

**Human nutrition – 2022 November O Level 5090****1. Nov/2022/Paper\_12/No.9**

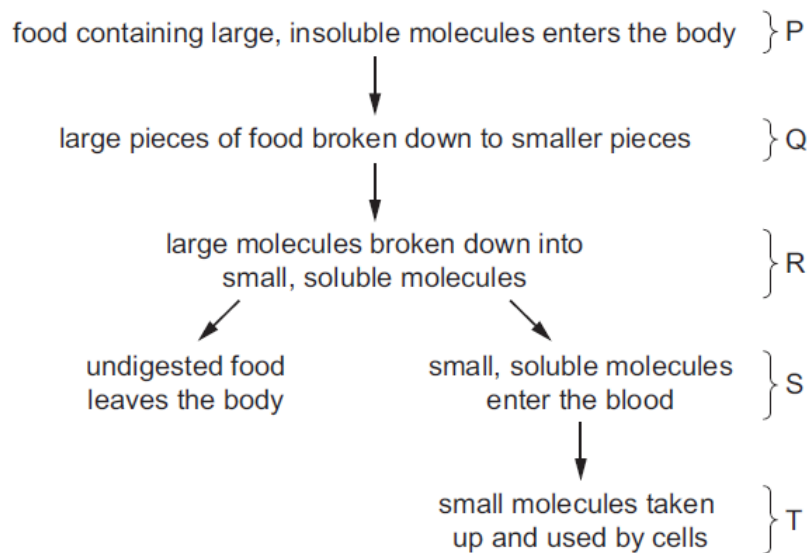
A lack of certain minerals and vitamins can lead to deficiency diseases.

Which row shows the correct symptoms of such diseases?

	deficiencies in diet	symptoms in body
<b>A</b>	calcium and vitamin C	too few red blood cells and deformed bones
<b>B</b>	calcium and vitamin D	brittle bones and bleeding gums
<b>C</b>	iron and vitamin C	brittle bones and bleeding gums
<b>D</b>	iron and vitamin D	too few red blood cells and deformed bones

**2. Nov/2022/Paper\_12/No.10**

The diagram shows how food is processed in the human alimentary canal.



Which row correctly identifies the named stages?

	absorption	assimilation	enzyme digestion
<b>A</b>	P	S	T
<b>B</b>	P	S	Q
<b>C</b>	S	P	Q
<b>D</b>	S	T	R

3. Nov/2022/Paper\_12/No.11

Which function is **not** carried out by the liver?

- A breakdown of alcohol
- B conversion of glycogen to glucose
- C formation of urea
- D secretion of digestive enzymes

4. Nov/2022/Paper\_21/No.8(a, b)

Malnutrition is a global problem.

In early 2020 the world population was approximately 7.8 billion people. Of these it is estimated that 1.9 billion adults were overweight and 462 million underweight.

(a) Explain what is meant by a balanced diet and outline its components.

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]

(b) Discuss the effects on health of being underweight and of being overweight.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [6]

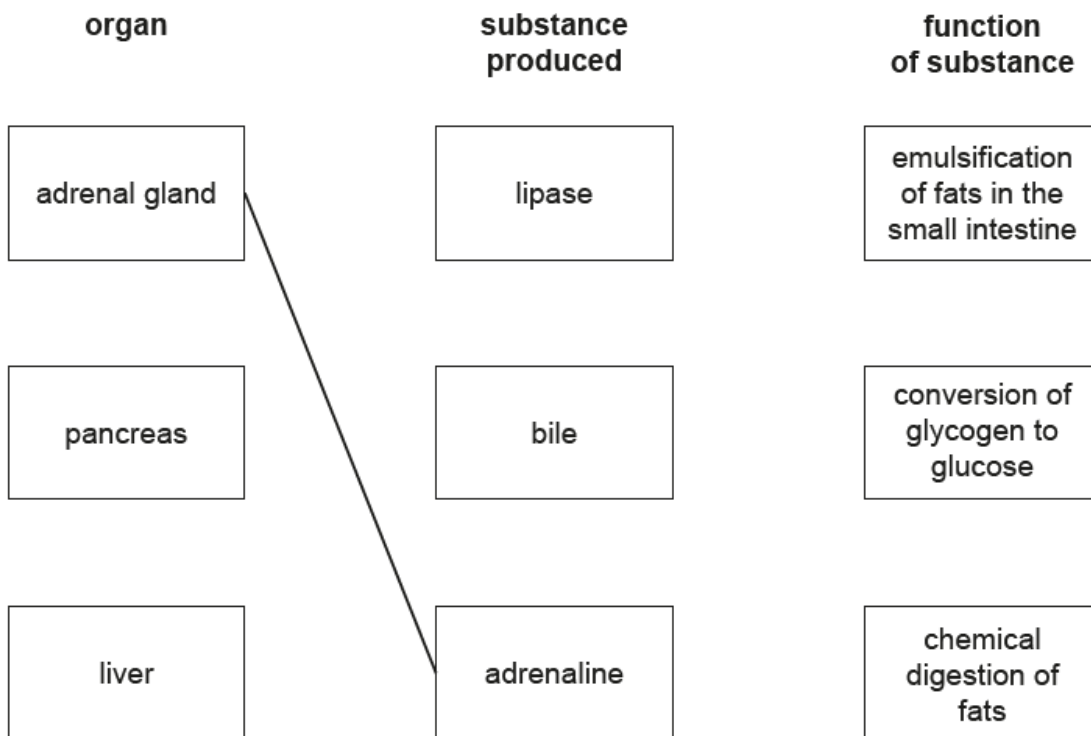
5. Nov/2022/Paper\_22/No.1

Organs in the human body produce substances which have specific functions.

Draw lines to link each organ with the substance it produces **and** to link each substance with the description of its function.

One line has been drawn for you.

Draw **five more** lines.



[5]

6. Nov/2022/Paper\_22/No.3b(ii)

(ii) The low concentration of lactose sugar in yoghurt makes it a better food than milk for a person with lactose intolerance.

Outline the health benefits to some people with lactose intolerance of continuing to include a dairy product such as yoghurt in the diet.

.....

.....

.....

..... [2]