

HYGIENIC ASSESSMENT OF THE NUTRITIONAL STATUS OF WORKERS OF A MINING AND METALLURGICAL PLANT

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Annotation

The results of the study showed that the consumption of carbohydrate and fat-rich products by workers of the mining and metallurgical plant is higher than the norm, while the consumption of milk and dairy products, fruits and vegetables, and fish is insufficient. Male workers consume more beef, chicken, cheese, and butter than women, which affects the overall energy and protein balance. It was found that the consumption level of dairy and dairy products is much lower than the physiological norm. High consumption of confectionery and sugar can lead to excess energy intake.

Keywords

workers, rational nutrition, winter-spring season, food analysis, mining and metallurgical plant.

ENTRANCE

Heavy and harmful labor under the circumstances activity take going industry enterprises of workers health in storage rational food important place In particular, winter - spring vitamins in season and biological active to substances was of need increase, one kind food model and new products shortage in the background workers food status assessment current is considered. This research mining and metallurgy combine of workers winter - spring in season current food status analysis to do focused [2,3,7].

National health storage and to eat inspection questionnaire participants protein, carbohydrate, fat, cholesterol, calcium, sodium and fiber daily consumption assessment for two 24- hour remembering stay from a diet conversation Food substances consumption to do, especially, fiber, sodium, calories and protein, saturated oil and from carbohydrates removable calories professional

by percentage to the group looking at difference did. Saturated oil and to cholesterol recommendations compliance to do observed, but workers other all feed recommendations on nutrients, especially fiber bad compliance did [5,8,10].

A row research office employees between healthy food and work productivity level between dependency to study focused on. Nutritional in terms of balanced of food importance about awareness increasing progress because of this research is like iron feed substances right consumption to do own inside received of food workers productivity with how dependence studied [1,4,6,9].

Research material and Methods . Research during male and woman workers daily consumption to be done main food products amount hygienic standards with compared . Obtained information statistic again average value and error ($M \pm m$) in the form expressed .

Results and discussion . Analysis results this showed that flour and bread products male by group and woman in workers consumption level hygienic from the standards noticeable at the level high. In particular, bread and bakery products male in workers 384.7 ± 13.2 g, in women and 378.6 ± 11.8 g organization to recommend done from quantity more than that is Pasta, rice and porridge also standard in products from indicators increase status observed, this and carbohydrates share from above evidence (Figure 1).

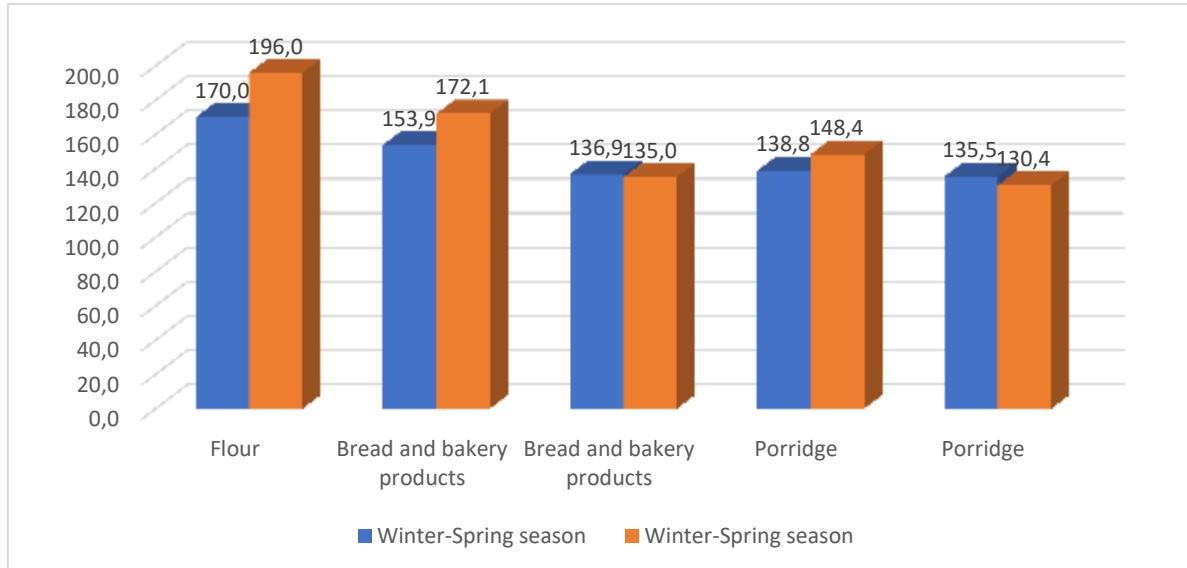


Figure 1. Workers winter - spring flour and bread products in season consumption level

In the diet rich in protein from products meat and fish products in consumption and relatively high indicators record was made. Mol and sheep meat, as well as chicken meat consumption male in workers to women relatively more is, this energy and protein need partially cover shows. However internal products and

sausage of products high share heart and blood vein diseases the risk increase possible.

