

2001 HIGHER SCHOOL CERTIFICATE EXAMINATION

Biology

Section I (continued)

Part B – 60 marks

Attempt Questions 16–28

Allow about 1 hour and 45 minutes for this part

Answer the questions in the spaces provided.

Marks

Question 16 (4 marks)

Genetically modified food on menu

Australians are growing more accepting of genetically modified (GM) food, a federal agency survey has found.

This survey found that 44 per cent of Australians now believe GM food would become more widely accepted and less risky in the next few years.

An earlier survey revealed that people thought the risks outweighed the benefits, but that the situation would change.

- (a) State ONE opinion held by Australians about genetically modified food, according to this article. 1

Genetically modified food would become more widely accepted and less risky in the next few years.

- (b) Justify ONE piece of information you would need in order to determine the validity of the survey results. 3

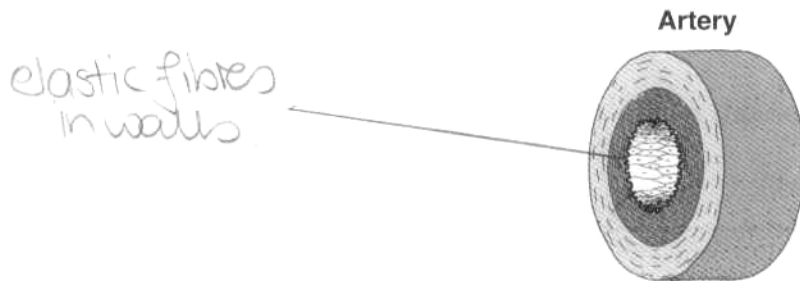
You would need to know who was tested. The survey should cover a broad cross-section of Australian society, testing people of different ages, sex, socio-economic background, educational level. Only then can a generalisation about all Australians be made. otherwise, if only scientists were tested for example, it wouldn't truly reflect the opinions of all Australians.

Marks

Question 17 (3 marks)

- (a) Label, on the diagram, ONE structural feature of the artery shown.

1



- (b) How does the labelled feature relate to the artery's function?

2

The artery carries blood away from the heart & around the rest of the body. Blood in the arteries is under pressure. Elastic fibres in the walls are necessary in keeping the blood under pressure & allowing for expansion of the artery as it is under pressure.

Question 18 (5 marks)

- (a) Name TWO products extracted from donated blood, and state their uses.

4

Red blood cells - given to people whose blood isn't carrying enough oxygen e.g. anaemia.
Plasma - contains blood clotting factors for people with haemophilia.

- (b) Propose ONE reason why scientists have now begun to develop artificial blood.

1

The quantities of donated blood are quite low.