



ASSIST

AUSTRALIAN SCHOOL SCIENCE
INFORMATION SUPPORT FOR
TEACHERS AND TECHNICIANS

Published on ASSIST (<https://assist.asta.edu.au>)

[Home](#) > Food tests: glucose, starch and gelatine solutions

Food tests: glucose, starch and gelatine solutions

Posted by Anonymous on Fri, 2018-08-03 10:29

Food tests: glucose, starch and gelatine solutions: I have to make up solutions for a prac where students are working out if select foods are a protein, carbohydrate or sugar. Can you please advise about the concentrations for the mixtures?

Voting:



Average: 5 (1 vote)

Laboratory Technicians:

Laboratory Technicians

Showing 1-2 of 2 Responses

Food tests: glucose, starch and gelatine solutions

Submitted by sat on 03 August 2018

Answer reviewed 18 Jan 2023.

Food testing is routinely carried out in senior biology classes. Students test a variety of food samples for carbohydrates, such as sugar and starch; lipids; proteins and vitamin C.

In response to this question we have developed an [information sheet](#). See [Laboratory Notes: Food Tests](#)

Food tests: glucose, starch and gelatine solutions

Submitted by on 14 August 2018

Positive Test Results for Test 1: Glucose When you add Bendeict's solution, the solution turns blue. As it heats the colour changes from Blue Green Yellow Tomato Red at the end NOTE: When starch is heated it also breaks down to a simple sugar and so shows a positive result. Test 2: Fat/Oils When the oil has been rubbed into the brown paper, if you hold it up to the light it should be translucent. Test 3: Starch After the Iodine - I₂/KI has been added the starch solution should be coloured anywhere from purple through to black. Test 4: Protein No colour change should occur when the sodium hydroxide – NaOH is added. After the copper sulfate – CuSO₄ is added it should change from light blue to dark blue to purple. Foods: To avoid contamination make sure the students cut each piece of food up in a different area on the cutting board. Also make sure they wash the knife after each food. Preparations of Solutions: Keep in fridge until required for use. Then return when finished. Glucose: Dissolve 1 teaspoon of glucose in 200ml of water. (Do not use sugar) Protein: Dissolve ¼ teaspoon of gelatine in 200ml of water. Heat to nearly boiling to dissolve. Starch: Dissolve 1 teaspoon of powdered starch in 200ml of water. Heat to boiling to dissolve. If you do not heat, the solution will remain cloudy. Egg White: Use raw. Beat egg white with 100ml water. Store in small dropping bottles.

Source URL: <https://assist.asta.edu.au/question/4331/food-tests-glucose-starch-and-gelatine-solutions>