

Learning Objectives



After completing this lesson, students will be able to:

- understand the classification of nutrients.
- list the sources, functions and deficiency disorders of vitamins and minerals.
- gain knowledge about different methods of food preservation.
- identify the adulterants in food.
- explain the role of different food quality certifying agents of our country.

Introduction

Food is the basic necessity of life. Food is defined as any substance of either plant or animal origin consumed to provide nutritional support for an organism. It contains essential nutrients that provide energy, helps in normal growth and development, repair the worn out tissues and protect the body from diseases.

Food contamination with microorganisms is a major source of illness either in the form of infections or poisoning. Food safety is becoming a major concern these days. Adulteration of foodstuffs is commonly practiced in India by traders. Food is contaminated or adulterated from production to consumption for financial gain. The normal physiological functions of a consumer are affected due to either addition of a deleterious substance or the removal of a vital component. Food laws have come into existence to maintain the quality of food produced in our country. Let us study about them in detail.

21.1 Classes of Nutrients

Nutrients are classified into the following major groups as given below.

- Carbohydrates
- Proteins
- Fats
- Vitamins
- Minerals

21.1.1 Carbohydrates

Carbohydrates are organic compounds composed of carbon, hydrogen and oxygen. Carbohydrate is an essential nutrient which provides the chief source of energy to the body. Glucose, sucrose, lactose, starch, cellulose are examples for carbohydrates.

Carbohydrates are classified as monosaccharide (Glucose), disaccharide (Sucrose) and polysaccharide (Cellulose). The classification is based on the number of sugar molecules present in each group.