5.5 Health, Fitness and Wellbeing: Diet, Energy Balance and Performance: 10-minute Pack

AQA 8582 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Which of the following best describes 'energy balance'?

- ☐ A) The comparison between a person's energy intake from food and drink, and their energy expenditure
- ☐ B) The total amount of carbohydrate stored as glycogen in the muscles
- ☐ C) The number of calories in a single meal
- ☐ D) A performer's measured level of cardiovascular fitness

(Total for Question 1 is 1 mark)

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2 Which of the following would most directly increase a performer's energy expenditure on a given day?

- ☐ A) Eating a larger breakfast
- ☐ B) Completing an additional, longer training session
- ☐ C) Drinking more water throughout the day
- ☐ D) Taking a rest day with no planned training

(Total for Question 2 is 1 mark)

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3 State two examples of good carbohydrate sources a performer might use to increase their intake before a long event.

(Total for Question 3 is 2 marks)

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4 Explain why consuming carbohydrate, and some protein, soon after a hard training session is often recommended to support recovery.

(Total for Question 4 is 2 marks)

5 Explain why simply eating 'more food' is not, on its own, a complete description of a sensible strategy for meeting a performer's increased energy needs during heavy training.

(Total for Question 5 is 3 marks)

6 Suggest one dietary consideration between the two sessions relevant to her energy balance, and explain why it matters.

(Total for Question 6 is 2 marks)

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Mark scheme · 5.5 Health, Fitness and Wellbeing: Diet, Energy Balance and Performance: 10-minute Pack

Question 1

A **B1**

Answer: A

Question 2

B **B1**

Answer: B

Question 3

pasta, rice or potatoes, oe **B1**

wholegrain bread, oats or bananas, oe **B1**

Answer: Pasta, rice or potatoes, and wholegrain bread, oats or bananas, are all good carbohydrate sources a performer might use before a long event.

Question 4

carbohydrate helps to replenish glycogen stores that were used up during the session, oe **B1**

protein supports the repair of muscle tissue that has been broken down or stressed during training, oe **B1**

Answer: Carbohydrate helps to replenish glycogen stores that were used up during the session, and protein supports the repair of muscle tissue that has been broken down or stressed during training.

Question 5

the type of energy matters, not just the total amount, e.g. carbohydrate is particularly important for fuelling and refuelling muscle glycogen, oe **B1**

timing also matters, e.g. eating around training sessions supports fuelling and recovery more effectively than the same food eaten at a different time, oe **B1**

so an effective strategy considers the balance, type and timing of intake relative to training demands, not simply a larger total amount of food, oe **B1**

Answer: The type of energy matters, not just the total amount, since carbohydrate is particularly important for fuelling and refuelling muscle glycogen. Timing also matters, as eating around training sessions supports fuelling and recovery more effectively than the same food eaten at a different time. An effective strategy therefore considers the balance, type and timing of intake, not simply a larger total amount of food.

Question 6

eating a carbohydrate-containing meal or snack between the two sessions, oe **B1**

to help replenish some glycogen used in the morning session ahead of the evening session, so training quality is not compromised by low fuel, oe **B1**

Answer: Eating a carbohydrate-containing meal or snack between the two sessions would help replenish some glycogen used in the morning session ahead of the evening session, so training quality is not compromised by low fuel.

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