

**Oral Health Promotion  
for  
Pregnancy, infancy & early childhood**

**Handbook for Public Health Staff**



**Family Health Bureau  
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## Aim of this handbook

Through this concise handbook it is expected that all antenatal mothers & parents/caregivers of children under the age of 3 years to be knowledgeable about basic information on oral health promotion. The handbook could also be used to identify abnormalities in teeth.

Followings are the activities that should be done in this regard;

- Use the coloured pictures & the related text on the opposite page of this handbook to impart oral health messages to the public at any convenient setting (eg. antenatal clinics, child welfare clinics, weighing posts, preschools, home visits). The wall charts provided could also be used for this purpose as an educational tool.
- Encourage parents/caregivers to examine their child's teeth at least once in front of you. Instruct them to enter observations in the relevant sections in the Child Health Development Record (CHDR).
- Examine children's teeth at the age of 12 & 18 months and enter observations in the CHDR. Refer them for dental advice & treatment if you detect any abnormality during check-ups.

## Important facts on oral diseases

Oral diseases are common among the public as it is associated with dietary habits & hygiene practices.

Unhealthy dietary habits & poor oral hygiene practices favour unwanted growth of commensal bacteria that cause common dental diseases: dental caries & gum disease. Healthy diet & proper hygienic measures can reverse the bacterial counts and cure these diseases (infections).

Thus, a healthy diet & proper oral hygiene practices will not only prevent the occurrence of oral diseases but also will arrest those diseases that have already occurred, at any stage of the disease. However, treatment may be necessary if tissue destruction has already taken place.

Identifying oral diseases at early stages enables it to be easily cured with simple interventions. At late stages, though treatment becomes complex and expensive, the damaged tissues cannot be regained.

Frequent intake of sweets, sticky starchy food (buns, biscuits etc.) and neglected oral hygiene measures increase the risk for oral diseases. Due to these reasons, Pregnancy, infancy and early childhood are considered as high risk periods for oral diseases.

Adopting a healthy dietary pattern, good oral hygiene practices (tooth brushing) and periodic dental checkups followed by prompt treatment for any abnormality are the key strategies for maintaining proper oral health.

Picture 1 – Pregnancy induced gum diseases



Picture 2 – Pattern of brushing teeth methodically



How to Brush

- From gum margin to biting surface of the tooth
- From one corner to the other corner of a jaw, including all tooth surfaces (inside, outside & biting surfaces)
- Upper & lower jaws separately
- Clean tongue after brushing teeth.

Special areas

- Posterior teeth & inner side of front teeth
- Gum margins

## Oral health during pregnancy

### Why maintaining good oral health is important during pregnancy?

- To reduce complications of dental diseases during pregnancy.
- To minimize the risk of dental caries in young children (by reducing the risk of transmission of harmful bacteria from mother to the newborn).

### Why pregnant mothers are at a higher risk for oral diseases?

- Vulnerability to gum disease (bleeding & swollen gums) due to hormonal changes – (Picture 1).
- Experiencing nausea/vomiting & food cravings, specially the frequent intake of sour/sweet food dissolve the enamel (By creating an acidic environment inside the mouth).
- Frequent intake of food & brushing difficulties speed up dental diseases due to food impaction between teeth.

### How to reduce the risk?

- Stick to a balanced diet & limit intake of sour/sweet food.
- Drink some water after intake of food & wash the mouth after experiencing nausea/vomiting, whenever possible.
- Brush methodically (Picture 2) at least twice a day morning & night (before bed) with fluoridated tooth paste. Choose a convenient time for brushing if it is difficult in the morning.
- Get a compulsory dental checkup by a Dental Surgeon & stick to the suggested treatment & advice.

### Remember,

- No Calcium loss will occur to weaken teeth during pregnancy.
- Dental treatment is relatively safe in pregnancy, thus mothers need not have undue worries in this regard.

