



Name: _____

Subject: ~~Alternative~~ to practical 1

Teacher: *Meray Kopty*

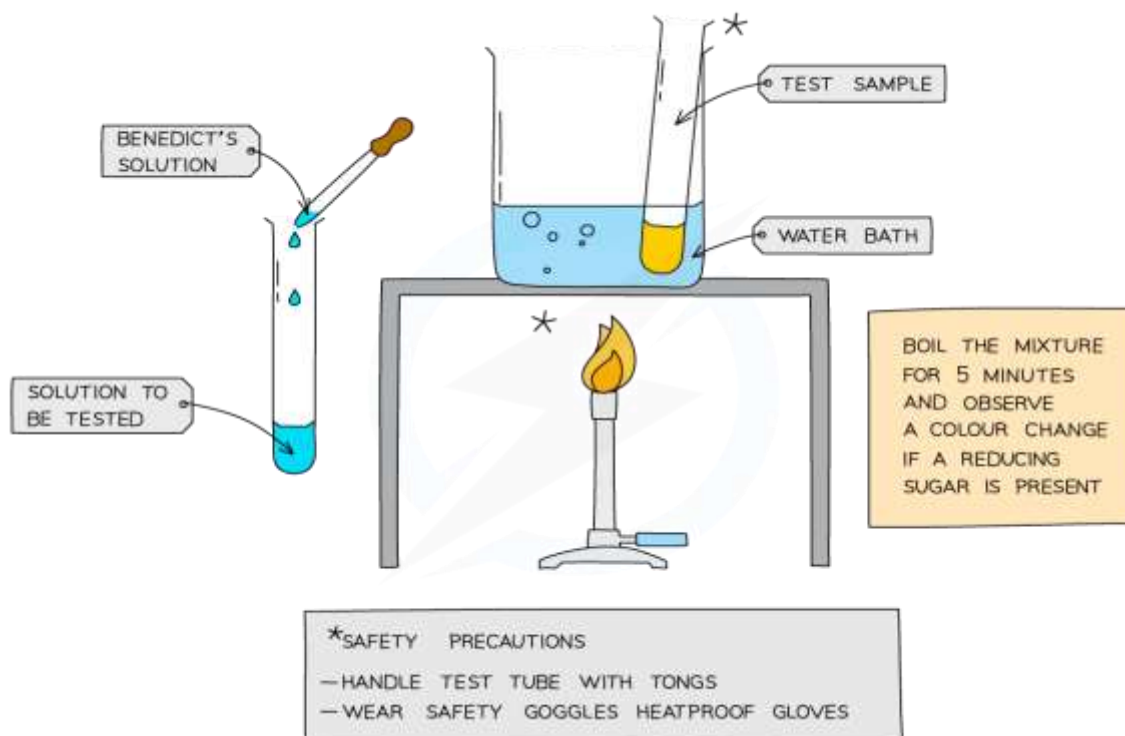
Class: Grade 9

Biology

Food Tests

Test for glucose (a reducing sugar)

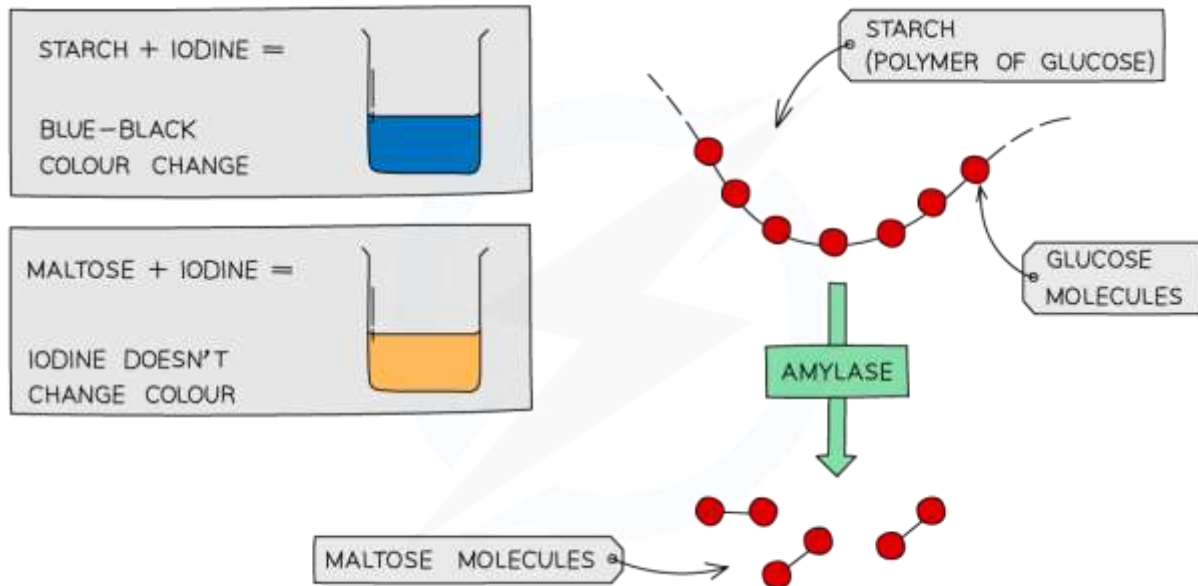
- Add **Benedict's solution** into sample solution in test tube
- **Heat** at 60 - 70 °c in water bath for **5 minutes**
- Take test tube out of water bath and observe the colour
- A positive test will show a colour change from **blue to orange or brick red**



