

HEALTHY TEETH!

K-1st Grade

Nutrition Objectives:

- Students will learn how to take good care of their teeth.
- Students will learn the correct way to brush their teeth.
- Students will learn that while many foods are harmful to their teeth, some foods are actually beneficial to their teeth, especially calcium-rich foods.
- Students will learn they need **3-A-Day** of Dairy for strong bones and teeth.

Colorado Content Standards	Application of Standard
<p>Science Standard 3: Life Science: Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment.</p> <p>Students will:</p> <ul style="list-style-type: none"> ▪ describe the basic food requirements for humans as summarized in the nutrition pyramid. 	<p>Students will:</p> <ul style="list-style-type: none"> ▪ learn the correct way to brush their teeth to prevent tooth decay. ▪ identify the foods that help maintain healthy teeth. ▪ identify the foods that are more harmful to teeth.
<p>Literacy Standard 1: Students read and understand a variety of materials.</p> <p>Students will:</p> <ul style="list-style-type: none"> ▪ use a full range of strategies to comprehend materials such as directions, nonfiction material, rhymes and poems, and stories. <p>Literacy Standard 2:</p>	<p>Students will:</p> <ul style="list-style-type: none"> ▪ read the words to the song "This Is The Way We Brush Our Teeth"

<p>Students write and speak for a variety of purposes and audiences.</p> <p>Students will:</p> <ul style="list-style-type: none"> ▪ generate topics and develop ideas for a variety of writing and speaking purposes (<i>for example, writing a letter to an adult</i>). ▪ choose vocabulary that communicates their messages clearly and precisely. ▪ create readable documents with legible handwriting. 	<p>Students will:</p> <ul style="list-style-type: none"> ▪ draft a letter to their families sharing what they learned about dental care.
<p>Literacy Standard 6: Students read and recognize literature as a record of human experience.</p> <p>Students will:</p> <ul style="list-style-type: none"> ▪ read, respond to, and discuss a variety of literature such as folk tales, legends, myths, fiction, rhymes and poems, non-fiction, and content-area reading; 	<p>Students will:</p> <ul style="list-style-type: none"> ▪ listen to the book "Those Icky Sticky Smelly Cavity-Causing but ... Invisible Germs" and understand that cavity-causing bacteria are present in our mouths, but with good dental care we can avoid cavities.

Lesson Specific Nutrition Information:

- The visible part of the tooth is called the crown. The outer layer of the crown is called enamel. It is the hardest substance in our bodies and it protects the tooth. Beneath the enamel is the layer called dentin, which is a hard, yellow substance. The center of the tooth is called the pulp, which is soft. Blood vessels and nerves run through the pulp, bringing nutrients to the dentin, keeping the tooth strong and healthy.
- We have millions of bacteria inside our mouths. Every time we eat, the bacteria feast on the food remaining in our mouths. As the bacteria grow and multiply, your teeth are eventually covered with a clear, sticky film called plaque. Plaque is a combination of bits of food, bacteria, and other substances. It forms mainly between the teeth and where the gums and teeth meet. Plaque can even build up on our teeth while we sleep. Plaque continues to build up if you do not clean your teeth regularly. When plaque is left for a few days or more on your teeth, it hardens and becomes tartar, which is more difficult to remove. Tartar can damage your gums.

- After we eat and drink, the bacteria in our mouths feed off of the left-over food particles. Bacteria produce acid as a by-product of this food breakdown. This acid then sticks to the plaque on our teeth. The higher the sugar content of the food and drink, the more acid that forms. The acid slowly eats through the tooth enamel. This is called tooth decay. When the acid eats through the enamel and reaches the softer dentin, the acid works faster making a hole, or cavity in the tooth. Toothaches occur when the acid from the bacteria comes in contact with the dentin. This often indicates a cavity.
- Gum disease is caused by bacteria and plaque growing down between the teeth and the gums, but this usually affects adults more than children.
- The primary method of fighting tooth decay is brushing our teeth. Brushing scrubs away the sticky plaque that builds up on the teeth. Fluoride in toothpaste and water makes the enamel on our teeth stronger, which helps to protect our teeth. Adults and children should brush at least two times a day, in the morning and evening. Research shows that bacteria usually cannot make enough acid to damage teeth that are brushed at least once every 24 hours.
- The most effective method of tooth brushing is up and down and around in circles. Brush the top teeth downward from the gums and the bottom teeth upward from the gums. All surfaces of the teeth must be brushed, in addition to the gums and the tongue.
- The texture of a food eaten greatly affects the likelihood that bacteria will stick to the enamel. Many foods have adverse effects on dental health, in addition to the obvious sweet foods such as cookies and candies. Starchy foods are broken down by saliva into a sugar called maltose, and bacteria love maltose. Starches actually remain on the tooth longer than sugars, giving bacteria more time to make acid that can cause cavities. Sticky foods such as dried fruits require a good brushing after eating to prevent the sugars from lodging in the plaque on the teeth. Crunchy, non-sticky foods, such as apples are the best for maintaining healthy teeth.
- Consuming cheese immediately after meals or as a between-meals snack also helps reduce the risk of tooth decay. Calcium, phosphorus and other components in cheese may contribute to this beneficial effect. (data from www.nationaldairycouncil.org)
- Flossing once a day to remove food and plaque from between the teeth is recommended. This should be done with the assistance of an adult for younger children.

