UNIT- 1

BASIC ASPECTS

DEFINITION

1**) Health:** According to World Health Organization (WHO) health is defined as a state of complete physical, mental, social and spiritual well being, and not merely the absence of disease or infirmity. It is a positive state of complete well being. To remain healthy a balance between work and rest or recreation is necessary, this improves our work efficiency.

2**) Nutrition:** It is a science of nourishing body. It is a combination of processes by which the human body receives and utilizes nutrients which are necessary for carrying out various functions and for the growth and renewal of its components. Thus it is a study of various nutrients, their characteristics, functions, requirements and sources.

It is the science of foods, the nutrients and other substances therein, their interaction, action and balance in relationship to health and disease; the process by which the organism ingests, digests, absorbs, transports, utilizes nutrients and disposes of their end products.

3**) Nutrients:** These are the chemical substances present in food, which the body needs to carry out its functions. The major group of nutrients required by the body is carbohydrates, protein, fat, vitamins and minerals. Each nutrient has specific function in the body.

FUNCTIONS OF FOOD

Food is the basic need for all living beings. It is defined as any substance which nourishes the body as it is fit to eat. It gives us energy to carry out day to day activities and keeps the body systems functioning well. Along with this food also adds pleasure to life. Major functions of food are: Physiological, Psychological and Social.

1) **Physiological**- Each nutrient in the food has specific function to perform in the body. The physiological functions performed by the food are:

a) Providing energy- body needs energy to carry out voluntary and involuntary activities. Involuntary work which is not under our control such as digestion, respiration etc. Voluntary work is which we do by our wish like walking, working etc. The energy required for these activities is supplied by oxidation of foods that we eat (mainly carbohydrate and fat).

b) Body Building or Growth- Our body is made up of millions of cells and when growth takes place new cells are added to the existing cells and cell size increases. Protein plays a major role for this.

c) Maintenance or Repair- In an adult body, worn out cells are continuously being replaced by new ones. This wear and tear of cells needs to be maintained. Proteins, minerals and water are mainly required for growth as well as maintenance of all cells and tissues in the body.
d) Regulation of body processes- Food also regulates numerous activities in the body such as beating of heart, body temperature and clotting of blood. Each of these processes is carried out by specific nutrients eg. Vitamin K and calcium are necessary for blood clotting.
e) Protective Function- Nutrients also help in building up the resistance of body against disease and infection and to recover quickly from any infection.

2) Psychological Function- We all has emotional needs like need for love, attention and security. Food can play an important role in fulfilling these needs. Food can be given as a reward to a person or one can be deprived of it for its bad behavior. Rich servings being associated with happiness and food like khichri may be associated with sickness. Food is therefore associated with ones emotions and feelings.

3) Social Function- Food has a special role in celebrations such as birthday party; festivals like Diwali and Id have special menus for them. In certain communities food is served as status symbol. Thus in a way food brings people together.

All these aspects are important in food acceptance and must be considered in meal planning, which is not only nutritionally adequate but also enjoyable for the group for whom it is intended.

CLASSIFICATION OF NUTRIENTS

Based on requirements by body nutrients are divided into two groups:

1) **Macronutrients**- carbohydrate, proteins, fat and water
2) **Micronutrient**- vitamins and minerals(requirement is in mg or milligrams)
   Both are equally important for good health. The amount needed to ensure good health varies from individual to individual depending on their age, gender, body size, activity and state of health. ICMR gives the RDA for Indians.