“Cheeses of the World”
Leader/Teacher Guide

Objectives:
- Help members explore origins of cheese and cheese-making.
- Help members learn how cheese can be part of a healthy diet.
- Have members learn some differences in cheeses and participate in a tasting activity to begin to recognize differences.

Materials needed:
FCD09-02 Participant handout
FCD09-03 Consent letter/evaluation

Supplies needed before lesson:
1. A pencil and piece of paper for each participant.
4. Obtain 3-5 samples of a variety of cheeses listed on member hand-out from different categories for tasting activity. (Purchase varieties different than the common cheddar, mozzarella, Monterey jack, etc.). Before class cut cheese into 1 inch squares and store in air-tight containers in the refrigerator. Provide toothpicks for picking up cheese or a spoon for cheeses that are too soft or crumbly. (Optional-have some crackers or fresh fruit available to accompany tasting.)
5. Small plates and napkins.

<table>
<thead>
<tr>
<th>Teaching Outline:</th>
<th>Teaching Tips:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction/Ice Breaker</td>
<td></td>
</tr>
<tr>
<td>Give the participants 1 minute to list as many types of cheeses as they can. Have the person who has the most cheeses read their list. (You may want to reward them with a small or “cheesy” prize.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th>State objectives.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The objectives of this lesson are to:</td>
<td></td>
</tr>
<tr>
<td>- Explore origins of cheese and cheese-making.</td>
<td></td>
</tr>
<tr>
<td>- Learn how cheese can be part of a healthy diet.</td>
<td></td>
</tr>
<tr>
<td>- Learn some differences in cheeses and participate in a tasting activity to begin to recognize differences.</td>
<td></td>
</tr>
</tbody>
</table>
History/Geography:

You may have enjoyed a simple grilled Cheddar cheese sandwich or savored a rich and complex Stilton cheese with a crisp pear slice. Today cheeses are served breakfast through dinner, for snacks and dessert. Cheeses have been crafted for over 4,000 years and the wide varieties available have everything to do with geography, weather and human ingenuity.

The first cheeses may have been produced accidentally before Roman times in Europe and Asia when milk was carried in the fourth or true stomach of a milk-fed calf. Rennet, an extract in that organ, acted as a curdling agent to thicken the milk. Prolonged bacterial action took the homogeneous, yogurt-like mixture to the next phase: cheese!

In the dark ages, religious houses preserved the appreciation of fine cheeses. In Greece, goat’s milk cheese was dried and carried by soldiers and sailors on journeys. Romans preferred dry cheeses and sometimes smoked.

The people of the British Isles learned about cheese making during the Roman occupation. Cheshire cheese was well known by 1662. In the early 18th century, Cheddar and Stilton were commonly known. Cheddar, a popular cheese, was made by combining all the cow’s milk in its namesake town in Somerset in a cooperative venture. Stilton, a cow’s milk version of Roquefort was named for its home town in Huntingtonshire. It was served with the mites and maggots that surrounded it and eaten with a spoon.

Conversely, the French admired their bleu cheese. Roquefort was the most popular cheese followed by Brie, Maroilles and Gruyere.

Cheese enjoyed rank in England and France. Fresh or briefly aged types were part of the diets of the poor and were considered “white meat.” The rich enjoyed a variety of cheese near the end of the meal to promote digestion or stimulate the appetite to continue eating. Being overweight or obese was a symbol of wealth. The Greeks prolonged the party at the end of the meal by eating cheese to stimulate their thirst for wine.

Only the very wealthy could afford the large wheels of cheese in the markets. Anyone that had enough money to purchase cheese was called a “Big Wheel” or “Big Cheese.”
### How cheese is made:

Milk is made of fat, water, sugar, protein and minerals. The tiny, lumpy globules of fat float to the top to form a layer of cream. The protein in milk is called casein and whey. Casein is like small clusters of tiny sponges soaked in water. When milk is heated or mixed with salt or acids, the denatured proteins clump together. The liquid that has been forced out is called whey. The curds (mostly protein and fat) are used to make cheese. Fresh curds (such as cottage or ricotta) can be eaten or the cheese can be stored and ripened. The aged cheese can be eaten over many months.

Cheese producers can control the ripening process with enzymes and other methods to create flavors, textures and appearances for distinctive cheeses. Ripened cheeses can be aged to mild flavors or strong and sharp.

### Optional activity:

Make simple cottage cheese with members to see process of curdling. Simply heat 2 cups of 2% or whole milk to boiling and add 2 tbsp. lemon juice; continue stirring until you see curds forming. If members would like to taste cottage cheese, drain whey from curds, add 1-2 tsp. milk back in to curds, salt and pepper to taste.