MATERIALS, INGREDIENTS and PREPARATION

Equipment and Ingredients	Teacher Preparation	Food Preparation
Scissors Crayons or markers Small plates* Toothbrushes* Bowls* Plastic spoons* Napkins* 1 gallon milk 1 large box cereal	<ul style="list-style-type: none"> ▪ Transparency or chart paper with song ▪ Book "Those Icky Sticky Smelly Cavity-Causing but... Invisible Germs" by Judith Anne Rice ▪ Activity sheet copies* 	Open box of cereal and milk and have ready to pour in bowls. Note: Keep milk refrigerated until ready to serve.

*one per student

**any child-friendly cereal that has less than 5 grams of sugar per serving.

SET-UP

Copies:

- Make copies of both activity sheets (each student).

Work area:

- Students will work individually at their desks.
- Have toothbrushes ready to hand out.
- Have nutrition table ready for lesson materials and ingredients.

Other-prep:

- Prepare song by writing the words on large chart paper, on blackboard, or making an overhead transparency (optional for Kindergarten class).
- Make a paper plate mouth ahead of time so that you have an example to show the children (Process, Step 4).
- Display MyPyramid poster.
- If using transparency, have overhead projector ready to use.

INTRODUCTION WITH STUDENTS

- **“Today we are going to learn how to take good care of our teeth. During the upcoming holidays, some of you may be eating candy and other sweet foods as you celebrate. Name some foods that are sugary (candy, soda, ice cream, etc.) Sugar and sugary foods may be harmful to your teeth, especially if you do not brush your teeth after eating sugary foods.”**
- Read *Those Icky Sticky Smelly Cavity-Causing but...Invisible Germs*.
- Discuss the germs that attacked Sal's teeth. **“We call these germs ‘Sugar Bugs’ because when you eat sugar the germs go crazy and start eating holes in your teeth like the cavity-causing germs in the story.**
- **“What did Sal do to get rid of the germs that were on his teeth?”**(He brushed his teeth and he went to the dentist to get his teeth cleaned.)
- **“What else can we do to keep our teeth clean? We floss.** If students do not know what flossing is, explain to them the process of using dental floss to remove food that gets stuck between their teeth. Flossing is important and they should ask for help from their dentist and adults at home to learn to floss, and then floss every day.
- **“There are some foods that we eat that help keep our teeth clean and strong. Do you know what food group helps us grow strong bones and teeth?”** (the Milk group). Point to the Milk group on the MyPyramid poster. Ask students to identify some of the foods found in this group. **“Foods in this group contain something called calcium and our bodies need calcium to grow strong teeth. It is important to drink milk and/or eat foods in this group for our teeth to be healthy and strong. Every day you need 3-A-Day of Dairy. This means you need to drink 3 cups of milk or eat 3 foods from the Milk group of MyPyramid every day!**
- **Another beneficial group of foods to maintain clean teeth is crunchy fruits and vegetables.”** Point out the fruit and vegetable groups on MyPyramid. **“Can you identify any crunchy foods in these two groups?”** (apples, carrots, broccoli). **“Eating these foods should not replace brushing your teeth, but sometimes when we are away from home and we don’t have the chance to brush our teeth, we can eat one of these crunchy fruits or vegetables to help remove the ‘sugar bugs’ or bacteria.”**
- **“Today we are going to learn how to brush our teeth properly, to really get those invisible germs out of our teeth. Moving the brush back and forth, or side to side, does not always get rid of the bacteria, or ‘sugar bugs’. We have to brush up and down and make little circles with our brushes to get**

them out. It is also important to brush all sides of our teeth: front, top, and back. Today we are going to learn a song to help us remember how to brush the correct way.”

