COOPERATIVE EXTENSION SERVICE UNIVERSITY OF KENTUCKY • COLLEGE OF AGRICULTURE

DAIRY FOODS

Unit 4: *Cultured* Dairy Products

Introduction

Cultured milk products have been known to mankind from antiquity and have been used in this country since the early 1800s. Before refrigeration, milk spoiled very quickly after it was taken from the animal, especially in hot weather. People found that sour milk could be kept longer under controlled conditions and had a pleasant flavor.

Today, cultured milk products are produced by bacterial fermentation. Buttermilk, sour cream, acidophilus milk, yogurt, and some cheeses, such as blue or Roquefort and Swiss, are cultured milk products. Other cheeses also have a culture added by the manufacturer.

In this project, you will learn:



that some bacteria are useful to man



the contribution of cultured dairy products to the diet



to prepare foods using cultured dairy products



to compare the taste, ingredients, and cost of yogurt



Did you know that about 45 percent of your adult skeleton is formed during your teen years? This is why it is so important to get the right amount of calcium every day during your teen years. Calcium makes your bones strong and your joints flexible.

Older women who have not consumed enough calcium throughout life can develop osteoporosis. Osteoporosis is a disease that results in porous, brittle bones, which can break easily. Also, the long bones get shorter, and people often get a humped back. (The bones are not strong enough to stay straight and sturdy because there isn't enough calcium in them.) Although less common, older men can develop osteoporosis, too.

The prevention of osteoporosis is just one reason to eat calcium-rich foods throughout life.

More about Cultures

Bacteria are living organisms that need food, water, and warm temperature to grow. When bacteria are in this type of environment and they grow, it is called a culture. Certain bacteria, when cultured in milk, feed on the sugar there and produce an acid called lactic acid. This process, known as fermentation, changes the flavor and texture of the milk. Different bacteria are chosen for each type of cultured milk product according to the flavor and texture desired. Teens should eat four or more servings of calciumrich foods each day to obtain 1,300 milligrams of calcium — enough to build strong and healthy bones during growth. Young adults should eat two or more servings of calcium-rich foods each day to obtain 1,000 milligrams of calcium. Men and women aged 50 years and greater need 1,200 milligrams of calcium, about four servings per day, to keep their bones strong and healthy.

One way to keep up your intake of calcium-rich foods is to enjoy a variety of cultured dairy products including buttermilk, acidophilus milk, yogurt, frozen yogurt, and Swiss cheese. Cultured dairy products, like the milk they are made from, provide calcium, as well as protein, fat, vitamin A, phosphorus, and carbohydrates. One cup of buttermilk, for example, provides nearly 300 milligrams of calcium.

Cultured Milk Products

Buttermilk

Buttermilk was originally produced when cream was churned into butter on the farm. It was the residual liquid left when cream was churned to make butter. This buttermilk had a tangy acid flavor and was considered a good thirst quencher on hot summer days.

Today's buttermilk is made by fermenting or culturing whole or lowfat milk with the appropriate characterizing bacteria. These bacteria include the acid-producer *Lactococcus lactis* or *cremoris* and the flavor- and aroma-producer *Leuconostoc cremoris*. Much of the appeal of buttermilk is due to products produced from the fermentation of citric acid by *Leuconostoc cremoris*. According to federal law, up to 0.2 percent citric acid can be added before fermentation for flavor improvement.

The bacterial culture's acidity also helps thicken the buttermilk and gives it a more appealing body and texture. Sometimes butter flakes are added. Salt can also be added, in an amount of up to 2 percent of the total volume, to improve the natural flavor.

Servings per Day Image: Constraint of the serving ser

Food Guide Pyramid: Servings per Day

If buttermilk is not kept refrigerated at all times, the compounds responsible for its characteristic aroma and flavor rapidly disappear.

Buttermilk in the U.S. is consumed mainly by the adult population in the South, and per capita consumption has declined dramatically in the last 20 years.

