



Adolescence 11-21 years 9

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: Snacks and Drinks – Adolescence 11-21 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 child will have healthy teeth?

Families Will Know:

- What foods their child needs to eat to maintain good oral health.
- What some appropriate snacks for children 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.

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: Teeth Cleaning

Understandings:

- Daily dental care routine is important for healthy teeth.
- There is a correct way to brush and floss.

Essential Questions:

- Why is it important to have a daily care routine for healthy teeth?
- What is the correct way to brush and floss?

Families Will Know:

- The daily dental care routine required for healthy teeth.
- The correct way to brush and floss.

Families Will Be Able To:

- Demonstrate behaviors consistent with a daily dental care routine for healthy teeth.
- Demonstrate the proper way to brush and floss teeth.

Instructional Activities:

- Discuss lesson: "Importance of Brushing and Flossing."
- Show instructional charts for proper brushing and flossing.

The Importance of Brushing and Flossing Teeth

The mouth contains many germs. Some germs combined with saliva and foods form plaque on the teeth. 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. If this plaque is not removed it hardens into tartar within 24-36 hours, requiring removal by a dental professional (dentist or dental hygienist). Tartar collects germs and makes gums red, puffy and easy to bleed.

When and How to Brush

Brushing removes the plaque from surfaces of the teeth. Ideally, everyone should brush following meals and snacks and always brush before going to bed. Bacteria are more active when a person is sleeping. Realistically, most people brush two times a day: in the morning and at 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. Short circular motions should be used.

Toothbrushes and Toothpaste

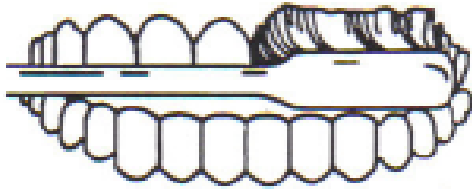
Toothbrushes should be replaced when the bristles are frayed or bent – usually every two to three months. When bristles are frayed or bent, they do not clean the teeth effectively. Bristles should have soft, rounded ends. The size and shape of the toothbrush should allow the user to reach every tooth. Only one pea-sized dab of toothpaste is needed for each brushing.

Flossing

In addition to brushing the teeth, a person should also floss the teeth. Flossing removes plaque from between the teeth. Everyone over age 8 should floss once a day. Children 8 to 11 years may need assistance with flossing until they can easily move the floss in between their teeth.

As with brushing, a regular pattern for flossing should be established to ensure all sides of the teeth are cleaned routinely. Start with 12-15 inches of floss, wind floss around one of the middle fingers. The remaining floss should be wound around the middle finger of the opposite hand to “take up” the used floss. The floss is held tight between the thumb and forefingers with about one inch of floss between them. Gently guide the floss between the teeth. Do not snap the floss into the gums. Curve the floss into a C-shape against the side of the tooth at the gum line. Hold the floss tightly against the tooth. Gently scrape the side of the tooth, moving the floss away from the gum and using an up-and-down motion. Repeat the procedure on the rest of the teeth, including behind the back teeth.

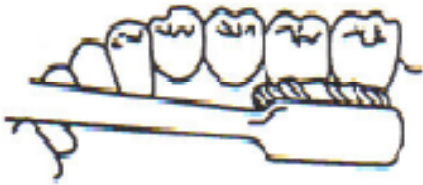
HOW TO BRUSH



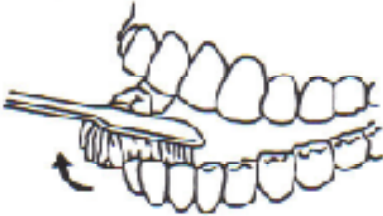
1. Place toothbrush (with pea-sized dab of toothpaste) at angle to teeth. Brush each tooth and the gums in small circles.



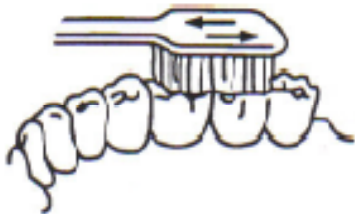
2. Brush the outside of each tooth, upper and lower.



