

Elementary Lesson Plan

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Kindergarten through second grade Goals

1. Teach children about the importance of dairy foods in a well-balanced diet.
2. Encourage children to switch to low fat or fat-free dairy products.

Objectives

1. Students will be able to identify foods in the dairy group.
2. Students will develop an awareness of the importance of using low fat or fat-free dairy products.

Handouts are found in the “Lesson Plan Handouts and Activities” section of this manual.

Activity 1: Introduction to Dairy

Materials needed

- “What Dairy Foods Did I Eat Yesterday?” handout
- Empty or unused dairy food containers

Discussion

1. Display a variety of dairy products that you brought in from home. *Who likes dairy foods? Did you eat more than one? more than two? Let’s fill out this handout to see how many dairy foods you ate yesterday.* Use the handout, “What Dairy Foods Did I Eat Yesterday?”
2. *When we think of dairy foods, we usually think of milk. Did you know milk comes from cows? Some people drink milk from goats or other mammals (a mammal is an animal that makes milk). Some people drink a product that is made from soybeans that is called soy “milk,” but it is not really milk since it doesn’t come from an animal! Foods that are made from milk also are dairy products. Dairy foods include milk, yogurt, cheese, cottage cheese, ice cream, and frozen yogurt. Why are dairy foods good for you? Dairy foods are our best source of calcium, a mineral that helps keep your bones and teeth healthy. It is important to have strong bones while you grow. Dairy products also provide you with other important nutrients such as protein and vitamin D.*

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Activity 2: What kind of milk do you drink at home?

Materials needed

- Milk caps or empty milk cartons children brought in from home
- “Milk Cap Bar Chart” worksheet

Note: About a week prior to this lesson ask children to find out what kind of milk they drink at home. Have them bring in from home either the caps from milk containers or clean, empty milk cartons.

Discussion

1. *Fat is an ingredient in some dairy products. We all need to eat some fat every day, but too much is not healthy for our heart. Healthier milk choices are low fat or fat-free milk instead of whole milk.* Ask students to take out the milk caps or empty cartons they brought in from home. *What kind of milk do you drink at home?* (Before today’s class, be sure you have researched which color cap corresponds with low fat and fat-free milk.) *A red cap means you are drinking whole milk.* (Explain which color corresponds with the reduced fat (2%), low fat (1%), and fat-free (skim) milk, as these will differ depending upon the manufacturer in your area). *Whole milk has eight grams of fat per cup. Reduced fat (2%) milk has five grams of fat, low fat (1%) milk has three grams of fat, and fat-free milk has zero grams of fat.* Tally the caps on the poster “Milk Cap Bar Chart” in front of the room.



Activity 3: Daily Dairy Servings

Materials needed

- “What Dairy Foods Did I Eat Yesterday?” handout completed by children (from Activity one)
- Refrigerated 1% milk and fat-free milk
- 3 fluid ounce cups
- Napkins
- “Test Your Taste Buds” handout (parent letter on opposite side)

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Discussion

1. *How much milk or other dairy products do you need each day? Children ages two-eight need two cups per day (one-cup milk or yogurt or, 1½ ounces of hard cheese counts as one cup from the Milk group). We should choose lower fat versions like low fat cheese and fat-free yogurt, for a healthy body.*
2. Ask children to take out the handout, “What Dairy Foods Did I Eat Yesterday?” *How many servings of dairy did you eat for that day?*
3. Encourage children to switch to low fat or fat-free milk at home by doing a blind taste-test. See the “Test Your Taste Buds” worksheet. Using very cold milk, have students taste test the milks and mark the chart accordingly. Have each child take home the taste test chart for parents/caregivers to see. A parent letter is on the opposite side of the worksheet.



Activity 4: Culminating Activity

Materials needed

- “Drink Milk Everyday” worksheet

Discussion

1. Have children complete the “Drink Milk Everyday” worksheet.
2. Review correct answers with children.

Additional Activities for Grades K-2

1. National Dairy Council at www.nationaldairycouncil.org/nationaldairycouncil/tools.
2. It is difficult to tell how much fat is in the different types of milk. To illustrate this, fat tubes that illustrate various amounts of fat could be made or purchased.
3. For additional resources, such as books, videotapes and CDs, games, and educational kits contact the Florida Department of Education, Food and Nutrition Resource Center at 1-800-504-6609. Resources are available to borrow free of charge and includes postage.

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References

U.S. Department of Agriculture, MyPyramid Food Guidance System Retrieved February 14, 2006 at www.MyPyramid.gov.

Florida Interagency Food and Nutrition Committee's Retrieved February 14, 2006 at: fifnc.com

Duyff, R.L. (2002). The American Dietetic Association's Complete Food and Nutrition Guide. Hoboken, NJ: John Wiley & Sons, Inc.

University of Illinois Extension: Family Nutrition Program. Milk, Yogurt and Cheese Group. *Wellness Ways Resource Book*. Retrieved February 14, 2006 at: <http://wellnessways.aces.uiuc.edu/MilkYogurtCheese.html>

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Third through fifth grade

Goals

1. Teach children about the importance of dairy foods in a well-balanced diet.
2. Encourage children to switch to low fat or fat-free dairy products.

Objectives

1. Students will be able to identify foods in the Milk group.
2. Students will develop an awareness of the importance of using low fat or fat-free dairy products.
3. Students will record a 24-hour food recall for dairy products.
4. Students will list dairy foods that are low in fat or fat-free.



