

# Dental caries in childhood

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## Definition

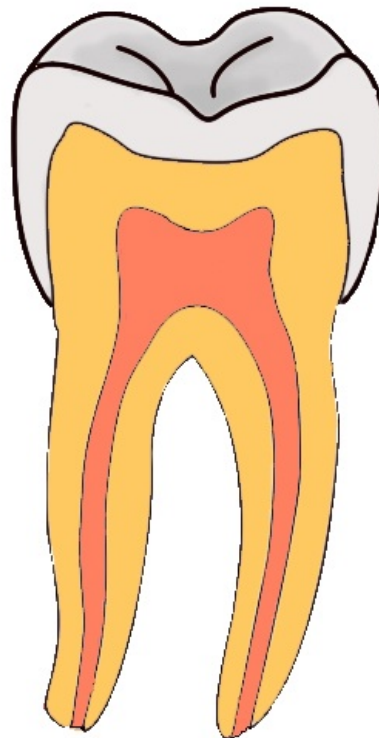
Carious damage to even a single tooth in the dentition in a child under **3 years** of age is referred to as early childhood dental caries in the Anglo-American literature then *Early Childhood Caries* (ECC), you can also find the SECC definition "severe early childhood caries".

## Dental caries

**Infectious disease of** hard dental tissues, **the cause of which is multifactorial**. On average, early childhood caries affects 5 to 10% of children worldwide. Dental caries can be a serious health and psychological problem for a child in infancy and toddlerhood.

Teeth affected by caries can lead **to inflammation of the dental pulp, periodontitis** and difficulty in biting. As a result of the pain, the child may refuse solid food and may even fail to thrive. Inflammatory complications caused by caries can spread to the periapical tissues and subsequently to the bone or damage the development of the permanent tooth.

As the first teeth of the temporary dentition, the incisors erupt around the 6th to 8th month of a child's life. During this period, the child is completely dependent on the care of adults, especially the mother. It is the mother who takes care of the hygiene of the child's oral cavity, by choosing the right diet and building eating habits, she has



the greatest influence on the state of the child's teeth.

## Etiology

We consider the following to be the main **etiologically factor**:

1. **cariogenic microorganisms** in saliva;
2. **fermentable carbohydrates**, which serve as a substrate for microorganisms;
3. **soft dental plaque**, the accumulation of which is caused by insufficient dental hygiene.

An important factor in the development of the carious process is the transfer of **cariogenic microorganisms**, especially *Streptococcus mutans*, from the mother (and other persons) to the child. Among the bad habits that can start this process are, for example **licking the pacifier** after it has become dirty, checking the temperature of the milk by tasting it, tasting the food served with the same spoon that the baby is fed with, kissing the baby's mouth. The earlier bacterial colonization of the child's oral cavity occurs, the greater the risk of caries damage.

**Cariogenic food**, rich in carbohydrates is, for example, sweetened flavored milk, fruit juices and other sugar-sweetened beverages. Their administration in a baby bottle is especially harmful. They are especially harmful if they are administered just before bedtime and during the night. During sleep, the production of saliva **decreases** and thus its ability to wash the teeth, especially the upper incisors, and thus their neutralizing effect cannot be manifested. With repeated administration of a cariogenic diet, an acidic environment persists in saliva and soft dental plaque, which leads to **demineralization** hard dental tissues.

Frequent use of medications that are administered in the form of syrups containing sugar can also contribute to tooth decay in toddlerhood.

**Insufficient oral hygiene** leads to the accumulation of soft dental plaque, which prevents the action fluorides on the teeth. In addition, the amount of fluoride in the oral cavity may not reach suitable values due to insufficient intake through fluoridated toothpaste.

Another factor that can promote the formation of tooth decay is long-term breastfeeding (but breast milk is not considered cariogenic). After 18 months, breastfeeding 4-5 times a night has little nutritional value and serves only to calm the child.

## Prevention

Immediately after cutting the first temporary incisors, it is necessary **to remove** soft dental plaque and milk residues with a piece of **gauze** twice a day, especially in the evening before going to bed. A small amount of baby paste is carefully rubbed onto the surface of the tooth crown. After molars erupt, parents should use a small soft brush with fluoride paste to brush their child's teeth. It goes without saying that the child has his own toothbrush.

**The first preventive dental examination** the dentist should take place before the end of the first year of the child's age.

The mother herself should perform oral hygiene very carefully to avoid the transmission of cariogenic microorganisms to the child. She should also avoid all the above-described bad habits when caring for a child.

We must not supply dental plaque microorganisms with their food – sugar or starch. We will prevent serving sweet drinks or milk before and during the child's sleep. If the mother breastfeeds the child after the first year of his age, it is recommended to wipe his teeth with a damp gauze after night feeding. After the first year of age, the child should drink from a cup, not from a bottle, and mainly mineral water or unsweetened tea.

After sweet drinks or meals, there should be at least 2 hours without sweets, so that **the saliva can neutralize** the resulting acidic environment. Furthermore, it is necessary to exclude dipping the pacifier in honey, sugar or syrup.

## Treatment

The emergence and development of early childhood caries can be prevented by the active cooperation of the pediatrician with the child's parents (application of fluoride preparations, sealing of fissures ). During the toddler years, the parents of the child are completely responsible for preventive measures that lead to protection against early childhood decay.

**Remediation of caries is difficult** due to the often difficult cooperation of the child with the dentist. In case of a carious lesion, radical treatment with multiple extractions of temporary teeth should be chosen. This treatment can lead to a long-term negative attitude of the child towards further, even if only preventive, check-ups at the dental office.

## Links

### related articles

- Dental caries

### External links

- Prevention of tooth decay in children and youth ([http://i.pupiq.net/a/e/e/64c/64c/141410/Fluoridy\\_draft\\_def\\_venze.pdf](http://i.pupiq.net/a/e/e/64c/64c/141410/Fluoridy_draft_def_venze.pdf))

## References

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