

**MULTIPLE CHOICE
QUESTION PAPER**

Paper number APNU3.01 Please insert this reference number in the appropriate boxes on your candidate answer sheet	Time allocation 45 minutes
Title MOCK PAPER Level 3 Applying the Principles of Nutrition to a Physical Activity Programme L/600/9054	
Special Instructions This theory paper comprises questions that are indicative of the Level 3 Applying the Principles of Nutrition to a Physical Activity Programme unit. All questions are multiple-choice. Answers should be recorded as either a, b, c or d. This theory paper has 30 marks. A minimum total of 21 marks overall (70%) is required in order to pass. Important: Please do not write on this paper. Note: You may use a calculator for this assessment.	

Q1

Which organ is the major site for absorption of nutrients in the digestive system? (1 mark)

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

Q2

Which of the following statements is an accurate definition of diet? (1 mark)

- a. An eating routine which limits the intake of food and drink
- b. An eating pattern which determines when certain foods should be consumed
- c. The food and drink routinely consumed by an individual
- d. An eating habit which restricts individual food groups

Q3

According to the Eatwell Plate, which foods should be eaten in the smallest quantity? (1 mark)

- a. Milk and dairy foods
- b. Fat and sugar
- c. Fruit and vegetables
- d. Bread, rice, potatoes, pasta

Q4

How many essential (primary) amino acids are there? (1 mark)

- a. 8
- b. 12
- c. 16
- d. 20

Q5

Which of the following vitamins is fat soluble? (1 mark)

- a. A
- b. B6
- c. B12
- d. C

Q6

1g of fat provides how many kcals of energy? (1 mark)

- a. 4
- b. 5
- c. 7
- d. 9

Q7

Fill in the gap: (1 mark)

There are _____ kilocalories (kcal) in 1 gram of carbohydrate

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

Q8

If 100g of a food provides 6g of fat and 95kcal, what is the percentage energy from fat in this product? (1 mark)

- a. 37
- b. 47
- c. 57
- d. 67

Q9

When cooking vegetables, water-soluble vitamins will be best retained by using which of the following cooking methods? (1 mark)

- a. Slow cooking
- b. Boiling
- c. Cooking at a very high temperature
- d. Steaming

Q10

Which hormone, influenced by the amount of fat we have in our fat cells, helps regulate metabolic rate and appetite? (1 mark)

- a. Leptin
- b. Insulin
- c. Ghrelin
- d. Glucagon

Q11

A client should be referred to a dietician if they (1 mark)

- a. are training for a marathon and would like dietary advice
- b. would like to make changes to their diet to improve their health status
- c. require more complex dietary analysis
- d. would like advice on healthy food choices

Q12

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

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

Q13

Which of the following statements is true according to the 'eatwell plate'? (1 mark)

- a. Foods and drinks high in fat and/or sugar are **not** essential to a healthy diet
- b. 25% of the *daily amount* of food should come from non-dairy sources of protein
- c. Bread, rice potatoes and pasta are **not** essential to a healthy diet
- d. 50% of the *daily amount* of food should come from starchy foods

Q14

Which one of the following statements about supplementation is true? (1 mark)

- a. Excess vitamin E is excreted in the urine
- b. Vitamin A can be toxic in high doses
- c. All vitamin supplementation is safe
- d. Excess vitamin C may cause cramps

Q15

The proportion of fruit and vegetables in the 'eatwell plate' is equal to that of (1 mark)

- a. starchy foods
- b. meat, fish and beans
- c. foods high in fat and/or sugar
- d. milk and dairy

Q16

How many portions of fruit and vegetables are recommended to be consumed per day? (1 mark)

- a. At least 1
- b. At least 3
- c. At least 5
- d. At least 7

Q17

Which of the following foods provides all the essential amino acids? (1 mark)

- a. Fish
- b. Nuts
- c. Lentils
- d. Beans

Q18

Which statement below is based on evidence? (1 mark)

- a. 0.8g of protein per kg body weight is a sufficient daily amount for an inactive person
- b. Protein can be consumed in unlimited amounts in the diet
- c. Saturated fat should be eliminated from the diet
- d. For health it is essential to consume a very low fat diet

Q19

What level of nutritional advice should a personal trainer be delivering to clients? (1 mark)

- a. Recommendations in-line with healthy eating guidelines including for someone recovering from illness
- b. Recommendations in-line with healthy eating guidelines including for someone recovering from illness and advice on supplements
- c. Recommendations covering quantity and quality of foods in-line with healthy eating guidelines
- d. Recommendations in-line with healthy eating guidelines including advice on supplements

Q20

What is a potential consequence of eating a diet containing fewer kilocalories than the BMR? (1 mark)

- a. Increased energy levels
- b. Increased loss of lean tissue
- c. Increased metabolic rate
- d. Increased hydration levels

Q21

A waist circumference of 90-109cm (35.5 - 43.0 inches) on females presents a high risk of developing (1 mark)

- a. psoriasis
- b. type 1 diabetes
- c. osteoporosis
- d. type 2 diabetes

Q22

Which of the following religious groups only consumes meat which is Halal? (1 mark)

- a. Muslims
- b. Hindus
- c. Christians
- d. Buddhists

Q23

To prevent loss of muscle tissue a very active individual requires a diet which is (1 Mark)

- a. low fat
- b. high fat
- c. low carbohydrate
- d. high carbohydrate

Schofield Calculation**Men**

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

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

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

Women

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

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

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

Key

W = Body weight in kilograms

Physical Activity Factor:

BMR x 1.4 inactive men and women

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

Q24

If BMR (basal metabolic rate) is 1975 kcals and a female is moderately active (activity factor 1.6), what is their total energy requirement per day in kcals? (1 mark)

- a. 3060
- b. 3160
- c. 3260
- d. 3360

Q25

Which statement is correct in relation to muscle glycogen stores? (1 mark)

- a. Muscle glycogen stores can last for 24 hours without being topped up
- b. When muscle glycogen becomes depleted it can be replenished by stores from other muscles
- c. Muscle glycogen stores can last up to 12 hours without being topped up
- d. Muscle glycogen stores are used exclusively by the muscle in which they are stored

Schofield Calculation**Men**

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

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

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

Women

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

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

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

Key

W = Body weight in kilograms

Physical Activity Factor:

BMR x 1.4 inactive men and women

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

Q26

Using the Schofield formula, what is the BMR (basal metabolic rate), in kcals, of a female aged 29 and weighing 68kg? (1 mark)

- a. 1293
- b. 1493
- c. 1693
- d. 1893

Q27

Which of the following defines basal metabolic rate (BMR)? (1 mark)

- a. An individual's basic requirement of energy at rest
- b. An individual's basic requirement of energy during exercise
- c. An individual's total body mass
- d. An individual's lean body mass

Q28

Which of the following activities will burn the most energy per minute (based on a 65Kg individual)? (1 mark)

- a. Brisk walking
- b. High intensity aerobics class
- c. Race cycling
- d. Moderate intensity weight lifting

Q29

Which of the following drinks would give the quickest rehydration? (1 mark)

- a. Hypertonic
- b. Coffee
- c. Isotonic
- d. Tea

Q30

What is the recommended daily protein intake for adults performing regular endurance training? (1 mark)

- a. 0.8 – 1.0g/kg body weight
- b. 1.2 – 1.4g/kg body weight
- c. 1.8 – 2.0g/kg body weight
- d. 2.4 – 2.6g/kg body weight