



# Lesson 3:

## Get Your Calcium-Rich Foods

### Lesson Highlights

#### Objectives

##### Students will:

- Identify foods in the milk group.
- Identify the health and nutrition benefits from eating foods rich in calcium.
- Analyze food labels to determine which foods contain the most calcium.
- Compare food labels to determine which calcium-rich foods are lowest in fat.

#### Curriculum Connections:

Math, Health, Science

#### Student Skills Developed:

- Reading charts
- Thinking skills – making comparisons
- Math computation

#### Materials:

- *What's on the Label?* handout for each student
- *What's the Score?* worksheet for each student
- Samples of fat-free, 1%, 2%, and whole milk
- Four plastic glasses (for each student trying the taste test)
- Marker

#### Activity: What's on the Label?

##### Make the following points about the health benefits of calcium-rich foods:

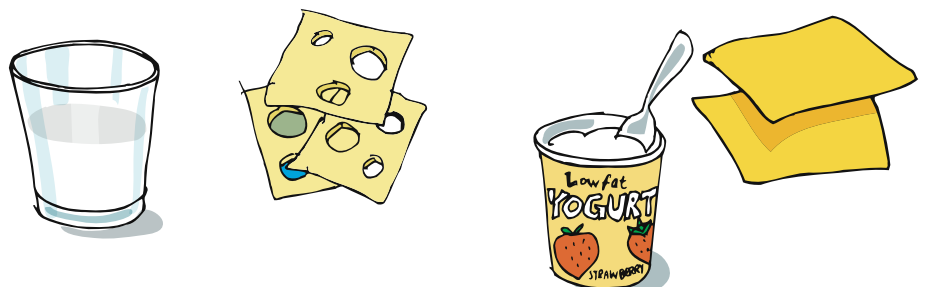
- Diets that are rich in lowfat and fat-free milk and milk products help build and maintain bone mass.
- Students their age especially need to drink milk, because this is when their bone mass is being built.

**Now pass out *What's on the Label?* handout.** Tell students that food labels give them important information about the nutritional value of the food. Discuss the following information with the students:

- Ask students to look for the words "Serving Size" on the labels. In the case of milk, the serving size is 8 fluid ounces – 1 cup.
- Next, have students find first the number of calories in a single serving of the food. Each of the first four labels is for an 8 fluid ounce glass of milk; yet they have a very different number of calories per serving. Why? Because of the fat and sugar content. Look at the calorie content for 1% chocolate milk. It is higher than the calorie content for whole milk. The extra calories come from sugar and chocolate.
- At the bottom of the food label, students will find some numbers followed by percent signs. This is where calcium is listed. Use the % Daily Value (DV) column when possible: 5% DV or less is low, 20% DV or more is high.

**Pass out the *What's the Score?* worksheet.** Have students complete the chart at the top of the page, filling in numbers from the four nutrition labels for milk. Later, check students' answers.

Next, have students use *What's on the Label?* to help them complete the questions on *What's the Score?* Check student answers and discuss.

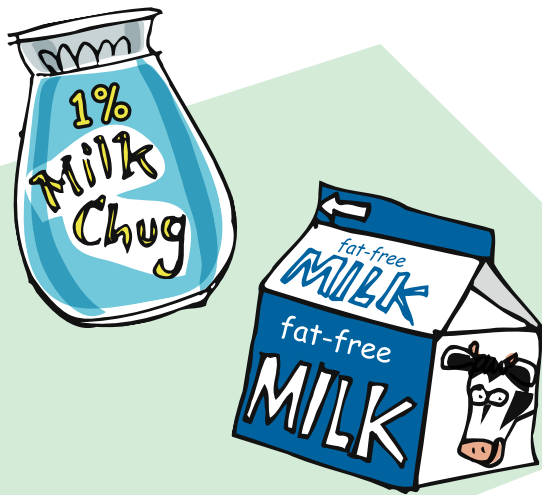


## Group Activity: Taste Test

Bring in samples of fat-free, 1%, 2%, and whole milk. With a marker, label four plastic glasses A, B, C, and D. Without showing students what you are doing, pour a small amount of the four types of milk into the glasses. (Prepare one set of glasses for each student participant.)

Now have a student come up to taste each of the four milks. Describe the tastes. Rate each. Repeat with other students trying the taste test.

Later, have students talk about how they can reduce the fat they consume by switching the milk they drink. If they usually drink whole milk, they should switch gradually to 2% milk, then to 1% milk, and finally to fat-free milk.