Butter

Two basic types of butter are made. Sweet cream butter is made from fresh, pasteurized cream and is the major type of butter made in this country. Ripened cream is made from fermented cream. The cream is churned until the fat becomes semisolid. The liquid is separated from the fat. Salt and colorings usually are added to the fat after churning. To be called butter, it must contain 80 percent milk fat.

The U.S. Department of Agriculture (USDA) grades butter as AA, A, B, or C, depending on its quality.

Whipped butter has been stirred to incorporate air. It is somewhat lighter and easier to spread than stick butter.

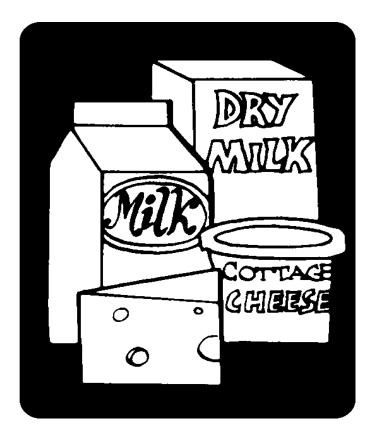
Although it is a dairy product, butter does not belong to the milk, cheese, and yogurt group of the Food Guide Pyramid. This is because butter is largely fat, and most of the nutrients that milk provides are not contained in butter.

Sour Cream

Sour cream is the product resulting from the addition of lactic acid-producing bacteria to pasteurized cream containing not less than 18 percent milk fat. This type of sour cream is called "cultured sour cream." The culture used is the same as for buttermilk.

Sour cream also can be made by direct acidification, but this product will not have as good a flavor as the cultured product. When sour cream or other dairy products are made by direct acidification, this fact must be stated on the label. Acidified sour cream results from the addition of acidifiers to pasteurized cream containing not less than 18 percent milk fat. The product may or may not contain lactic acid-producing bacteria.

Sour half-and-half is made from the addition of lactic acid-producing bacteria to pasteurized half-and-half. Sour half-and-half contains between 10.5 and 18 percent milk fat. Light and fat-free sour creams are also made today. The fat content and label claim for these products must comply with the requirements of the Nutritional Labeling and Education Act (NLEA).



We usually think of sour cream as a topping for baked potatoes, but it also has many other uses. It can be used as a salad dressing, a spread for bread, or as a dip. Many dips are made by adding chives, fruit, cheese, or spices to the sour cream. Sour cream also is used as an ingredient in a variety of other foods. In order to keep sour cream fresh, it must be covered and refrigerated.

Sour cream consumption is about 2.43 pounds per person and has increased by 46 percent in the last 10 years.

Acidophilus Milk

Acidophilus milk is another type of fermented dairy product where *Lactobacillus acidophilus* is used as the bacterial culture. This bacteria is thought to establish itself in the intestinal tract where it inhibits the activities of harmful gas-producing organisms. For some persons who have frequent problems with diarrhea and intestinal gas, the overall healthful effects can be very beneficial. However, acidophilus milk has a harsh acid taste and has not been accepted by the consumer despite its healthful effects.

In response to this, sweet acidophilus milk was developed. The bacteria in sweet acidophilus milk are grown separately and then added to pasteurized milk. This milk must be stored at 40° F to keep the bacteria inactive. When the milk is consumed, the beneficial bacteria become active in the warm stomach and intestinal tract.

Sweet acidophilus milk can be made from milk of any fat content but is usually made from lowfat (1 percent) milk. It looks and tastes like regular lowfat milk and has the same nutritional value as lowfat milk.

Yogurt

Yogurt may seem like something new because of its current popularity, but it has been around for centuries. It is a staple food in the diets of many peoples, especially those who live around the Mediterranean Sea.

