Explore Dairy!

Instructions are provided for 3 tasting activities. Prepare students by saying, "Let's go on a fun adventure and explore food through the 5 senses! Using your senses (sight, touch, smell, taste, and hearing) is a way to get familiar with food or discover a taste for something new. In these tasting activities, you'll discover that cheese, milk, and yogurt provide unique flavor, texture, and taste to meals and snacks. A variety of foods from all 5 food groups make eating interesting, tasty, and fun."

## Tasting Activities:

I. Three Cheers for Cheese (Lesson I)
2. Milk Masterclass (Lesson 3)
3. Yogurt, Culture on a Spoon (Lesson 5)

## How to Conduct a Tasting Activity:

- Review tips online for successful and respectful tasting activities at HealthyEating.org/Nutrition-Topics/Meal-Planning/Food-Tasting.
- Wash hands before preparing food.
- Consider if students may taste as many times as they'd like. If so, have enough samples for each student to taste and more for seconds or thirds.
- Discuss the 5 basic tastes (sweet, salty, sour, bitter, umami).
- Establish classroom norms for trying foods:
- Students wash their hands.
- The class tastes together. Students will wait until everyone receives a sample.
- Students use all their senses. If they do not wish to taste the sample they can explore it through sight, touch, smell, and hearing.
- Try tasting a sample many times using small bites, instead of all at once.
- It's OK to like or dislike different foods-that's just another way each student is unique. Encourage an environment of respect and open-mindedness.
- During the tasting, do not talk out loud. Doing so may influence others' opinions. Ask students to save their thoughts for the discussion.


## Objectives:

I. Introduce students to the fascinating world of different dairy cheese flavors, textures, and aromas.
2. Students will use their senses (sight, touch, smell, taste, and hearing) to describe different cheeses.

## Time:

- 10 minutes for preparation
- 15 minutes for lesson
- 25 minutes total


## Materials:

- 3 different types of cheese:
- Hard cheese like Parmesan or cheddar
- Crumbly cheese like feta or cotija
- Soft cheese like cottage cheese or ricotta
- Single serving cups
- Tasting Worksheet
- Blank piece of paper or the other side of the Tasting Worksheet if blank
- Nutrition Primer
- Tasting Activity Tips


## Preparation:

- Prepare the ingredients or samples ahead of time or during the video portion of the lesson, if possible. Refrigerate until ready to serve.
- Prepare small samples for each student. Label each sample for younger students and identify each sample prior to tasting.


## Test Students' Cheese IQ:

I. True or False? Nearly half of the dairy milk produced in California is turned into cheese. (True!)
2. True or False? There are now hundreds of cheese varieties around the globe, including 300 in the United States. (True!)
3. True or False? A cheddar cheese stick contains about as much calcium as a glass of milk. (True! That's 306 mg of calcium to build strong bones and teeth.)
4. What is the most popular cheese recipe in America? (Macaroni and cheese)

## Procedure:

I. Review the video and introduce the activity. Distribute a blank piece of paper to each student (or use the back of the Tasting Worksheet) and give the following directions.

- Remember the 5 food groups from the video? Let's test your memory! Write down as many food groups as you can on your paper. (Dairy, Vegetables, Fruits, Grains, Protein)
- Now, think about your farm friends-cows-and which food group comes from these cool creatures. Circle that food group on your paper.
- Jot down 3 more dairy foods made from milk that you enjoy for breakfast, lunch, or dinner.
- Raise your hand if you mentioned cheese as a food made from milk. Awesome! Guess what? Cheese is the star of today's tasting adventure.
- As you taste these cheeses, you're going to use your senses-your eyes, hands, nose, ears, and of course your taste buds! You'll see the different colors and shapes, feel the textures, smell the aromas, listen for different sounds, and savor the flavors. And guess what? While you're having fun, you'll also learn about the Dairy food group.

2. Time to taste! Distribute the Tasting Worksheet (or flip over if the back was used earlier) and the first cheese sample. Invite students to write and draw the food, then make observations about the sample's smell and appearance. Have the students break the cheese to observe the texture. Have them taste the cheese, observing the flavor and how it feels in the mouth. Repeat for each variety.
3. Discussion. Choose some of the questions below to spark discussion.

