

4. Classification of Foods: Food compounds have been classified into groups according to their chemical composition and their physiological action. Most foods belong in more than one class, though usually they have one dominant function or value.

5. Food Groups: The food compounds and principles essential for human life may be classified into the following groups:

- | | |
|--------------------|---------------------|
| a. Water | e. Carbohydrates |
| b. Inorganic salts | f. Oxygen |
| c. Proteins | g. Vitamins |
| d. Fats | h. Food accessories |

6. Food Values: Our estimate of the value of various foodstuffs has been secured through three main standards of measurement:

- a. Chemical: For many centuries the sole unit of measurement was secured by chemical analyses.
- b. Physical: Values have been attached to foods, based upon their ability to produce heat, measured in heat units.
Unit of measurement--Calorie (large) the amount of heat necessary to raise 1 kilogram of water 1° centigrade.
- c. Biological: The newer values are based upon carefully controlled feeding experiments on animals.

7. Minimum Essentials: While the exact chemical composition and physiological action of the numerous substances used for food would be useful and desirable, it is not necessary in order to intelligently select a well balanced diet to fit your peculiar needs.

The following facts, however, are considered the minimum essential knowledge about each one of the food groups as guides to adequate nutrition:

- a. Function of group in body.
- b. Source from which it can be most economically secured
physiologically
financially
- c. Quantity required by body.
- d. Quality producing best results.

(Note--Student is expected to look up the above facts about each one of the groups of foods enumerated above.)

D. MECHANISMS OF DIGESTION AND ASSIMILATION

1. Preparation of Food

To understand the varied aspects of the preparation of foods is one of the essential foundations of a nutrition program. This may be considered from the standpoint of its crude preparation by plants and animals; its refinement and distribution by man; and its physiological preparation by the body.

- a. Plant: Assembled by plants from the air and soil.
- b. Animals: The making over of plant life into animal tissue.
- c. Production, transportation and distribution by man.
- d. Domestic: Preparation for consumption.
- e. Physiological preparation: digestion.