Basically, all yogurt is cultured milk. The bacteria used most commonly are *Lactobacillus bulgaricus* (named so because yogurt was first discovered by Europeans among the people of Bulgaria) and *Streptococcus thermophilus*. This is what gives yogurt its gellike consistency and semisour, tangy taste.

Yogurt can be made from milk of any fat content but in order to be called "light" or "fat-free," the fat content must comply with the NLEA. Flavored yogurt is very popular at this time. One manufacturer has more than 20 flavors on the market, ranging from apricot to vanilla. Because sugar is used in flavored yogurts, they are sweeter than plain yogurt.

The nutrient value of plain yogurt is about the same as the milk from which it is made. Plain yogurt contains about 140 calories per cup and is a good source of protein, calcium, and riboflavin. Flavored yogurts, of course, have more sugar and, therefore, more calories and slightly less of the other nutrients.

Yogurt can be eaten without added ingredients; as a custard with berries or peaches, lightly seasoned with salt and chives or chopped onions, or as a topping for fruit. Sometimes plain yogurt can be used as a lowercalorie substitute for sour cream.

In the U.S., yogurt consumption is 4.6 pounds per person. This represents a 90 percent increase in consumption in the last 10 years and a 500 percent increase in the last 20 years.

Activity

1. On a separate sheet of paper, list the ingredients in and prices of as many different types of strawberry yogurt as you can find. Also note the size of the container and how many servings it holds.

2. Buy three 8-ounce containers of different brands and prices of strawberry yogurt. Sample each and record your findings.

• Which has the best flavor? _____

• What ingredients might have caused a difference in flavor?

• Which yogurt costs less per ounce?

• Which yogurt is the best buy with respect to cost and flavor?

• How does the price per serving of yogurt compare with the price per serving of milk?

Cost of 1 cup milk _____

Cost of 8 ounces plain yogurt _____

What is the difference? _____

Cooking with Cultured Milk Products

Before you start cooking, thoroughly wash your hands with soap and water. Fasten long hair away from the face with a clip or ribbon. Read the recipe carefully. Make sure you understand the instructions. Gather necessary equipment and ingredients. All utensils and measuring equipment should be clean.

Food Safety Tips

Safe food-handling is important to prevent foodborne illness (food poisoning). Here are a few basic tips that you should follow:

- $\sqrt{}$ Wash your hands with warm, soapy water before and after handling food.
- $\sqrt{}$ Wash all surfaces, utensils, and hands after coming into contact with raw meat, poultry, and eggs.
- $\sqrt{1}$ Thoroughly cook all hot foods according to the recommended time and temperatures.
- $\sqrt{}$ Keep hot foods hot (above 140°F) and cold foods cold (below 40°F).
- $\sqrt{10}$ Refrigerate food within two hours of serving time.

Recipes

Homemade Sour Cream

1 pint light cream 2 tablespoons nonfat dry milk powder 2 tablespoons cultured buttermilk

- 1. Wash your hands thoroughly with soap and water.
- **2.** Sterilize all the utensils you will be using by submerging them in boiling water for 5 minutes.
- 3. Pour light cream into the top pan of a double boiler.
- 4. Add nonfat dry milk powder; mix thoroughly.
- **5.** Pasteurize the mixture by heating it to 180°F over hot water. Place lid on pan and let mixture stand 30 minutes.
- **6.** Pour mixture into a sterilized 1-quart jar. Cool mixture quickly to room temperature or 70°F.
- **7.** Add cultured buttermilk. (The cultured buttermilk serves as the starter, which leads to coagulation of the cream.)
- **8.** Allow mixture to stand in a warm (70°F), quiet place where it will not receive any vibrations until it coagulates and forms a firm curd (solid), about 6 to 12 hours depending on the activity of your "starter" (the cultured buttermilk).
- 9. Place in refrigerator and cool.

Makes 1¹/₄ cups. Each tablespoon contains 34 calories and 32 milligrams calcium.

