



Early Childhood 3-5 years Units . . . . . 4

## **Baby Teeth with Plaque**

Plaque is a sticky, colorless layer of germs and saliva that sits on the teeth and gums. When plaque is left on the teeth and gums, it hardens and becomes tartar or calculus. When the germs break down the sugars in the food, acids are formed. This happens for about 20 minutes after the food is eaten. These acids can eat away the enamel on the teeth. The result is damage to the teeth also known as cavities.

To remove the plaque from the teeth and gums, parents should use a damp cloth or toothbrush.

## **White Spots**

The first sign of a cavity starting on a tooth is a “white spot.” These spots are caused by germs in plaque eating away the enamel of the tooth. These spots are found near the gums where plaque sits. They look chalky and white when the teeth are dry. These spots may not turn into cavities if they are brushed and kept clean. This is why it is so important to brush. Fluorosis may also cause white spots. Fluorosis is caused by too much fluoride.

## **Brown Spots/Cavity**

Most brown spots on teeth are cavities, but any brown spot is not normal and should be examined by a dentist. Cavities can be on top of the teeth, on the sides of teeth and on the teeth near the gums. Just because the brown spot doesn't hurt, doesn't mean it's not a cavity. Some spots can be due to injury. A tooth can come in brown if the gums were hurt from a fall.

## **Gray Coloring**

Gray coloring of the entire baby tooth often is caused by some sort of injury. Unless the tooth is painful and loose, there is not much to be done, but evaluation by a dentist is highly recommended.

Another cause of gray teeth is dental cavities. These are often gray spots on parts of the tooth that look dull. Have a dentist look at this spot.

## Decay/Cavities

- Bacteria (germs) are connected to dental decay. These bacteria are called *Streptococcus mutans* and do not appear in the mouth of infants until after the teeth come in. Most likely infants become infected from their parents, siblings or other individuals through contact. Usually the mother is considered to be the source. Mothers who have a lot of cavities are more likely to have the bacteria and infect their children.
- Cavities develop in the grooves of the back teeth which are hard to reach when brushing, but where food usually sticks. Cavities also appear on smooth surfaces if not brushed.
- One of the most important factors related to cavities is sugar. Actually, the development of cavities depends on how often the child eats sugary foods, not on the amount eaten. Changing the child's diet to decrease how often sugar eaten is very important.
- In children who still drink from the bottle, one of the most important causes of decay is putting them to bed with a bottle. The sugar from the juice or milk remains on the babies' teeth overnight. Try to give the baby water at naptime or bedtime.
- Fluoride is the most effective measure against dental decay.
- Taking care of your teeth is essential. Parents should brush children's teeth.
- Get your child used to visiting the dentist (dental home).

## Lift the Lip

Tooth decay in children under age 3 is preventable. If found early, it can be stopped and even reversed. Parents/caregivers can be taught to “Lift the Lip” to check their child’s teeth for early signs of tooth decay.

Two adults sit facing each other knee to knee. The adult holding the child gently lays them back on the laps so to tilt the child’s head back. This adult can hold wiggly arms and legs. Place the head so you can see the four upper front teeth. Now have the adult in whose lap the child’s head lies gently lift the lip.



Focus on the four upper front teeth. This is where you are most likely to find signs of possible dental problems: visible plaque, white or brown spots. Look at both the front and the back of the four upper front teeth, near the roof of the mouth.

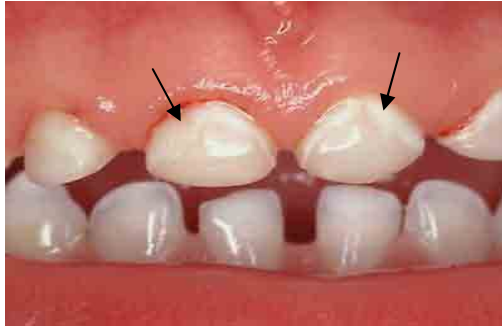
As new teeth come in the mouth they will need to be checked the same way.

So what does a tooth problem look like?

1. Visible Plaque is a thick layer of germs and food. Decay starts to form under plaque that is not regularly cleaned away.



