Five **Fun Facts** About Dairy Foods!

- On average a dairy cow can produce 6-10 gallons of milk per day, which equals 96-160 glasses of milk.
- Milk goes from farm to store in just two days.
- Dairy foods build healthy bodies with important nutrients that work together like: Calcium, Protein, Vitamin D, Potassium and many more!
- Fermented dairy foods like cheese, yogurt and kefir have live active cultures, also known as good bacteria, that create unique tastes, textures and healthy qualities.
- It takes 10 pounds of milk to make one pound of cheese.

Four **Fun Teaching Ideas**!

- Go on a virtual field trip to a dairy farm. As a class, discuss your observations. [www.HealthyEating.org/MDC](http://www.HealthyEating.org/MDC)
- Explore the journey of milk and your favorite dairy foods. Ask students or small groups to research how specific dairy foods are made from milk and report back. Include less familiar foods like cottage cheese and buttermilk.
- Find the counties in California where milk is one of the top three commodities. [https://LearnAboutAg.org/resources/learn/map.pdf](https://LearnAboutAg.org/resources/learn/map.pdf)
- Make butter by shaking heavy whipping cream in small containers! Investigate the physical changes that occur.

*Explore all the great bell pepper resources in this section!*
Tasting Dairy Foods

Taste testing helps children get familiar with nutritious foods that they may have never tried or seen before. Tastings are a fun hands-on way to discover new tastes and explore foods with all the senses.

Milk tasting.
Provide each student with 2-3 disposable or reusable cups, paper and pencil. Choose 2-3 different milks to compare, such as: whole milk, 2-percent milk, 1-percent milk, fat-free milk, reconstituted powdered milk, butter milk, or goat milk. Pour just enough so each person can have a taste while minimizing food waste. Ask students to discuss and journal about their experience:

• How do the types of milk taste differently?
• Could you guess what the different types of milk were? (fun to do as blind taste test)
• What factors affect the taste of milk?
• How did the milk look, smell, feel in your mouth, and taste?

Additional activity: Compare the taste of dairy milk to non-dairy beverages from soy, almond, coconut, rice or hemp. Discuss the same questions above. Expand the discussion to explore how different milks are made.

Cheese tasting.
Provide each student with a napkin, paper and pencil. Offer students small servings of different types of hard and soft cheeses, such as: cottage cheese, spreadable cheese, cheddar (sharp, mild), Colby, Monterey jack, pepper jack, mozzarella (fresh, dry), parmesan, Swiss, bleu/gorgonzola, goat cheese, provolone, gouda, low-fat cheese. Cut or spoon just enough cheese for each person to taste while minimizing food waste. Ask students to discuss and journal about their experience:

• What do the cheeses look, smell, feel and taste like?
• Describe and compare the texture, color, appearance, taste and smell of the cheese.
• Can you tell the difference between cheeses? (fun to do as blind taste test with blindfold)
• Discuss how cheese is produced and what it means to be “aged”.

Yogurt tasting.
Provide each student with a napkin, cup(s), paper and pencil. Offer students 1-3 different types of yogurt products such as: plain or flavored yogurt, whole milk and fat-free yogurt, European style, Greek, Kefir or drinkable yogurt. Pour or spoon just enough yogurt for each person to taste while minimizing food waste. Ask students to discuss and journal about their experience:

• What does the yogurt look, smell, feel and taste like?
• Describe and compare the texture, color, appearance, taste and smell of the yogurt.
• Can you tell the difference between yogurts? (fun to do as blind taste test)
• Discuss what “fermentation” means and how it affects the taste and texture.
Nutritious snacks are a great way to introduce a variety of wholesome foods and set a foundation for lifelong healthy habits. Snacks help keep tummies full in between meals and support student achievement. Lack of adequate consumption of specific foods, such as fruits, vegetables, or dairy products, is associated with lower grades among students.

Pairing two or more food groups together as snacks adds even more variety and enjoyment. Here are some fun ways to pair your Taste and Teach fruits and vegetables with dairy!

- Tomatoes- layer with mozzarella cheese
- Apples- dip in yogurt with a dash of cinnamon
- Grapes- string on kabobs with cubes of cheese in between
- Citrus- add a splash of citrus and herbs to yogurt for a tasty dip
- Nuts- layer within or on top of a yogurt parfait
- Leafy greens- sprinkle with a yogurt salad dressing
- Green beans- pair with a quick Greek yogurt dip
- Avocados- mix into cottage cheese
- Berries- mix into plain yogurt or layer in a parfait
- Pears- pair with slices of cheese
- Peaches- blend into a smoothie with a little milk and vanilla extract

Recipe Ideas!