Fish and fish products consumption enough at the level not being Milk and milk products, especially milk consumption recommendation done from quantity sharply decreased, calcium shortage the risk to the surface Curd consumption male and woman in workers almost standard at the level although, in general milk products balance complete does not provide (Figure 2).

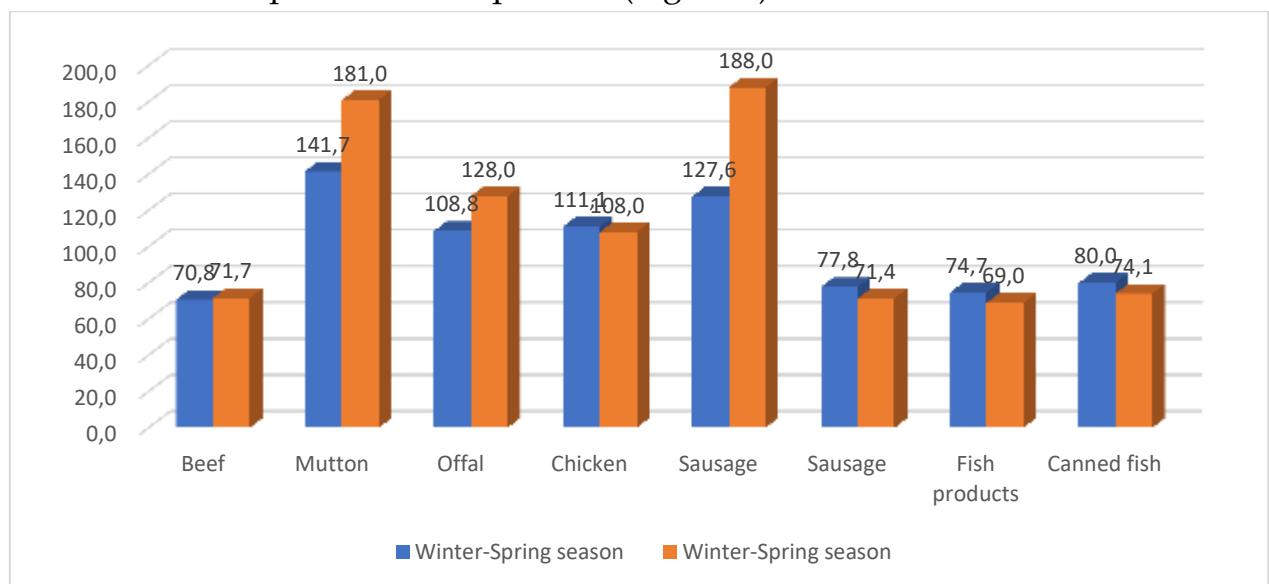
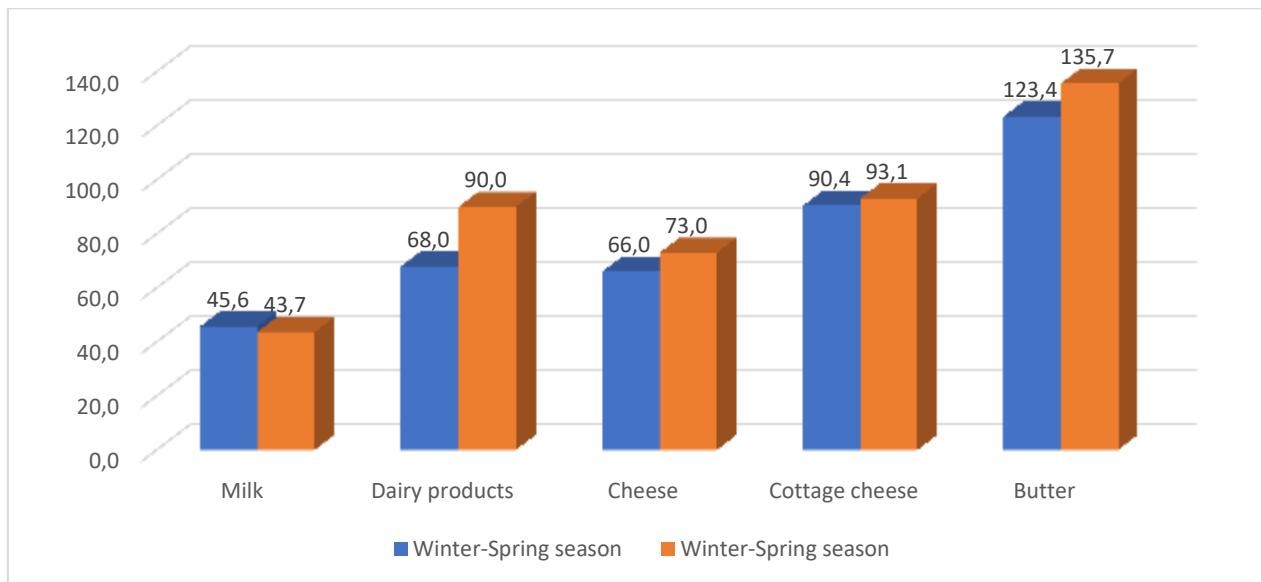


