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BIOTECHNOLOGY IMPLEMENTATION AND NORTHERN DELIVERY OPTIMIZATION FEATURES FOR FOOD PROVISION IN THE ARCTIC

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The article is devoted to an urgent issue, which is directly related to both ensuring economic security and the spatial development of modern Russia. The process of ensuring food security in the format of the “Northern Delivery” which enables the state basic goods supplement (primarily food and fuel) to the Far North, Siberia, and the Far East is described here.

The authors paid special attention to the specifics, as well as the imperative of the transformation of the Northern Delivery mechanism through the introduction of modern biotechnology.

Keywords: economic and food security, the Arctic, spatial development, the northern territories, the northern delivery, the mechanism of the northern delivery, food production and supplies, biotechnology

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**THE PARTICIPATION OF SMALL AND MEDIUM-SIZED BUSINESSES IN THE
INTRODUCTION OF NEW STANDARDS FOR THE FAR NORTH**

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Nutrition rates in the regions and in Russia entirely have not changed during the last 30-40 years. The territories of the Far North and the Arctic zone of the Russian Federation are special not only in connection with difficult climatic conditions, but also in logistics and entrepreneurship in connection with the northern appreciation. Small and medium-sized businesses are the main suppliers of food, so the change in the diet and nutritional standards of the northerners will depend directly on the flexibility and transformations in trade.

Keywords: the food supply of the Arctic, the norms for feeding the Far North, the northern delivery, regional food standards

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SCIENTIFIC BASES OF CREATING AN OPTIMAL DIET OF A CHILD POPULATION IN THE ARCTIC ZONE OF THE RUSSIAN FEDERATION

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The article presents the results of scientific studies of the nutrient requirements and energy of children of indigenous and non-indigenous people living in the Russian Arctic. However, the physiological characteristics of metabolism in cold conditions differ significantly from the well-studied hygienic provisions in this area for the rest of Russia.

Adapted to the conditions of the Arctic, hygienic rules, norms and recommendations will allow to form competent management decisions in the field of children's nutrition, reduce morbidity and improve the quality of life.

Keywords: nutrition, healthy lifestyle, diet, energy consumption, the Arctic

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RATIONS SPECIFICATIOBS FOR MILITARY PERSONNEL IN THE ARCTIC REGION

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Complex geopolitical situation requires Russia's military presence in such a strategically important region as the Arctic. Extremal climate conditions require a special approach to the preparation of food rations for military personnel, whose daily calorie consumption is high. Given the difficulties of supplying fresh fruits and vegetables - the main sources of vitamins and minerals, the diet of the Arctic military should be redefined in the direction of its improvement to the level of modern and functional nutrition.

Keywords: military presence, military ration, functional nutrition, food supply, Northern delivery, security

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FOOD PECULARITIES OF THE ARCTIC INDIGENOUS POPULATION

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Currently, measures to improve the nutrition of the population of the northern regions are being widely implemented. However, the problem of rationalization of nutrition in terms of exposure to the body of extreme factors has not been resolved to date. In extreme conditions of the Far North, characterized by a high specificity of the composition of soil, water, air, the peculiarity of biochemical transformations, the importance of balanced diets increases markedly.

The article presents the results of research on the eating habits of the indigenous population, analyzes the dietary patterns of the Northern peoples and the effects on children of products from other latitudes. Ecological analysis of food chains allows to conclude the specific uses of the products of the local raw material base in the nutrition of the peoples of the Far North.

Key words: peoples of the North, food habits, wild plants, diet, raw material base

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FOOD RATION ANALYSIS OF HEAVY LABOR AND WATCH WORKERS OPERATING IN EXTREME NORTH WEATHER CONDITIONS

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One of the most effective and cost-effective measures to increase human resilience to adverse environmental and labor factors is the correction of rations of northerners through the use of products of enhanced nutritional value and widespread use of local raw materials in food products.

The article provides an analysis of the nutritional value of a two-week menu of employees of one of the mining enterprises in the North-Yeniseisk district of the Krasnoyarsk. The results of the research can serve as a basis for the development of corrective nutrition for workers of heavy labor on a rotational basis in the northern and Arctic regions of Russia.

Keywords: food ration, shift workers menu, balanced nutrition, food habits, the Arctic, balanced nutrition.

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