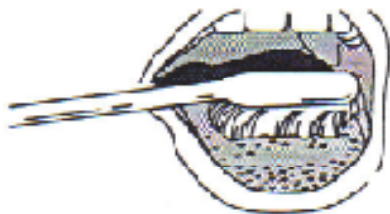
3. Brush the same way on the inside.



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.

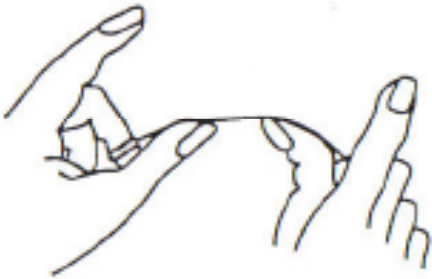


6. Brush the tongue and the roof of the mouth.

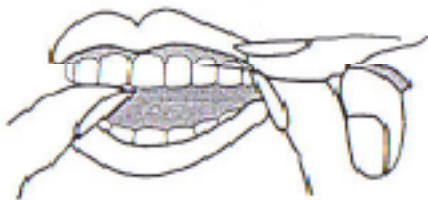
HOW TO FLOSS



1. Start with 12-15 inches of floss and wind floss around one of the middle fingers. The rest of the floss should be wrapped around the opposite hand to “take up” the dirty floss.



2. The floss is held tight between the thumb and the pointer finger with about an inch of floss between them.



3. Gently guide the floss between the teeth. When it reaches the gum, curve it into a C-shape and beginning at the gumline, scrape the tooth gently up and down. Repeat for both sides of each tooth.

4. Use a back-and-forth motion to guide floss between the teeth.

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 Sealants

Understandings:

- Dental sealants are thin plastic coatings which are painted onto the chewing surfaces of back teeth and help to protect teeth from tooth decay.
- Sealants are applied to the chewing surfaces of the permanent first (6-year) and second (12-year) molars.

Essential Question:

- How do sealants prevent tooth decay?

Families Will Know:

- The importance of sealants for their children's teeth.

Families Will Be Able To:

- Ask dentist for sealants for their children to help prevent tooth decay.

Instructional Activity:

- Discuss sealant lesson.
- Give handout.

Dental Sealants

A sealant is a plastic material that is usually applied to the chewing surface of the back teeth. This plastic resin bonds into the depressions and grooves (pits and fissures) of the chewing surfaces of back teeth. The result is that the surface of the tooth is somewhat flatter and smoother. The sealant acts as a barrier, protecting enamel from plaque and acids.

Thorough brushing and flossing help remove food particles and plaque from smooth surfaces of teeth. But toothbrush bristles cannot reach all the way into the depressions and grooves to clean out food and plaque. Sealants protect these vulnerable areas by “sealing out” plaque and food. There are no longer any places on the chewing part of the tooth that the bristles of a toothbrush can’t reach and clean. Because plaque can be removed more easily and effectively, there is much less chance that decay will start.

First permanent molars erupt into the mouth at about age 6 years. Placing sealants on these teeth shortly after they erupt protects them from developing cavities in areas of the teeth where food and bacteria collect. Sealants applied to these susceptible tooth surfaces help to prevent tooth decay.

Second permanent molars erupt into the mouth at about age 12 years. Pits and fissures on the surfaces of these teeth are as susceptible to dental caries as the first permanent molars of younger children. Therefore, young teens need to receive dental sealants shortly after the eruption of their second permanent molars.

Sealants are easy for the dentist or dental hygienists to apply and it takes only a few minutes to seal each tooth. The teeth that will be sealed are cleaned. Then the chewing surfaces are prepared with a liquid to help the sealant adhere to the tooth. The sealant is then “painted” onto the tooth enamel, where it bonds directly to the tooth and hardens. Sometimes a special curing light is used to help the sealant harden.

