

Chapter 15. Nutrition in Man

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Solution 1:

Carbohydrates provide energy and warmth to our body.

Solution 2:

Sources of Vitamin C are Lemon and carrot and sources of Vitamin A are Green vegetables and egg yolk.

Solution 3:

Vitamin C

Solution 4:

Pigs and crows

Solution 5:

Carbohydrates

Solution 6:

Roughage

Solution 7:

Assimilation

Solution 8:

Fats

Solution 9:

1. Carnivores are flesh-eating animals that eat other animals. Example – Snakes, Lion, tiger, vulture
2. Omnivores are animals that feed on both animals and plants. Example – crows, certain bears.
3. Scavenger is any animal that feeds on refuse and other decaying organic matter. Example – vultures, dung beetle.

Solution 10:

(a)

Autotrophs	Heterotrophs
They prepare their own food from simple inorganic raw materials.	They depend on autotrophs for their food and are unable to synthesize their own food.
Example - Green plants	Example - Animals

(b)

Herbivore	Carnivore
These animals feed on plants.	These animals feed on other animals
Example - Goat, Giraffe	Example - Lion, frog

(c)

Assimilation	Absorption
It involves utilization of absorbed food by different body cells.	It is the process by which soluble digested food passes from alimentary canal into the blood and lymph through intestinal villi.

Solution 11:

Food is a mixture of nutritive substances which when taken and incorporated into the body tissues provide materials for energy, repair, growth, reproduction, regulation of life processes and resistance to diseases.

Solution 12:

Proteins are used in the synthesis of new protoplasm to be utilized in growth and tissue repair. Hence they are called body building foods.

Solution 13:

- (a) Night-blindness
- (b) Protein
- (c) Vitamin D
- (d) Insectivore

Solution 14:

- (a) False
- (b) True
- (c) True
- (d) False
- (e) True

PAGE NO:139**Solution 15:**

Water is necessary for our body because:

1. Water acts as solvent for many organic and inorganic compounds
2. Water facilitates the movement of food materials, waste products and other chemical substances in the cytoplasm and circulatory process.

3. It plays an important role in regulating body temperature and osmotic pressure of the body fluids.
4. Water serves as good medium for various metabolic reactions.

Solution 16:

The undigested fibrous material present in the food is called roughage. Raw vegetables, and bran are examples of roughage

Solution 17:

- (a) energy
- (b) glycogen
- (c) fatty acid, glycerol
- (d) sucrose, maltose

Solution 18:

1. The condition where people become weak and sick due to insufficient and unbalanced diet is referred to as malnutrition.
2. Saprophytic nutrition refers to nutrition in which animals feed on dead or decaying matter.
3. Vitamins are organic compounds regularly required in minute quantities in the diet for normal metabolism, health and growth.

Solution 19:

- (a) Milk
- (b) Sugarcane
- (c) Plants
- (d) Yellow and green vegetables

Solution 20:

1. **Kwashiorkor** develops in children whose diet is deficient in proteins even if sufficient carbohydrates and fats are consumed. This disease is common among infants and children up to 3 years old. The symptoms of Kwashiorkor include reduced body weight, stunted growth, protruding belly and thin legs.
2. **Marasmus** is a form of prolonged protein energy malnutrition. It affects infants under one year of age. The symptoms of Marasmus include irreversible muscle degeneration, dry, wrinkled skin, prominent ribs and thin legs.

Solution 21:

1. Deficiency of iron leads to anaemia.
2. Deficiency of iodine leads to goitre.

Solution 22:

1. (a) 500 gm
2. (d) food
3. (b) rice
4. (b) Carrot
5. (a) A, D and E
6. (d) K
7. (c) Protein
8. (a) C