## Lunchroom Link:

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Does your school have vending machines? Do they offer milk for sale? If not, perhaps your class could start a campaign to add fat-free or lowfat milk to the choices available in your school vending machines.

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# What's on the Label?

## Milk fat-free

Nutrition Facts	
Serving Size 8 fl oz (245g)	
Servings Per Container 8	
Amount Per Serving	
<b>Calories</b> 90	Calories from Fat 0
%Daily Value*	
<b>Total Fat</b> 0g	0 %
Saturated Fat 0g	0 %
Trans Fat 0g	0 %
<b>Cholesterol</b> <5mg	0 %
<b>Sodium</b> 130mg	5 %
<b>Total Carbohydrate</b> 12g	4 %
Dietary Fiber 0g	0 %
Sugars 12g	
<b>Protein</b> 8g	
Vitamin A 10% • Vitamin C 4%	
Calcium 30% • Iron 0%	
* Percent Daily Values are based on a 2,000 calorie diet.	

## Milk 1%, chocolate

Nutrition Facts	
Serving Size 8 fl oz (245g)	
Servings Per Container 8	
Amount Per Serving	
<b>Calories</b> 170	Calories from Fat 20
%Daily Value*	
<b>Total Fat</b> 2.5g	4 %
Saturated Fat 1.5g	8 %
Trans Fat 0g	0 %
<b>Cholesterol</b> 5mg	2 %
<b>Sodium</b> 190mg	8 %
<b>Total Carbohydrate</b> 29g	10 %
Dietary Fiber 1g	5 %
Sugars 27g	
<b>Protein</b> 8g	
Vitamin A 10% • Vitamin C 6%	
Calcium 30% • Iron 4%	
* Percent Daily Values are based on a 2,000 calorie diet.	

## Milk 2%

Nutrition Facts	
Serving Size 8 fl oz (245g)	
Servings Per Container 8	
Amount Per Serving	
<b>Calories</b> 130	Calories from Fat 45
%Daily Value*	
<b>Total Fat</b> 5g	8 %
Saturated Fat 3g	15 %
Trans Fat 0g	0 %
<b>Cholesterol</b> 20mg	7 %
<b>Sodium</b> 125mg	5 %
<b>Total Carbohydrate</b> 13g	4 %
Dietary Fiber 0g	0 %
Sugars 12g	
<b>Protein</b> 8g	
Vitamin A 10% • Vitamin C 4%	
Calcium 30% • Iron 0%	
* Percent Daily Values are based on a 2,000 calorie diet.	

## Milk whole

Nutrition Facts	
Serving Size 8 fl oz (245g)	
Servings Per Container 8	
Amount Per Serving	
<b>Calories</b> 150	Calories from Fat 70
%Daily Value*	
<b>Total Fat</b> 8g	12 %
Saturated Fat 5g	25 %
Trans Fat 0g	0 %
<b>Cholesterol</b> 35mg	11 %
<b>Sodium</b> 125mg	5 %
<b>Total Carbohydrate</b> 12g	4 %
Dietary Fiber 0g	0 %
Sugars 12g	
<b>Protein</b> 8g	
Vitamin A 6% • Vitamin C 4%	
Calcium 30% • Iron 0%	
* Percent Daily Values are based on a 2,000 calorie diet.	

## Vanilla ice cream

Nutrition Facts	
Serving Size 1/2 cup (65g)	
Servings Per Container 14	
Amount Per Serving	
<b>Calories</b> 140	Calories from Fat 70
%Daily Value*	
<b>Total Fat</b> 7g	11 %
Saturated Fat 4.5g	23 %
Trans Fat 0g	0 %
<b>Cholesterol</b> 20mg	6 %
<b>Sodium</b> 40mg	2 %
<b>Total Carbohydrate</b> 15g	5 %
Dietary Fiber 0g	0 %
Sugars 15g	
<b>Protein</b> 3g	
Vitamin A 4% • Vitamin C 0%	
Calcium 10% • Iron 0%	
* Percent Daily Values are based on a 2,000 calorie diet.	