The Benedict's test for glucose

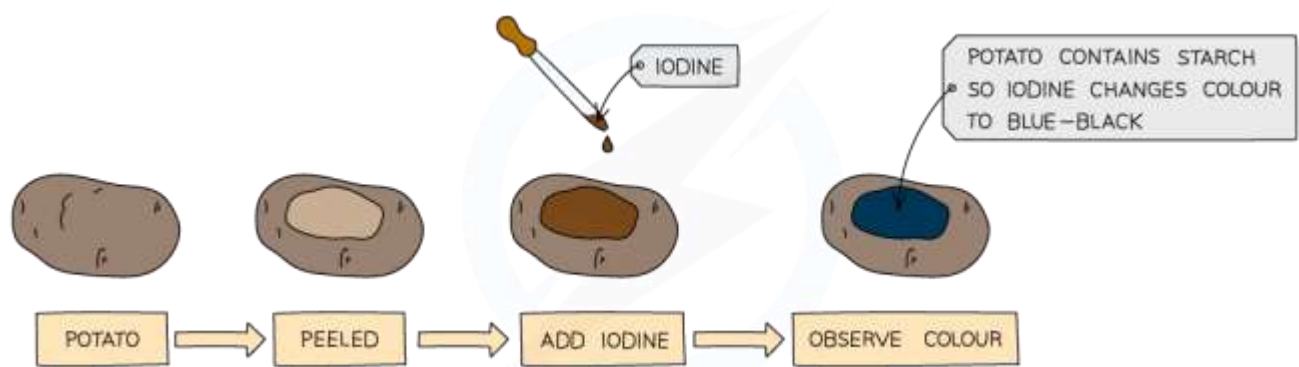
Test for starch using iodine

- We can use iodine to test for the presence or absence of starch in a food sample.



