CMI PUBLIC SCHOOL, CHALAKUDY
SCIENCE PROJECT
GROUP 1:

AIM:
Test the presence of proteins in food items.

THEORY:
The presence of carbohydrates, fats and proteins in any food stuff is detected by performing the tests for proteins, fats and carbohydrates with the extract of the foodstuff. The advantage is these tests do not interfere with each other.

[write introduction about, proteins and its importance in daily life. two pages, about proteins and its importance in daily life.
Include pictures of and protein rich foods, colour pictures]

EXPERIMENT

AIM:
To test the presence of proteins in food items.

MATERIALS REQUIRED:
Gram or pea seeds, one banana, test tubes, water, copper sulphate solution, caustic soda, dropper.

PROCEDURE:
1.Grind 10-15 seeds of gram or pea into powder form; and mash a piece of banana separately to form a paste.
2. Take a small quantity of these food items in the separate test tubes and label them ‘A’ and ‘B’.
3. Add 10-15 drops of water to each test tube.
4. With the help of droppers, add 2-3 drops of copper sulphate solution and 10 drops of caustic soda to each test tube.
5. Shake well and keep the test tubes aside for a few minutes.
6. Note the change in colour and record your observations.

OBSERVATION: Contents of test tube ‘A’ containing powered seeds of gram or pea turn violet in colour whereas test tube ’B’ containing mashed banana does not show colour change.

RESULT:
- Appearance of violet colour in test tube ‘A’ confirms that gram or pea seeds contain proteins. As banana does not contain proteins, the test tube ‘B’ does not show violet colour.
- Protein is another food component present in many of our food items. These are body-building components of the food.

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