2. Early decay first shows as white spots or a white line along the upper part of the tooth closest to the gums.



3. Moderate decay shows as large brown spots that are really holes in the teeth.



4. Severe decay is obvious because the teeth begin to chip off and have a broken appearance, sometimes looking like little dark nubs.



“Lift the Lip” takes only a few minutes. If the child cries or fusses, it’s OK because the child’s mouth will be wide open for viewing.

If you see any of these problems the child should be referred to a dentist. Early problems can many times be reversed with fluoride or repaired by a dentist. If left untreated the child may require hospitalization for treatment.

Remember to “Lift the Lip” and check your child’s upper front teeth at least once a month.

## **Unit: Fluoride in Drinking Water/Alternate Source of Fluoride**

### *Understandings:*

- Fluoridated water is safe and helps to prevent tooth decay.
- Use fluoride toothpaste to brush your teeth.
- Fluoride toothpaste and fluoridated water are both good to have on a daily basis.

### *Essential Questions:*

- Does the water my family drinks contain fluoride?
- Why does fluoride help prevent tooth decay?
- How do I find out the fluoride level in my water?

### *Families Will Know:*

- Fluoride prevents tooth decay. If there is not enough fluoride in the drinking water, the alternatives are fluoride tablets or drops by prescription. These must be prescribed by a doctor or dentist.
- Some private wells have enough fluoride for good dental health, but most wells do not. Families should tell their pediatrician or dentist if they are on well water.
- If the family's water comes from a private well and their physician wants to prescribe fluoride drops, vitamins or tablets for their baby, they must have the water tested first.
- The use of alternative types of fluoride, such as tablets or drops, is a daily, long-term commitment.

### *Families Will Be Able To:*

- Demonstrate knowledge of importance of fluoride by knowing the level of fluoride in their water and/or choosing fluoride treatments or enhanced products.

- Tell their pediatrician or dentist about their water source if they are unsure of the fluoride level.

*Instructional Activities:*

- Discuss the role fluoride plays in the prevention of tooth decay.
- Give handout.
- Discuss the fluoride level of the family's drinking water.
- Discuss alternatives, if there is not enough fluoride in the water.



## Fluoride – How It Makes Teeth Stronger

Fluoride is a naturally occurring substance that is present in almost all sources of drinking water. Fluoride is necessary for the proper development of teeth and bones, and it protects teeth once they have erupted into the mouth. Fluoride benefits children before their teeth have come in, and it also protects the teeth of children and adults after all of their teeth are present in the mouth. Fluoride can be ingested or swallowed (by means of fluoridated water or fluoride drops and tablets) and it can be applied topically (fluoride toothpaste, rinses and applications in the dental office). When a tooth is exposed to fluoride, it makes it more resistant to cavities.

**Ingested or Swallowed Fluoride:** Drinking fluoridated water from birth significantly reduces tooth decay. Fluoridation is supported by the American Dental Association, American Dental Hygienists' Association, American Medical Association, American Public Health Association and virtually every other major national and international health and science organization.

When fluoridated water is not available, drops or tablets may be prescribed by your physician. Private wells must be tested to determine their natural levels of fluoride. A child should receive only one source of ingested fluoride: fluoridated water, drops or tablets. Exposure to both sources may cause dental fluorosis, which is characterized by white spots on the enamel. Some private wells have enough fluoride for good dental health, but most wells do not. If your water comes from a private well and your physician wants to prescribe fluoride drops, vitamins or tablets for your baby, make sure he or she has your water tested first.

**Topical Fluoride:** In addition to one source of ingested fluoride, any combination of topical fluorides may be used. Topical fluoride, applied directly to the enamel surface, helps provide additional protection against decay after the teeth have come into the mouth. Fluoride enhances the replacement of minerals lost from enamel surfaces and stops decay before it spreads into the tooth.

There are three common methods for applying topical fluorides:

1. Fluoride toothpastes that have the seal of the American Dental Association's Council on Dental Therapeutics on the carton or tube have been proven effective in reducing decay. Only a small pea-sized dab of toothpaste is necessary with each brushing to provide a sufficient amount of fluoride. Because toothpaste can contain high amounts of fluoride, it is recommended that children be carefully monitored so they do not swallow the toothpaste, which may cause fluorosis.
2. A fluoride mouth rinse (not used in preschool age children because they cannot control swallowing reflex).
3. Fluoride application by dentist or dental hygienist.