- Greek yogurt dip for veggies: mix dry dip or dressing mix with plain Greek yogurt
- Yogurt dip for fruit: plain yogurt or Greek yogurt, mix in honey or maple syrup, cinnamon, and vanilla extract.
- Smoothie: in a blender add 3 cups fruit, ½ cup yogurt or cottage cheese, 1 cup milk and blend until smooth. Makes 2 servings.
How Produced – California produced 39.8 billion pounds of milk in 2017. Approximately 1.73 million dairy cows produce milk on approximately 1,300 dairies located throughout the state. California’s available land, mild climate, and plentiful feed supply make it a desirable and productive location for dairies.

A dairy cow must give birth to a calf to produce milk. A female calf is called a heifer and a male is called a bull. After nine months gestation, a mature two-year old heifer gives birth and is called a “fresh cow.” She produces milk (lactation) for 10 months during which time she is bred again. Her milk production then decreases until she produces no milk (dry) for two months. She will produce milk again after she has her next calf. Cows have a production cycle of four to seven years.

Dairy cows are milked two (sometimes three) times each day. A cow will produce six to seven gallons of milk each day which is more than 2,000 gallons of milk each year.

Cows are ruminant animals, which have four stomach compartments, and efficiently digest many different commodities such as hay, silage (fermented corn, wheat or hay including the stalks and leaves), and grain (corn, oats and barley). Cows also consume many different agricultural by-products including cottonseed, almond hulls, sugar beet pulp, and blemished vegetables. Cows drink approximately 35 gallons of water each day.

History – Anthropologists suggest that Ancient Egyptians, Romans, and Greeks made cheese and yogurt as early as 600 B.C. Missionaries brought the first dairy cows to California in 1770. During the Gold Rush, immigrants brought cows, cheese presses, and churns to California along with their own recipes for making dairy products.

In 1882, David Jacks, a Scotsman from Monterey, named his cheese Monterey Jack. He was the first person to sell cheese commercially in California. The early 1900s brought changes to the dairy industry including centralized manufacturing and distribution. As California’s population increased, the dairy industry focused on improving sanitation, increasing production, and mechanization.

Today, California’s dairy industry utilizes technology and advanced food processing systems to provide safe, quality products for California, the United States, and the world.

Breed – There are five dairy breeds in California. The black and white Holstein is the most common. The Jersey is a smaller cow whose milk is often used for cheese production. The Brown Swiss, Guernsey, and Ayrshire are other breeds used for milk production.

Commodity Value – California has been the nation’s leading dairy state since 1993 when it surpassed Wisconsin in milk production. Sales of milk and cream contributed $6.9 billion in 2017 to California’s economy. In 2017 California accounted for 18.5% of the U.S. milk production. California’s cheese production ranks second in the nation, with approximately 46 percent of all the Golden State’s milk used to make cheese.

Top Producing Counties – Although during 2017, 31 counties contributed to the state’s total milk production, a handful of counties continued to be responsible for the bulk of the production. Tulare, Merced, Kings, Stanislaus, and Kern counties accounted for 72 percent of the state’s total milk production.

Nutritional Value – Dairy products such as milk, yogurt, and cheese contain numerous essential nutrients including calcium, potassium, phosphorus, magnesium, and protein. This “package of nutrients” is critical for the development of strong bones and teeth, maintaining a healthy weight, and reducing the risk of high blood pressure, osteoporosis, and certain cancers. Whether it’s protein to help build and repair muscle tissue or vitamin A to help maintain healthy skin, dairy products are a natural nutrient powerhouse.

For additional information:
Dairy Council of California
(877) 324-7901
Website: www.HealthyEating.org
California Milk Advisory Board
Website: www.realcaliforniacheese.com
**Lesson Ideas**

- Explore different dairy breeds including their characteristics, history, and origin.
- Compare a cow’s diet and digestive process to a human’s diet and digestive process. Diagram ruminant and monogastric digestive systems.
- Make butter by shaking heavy whipping cream in baby food jars.
- Create a picture collage of products made from milk.
- Visit a dairy or milk processing facility.
- Taste test different cheese and dairy products.
- Make homemade ice cream.
- Research the nutrients found in dairy products.

