscular problems may close their mouth either in refusal or as a result of poor coordination. In such cases, the use of a mouth-prop can help protect both the child and the fingers of the person performing the brushing.

Mouth-props come in various sizes, are sold by dental products companies, and your dentist can help you find them. If they are not available in your country, you can use, for example, a disposable syringe with the plunger pushed in (to ensure greater rigidity) to keep the child's mouth open during the brushing. Metal devices are less recommended, due to the higher risk of dental fractures.

TOOTHPASTE

It is now a proven fact that topical fluoride routinely applied by daily use of fluoridated toothpaste is the most efficient way to prevent caries.

According to the recommendations of the European Academy of Paediatric Dentistry (2019), a high fluoride concentration (1000 to 1500 ppm) is mandatory even for very young children and for children that cannot spit. For them, a smaller quantity of paste must be used and excess can be removed (if needed) with a damp gauze.

DO NOT have the child RINSE after brushing (even if he/she can) – rinsing would wash away some of the protecting fluoride layer.

DO NOT brush immediately after acidic foods (like fruit or fruit juice) or after sweets. Let saliva do its job in neutralizing the acids for about 30 minutes, then brush.



DENTAL FLOSS

Spaces between teeth cannot be properly cleaned by brushing alone. Food can remain trapped between teeth and exert a continuous acidic attack upon enamel. It is very important to prevent that from happening by flossing the child's teeth at least once a day, before the evening brushing.

For easy use, manufacturers have imagined disposable flossing devices with various types of handles, in different colours, even scented, in order to make flossing easier for both child and caregiver.



KEEP THE MOUTH MOIST

In children with reduced saliva flow (due either to the condition itself or to the medication) and in children who breathe through the mouth, oral mucosa shall be dryer than normal. In the absence of the buffering effect of saliva, a favorable breeding ground for bacteria is created. It is a good idea to have the child drink a lot of water and thus maintain a proper level of hydration of the oral mucosa.

IMPORTANT:

Water can NOT be substituted by milk/juices/sweetened tea.

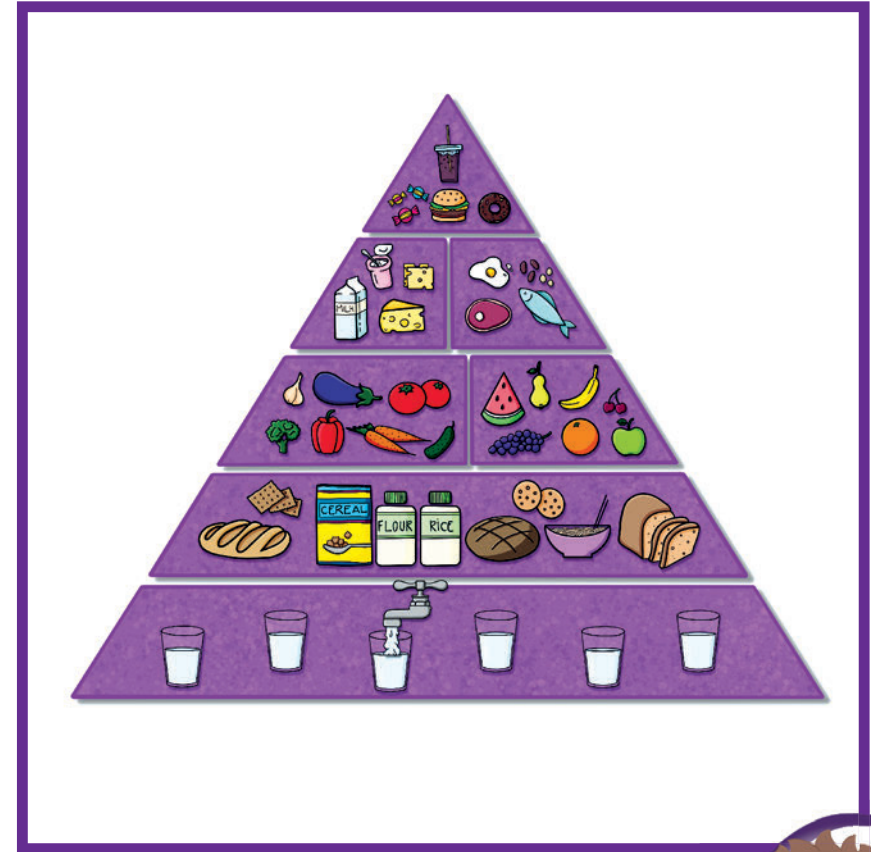


B. BALANCED DIET

plays an essential role in preventing caries and supporting tissues' diseases. Besides the consumption of "healthy" foods, healthy eating also involves a feeding schedule, with limited snacks between meals.

