Bacteria Lab

Learner Outcome

The student will be able to:

conduct an experiment and provide explanation in relation to the type of environment that increases the growth of bacteria cells in chicken broth (MS-LS1-5).

1. **Problem**: Does acidity (vinegar) affect the rate at which food spoils?

2. **Hypothesis:**

3. **Procedure**:
    - Fill 2 flasks with 200 ml of warm water.
    - Stir a bullion cube into each of the two flasks.
    - Add two teaspoons of vinegar to one flask.
    - Label the flasks.
    - Leave both flasks in a warm, dark place for two days.
    - Observe each flask and record your observations.

4. **Gather and Record and Analyze Data:**

	Day 1 Observations	Day 2 Observations
Flask #1 (Bullion)		

	Day 1 Observations	Day 2 Observations
Flask #2 (Bullion and Vinegar)		

- Which flask is considered the control?

- What is the variable?

- What are the constants?

- Which flask is considered the experimental group?

- How does the vinegar environment affect bacteria?

- In this lab, what type environmental conditions promote bacterial growth?

5. **Conclusion:** (paragraph)