



# FOOD ANALYSIS OF BOXING DIET PRODUCTS FOR CHILDREN

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**Abstract.** Of particular importance for students-athletes who strive to achieve high results are the issues of rational nutrition, for this purpose, the article examined the seven-day diet of student-athletes involved in the sport of boxing in an accounting method and analyzed the amount of food in it. In conclusion, athletes who are engaged in boxing sports, the diet of food is almost consistent with the norms recommended by experts, but when drawing up a diet, it is necessary to draw up and control the diet individually, taking into account the weight of athletes and the tasks set for them.

**Keywords:** boxing, athletes, diet, nutrients.

One of the main factors in maintaining health and achieving success in sports is a healthy diet. Food should satisfy the human body's need for plastic materials, energy, biologically active substances and evoke a positive feeling in it. Any deviation from adequate supply of nutrients to the body can cause serious health damage, a decrease in resistance to negative environmental factors, deterioration of mental and physical indicators. For athletes-students who strive to achieve high results, the issues of rational nutrition are of particular importance, since at the moment there is no doubt that there is a connection between nutrition and physical indicators. To improve the effectiveness of the training process, the athlete's diet must fully compensate for the strength requirements of physical activity and must contain the necessary macro and microelements for the body [1,2].

The peculiarities of a particular sport, the nature of physical activity, the weight of the athlete, the peculiarities of metabolism – all this requires an individual calculation of the required amount of strength and food components. All this is contained in quality and calorie-rich food [3].

The usual diet includes three meals a day, but it is considered useful for professionally engaged athlete children to eat 4 or 5 meals a day. Currently, most nutritionists recommend eating 5-6 times a day. This procedure promotes better absorption of nutrients, gradually reducing the load on the stomach from breakfast to dinner. The order of meals for two workouts per day is as follows: first Breakfast 5%, second breakfast 25%, lunch 35%, tolma tea 10%, Dinner 30%. During the period of gaining muscle mass, it is not recommended to lie on an empty stomach. Before going to bed, it is necessary to eat products that are rich in protein, if necessary, food 2 or 3 can be enriched with protein [4,6].

When drawing up a menu for athletes, first of all, it is necessary to take into account the energy of food and the required amount of nutrients, as well as the individual characteristics of athletes and which foods they love and consume. As much as possible, it is recommended to include various foods in the menu, which are not recommended to be repeated more often [5,6].

Boxing is a sport that requires high physical activity. For such intensive training and competitions, it is important to provide the necessary nutrients to the children's body. By eating well, boxers can increase their stamina, strength, and speed. Proper food products in the diet of

food are essential for the development of a growing organism, muscle repair and energy storage [7].

**The purpose of the scientific work** is to analyze the food in the diet of sports students engaged in the sport of boxing.

**Research material and methods.** Scientific research was carried out in the kitchen of the specialized sports school for boxing named after Bahadir Jalolov. In this, the autumn-season diet of athletes-students engaged in boxing (77 in total) was analyzed, and the consumption content and analysis of foods in the daily diet was calculated using tables.

**Analysis of the results obtained.** According to the decision of the Cabinet of Ministers of the Republic of Uzbekistan №731 "On measures to organize the activities of Olympic and Paralympic sports training centers", we conducted a hygienic analysis of the meal of students in the autumn season at the specialized sports School of boxing named after Bahadir Jalolov. According to this, we assessed the state of consumption, relative to the norm, of 26 different foods indicated in the decision (Table 1). By grouping food separately, we have a general idea of how food products are interchangeable. For example, bread and bakery products are made up of wheat bread type 1 and wheat flour type 1, and their combined consumption is 6.7% less than the norm. The main reason for this reduction is wheat flour variety 1, as it was found to be 71.9% less than the amount calculated separately (Figure 1).

It was calculated that cereals, pasta, were also consumed at a lower level (23.8 %) than normal. Sugar, honey and confectionery, which have basic nutrients that provide daily strength, are almost ¼ part lower than the norm (25.3%). Even when comparing them, it was observed that sugar was at least 10.8%, confectionery was at 32.1% and Honey was at a minimum of 46.8%. As a result of our analysis of the consumption of milk and dairy products, it was calculated that athlete-students consumed these products 11.3% less than the norm during the autumn months. Notably, milk-yogurt and cheese have the lowest percentage of milk and dairy products (4.8% and 1.3%, respectively). While the butter product was consumed on average 13.1% less, it was found to be consumed almost twice as low in cream and curd products (33.8% and 42.9% less).

