

# Taste-Test Milk

## 4<sup>th</sup> Grade

### Nutrition Objectives:

- Students will learn that regardless of the various milk flavors, (plain, chocolate and strawberry) all low-fat milks provide good nutritional value.
- Students will learn where milk comes from and that milk fits in the Milk Group of MyPyramid and it provides a significant amount of calcium for our bodies.
- Students will learn that we need to eat **3-A-Day** of Dairy to keep our bodies healthy.
- Students will learn that advertising influences our food choices.

<b>Colorado Content Standards</b>	<b>Application of Standard</b>
<p><b>Science Standard 1:</b> Students understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.</p> <p>Students will:</p> <ul style="list-style-type: none"> <li>▪ select and use simple devices to gather data related to an investigation;</li> <li>▪ use data based on observations to construct a reasonable explanation;</li> <li>▪ communicate about investigations and explanations.</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>▪ investigate these milks through observation and taste-testing by using their senses of sight, feeling/touch (textures), and taste;</li> <li>▪ compare the appearance, texture, and taste of the milks, then describe what makes them different and similar;</li> <li>▪ communicate the results of their investigations.</li> </ul>
<p><b>Science Standard 3:</b> 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>	<p>Students will:</p>

<ul style="list-style-type: none"> <li>describe the basic food requirements for humans as summarized in the nutrition pyramid.</li> </ul>	<ul style="list-style-type: none"> <li>learn the benefits of drinking milk.</li> </ul>
<p><b>Literacy Standard 1:</b> Students read and understand a variety of materials.</p> <p>Students will:</p> <ul style="list-style-type: none"> <li>use a full range of strategies to comprehend materials such as directions, non-fiction material, rhymes and poems, stories.</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>read the non-fiction text “Cows”.</li> </ul>
<p><b>Literacy Standard 2:</b> Students write and speak for a variety of purposes and audiences.</p> <p>Students will:</p> <ul style="list-style-type: none"> <li>choose vocabulary that communicates their messages clearly and precisely;</li> <li>create readable documents with legible handwriting.</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>describe the differences and similarities between three flavors of milk with descriptive words and create a convincing slogan;</li> <li>write a slogan.</li> </ul>

**WHAT TEACHERS NEED TO KNOW**

Please refer to the *Flavored Milks* document.

**MATERIALS, INGREDIENTS and TEACHER PREPARATION**

Equipment and Ingredients	Teacher Preparation	Food Preparation
<ul style="list-style-type: none"> <li>▪ napkins*</li> <li>▪ drinking cups (3 for each student)</li>   <li>▪ 1/2 gallon white milk (1%)</li> <li>▪ 1/2 gallon chocolate milk (1%)</li> <li>▪ 1/2 gallon strawberry milk (1%)</li> </ul>	<ul style="list-style-type: none"> <li>▪ copies of activity sheets*</li> <li>▪ transparency of food label sheet</li> <li>▪ 8 ½" by 11" beige or light brown paper*</li> <li>▪ colored pencils or crayons or markers.</li> <li>▪ several pieces of white, brown and pink chalk</li> <li>▪ book "Cows" by Sara Swan Miller</li> <li>▪ "Got Milk?" poster</li> </ul>	<p>For each student:</p> <ul style="list-style-type: none"> <li>▪ fill first 5 ounce cup less than half full of plain milk,</li> <li>▪ fill second 5 ounce cup less than half full of chocolate milk, and</li> <li>▪ fill third 5 ounce cup less than half full of strawberry milk.</li> </ul>

\*one per student

## SET-UP

### Work area:

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

### Other-prep:

- Have drawing materials (paper, markers, crayons, colored pencils, and several pieces of white, brown and pink chalk) ready to pass out.
- Have Dairy Council "Got Milk?" posters ready to show.

## INTRODUCTION WITH STUDENTS

### "Why is drinking milk so important for our health?"

Discuss which nutrients are found in milk:

- a good source of calcium
- contains protein, carbohydrate, fat, potassium, magnesium, phosphorus, B-complex vitamins
- added vitamins A and D.

Emphasize that drinking milk is one of the best ways to get calcium for our strong bones and healthy teeth. Other sources of calcium include dark green, leafy vegetables, broccoli, soybeans, tofu processed with calcium, some nuts and beans, canned sardines and salmon, orange juice with calcium added, and other calcium-fortified foods.

What is **3-A-Day** of Dairy? Research shows that most of us are eating only half the

recommended 3 servings of dairy each day. **3-A-Day** of Dairy was created as a simple reminder for families to get 3 daily servings of milk, cheese or yogurt for stronger bones and healthy bodies. Have you had your **3** today?

