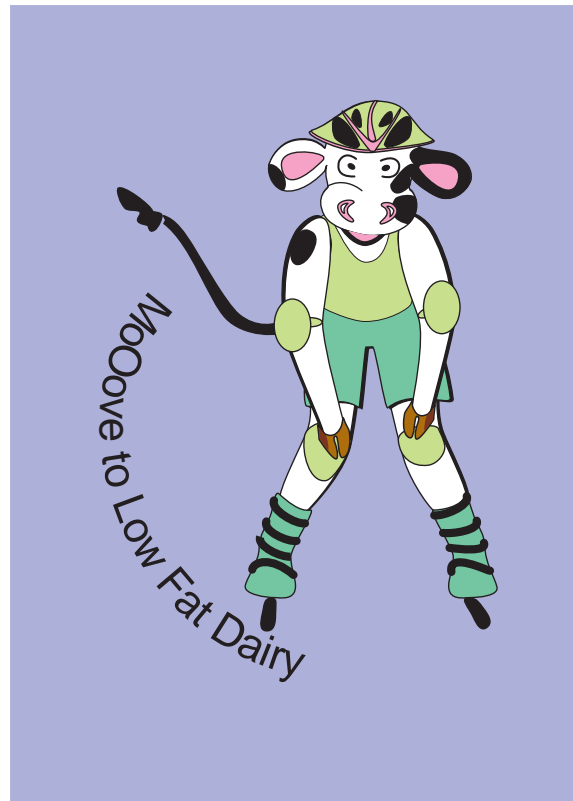


Teen
Lesson
Plan Handouts



Inside the Pyramid

How much food from the milk group is needed daily?

The amount of food from the Milk Group you need to eat depends on age. Recommended daily amounts are shown in the chart.

Daily recommendation		
Children	2-3 years old	2 cups*
	4-8 years old	2 cups*
Girls	9-13 years old	3 cups*
	14-18 years old	3 cups*
Boys	9-13 years old	3 cups*
	14-18 years old	3 cups*
Women	19-30 years old	3 cups*
	31-50 years old	3 cups*
	51+ years old	3 cups*
Men	19-30 years old	3 cups*
	31-50 years old	3 cups*
	51+ years old	3 cups*

What counts as 1 cup in the milk group?

The chart lists specific amounts that count as 1 cup in the milk group towards your daily recommended intake:

	Amount that counts as 1 cup in the milk group	Common portions and cup equivalents
Milk <i>[choose fat-free or low-fat milk most often]</i>	1 cup 1 half-pint container ½ cup evaporated milk	
Yogurt <i>[choose fat-free or low-fat yogurt most often]</i>	1 regular container (8 fluid ounces) 1 cup	1 small container (6 ounces) = ¾ cup 1 snack size container (4 ounces) = ½ cup
Cheese <i>[choose low-fat cheeses most often]</i>	1 ½ ounces hard cheese (cheddar, mozzarella, Swiss, parmesan) 1/3 cup shredded cheese 2 ounces processed cheese (American) ½ cup ricotta cheese 2 cups cottage cheese	1 slice of hard cheese is equivalent to ½ cup milk 1 slice of processed cheese is equivalent to 1/3 cup milk ½ cup cottage cheese is equivalent to ¼ cup milk
Milk-based desserts <i>[choose fat-free or low-fat types most often]</i>	1 cup pudding made with milk 1 cup frozen yogurt 1 ½ cups ice cream	1 scoop ice cream is equivalent to 1/3 cup milk



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:

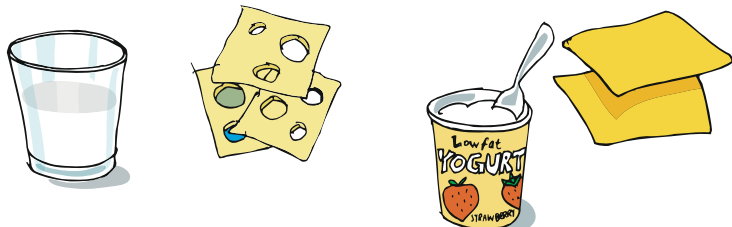
- Diets that are rich in lowfat and fat-free milk and milk products help build and maintain bone mass.
- Students their age especially need to drink milk, because this is when their bone mass is being built.

