

# Bacteria

**STEM Sims**

## Lesson 3: Which Dairy Product Contains the Most Dangerous Bacteria?

Both milk and cheese are likely to contain bacteria. Since they are both dairy products, do you think that they have the same type of bacteria present in and on the food items?

### Doing the Science

1. Start the Bacteria Simulation by clicking on the “Sim” tab.
2. Move the mouse to the cheese on the table.
3. When the word “Cheese” appears, click the mouse. The button in the “Sample Collected” area should turn red.
4. Move the mouse to the microscope and click on the scope.
5. View the sample by clicking on “Single,” “Multiple,” “Flagellated,” and “With Gram Stain.”
6. Sketch what you see in the microscope in the appropriate space in Table 1 below.
7. Select the “Back” button at the bottom right of the screen.
8. Click on the red “Clear” button in the “Sample Collected” area.
9. Move the mouse on the table area.
10. When the word “Milk” appears, click the mouse. The button in the “Sample Collected” area should turn red.
11. Repeat steps 4 – 6.
12. Use the “Bacteria Database” in the “Background” section of the site to identify the bacteria type (if present) in the different dairy products.

**Table 1.**

Sample	Single	Multiple	Flagellated	Gram Stain	Bacteria Type
Cheese					
Milk					

### Do You Understand?

1. Did both dairy products contain the same type of bacteria?
  
  
  
  
  
  
  
  
  
  
2. Explain whether your answer to the previous question makes sense or not.