

Title: Food Testing Lab

Purpose: to determine the presence/absence of carbohydrates, lipids, and proteins in food.

Materials:

Iodine-Potassium Iodine solution (starch test)	Starch solution	Test tubes
Benedict's solution (monosaccharide test)	albumin solution (egg white protein)	Test tube racks
Biuret solution (protein test)	dextrose (glucose) solution	Test tube holders
Brown paper (lipid test)	hexane (lipid) sample	Hot plate
	Food samples	pipettes

Procedure:

Starch Test

Put 1 dropper of starch solution into test tube.
Add 2—3 drops iodine/potassium solution.
A blue-black color indicates the presence of starch.

Sugar Test

Put 1 dropper of Benedict's solution into a test tube.
Add 5—10 drops of dextrose (glucose) solution.
Hold the test tube (with a test tube holder) in the hot water bath for 2—3 minutes.
A brown-orange color indicates the presence of a monosaccharide (glucose or fructose).

Protein Test

Put 1 dropper of albumin (egg white) solution into test tube.
Add 5—10 drops Biuret solution
A purple color indicates the presence of protein.

Lipid Test

Pick up a slip of brown paper and try to see through it.
Place 1—2 drops of hexane or oil onto the brown paper.
Now pick it up and try to see it.
Translucence (ability to partially see through the paper) indicates the presence of fat.

1. Perform the "control" tests (above) and then test various food samples for the presence of starch, sugar, protein, and lipids.
2. Record your results in a data table similar to the one below.

Results:

Sample	Starch	Sugar	Protein	Lipid

Discussion: See lab grading guidelines

Conclusion: Testable Statement (10 words or less!)

Reflection: Personal statement