Mock Sour Cream (lower-calorie version)

1 cup creamed cottage cheese 1 tablespoon lemon juice 3 tablespoons water

- **1.** Combine all ingredients in the container of an electric blender or food processor.
- **2.** Cover and process until mixture is creamy and smooth, about 8 to 10 seconds.

Makes 1 cup. Each tablespoon contains 14 calories and 8 milligrams calcium.

Ways to Use Sour Cream or Mock Sour Cream

- Top cream of tomato or other soups with a tablespoon of sour cream; sprinkle with chives or chopped green onions.
- Add ¹/₄ to ¹/₂ cup sour cream to green beans before serving. Sprinkle with chives, chopped nuts, or dill seed, if desired.

Blue Cheese Dressing

- 1 (4-ounce) package blue cheese, crumbled 1/2 cup sour cream 1/2 cup plain yogurt
- 1 teaspoon lemon juice
- 1 tablespoon minced onion
- ¹/₂ teaspoon salt
- 1. Combine all ingredients and stir thoroughly.
- 2. Cover and chill 6 to 8 hours to blend flavors.

Makes 1¹/₂ cups. Each tablespoon contains 30 calories and 40 milligrams calcium.

Buttermilk Pancakes

1 egg

- 1 tablespoon firmly packed brown sugar
- 1 cup all-purpose flour, unsifted
- 1 teaspoon baking powder
- 1/2 teaspoon baking soda
- 1/2 teaspoon salt
- ¹/₃ cup buttermilk
- 2 tablespoons oil
- **1.** Preheat griddle or heavy skillet. If the griddle or skillet is nonstick, there is no need to grease it. If not, then spray with nonstick coating, or grease lightly with vegetable oil.
- **2.** Beat egg and brown sugar until very light, about 2 minutes.
- 3. Mix dry ingredients, stir gently into beaten egg.
- **4.** Add buttermilk and 2 tablespoons of oil. Stir only until mixed. Batter should be lumpy.
- **5.** For each pancake, pour ¹/₄ cup batter onto hot griddle or skillet.
- **6.** Cook until surface is covered with bubbles; turn and cook on other side until light brown.

Makes 12 (4-inch) pancakes. Each pancake contains 72 calories and 25 milligrams calcium.

Sour Cream Coffee Cake

1½ cups sifted all-purpose flour
1 cup sugar
2 teaspoons baking powder
½ teaspoon baking soda
¼ teaspoon salt
1 cup sour cream or buttermilk
2 medium eggs

Topping

- 2 tablespoons all-purpose flour
- 2 tablespoons butter
- 5 tablespoons sugar
- 1/2 teaspoon cinnamon
- 1. Preheat oven to 350°F.
- **2.** Take eggs and sour cream out of refrigerator, and allow them to come to room temperature while you gather remaining ingredients and equipment.
- **3.** Sift together 1½ cups flour, 1 cup sugar, baking powder, baking soda, and salt.
- 4. Combine sour cream and eggs.
- **5.** Add sifted ingredients to cream and egg mixture. Beat just until smooth. (Overbeating tends to toughen the dough.)
- 6. Spread batter in a lightly greased 9- by 9-inch pan.
- **7.** Combine topping ingredients; blend with a fork until crumbly. Sprinkle over batter.
- 8. Bake 25 to 30 minutes.

Makes 8 servings. Each serving contains 256 calories and 59 milligrams calcium if made with sour cream. If made with buttermilk, each serving contains 207 calories and 61 milligrams calcium.

Variations

Chocolate-Date Sour Cream Coffee Cake — Prepare the batter as directed above and stir in 2 ounces grated, unsweetened chocolate; 1 cup chopped dates; and 1 cup chopped nuts (optional) just before baking. Bake at 350°F for 25 to 30 minutes. This recipe does not require a topping. Makes 8 servings.

