HYGIENIC ASSESSMENT OF THE NUTRITIONAL STATUS OF WORKERS

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Introduction. Imbalances in dietary patterns adversely affect the nutritional status of the body and create favorable conditions for the development of non-communicable diseases. According to statistical data, these diseases occupy a leading position in mortality rates, accounting for more than half of all deaths among the population [1,5,6]. Unfavorable factors and occupational hazards encountered during the labor process play a significant role in the development of metabolic disorders and cardiovascular diseases. Therefore, the implementation of a preventive nutrition system aimed at reducing the negative impact of harmful industrial conditions, preventing occupational diseases, and strengthening the body's adaptive and protective mechanisms is considered a relevant public health task [2,3,4].

Objective. To conduct a hygienic analysis of the nutritional status of workers at a potassium production enterprise during the winter season.

Results. The analysis conducted during the cold season of the year showed that the average consumption level of the grain and flour products group reached 109.7%, indicating a slightly excessive intake compared to recommended standards. The high proportion of wheat bread, pasta, and wheat flour in the diet contributed to the elevated group indicator.

The average consumption level of the vegetable group was 81.0%, reflecting an overall deficiency in vegetable intake. In particular, low consumption of beetroot, melons, and other vegetables significantly reduced the group indicator.

For the meat and meat products group, the average consumption level reached 169.9%. This high value was mainly due to the excessive consumption of mutton, which exceeded the recommended level by 476.7%. At the same time, insufficient consumption of beef and rabbit meat indicated a qualitative imbalance in the diet.

The average consumption level of the poultry and egg products group was 136.5%. The intake of eggs was twice the recommended level, which significantly increased the group indicator, whereas poultry meat consumption remained below the recommended norm.

The fish and fish products group showed an average consumption level of only 31.2%, indicating a pronounced deficiency of fish in the diet and inadequate provision of biologically complete proteins.

The average consumption level of the milk and dairy products group was 43.5%. Very low intake of milk, sour cream, and cottage cheese indicates a clear deficiency in this group, which may lead to calcium and high-quality protein deficiency.

The confectionery products group demonstrated an average consumption level of 160.0%, indicating excessive intake of sugar and confectionery products and a high

proportion of rapidly digestible carbohydrates in the diet. Overall, the group-based analysis of food products clearly demonstrates that workers' diets are characterized by excessive consumption of carbohydrate-rich foods, while fish, dairy products, and vegetables are insufficient.

Conclusion.

The winter diet of workers at the potassium production enterprise is characterized by excessive consumption of grain, flour, and confectionery products, alongside insufficient intake of fish, dairy products, and vegetables. Although the diet is energetically adequate, it is biologically low in value and unbalanced, which necessitates dietary correction based on physiological nutritional standards.

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