AQA GCSE Combined Science - Trilogy | 8464

SPECIFICATION POINT 4.2.2.4

Coronary heart disease: a non-communicable disease

Past-paper questions

Tier	**Foundation**
Question groups	**2**
Available paper years	**2018–2024**

Using this booklet

1. Answer the questions in order and show your working.
2. Original question numbers and marks are retained.
3. Print at actual size (100%) for measuring questions.
4. Use the companion answer booklet to check your work.

Name: _____ **Date:** _____

Whole questions are retained for context, so some parts assess other specification points. Current and legacy sources are labelled. Continue on extra paper if needed.

4.2.2.4 Coronary heart disease: a non-communicable disease

Question 01

June 2018 | 8464/B/1F | Original Q7

0 7 Coronary heart disease (CHD) is a non-communicable disease.

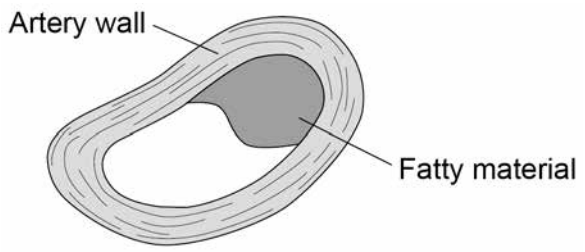
CHD is caused when fatty material builds up in the coronary arteries.

0 7 . 1 Explain what a non-communicable disease is.

[2 marks]

Figure 14 shows a coronary artery of someone with CHD.

Figure 14



0 7 . 2 Explain how CHD can cause a heart attack.

[3 marks]

Question 7 continues on the next page

4.2.2.4 Coronary heart disease: a non-communicable disease

Question 01 · continued

June 2018 | 8464/B/1F | Original Q7

0 7 . 3 Explain how lifestyle and medical risk factors increase the chance of developing CHD.
[6 marks]

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4.2.2.4 Coronary heart disease: a non-communicable disease

Question 02

0 4 This question is about disease.

Gonorrhoea is a sexually transmitted disease.

0 4 . 1 Which is a symptom of gonorrhoea?

[1 mark]

Tick (✓) **one** box.

- Damaged immune system ☐
- Pain when urinating ☐
- Reduced body temperature ☐

Table 2 shows the number of reported cases of gonorrhoea for 5 cities.

Table 2

City	Number of reported cases of gonorrhoea per 100 000 of the population
A	124
B	118
C	40
D	130
E	40

4.2.2.4 Coronary heart disease: a non-communicable disease

Question 02 · continued

0 4 . 2 The number of cases of gonorrhoea in each city might **not** be accurate.

Suggest **one** reason why.

[1 mark]

0 4 . 3 Which is the best way to present the data from **Table 2**?

[1 mark]

Tick (✓) **one** box.

Bar chart ☐

Line graph ☐

Scatter diagram ☐

0 4 . 4 The data is given as per 100 000 of the population and **not** as the total number of people with gonorrhoea.

Suggest why.

[1 mark]

Question 4 continues on the next page

4.2.2.4 Coronary heart disease: a non-communicable disease

Question 02 · continued

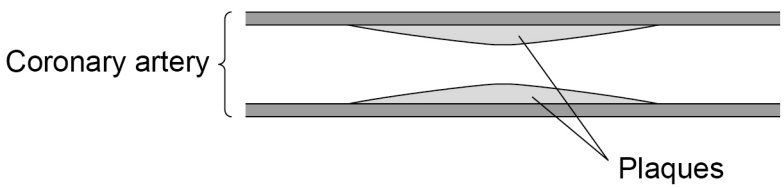
Deposits can form in coronary arteries.

The deposits are called plaques.

Plaques cause damage to the arteries.

Figure 6 shows plaques in a coronary artery.

Figure 6



0 4 . 5 Which **two** factors **increase** the risk of plaques forming in the coronary artery?

[2 marks]

Tick (✓) **two** boxes.

- High fat diet ☐
- Low blood glucose ☐
- Regular exercise ☐
- Smoking ☐
- Taking statins ☐

4.2.2.4 Coronary heart disease: a non-communicable disease

Question 02 · continued

0 4 . 6 Which treatment can be used for the plaques in **Figure 6**?

[1 mark]

Tick (✓) **one** box.

A placebo ☐

A stent ☐

An antibiotic ☐

0 4 . 7 A heart attack can happen when plaques block a coronary artery.

During a heart attack muscle cells in the heart die.

Explain how the blockage can lead to the death of muscle cells in the heart.

[3 marks]

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