

**MULTIPLE CHOICE  
QUESTION PAPER**

<b>Paper number</b> APNU3.0 Please insert this reference number in the appropriate boxes on your candidate answer sheet	<b>Time allocation</b> 50 minutes
<b>Title</b>  <b>MOCK PAPER</b>  <b>Level 3</b> <b>Applying the Principles of Nutrition to a Physical Activity Programme</b>  L/600/9054 Applying the Principles of Nutrition to a Physical Activity Programme	
<b>Special Instructions</b>  This theory paper comprises questions that are indicative to the Level 3 Applying the Principles of Nutrition to a Physical Activity Programme unit. It contains questions that are phrased as standard multiple choice, pictorial, fill the blanks and/or complete the sentence style questions. Answers should be recorded as either a, b, c or d.  The questions within this paper are proportionate to the assessment criteria within the unit and relate to the following: <ul style="list-style-type: none"><li>• The principles of nutrition</li><li>• Key guidelines in relation to nutrition</li><li>• Nationally recommended practice in relation to providing nutritional advice</li><li>• The relationship between nutrition and physical activity</li><li>• Understanding how to collect and use nutritional information</li><li>• Principles of nutritional goal setting</li></ul> This theory paper has 40 marks. A <b>minimum total of 28 marks overall (70%)</b> is required in order to pass.  <b>Note: You may use a calculator for this assessment.</b>  <b>Important: Please do not write on this paper.</b>	



Q1

**What is the primary function of carbohydrate in the diet? (1 mark)**

- a. To absorb vitamins
- b. To supply energy
- c. To allow for enzyme action
- d. To promote repair of tissues

Q2

**Which fuel is needed for the effective utilisation of fat? (1 mark)**

- a. Glucose
- b. Protein
- c. Fibre
- d. Alcohol

Q3

**What is the function of fibre in a balanced healthy diet? (1 mark)**

- a. It supplies vitamin D
- b. It provides energy
- c. It increases blood cholesterol
- d. It slows down gastric emptying

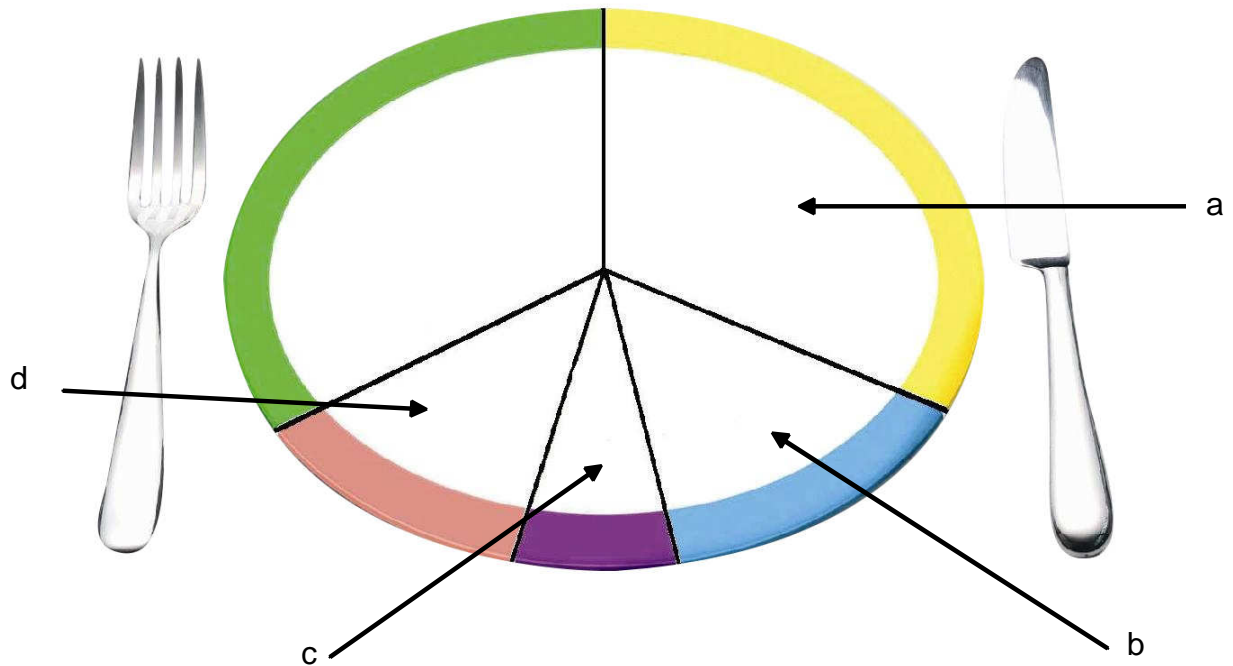
Q4

**Which of the following is NOT an essential nutrient? (1 mark)**

- a. Fat
- b. Alcohol
- c. Vitamins
- d. Protein

Q5

According to the Eatwell Plate pictured below, in which section would you find starchy foods such as bread, rice, pasta and potatoes? (1 mark)



Q6

Which of the following provides the best source of vitamin A? (1 mark)

- a. Lentils
- b. Apples
- c. Full fat milk
- d. Brown rice

Q7

Fill the gap: (1 mark)

There are \_\_\_\_\_ kilocalories (kcal) in 1 gram of protein.

