TWO-STAGE FILTRATION OF THE DIETS OF DISPOSABLE CONSUMPTION FOR DEVELOPMENT OF DIETARY SYSTEMS

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The article is devoted to the problem of the analysis of the expendable diets quality by biological value criterion. The results of quality estimation of 60 expendable diets of various types (for breakfasts and lunches, dinners and suppers) by the indicator of the generalized biological value are presented.

Biological value of protein in diets was estimated by the indicator of protein approximation to the ideal, or, which is the same, a generalized indicator of biological value of protein in a diet. It is the value characterizing the level of quantitative content approximation of essential amino acids in it to reference protein. To express this value mathematically, well-known values of amino acidic scores are used. The indicator of the corrected value of amino acid score is introduced, which may take the values from 0 to 100%. Moreover, if amino acid score is more than 100%, its corrected value is taken as 100%, if it is less or equals 100%, this parameter’s value matches the amino acidic score value.

The expediency of using the indicator of the generalized biological value in the diets for using them for daily diets optimization is established. It is determined that in case of critical value of $H_{2}\geq49$ indicator it is necessary to weed 3 diets, which do not satisfy the specified requirements, out of 60 expendable diets. 43 best expendable diets can be drawn in the result of double filtration – by the indicators of the groups of nutrients balance and the indicator of the generalized biological value. It is planned to elaborate software programme for automated selection of the best daily diets from the totality of the projected and filtered expendable diets.

Keywords: expendable diets, daily diets, nutrition system, index of nutrient groups balancing, indicator of the generalized biological value of protein, diets filtration.