- Did the cheeses look different from each other? How?
- How did the textures of the cheeses vary? Which texture did you like the most?
- Which cheese had the strongest or most unique smell? Why do you think that is?
- What words would you use to describe the flavors of the different cheeses?
- How does cheese taste different from milk? In what ways are they similar?
- Why do you think people turn milk into cheese? What does cheese offer that milk doesn't?
- How did you feel about tasting cheeses you might not have tried before?
- What's one thing you learned about cheese today?

4. Conclusion. Share the following perspective:

Reflecting on your cheese-tasting adventure, it's clear that you've journeyed through a world of flavors, textures, and discovery. Each of you shared your observations, preferences, and thoughts, showing how exciting it can be to explore new foods like cheese. Not only can you enjoy different flavors and textures but you can also nourish your muscles, boost your energy, and build strong bones and teeth.

## Explore Dairy!

Explore More: Continue the fun food adventure with these additional videos and activities.

- Join Chef Monti in "The Secret History of Cheese" to explore the process of making cheese.
- Join Chef Monti in "Foods Go Together" to make ricotta cheese from scratch.
- Embark on a global cheese exploration by researching the origins of various cheeses from around the world. Your mission involves selecting diverse cheese types, delving into their history, and pinpointing their origins on a world map. Include information about each cheese's cultural significance, creating a visual cheese atlas to share with your class.


## Objectives:

I. Students will use their senses to observe and describe how different types of milk look, feel, and taste.
2. Students will be able to skillfully observe and discern differences in texture, flavor, and appearance among different types of dairy milk.
3. Students will discover that different types of milk have unique benefits and uses.

## Time:

- 10 minutes for preparation
- 15 minutes for lesson
- 25 minutes total


## Materials:

- 3 to 4 different types of plain dairy milk such as:
- Fat-free milk
- Low-fat milk (I\% milk)
- Whole milk
- Lactose-free milk (available in a variety of milk fat options and great for individuals or the whole class if students opt out due to lactose intolerance; read Nutrition Primer for more information)
- A container or carton for each milk type
- Transparent or clear single serving cups
- Tasting Worksheet
- Nutrition Primer
- Tasting Activity Tips


## Preparation:

- Prepare the ingredients or samples ahead of time or during the video portion of the lesson, if possible. Refrigerate until ready to serve.
- Prepare small samples for each student. Label each sample for younger students and identify each sample prior to tasting.


## Test Students' Milk IQ:

I. On average, how many gallons of milk can a cow produce in a single day? (I0 gallons)
2. Which mineral is naturally abundant in dairy milk and is essential for healthy bones? (Calcium)
3. True or False? If you're lactose intolerant, you can't drink milk or eat dairy products. (False. Most people with lactose intolerance can consume certain dairy foods with little to no symptoms. Try lactose-free milk. Hard cheese and yogurt are both low in lactose, too.)
4. True or False? Milk is a food. (True! Milk is a drink and is considered a food because of all the nutrition it provides.)

## Procedure:

I. Review the video and introduce the activity. Use the following points to recall the steps of milk from the farm to you.

- What's the first step to make sure milk is safe to drink? The processing plant heats the milk to 160 degrees. This step is called pasteurization.
- Do you remember how milk goes through tiny holes? Why is this step important? It's to mix everything up so the cream doesn't separate. That's homogenization.
- What's the final stop for milk before it gets to you? It is packaged into cartons or bottles. But wait, what else can be made from milk? It can also be turned into foods like cheese and yogurt.
- Today, you'll dive into another fascinating adventure, this time unraveling the secrets of milk's varieties-the different percentages of fat, lactose-free options, and more. In this masterclass, you will explore different types of milk.

2. Introduce milk fat. Show students the different milk cartons. Ask if they have seen the different milk cartons at the store. Ask what type of milk they drink in the cafeteria and at home. Have them make observations about similarities and differences in the packaging. Make the following points about milk:

- Did you know that all types of milk naturally contain some fat? But sometimes, people will want to have milk with more or less fat, and that's why a little magic happens during processing.
- Think back to milk before it is homogenized. Do you remember how the bottle of milk in the video separated into different layers, with a creamy layer on top? That top layer of cream is the fat we're talking about. It's the special part of the milk that makes it taste really rich and smooth.
- Now, let's talk about different types of milk. To make fat-free milk, all the cream is removed. Whole milk hasn't had any of its cream removed. Products like heavy cream (often used for making whipped cream) can have cream added to the milk to make them super rich. The milk you're going to taste has different amounts of fat. See if you can taste the differences.