As long as the sealant remains intact, the tooth surface will be protected from decay. Sealants hold up well under the force of normal chewing and usually last several years. Sometimes reapplication is needed. During regular dental visits, the dentist will check the condition of the sealants and reapply them when necessary. Dental sealants do not replace fluoride – they work together to prevent tooth decay.

Unit: Mouthguards

Understanding:

- Mouthguards help prevent injury to the teeth, lips, cheeks and tongue when playing sports.

Essential Questions:

- What is a mouthguard?
- Why is it important to wear a mouthguard while playing sports?
- For what sports are mouthguards recommended?
- What are the different types of mouthguards?

Families Will Know:

- The importance of wearing a mouthguard when playing sports.
- The different types of mouthguards.

Families Will Be Able To:

- Demonstrate knowledge for which sports mouthguards are recommended and the ability to choose a suitable type of mouth guard.

Instructional Activities:

- Discuss lesson: "Mouthguards".
- Discuss sports for which mouthguards are recommended.
- Give handout.
- Discuss types of mouthguards.
- Give handout.

Mouthguards

A mouthguard is a flexible appliance made out of plastic, which fits around the upper teeth because they are the most frequently injured. It is worn during athletic and recreational sports.

Mouthguards are important because:

- Dental injuries are the most common type of injury to the face.
- Half of all dental injuries can be prevented.
- An athlete is 60 times more likely to cause damage to his/her teeth when not wearing a mouthguard.
- A broken tooth is more expensive than a mouthguard.
- Sixty percent of facial injuries occur during sports practice.
- In the United States, 5 million teeth are knocked out each year – mainly front teeth.

A mouthguard can also prevent serious injuries such as concussions, cerebral hemorrhages, jaw fractures and neck injuries by helping to avoid situations where the lower jaw is thrust into the upper jaw. Mouthguards are effective in preventing cutting and bruising of the lips and cheeks, especially for those who wear orthodontic appliances.

Sports for which mouthguards are recommended include:

Acrobatics	Gymnastics	Skateboarding
Baseball	Handball	Skiing
Basketball	Lacrosse	Skydiving
Bicycling	Ice Hockey	Soccer
Boxing	Martial Arts	Squash
Discus	Racquetball	Volleyball
Field Hockey	Rollerblading	Water Polo
Football	Rugby	Weightlifting
	Shotputting	Wrestling

There are three types of mouthguards

Stock Mouthguard

The stock mouthguard, available at most sporting good stores, comes in limited sizes (usually small, medium and large) and is the least expensive and least protective. These protectors are ready to be used without any further preparation; simply remove from the package and place in the mouth. They are commonly constructed of rubber or polyvinyl material. They are bulky and lack good retention, and therefore must be held in place by constantly biting down. This interferes with speech and breathing, making the stock mouthguards the least acceptable and least protective.

Mouth Formed or Boil and Bite Mouthguard

This is the most commonly used mouth guard on the market. Most marketing and advertising in the past has been for this type of mouthguard. Made from thermoplastic material, they are immersed in boiling water and formed in the mouth by using finger, tongue and biting pressure. Available in limited sizes, these mouth guards do not cover all the teeth. They also are uncomfortable to wear.

Custom-made Mouthguards

The custom-made mouthguard is individually designed and constructed by a dentist. It is constructed over a plaster replica of the individual's teeth and is more expensive. It offers exceptionally good fit, comfort and overall quality and is the best at preventing injuries.

A strap is often fastened to any of these mouthguards, protecting against loss and allowing the mouth guard to be removed or suspended from other face gear when the individual is not in play.

Mouthguards can last a long time if they are cared for properly. The mouthguard should be rinsed under cold tap water after each use and allowed to dry before storing.

Unit: Bad Breath, Bleeding Gums and Toothache

Understandings:

- Bad breath, bleeding gums and toothache can indicate oral health problems.
- Oral health problems need to be seen by a dentist.

Essential Questions:

- Why do these oral health problems in a child's mouth indicate the need to be seen by a dentist?
- When should these oral health problems be seen by a dentist?

Families Will Know:

- What can cause bad breath, bleeding gums and toothache?
- Why they should seek dental help.