Each serving contains 400 calories and 88 milligrams calcium if made with sour cream and nuts; 353 calories and 71 milligrams calcium if made with sour cream and no nuts. Each serving contains 304 calories and 74 milligrams calcium if made with buttermilk and no nuts.

Note: Coffee cake usually is better when served warm. If you have some left over, it can be heated in the microwave oven. Put two squares of coffee cake on a paper towel on a nonmetal plate. Microwave, uncovered, 15 to 20 seconds.

Homemade Cultured Buttermilk

1 cup nonfat dry milk powder or 1 quart pasteurized, skim milk 1/2 cup fresh cultured buttermilk

- 1. Wash hands thoroughly with soap and water.
- 2. Sterilize all utensils by submerging them in boiling water for 5 minutes.
- **3.** Pour nonfat dry milk powder into a sterile l-quart glass jar. Fill the jar to within 2 inches of the top with recently boiled water. Place lid on jar and shake until all the powder is dissolved. (Or fill the jar to within 2 inches of the top with fluid milk.)
- **4.** Adjust the temperature to 72°F and add cultured buttermilk.
- 5. Replace the lid, and shake about 1 minute.
- **6.** Let jar sit at room temperature (72 to 75°F) for 12 to 16 hours or until the milk has coagulated and formed a firm curd (solid).
- 7. Break the curd by rotating the quart jar. The flavor of the liquid should be tangy and clean. Save some of this buttermilk to use when making a fresh batch. Place the buttermilk you wish to save in a sterile container before adding salt to the buttermilk you are going to drink or cook with.
- **8.** Add salt to taste, about $\frac{1}{2}$ teaspoon.
- 9. Cool the buttermilk by placing the container in a pan of ice water; then store in the refrigerator.

10. Serve cold. Can be refrigerated for 3 to 5 days.

Makes 4 cups. Each cup contains 75 calories and 245 milligrams calcium.

Flavored Buttermilk

Add one tablespoon (or less to suit taste) of fruit puree or blueberry, pineapple, or strawberry topping after breaking the curd. Juices such as lemon or orange also can be used. Each cup flavored with orange juice contains 80 calories and 245 milligrams calcium.

Yogurt Dressing

2 teaspoons lemon juice 1 tablespoon oil ¹/₂ cup low fat plain yogurt ¹/₂ teaspoon paprika Dash Tabasco ¹/₂ teaspoon salt ¹/₈ teaspoon garlic powder

- **1.** Combine all ingredients in the container of an electric blender or food processor.
- 2. Cover and process until smooth.

Makes ¹/₂ cup. Each tablespoon contains 20 calories and 22 milligrams calcium.

Yogurt Gelatin Dessert

- 1 (3-ounce) package fruit-flavored gelatin 1 (8-ounce) carton yogurt of same flavor
- 1. Prepare gelatin according to package directions.
- 2. Chill until gelatin begins to set.
- 3. Add yogurt, stirring to combine. Mold and chill.

Makes 8 servings. Each serving contains about 32 calories and 43 milligrams calcium.

Homemade Flavored Yogurt

¼ cups nonfat dry milk powder tablespoons plain yogurt cup strawberry preserves

- 1. Wash hands thoroughly with soap and water.
- **2.** Sterilize all utensils you will be using by submerging them in boiling water for 5 minutes.
- **3.** Pour nonfat dry milk powder into a sterile l-quart jar, fill the jar ²/₃ full with recently boiled water. Cover and shake until all the powder is dissolved. Then finish filling the jar with boiled water. Shake again.
- 4. Cool milk to 110°F.
- 5. Add plain yogurt.
- 6. Cover and shake jar vigorously for about 1 minute.
- 7. Place the jar in a pan of 108°F water. Allow the milk to ripen at that temperature until it has coagulated into a firm curd (solid), about 5 hours. The water temperature must remain approximately 108°F during the entire ripening process.
- **8.** Remove the jar from the water, and place it in the refrigerator or in a pan of ice water until well chilled.
- 9. Blend in preserves.

