

Assessment 1

Total Marks 30

Question 1 Multiple Choice Questions:

(05)

- i. Nutrition is the process of consuming, absorbing and:
 - a) storing nutrients
 - b) using nutrients**
 - c) losing nutrients

- ii. Proteins are involved in:
 - a) a range of biochemical reactions
 - b) maintaining ionic balances in the body
 - c) growth, repair and general maintenance of the body**

- iii. Vitamins are important for:
 - a) a range of biochemical reactions**
 - b) providing energy to the body
 - c) growth and repair of the body

- vi. An excess of only 200 calories per day for 10 days is likely to result in a weight gain of nearly:
 - a) 0.5 pounds**
 - b) 1 pound
 - c) 2 pounds

- v. One Kcal is approximately:
 - a) 5.2 KJ
 - b) 4.2 KJ**
 - c) 6.2 KJ

- vi. People maintain a stable weight when their total energy intake balances their:
 - a) total energy expenditure (TEE)**
 - b) basal metabolic rate (BMR)
 - c) reference energy intake (REI)

An Overview of Nutrition

- vii. Which of the followings BMI is considered healthy?
 - a) 30-35
 - b) 35-40
 - c) 18.5-25
- viii. When we are in energy balance, we:
 - a) put on weight
 - b) lose weight
 - c) retain the same weight
- xi. BMI between 30-35 is considered:
 - a) normal
 - b) overweight
 - c) obese
- x. The formula for calculating BMI is:
 - a) BMI= weight x height
 - b) BMI= weight/kg
 - c) Height/m
 - d) BMI = weight/kg
 - e) Height/m²

Q: 2: Short Questions

(18)

Each part carries equal marks

- i. The energy requirements are different for different people. Why?
- ii. What is BMI, and how can it be calculated?
- iii. Define whole foods, and also describe their importance in our diet.
- iv. What are refined foods? Are they nutritious? If not why?
- v. What is basal metabolic rate? What is the difference between total energy expenditure (TEE) and Basal Metabolic Rate (BMR)?
- vi. What are micro-nutrients? Why does our body need them?

Case Study

(7)

Lucy (32) is a fairly active young woman, who works out in the gym several days a week. She has a stressful job. Her diet intake record also shows that her diet is healthy and balanced. Her BMI falls within the ideal range but her skin is very dry, and most of the time she feels tired and fatigued. She has been taking good care of herself and her diet, and takes appropriate rest also, but is greatly worried about these problems. Most of the time she does not feel fresh and is not enjoying her quality of life.

Questions:

- 1) The reason for Lucy's dry skin seems that:
 - a) she is not taking proper amount of vegetables in her diet
 - b) she is not taking proper exercise
 - c) she is not drinking enough water
- 2) The reason for Lucy's tiredness could be:
 - a) her stressful job
 - b) her physical activity
 - c) dehydration
- 3) What could be the best dietary advice for Lucy?
 - a) She should take multivitamin supplement
 - b) She should take more rest
 - c) She should drink 6-8 glasses of water daily

Question 2

I] The energy requirements are different for different people. Why?

ANSWER = This can be because of their age, gender, weight and activity level.

II] What is BMI and how can it be calculated?

Answer: BMI {Body Mass Index} is a measure that allows us to check if we are at healthy weight range for a height range. To calculate BMI: The weight [Kg] is divided by the square of the height [m²]. then divide that number once again by height.

$$BMI = \frac{Weight [Kg]}{Height [m^2]}$$

III] Define Whole foods, and also describe their importance in our diet.

Answer: Whole foods are foods that are as close to their natural state as possible and are prepared in a way that retains enough nutritional value to support health. Examples are carrot, cucumber, leafy greens, potatoes etc.

Whole foods are important in our diet because they are concentrated source of nutrients.

IV] What are Refined food? Are they nutritious? If not Why?

Answer: Refined foods are those foods that have been processed, they are not nutritious because they have lost most of their nutrients. This is because they rob the body of their stored energy to digest.

V] What is Basal Metabolic Rate? What is the difference between total energy expenditure [TEE] and Basal Metabolic Rate [BMR]?

Answer: Basal metabolic rate is the minimum no of calories we need to burn to fuel essential bodily processes and keep our organs and tissues in working order.

The difference is that Basal Metabolic Rate [BMR] is the process that continues when we are sitting quietly or lie asleep such as breathing or beating of our hearts. While

Total Energy Expenditure [TEE] is the extra energy needed to carry out everyday activities beyond the energy required for BMR.

VI] What are micro-nutrients? Why does our body need them?

Answer: Micro-nutrients are those nutrients our body require daily in small quantities in milligrams to micro grams, they include certain Vitamins and certain minerals that allows the body to use macro-nutrients.

The body needs them because they help to release energy that are used to power other chemical reactions and cellular processes while energy is lost as heat.