## Unit: Teeth Cleaning –Early Childhood 3-5 Years

### *Understandings:*

- The formation of daily oral health habits is important for the child.
- The child participates in his/her oral health care, but parents assist the child.

### *Essential Questions:*

- Why is it important to establish good oral health habits at this age?
- What role should the child play and what role should the parent play in the child’s daily oral health care?

### *Families Will Know:*

- Why it is important to establish good oral health habits.
- What the child can do while learning to care for his/her teeth and what activities the parent must do to ensure that brushing is done well.

### *Families Will Be Able To:*

- Help children learn to brush their teeth, yet participate in the process themselves so that the job is done sufficiently.

### *Instructional Activities:*

- Discuss with the parents the importance of making good oral health habits a part of their child’s daily routine.
- Discuss lesson: “The Importance of Brushing Children’s Teeth.”
- Show parents how they can assist child with the teeth cleaning process.
- Discuss lesson: “Eruption of Teeth (Teething).”

## **The Importance of Brushing Children's Teeth**

The mouth contains many germs. Some germs combined with saliva and foods form plaque on the teeth and gum line. If this plaque is not removed, it hardens into tartar within 24-36 hours, requiring removal by a dental professional (dentist or dental hygienist). When you eat sugary and starchy foods, the germs use these foods to make acid. The acid attacks the enamel of the tooth and starts cavities.

### **When and How to Brush**

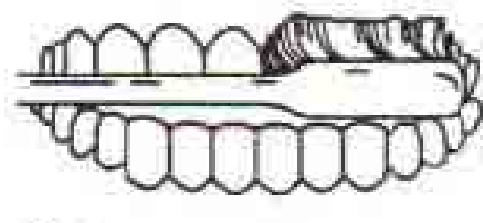
Brushing removes the plaque from surfaces of the teeth. Ideally, children should brush following meals and snacks and always before going to bed. Bacteria are more active when a person is sleeping. Realistically most people brush two times a day (morning and night).

A thorough job of brushing generally takes two to three minutes. All surfaces of the teeth should be brushed. The toothbrush bristles should be angled toward the gum line. A gentle scrubbing motion rather than the circular one used for adults often works well for children.

### **Toothbrushes and Toothpaste**

Toothbrushes should be replaced when the bristles are frayed or bent – usually every two to three months. When bristles are frayed or bent, they do not clean the teeth effectively. Bristles should have soft, rounded ends. The size and shape of the toothbrush should allow the user to reach every tooth. Only one pea-size dab of toothpaste is needed for each brushing to provide the right amount of fluoride. It is recommended that children be carefully monitored so that they do not swallow the toothpaste which can cause fluorosis.

# HOW TO BRUSH



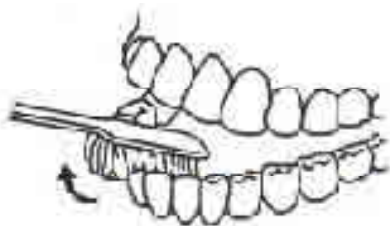
1. Place toothbrush (with pea-sized dab of toothpaste) at angle to teeth. Brush each tooth and the gums in small circles.



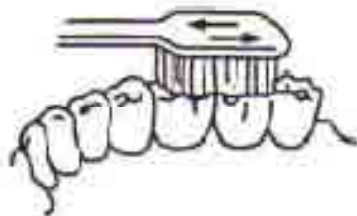
2. Brush the outside of each tooth, upper and lower.



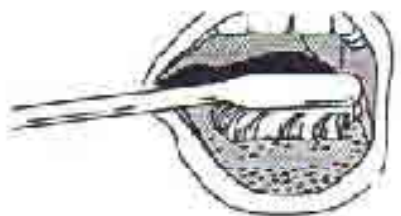
3. Brush the same way on the inside.



4. Tilt the brush and make a few up-and-down strokes to clean the inside of the upper and lower front teeth.



5. Brush the tops of the teeth.



6. Brush the tongue and the roof of the mouth.

## **Eruption of Teeth (Teething)**

When baby teeth are about to come in, the child:

- Drools constantly;
- Has fingers and hands in mouth;
- Can be very restless while sleeping;
- Can be irritable and fussy;
- Can have a runny nose;
- Can have a slight fever.