Picture 3 - Eruption of first tooth



Picture 4 – Eruption of deciduous teeth. Note the spaces between teeth



## Tooth eruption

### When?

- First milk tooth erupts around 6-12 months of age (usually around 9 months). Eruption of all 20 milk teeth will complete around the age of 30 months.
- If teeth are not present even after 12 months of age seeking dental advice is necessary.

### In what sequence?

- Sequence of eruption of teeth can vary. Usually lower anterior teeth appear first (Picture 3).
- Upper anterior teeth appear next and, then the rest will gradually erupt from anterior to posterior.

### What are the other associated issues?

- During the time of eruption of teeth the child could get a mild fever. If it lasts for a long duration, seek medical advice.
- During this period baby may put various things into the mouth. Make sure the objects are safe and clean.
- The spaces between teeth during tooth eruption is normal (Picture 4). These will get reduced once all the teeth have erupted.
- Baby can eat a semi-solid diet even without teeth. So the importance of adhering to dietary advices is to be stressed.
- Rarely teeth may be present at birth. These may give rise to breast feeding difficulties & If these teeth are shaky, might dislodge & obstruct the airway (aspirate). Refer to the nearest consultant dental clinic for advice.

Picture 5 – Examination of child's teeth



- Move the lips apart and check the gum margins of upper anterior teeth
- Open the mouth widely and check biting surfaces of posterior teeth



Picture 6

Whitish/brownish spots on tooth surfaces indicate early signs of caries

Picture 7

Reddish, swollen gums, accumulation of deposits and bleeding gums (while brushing) indicate inadequate brushing.



## Maintaining oral health

- Tooth decay (dental caries) is the most common childhood oral disease. It is mainly caused by 'sugars' in food.
- Fluoride makes teeth stronger & resists tooth decay. Recommended usage of fluoride toothpaste provides correct amount of fluoride to the tooth surface.
- At the initial stages, tooth decay does not cause any discomfort. It could only be detected by identifying visible changes during dental check ups.

Therefore, it is important to stick to the following 3 basic steps for maintaining good oral health;

### 1. Give a healthy diet from childhood

- Give fresh fruits, vegetables & pulses whenever possible
- Restrict sugary food, sweets & sticky starchy foods like biscuits & buns
- Do not add sugar to infant's food & drink
- Give water after intake of sweets

### 2. Practice correct tooth brushing – (see the next page)

### 3. Have regular dental check-ups

#### What to look for & how frequent ?

- Once a week examine all the teeth & gums at the time of brushing (Picture 5).

#### What to do if any change is detected (Pictures 6 & 7) ?

- With continuous proper tooth brushing using a small amount of fluoridated tooth paste, the disease will get controlled.
- Seek dental advice & treatment in case of any doubts.

Picture 8 – Brushing child's teeth



Picture 9 – Correct amount of toothpaste



At the beginning

By around 3 years of age



## Tooth brushing

### When to start? with what?

- Brushing teeth should start as soon as they erupt. But gums & the tongue should be cleaned with a wet clean piece of cloth even before that.
- If the baby is too small to use a tooth brush at the time of tooth eruption, use a clean piece of wet cloth.
- When more than 4 teeth are present, using an infant/child tooth brush is compulsory.
- When the child is over 12 months of age use of fluoridated toothpaste is compulsory. Start with a very small amount (smear layer) of toothpaste to brush teeth in infancy & increase it gradually to the size of a green gram of toothpaste by 3 years (Picture 9).

### How to brush?

- Introduce brushing to the baby as a game when he/she is in a happy mood, preferably at bath time (Picture 8).
- As the child grows, brushing twice a day morning & night before bed is compulsory.
- Brush methodically (Picture 2), as to brush all surfaces of every tooth.
- Parental supervision is important, even when the child is capable of brushing by him/her self (until the age of 8 years). Brushing with family members can encourage the child to brush teeth.