**Fantastic Facts**

1. Cows have four stomach compartments.
2. Cottonseed, almond hulls, sugar beet pulp, and blemished vegetables are all agricultural by-products eaten by cows.
3. Monterey Jack cheese was developed by the Jacks family in Monterey, California.
4. Silage is partially fermented grains and grain by-products.
5. On average, a cow produces milk for four to seven years.
6. The most common dairy breed in California is the black and white Holstein.
7. Yogurt, ice cream, cheese, and butter are all dairy products.
8. Calcium is an essential nutrient found in milk.

**Lesson Plan: Milk-From the Farm to the Family Class Book**

**Introduction:** Dairy products have been around since 600 B.C. However, today’s milk production and the production of dairy products is very scientific and technical.

**Objective:** Students will perform independent research on one aspect of milk and dairy product production. The class will produce a book that depicts the process.

**California Standards:** CC ELA: W.3-12.2, 4, 7 SL.3-12.4, 5

**Materials:** Index cards, resources including Internet access, books and encyclopedias, 12” x 18” paper, markers.

**Procedure:**
1. Write key words or phrases on index cards. These should be one card per student or pair of students. Example words include ruminant, lactation, cow diet, pasteurization, homogenization, etc.
2. Distribute one card to each student or partnership.
3. Have the students research, on the Internet and in libraries, the meaning of their word or phrase and learn how it relates to milk production.
4. Have the students write and roughly illustrate their findings using a standard format.
5. Have the students each read their page to the class. As a class, sequence the information and have the students use technology to create a professional looking page about their findings so that it blends with the work of other classmates.
6. Title the book “Milk: From the Farm to the Family.” Bind the book and share it with other classes or at Open House.
Ice Cream in a Bag

Explore the history of ice cream and dairy products, and the chemistry of ice, salt, and exothermic reactions.

Recipe
1. Fill the large bag half full of ice and add the rock salt. Seal the bag.
2. Put milk, vanilla, and sugar into the small bag and seal it. You can use two bags to prevent leaking.
3. Place the small bag inside the large one, sealing it again, carefully.
4. Shake until the mixture is ice cream, which takes about 5 minutes.
5. Wipe off the top of the small bag, then open it carefully. Enjoy!

Classroom Activities

English Language Arts/History
- Research the origin of the ingredients, discuss how transportation systems are part of the distribution system for these ingredients. Locate the nearest place in their community that ice cream is produced.
- Have students research the history of ice cream or other dairy products and present their findings to the class.

Math
- Before the activity, have students estimate the amount of milk needed for the experiment. Then, calculate actual amount needed. Calculate the cost of the milk that was used.
- Have students multiply and divide fractions to determine the amount of supplies needed for 1 scoop of ice cream for each person in the whole class, half the class, etc.

Science
- Create a food chain or food web with cows and humans and explain the relationships.
- Have students write down their observations and discuss the process of how milk turned into ice cream, describing the physical and chemical properties.

Materials
- 1 gallon-size plastic food storage bag
- Ice cubes
- 6 tablespoons rock salt
- 1 pint-size resealable plastic food storage bag
- ½ cup milk or half & half
- ¼ teaspoon vanilla
- 1 tablespoon sugar

Tip
A ½ cup of milk will make about 1 scoop of ice cream; double the recipe if you want more.

California Standards:

Grade 1
ELA CC: RI.1.10; SL.1.1
Math CC: 1.OA.1, 1.MD.4

Grade 2
ELA CC: RI.2.10; SL.2.1
Math CC: 2.OA.1, 2.MD.8
NGSS: 2-PS1-1, 4

Grade 3
ELA CC: RI.3.10; SL.3.1; SL.3.4
Math CC: 3.OA.1, 3.MD.2
NGSS: 3-LS4-3

Grade 4
ELA CC: RI.4.10; SL.4.1, 4
Math CC: 4.NF.4c, 4.MD.2

Grade 5
ELA CC: RI.5.10; SL.5.1, 4
Math CC: 5.NF.1.2
NGSS: 5-PS1-3, 4, 5-PS3-1

Adapted from "Acres of Adventures Activity Guides" by 4-H
Say Cheese
Investigating the cheese-making process.

Mozzarella Recipe
California is a leading producer of Mozzarella cheese. Mozzarella is a fresh cheese that originated in Italy and is commonly used on pizzas and in pastas. The recipe makes approximately 12-14 ounces of fresh mozzarella cheese and takes 30-60 minutes.

1. Pour milk into stainless steel pot, add citric acid and stir gently to blend. Heat milk over medium-low heat to 88-90°F.