The iodine test for starch

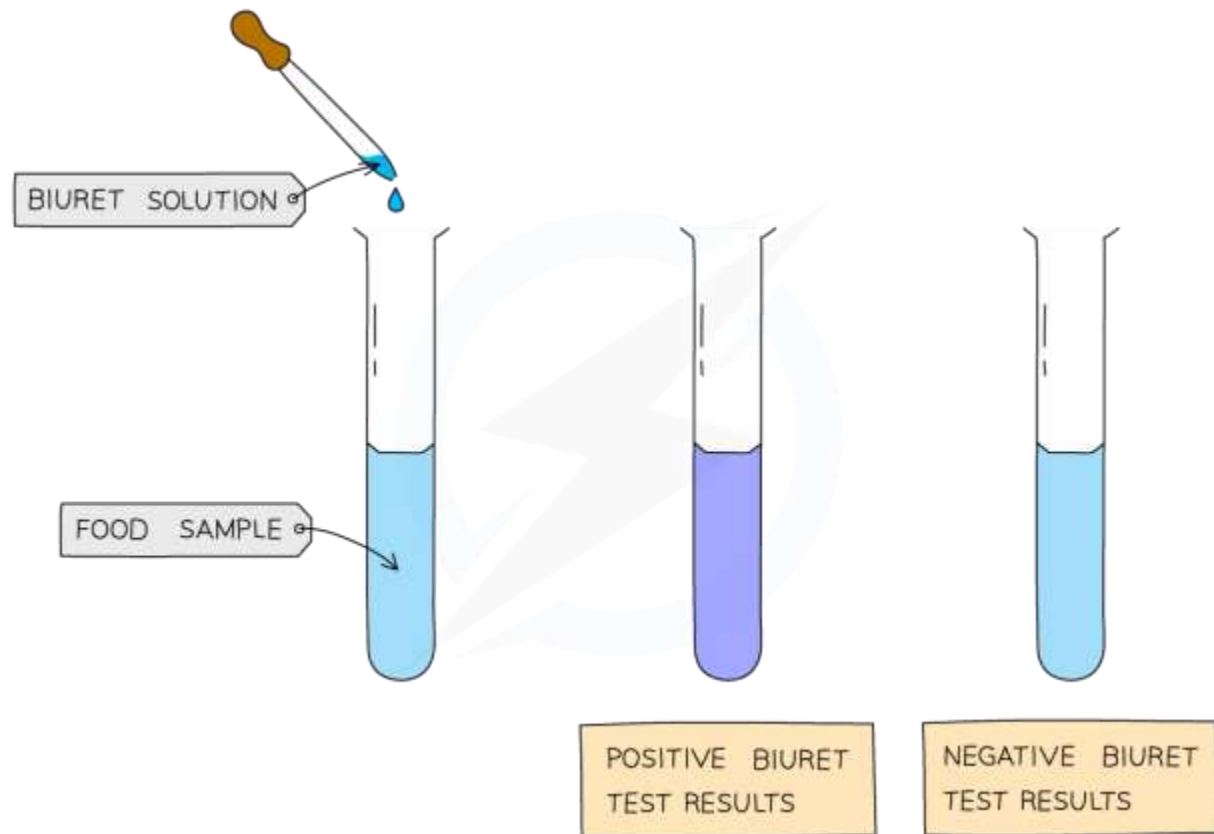
- Add drops of **iodine solution** to the food sample
- A positive test will show a colour change from **orange-brown** to **blue-black**



Testing a potato to prove the presence of starch

Test for protein

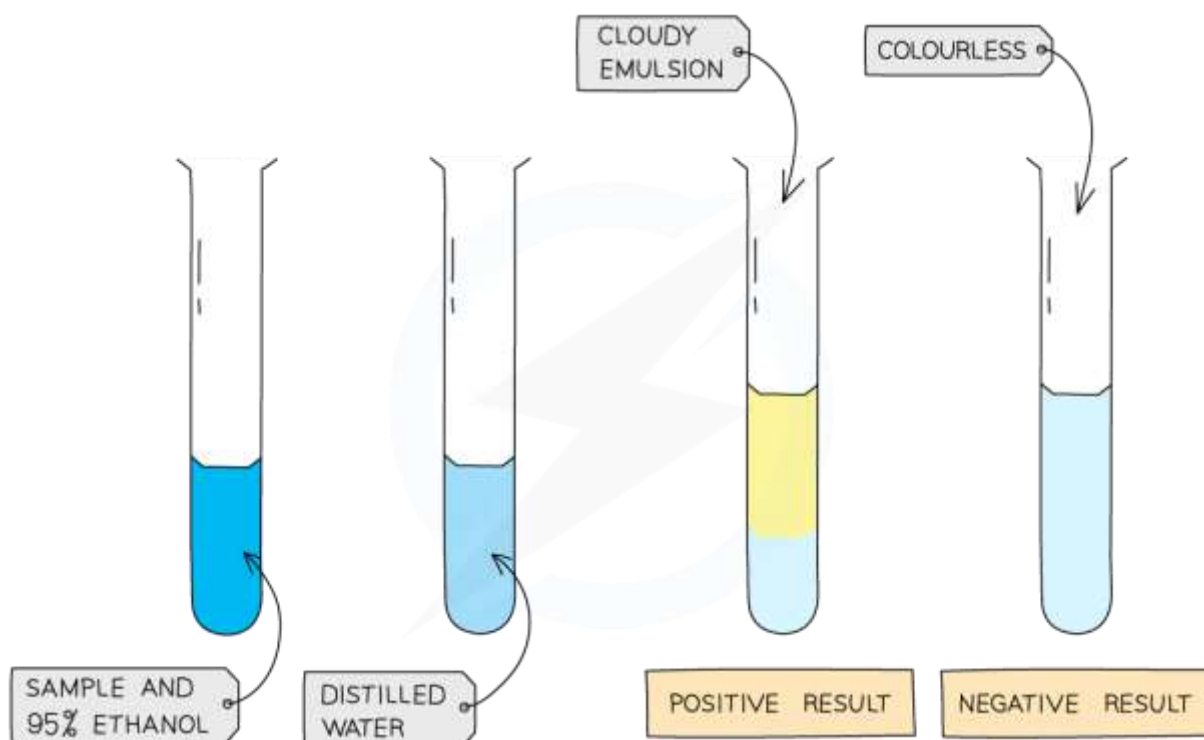
- Add drops of **Biuret solution** to the food sample
- A positive test will show a colour change from **blue to violet / purple**