Figure 2. Workers winter - spring in season meat and fish products consumption level

Milk consumption male 182.5 ± 4.2 g in workers, 174.6 ± 3.6 g in women organization to recommend Significantly more than 400 g at the level less. Milk products (kefir, yogurt) and others) 23.6 ± 1.4 g in men, 28.0 ± 1.6 g in women organization as a rule indicator (20 g) near or a little increased. Cheese consumption The norm is 23.2 ± 0.1 g in men and 24.6 ± 0.2 g in women . from quantity a little high . Cottage cheese consumption 45.2 ± 0.5 g for men, 41.9 ± 0.3 g for women, recommended done standard Butter consumption The recommended intake is 43.2 ± 0.8 g for men and 40.7 ± 0.5 g for women. above 35 g (men) and 30 g (women) (Figure 3).



Conclusion. Winter - spring in season workers food diet energetic in terms of enough although, quality in terms of unbalanced. This situation vitamin and mineral deficiencies in workers deficiency, chronic diseases development the risk Therefore, the diet optimization, fruits and vegetables, milk and fish consumption increase and oil and sugar amount reduce recommendation it is called.

REFERENCES:

1. Азизова Ф. Л., Бўрибоев Э. М. Тамаки корхона ишчиларингнинг ёз мавсумидаги овқатланишини гигиеник баҳолаш. – 2024.
2. Горбачев Д. О., Сазонова О. В., Бородина Л. М. Гигиеническая характеристика пищевого статуса работников нефтеперерабатывающей промышленности //Актуальные вопросы и перспективы развития медицины. – 2017. – С. 19-20.
3. Baymamatovich O. B. et al. Analysis of vitamins contained in the daily diet of manufacturing enterprises workers. – 2024.
4. Ermatov N. J. et al. Hygienic analysis of the nutritional condition of the employees of textile enterprise. – 2024.
5. Kachan D. et al. Nutrient intake and adherence to dietary recommendations among US workers //Journal of occupational and environmental medicine. - 2012. - Т. 54. - no. 1. - S. 101-105.
6. Mahendika D. et al. The relationship of a healthy diet with the level of productivity among office workers // Oshada . - 2025. - Т. 2. - no. 1. - S. 1-12.
7. Ortiqov B. B. Kaliy ishlab chiqarish korxonalarida ishlovchi ishchilarning ovqatlanish tartibiga qo 'yiladigan gigiyenik talablar //Медицинский журнал молодых ученых. – 2025. – №. 13 (03). – С. 194-200.

8. Ortiqov B. B., Baxtiyorova G. R., Tugilova S. N. Analysis of the main risk group products in the daily diet of textile enterprises' employees. - 2024.
9. Ortiqov B. B., Omonov J. P. Hygienic justification of the nutrition of workers in the bread production industry. - 2025.
10. Prognostic Nutritional Index for Oral Cancer: A predictive parameter or a nutritional parameter? ScienceDirect. <https://www.sciencedirect.com/science/article/pii/S2212555825000043>.