

## **2-Marks questions with answers:**

### **Unit-I**

#### **1. Define nutrition with its types?**

Ans. It is the process of acquiring food and then utilizing it for energy, growth, repair, and other metabolic functions. Nutrition is accomplished through the use of an alimentary canal. Human nutrition consists of the following steps: intake, digestion, absorption, assimilation, and egestion.

#### **2. Describe the role of nutrition agencies?**

Ans. Identify various dietary and nutrition problems prevalent among different segments of the population and continuously monitor diet and nutrition situation of the country.

#### **3. What are proteins?**

Ans. Proteins are large, complex molecules that play many critical roles in the body. They do most of the work in cells and are required for the structure, function, and regulation of the body's tissues and organs.

#### **4. Write a note on vitamins?**

Ans. Vitamins are substances that our bodies need to develop and function normally. They include vitamins A, C, D, E, and K, choline, and the B vitamins (thiamin, riboflavin, niacin, pantothenic acid, biotin, vitamin B6, vitamin B12, and folate/folic acid)

#### **5. Define Digestion?**

Ans. Digestion involves the breakdown of food into smaller and smaller components, until they can be absorbed and assimilated into the body.

#### **6. What are fats?**

Ans. A small amount of fat is an essential part of a healthy, balanced diet. Fat is a source of essential fatty acids, which the body cannot make itself. Fat helps the body absorb vitamin A, vitamin D and vitamin E. These vitamins are fat-soluble, which means they can only be absorbed with the help of fats.

#### **7. Describe the transport of carbohydrates?**

Ans. How the body absorbs & transports broken-down carbohydrates in the body. The monosaccharide units, glucose, galactose and fructose are transported through the wall of the small intestine and then into the portal vein which then takes these elements straight to the liver.

#### **8. What is absorption?**

Ans. Absorption is the process by which the products of digestion are absorbed by the blood to be supplied to the rest of the body. During absorption, the digested products are transported into the blood.

#### **9. What is Assimilation?**

Ans. It is the movement of the digested food molecules into the cells of the body from where they are used. The liver is important in assimilation. For example, glucose is used in respiration to provide energy, and also amino acids are used to build new proteins.

#### **10 What are the nutrition agencies?**

Ans. Important National Agencies Working Towards Food and Nutrition:

- National Health Authority.
- National Institute of Health and Family Welfare.
- Food and Nutrition Board.
- Indian Red Cross Society.
- World Health Organization.
- United Nations Development Programmed.
- World Food Programmed.

## **Unit-II**

#### **1. What is energy balance?**

Ans. Energy is another word for "calories." Your energy balance is the balance of calories consumed through eating and drinking compared to calories burned through physical activity. What you eat and drink is ENERGY IN. What you burn through physical activity is ENERGY OUT.

#### **2. What is water balance?**

Ans. Water balance is the concept that the amount of water lost from the body is equal to the amount of water consumed. Keeping our water and electrolytes, like sodium, in balance is called osmotic concentration. Our thirst center can detect very small changes in the water level within our bodies.

#### **3.What is BMR?**

Ans. Basal metabolic rate measures the calories needed to perform your body's most basic (basal) functions, like breathing, circulation, and cell production. BMR is most accurately measured in a lab setting under very restrictive conditions.

#### **4. What is meant by the energy balance equation?**

Ans. The energy balance equation is the relationship between the energy consumed – measured in calories and the energy expended – also measured in calories. Maintaining a healthy weight requires a balance between energy in and energy out.

#### **5.What are factors affecting BMR?**

Ans. Here are factors that affect BMR and metabolism:

- Muscle mass.
- Age.
- Body size.
- Gender.
- Genetics.
- Physical activity.
- Hormonal factors.
- Environmental factors.

#### **6.What is meant by RDA?**

Ans. Recommended Dietary Allowances (RDAs) are the levels of intake of essential nutrients that,

on the basis of scientific knowledge, are judged by the Food and Nutrition Board to be adequate to meet the known nutrient needs of practically all healthy persons.

### **7.What is geriatrics?**

Ans. Geriatrics is the medical specialty dedicated exclusively to providing high-quality, patient-centered care for older adults. Older adults have a unique set of issues and concerns which geriatric clinicians are trained to focus upon. Illnesses, diseases, and medications may affect older people differently than younger adults, and older patients may have overlapping health problems that require multiple medications.