**Table-1**

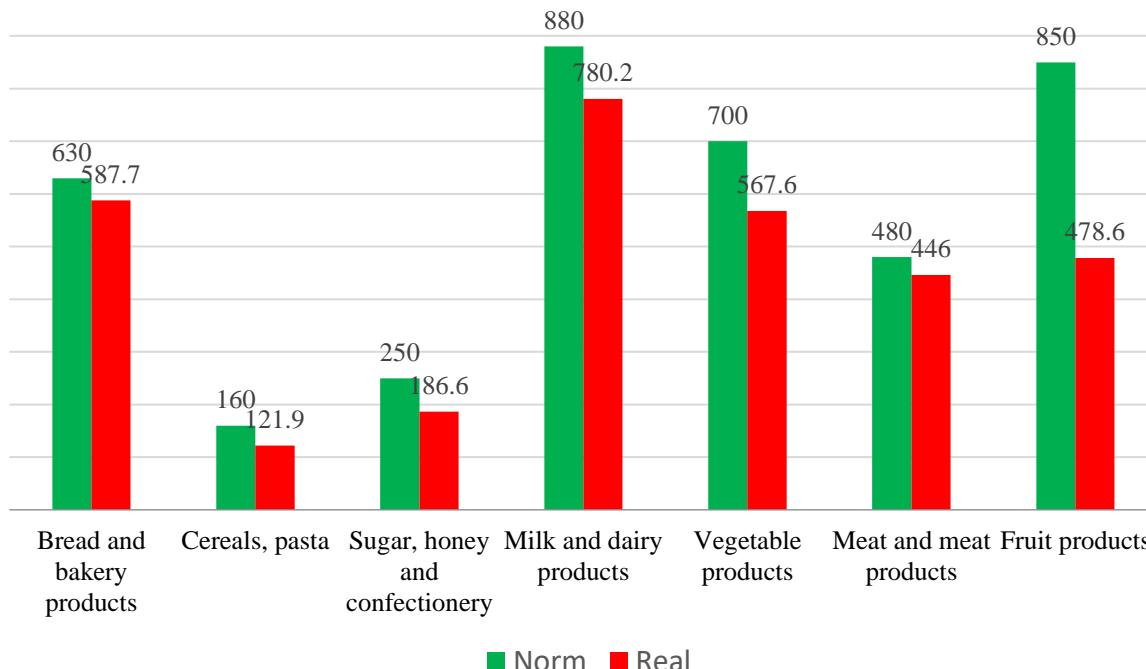
**The state of the specialized sports school for boxing named after Bahadir Jalolov in relation to the actual amount of the daily food norm for student-athletes**

N	Food product	Norms, g	True, g	Difference, g	%
1	Wheat bread, 1-varieties	600	579,2	-20,8	-3,5
2	Wheat flour, 1-varieties	30	8,4	-21,6	-71,9
3	Cereals, pasta products	160	121,9	-38,1	-23,8
4	Sugar	100	89,2	-10,8	-10,8
5	Honey	30	16,0	-14,0	-46,8
6	Confectionery	120	81,4	-38,6	-32,1
7	Butter	80	69,5	-10,5	-13,1
8	Vegetable oil	30	28,2	-1,8	-6,1
9	Milk and sour milk	600	571,0	-29,0	-4,8
10	Cream	50	33,1	-16,9	-33,8
11	Curd	100	57,1	-42,9	-42,9
12	Cheese	50	49,4	-0,6	-1,3
13	Meat, poultry meat	410	377,9	-32,1	-7,8
14	Sausage products	70	68,1	-1,9	-2,8

<b>15</b>	Fish	100	0,0	-100,0	-100,0
<b>16</b>	Eggs (pieces)	2	1.7	-0.3	-15,6
<b>17</b>	Potatoes	500	424,9	-75,1	-15,0
<b>18</b>	Vegetables, including tomato paste	700	567,6	-132,4	-18,9
<b>19</b>	Fruit berries, wet fruits, juices, vitamin drinks	800	441,4	-358,6	-44,8
<b>20</b>	Dry fruits, including namatak 0.5 gr, bargak	50	37,1	-12,9	-25,7
<b>21</b>	Tea	3	3.1	0.1	3,9
<b>22</b>	Cocoa	5	2,5	-2,5	-49,4
<b>23</b>	Iodized salt	10	8,8	-1,2	-11,8
<b>24</b>	Yeast	1	0	-1,0	-100,0
<b>25</b>	Mineral non-carbonated water	500	0	-500,0	-100,0
<b>26</b>	Wheat grass powder	3	0	-3,0	-100,0

It is necessary that those who practice boxing sports are constantly satisfied with the need for protein, mainly from macronutrients. When analyzing the consumption of meat and meat products considered a source of protein, it was found that it was 7.1% less. In this case, sausages are eaten 5% more than meat products.

As an analytical result of the consumption of vegetable products, it was observed that there was a shortage of 18.9% to the norm, and the amount of potatoes calculated separately was 15% less. As a result of our analysis of the combined amount of wet fruits, berries and dry fruits, we can see that the total is 43.7% less, and according to a separate account, the lack of wet and dry fruits is almost in a 2:1 ratio (44.8% and 25.7%).



**Figure 1. The state of consumption in which some of the foods are grouped, in grams**

Vegetable oil was 6.1% less, eggs were 9.5% less than it, and iodized salt was 5.7% less consumed. During the season, only tea is distinguished by an excess of 3.9% from the norm and the absence in the diet of such products as fish, yeast, mineral non-carbonated water, wheat grass powder at all.

**Conclusion:** Judging by the scientific research, it can be said that only the tea product is in moderation in the diet of student-athletes engaged in boxing sports, and the indicator of some of the remaining products in relation to the norm is significantly less. For example, wheat bread, 1st grade 20.8 gr, vegetable oil 1.8 gr, milk-yogurt 29 gr, cheese 0.6 gr, meat, poultry 32.1 gr, sausages are 1.9 gr less. The remaining products include wheat flour, type 1 (28 %), honey (53.3 %), confectionery (67.8 %), sour cream (66.2 %), cottage cheese (57.1 %), fruits (55.2 %) and cocoa (50%), which are significantly underserved. It is also of great importance that products such as fish, yeast, mineral still water, wheat grass powder are not included in the cookbook.

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