It is, of course, very easy to recommend a sugar-free diet. However, this is very difficult to apply in real life and can become extremely frustrating for both child and parent – especially given that various therapies include rewards.

Sweets should not necessarily be excluded, but should ideally be offered as a dessert rather than as snacks. Fruit, jams or home-made cakes are to be preferred, while waffles, cheese puffs, expanded cereals, chips and other sticky high-sugar snacks, though highly appreciated by children, should be avoided.



XYLITOL SWEETS

can be used as rewards – they become more and more available both through pharmacies and food stores. Carefully read the labels! After all, it's all about habits, and healthy habits must be built.



C. REGULAR VISITS TO THE DENTIST. THE DENTAL HOME.



Regular dental check-ups should be part of our routine, especially when it comes to patients with special health care needs. Depending on the oral status of each patient and the level of cooperation, the dentist will determine what would be the appropriate time lapse between two controls. In any case, the reason for seeing the dentist should NOT be the pain. Otherwise, the patient will associate the unpleasant stimulus (pain) with the visit to the dental office, which of course is not desirable.

GOOD TO KNOW: once pain has occurred the needed dental treatment becomes more complex and shall require more compliance on behalf of the child. Dental compliance in children may be difficult to obtain even under usual, stress-free circumstances.



How likely is any child in pain to cooperate? How about a child with limited communication skills? Or a child whose general condition has repeatedly required contact with medical staff performing unpleasant manoeuvres?

In order to keep treatment needs to a minimum, minimize discomfort and enhance cooperation, parents should keep in close contact with the dentist, follow professional advice and carefully apply the recommended prevention methods.

Special children need additional professional dental care.

For the parents of children with complex health problems, oral care sometimes falls on a secondary level of concern. Although somehow explainable, this perception is wrong.

Oral health is an important part of general health and oral disease may cause or enhance important problems to the child and family – from sleepless nights to malnutrition.

Dental check-ups need to be started as early **as the age of 1 year** and continued with a frequency that will be established by the dentist in accordance to the child's particular situation. This type of early-started continuous management, known as the DENTAL HOME concept, gives way for efficient, personalized caries prevention, enables the dentist to find and solve small problems before they become important (that is called INTERCEPTION) and provides the parents or caretakers with a phone number to use and a qualified dental professional to call in case of emergency or concern.



Close supervision of primary teeth shedding is also very important. When primary (milk) teeth are lost/ extracted in due time, permanent teeth will be more likely to erupt in the right places on the arch. This will reduce the occurrence of anomalies of dental position, with a positive effect not only for chewing, but also for hygiene, because dental malpositions favor food retention. In addition, many children with special health care needs have developmental particularities of the teeth and jaws derived from their general condition and often anomalies can be at least mitigated if noticed and addressed early enough.

Regular dental check-ups are also useful for getting regular professional cleaning. This may be of particular importance for example in children who breathe through their mouth, as plaque



and calculus tend to form more quickly under such circumstances. Another essential benefit of regular dental check-ups is the development of familiarity with the environment. This is important for any child - and even more for the child with special needs, who often cooperates with difficulty. The children get to know the dentist, the office staff and the environment and gain confidence, which can greatly ease the treatment, especially when the needed intervention is not very complex – and it should almost never be if the above-mentioned principles of a DENTAL HOME are observed.

Some offices publish on their own website photos with the medical team, respectively with the dental office. Using them can be useful for preparing the child before visiting the dentist, especially for those children with special needs who are visually oriented.



Some children need special precautions for the provision of dental care. For example, children with heart conditions may require antibiotic prophylaxis prior to certain dental procedures, while children who cannot relax and cannot cooperate may need sedation or general anaesthesia. Sometimes medication can be prescribed by the dentist, sometimes the help of an anesthesiologist may be needed, and in some cases dental treatment will be performed in hospital premises, under deep sedation or general anaesthesia. In order to avoid any problems or accidents, it is very important that you provide complete and accurate information about the child's health to the dentist, as well as details about any previous and/or current treatments. Copies of medical records can be requested by the medical team. Sometimes, the dentist may need to directly communicate with the doctors of other specialties (neurologist, pediatrician, family doctor etc.) who take care of your child's health.



VERY IMPORTANT:

If your child has undergone dental treatment under general anesthesia, this does not mean that the problems are permanently solved and the child will no longer have any oral health problems. It is essential that the acquired result is maintained and further treatment needs are minimized by all the means that have been presented in this material.

Teaming with the medical team enables you to take better care of your child's health – and that goes for oral health, too.



1. Cut out the outline
2. Punch in the marked places
3. Tie a string at each end
4. Rotate the string
5. Watch little OSCAR brush his teeth