2. Remove from heat, add rennet and stir for 30-60 seconds to blend. Cover and let sit for five minutes. Continue to heat to 105°F as curd and whey separate.

3. Line colander with cheesecloth. Gently pour curds (solids) and whey (liquid) into colander to strain. Place curds in microwave-safe bowl. Whey can be retained for other baking projects like bread.

4. Microwave curds for 30-60 seconds on high. Remove from microwave and gently press curds with hands (draining off additional whey). Repeat process two to three more times, microwaving in 20-30 second intervals. Press curds together while cheese is warm (almost too warm to handle) and knead cheese like bread dough until it is smooth and pliable (like pulling taffy). If needed, microwave cheese in 10 seconds intervals to keep cheese warm and pliable. Then, knead in salt.

5. Cheese is done when it is smooth. Form cheese into a ball and place in cold water to cool. When cheese is cold, remove from water and place in plastic wrap and refrigerate. Eat within one week.

Classroom Activities

Science
- Have students record observations throughout the cheese-making process including descriptions of how the ingredient properties changed and the temperatures at which they observed phase changes. Have students identify the catalyst and describe the role it played in cheese making.
- Instruct students to categorize mozzarella cheese into a food group, list the number of recommended servings of that food group per day and the nutritional facts of mozzarella cheese.

English Language Arts
- Have students work in groups to create their own mozzarella cheese brand name, slogan, logo, and informational advertisement that persuades shoppers to purchase their product. Students can present this material to their classmates using a poster, PowerPoint, or video.

California Standards
Grades 9-12
ELA CC: W.9-12.1, 4, 6;
SL.9-12.1, 2, 4, 5; WHST.9-12.1, 7
NGSS: HS-PS1-1, 2, 4, 5

Materials
- ¼ teaspoon liquid or ¼ tablet rennet (dilute in ¼ cup water)
- 6-8 quart stainless steel pot (not aluminum)
- 1 gallon of whole milk
- 1 ½ teaspoons citric acid (dilute in 1 cup water)
- Dairy thermometer
- Colander
- Cheesecloth
- Microwave-safe bowl
- 1-2 teaspoons salt
- Food-grade rubber gloves

Tip
Take a virtual tour of California dairies and meet dairy farmers at RealCaliforniaMilk.com

Adapted from “30 Minute Fresh Mozzarella” by Utah Education Network.
STEM: Make Your Own Yogurt

Enjoy delicious yogurt that you and your family can make at home. It's easy!

Or make cheese using the “Say Cheese” Ag-Bite from California Foundation for Agriculture in the Classroom:
http://learnaboutag.org/resources/bites/cheese.pdf

Ingredients:
1 quart (4 cups) low-fat or fat-free Milk
2 tablespoons Yogurt, plain with live, active cultures
2/3 cup fat-free powdered Milk (Omit if using whole milk)

Non-stick saucepan, 2 quarts or larger
Wisk
Candy or general cooking thermometer
Quart sized jar, container or insulated bottle

For sweetened yogurt, stir in
2-4 tablespoons Honey or Maple syrup
1-2 cups fresh or dried Fruit
1/2 teaspoon Vanilla

Preparation:
Combine milk and powdered milk in a non-stick saucepan. Wisk together and constantly stirring, heat milk to 180-190 degrees. The milk will be steaming, expanding and beginning to form bubbles.

Remove from heat and let milk cool to 115-120 degrees.

In a small container, mix two tablespoons of yogurt with two tablespoons of the heated milk and wisk until smooth.

Stir yogurt mixture into the saucepan of cooling milk and continue stirring for at least two minutes.

Pour the contents of the saucepan into a warm jar, container or insulated bottle. Cover it and keep it warm until it sets, usually 4-6 hours. You can wrap the jar in kitchen towels, place your container in an insulated cooler or place it in the oven with a light bulb on.

Once the yogurt sets, refrigerate it to firm its structure and mix in any desired flavorings.


Unscramble the words to finish each sentence:

Yidra _ _ _ _ _ foods are an important part of a healthy diet.

Milk is a good source of lmccuia _ _ _ _ _ _ _ which is important for strong bones.

Gtyuor _ _ _ _ _ _ _ and eesehc _ _ _ _ _ _ _ are examples of dairy foods.

Milk has rtpneoi _ _ _ _ _ _ _ which is good for building muscle.

Children ages 9 and older, as well as adults, should eat erht e _ _ _ _ servings of dairy foods each day.

