



Digestion Experiment: Amylase

Objectives:

To understand how the digestive system mechanically and chemically breaks down food to provide energy by chewing and saliva.

To understand that in humans, digestion begins in the mouth.

Materials:

- 1 Iodine bottle
- 1 Dropper
- 3 Petri dishes
- 1 unsalted cracker

Preparation:

1. Think about the last thing you ate. Why did you eat? (other than being hungry)

2. The process of digestion starts in the mouth. Make a quick labelled sketch of how you think that works.

3. Mechanical Digestion. Explain what you think this might mean.

4. Chemical digestion. Explain what you think this might mean.

Procedure / Method:

1. Label the three petri dishes, for example, A, B, and C.
2. Put 1 TBSP of water in each petri dish.
3. One petri dish will contain only water - this is the control.
4. Crumble one saltine cracker into one petri dish and stir / mix.
5. Chew one saltine for two minutes without swallowing and then spit it out into the last petri dish. Stir with a clean stirrer.
6. Wait for at least five minutes.
7. Add three drops of iodine into each Petri dish and stir/ mix.

Results:

Petri Dish	Observations