**“Do you drink milk at home or in the lunchroom? How do you PLAN to get you three servings of Milk Group foods today?”**

Ideas: milk on cereal at breakfast, yogurt snack, a glass of milk with dinner

**“Where does milk come from?”**

After they discuss what they know about cows read pages 19-29 from “Cows” by Sara Swan Miller.

**“Do you drink any flavored milks, such as chocolate or strawberry milk? Flavored milks are healthy choices. Flavored milks contain more sugar than plain milk, but also contain calcium, which is very important for their healthy bones. All milk provides calcium for you bones to grow strong. Milk is always a better choice over soda which offers only sugar.”**

**“We are going to compare three different flavors of milk (plain, chocolate, and strawberry). All the flavors we will taste-test are 1% milkfat. You will describe the look, feel, and taste of each type of milk.”**

**“After the milk taste-testing activity, you will draw self-portraits with a milk mustache and write a slogan.”** Slogan is a short saying. In this case, the slogan’s purpose is to convince someone to buy the milk product.

## PROCESS

- Step 1: Have students wash their hands with soap and warm water.
- Step 2: Pass out three 5 ounce cups (1–plain milk, 2–chocolate milk, 3–strawberry milk) and the milk taste-testing activity sheets to each student. Explain that many food industries use taste-testing experiments as a very important scientific activity to help come up with the best products. Encourage students to be brave scientists. Use this experiment as an opportunity to help your students increase their vocabularies. Brainstorm with them how to choose strong adjectives such as "delicious", "flavorful" or "bland" instead of using ordinary weak adjectives such as “good” and “OK”, “bad” or “nasty.”
- Step 3: Have students first compare the appearance of all flavors of milk, then have them continue observing and investigating the feel and taste of the milks. For the “feel,” students don’t need to put their fingers in the cups in order to “feel” the milk. Tell them that the inside of their mouths is very sensitive so that they can “feel” the texture of the milk in their mouths by using the sense of touch. Have them record the results on the activity

sheet.

- Step 4: Discuss the students' findings. Ask students about when they might drink the different milks. Have them come up with times they would drink each of the different kinds of milks. For example, they may use plain milk in their cereal, chocolate milk for lunch and strawberry milk at snack time. Remind students that it is important to get their **3-A-Day** of dairy foods for good health and that drinking at least three cups of milk a day is a good way to reach this goal. Clean up the small cups.
- Step 5: Discuss how advertising influences our food choices. Ask students if they have had the experience while watching TV, where a certain commercial made them want to buy that particular product. Ask students what the important factors are that make a commercial very attractive. Explain to students that people often use a slogan to promote their products.
- Step 6: Show the "Got Milk?" poster to students. Explain that the poster was designed to encourage people to drink more milk. Tell them that they are going to make an advertisement that will make people want to drink one of the milks they tasted today. Tell them that their advertisements will include their self-portraits with a milk mustache and a slogan. Brainstorm some slogan ideas; *Got strawberry? Got white milk? Chocolate milk is the way to go for your strong bones and healthy heart! Drinking milk is very healthy, choose low fat chocolate milk!*
- Step 7: Pass out the materials for drawing and have students draw their own milk-mustache self-portraits. Have them write a slogan on their pictures.
- Step 8: When students have finished their drawings, have them clean up the area. If time permits, have them share their drawings with the class.
- Step 9: If space is available, display the drawings in the classroom or hallway.

### **SUMMARY/REVIEW WITH STUDENTS**

- Drinking milk is very important for promoting and maintaining good health, especially strong bones and healthy teeth.
- Milk fits in the Milk Group and you should have **3-A-Day** of dairy from the Milk Group each day.
- How many of you drink milk in the lunchroom?
- How many of you drink three glasses of milk every day?

# Taste-Test Milk

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Compare **1% plain milk**, **1% chocolate milk** and **1% strawberry milk**. Describe the differences and similarities between them.

Food Item:	It looks:	It feels:	It tastes:
Plain milk			
Chocolate milk			
Strawberry milk			

**Drink three glasses of fat-free or  
1% low-fat milk every day!**

## Prueba del Gusto de la Leche (4° Grado)

Nombre: \_\_\_\_\_ Fecha: \_\_\_\_\_

Comparen la leche regular de 1% con la leche de chocolate de 1% y la leche de fresa de 1%. Describan las diferencias entre las tres

Alimento:	Tiene aspecto:	Se siente:	sabe a:
Leche regular			
Leche de chocolate			
Leche de fresa			

**Beban tres vasos de leche descremada o leche con 1% reducción de grasa ¡cada día!**