World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-19, February 2023
ISSN: 2749-3644

ESTIMATION OF THE IMPORTANCE OF BIOLOGICAL VALUE OF NUTRITION ALLOWANCES OF SPORTSMEN OF WEIGHTLIFTING IN THE CONDITIONS OF THE HOT CLIMATE

Tukhtarov B.E. Valiyeva M.U. Khidirov N.Ch.
Samarkand State Medical University

Article history:

Received: December 10th 2022
Accepted: January 10th 2023
Published: February 14th 2023

Abstract:

It is established, that equation of nutrition substances in the changed background of a food has reached an optimum level and has made 1:1.1:4.1, against 1:1.2:4.9 on an actual background of a food. The optimality of a parity of nutrition substances in daily average nutrition allowances of sportsmen on the changed background of a nutrition is reached thanks to increase in norms of a food of fibers of an animal origin, vegetative fats and to decrease in sources of carbohydrates. The general biological value of daily average diets on the changed background of a nutrition at sportsmen of weightlifting has raised in an summer-autumnal season has raised to 88.7· 1.0 %, with 72.4· 1.0 % on an actual background of a food, and in a winter-spring season to 82,8· 1.0 %.

Keywords: professional sportsmen, weightlifting, a hot climate, food allowances, fibers, fats, carbohydrates, vitamins.

INTRODUCTION. According to known nutriciologists biological value of food allowances characterizes force of biological influence to a live organism in the form of a parity of the sum of biologically active substances containing in foodstuff to daily average requirement of an organism [1,2,3]. The purpose of researches was substantiations of optimum variants of daily average norms of a set of products for sportsmen of weightlifting in the conditions of a hot climate on the basis of biological value of food allowances. Methods of researches. An actual nutrition of sportsmen is studied by a method of the 24- hourly supervision and interrogation in training bases. For the statistical analysis 720 menus-apportions in 14 male sportsmen are used. Food value of diets paid off on the basis of tables of a chemical compound of foodstuff [4]. Biological value of food allowances was estimated on all BAS (biologically active substances), separately for cold and warm seasons of year and expressed in the form of % of satisfaction of daily requirement:

Vit. Sp + Vit. Ap + lysine + methionine n
BCR = Vit. Cp + Vit. Ip + lysine + methionine ... etc. X 100

Where, БЦР-biological value of a diet; n-quantity of biologically active substances in an investigated diet in mg; p - daily norm of the given component in mg. Results of researches. The comparative estimation of structural structure of biologically active substances and biological value of daily average food allowances of sportsmen on actual and changed food background, testifies to efficiency of the spent corrections (table 1). Equation of food substances on the changed background of a nutrition has reached an optimum level. So, if on an actual background of a nutrition equation food substances made 1:1.2:4.9 in a winter-spring season and 1:1.2:5.2 in an summer-autumnal season on the changed background the given indicator has made 1:1.1:4.1 in all seasons. Such optimum for sportsmen of a parity of food substances in daily average food allowances on the changed background of a food it is reached thanks to increase in norms of a food of fibers of an animal origin, vegetative fats and to decrease in sources of carbohydrates. So, relative density of fibers of an animal origin on the changed background of a food on the average has increased by 25 % in comparison with an actual background of nutrition, vegetative fats on 15 %. Decrease in carbohydrates against the changed food on the average has made 7-10 %. As have shown the analysis of biological value of diets at sportsmen of statistically authentic differences depending on seasons of year are not available. It is connected by special attention in norms of a nutrition both in summer-autumnal, and in winter-spring seasons to sources of vitamins and possibility in modern conditions of maintenance of all-the-year-round availability of fresh vegetables and greens in Uzbekistan. As authentic differences in the maintenance of vitamins B_1, B_2, PP, amino acids isolesine and valiline in food allowances on actual and changed background of nutrition it is not revealed, in connection with a high consumption level grain-sources the given group of biologically active substances on an actual background of a food. At the same time, biological value of daily average diets on the changed background of a food, at the expense of

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-19, February 2023
ISSN: 2749-3644

optimization of the maintenance of the majority of biologically active substances in diets, at all sportsmen in an winter-autumnal season has raised to 88.7· 1.0 %, with 72.4· 1.0 % on an actual background of a food, and in winter a spring season to 82,8· 1.0 %.

Table 1.