## American cheese

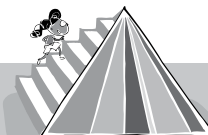
Nutrition Facts	
Serving Size 1 slice (19g)	
Servings Per Container 24	
Amount Per Serving	
<b>Calories</b> 60	Calories from Fat 40
%Daily Value*	
<b>Total Fat</b> 4.5g	7 %
Saturated Fat 2.5g	13 %
Trans Fat 0g	0 %
<b>Cholesterol</b> 15mg	5 %
<b>Sodium</b> 250mg	10 %
<b>Total Carbohydrate</b> 1g	0 %
Dietary Fiber 0g	0 %
Sugars 1g	
<b>Protein</b> 3g	
Vitamin A 4% • Vitamin C 0%	
Calcium 20% • Iron 0%	
* Percent Daily Values are based on a 2,000 calorie diet.	

## Fruit-flavored yogurt

Nutrition Facts	
Serving Size 6 ounces (170g)	
Servings Per Container 1	
Amount Per Serving	
<b>Calories</b> 170	Calories from Fat 15
%Daily Value*	
<b>Total Fat</b> 1.5g	2 %
Saturated Fat 1g	5 %
Trans Fat 0g	0 %
<b>Cholesterol</b> 10mg	3 %
<b>Sodium</b> 125mg	5 %
<b>Total Carbohydrate</b> 33g	11 %
Dietary Fiber 0g	0 %
Sugars 30g	
<b>Protein</b> 6g	
Vitamin A 0% • Vitamin C 0%	
Calcium 20% • Iron 0%	
* Percent Daily Values are based on a 2,000 calorie diet.	

## Cottage cheese

Nutrition Facts	
Serving Size 1/2 cup (119g)	
Servings Per Container 4	
Amount Per Serving	
<b>Calories</b> 90	Calories from Fat 20
%Daily Value*	
<b>Total Fat</b> 2.5g	4 %
Saturated Fat 1.5g	8 %
Trans Fat 0g	0 %
<b>Cholesterol</b> 15mg	5 %
<b>Sodium</b> 410mg	17 %
<b>Total Carbohydrate</b> 6g	2 %
Dietary Fiber 0g	0 %
Sugars 5g	
<b>Protein</b> 11g	
Vitamin A 4% • Vitamin C 0%	
Calcium 8% • Iron 0%	
* Percent Daily Values are based on a 2,000 calorie diet.	



# What's the Score?

Here is a way to compare foods to see which foods are the best choices for you. Answer the questions below for these four foods, using *What's on the Label?*

	Fat-free milk	1% chocolate milk	2% milk	Whole milk
1. What is the serving size for this item?				
2. Is the serving size realistic? ( <i>Is this how much you would normally eat/drink?</i> )				
3. How many total calories in one serving?				
4. How many total grams of fat in one serving?				
5. What percent of calcium in one serving?				

Based on this information, which type of milk offers the most calcium with the lowest fat?

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Now look at *all* the labels on the page. Answer these questions:

1. If Manuel drinks 8 fluid ounces of 1% chocolate milk and eats 6 ounces of fruit-flavored yogurt, how much calcium has he had? \_\_\_\_\_

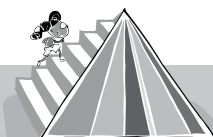
How many grams of fat? \_\_\_\_\_

2. Which food item on the sheet has the least calcium with the highest amount of fat?

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3. Which food item on the sheet has the most calcium with the lowest amount of fat?

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# What's the Score? Answer Key

Here is a way to compare foods to see which foods are the best choices for you. Answer the questions below for these four foods, using *What's on the Label?*

	Fat-free milk	1% chocolate milk	2% milk	Whole milk
1. What is the serving size for this item?	1 cup (8 fl oz)	1 cup (8 fl oz)	1 cup (8 fl oz)	1 cup (8 fl oz)
2. Is the serving size realistic? ( <i>Is this how much you would normally eat/drink?</i> )				
3. How many calories in one serving?	90	170	130	150
4. How many total grams of fat in one serving?	0	2.5	5	8
5. What percentage of calcium in one serving?	30% DV	30% DV	30% DV	30% DV

Based on this information, which type of milk offers the most calcium with the lowest fat?

Answer: Fat-free

Now look at *all* the labels on the page. Answer these questions:

1. If Manuel drinks 8 fluid ounces of 1% chocolate milk and eats 6 ounces of fruit-flavored yogurt, how much calcium has he had? **Answer: 50% DV**

How many grams of fat? **Answer: 4 grams**

2. Which food item on the sheet has the least calcium with the highest amount of fat?

**Answer: Vanilla ice cream**

3. Which food item on the sheet has the most calcium with the lowest amount of fat?

**Answer: Fat-free milk**