3. Time to taste! Distribute the Tasting Worksheet and the first milk sample. Invite students to make observations about the sample's smell and appearance. Demonstrate how to hold the milk sample up to the light to observe transparency. Finally, taste the milk, observing the flavor and how it feels in the mouth. Repeat for each type of milk.
4. Discussion. Choose some of the questions below to spark discussion.

- How does the appearance of each milk type compare? Is one milk more transparent (seethrough) than the others?
- How does the texture of each milk feel on your tongue? Do some milks feel thicker or thinner?

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- Does the creamier milk leave a different aftertaste compared to the less creamy ones?
- How might you use each type of milk in different foods or recipes? Can you think of a dish where one type of milk would work better than the others?
- Which milk do you personally prefer, and why? Is it based on taste, creaminess, or other factors?
- Do you think the different fat content in these milks affects their taste and texture? How might it impact their nutritional value?
- What's one thing you learned about milk today?

5. Conclusion. In this milk masterclass, you've observed how different types of milk bring their own unique characteristics to the table. Just as you each have preferences, milk comes in various forms to suit different tastes and needs. All forms of dairy milk contain 13 essential nutrients that play an important role in growth and development. It's fascinating how a simple liquid can have so much diversity and potential, from adding a touch of richness to hot cocoa to creating a tasty sauce for pasta.

Explore More: Continue the fun food adventure with these additional activities.

- Put your math skills to the test in a fun and practical way. Imagine you're a milk detective, investigating different types of milk, like heavy cream ( $30 \%$ fat), whole ( $3.5 \%$ fat), reduced-fat ( $2 \%$ fat), low-fat (I\% fat), and fat-free $(0.2 \% \mathrm{fat})$. Your task? Calculate the fat content, in ounces, in each carton. Once your group has cracked the calculations, you'll present your findings to the class.
- Select a theme (superheroes, sports, Halloween, etc.) and engage students in a friendly milk carton contest. Students use their imagination to upcycle empty school milk cartons, milk jugs or use the paper milk carton template provided. Vote for the most creative, cutest or funniest design.


## Objectives:

I. Students will adeptly follow precise instructions, honing their measuring and preparation abilities as they craft 2 distinct yogurt dips.
2. Students will observe and discern differences in texture, flavor, and appearance between different yogurt dips.
3. Students will foster an understanding of how various cultures uniquely embrace and savor yogurt, cultivating an enhanced appreciation for culinary diversity.

## Time:

- 20 minutes for preparation
- 25 minutes for lesson
- 45 minutes total


## Materials:

- Ingredients for an Indian-inspired yogurt dip (enough for 6 to 8 students)
- 2 cups plain, whole-milk Greek yogurt
- $1 / 4$ teaspoon salt
- $1 / 2$ teaspoon ground cumin
- Fresh cilantro and mint
- Cucumber slices or spears for dipping
- Ingredients for a Greek-inspired yogurt dip (enough for 6 to 8 students)
- 2 cups plain, whole-milk Greek yogurt
- $3 / 4$ teaspoon vanilla extract
- $1 / 4$ cup honey
- Ground cinnamon
- Apple slices for dipping
- Single serving cups
- Bowl and spoon for mixing (clear or see-through bowls to see mixing)
- Measuring cups and teaspoons
- Tasting Worksheet
- Nutrition Primer
- Tasting Activity Tips


## Preparation:

I. Decide whether the yogurt recipes will be made together as a whole class or in smaller groups. Determine how many mixing bowls and spoons, and measuring cups and teaspoons are needed. Determine if ingredients need to be pre-measured for students.
a. Whole Class: If you choose to make yogurt as a whole class, first calculate the ingredient amounts needed for the total number of students. During the lesson, students will take turns adding these ingredients to 2 large bowls of yogurt. Once prepared, samples will be served from the class bowls to each student.
b. Small Groups: Alternatively, if you opt for smaller groups, provide each group with 2 cups of yogurt in each bowl (2 bowls per group). Set up stations with the required ingredients and the matching measuring utensils. Each group will then use the recipe to follow the instructions and add ingredients to the yogurt. This approach allows for hands-on engagement and collaborative learning as each group creates its unique yogurt blends.