Sometimes the gums may appear blue or purple instead of the usual pink color. Gums return to pink after the tooth comes in. Teething may be most noticeable when the first teeth erupt. Gums are sore, tender and swollen near the area of the tooth coming in.

To help a child who is teething, a caregiver can give the baby a cold, wet washcloth, a teething ring or even a frozen bagel to chew on. This will help relieve the child's discomfort.

Some conditions commonly associated with teething may actually represent an illness or infection. High fever, diarrhea and vomiting are frequently seen with some type of illness.

## Unit: Sharing Germs

### *Understandings:*

- Cleaning your child's pacifier in your mouth, sharing your spoon with your child or pre-chewing your child's food may transmit germs (*Streptococcus mutans*) which can cause tooth decay in your child.

### *Essential Questions:*

- Why do these germ-sharing practices cause tooth decay?

### *Families Will Know:*

- How germ sharing practices transmit *Streptococcus mutans* from parent to child and cause tooth decay.

### *Families Will Be Able To:*

- Prevent the transmission of *Streptococcus mutans* to their children and prevent their tooth decay.

### *Instructional Activities:*

- Discuss lesson: "The Transmission of *Streptococcus mutans* Can Cause Tooth Decay."
- Discuss alternate practices to reduce risk of tooth decay.

## **The Transmission of *Streptococcus mutans* Can Cause Tooth Decay**

One of the most important germ/bacteria in dental decay is *Streptococcus mutans* (*S. mutans*). It can be transmitted from the caregiver's saliva to the child's mouth. It interacts with plaque and sugary food to cause decay of the tooth enamel. If the caregiver has much dental decay, he/she usually has high levels of *S. mutans*.

If the caregiver cleans the child's pacifier in his/her mouth before giving it to the child, *S. mutans* is transmitted. Cleaning the pacifier with soap and water prevents transmission.

The caregiver sharing a spoon with the child also can cause transmission of *S. mutans*. Always use a clean spoon which only your child uses. This can prevent transmission.

Pre-chewing the child's food by the caregiver is another method of *S. mutans* transmission. Mash the food with a fork prior to giving food to child instead of pre-chewing. This also will prevent transmission of *S. mutans*.

Many families say, "We all have bad teeth." However, this usually means that the family all has the same bacteria. *S. mutans* can be spread from family members to child as early as 10 months of age. Other methods of transmission can be kissing child on the mouth, sharing toothbrushes, cups and even toys. The child is susceptible as soon as the first tooth erupts. Because it is impossible to not show affection to your child, you should reduce the risk of transmission by having good oral health yourself.

## Unit: Snacks and Drinks – Early Childhood 3-5 Years

### *Understandings:*

- Good nutrition has a positive impact on the development of healthy teeth.
- Frequency of snacking as well as the quality of snacks strongly impacts oral health.

### *Essential Questions:*

- What are examples of foods which help maintain good oral health?
- What are the best snacks to provide and when should they be offered so that the young child will have healthy teeth?

### *Families Will Know:*

- What foods their young child needs to eat to maintain good oral health.
- What some appropriate snacks for young children are and when they should be offered.

### *Families Will Be Able To:*

- Select and provide healthy nutritional foods.
- Identify the healthiest snack choices in regard to oral health, as well as how much and how often to offer them to the child.

### *Instructional Activities:*

- Discuss the family's current eating habits re: snacks and drinks.
- Discuss frequency of snacks and timing in day.
- Formulate a snack plan with the parents
- Discuss lesson: "Why Does Sugar Hurt Your Teeth."
- Discuss lesson: "Nutritious Snacks and Food."



- Give handout: “Healthy and Unhealthy Food for Your Teeth.”

## **Why Does Sugar Hurt Your Teeth?**

What people choose for meals and snacks can make a big difference in the health of their mouths. Sugars and starches boost acid production on the teeth. When acid stays on teeth, cavities start forming. How quickly cavities form depends on many factors, but among the most important and controllable are:

- The kind of food eaten (sugary and starchy);
- How often the food comes into contact with teeth;
- How long the food stays on teeth.

