

CHAPTER 01

FOOD COMPONENTS

FOOD:

We all love food. We eat different types of food and everyone have their own favorite food. Some of us like spicy Biryani and some of us like sweets, ice creams and chocolates. Eating good food, especially with family and friends, is one of the pleasures of life.

Good foods give plenty of energy to work and enjoy. Having good food also lowers infections and keeps our immune system strong.



What is food?

A food is something that provides nutrients. The components of food are carbohydrates, proteins, fats, vitamins, minerals and water. Fiber is also a type of carbohydrate, helps in proper digestion.

FOOD COMPONENTS

Carbohydrates:

Carbohydrates are the main source of energy for the body. The body breaks carbohydrates down into glucose, acts as main energy source for the brain and muscles. The most common forms of carbohydrates are sugars, starch and dietary fiber.



Sources:

The sources of carbohydrates include bread, fruits, vegetables, nuts, seeds, whole grains, potatoes etc. High intake of carbohydrates, lead to obesity.

Carbohydrates provide energy to keep the body breathing and alive, for movement and growth of tissues.

Carbohydrate test:

If an iodine solution, added to the food sample, blue or black color formation indicates the presence of starch.

Proteins:

Protein is a macronutrient and is a part of every cell in the body. Protein, found throughout the body – in muscle, bone, skin, hair, nails etc. It is made from 20 plus basic building blocks called amino acids. Protein helps the body to build and repair cells and tissues.

**Sources:**

The sources of fats include nuts, oils, avocados, meat, dairy products, snack foods and baked goods. Eating the right amount of the right type of fat is important. Intake of excess amount of fatty foods can cause many health problems.

Fat test:

Place a food sample on paper. If the paper turns translucent, the sample contains fat.

Our body needs these macronutrients in larger quantities in order to function properly. Few nutrients are required in smaller quantities. They are micronutrients like vitamins and minerals to keep our body fit and healthy.

Dietary fiber or Roughages:

It is a type of carbohydrate body cannot digest. Eating enough fiber can prevent or relieve constipation, helping waste to move smoothly through the body and lowers bad cholesterol levels in the body. Good sources of dietary fiber include whole grains, nuts, seeds, fruits and vegetables.



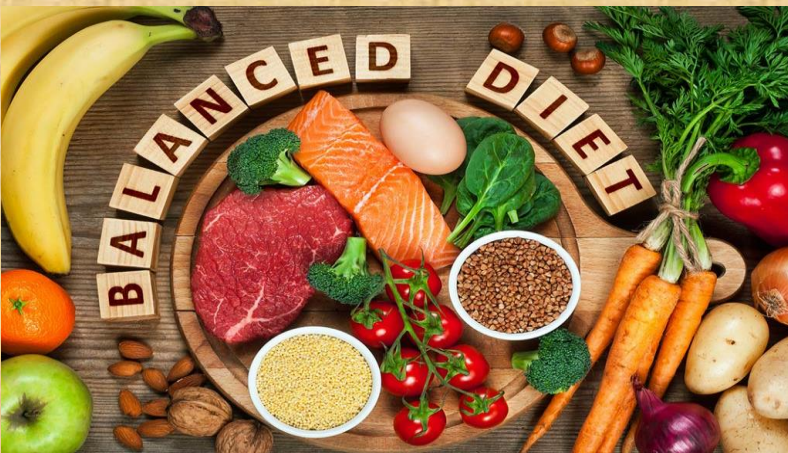
Water:

Water is the most abundant and most frequently overlooked component of food. Fruits contain 80-95% water, raw meat contains 60% and nuts contain 5% water. Water helps in absorbing the nutrients from food. It helps to throw out wastes like urine and sweat from our body.

All these components when supplied in proper amounts give energy, improves body functions and strengthens immune system.

Balanced diet

A balanced diet is one that fulfills all of a person's nutritional needs. It consists of a wide variety of foods to support body and keep us energized and healthy. Having balanced diet avoids eating junk food or food without nutritional value.

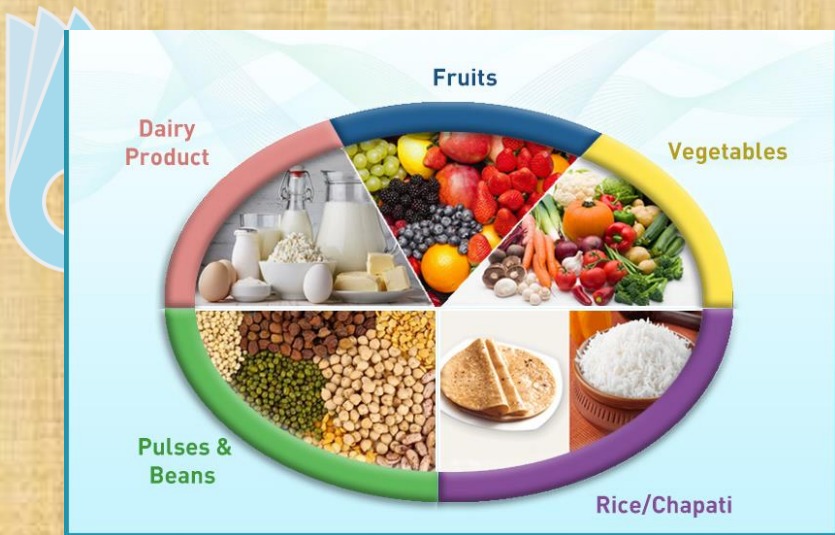


Balanced diet ensures to eat all the required nutrients for your body to function properly. Eat food group contains important nutrients. A balanced diet offers 60-70% of total calories from carbohydrates, 10-12% from proteins and 20-25% of total calories from fat.

Balanced diet should include:

- Vegetables and legumes (beans)
- Fruits
- Grains and cereals
- Meat, fish, eggs, nuts and seeds
- Milk, cheese, yoghurt
- Drink lots of water

A balanced diet includes all these groups and it helps to protect against malnutrition and diabetes, heart attacks in adults.



Children who do not get enough healthy foods may face growth and developmental problems, poor academic performance and frequent infections.

A complete diet supplies all the nutrients required for our body and stop us from getting sick. It helps to make our immune system strong, which became most important, now a day.

Summary of food components

- Food gives us all the required nutrients to our body to work and live properly.
- The components of food include carbohydrates, proteins, fats, vitamins, minerals, dietary fiber and water.
- Energy giving foods include carbohydrates and fats. Body building foods include more of proteins.
- Dietary fiber is also a type of carbohydrate, mostly found in fruits and vegetables. Mainly helps in relieving constipation and reducing bad cholesterol in body.
- Drinking lots of water can keep our body active and healthy. Drinking water frequently can help to throw out wastes like sweat and urine from our body.
- A diet containing all these nutrients in proper proportions called balanced diet.
- Everyone requires balanced diet.
- Eating junk food or food without nutritional value may lead to obesity and other illness.
- Deficiency of nutrients may lead to malnutrition and other diseases.

Glossary

- **Balanced diet** – A diet having all the components in right proportions
- **Carbohydrates** – Energy giving macronutrients
- **Constipation** – it occurs when bowel movements become less frequent and stools become difficult to pass.
- **Fats** – a type of macronutrients gives energy and insulates body.

- **Dietary Fiber** – a type of carbohydrate, our body cannot digest.
- **Proteins** - a type of macronutrient and found throughout the body in each cell and tissue.
- **Vitamins** – components needed by body to grow and function normally.
- **Minerals** – Components important to make hormones and enzymes in our body