The Biuret test for protein

Test for lipids

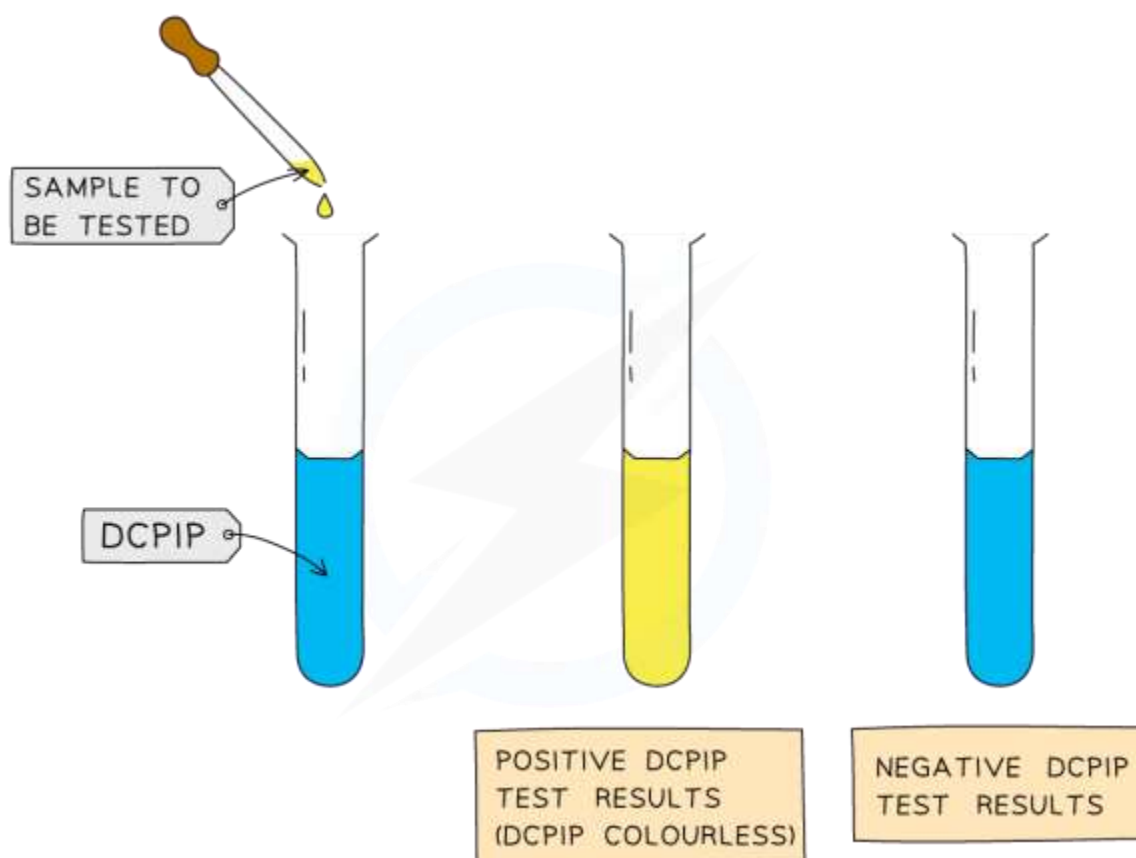
- Food sample is mixed with **2cm³ of ethanol** and shaken
- The ethanol is added to an equal volume of **cold water**
- A positive test will show a **cloudy emulsion** forming



The ethanol test for lipids

Test for vitamin C

- Add 1cm^3 of **DCPIP solution** to a test tube
- Add a small amount of food sample (as a solution)
- A positive test will show the **blue colour of the dye disappearing**



The DCPIP test for vitamin C

Exam Tip

When describing food tests in exam answers, make sure you give the **starting colour** of the solution and the **colour it changes to** for a positive result.