The longer a sugary or starchy food stays in the mouth, the longer the plaque and bacteria produce acids that weaken teeth and the greater the chance for cavities.

Food consistency or texture affects acid production. Starches that stay on teeth – such as cookies, sweetened cereal and sugary foods such as nougat candy bars, caramels and donuts prolong acid production. Sugary foods that are sucked or left to dissolve in the mouth – breathe mints, cough drops, and suckers – lengthen the time teeth are coated with sugar. Juicy, fibrous foods such as oranges, apples, carrots and celery generally don't stay on teeth as long.

Sticky-sugary or sticky-starchy foods are a problem if eaten many times during the day and by themselves between meals. These foods should be eaten during or at the end of meals. Without other foods and liquids to clean teeth and clear the mouth, tooth-destroying acid remains on teeth for long periods of time.

## **Nutritious Foods and Snacks**

Nutritious foods and snacks are better choices for oral health and put the person at lower risk for tooth decay. Help control plaque, bacteria and acids by choosing how often a food is eaten, what is eaten with it and what actions are taken after eating.

- Meats, poultry and seafood have few carbohydrates; their protein and fat cannot be used by plaque bacteria. Thus, they have little effect on tooth decay.
- Serve sugary or starchy foods during meals when the presence of other foods can help remove the carbohydrates from the mouth. Naptime or bedtime is the worst time to eat because saliva flow slows down during the sleep.
- Eat the sugary/starchy food in one “dose” or sitting, instead of several portions throughout the day.
- Snack at regular intervals between meals, not all day.
- At snack time, serve the sugary/starchy item with raw vegetables (celery, cucumbers and broccoli), water or cheese to reduce acid on teeth. Drinking milk can provide some protection against plaque’s ability to stick to teeth.
- Adults could chew xylitol gum (available over the counter) after eating to encourage saliva flow and remove food debris from teeth. Xylitol gum helps stop plaque from forming on teeth which means there are fewer places for bacteria to produce acid.
- Swish with water to help remove food particles and reduce acid or brush.

# HEALTHY AND UNHEALTHY FOOD FOR YOUR TEETH



## NUTRITIONALLY AND DENTALLY HEALTHY

Milk  
Plain Yogurt  
Cheese  
Cottage Cheese  
Raw Fruits (apple, orange, banana, peach, nectarines, blueberries, strawberries)  
Raw Vegetables (carrots, celery, cucumbers, broccoli, cauliflower, turnips)  
Unsweetened Fruit Juice (Orange, grapefruit)  
Unsweetened Vegetable Juice (tomato, blended vegetable)  
Tossed Salad  
Coleslaw  
Muffins (plain)  
Pizza  
Crackers  
Breads (plain, whole-grain, enriched)  
Cereals (plain, whole-grain, enriched)  
Rolls (plain, whole-grain, enriched)  
Hard Cooked Deviled Eggs  
Nuts (peanuts, pistachios, mixed nuts)  
Seeds (sunflower, pumpkin, sesame)  
Nuts and Bolts (snack mix)  
Sandwiches (meat, poultry, fish, eggs, cheese, peanut butter)  
Meat, Poultry, Fish, Eggs  
Peanut Butter

## NUTRITIONALLY UNHEALTHY BUT DENTALLY HEALTHY



French Fries  
Popcorn  
Potato Chips  
Pretzels  
Cheese or Corn-flavored snacks  
Sugar-free Soft Drinks  
Sugarless Gum

## NUTRITIONALLY AND DENTALLY UNHEALTHY

Beverages (containing sugar such as regular soft drinks, tea and coffee  
with added sugar)  
Honey  
Jams and Jellies  
Sweet Baked Goods  
Chocolate Nougat-type Candy Bars  
Fudge  
Candies, Lozenges, Regular Gum, Breath Mints  
Caramel Popcorn  
Licorice  
Sugar Cookies  
Marshmallows  
Raisins  
Fruit Roll Ups  
Taffy  
Fig Bars

## **Unit: Medications and Serious Health Problems**

### *Understandings:*

- There is an increased risk of dental decay in children who have frequent intake of sugary medicine.
- Children with special health care needs are at higher risk for dental decay.