**Remember**, fluoridated toothpaste is suitable for children only as long as it is used properly. For safety;

- Use a small amount of tooth paste (Picture 9).
- Supervision of brushing by parents.
- Encourage to spit out excess toothpaste from childhood.
- Keep it out-of-reach of children.

Picture 10 – Dental Caries, early lesion



Picture 11 – Arresting early carious lesions



Before treatment

After successful  
treatment



## Dental caries- Early stage

### How to detect?

- Look for dull & chalky-white patches. Mostly seen closer to gum margins. Tooth surface is still intact (Pictures 10).
- Healthy teeth are slightly yellowish-white in colour & has a shiny surface.

### What causes this?

- Frequent intake of sweets, sugary food & sticky starchy food (eg. Biscuits, buns etc.)
- Inadequate brushing leading to food debris retaining inside the mouth

Bacteria inside the mouth convert the 'sugar' into acid & this causes dissolution of tooth enamel, resulting in tooth decay.

### How to treat?

- Restrict sugar & sweets as far as possible. Give a sip of water after intake of sweets.
- Brush teeth twice a day with a small amount of fluoridated tooth paste making sure as to brush the areas with early decay properly.

Sticking to this simple treatment will ensure that tooth decay will not progress to the stage of cavity formation (Picture 12). But if these patches are progressing, seek dental advice.

### If treatment is successful;

- Chalky-white, dull areas regain its shine. Some times these areas may turn brownish in colour (Picture 11).
- Shiny tooth surface indicates that the tooth is safe.

**Remember**, sometimes the child may be too small for dental treatment. Proper tooth brushing & restriction of sugar/sweets is the only treatment. Thus, the responsibility of parents/caregivers in this regard need to be stressed.

Picture 12 – Dental caries - cavity formation



Picture 13 - Dental caries - advanced lesion



## Dental caries – Late stages

### How to detect?

- At this stage the tooth surface is damaged & cavities are formed (picture 12).

### What causes this?

- Not taking adequate measures to control the disease at early stages.
- Frequent intake of sugar/sweets (page 5) & inadequate tooth brushing.

### How to treat?

- Brush teeth with a small amount of fluoridated tooth paste twice a day while giving special care to brush the areas undergoing tooth decay.
- Stop addition of sugar to child's food & drinks. It is compulsory to minimize sweets & other sugary/sticky, starchy food .
- Refer the child to the nearest dental clinic for 'Fluoride treatment' & necessary fillings.

Sticking to this treatment will ensure that tooth decay will not progress to cause advanced lesions (Picture 13) .

### If treatment is successful;

- Brownish dull areas will regain its shine.
- Damaged areas of the tooth will not regenerate. But shiny surfaces indicate that the tooth is safe & assures that the disease is not progressing.

**Remember**, removal of milk teeth is not recommended as it will affect the proper alignment of permanent teeth. But if the child experiences frequent infections (pain, swelling etc.) tooth removal may be necessary.

## Tips to maintain optimal oral health

### Pregnancy

- Maintain a balanced diet
- Restrict sweets & acidic food
- Take a sip of water after every meal/snack, whenever possible
- Brush teeth twice a day using fluoridated toothpaste
- Get a compulsory dental check-up by a Dental Surgeon & stick to the suggested treatment & advice

### Infancy & early childhood

#### Give a healthy diet from childhood

- Give fresh fruits, vegetables & pulses whenever possible
- Restrict sugary food, sweets & sticky starchy foods like biscuits & buns
- Do not add sugar to infant food & drink
- Give water after intake of 'sweets'

#### Practice correct tooth brushing

- Brush teeth twice a day from the day the first tooth erupts
- Use of a tooth brush is compulsory when 4 teeth appear in the mouth
- Use of a small amount of fluoridated tooth paste (smear layer) is compulsory after 12 months of age

#### Have regular dental check-ups

- Check child's teeth once a week for chalky white or brown patches
- Seek dental advice if you see these patches