Families Will Be Able To:

- Recognize the symptoms of oral health problems that need to be seen by a dentist as soon as possible such as toothache, or at next appointment such as bad breath.

Instructional Activities:

- Discuss lesson: "Bad Breath."
- Discuss lesson: "Bleeding Gums."
- Discuss lesson: "Toothache."

Bad Breath

The major source of bad breath is poor oral hygiene and food debris on the back of the tongue.

Certain foods cause bad breath - such as garlic and onions. Bad breath can also be caused by dry mouth or the lack of saliva. Tobacco products cause bad breath. Bad breath may be a sign of a medical disorder.

If you don't brush and floss daily, food collects between the teeth, on the tongue and around the gums causing bad breath. Brushing your tongue when you brush your teeth may help. Also, it is important to drink lots of water to wash away food from the teeth, tongue and gums.

Persistent bad breath and taste in the mouth is also a warning sign for gum disease. If bad breath does not go away after brushing and flossing, this could be the gum disease called gingivitis or periodontal disease. See a dentist if this occurs.

Bleeding Gums and Gingivitis

Healthy gums should not bleed. Gums that bleed can be a sign of gingivitis. Gingivitis is infection and swelling of the gums. It is one of the most common gum problems. Early gingivitis can be painless and may not be noticed. Symptoms can include red, soft or swollen gums, bad breath and a bad taste in the mouth. Pregnant women and untreated diabetics are more likely to get gingivitis.

Bleeding gums can also be a sign of periodontal disease. Periodontal disease can cause infected gums to pull away from the teeth because of damaged bone around the teeth. Eventually your teeth may become loose and fall out. Brushing and flossing are the best ways to prevent bleeding gums, gingivitis and periodontal disease.

Other causes of bleeding gums

Bleeding can also be due to injury of the gums by any sharp item such as a toothpick, fish bone or pin.

Toothache

What does it feel like?

Feeling a sharp pain when biting down. This could be a cavity, a cracked tooth or a loose filling. See your dentist immediately.

Having severe pain, pressure and swelling in the mouth that does not go away. It is possible that this is an abscess, which is an infection in the tooth and/or gum. See your dentist immediately.

Upper teeth and jaw ache, but the pain is not sharp. This may be a sinus infection. Sinus pain can “travel” to the upper jaw. Also, grinding of the teeth can cause a dull ache in the upper jaw. See your medical doctor.

After receiving dental treatment, teeth are sensitive to heat or cold. Temporary tooth pain is normal after dental treatment. The pain should go away within four to six weeks. If it doesn't, or if it gets worse, be sure to see your dentist soon.

Experiencing a sudden slight pain in the teeth when eating or drinking something hot or cold, which then goes away. This usually means a loose filling or gums pulling away from the teeth. A toothpaste to relieve sensitivity can be used, but if pain persists, see your dentist.

If you have a toothache, you need to see a dentist as soon as possible.

Unit: Cigarettes and Smokeless Tobacco

Understandings:

- Cigarettes and smokeless tobacco can affect the gums, teeth, breath, blood pressure, heart rate and other parts of the body.
- Tobacco use can lead to oral cancer.

Essential Questions:

- How can tobacco use affect oral health and other parts of the body?
- How can tobacco use lead to oral cancers?

Families Will Know:

- Why they should avoid cigarettes and smokeless tobacco products.

Families Will Be Able To:

- Identify the possible outcomes from cigarette and smokeless tobacco use.
- Identify the signs and symptoms of oral cancer.

Instructional Activities:

- Discuss lesson: “Effects Tobacco Can Have on my Oral Health.”
- Discuss lesson: “Tobacco Products Can Cause Oral Cancer.”
- Discuss signs and symptoms of oral cancers – leave handout.

Effects Tobacco Can Have On My Oral Health: **Cigarettes, cigars and smokeless tobacco products**

Use of any tobacco products can greatly increase your risk of developing gum disease (periodontal disease). Tobacco damages the bone and soft tissues that support your teeth. This causes receding gums, which increases sensitivity to hot and cold and tooth decay in these areas. Without treatment, your teeth may become loose, painful and even fall out.

