Lab Report 1 | Lower Secondary Stage of (6-8)

1st Semester | 2023-2024

Subject: Science

Lab report: test for food
Name: …….
Grade 6 National (A/B)

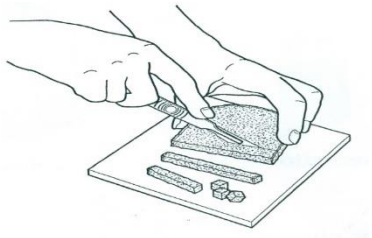
Objectives: To test for the presence of starch, fat, and protein in food.

We can test for the presence of these important compounds in food by using chemical reagents that react in predictable ways in the presence of these nutrients.

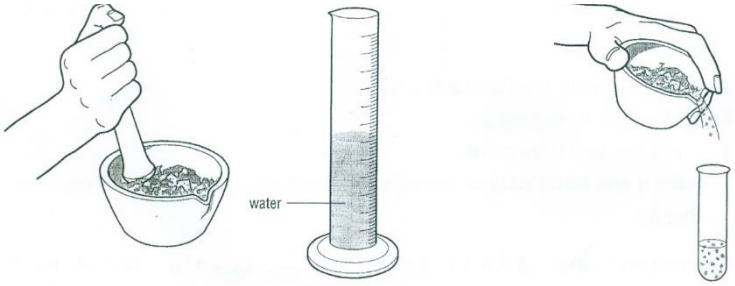
Preparing food samples for food tests:

Use the following procedure to prepare food samples to be tested for starch, fat and protein.

1. Chop up each food in turn.



2. Grind up a small amount of each in a little water so that the nutrients can be released from the food material, making a suspension.



3. Pour the suspension into a test tube.
4. Clean the scalpel, tile, mortar and pestle after each food has been prepared.
5. Make a suitable test for each kind of food.

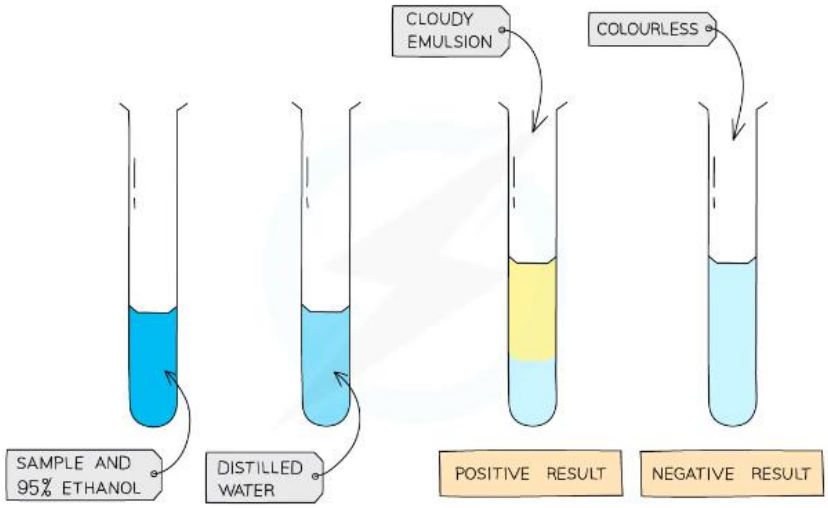
Food test 1: <u>Test for starch using iodine:</u>

- Add three drops of **iodine solution** to each food suspension prepared before.
- Shake the test tube gently.

Observation: **Blue- black color is formed.**

Food test 2: ***Test for fat using ethanol:***

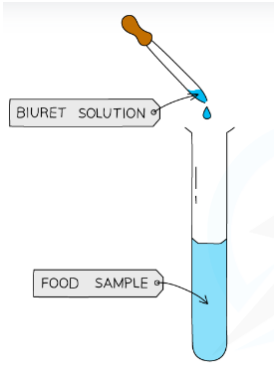
- Put a sample of food into a test tube.
- Add **2cm^3 of ethanol** and shake.
- Add the ethanol to an equal volume of **cold water.**



Observation: **Cloudy liquid is formed.**

Food test 3: <u>Test for protein using biuret reagent:</u>

1. Add a small quantity of food sample in a test tube.
2. Add 3 drops of Biuret reagent to the tube.
3. shake the test tube gently.



Observation: **Purple color is formed.**

✓ **<u>Check your understanding:</u>**

Complete the following table.

Food	Reagent	Positive test result
Starch	Iodine	Blue-black color
Fat	Ethanol+ cold water	Cloudy liquid
Protein	Biuret	Purple color