## **Unit-III**

### **1.Define malnutrition?**

Ans. Malnutrition refers to deficiencies or excesses in nutrient intake, imbalance of essential nutrients or impaired nutrient utilization. The double burden of malnutrition consists of both undernutrition and overweight and obesity, as well as diet-related noncommunicable diseases.

### **2.What are the symptoms and signs of malnutrition?**

Ans. Common signs and symptoms of malnutrition include:

- loss of appetite and lack of interest in food or fluids
- unplanned weight loss - this might cause clothing, rings, watches or dentures to become loose
- tiredness or low energy levels
- reduced ability to perform everyday tasks like showering, getting dressed or cooking
- reduced muscle strength – for example, not being able to walk as far or as fast as usual
- changes in mood which might cause feelings of lethargy and depression
- poor concentration
- poor growth in children
- increased risk of infection, recurrent infections, taking longer to recover and poor wound healing
- difficulty keeping warm
- dizziness

### **3.What are the complications of malnutrition?**

Ans. Consequences of malnutrition:

Muscle function. Weight loss due to depletion of fat and muscle mass, including organ mass, is often the most obvious sign of malnutrition.

Cardio-respiratory function.

Gastrointestinal function.

Immunity and wound healing.

Psychosocial effects.

### **4. Is malnutrition a disease?**

Ans. Malnutrition is a category of diseases that includes undernutrition and overnutrition. Undernutrition is a lack of nutrients, which can result in stunted growth, wasting, and underweight. A surplus of nutrients causes overnutrition, which can result in obesity.

### **5.What are the types of malnutrition?**

Ans. There are two major types of malnutrition:

Protein-energy malnutrition - resulting from deficiencies in any or all nutrients.

Micronutrient deficiency diseases - resulting from a deficiency of specific micronutrients.

**6.What is its effect of overnutrition on the body?**

Ans. Overnutrition increases the risks of serious diet-related chronic diseases, including type 2 diabetes, hypertension, cardiovascular disease, and stroke.

**7.Define immunity?**

Ans. These specialized cells and parts of the immune system offer the body protection against disease. This protection is called immunity. Humans have three types of immunity — innate, adaptive, and passive: Innate immunity: Everyone is born with innate (or natural) immunity, a type of general protection.

## Unit-IV

**1.Define nutrition education?**

Ans. Nutrition education can be defined as any set of learning experiences designed to facilitate the voluntary adoption of eating and other nutrition-related behaviors conducive to health and well-being.

**2.Define anthropometry?**

Ans. Anthropometry is the most frequently used method to assess the nutritional status of individuals or population groups. Measurements of nutritional anthropometry are based on growth in children and body weight changes in adults.

**3.What is a diet survey?**

The term 'dietary survey' refers to a group of methods that are used to collect food consumption data to study the diets of individuals or groups. Common methods in dietary surveys are food frequency questionnaires, food diaries, and 24-hour recalls.

**4.What are the types of assessment of nutritional status?**

An easy way to remember types of nutrition assessment is ABCD: Anthropometric, biochemical, clinical, and dietary. Anthropometry is the measurement of the size, weight, and proportions of the body.

**5.Define biochemical assessment?**

Ans. Biochemical assessment offers to detect a number of nutrient-depletion stages, namely change in nutrient store, in body fluids, in functional level of tissues as well as in enzyme's activity.

## Unit-V

**1.Define hormones?**

Ans. Hormones are chemical substances that act like messenger molecules in the body. After being made in one part of the body, they travel to other parts of the body where they help control how cells and organs do their work.

**2.What is a fad diet?**

Ans. A fad diet is a plan that promotes results such as fast weight loss without robust scientific evidence to support its claims. Popular ones include plans where you eat a very restrictive diet with few foods or an unusual combination of foods. They may only allow you to eat certain foods at certain times.

**3.What are the components of the blood?**

Ans. Blood is a specialized body fluid. It has four main components: plasma, red blood cells, white blood cells, and platelets.

**4.What are the types of hormones?**

Ans. Types of hormones:

- Insulin
- Cortisol
- Testosterone
- Growth hormone
- Estrogen
- Adrenaline
- Adrenocorticotrophic hormone

**5.What is blood?**

Ans. Blood is a specialized body fluid. It has four main components: plasma, red blood cells, white blood cells, and platelets. Blood has many different functions, including: transporting oxygen and nutrients to the lungs and tissues.