

Detecting the Presence of Starch in Food

Starch is part of the _____ group of nutrients. It is _____ because many sugars are _____ together. In digestion, it is one of the first nutrients to be broken down. The enzyme, _____ breaks the bonds of starch to produce simpler _____.

Purpose

To investigate the presence of starch in various food products.

Materials

Plate

8 different food products (use grain products, fruits, and vegetables)

Iodine solution

Method

1. Place a sample of each food on the plate. Test similar amounts of each food.
2. Place a few drops of iodine solution on each food.
3. Make observations immediately.
4. Wait a few more minutes and note any other changes.

DETECTING THE PRESENCE OF STARCH IN FOOD, *continued*

1-8

Observations

Complete the chart below using the foods your group has compiled. When drops of iodine solution are applied to a food containing starch, the solution will turn dark blue, purple, or blackish.

Food Product	Description <i>Before</i> Testing	Description <i>After</i> Testing	Conclusion Are simple sugars present?
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Questions

1. Many experiments have controls. What can be used as a control? Why is it ideal to have a control?

2. Icing sugar tests positive for starch. Why?

3. Starchy foods are often discouraged in many low-carbohydrate and/or high-protein diets. Find information about one of these diets and describe the foods discouraged in it.

4. Why should people be wary of these diets?