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.

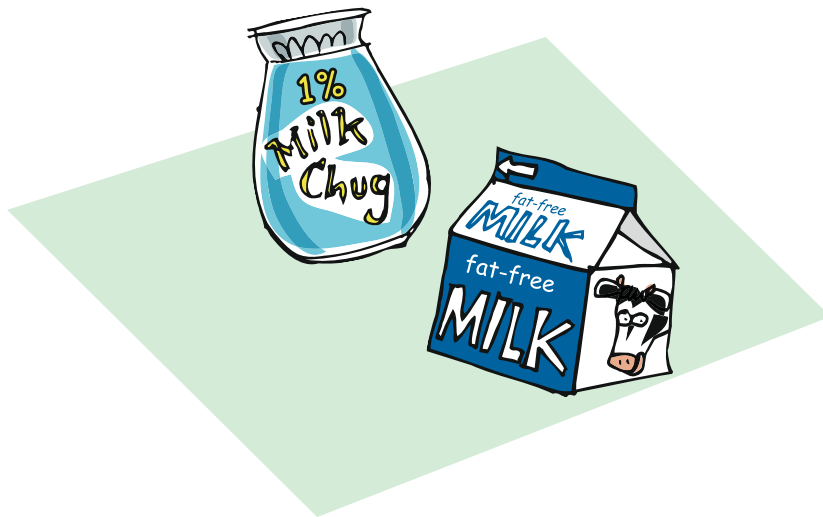


Group Activity: Taste Test

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:

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.

Name: _____

What's on the Label?

Milk fat-free

Nutrition Facts		
Serving Size 8 fl oz (245g)		
Servings Per Container 8		
Amount Per Serving		
Calories 90	Calories from Fat 0	
%Daily Value*		
Total Fat 0g		0 %
Saturated Fat 0g		0 %
Trans Fat 0g		0 %
Cholesterol < 5mg		0 %
Sodium 130mg		5 %
Total Carbohydrate 12g		4 %
Dietary Fiber 0g 0 %		
Sugars 12g		
Protein 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		
Calories 170	Calories from Fat 20	
%Daily Value*		
Total Fat 2.5g		4 %
Saturated Fat 1.5g		8 %
Trans Fat 0g		0 %
Cholesterol 5mg		2 %
Sodium 190mg		8 %
Total Carbohydrate 29g		10 %
Dietary Fiber 1g 5 %		
Sugars 27g		
Protein 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		
Calories 130	Calories from Fat 45	
%Daily Value*		
Total Fat 5g		8 %
Saturated Fat 3g		15 %
Trans Fat 0g		0 %
Cholesterol 20mg		7 %
Sodium 125mg		5 %
Total Carbohydrate 13g		4 %
Dietary Fiber 0g 0 %		
Sugars 12g		
Protein 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		
Calories 150	Calories from Fat 70	
%Daily Value*		
Total Fat 8g		12 %
Saturated Fat 5g		25 %
Trans Fat 0g		0 %
Cholesterol 35mg		11 %
Sodium 125mg		5 %
Total Carbohydrate 12g		4 %
Dietary Fiber 0g 0 %		
Sugars 12g		
Protein 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		
Calories 140	Calories from Fat 70	
%Daily Value*		
Total Fat 7g		11 %
Saturated Fat 4.5g		23 %
Trans Fat 0g		0 %
Cholesterol 20mg		6 %
Sodium 40mg		2 %
Total Carbohydrate 15g		5 %
Dietary Fiber 0g 0 %		
Sugars 15g		
Protein 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		
Calories 60	Calories from Fat 40	
%Daily Value*		
Total Fat 4.5g		7 %
Saturated Fat 2.5g		13 %
Trans Fat 0g		0 %
Cholesterol 15mg		5 %
Sodium 250mg		10 %
Total Carbohydrate 1g		0 %
Dietary Fiber 0g 0 %		
Sugars 1g		
Protein 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