Use of any tobacco products can delay healing after a tooth extraction or other oral surgery.

It can also contribute to:

- Bad breath
- Stains and yellowing of your teeth
- Build up of tartar on your teeth
- Mouth sores
- Facial wrinkling and appearance of aging
- Delayed healing after oral surgery and tooth extractions
- Leukoplakia – A white patch or plaque that is considered to be precancerous
- Cancer of the pharynx (throat), larynx (voice box) and esophagus (connects mouth to stomach)

Smokeless tobacco products such as snuff and chewing tobacco often contain sugars to enhance their flavors, which increase risk of tooth decay. They also typically contain sand and grit, which can wear down your teeth.

Tobacco Products Can Cause Oral Cancer

The single greatest risk factor for oral cancer is tobacco use in any form. Tobacco causes 90 percent of oral cancers. Only 50 percent of people diagnosed with oral cancer are alive after five years. Seventy percent of oral cancers have spread to lymph nodes in the body by the time the cancer is diagnosed. Oral cancer can include cancer of the lips, tongue, cheeks, gums, the floor and roof of mouth and the throat (esophagus). In addition, tobacco juices can induce cancer of the larynx and stomach.

Surgery for oral cancer is often disfiguring. If the cancer is not caught right away, major surgery is often needed to take out parts of the mouth, tongue or jaw. Head and neck radiation is often part of the treatment and can cause severe complications such as burned tissues, difficulty swallowing and reduced saliva flow.

Tobacco products can cause oral cancer by damaging the lining of the oral cavity and oropharynx, causing tissue to grow more rapidly to repair the damage. Researchers believe that DNA-damaging chemicals in tobacco are linked to the increased risk of oral cancer. Cigars are not a safe alternative to cigarettes. Even if you do not inhale cigar smoke, you are still at risk for oral and throat cancers.

Signs and Symptoms of Oral Cancer

- A persistent sore or irritation that does not heal (after two weeks).
- Color changes such as the development of red or white patches in the mouth or on the lips.
- Pain, tenderness or numbness anywhere in the mouth or lips.
- A lump, thickening, rough spot, crust or small eroded area.
- Difficulty in chewing, swallowing, speaking or persistent hoarseness and moving the jaw or tongue.
- Change in bite – in the way your teeth fit together.
- Repeated bleeding from the mouth or throat.
- Swelling, lump or growth anywhere in or about the mouth or neck.

Unit: Oral Piercing

Understanding:

- The effects of oral piercing on oral health.

Essential Question:

- How can oral piercing affect oral health?

Families Will Know:

- Why they should avoid piercing of the oral cavity.

Families Will Be Able To:

- Identify the possible complications of oral piercing.

Instructional Activities:

- Discuss lesson: “Effects of Oral Piercing on Oral Health.”
- Discuss complications of oral piercing from the lesson– leave handout.

The Effects of Oral Piercing on Oral Health

Pierced lips and tongues are fashionable, but may lead to oral health problems. Because your mouth contains millions of bacteria, infection at the site of the piercing is common. Common symptoms after oral piercing include pain, swelling, infection, an increased flow of saliva and damage to the gums. Piercing can also cause uncontrollable bleeding and nerve damage. Pain and swelling are common and your tongue could swell large enough to close off your airway.

Studies have shown 50 percent of people who had worn a barbell piercing in their tongue for more than two years had their gum tissue pull away from the inside of their lower front teeth. Besides giving an appearance of aging, these receding gums can lead to sensitivity and tooth loss. In addition, the jewelry can chip, scratch or crack teeth if the jewelry strikes them. Chipping of the back teeth occurred in nearly half of all people who had worn the piercing for more than four years.

Oral piercing puts you at risk of contracting hepatitis B, C, D and G. In addition, you are at risk of a serious inflammation of the heart called bacterial endocarditis. This happens when oral bacteria enter the blood stream at the site of the piercing, where it can travel to the heart. This is a risk for people with heart valve problems.