Happy Eating.org

Content originally developed with California Foundation for Agriculture in the Classroom.
For more free agricultural education resources visit www.LearnAboutAg.org
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Mmm... Milk!

Milk is the top agricultural product in California! And our dairy farmers and processors produce that milk more efficiently than ever before.

Where does milk come from?

Milk and dairy foods are rich in a wide range of nutrients that are enjoyed by children and adults. Most milk in the United States comes from cows, but goats, camels and sheep also produce milk. Beverages from plant sources like rice or almond are not true “milk.”

What’s in the Dairy Aisle?

Milk is a great beverage to have with meals and can also be made into other delicious products. Children ages 9 and older and adults should include three servings of milk, yogurt or cheese each day. Use the following list to label the foods in the dairy aisle from the grocery store:

- milk
- cheese
- ice cream
- yogurt
- butter

Next draw in another product you would find in the dairy aisle.

Check Your Price

Look in your local newspaper and find ads with dairy foods. Record the prices you find for the items listed. Compare prices from other stores or ads.

BONUS: Use the Serving Sizes of Dairy Products Chart to find the price per serving. How do other healthy foods stack up per serving, like canned peaches or peanut butter?
California leads the nation in agricultural production. Not only do California’s dairy farmers produce more milk than any other state, our farmers grow more different types of vegetables, fruits and grains than any other state.

That means it’s easy to find #CAonMyPlate all year long.

ChooseMyPlate.gov/MyState

State Fruit: Avocado
State Grain: Rice
State Nut: Almond
State Vegetable: Artichoke

Other California grown or produced foods: Almonds, apples, apricots, asparagus, artichokes, barley, beans, beef, black-eyed peas, blueberries, bread, broccoli, cabbage, cantaloupe, carrots, cauliflower, celery, cheese, cherries, chicken, chickpeas, corn, cucumbers, dates, eggs, figs, garlic, grapefruits, grapes, green beans, honey dew, kiwi fruit, leaf lettuce, lemons, lima beans, milk, mushrooms, nectarines, oats, olives, onions, oranges, peaches, pears, pecans, peppers, persimmons, pistachios, plums, pomegranates, potatoes, prunes, pumpkins, raspberries, red kidney beans, romaine lettuce, spinach, squash, strawberries, sweet corn, sweet potatoes, tangerines, tomatoes, turkey, walnuts, watermelon, wheat, yogurt

For more information on agricultural production in California, visit www.CDFA.CA.Gov

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**Western Europe**

Europe's cheeses exemplify the continent's diversity. Parmesan from Italy, gouda from the Netherlands, and bleu from France, roquefort from Greece—the list goes on. In fact, Western Europe leads the world in both production and consumption of cheese. But California has its own claim to cheese fame: daily, including cheese, is California's most valuable agricultural commodity.

**Recipe**

**Cheese Herb Zucchini**

This kid-friendly recipe can be modified to feature locally sourced cheese, such as Monterey Jack, or a European cheese, such as parmesan.

**Ingredients**
- 1 tsp. garlic salt
- 1 tbsp. Italian herbs
- 2 Tbsp. butter, melted
- 1 cup cheese, grated

**Procedure**

1. Cut off ends of zucchini, cut lengthwise. Parboil in boiling salted water; until tender but crisp. Drain. Toss into lightly buttered baking dish.
2. Drizzle melted butter 1. Bake at 400°F for 10 minutes, until cheese is melted and lightly browned. Source: healthyeating.org

**California Spotlight**

In California, 46 percent of cow's milk is used in cheesemaking. The state's dairy processors produce more than 250 different varieties and styles of cheese—including Monterey Jack—which was originally produced in California missions more than 200 years ago. Additionally, California leads the nation in producing Hispanic-style cheeses.

**Folklore of Foodies**

In folklore, the humble blue cheese goes back to the 7th century, to a cave outside the village of Roquefort in France. Legend has it that a distracted shepherd forgot his lunch of bread and cheese in the cave. When he returned a few months later, the cheese had become infused with penicilliniae requisita, a mold that was growing in the cave. Imagine his surprise when he realized his new variety of cheese was both safe to eat and delicious.

**Cheese Around the Clock**

In Western Europe, cheese is eaten around the clock. Study the 24-hour clock to discover how cheese is enjoyed throughout the day.

**Greece**

Greek sheep's milk cheese makes with goat's, sheep's, and feta cheese on spanakopita, a feta cheese and spinach filled pastry.

