



The Physiological Need of The Body For Nutrients And The Importance Of Rational Nutrition

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Abstract: Food ration is the composition and quantity of food products, which must be included in the daily food ration. The following hygienic requirements are imposed on the daily food ration, which ensures that the diet is reasonable. The energy value of the food ration is the maintenance of the nutrients included in the food in accordance with the physiological needs of the body. The body's physiological need for nutrients depends on each person's gender, age, body structure, type of work, climatic conditions, and the physiological state of the body (for women, the physiological state is monthly menstruation).

Key words: Diet, physiological, climate, protein, carbohydrate, organoleptic, sanitary - epidemiologic.

Nutrients included in the diet must be balanced. For example, the main nutrients (protein, fat, carbohydrate) should be in the ratio of 1:1, 2:4, 6 in a balanced diet.

Food products in the daily diet should be diverse and have a high level of organoleptic indicators. i.e. their appearance, smell, taste, consistency, temperature. Because these indicators not only reveal a person's appetite, but also ensure complete digestion of the consumed food.

Eaten food can cause a feeling of satiety in a person, which depends not only on the amount of food eaten, but also on its composition and type of processing.

It is considered necessary to take into account the season of the year, national traditions and customs when organizing a reasonable diet of the population.

Meals should be properly distributed throughout the day. For example, in the cold season of the year, 30-35% of daily energy should be allocated to breakfast, 40-45% to lunch and 25-30% to dinner. In the hot season, the energy value of lunch is slightly reduced and the energy value of breakfast and dinner is increased.

Food products should be harmless to the body. From a sanitary-epidemiological point of view, food should not contain pathogenic microbes and their products, or chemical compounds that have a toxic effect in other forms.

Physiological nutrition standards are the basis of rational nutrition. Physiological nutrition standards were developed by nutritionists and are intended for different groups of the population. These physiological nutritional norms are offered for recommendation purposes. The body's physiological need for nutrients and energy is not constant, that is, an unchanging amount, but needs to be regularly changed, because scientific innovations and changes in the lifestyle of the population require changing these indicators.

Physiological norms of eating are the amounts of nutrients and energy, which are established to meet the physiological needs of the organism according to the age, gender, and type of work. Physiological standards of eating have been developed for the following population groups:

1. Children and adolescents under 18 years of age. They are divided into 9 age groups, and after the age of 11, their gender is also taken into account.

The energy value of the daily food ration is from 1540 kcal.. (1-3 years old) to 3000 kcal.. (adolescents 14-17 years old) according to their age indicators.

2. Population aged 18 to 60 who are able to work. They are divided into 5 professional groups, taking into account gender, according to the intensity of the work they perform. The population of each labor group is divided into 3 groups according to their age: 18-29 years old, 30-39 years old and 40-60 years old;



Group I - those engaged in almost mental work (managers of enterprises and institutions, pedagogues, scientific workers, some types of medical workers).

Group II - those engaged in light physical labor (engineers - technicians, workers of automated enterprises, tailors, communication workers, nurses, sanitary workers, etc.).

Group III - those engaged in moderate physical labor (machinery workers, locksmiths, workers of chemical enterprises, workers of textile enterprises, drivers, surgeons, sellers of food stores).

IV group - those engaged in heavy physical labor (builders, agricultural workers and servants, mechanics, workers of oil and gas industry enterprises, metallurgists).

Group V - is only for men and includes those engaged in heavy physical labor (miners, bricklayers, truckers, concrete pourers, earth diggers, etc.).

The daily energy value of food for able-bodied men is from 2100 kcal. (1 group: 40 - 59 years old) to 4200 kcal. And for women, it ranges from 1800 kcal. (40-59-year-olds in group 1) to 3050 kcal. (18-29-year-olds in group 4).

It is recommended to add 350 kcal to the energy value of the diet for pregnant women and 450-500 kcal to the main diet for lactating women.

For the elderly, if their age is around 60-75, it is recommended to reduce the energy value of the daily food ration by 5%, and for those over 75 years old, to reduce it by 10-15%.

Physiological nutrition standards are not only of hygienic importance, but also of social importance, as they are important for calculating the consumption bag.

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