### *Essential Questions:*

- What can parents do to decrease the risk of dental decay if their child needs medication that has a sugar base and has special health care needs?

### *Families Will Know:*

- What actions parents can initiate to decrease the risk of dental decay in their child needing sugary medications and/or having special health care needs.

### *Families Will Be Able To:*

- Execute a plan to decrease the likelihood of dental decay in their children with special health needs or needing sugary medications.

### *Instructional Activity:*

- Discuss lesson: “Sugary Medicine and Children with Special Health Care Needs.”

## **Sugary Medicine and Children with Special Health Care Needs**

There is an increased risk of dental decay in children who frequently need to take sugary medicine. The sugars combine with bacterial plaque and attack the enamel of teeth for about 20 minutes. After many such attacks, the tooth begins to decay. Cleaning the child's teeth after taking sugary medication can reduce the opportunity for tooth decay.

Children with special health care needs often experience oral health problems. Medication to treat seizures in children can cause the gums to enlarge. In addition, trauma occurs to the teeth more often in children with seizures. Older children and young adults with Down syndrome often have periodontal disease, dry mouth and bite problems. Some children with developmental disabilities have tooth enamel defects, gum infections, bite problems and get their teeth very late. Children who have frequent vomiting and special diets have increased dental cavities.

Many parents lack confidence in their ability to provide oral care for their children with special health problems. It may also be difficult to clean their children's teeth. In addition, there may be a lack of dentists trained or willing to provide dental care to these children. As these children often have other special problems, oral health is their least concern. However, oral health problems can be severe.

It is important for parents to provide good oral health care every day for their children with special health needs and consult a dentist who is trained and willing to see their child as needed.

## **Unit: Your Dental Home**

### *Understandings:*

- A dental home is an important part of good oral health.
- Maintaining a dental home is an ongoing process.

### *Essential Questions:*

- What is a dental home?
- Why is it important to have a dental home?
- What behaviors are required to establish a dental home?
- What behaviors are required to maintain a dental home?

### *Families Will Know:*

- The definition of a dental home.
- Why it is important to have a dental home.
- How to establish a dental home.
- How to maintain a dental home.

### *Families Will Be Able To:*

- Discuss what a dental home is and why it is important to have one.
- Demonstrate the types of behaviors that are required to establish and maintain a dental home.
- Problem solve what to do if they cannot get a dental appointment.

### *Instructional Activities:*

- “Dental Home” lesson.



# Dental Home

## **What is a Dental Home?**

- Definition of dental home: A dental office or clinic where you and your family feel welcome, have formed a relationship with the dentist and feel comfortable to receive dental care on a regular basis.

## **Why is it important to have a Dental Home?**

- Discuss continuity of care, e.g., someone to keep track of your teeth, check-ups for family members every six months, fewer health problems.
- Discuss advantage of continuity of care:
  - Advice on oral health issues;
  - Keeps teeth healthy and makes you look attractive;
  - Provides current information on the condition of gums, teeth, bite;
  - Watches for germs, plaque, cavities and gum infections;
  - Helps maintain teeth and prevent the need for dentures.

### *Activity:*

- Show pictures of people with unattractive teeth as a result of poor oral health habits.
- Give handout of oral health symptoms which indicate the need for a dental visit.
- Ask question: What does the lack of good dental habits mean for you long term?

## **What behaviors are required to establish a dental home?**

- Discuss chain of events which occur when making a dental appointment:
  - What to say on the telephone;
  - Arrange for transportation;
  - Arrange babysitting.
- Discuss the child visiting the dentist:
  - Do not share any anxiety that you may feel about the appointment;
  - Avoid statements that suggest an unpleasant situation, e.g., "It won't hurt;"
  - Don't bribe the child to go to the dentist;
  - Don't threaten subsequent visits as punishment.

### *Activity:*

- Role play making a dental appointment.
- Give booklet "Going to the Dentist" for children.

## **Problems finding a dental home?**

- Discuss what to do if the first dentist called cannot give a dental appointment:
  - Be prepared to make more than one phone call;
  - For families on Medicaid/ Healthy Start/ Healthy Families, contact the county Department of Job and Family Services to find a provider;
  - Find out if there is a Safety Net dental clinic in the city or county.