### Nutrition Connection

If you ask any child you know what cheese is made from, the most common answer will obviously be milk! And we all know that familiar little jingle “milk does a body good”…well so can cheese which is a product of milk, as we have just discussed. Cheese can be a part of your healthy diet and can really liven up your favorite dishes.

On MyPyramid cheese fits into the milk group. A person on a 2,000 calorie diet needs about 3 cups of milk, or its equivalent, a day (1.5 ounces of natural cheese or 2 ounces of processed cheese equals 1 cup of milk). You can go to [http://www.mypyramid.gov](http://www.mypyramid.gov) to create a personalized diet plan based on gender, age and activity level.

So what can we get from eating cheese?

- Excellent source of **calcium**-an essential mineral needed for bone formation and growth. (Older women often don’t get enough so this is a good way to add some into your diet.)
- Good source of **protein** which is found in every cell in our bodies and used as the building blocks of our bodies.

[Show a picture of MyPyramid.](http://www.mypyramid.gov)
Different varieties of cheese contain varying amounts of all the nutrients listed above and some cheeses contain other nutrients not listed here. To know more about a specific cheese read the *Nutrition Facts Label* found on the packaging—it will tell you all that you need to know!

One other nutrient that we get from cheeses that often scares people away is **fat**. Fat content varies widely from high amounts to low- or non-fat. Choosing low-fat varieties will help you still enjoy cheese while not increasing your fat consumption. Again, refer to the Nutrition Facts label for help.

<table>
<thead>
<tr>
<th>Cheese Varieties:</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are hundreds of varieties of cheeses:</td>
</tr>
<tr>
<td>➢ from countries around the globe from China to France to Mexico to India</td>
</tr>
<tr>
<td>➢ made from cows, goats, sheep, yaks, camels, reindeers and buffalo’s milk.</td>
</tr>
<tr>
<td>➢ in colors from white to orange to red to blue to green</td>
</tr>
<tr>
<td>➢ in textures from soft to semi-firm to hard</td>
</tr>
<tr>
<td>➢ in all flavors from fruity to nutty to mild to pungent</td>
</tr>
</tbody>
</table>

Everyone seems to have their own way of classifying cheese. Commonly, though, the moisture content of cheese determines the category. (The subtle characteristics within each category are distinguished by the type of milk and the quality of that milk—which is determined by the regional quality of the feed influenced by the sun, soil, and water.)

In this lesson we will refer to different types by the following classifications:
- Soft
- Semi-soft
- Firm
- Hard
- Blue-veined

Refer to the Cheeses of the World poster, if available, and choose several from each category to look at and read the descriptions to illustrate variety.

<table>
<thead>
<tr>
<th>Cheese Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food safety should always be a top priority. When choosing cheese, a good choice is cheese made from pasteurized milk - especially for people who are at higher risk such as older adults and those with weakened immune systems. Cheeses made from raw milk are more likely to have harmful bacteria that could cause illness.</td>
</tr>
</tbody>
</table>
Many people like to serve their cheese at room temperature because it brings out the flavor; but leaving cheese out for too long before or after serving can be a safety risk. A safer recommendation would be to take the cheese out of the refrigerator 10-15 minutes prior to serving for better flavor. Leftover portions of cheese need to be refrigerated immediately.

**Tasting Activity and Serving Tips**

| At this time bring out prepared, cut cheeses for tasting. If you chose a cheese from the poster, you could read the description as you pass out the cheese. |
| *Optional note:* take out the prepared cheese 10-15 minutes before serving to let them warm slightly for better flavor while tasting. |

| Allow participants to discuss the differences in the cheeses, likes, dislikes, etc. and write cheeses and comments onto the cheese tasting chart in the participant handout. |

- **Game (optional):**

  **Optional game:**“Cheese Heads”
  Write names of cheeses on sticky notes. Pass these out face down, one per participant. Have participants stick them to their foreheads without peeking. One at a time have them take a turn asking questions to figure out what kind of cheese they are. They can ask questions such as: Am I a soft cheese? Am I fruity tasting? Am I made in Italy, etc.? If your time is limited you could limit the questions to 10 total or just have 3 or 4 participants stand in front of the group to discover their “head” cheese.

- **OSU Consumer publications on cheese:**

  PNW 539  Fresh Cheese Made Safely
  [http://extension.oregonstate.edu/catalog](http://extension.oregonstate.edu/catalog)

- **Summary:**

  Ask members if there are any questions.

  Encourage members to try new varieties of cheeses, find out some fun facts about them and use them to excite their palate and their plates!
Evaluation:

Distribute the “Informed Consent Statement” and evaluation form. Read aloud the “Informed Consent Statement” and give participants 5 minutes or so to complete the evaluation. Collect the evaluations and return them to your local county Extension Office.

Bibliography