- a. 4
- b. 7
- c. 9
- d. 12

Q8

**What is the primary cause of ketosis? (1 mark)**

- a. Lack of vitamins
- b. Lack of protein
- c. Lack of fat
- d. Lack of carbohydrate

Q9

**Why does the body need a regular supply of vitamins and minerals? (1 mark)**

- a. To reduce free-radical damage
- b. To help achieve weight gain
- c. To reduce the absorption of fats from the gut
- d. To delay stomach emptying, thus reducing feelings of hunger

Q10

**Which of the following are water soluble vitamins? (1 mark)**

- a. D & E
- b. B & C
- c. K & E
- d. A & D

Q11

**What is the name of the disease characterised by a build up of fatty deposits within the arteries? (1 mark)**

- a. Scoliosis
- b. Acidosis
- c. Atherosclerosis
- d. Osteoporosis

Q12

**When glycogen stores are depleted, where does the liver obtain amino acids from for conversion to glucose? (1 mark)**

- a. The breakdown of fat
- b. The breakdown of muscle
- c. The breakdown of starch
- d. The breakdown of carbohydrate

Q13

**Which of the following minerals is a trace element? (1 mark)**

- a. Calcium
- b. Potassium
- c. Zinc
- d. Phosphorus

Q14

**Which method of cooking is recommended in order to retain the vitamins and minerals in vegetables? (1 mark)**

- a. Steam in a small amount of water
- b. Boil for 10 minutes
- c. Add to soups or stews
- d. Cook at a very high temperature

Q15

**Which of the following is a simple carbohydrate? (1 mark)**

- a. Vegetables
- b. Bran
- c. Grains
- d. Jam

NUTRITION INFORMATION			
TYPICAL VALUES	PER 100ml OF PRODUCT	PER AVERAGE SERVING (250ml)	GUIDELINE DAILY AMOUNTS ADULTS
ENERGY	286 kJ 68 kcal	715 kJ 170 kcal	2000
PROTEIN	3.4g	8.5g	45g
CARBOHYDRATE	4.7g	11.8g	230g
of which sugars	4.7g	11.8g	90g
FAT	4.0g	10.0g	70g
of which saturates	2.6g	6.5g	30g
FIBRE	0.0g	0.0g	24g
SODIUM	trace	Trace	2.4g
SALT	trace	trace	6g
CALCIUM	122.0mg	305.0mg	700mg

Q16

**With reference to the food label shown above, what is the percentage of kilocalories derived from carbohydrate? (1 mark)**

- a. 4.7%
- b. 11.8%
- c. 27.6%
- d. 62.2%

Q17

**With reference to the food label shown above, approximately how many average servings of this product would need to be eaten to obtain to the guideline daily amount (GDA) of sugars? (1 mark)**

- a. 3.2 servings
- b. 4.7 servings
- c. 5.5 servings
- d. 7.6 servings

Q18

**How can saturated fats be identified? (1 mark)**

- a. They are solid at room temperature
- b. They are liquid at room temperature
- c. They are yellow in colour
- d. They are white in colour

Q19

**Which of the following protein-based foods contains all the essential amino acids? (1 mark)**

- a. Peanuts
- b. Lentils
- c. Pasta
- d. Soy-bean

Q20

**Which of the following is important for bile production? (1 mark)**

- a. Calcium
- b. Water
- c. Cholesterol
- d. Glucose

Q21

**Which of the following is first in the digestive system? (1 mark)**

- a. Rectum
- b. Small intestine
- c. Colon
- d. Stomach

Q22

**The ‘traffic light’ labelling system shows amounts of which four nutrients?  
(1 mark)**

- a. Saturated fat, sugar, salt, minerals
- b. Fat, saturated fat, sugar, salt
- c. Saturated fat, sugar, starch, minerals
- d. Fat, starch, salt, sugar

Q23

**In a healthy diet, what is the recommended percentage of kilocalories (kcal) that should come from carbohydrates? (1 mark)**

- a. 20 - 30%
- b. 30 - 40%
- c. 40 - 50%
- d. 50 - 60%

Q24

**What is the total percentage of fats recommended in a balanced healthy diet?  
(1 mark)**

- a. No more than 15%
- b. No more than 25%
- c. No more than 35%
- d. No more than 45%

