STUDY OF CHANGES IN STUDENTS' DIET DURING MARTIAL LAW

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Military operations cause not only direct damage to the civilian population in the form of destruction of housing and civil infrastructure, but also indirect damage - living conditions can significantly deteriorate. This also fully applies to the quantitative and qualitative composition of the diet. Starvation is a great stress for the body, which can become a trigger for the development of severe chronic diseases, and above all, autoimmune pathological processes and mental disorders [1]. The UN Security Council states that food and medicine shortages during hostilities cause more harm to the civilian population than the direct consequences of the bombing of populated areas in the form of casualties and injuries [2]. Prolonged starvation (or lack of food) has been proven to be associated with the development of hypertension, chronic heart failure and, to a greater extent, diabetes of type 2. In addition, lack of food reduces cognitive abilities [3]. That is why the study of changes in the diet of the population during military operations is very relevant for modern Ukraine.

The aim of our research was to evaluate the qualitative and quantitative changes in the diet of students during military operations in country, as well as to identify dyspeptic phenomena caused by this, which arose during the war.

By means of an anonymous survey, in which 71 students aged 17-24 took part, changes in the diet were investigated in comparison with the diet of students before

the introduction of martial law. Among the respondents, the majority (84.3%) of respondents are women.

Before the introduction of martial law, 50.7 % of respondents used protein-containing products every day, 49.3 % used them at least 2-3 times a week. After the introduction of martial law, the proportion of those who use these products every day dropped to 38 %. 11.3 % of respondents use protein-containing products once a week. 50.7 % of respondents use protein-containing products at least 2-3 times a week.

Regarding the consumption of carbohydrate-containing products (cereals and pasta), it was found that before the introduction of martial law in 45.1 % of respondents, such food made up 50-70 % of the diet, in 38 % of respondents - 30-50 % of the daily diet. In 8.5 % of respondents, cereals made up less than 30 % of the diet, the same number of respondents said that cereals made up more than 70 % of the diet. These indicators almost did not change during the period of military operations, but the number of respondents whose consumption of these products makes up more than 70 % of the diet almost doubled.

When studying the peculiarities of the use of animal and vegetable fats, it was found that after the introduction of martial law, 25.4 % of respondents had the opportunity to consume fatty meat, fish and vegetable fats every day, which is 8.4 % less than in peacetime. The number of students using these products 2 times a month has increased (23.9 % compared to 18.3 % before the introduction of martial law). The percentage of respondents who hardly use or do not use at all has also increased (23.9 % vs. 21.1 %).

The amount of canned food in the diet increased slightly in 38 % of respondents, in 28.2 % it increased significantly, and in 33.8 % it did not increase or they do not use canned food at all.

Humanitarian aid products make up more than half of the diet of 19.7 % of respondents, 47.9 % have less than half of the diet, and 32.4 % do not consume humanitarian aid products.

More than half of the respondents (53.5 %) reported an increase in dyspeptic symptoms after the start of the war. The most frequent disorders are lack of appetite (19.7 %) and diarrhea or constipation (15.5 %).

Thus, quantitative and qualitative changes in the diet were found among the interviewed group. The share of protein-containing products in the diet decreased the most. The proportion of fatty meat, fish, and oil used has changed less. The rates of consumption of cereals and pasta in the diet have hardly changed. Qualitative changes are manifested in the increase in the share of canned products in the diet of most respondents. The statements of some respondents that they do not eat fatty meat and fish at all attract attention.

Thereby, the conducted research shows an existing tendency to decrease the well-being of students. A significant amount of humanitarian products in the diet indicates the deterioration of the material conditions of the population.

References:

- 1. United Nations. (2018) Adopting Resolution 2417, Security Council Strongly Condemns Starving of Civilians, Unlawfully Denying Humanitarian Access as Warfare Tactics. 8267th Meeting (AM) Retrieved from https://press.un.org/en/2018/sc13354.doc.htm
- 2. Arnold, M. J., Harding, M.C.& Conley, A.T. (2021) Dietary Guidelines for Americans 2020-2025: Recommendations from the U.S. Departments of Agriculture and Health and Human Services. *American Family Physician*, 104(5):533-536. Retrieved from https://pubmed.ncbi.nlm.nih.gov/34783510/
- 3. Jepkemboi, G. The effects of Hunger on Physical and Cognitive Development of Children. (2018) In book: *Assisting Young Children Caught in Disasters* (pp.105-114). doi 10.1007/978-3-319-62887-5_10