

Yogurt Sundaes

A Grade 8 to 12 Lesson Plan

Overview:

Grade 8 to 12 students will learn about yogurt and the process of fermentation. They will also prepare a delicious yogurt sundae. This activity encourages social interaction, supports comfort with food, and helps students develop a positive relationship with eating, while building an understanding of fermentation and how it is used in food preparation.

Estimated time: 1 hour

Food Cost: \$20-30

Learning Outcomes:

By the end of the lesson, students will:

- Understand the role of fermentation in the yogurt making process.
- Engage in hands-on food preparation.
- Participate in a relaxed, pressure-free food exposure activity.
- Reflect on different ways to enjoy yogurt and other fermented foods.

Curriculum links:

This lesson supports Big Ideas and Learning Standards in the Physical and Health Education BC curriculum and can also link to other subject areas. [Find out how this lesson can support your curriculum goals, here.](#)



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For nutrition education workshops, lesson plans, and resources visit nutritioneducationbc.ca

Materials:

1. Ingredients

- 1 or 2 large tubs of plain or vanilla yogurt. Try Swiss-style (stirred), Greek yogurt, or other options such as Skyr, Dahi, or Labneh.
- 2-4 assorted simple toppings, such as:
 - Fruit: Fresh or frozen berries, chopped apples, sliced banana, canned peaches, dried fruit (raisins or cranberries).
 - Grains: Granola, cereal or oats.
 - Other: Shredded coconut, hemp hearts, sunflower seeds, chia seeds, cinnamon.

Tips for choosing foods for this lesson

When selecting foods for this activity, consider the following:

- **Allergy and safety checks:** Review student allergy and dietary information ahead of time.
- **Simple and familiar:** Select foods that most students recognize.
- **Cultural and dietary inclusivity:** Be mindful of cultural food practices and dietary restrictions.

Selecting safe and inclusive foods promotes a positive experience for all students.

2. Equipment

- Small cups or bowls (one per student)
- Small spoons (one per student)
- Serving spoons (for yogurt and toppings)
- Bowls for toppings
- Labels for each topping (*optional*)

Procedure:

1. Preparation

- Read through the complete lesson plan.
- Gather all ingredients and supplies.
- Prepare food as required and set aside.
- Arrange toppings in small bowls for easy access.
- Set up a clean and accessible serving area.

Refer to [Kitchen Equipment for your Classroom](#) for more preparation and food safety tips. For additional food safety information, visit [HealthLink BC](#).

2. Setting the stage

- Reduce distractions in the room (e.g clean desktops, turn down loud music, turn off and/or put away computers).
- Have students sit comfortably at a table or their desks.



3. Introduction to Yogurt

- Explain to students that today they will be preparing their own yogurt sundaes and enjoying them together.
- Facilitate a short class discussion. Prompt questions can include:
 - *What types of yogurt have you tried before? (Swiss-style (also known as stirred), Greek, Skyr, drinkable, Dahi, Labneh, plain/flavoured)*
 - *How does your family like to eat yogurt?*
 - *Have you ever made yogurt at home?*
 - *Do you know how yogurt is made?*

- Explain how yogurt is made and the role of fermentation:

Today we're going to explore the science behind how yogurt is made. Yogurt is created by **fermentation**.

Fermentation is a process where bacteria transform food. While some bacteria can make us sick, some bacteria are helpful. Some help with digestion in our bodies, and others help us make foods like yogurt, cheese, sourdough bread and kimchi. In yogurt making, helpful bacteria transform milk into yogurt.

The bacteria used to make yogurt are called **starter cultures**. These are specific types of helpful bacteria (*Lactobacillus bulgaricus* and *Streptococcus thermophiles*) chosen for their ability to ferment milk.

Here's how the process works:

First, milk is gently heated. The starter cultures are then added to the warm milk. The milk is kept warm for several hours. During this time, the bacteria convert the **lactose** (the sugar naturally found in milk) to **lactic acid**. The lactic acid lowers the pH of the milk, which in turn denatures some of the milk proteins, resulting in the milk to thicken and giving the yogurt its signature tangy taste.

Making fermented food takes precision, but also creativity with different flavors, textures, and fermentation times. **It's a balance of art and science.**

Fun fermentation facts

- People have been making yogurt for thousands of years. There is evidence of yogurt in the Neolithic period (around 5000 BC) in Mesopotamia.
- Fermentation can make food last longer. Before refrigerators were invented, people used fermentation to preserve food.
- Fermentation can make food fizzy and create natural bubbles!
- **Fermentation around the world**
 - Kimchi – fermented spicy cabbage, radish (Korea)
 - Sauerkraut – fermented cabbage (Germany)
 - Miso – fermented soybeans (Japan)
 - Dosa – fermented rice and lentil flat bread (India)
 - Injera – fermented Teff flour bread (Ethiopia)
 - Surströmming – fermented herring (Sweden)
 - Kombucha – fermented tea beverage (China)
 - Atole – fermented corn beverage (Central America)



4. Making Yogurt Sundaes

- Have everyone wash their hands.
- Have students collaboratively set up the sundae station, being mindful of a layout that enables easy assembly.
- Allow students to take turns making their yogurt sundaes.
- Have students portion their own yogurt and add the toppings of their choice. Emphasize that there should be enough for everyone to have one serving. Any leftovers can give students the opportunity to come back for more.

5. Opportunity to Taste

- Have students sit comfortably at a table, or their desk.
- When everyone has their yogurt sundae prepared, support self-directed tasting.

Positive food experiences

Adolescents learn about food through repeated exposure. Encouraging exploration without pressure helps build positive associations with healthy eating.

Any level of interaction with the food is optional and guided by each student's comfort and choice. If a student is not yet ready to touch, smell, or taste a food, they can still learn and build positive food experiences by simply watching others explore. Support each student as needed.

Allowing adolescents to participate in food planning, as well as giving them the choice of if and how much they want to eat, fosters food confidence.

- Guide a discussion. Encourage students to share. Prompt questions can include:
 - *How does your yogurt sundae taste?*
 - *What toppings did you choose?*
 - *Did you try something that wouldn't be your typical choice?*
 - *What is your favourite topping?*
 - *Are there any toppings we didn't have that you would want to add to your yogurt sundae?*
 - *Do you think you might like to make yogurt sundaes at home for a meal or snack?*
 - *Would you choose the same toppings next time?*
 - *What was something you learned about today?*



Being mindful of food talk

Avoid terms that classify foods (such as “good” or “bad”). Instead, use simple, factual non-evaluative language that focuses on sorting and categorizing (for example, colour or shape), food ecology (where food comes from), or how food is prepared.

Language used when talking about food and when food is consumed should be respectful and non-judgmental. Avoid commenting on the amount of food eaten. Part of healthy eating is developing positive feelings about food.

6. Clean-Up

- Invite students to help clean their space and wipe tables.
- Compost food scraps.
- Bring bowls and spoons to the sink or collection bin.
- Put away clean supplies.
- Store any leftovers.
- Wash hands.

More information for Teachers

Want to do more nutrition education? [Explore our other lesson plans](#) or check out our [BC at the Table](#) program.