Q25

**Which of the following does NOT qualify as a portion of fruit or vegetables?  
(1 mark)**

- a. 1 medium sized potato
- b. 1 dessert bowl of salad
- c. 1 glass of orange juice
- d. 1 handful of blueberries

Q26

**Which of the following is a possible consequence of eating a low protein diet? (1 mark)**

- a. Decreased muscle growth and repair
- b. Increased potential for glycogen storage
- c. Increased uptake of minerals
- d. Decreased potential to store body fat

Q27

**What advice would you recommend as part of an effective fat loss programme? (1 mark)**

- a. Severely restrict calorie intake
- b. Include regular cardiovascular training
- c. Aim to lose weight as rapidly as possible
- d. Avoid any resistance training

Q28

**Which of the following services should be referred to a registered dietician? (1 mark)**

- a. Evaluating the need for supplementation
- b. Estimating daily energy requirements
- c. Identifying strengths and weaknesses of different diets
- d. Utilising the eatwell plate to assess a diet

Q29

**During moderate to high intensity activity, how long can stored muscle glycogen last? (1 mark)**

- a. 10 seconds
- b. 1 - 1.5 hours
- c. 4 – 5 hours
- d. 24 hours

Q30

**What is the recommended daily protein intake for a sedentary adult? (1 mark)**

- a. 0.2g/kg body weight
- b. 0.8g/kg body weight
- c. 1.2g/kg body weight
- d. 1.8g/kg body weight

Q31

**Which of the following describes a safe and effective weight loss plan? (1 mark)**

- a. Provide an energy intake below an individual's BMR
- b. Promote rapid weight loss by eating less
- c. Allow unlimited amounts of a certain food group
- d. Increase energy output and decrease energy intake

Q32

**During high intensity activity, what fuel contributes the most to energy production? (1 mark)**

- a. Protein
- b. Iron
- c. Glycogen
- d. Fat

Q33

**Which of the following drinks would be used by endurance athletes to top up muscle glycogen stores? (1 mark)**

- a. Hypertonic
- b. Water
- c. Hypotonic
- d. Tea

**Schofield Calculation****Men**

$$10 - 17 \text{ years } \text{BMR} = 17.7 \times W + 657$$

$$18 - 29 \text{ years } \text{BMR} = 15.1 \times W + 692$$

$$30 - 59 \text{ years } \text{BMR} = 11.5 \times W + 873$$

**Women**

$$10 - 17 \text{ years } \text{BMR} = 13.4 \times W + 692$$

$$18 - 29 \text{ years } \text{BMR} = 14.8 \times W + 487$$

$$30 - 59 \text{ years } \text{BMR} = 8.3 \times W + 846$$

**Key**

$W$  = Body weight in kilograms

**PAF:**

BMR x 1.4 inactive men and women  
(this applies to most people in the UK)

BMR x 1.6 moderately active women

BMR x 1.7 moderately active men

BMR x 1.8 very active women

BMR x 1.9 very active men

Q34

**Using the Schofield calculation shown above, calculate the daily energy requirement (kcal) for a 20 year old male who weighs 80kg and is very active. (1 mark)**

- a. 2610
- b. 3110
- c. 3610
- d. 4110

Q35

**What is the approximate energy expenditure of a 65kg individual during brisk walking? (1 mark)**

- a. 1 kcal/min
- b. 6 kcal/min
- c. 16 kcal/min
- d. 160 kcal/min

Q36

**With reference to metabolism, what do the initials TEF stand for? (1 mark)**

- a. Trans Essential Fats
- b. Total Energy of Feeding
- c. Timed Eating Factor
- d. Thermic Effect of Food

Q37

**Which of the following methods would be least effective for measuring fat loss? (1 mark)**

- a. Weighing scales
- b. Bio-electrical impedance
- c. Skin fold callipers
- d. Tape measure

Q38

**Which of the following is a sign of Bulimia? (1 mark)**

- a. High breathing rate
- b. High blood pressure
- c. Increased bone density
- d. Increased tooth decay

Q39

**Which of the following individuals has a body mass index (BMI) that would be considered to be healthy? (1 mark)** $wt (kg)/ht^2 (m)$ 

- |              |               |                    |
|--------------|---------------|--------------------|
| a. Person 1. | Weight: 53kg  | Height: 1.72metres |
| b. Person 2. | Weight: 70kg  | Height: 1.72metres |
| c. Person 3. | Weight: 85kg  | Height: 1.72metres |
| d. Person 4. | Weight: 100kg | Height: 1.72metres |

Q40

**Someone who has been consciously eating healthily for the last 7 months is in which stage of change? (1 mark)**

- a. Action
- b. Preparation
- c. Maintenance
- d. Termination