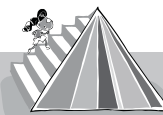
Nutrition Facts		
Serving Size 6 ounces (170g)		
Servings Per Container 1		
Amount Per Serving		
Calories 170	Calories from Fat 15	
%Daily Value*		
Total Fat 1.5g		2 %
Saturated Fat 1g		5 %
Trans Fat 0g		0 %
Cholesterol 10mg		3 %
Sodium 125mg		5 %
Total Carbohydrate 33g		11 %
Dietary Fiber 0g 0 %		
Sugars 30g		
Protein 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		
Calories 90	Calories from Fat 20	
%Daily Value*		
Total Fat 2.5g		4 %
Saturated Fat 1.5g		8 %
Trans Fat 0g		0 %
Cholesterol 15mg		5 %
Sodium 410mg		17 %
Total Carbohydrate 6g		2 %
Dietary Fiber 0g 0 %		
Sugars 5g		
Protein 11g		
Vitamin A 4% • Vitamin C 0%		
Calcium 8% • Iron 0%		

* Percent Daily Values are based on a 2,000 calorie diet.



Name: _____

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?

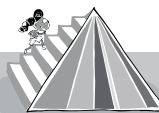
Now look at *all* the labels on the page. Answer these questions:

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?

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



Name: _____

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**

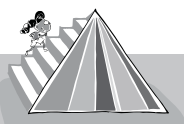
How many grams of fat? **Answer: 4 grams**

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



Make a Smart Choice

Use the **NUTRITION FACTS** label to compare products - and choose the one that is healthier for you and your family.

Nutrition Facts A	
Serving Size 1 cup (228g) Servings Per Container 2	
Amount Per Serving	
Calories 190	Calories from Fat 45
% Daily Value*	
Total Fat 5g	8%
Saturated Fat 2g	10%
Cholesterol 0mg	0%
Sodium 300mg	13%
Total Carbohydrate 34g	11%
Dietary Fiber 0g	0%
Sugars 18g	
Protein 2g	
Vitamin A 0%	Vitamin C 0%
Calcium 6%	Iron 2%

USE THE % DAILY VALUES TO COMPARE PRODUCTS

In general, try to choose foods with :

- higher % Daily Values for Vitamins A & C and minerals (iron and calcium)
- higher % Daily Values for fiber
- lower % Daily Values for total fat, saturated fat and cholesterol
- lower % Daily Values for sodium

Let's compare two product labels, A & B.

1. READ EACH LABEL, look for the % Daily Values for:

- total fat
- saturated fat
- cholesterol
- sodium
- fiber
- Vitamins A & C
- minerals (iron & calcium)

Nutrition Facts B	
Serving Size 1 cup (228g) Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	Vitamin C 2%
Calcium 20%	Iron 4%

2. ANSWER THESE QUESTIONS

Which product is:

- lower in % Daily Value for total fat?
- lower in saturated fat and cholesterol?
- lower in % Daily Value for sodium?
- higher in % Daily Value for fiber?
- higher in % Daily Value for Vitamins A & C?
- higher in % Daily Value for iron & calcium?

3. HOW DO THESE PRODUCTS COMPARE?

In general:

Product A is lower in fat, cholesterol and sodium.

Product B is higher in calcium. Both products provide no fiber and very little or no vitamins A, C or iron.

4. SO WHICH PRODUCT WOULD YOU CHOOSE?

It depends on your dietary needs.

If you want to cut down on fat, you might choose product A. If you needed a good source of calcium, you might choose product B. Or, you may want to compare other products before deciding.