

Lesson 4: How Do I Digest Fats?

Activity 4.5

Purpose

The purpose of this lab is to simulate the digestion of fats in the small intestines.

Word Wall Words

Gall Bladder: _____

Bile: _____

Lipase: _____

Emulsion: _____

Your Progress:

- Mastery
- Proficient
- Developing
- Beginning

✚ Safety

Keep your thumb tightly on the test tube as you are shaking it. Avoid getting the dish soap in your eye. Most importantly, allow your lab partner to handle the materials if you have any allergies to olive oil or vegetable oil.

Procedure

Before you begin, rinse both test tubes out completely. Fill the two test tubes with the contents listed below. Be sure that after adding the water the test tube is almost completely full. Record observations in the table below.

Data Table

Contents	Observations Before Shaking
Test Tube #1 <ul style="list-style-type: none"> • 5 Drops of Oil • Water 	
Test Tube #2 <ul style="list-style-type: none"> • 5 Drops of Oil • 10 Drops Dish Soap • Water 	

Procedure Continued

After carefully recording your observations shake each test tube for a total of 4 minutes. Allow the test tubes to settle for one additional minute. Carefully record your observations below.

Contents	Observations After Shaking for 4 Minutes
Test Tube #1 <ul style="list-style-type: none">• 5 Drops of Oil• Water	
Test Tube #2 <ul style="list-style-type: none">• 5 Drops of Oil• 10 Drops Dish Soap• Water	

Analysis

How would you describe the solubility of oil in water?

How did dish soap affect the way oil and water mixed?

Why would fatty foods be difficult to digest if the body does not have a way to mix it with water?