Activity 1: Introduction to Dairy Foods

Materials needed

- Empty or unopened containers of dairy foods

Discussion

1. *Today we're going to talk about foods that come from cows. Who can tell me what those foods are called? [Wait for someone to say "dairy foods."] Who likes to eat dairy foods? Let's write a list of dairy foods on the board. After writing their suggestions, review: Dairy foods include milk, yogurt, cheese, cottage cheese, ice cream, and frozen yogurt. What dairy foods do you like to eat and why? Dairy foods and foods made with them (like puddings and custards) are the best sources of calcium, a mineral that helps keep your bones and teeth healthy, helps muscles contract and your heartbeat, and aids in clotting blood when you are bleeding. It is important to build strong bones while you grow and all through your life. Dairy products also provide other important nutrients such as vitamin A, vitamin D, riboflavin, the mineral potassium, and protein. Your body cannot make calcium so you need to supply it to your body through your food.*
2. Show your class a variety of food labels from dairy products found in supermarkets. See if students can locate the amount of calcium in each item by reading the Nutrition Facts label.

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Activity 2: Daily Dairy Servings

Materials needed

- “How Much Calcium Are You Getting Each Day?” handout
- “Daily Calcium Requirements” handout
- Calculators

Discussion

1. *How many cups of milk or dairy products do you need each day? You (children nine to thirteen years) need three cups of milk or other dairy products daily. This provides about 900 milligrams of calcium. One cup of milk or yogurt or 1½ oz. of hard cheese counts as one cup from the Milk group.*
2. Ask children to fill out the handout, “How Much Calcium Are You Getting Each Day?” See if their amount meets the recommended daily calcium intake. Have participants compare their calcium intake to the values listed in the handout, “Daily Calcium Requirements.”



Activity 3: Milk Comparison and Taste Test

Materials needed

- Milk caps or empty milk cartons from children
- “Milk Cap Bar Chart” handout
- “Test Your Taste Buds” handout

Discussion

1. *Fat is a nutrient in some dairy products. We all need to have some fat in our food every day, but too much is not healthy for our hearts. Too much fat also provides too many calories for some people. Healthier choices are low fat (1%) or fat-free (skim) milk instead of whole or reduced fat (2%) milk. Ask students to take out the milk caps or empty milk cartons they brought in from home. What kind of milk do you drink at home? (Before today’s class, be sure you have researched which color cap corresponds with low fat and fat-free milk.) A red cap means you are drinking whole milk. (Explain which color corresponds for the reduced fat (2%), low fat (1%), and fat-free (skim) milk, as these will differ depending on the manufacturer in your area.) Whole milk has eight grams of fat per cup; reduced fat (2%) has five grams of fat; low fat (1%) has three grams of fat; and fat-free milk (skim) has zero grams of fat. Tally the caps on the poster “Milk Cap Bar Chart” in front of the room.*

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2. Encourage children to switch to low fat or fat-free milk at home by doing a blind taste-test. See the “Test Your Taste Buds” worksheet. Using very cold, refrigerated milk, have students taste test the milks and mark the chart accordingly. Have the child take home the taste test chart and letter for parents/ caregivers to see.

Activity 4: Measuring Calcium

Materials needed

- Clear plastic bags
- 12.5 cups flour
- Measuring cup

Discussion

1. The body deposits great amounts of calcium during growth years. Use clear plastic bags and white flour to represent the approximate amount of calcium in the body at different ages. Math skills can be integrated into the classroom by converting ounces of body calcium to cups of flour.

Age	Body Calcium
Infancy	1 ounce
5 years	7 ounces
10 years	14 ounces
15 years	28 ounces

Note: One ounce of flour is equal to $\frac{1}{4}$ cup.

Additional Activities for Grades 3-5

1. National Dairy Council Retrieved February 14, 2006 at: www.nationaldairycouncil.org/nationaldairycouncil/tools.
2. It is difficult to tell how much fat is in the different types of milk. To illustrate this, fat tubes that illustrate various amounts of fat could be made or purchased.
3. For additional resources, such as books, videotapes and CDs, games, and educational kits contact the Florida Department of Education, Food and Nutrition Resource Center at 1-800-504-6609. Resources are available to borrow free of charge and includes postage.

References

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Florida Interagency Food and Nutrition Committee Retrieved February 14, 2006 at: fifnc.com.

Duyff, R.L. (2002). The American Dietetics Association’s Complete Food and Nutrition Guide. Hoboken, NJ: John Wiley & Sons, Inc.

University of Illinois Extension: Family Nutrition Program. Milk, Yogurt and Cheese Group. *Wellness Ways Resource Book*. Retrieved February 14, 2006 at: web.aces.uiuc.edu/wellnessways/MilkYogurtCheese.html.

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Sunshine State Standards

Grades K-2

Activity 1

Health Education HE.A.1.1.2
Health Education HE.A.1.1.9
Mathematics MA.A.2.1.1
Science SC.G.1.1.2

Activity 2

Health Education HE.A.1.1.2
Health Education HE.C.1.1.2
Mathematics MA.B.1.1.1
Mathematics MA.D.1.1.1
Mathematics MA.E.1.1.1

Activity 3

Health Education HE.A.1.1.3
Health Education HE.C.1.1.2
Mathematics MA.A.2.1.1
Mathematics MA.E.1.1.1

Activity 4

Health Education HE.A.1.1.9
Health Education HE.B.3.1.3
Science SC.G.1.1.2

Grades 3-5

Activity 1

Health Education HE.A.1.2.2
Health Education HE.A.1.2.10
Language Arts LA.A.2.2.7

Activity 2

Health Education HE.C.1.2.1
Mathematics MA.A.3.2.1
Mathematics MA.A.3.2.2
Mathematics MA.A.3.2.3
Mathematics MA.B.1.2.1

Activity 3

Health Education HE.A.1.2.4
Health Education HE.C.1.2.1
Mathematics MA.A.3.2.2
Mathematics MA.E.1.2.1

Activity 4

Health Education HE.B.2.2.4
Mathematics MA.B.1.2.1