Comparative estimation of biological value of daily average nitrition allowances of sportsmen of weightlifting on actual and changed background of nutrition, M· m in % from requirement

Seasons of year	The general biological value of diets		
	On the changed background of nutrition	On an actual background of nutrition	P
Summer-autumn	88.7±1.0	72.4±1.0	<0,01
Winter-spring	82.8±1.0	67.7±1.0	<0,01

Increases of the general biological value of daily average nutrition allowances it is reached by the daily average norms of a food offered by us, thanks to increase in nutrition allowances of sources of vitamins A, D, B_6, B_{12}, irreplaceable amino acids - leisin, lisin, methionine and iron gemma (at the expense of fish, a liver, sour-milk products), Vitamin C, vitamin B_9 (pholasin), cellulose, pectin and beta carotinoids (at the expense of vegetables, cucurbitaceous, pumpkins, fruit and greens), potassium, calcium, phosphorus and magnesium (at the expense of bean, dairy production and dried fruits), sitosterins, холина and phospholipids (at the expense of vegetable oils and bean). At the same time, it is necessary to notice, that at the expense of natural products it is not reached necessary for an organism of sportsmen of norm of consumption of vitamin C, selenium and amino acids leisin, treonin. According to the literature of last years [5,6] selenium is to the important elements in formation of fermental systems of oxidation-reduction process and metabolism regulation in an organism. Rich sources of selenium are sea products. Probably, for the continental countries which do not have sea coasts and a characteristic food with low consumption of sea products, an alimentary problem is not only deficiency of iodine, but also deficiency of selenium. If the problem iodine insufficiency conditions for the continental countries is studied enough also it solved by mass consumption iodine table salt a problem of deficiency of selenium, it is studied insufficiently and demands the permission.

Taking into account the revealed deficiency of some biologically active substances, on the basis of spent by us hygiene - toxicological estimation [7], a chemical compound and properties of some domestic and foreign BAA to nutrition (biologically active additions), us in quality additives to nutrition for sportsmen is chosen domestic BAA to food «Kuvatin» and «Bioferron». BAA to nutrition «Kuvatin» is hydrolyzed fiber of cocoons of the silkworm intended for strengthening of immunity, at intensive physical activities (sportsmen, the people who are engaged in heavy physical work). As an additional prophylactic, for prevention of infringements in activity of cardiovascular system (table 2) also is recommended.

Syrup «Bioferron» with structure: a barberry, raisin, caraway seeds, a beet, crystal sugar, water drinking (table 3).

Table 2.

Chemical compound BAA «Kuvatin», in mg of %

№ п/п	The name of amino acids	The maintenance in mg of %
1.	Glisin	32,3
2.	Alanin	20,5
3.	Serin	18,0
4.	Tirosin	9,2
5.	Valin	3,5
6.	Aspargen acid	8,2
7.	Glutamin acid	2,1
8.	Treonin	4,,8
9.	Phenilalanin	0,9
10.	Arganin	1,8
11.	Isoleisin	0,8
12.	Leisin	0,9
13.	Prolin	0,9

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-19, February 2023
ISSN: 2749-3644

14.	Lizin	0,3
15.	Triptophan	0,2
16.	Gistidin	0,7
17.	Cystin	0,1

Table 3.
Nutritional and biological value BAA of «Bioferron».

№	The name of substances	The maintenance
1.	Fiber, in g in 100 g of product	2,0±0,2
2.	Fats, in g in 100 g of product	2,6±0,3
3.	Carbohydrates, in 100 g of product	12,0±1,2
4.	Vitamin C, in mg in 100 g of product	50,0±2,0
5.	Vitamin B_1, in mg in 100 g of product	0,02±0,005
6.	Vitamin B_2, in mg in 100 g of product	0,02±0,004
7.	Vitamin B_6, in mg in 100 g of product	0,04±0,01
8.	Vitamin PP, in mg in 100 g of product	0,4±0,02
9.	Pholasin, in mg in 100 g of product	0,1±0,01
10.	Iron, in mg in 100 g of product	4,5±0,02
11.	Potassium, in mg in 100 g of product	488,0±4,8
12.	Calcium, in mg in 100 g of product	137,0±1,3
13.	Magnesium, in mg in 100 g of product	44,0±0,4
14.	Phosphorus, in mg in 100 g of product	42,0±0,4

CONCLUSIONS:

1. Equation of nutrition substances in the changed background of a nutrition has reached an optimum level and has made 1:1.1:4.1, against 1:1.2:4.9 on an actual background of a food.

2. The optimality of a parity of nutrition substances in daily average food allowances of sportsmen on the changed background of a food is reached thanks to increase in norms of a food of fibers of an animal origin, vegetative fats and to decrease in sources of carbohydrates.

3. The general biological value of daily average diets on the changed background of a food at sportsmen of weightlifting has raised in an summer-autumnal season has raised to 88.7· 1.0 %, with 72.4· 1.0 % on an actual background of a food, and in a winter-spring season to 82,8· 1.0 %.