## Test Students' Yogurt IQ:

I. What is the main ingredient used to make yogurt? (Milk)
2. Which ancient civilization is often credited with discovering yogurt? (The ancient civilizations of the Middle East such as the Persians and the Babylonians)
3. Which vitamin, often associated with dairy products, can be found in yogurt? (Vitamin D)
4. What is the process called where bacteria are added to milk to make it into yogurt?
I. Pasteurization
2. Refrigeration
3. Fermentation
(Fermentation $=a$ process that turns milk into yogurt with the help of super small and helpful bacteria. Fermentation makes a sour or tart taste.)

## Procedure:

I. Review the videos from Lessons I and 4 and introduce the activity. Remind students of the video on dairy's health benefits and the video that showed how people all over the world and even in their own communities enjoy milk in different ways. Use the following points to talk about what they learned:

- Chef Monti made a tasty mango lassi that was inspired by the traditions of a place far away. Can you remember which culture gave her the idea for this yummy drink?
- Do you remember any other examples of how people use dairy in their special foods? It's amazing to see how milk is a part of many different delicious traditions.
- Now, think about your own family. What special food traditions does your family have? Do any of these food traditions include milk or dairy foods?


# Tasting Activities: Yogurt, Culture on a Spoon 

- Did you know that milk and dairy foods have nutrients and health benefits? What are some of the health benefits seen in the video from Lesson I?
- In just a moment, you'll be diving into a tasting experience where you'll create and savor 2 delightful yogurt dips from different parts of the world. The first dip is Indian inspired. The second dip is Greek inspired. These dips are like windows into the traditions and flavors of distant places, bringing a different culture closer to home. With each spoonful, you'll be embracing the essence of diverse cultures right here in the classroom.

2. Make the yogurt dips. Prepare the yogurt dips as a whole class or in groups.
3. Time to taste! Distribute the Tasting Worksheet and samples. Invite students to make observations about each sample's smell and appearance. Remind students not to rush as they make observations. Next, distribute the cucumber spears and apple slices and demonstrate how to dip them into the yogurt dips. Finally, instruct students to taste each dip, observing the flavors and how they feel in the mouth.
4. Discussion. Choose some of the questions below to spark discussion.

- Did you enjoy the yogurt dishes you tried today? Why or why not?
- Were there any flavors or ingredients in the yogurt dishes that you found surprising?
- Did any of the yogurt dishes remind you of something you've tried before?
- How did you feel about trying yogurt dishes that were new and different?
- How did trying these new yogurts help you learn more about different places and people around the world?
- Do you think you could teach someone else how to make one of these yogurts at home? Why or why not?
- If you had a magic yogurt spoon, where would you want it to take you in the world to try yogurt from another country?
- What's one thing you learned about yogurt today?

5. Conclusion. In this yogurt adventure, you've journeyed across continents through your taste buds, exploring the world of yogurt in sweet and savory forms. Isn't it amazing how different foods go together to create new tasty flavors? As this tasting journey wraps up, savor the richness of understanding and appreciation you've gained, one spoonful at a time.

# Tasting Activities: Yogurt, Culture on a Spoon 

## Explore Dairy!

Explore More: Continue the fun food adventure with these additional videos and activities.

- In your quest to explore yogurt around the world, research specific cultural ways of enjoying yogurt. Uncover the fascinating traditions and stories that go "beyond the spoon." From India's creamy lassi to the Middle East's tangy labneh to Greece's delightful tzatziki, your class will celebrate the wonderful differences that make this world so rich. Have students make recipe cards showcasing recipes from other cultures (sample template). Format all the recipe cards together to create a class cookbook.
- Delve into the realm of culinary mathematics as you apply ratio logic to transform one of the recipes into a feast that can satisfy the entire class or even the whole school. Through careful calculations, determine the proportional adjustments required for each ingredient, ensuring that taste, texture, and overall quality are preserved.