Makes 5 cups; 6 servings. Each serving contains 223 calories and 276 milligrams calcium.

With 1 cup frozen, thawed, sweetened strawberries instead of preserves, each serving contains 119 calories and 250 milligrams calcium.

Variations

- Add 1 cup fresh fruit plus ¹/₂ cup sugar (or sweeten to taste) instead of the preserves.
- Add 1 tablespoon vanilla plus ¹/₈ cup sugar (or sweeten to taste) instead of the preserves.
- Add 1 teaspoon lemon extract plus ¹/₈ cup sugar (or sweeten to taste) instead of the preserves.

Yogurt Potato Bread

(The flavor and moistness of this bread comes from potato soup and yogurt.)

- 6 to 6¹/₂ cups all-purpose flour
- 2 packages dry yeast
- 1¹/₂ tablespoons sugar
- 2 teaspoons salt
- ¹/₂ cup water
- 1 (8-ounce) carton plain yogurt
- 2 tablespoons butter
- 1 (10 ¹/₂-ounce) can condensed cream of potato soup, undiluted
- 1. Preheat oven to 400° F.
- **2.** In a large mixing bowl, combine 2¹/₅ cups flour, yeast, sugar, and salt; mix well.
- **3.** In a saucepan, heat water, yogurt, and butter until warm (120 to 130°F). Butter does not need to melt.
- 4. Add to flour mixture. Add undiluted soup.
- 5. Blend with an electric mixer on low speed until ingredients are moistened; beat 3 minutes on medium speed.
- **6.** By hand, gradually stir in enough remaining flour to make a firm dough.
- 7. Knead dough on a lightly floured surface until the dough is smooth and elastic, 5 to 8 minutes.
- **8.** Place dough in a greased bowl, turning to grease top.
- **9.** Cover and let rise in a warm place until light and double in bulk, about 1 hour.
- 10. Punch down dough. Divide into two parts.
- **11.** On a lightly floured surface, roll or pat each half into a 14- by 7-inch rectangle.
- 12. Starting with shorter side of one rectangle, roll up tightly, pressing dough into roll with each turn. Pinch edges and ends to seal. Repeat with remaining dough.
- 13. Place loaves in greased 9- by 5-inch bread pans.
- **14.** Cover and let rise in a warm place until double in bulk, about 40 minutes.
- **15.** Bake in preheated oven for 30 to 35 minutes or until golden brown.
- 16. Remove from pans and cool on wire racks.

Makes two loaves. One slice contains 121 calories and 25 milligrams calcium.

Strawberry-Yogurt Frozen Pops

2 (10-ounce) cartons frozen strawberries, thawed 1 tablespoon unflavored gelatin 16 ounces plain yogurt

- 1. Drain strawberries, reserving liquid.
- **2.** Pour reserved liquid into a saucepan and sprinkle with gelatin. Cook over low heat, stirring constantly, until gelatin dissolves.
- **3.** Combine strawberries, yogurt, and gelatin mixture in the container of an electric blender or food processor. Cover and process until smooth.
- **4.** Place 12 (3-ounce) paper cups on a tray or baking pan. Fill cups with blended mixture, and cover with a sheet of aluminum foil.
- **5.** Insert a wooden stick through the foil into the center of each cup.
- 6. Freeze until firm.
- 7. Dip cups in warm water to loosen each frozen pop from its cup.

Makes 12 frozen pops. Each pop contains 74 calories and 75 milligrams calcium.

Yogurt Whip

1 cup low fat strawberry yogurt 2 tablespoons light mayonnaise Fresh fruit

1. Mix together strawberry yogurt and mayonnaise.

2. Chill.

3. Use as a dip for fruit. Also can be used as a topping for fruit salad.

Makes 1 cup. One tablespoon contains 22 Calories and 23 milligrams calcium.

