

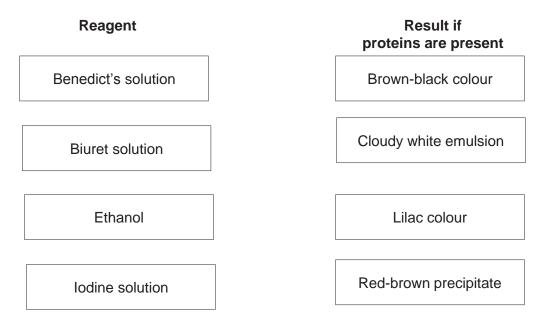
## GCSE Biology B (Twenty First Century Science)

J257/04 Depth in biology (Higher Tier)

**Question Set 14** 

- Milk contains proteins and other nutrients.
- (a) Milk can be tested for proteins by adding a reagent.

Draw one line to connect the correct reagent with the correct result if proteins are present



(b) Carbohydrates, lipids and proteins are all nutrients found in milk. Digestion breaks them down into smaller molecules that are absorbed into the blood.

Complete the table to identify the smaller molecules.

Large molecule	Smaller molecules it is broken down into
Carbohydrate	Sugars
Lipid	AND
Protein	

(c)\* Milk contains a carbohydrate called lactose. Only people with a particular mutation in their DNA can digest lactose.

If people **without** the mutation drink milk, they can suffer very unpleasant stomach pains and diarrhoea.

The mutation first appeared in a small number of people approximately 10000 years ago. It is now found in almost half the world's population.

Explain how natural selection caused the mutation to become so common.

## **Total Marks for Question Set 14: 10**

1

[2]

[2]

[6]



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