*Activity:*

- Role play what to do if you can't get a dental appointment.
- Ask question: Where else can you call to find dental care?

**What behaviors are required for maintaining a dental home?**

- Know the behaviors required for arranging appointments;
- Know how to make a follow-up appointment in the dentist's office or over the telephone.

*Activity:*

- Develop a plan for appointment schedules.
- Choose a prominent place for appointment reminders.

# Visiting the Dental Office

## Dental Home Staff Members

- The ***dentist*** is a primary oral health care provider trained in the science of prevention, diagnosis and treatment of oral disease. Dentists must be licensed by the state.
- The ***dental hygienist*** cleans your teeth and provides oral health education and must be licensed by the state.
- The ***dental assistant*** helps the dentist with dental procedures. A dental assistant works with the dentist at the dental chair.
- The ***dental receptionist*** helps patients schedule appointments, answers the telephone and assists with financial records.

## **Unit: Dental Injuries**

### *Understandings:*

- Parents can care for their children's dental injuries.
- Parents can prevent dental injuries.

### *Essential Questions:*

- How can parents care for dental injuries?
- How can parents prevent dental injuries?

### *Families Will Know:*

- First aid procedures for dental injuries.
- How to prevent dental injuries.

### *Instructional Activities:*

- Discuss "Treatment of Dental Injuries" lesson.
- Give handout.
- Discuss "How to Prevent Dental Injuries" lesson.
- Give handout.

# Treatment of Dental Injuries

## Dental Injury

*What do I do if a primary (baby) tooth is knocked out?*

- Do not attempt to replace the primary tooth in the child's mouth.
- Control bleeding by applying firm but gentle pressure to the area.

*What do I do if a primary (baby) tooth is loosened, chipped or pushed into the gums?*

- Rinse affected area with warm water.
- Place cold compress over area to minimize swelling.

*What do I do if a permanent tooth is knocked out?*

- Gently replant tooth into socket and hold tooth in place with tissue
- If not possible to replant tooth then place in a glass of cool skim or low-fat milk.
- Get child and tooth to the dentist immediately.

**See a dentist to see if the injury is more complicated or needs professional treatment.**

## **How to Prevent Dental Injuries**

It is very important to prevent injuries to your child's teeth. When the child is very young:

- Do not leave him/her unattended;
- Do not purchase or let him/her use a walker;
- Install gates on stairs;
- Encourage use of a bicycle helmet when riding toys and bikes;
- Have emergency number of doctor/dentist available in a prominent place.

## **Unit: Lift the Lip: Early Childhood 3-5 Years**

### *Understandings:*

- Changes in your child’s mouth can indicate dental problems.
- Knowing what to look for can catch dental problems early.
- Child needs to be seen by a dentist for suspected dental problems as soon as possible.

### *Essential Questions:*

- What changes should parents watch for in their young child’s mouth?
- What should parents do if they suspect their child has dental problems?

### *Families Will Know:*

- How to “Lift the Lip” to check for dental problems.
- How to recognize eruption of teeth, white, and/or brown spots on teeth, gray colored teeth, teeth with plaque, and bite problems.
- When to seek dental care for their child.

### *Families Will Be Able To:*

- Successfully “Lift the Lip” to check for dental problems.
- Successfully detect potential dental problems in their child’s mouth and know when to seek dental help.

### *Instructional Activities:*

- Discuss lesson: “Baby Teeth with Plaque.”
- Discuss lessons: “White Spots,” “Brown Spots/Cavity” and “Gray Spots.”
- Discuss lesson: “Decay/Cavities.”
- Discuss lesson: “Lift the Lip.”

## **Baby Teeth with Plaque**

Plaque is a sticky, colorless layer of germs and saliva that sits on the teeth and gums. When plaque is left on the teeth and gums, it hardens and becomes tartar or calculus. When the germs break down the sugars in the food, acids are formed. This happens for about 20 minutes after the food is eaten. These acids can eat away the enamel on the teeth. The result is damage to the teeth also known as cavities.

To remove the plaque from the teeth and gums, parents should use a damp cloth or toothbrush.