Yogurt Fruit Crunch

(Ecellent source of iron, good source of calcium, low in fat.)

- 1 cup granola-type cereal
- 2 cups low fat plain yogurt
- 1 cup fruit, fresh or canned in natural juice
- 1. Spoon alternate layers of cereal, yogurt, and fruit into four serving dishes.
- 2. Chill well before serving.

Makes 4 (1-cup) servings. Each serving contains about 258 calories and 235 milligrams calcium. Calories and calcium vary with ingredients used.

Cleaning Up

If you are neat when you cook, cleaning up is easy. Also, your parents will be much more willing to let you use the kitchen again. Wash utensils and counter tops with hot soapy water. Dry with clean dish towels. Put dry utensils away.

Citizenship

In the 4-H dairy foods project you have an opportunity to share what you have learned with others in your community. Because good nutrition is important to everyone, consider doing programs with groups and through the mass media to tell others about the importance of dairy products in the diet. Consider doing the following:

- Set up a table display of cultured dairy products at a grocery store. Prepare and distribute a fact sheet about the nutritive value of cultured dairy products. Include information about lowfat products that would be helpful to people on fat-restricted diets.
- Do a demonstration or presentation about cultured dairy products for a homemakers club or other community group.
- Do a food recall with your classmates. Ask them to write down everything they ate and drank the day before. How many different dairy products were consumed? Were any cultured dairy products? Discuss how much milk a 13- to 14-year-old should consume each day.
- Prepare dairy dishes for dairy or other agricultural field days.
- Do radio spots and news articles on dairy products.
- Assist with June Dairy Month promotions.

Leadership

If you have been in 4-H for 2 or 3 years, you should do some leadership activities as part of this project. The things you learned in earlier projects give you a good background to serve as a project leader. Consider doing the following:

- Serve as an assistant project leader with an adult or teen leader for 4-Hers in Units I or II of the Dairy Foods project.
- Help younger 4-Hers with planning and practicing a Dairy Foods project demonstration.
- Recruit additional youth to participate in the Dairy Foods project.
- Do an educational program with your school's lunch supervisor. Emphasize the importance of the dairy products served in the school lunchroom.

Demonstrations

The 4-H demonstration contest gives you an opportunity to share what you've learned in this project and to develop your public speaking skills. Select a topic from the list below or do a demonstration on another topic in which you are especially interested. Your parent or 4-H leader can help you select and prepare a demonstration.

- · How to Make Yogurt
- How to Make Buttermilk
- Sour Cream Dips and Spreads
- Comparing the Quality of At Least Four Different Types of Yogurt (taste, appearance, calories, calcium)

Dairy Foods Unit 4: Cultured Dairy Products

Project Record Form

Name_		School	Grade	
Address				
	Street and Number/Rural Route	City	State	Zip Code
County		Birth Date		

A. Under each section, list all the dairy foods dishes you prepared for this project. This is the size and scope of your project.

Type of Food	Date Prepared	Number of Servings	What You Remember Most about the Food or Its Preparation
Dishes Made with:			
Yogurt			
Buttermilk			
Sour Cream			
Other Dairy Products			
Dairy Products Made:			
Yogurt			
Buttermilk			
Sour Cream			
Total			

B. How many times did you attend group meetings to work on your project? ______

C. What knowledge did you gain or skills did you learn in the course of this project? (Examples: learned that some bacteria is beneficial; learned to make yogurt.)_____

D. List any other activities, such as exhibits, demonstrations, and tours, in which you participated as part of this project.

E. List the awards and recognition you have received in this project. Tell the level of recognition. Levels: L—local or club; C—county; D—district or area; S—state; N—national; and I—international.

F. If you helped others with their dairy foods project, give the number of people you helped and what you did to help them.

G. List your citizenship and community service in this project.

H. Write a project story telling what you did and learned in the project. Include such items as how the project helped your family, who helped you with the project, and why dairy foods are important to good nutrition.

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