

CHAPTER 4. DIET

Q.1. Fill in the blanks

1. Intake of Nutrients into the body and using it means nutrition.
2. From 1 gm. of Protein 4 Kcal energy is received.
3. Players performing strengthening exercises should increase proportions of Carbohydrates, Proteins, Fats, Vitamins and Minerals in their diet.
4. Normal sedentary individual requires 2500 Kcal energy daily.

Q.2. Write only names

1. Factor regulating body temperature - **water**
2. Fat Soluble Vitamins - **A D E and K**
3. Energy-rich compound formed from Glucose - **glycogen**
4. Nutrient important for stronger bones - **minerals**

Q.3. Match the Following Part A Answers Part B

- | | |
|---------------------|------------------------|
| 1) Sprouted Food - | b) Amrutann |
| 2) Fried Food - | d) Vishann |
| 3) Water- | a) Temperature Control |
| 4) Micro- Nutrients | c) Vitamins |

Q.4. Answer in brief

1. Write the process to prepare Sports Drink at home.

ANS: - To prepare Sports drink at home add 1 tbsp salt + 4 spoon glucose + half lemon to 1 litre of water. It is important to consume adequate amount of water in sports of high sweating and high temperature.

2. Write importance of Balanced Diet.

ANS: -. A balanced diet provides good nutrition to the body.

* One gets the required amount of calories on a daily basis. As a result, one gets better physical and mental health.

* Develops the ability to work.

* Increases immunity

3. On which factors the diet of Sportsmen depends?

ANS: -. Diet depends on factors such as the game of the athlete, his weight, his age, level of training and environment.

4. Classify Nutrients according to their functions.

ANS: - 4) Classification of Nutrients: We receive many components from food which are called as nutrients. The nutrients are classified into two groups:

1. Staple Nutrients / Macro-Nutrients: Carbohydrates, Protein and Fats are major nutrients and are required in higher quantities in the body.

2. Micro Nutrients: Vitamins, Minerals these are required in lesser quantities in the body. These are called as Micro-Nutrients.

Carbohydrates:

They perform important function of supplying energy to the body. From one gram of carbs one receives four kilocalories of energy. From the total energy required for the body one should receive 55-60 % from Carbohydrates. We get carbohydrates from the following foods Cereals like Cow, rye, millet, maize, rice, etc. One gets carbohydrates from Fruits like mangoes, grapes, bananas, apples, potatoes, sweet potatoes and milk and milk products. After digestion, they are converted into glucose. Excessive amounts of glucose are stored in the form of glycogen. When body is deprived of food, this glycogen is broken down and re-formed into glucose and the body gets the required energy.

Protein:

It is essential for nourishment, growth and degeneration of the body as well as for strengthening the bones. four kcal of energy is obtained from 1 gm of protein. About 15% of the total energy requirement should come from protein sources. Pulses, legumes, groundnuts, cashews, almonds, apricots, milk, dairy products, meat, fish, eggs are other sources of protein.

Fats:

Fats are essential for energy production, controlling body temperature, lubrication of the joints and nourishment of the body. About 25-30% of the total energy you need should come from Fats sources. Oilseeds, Coconut, Oil, Ghee, Butter, Milk, Meat, Fish and Fish Oil are the main sources of Fats. Nine kcal of energy is derived from one gram of Fats.

Minerals:

Minerals are required for good health and growth of body, teeth, bones and nerves. Green leafy vegetables, legumes, cashews, almonds, dates, sesame, pulses, eggs, meat, fish, marine and other sources are rich in minerals like calcium, phosphorus, iron, iodine, potassium, copper, magnesium, sodium, etc.

Vitamins: Vitamins are essential nutrient for proper growth and development of the body. Lack of vitamins leads to many disorders. The body receives the required vitamins from a wide variety of vegetables and fruits such as green leafy vegetables, broken grains, bananas and animal products like eggs, milk, butter, meat and fish.

Types of Vitamins:

1. Fat soluble Vitamins: A, D, E and K
2. Water Soluble Vitamins: B (B1, 2,3,6,12) and C

Water:

Body contains 65-70% water which is essential to maintain the body temperature. Water is essential for digestion, absorption and to transport essential nutrients and also for excretion.