With the above facts in mind, we will focus our attention upon the hygiene of the important systems of the body. In selecting the following topics, it is recognized that they do not cover the entire field. Our effort has been to present the most important and fundamental topics.

X. HYGIENE OF NUTRITION

Satisfactory nutrition is fundamental to health. The individual must have a reasonable knowledge of the physiological processes involved. This should include familiarity with <u>practical methods</u> of determining the <u>food requirements</u> of the individual; a working knowledge of the <u>composition</u> and <u>nutritive values of foods</u>; and, a satisfactory understanding of the <u>hygiene</u> of <u>the diet</u> with some practical <u>guides</u> to adequate nutrition.

1. Functions of Food in the Body

The functions of food in the body may be summed up under the following heads:

- a. To furnish energy
- b. To build or repair tissues
- c. To regulate body processes

2. Quantity of Food Requirements

The adaptation of the quantity of food intake to the <u>actual</u> needs of the individual is the first step in assuring adequate nutrition. This adaptation requires the use of some <u>unit</u> of measurement common to foodstuffs and the human organism. We have this unit in the <u>calorie</u>.

The actual amount of food intake required for a particular individual varies with the:

- a. Size and shape or body
- b. Age
- c. Sex
- d. Degree of activity
- e. Glandular activity
- f. Efficiency of the digestive and assimilative mechanisms

A crude, but satisfactory, method of estimating the theoretical needs of the individual is to use the age, sex and bodily activity factors by the following formula:

Energy values based on activity

- a. Light exercise 40-45 calories per kilogram of body weight b. Vigorous exercise 45-50 " " " " " " "