Nutrition Exam Questions

1. Footballers need .stamina. to play the game effectively.

State **two** classes of food that are most suitable for players who require stamina

**and** why they are needed in their diet.

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*(3 marks)*

**2)**

Sports performers need to be fit. One possible limit to fitness in some activities is

body fat. A high ’Body Mass Index’ (BMI) indicates a high percentage body fat and

possibly obesity.

How is Body Mass Index (BMI) calculated?

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*(2 marks)*

How may .obesity. affect performance in different activities?

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*(2 marks)*

**3)** Explain how a diet containing sufficient ‘vitamins’ **and** ‘minerals’ contributes to effective

performance.

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*(2 marks)*

**4)** Netball players should have a suitably balanced diet for their sport. What do you

understand by the term *balanced diet*?

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*(1 mark)*

What are the advantages **and** disadvantages of a netball player having a diet rich

in fat?

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*(4 marks)*

1. Eating a diet with sufficient calcium and iron would have physiological benefits for an athlete. State the importance of these two minerals for the athlete [3]

1. In what ways should the diet of a long distance runner be different from that of a weight lifter. Give reasons for your answer. [3]

3. A balanced diet for most games players is approximately 60% carbohydrate, 20% fat and 15% protein. Describe the role of each of these food types in maintaining a balanced diet for the games player [3]

**Nutrition answers**

**1 (b)** State **two** classes of food that are most suitable for players who require stamina

**and** why they are needed in their diet. *(3 marks)*

*3 marks for 3 of:*

*A. Carbohydrates/glucose/sugar;*

*B. Fats/lipids/triglycerides;*

*C. Energy/ATP/respiration.*

First two food groups only

Do **not** accept carbs

Do **not** accept protein

Do **not** accept fuel

**2 (a) (i)** How is ‘Body Mass Index’ (BMI) calculated?

*(2 marks)*

*2 marks for two of:*

*A. Height and weight/mass;*

*B. Weight divided Height 2/ squared.*

First two answers

Accept kg and m

Accept Kg/m2

Just point B = 2 marks

**2 (a) (ii)** How may ‘obesity’ affect performance in different activities?

*(2 marks)*

*A. Limits stamina/endurance/cardiovascular/*

*cardio-respiratory*

*endurance;*

2 (c) Explain how a diet containing sufficient ‘vitamins’ **and** ‘minerals’ contributes to

effective performance. *(2 marks)*

2 marks for 2 of:

A. Vit K/folic acid/Vit B12/iron - helps production of red blood cells/

haemoglobin;

B. Calcium/phosphorus /Vit D for bones;

C. Calcium / magnesium for muscle contraction;

D. Vit B2/niacin/phosphorus/sodium/iron – energy metabolism;

E. Potassium/sodium/calcium – nerve transmission

(b) (i)

1. Food intake containing sufficient amounts (enough but not excess) of all the

nutrients required/energy balance *1 mark*

(ii)

**Advantages**

1. Energy source

2. Aerobic/low intensity/slow release

3. Source of vitamins

4. E.g. A, D, E or K *sub max 3 marks*

**Disadvantages**

5. Excess mass/weight/obesity

6. Bad for stamina/endurance

7. Limits range of movement/flexibility

8. Performer too warm/may overheat/limits heat loss

9. One of the following named diseases: atherosclerosis/atheroma, coronary

heart disease, diabetes, cancers, high blood pressure

*Sub max 3 marks*

*4 marks*

1. Iron:

* Haemoglobin/red blood cells
* will enhance the transport of O2
* improved stamina

Calcium:

* Bones
* important for nerve transmission and muscle contraction

Max 3 marks

2. A marathon runner requires:

* more carbohydrate
* for energy

Weight lifter requires:

* more protein
* for muscle growth

Max 3 marks

3.

* Carbohydrate is the main energy fuel for both aerobic and anaerobic work
* Fats are the secondary energy fuel for low intensity work
* Proteins are for tissue growth and repair