5.4 Health, Fitness and Wellbeing: Micronutrients, Fibre and Water: 10-minute Pack

AQA 8582 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Which mineral is mainly needed to make haemoglobin in red blood cells, which carries oxygen around the body?

- ☐ A) Calcium
- ☐ B) Iron
- ☐ C) Vitamin D
- ☐ D) Vitamin C

(Total for Question 1 is 1 mark)

2 State two functions vitamin C performs in the body that are relevant to a sports performer.

(Total for Question 2 is 2 marks)

3 A player loses approximately 1.2 litres of fluid through sweat during a 90-minute match, and drinks 0.9 litres of fluid during the same period. Using the formula fluid balance = fluid intake - fluid lost, calculate the player's fluid balance for the match, stating whether this represents a deficit or a surplus.

(Total for Question 3 is 2 marks)

© Revision Library | revisionlibrary.co.uk

4 Which of the following is most likely to increase a performer's fluid loss through sweat during exercise?

- ☐ A) Training in a cool, air-conditioned gym
- ☐ B) Training outdoors in warm, humid conditions
- ☐ C) A short, low-intensity walk
- ☐ D) Resting indoors before training begins

(Total for Question 4 is 1 mark)

---

5 Explain how a lack of dietary fibre could affect a performer's digestive health, and suggest one dietary change that could help.

(Total for Question 5 is 3 marks)

---

6 State one likely cause of these symptoms and one action Noah could take to address it.

(Total for Question 6 is 2 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 5.4 Health, Fitness and Wellbeing: Micronutrients, Fibre and Water: 10-minute Pack

Question 1

B **B1**

Answer: B

Question 2

supports the immune system, oe **B1**

helps with the repair of body tissue, oe **B1**

Answer: Vitamin C supports the immune system, and helps with the repair of body tissue.

Question 3

0.9 - 1.2 (= -0.3) seen, oe **M1**

a deficit of 0.3 litres cao **A1**

Answer: A fluid deficit of 0.3 litres.

Question 4

B **B1**

Answer: B

Question 5

a lack of fibre can lead to digestive problems, such as irregular bowel movements or constipation, oe **B1**

fibre adds bulk and helps food move through the digestive system, oe **B1**

suggested change: increasing intake of wholegrain foods, fruit and vegetables, oe **B1**

Answer: A lack of fibre can lead to digestive problems such as irregular bowel movements, since fibre adds bulk and helps food move through the digestive system. Increasing intake of wholegrain foods, fruit and vegetables could help.

Question 6

mild dehydration, from sweat loss during exercise in warm conditions, oe **B1**

drink water (or a sports drink) to rehydrate, during a break in training, oe **B1**

Answer: A likely cause is mild dehydration from sweat loss during exercise in warm conditions; Noah should drink water to rehydrate during a break in training.

© Revision Library | revisionlibrary.co.uk