**Belgium**

In Belgium they enjoy Chèvres, endives rolled in ham and Prosciutto di Parma (cured ham) and baked until crisp.

**Denmark**

An afternoon snack may include a 27-layer pastry filled with cream cheese, fruit, and sugar, called a Viennese.

**The Degrees of Cheese**

Find the angle of each mealtime sector. Use a protractor, or use mathematical equations. To find the percent of each sector, divide the number of hours in each sector by the total number of hours in the day (24). To find each angle, multiply the percent (in decimal form) by 360.

**Cheese Fact**

Cheese can be digested by many people with lactose intolerance. Aging cheeses, such as swiss, parmesan, and cheddar, contain only trace amounts of lactose.

**Cheese Around the World**

- **France**
  - The French might snack on brioches served with fresh bread, but never crackers.
  - **Did You Know?**
    - Cheese provides the body with calcium and protein, and it helps protect teeth against cavities.

- **Italy**
  - Cheese is served in a communal pot with pieces of fresh bread.

- **United Kingdom**
  - Cheese is served with crusty bread, as a popular appetizer.

- **Switzerland**
  - Gruyère cheese, which is served with crusty bread, is a popular appetizer.

- **Germany**
  - Germans enjoy fresh bread, cold meats, and local cheese such as Bavarian Brie, butter, and jam.

- **Sweden**
  - Swedes eat open-faced cheese sandwiches layered with fish, Almuna Tegel cheese, mayo, cucumbers, and tomatoes.

- **Spain**
  - Croquettes de Jamón, fried balls of ham, eggs, and Queso de la Serena, a cheese made from sheep's milk, is a popular snack in Spain.

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**MMM...Milk!**

Where does milk come from?

Milk and dairy foods are rich in a wide range of nutrients that are enjoyed by children and adults. Most milk in the United States comes from cows, but goats, camels and sheep also produce milk. Beverages from plant sources like soy or almond are not true “milk.”

**Milk is number one!**

It is the top commodity in California.

And our dairy farmers and processors produce that milk more efficiently than ever before.

**What’s in the Dairy Aisle?**

**Activity**

Milk is a great beverage to have with meals and can also be made into other delicious products. Children and adults should include three servings of milk, cheese or yogurt each day. Use the following list to label the foods in the Dairy Aisle from the grocery store:

Milk, cheese, ice cream, yogurt, butter, and draw in another product you would find in the dairy aisle.

Look in your local newspaper and find ads with dairy foods. Record the prices you find for the items listed. Compare prices from other stores or ads. BONUS: Find the price per serving.

**Serving Sizes of Dairy Products**

<table>
<thead>
<tr>
<th>FOOD</th>
<th>SYMBOL</th>
<th>COMPARISON</th>
<th>SERVING SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
<td></td>
<td>Pointer finger</td>
<td>1/3 cup</td>
</tr>
<tr>
<td>(string cheese)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk and yogurt</td>
<td></td>
<td>One fist</td>
<td>1 cup</td>
</tr>
</tbody>
</table>

CA Standards: ELA CCSS: RI.3.5.1, 7, RI.4.1, SL.3.5.4, SL.3.5.4, RI.1.5, RI.2.5, RI.3.5, RI.4.5, RI.5.5, RI.6.5, RI.7.5, RI.8.5, RI.9-10.5

**Biotechnology**

An early example of biotechnology was the use of microorganisms to produce cheese, yogurt, and bread. Ancient Egyptians made cheese using biotechnology. In the 12th century, Genghis Khan fed his already brawny warriors yogurt for extra strength. Research how biotechnology and the use of microorganisms help in the process of cheese and yogurt making. Compare “then and now” procedures. Students can work in groups and present their findings to the class.

**Activity Healthy Food Scramble**

Unscramble the words to finish each sentence.

Yida ________ foods are an important part of a healthy diet.

Milk is a good source of lincemiu ________ which is important for strong bones.

Gtyour ________ eesche ________ are examples of dairy foods.

Milk has ripneei __________ which is good for building muscle.

Children ages 9 and older as well as adults should eat erhtie ________ servings of dairy foods each day.

**MyPlate**

MyPlate is an illustrated guide of what a balanced meal looks like. It should include:

- Grains, Protein, Vegetables,
- Fruits, and Dairy.

**Activity:** What should you put on your plate? Draw or write foods for your own MyPlate for lunch. Make sure you create a balanced meal!

See www.choosemyplate.gov/about for more details of what each food group contains as well as portions. Share your balanced meal with your classmates!