There is always a possibility that the jewelry can come loose in the mouth and become a choking hazard. If the jewelry is swallowed, it could result in injury to the internal organs.

Unit: Casual Observation – Adolescence 11-21 Years

Understandings:

- Changes in a child’s mouth can indicate oral health problems.

Essential Questions:

- What changes should mothers watch for in their child’s mouth?

Mothers Will Know:

- Why decay, discolored teeth, plaque on teeth and missing teeth can indicate oral health problems.

Mothers Will Be Able To:

- Successfully recognize their child’s oral health problems.

Instructional Activities:

- Discuss lesson: “Decay/Cavities.”
- Discuss lesson: “Discolored Teeth.”
- Discuss lesson: “Adult Teeth with Plaque.”
- Discuss lesson: “Missing Teeth.”

Decay/Cavities

- Bacteria (germs) are connected to dental decay. These bacteria 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 with close contact. Usually the mother is considered to be the source. Mothers who have a lot of cavities are more likely to have these 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 that can easily be brushed.
- One of the most important factors related to cavities is sugar. Actually, the development of cavities depends on how often sugary foods are eaten and not on the amount eaten. Changing the diet to decrease how often sugar is 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 them water at naptime or bedtime, or get them to sleep without a bottle at all.
- 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 at an early age (12 months of age or 6 months after first tooth comes into the mouth).

Discolored Teeth - Adult

Natural tooth colors are on a scale from gray to white to yellow. Some people are simply born with yellowish or grayish teeth.

Some teeth are discolored on the surface of the teeth. Some teeth are discolored from the inside of the tooth. Discoloration may be all over the tooth or appear as spots or lines in the enamel.

Causes of discolored teeth:

- Trauma – tooth becomes discolored gray from being hit;
- High fever when the tooth is forming;
- Excessive fluoride;
- Taking tetracycline before 8 years of age;
- Not cleaning your teeth daily;
- Decay – tooth looks dark because of decay;
- Eating and drinking foods or beverages that can stain the teeth;
- Old silver fillings make the tooth appear black or gray;
- Tobacco products stain teeth.

Adult Teeth with Plaque

Plaque is the soft, yellow-white material found on teeth and gums. While it is soft a person can clean it off with a toothbrush and floss. When plaque gets hard it is called tartar or calculus. Tartar can only be removed by the dentist or dental hygienist at the dental office.

Plaque causes tooth decay

Bacteria in plaque digest food left on your teeth and gums. The waste product is an acid. This acid dissolves the tooth structure and causes a cavity. Brushing and flossing removes the plaque. It is important to remove the plaque daily.

Plaque causes gingivitis

Healthy gums are pale pink and firm. When the gums become inflamed and swollen gingivitis is present. Typically, this results from the bacteria in plaque and poor oral hygiene.

Gingivitis is the inflammation of the gums around the teeth due to improper cleaning of teeth. It is nearly always reversible. The usual signs of gingivitis are gums which are swollen and bleed on brushing.

Thorough daily brushing, regular flossing and seeing your dentist every six months can reduce the chances of developing serious gingivitis and periodontal disease.

Missing Teeth

The No. 1 cause of missing multiple teeth in adults is periodontal disease which is a gum and bone disease. In a number of people, periodontal disease occurs when the gums become inflamed and infected. This infection spreads from the gums to the bone that supports the teeth in the mouth. The teeth become loose and eventually fall out.

Signs of periodontal disease:

- Swollen gums;
- Gums that appear bright red or red-purple;
- Gums that appear shiny;
- Gums that bleed easily – blood on toothbrush even with gentle brushing;
- Gums that are tender when touched, but painless otherwise;
- Bad breath;
- Loose teeth.

Why is it important to keep your teeth?

When a permanent tooth is lost, the teeth beside it begin to shift. It becomes harder to chew your food.

Loss of teeth often causes a feeling of aging. Without the teeth and bone to support your cheeks and lips, your face caves in and makes you look older.