CZU: 612.39

THE INFLUENCE OF NUTRIENTS ON THE METABOLISM DEPENDING ON THE TYPE OF STRESS REACTIVITY

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The experiment was performed on white rats Vistar line selected based on the reactive type of the organism (analogous to the asthenic type). For the selective choice of experimental animals with general non-specific activity of the body and with the level of stress-reactivity, the methods of "forced swimming" and "high cross-shaped labyrinth" were used. From the animals with the reactive type of the organism were formed according to the analogous principle (body mass, age, sex) 4 experimental groups of animals, of 4-5 individuals in each, which were maintained in the same conditions with an analogous diet. The difference was found in the fact that each group of animals will receive their food ration which will differ according to the caloric structure. The caloric structure of the food rations is represented in table 1. The duration of the experiment was 2 months.

Table 1. Caloric structure of food rations according to experimental groups (%)

	I group (control)	II group	III group	IV group
Proteins	8	11	12	14
Fats	35	28	27	25
Carbohydrates	57	61	61	61

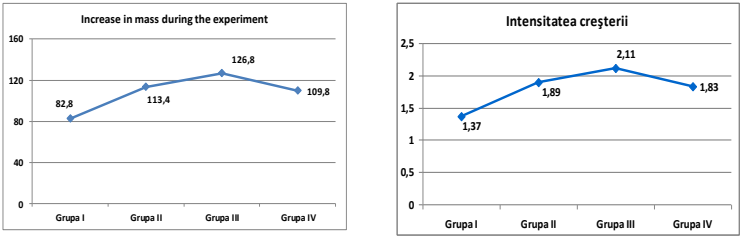


Figure 1. Changing body mass depending on the caloric structure of the ration (g/animal)

Thus, according to the results obtained and presented in figure 1, allows us to make a preliminary conclusion that the best variant of the ration with caloric structure for the asthenic type of constitution is the structure of the 3rd variant: proteins -12%, fats - 27 %, carbohydrates - 61%. The biological value of food rations must be determined according to the formula of the caloric structure of the ration that reflects its balance, the type of exchange of substances of the individual and the fermentative systems that underlie it. The formula of the caloric structure of rations is one of the most appropriate indicators. It allows to identify the optimal ratio of proteins, fats and carbohydrates - the basic energy carriers that define the nature and quality of metabolism. The health of the individual, but also possible dysfunctions and pathology depends on the ratio of these ingredients in the ration.

Keywords: stress reactivity, nutrients, metabolism, ration, caloric structure, health.