

Digestion and Nutrition

Lesson 5 - Carbohydrates

Biology - Key Stage 3

Mrs Walsh



Independent task

Write a method describing how to test food items for the presence of starch.

Include the chemical test used and how you would know if you got a positive result.

Firstly, you need to make a solution of the food sample To do this you need to

.....
.....

To test for the presence of starch, is added.

In the presence of starch it will change colour from to



Independent task

What can you interpret from these results?

Food item	Observation	Result - starch present?
Rice	Blue-black	
Flour	Blue-black	
Apple	Orange	
Egg white	Orange	
Crisps	Blue-black	
Cereal	Blue-black	
Onion	Orange	
Coconut	Orange	

Credit: Mrs Walsh



Independent task

Write a method describing how to test food items for the presence of sugars.

Include the chemical test used and how you would know if you got a positive result.

Firstly, you need to make a solution of the food sample To do this you need to

.....
.....

To test for the presence of sugars, is added, then the sample is

..... .

In the presence of sugars it will change colour from to The
concentration of sugars can be determined by...

.....
.....



Independent task

Check and correct the following method for testing for sugar.
There is a mistake made at each stage and one step is missing completely.

Incorrect method

- 1. Crush up the food using a pestle and mortar
- 2. Add a few drops of iodine to the food sample.
- 3. The colour should change from orange to blue in the presence of sugar.

Corrected method

- 1.
.....
- 2.
.....
- 3.
.....
- 4.
.....



Independent task

Food item	Chemical test	Observation	Result
Potatoes	Iodine	Blue-black	
	Benedict's solution	Blue	

Food item	Chemical test	Observation	Result
Ketchup	Iodine	Orange	
	Benedict's solution	Orange-brick red	



Independent task - continued

Food item	Chemical test	Observation	Result
Cola	Iodine	Orange	
	Benedict's solution	Orange- brick red	

Food item	Chemical test	Observation	Result
Puffed cereal	Iodine	Blue-black	
	Benedict's solution	Orange- brick red	