PROCESS

- Step 1: Show students the song, "This is the Way We Brush Our Teeth," written on the chart paper or overhead transparency. Point to the words of the song as you read them. As you read the words "up and down" and "round and round", model making those motions with a pretend toothbrush.
- Step 2: Hand out toothbrushes to students. Tell the students that it is really important for them to keep the brushes in the wrapper until they get home so their brush stays clean and germ-free.
- Step 3: Sing the song with the students several times. Have them use the toothbrush (in the wrapper) to pretend to brush their teeth with the correct motions.
- Step 4: Tell students that we are going to make paper plate mouths so we can practice brushing correctly. Model making your paper plate mouth in front of the class:
1. Fold a small paper plate in half.
 2. Open it back up so there is a crease across the middle.
 3. Fold the top half down toward the crease and the bottom half up toward the crease. The ridges on the paper plate will represent the upper and lower teeth.
 4. Draw a red tongue behind the bottom teeth on the plate.
- Optional fun activity: Students can cut along the ridges of the paper plate to make individual teeth. Some students may even want to remove a ridge of the paper plate to represent a tooth that they are missing in their real mouth.
- Step 5: Show students how to brush the teeth of the paper plate mouth with their toothbrushes (still in the wrapper). Tip: Sing the song to the students using the paper plate mouth as a singing puppet.
- Step 6: Hand out scissors and crayons or markers. Give each student a paper plate and tell them to make their mouth with the plate. When most of the class has finished their mouth, have the students take out their toothbrushes and sing the song again. While they sing have them brush their paper plate mouths. Remind students to practice the up and down motion and the circular motion as they brush their paper plate mouths.

Important: Have students also brush their paper plate mouth tongues. Tongues also carry bacteria.

- Step 7: Pass out the letter activity sheet. Tell students that they will be writing a letter to their families about what they learned in Nutrition today. Point out the parts of the letter: the date, the salutation of the letter (Dear Family) and the closing (Love). Read aloud the first line of their letter. Ask for volunteers to share what they learned about taking care of their teeth (eat foods from the Milk group, brush and floss regularly, and visit the dentist). Have students draw and write their letters to their families.
- Step 8: As the students are working at their desks on their letters, hand out the bowls, spoons and napkins. Pour cereal and milk in each bowl, making sure there is enough for all of the students as you pour. Remind students that the milk contains calcium, which helps their teeth grow strong.
- Step 9: If time permits, pass out the food activity sheet to the students. Review with the students the pictures of foods on the paper, reading the words aloud. Remind students of the Icky Sticky Smelly Cavity-Causing Germs of the book. Ask them which foods on the activity sheet have the most of these kinds of germs. Instruct students to cross out with an X the foods that are harmful to their teeth (candy, jelly beans, soft drink, chocolate). Discuss with students the remaining foods on the paper, and how those foods can help their teeth.

SUMMARY/REVIEW WITH STUDENTS

- Foods in the milk group contain calcium, which is good for our teeth. What are some of the foods in the Milk group? (milk, yogurt, cheese)
- What does **3-A-Day** of Dairy mean? (Get 3 daily servings of milk, cheese or yogurt.)
- How do we brush our teeth to get rid of the "sugar bugs" (bacteria)?
- Brush your teeth before you go to bed every night and before coming to school each morning!
 - What are the types of foods that are good for our teeth as well as foods that harm our teeth?

This is the Way We Brush Our Teeth

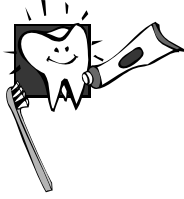
(To the tune of "Here We Go 'Round The Mulberry Bush")

This is the way we brush our teeth,
Brush our teeth,
Brush our teeth,
This is the way we brush our teeth,
So early in the morning.

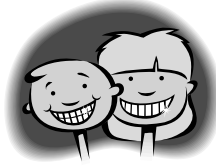
Brush them up and brush them down,
In little circles or round and round.
Don't brush them from side to side,
Those Sugar Bugs will surely hide.

This is the way we brush our teeth,
Brush our teeth,
Brush our teeth,
This is the way we brush our teeth,
So early in the morning.

Don't forget to brush your tongue,
Brush your tongue,
Brush your tongue,
Don't forget to brush your tongue,
It's important too!



Healthy Teeth! (K-1st)



(date)

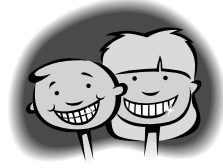
Dear Family,

Today I learned how to keep my teeth healthy. This is what I learned.

Love,



¡Dientes Sanos! (K-1^{er} Grado)



(fecha)

Querida Familia:

Hoy aprendí a mantener los dientes saludables. Lo que aprendí es:

Con cariño,

Healthy Teeth! (K-1st)

Name: _____ Date: _____

Mark an X on the foods that are NOT good for your teeth.



candy



celery



yogurt



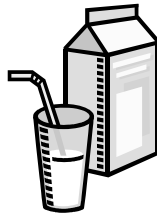
cheese



soft drink



carrot



milk



chocolate



broccoli



apple

**Drink milk and
eat crunchy fruits and vegetables
to keep your teeth healthy!**

¡Dientes Sanos! (K-1st)

Nombre: _____ Fecha: _____

Pon una X sobre las comidas que NO son buenas para tus dientes:



dulces



apio



yogur



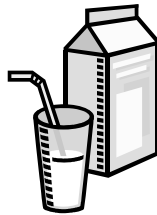
queso



refresco



zanahoria



leche



chocolate



brócoli



manzana

**¡Toma leche y
come verduras y frutas crujientes
para mantener los dientes sanos!**