## **White Spots**

The first sign of a cavity starting on a tooth is a “white spot.” These spots are caused by germs in plaque eating away the enamel of the tooth. These spots are found near the gums where plaque sits. They look chalky and white when the teeth are dry. These spots may not turn into cavities if they are brushed and kept clean. This is why it is so important to brush. Fluorosis may also cause white spots. Fluorosis is caused by too much fluoride.

## **Brown Spots/Cavity**

Most brown spots on teeth are cavities, but any brown spot is not normal and should be examined by a dentist. Cavities can be on top of the teeth, on the sides of teeth and on the teeth near the gums. Just because the brown spot doesn't hurt, doesn't mean it's not a cavity. Some spots can be due to injury. A tooth can come in brown if the gums were hurt from a fall.

## **Gray Coloring**

Gray coloring of the entire baby tooth often is caused by some sort of injury. Unless the tooth is painful and loose, there is not much to be done, but evaluation by a dentist is highly recommended.

Another cause of gray teeth is dental cavities. These are often gray spots on parts of the tooth that look dull. Have a dentist look at this spot.

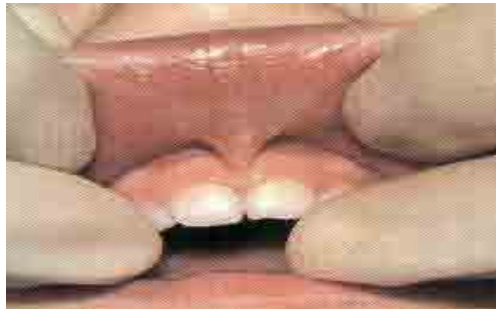
## Decay/Cavities

- Bacteria (germs) are connected to dental decay. These bacteria are called *Streptococcus mutans* and do not appear in the mouth of infants until after the teeth come in. Most likely infants become infected from their parents, siblings or other individuals through contact. Usually the mother is considered to be the source. Mothers who have a lot of cavities are more likely to have the bacteria and infect their children.
- Cavities develop in the grooves of the back teeth which are hard to reach when brushing, but where food usually sticks. Cavities also appear on smooth surfaces if not brushed.
- One of the most important factors related to cavities is sugar. Actually, the development of cavities depends on how often the child eats sugary foods, not on the amount eaten. Changing the child's diet to decrease how often sugar eaten is very important.
- In children who still drink from the bottle, one of the most important causes of decay is putting them to bed with a bottle. The sugar from the juice or milk remains on the babies' teeth overnight. Try to give the baby water at naptime or bedtime.
- Fluoride is the most effective measure against dental decay.
- Taking care of your teeth is essential. Parents should brush children's teeth.
- Get your child used to visiting the dentist (dental home).

## Lift the Lip

Tooth decay in children under age 3 is preventable. If found early, it can be stopped and even reversed. Parents/caregivers can be taught to “Lift the Lip” to check their child’s teeth for early signs of tooth decay.

Two adults sit facing each other knee to knee. The adult holding the child gently lays them back on the laps so to tilt the child’s head back. This adult can help hold wiggly arms and legs. Place the head so you can see the four upper front teeth. Now have the adult in whose lap the child’s head lies gently lift the lip.



Focus on the four upper front teeth. This is where you are most likely to find signs of possible dental problems: visible plaque, white or brown spots. Look at both the front and the back of the four upper front teeth, near the roof of the mouth.

As new teeth come in the mouth they will need to be checked the same way.

So what does a tooth problem look like?

1. Visible Plaque is a thick layer of germs and food. Decay starts to form under plaque that is not regularly cleaned away.



2. Early decay first shows as white spots or a white line along the upper part of the tooth closest to the gums.



3. Moderate decay shows as large brown spots that are really holes in the teeth.



4. Severe decay is obvious because the teeth begin to chip off and have a broken appearance, sometimes looking like little dark nubs.



“Lift the Lip” takes only a few minutes. If the child cries or fusses, it’s OK because the child’s mouth will be wide open for viewing.

If you see any of these problems the child should be referred to a dentist. Early problems can many times be reversed with fluoride or repaired by a dentist. If left untreated the child may require hospitalization for treatment.

Remember to “Lift the Lip” and check your child’s upper front teeth at least once a month.