4. Increases of the general biological value of daily average food allowances it is reached thanks to increase in food allowances of vitamins A, D, B_6, B_{12}, irreplaceable amino acids - leisin, lisin, methionine and iron gemma (at the expense of fish, a liver, sour-milk products), Vitamin C, vitamin B_9 (pholasin), cellulose, pectin and betacarotidins (at the expense of vegetables, cucurbitaceous, pumpkins, fruit and greens), potassium, calcium, phosphorus and magnesium (at the expense of bean, dairy production and dried fruits), sitosterins, cholina and pjospholipids (at the expense of vegetable oils and bean).

5. Additional application in a food of sportsmen BAA to nutrition «Kuvatin» and «Bioferron» have allowed to compensate deficiency in food allowances of vitamin C, selenium and amino acids leisin, treonin.

THE LITERATURE LIST:

1. Tutelyan V. A, Spirichev V. B, Shatnjuk L. N. Correction micronutrient deficiency//food Questions.-1999. - №6.-P. 3-11.
2. Tutelyan V. A, Suhanov B.P., Gapparov M.M. Nutrition in struggle for surviving.-Moskva.-2003.-IKTs «Academkniga».-437 p.
3. Corolyev L.D. Hygiene's queens of a food. 2 pub. M: Academy. 2007.
4. A chemical compound of foodstuff. The book 2. Help tables of the maintenance of amino acids, fat acids, vitamins, macro y micro cells, organic acids and carbohydrates/under the editorship of And. M.Skurihina, M.N.Volgareva-M. Agropromzdat.-1987-356 p.
5. Barenbojm G. M, Malenkov A.G. Biologically active substances. New principles of search. - M: the Science, 1986.368 p.
6. Vrzhesinsky O.A., Beketov H.A, Nikitin V. A, Pereverzev O. T, etc. Influence of biologically active additives to food with the various maintenance of vitamins on the vitamin status of the person//food Questions.-2002. - №1-2. - P. 27-31.
7. Tuhtarov B.E. Result of a hygienic estimation BAA intended for application in sports

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-19, February 2023
ISSN: 2749-3644

medicine.//Questions of nutrition.-2008. - №-3.-P. 33-35.
8. Khamdamov B.Z. Indicators of immunocitocine status in purulent-necrotic lesions of the lover extremities in patients with diabetes mellitus.//American Journal of Medicine and Medical Sciences, 2020 10(7) 473-478 DOI: 10.5923/j.ajmm.2020.- 1007.08 10.
9. M. I. Kamalova, N.K.Khaidarov, Sh.E.Islamov, Pathomorphological Features of hemorrhagic brain strokes, Journal of Biomedicine and Practice 2020, Special issue, pp. 101-105
10. Kamalova Malika Ilkhomovna, Islamov Shavkat Eriyigitovich, Khaidarov Nodir Kadyrovich. Morphological Features Of Microvascular Tissue Of The Brain At Hemorrhagic Stroke. The American Journal of Medical Sciences and Pharmaceutical Research, 2020. 2(10), 53-59
11. Khodjieva D. T., Khaydarova D. K., Khaydarov N. K. Complex evaluation of clinical and instrumental data for justification of optive treatment activites in patients with resistant forms of epilepsy. American Journal of Research. USA. № 11-12, 2018. C.186-193.
12. 12.Khodjieva D. T., Khaydarova D. K. Clinical and neuroph clinical and neurophysiological ch ogical characteristics of teristics of post-insular cognitive disorders and issues of therapy optimization. Central Asian Journal of Pediatrics. Dec.2019. P 82-86
13. Sadriddin Sayfullaevich Pulatov. (2022). Efficacy of ipidacrine in the recovery period of ischaemic stroke. World Bulletin of Public Health, 7, 28-32.
14. Tukhtarov B.E., Comparative assessment of the biological value of average daily diets in professional athletes of Uzbekistan. Gig. Sanit., 2010, 2, 65–67.
15. Исмоилов, О., Камалова, М., Анваршед , Т., & Махмудова , С. (2021). Кратко об анатомо-физиологических особенностяхстопы и применение некоторых комплексных упражнений для устранения плоскостопия. Збірникнауковихпрацъ SCIENTIA. вилученоіз https: //oj s .ukrlogos. in.ua/index.php/scientia/article/view/9999
16. Ergashovich, K. B., & Ilhomovna, K. M. (2021). Morphological Features of Human and Rat Liver and Biliary Tract Comparisons (Literary Review). *International Journal of Discoveries and Innovations in Applied Sciences*, *1*(4), 27–29.