

Laboratory Report Template

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Title

Project 1.2.4 Nutrient Investigation

Problem

We are investigating what food items have what nutrients.

Hypothesis

Ritz will have carbs and sugar
Apple will have carbs and sugar
Yogurt will have carbs and sugar
Cookies will have carbs and sugar
Lettice will have noting
Potato will have carbs
Ketchup will have sugar
Orange Juice will have sugar and vitamin c
Bread will have carbs and sugar

Materials

- List the supplies needed to conduct the experiment.
- Biuret Reagent
- Benedict's solution
- Iodine solution
- 2,6 Dichloroindophenol
- Brown paper bag
- Test tubes
- Test tube rack
- Distilled water
- Test tube tongs
- Plastic pipettes
- Marking pencil
- Computer
- Ritz crackers
- Apples
- Yogurt
- Cookies
- Lettice
- Potato
- Ketchup
- Orange juice
- Bread

Procedures

For this project, you will work with a partner to select a food product to study. You will determine a question about the nutrients in that product and develop a hypothesis before designing your experiment. Keep your question and hypothesis in mind as you write protocols to be sure that your experiment is designed to answer your question. We were giving 6 test tubes all of which we put 1 drop of a substance (Carbs, Sugar, Protein, Vitamin C, Water, and fat). We then mixed one of the following solutions (Iodine, Benedicts, Biurat, and Dichlorindophenol) with every substance in the test tube and recorded the results.

Data Collection

	Iodine	Benedicts	Biurat	Dichlorindophenol
Vitamin C	-	-	-	+
Carbs	+	-	-	-
Protein	-	-	+	-
Sugar	-	+	-	-
Water	-	-	-	-
Fat	-	-	-	-

Iodine was testing for carbs Benedicts was testing for Sugar Biurat was testing for protein Dichlorindophenol is testing for vitamin C.

The – stands for no change in color meaning it did not test positive for having the substance + means it had color change which means it had the substance in it.

Analysis of Results

Vitamin C tested negative on everything but Dichlorindophenol meaning it has vitamin C in it.

Carbs tested negative on everything but Iodine meaning it has carbs in it.

Protein tested negative on everything but Biurat meaning it has protein in it.

Sugar tested negative on everything but Benedicts meaning it has sugar in it.

Water tested negative on everything meaning it has non of the following nutrients in it.

Fat tested negative on everything meaning it has non of the following nutrients in it.

Conclusions

My predictions were mostly proven. Some sources of error might be if we wash out a test tube and then put a different substance in there than we had before, it might have not gotten washed out good enough and tested positive for something else it shouldn't have. What nutrients does fat have in it.