## INNOVATIVE TRENDS OF SCIENCE AND PRACTICE, TASKS AND WAYS TO SOLVE THEM

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# INNOVATIVE TRENDS OF SCIENCE AND PRACTICE, TASKS AND WAYS TO SOLVE THEM

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## FEATURES OF NUTRITION OF WOMEN IN THE INDUSTRIAL REGION

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**Introduction.** Rational nutrition is the basis for optimal health, development and functioning of the human body, socially significant activity and productivity [1, 2], and therefore an important component of human economic status and socio-economic development of society as a whole [3].

In 2014, the WHO announced that the double burden of nutrition-related diseases is an important public health issue. Double load is characterized by the coexistence of both malnutrition and obesity or related to violations of the requirements and principles of rational nutrition of non-communicable chronic diseases [4].

Changes in the human's nutrition formula of modern people on the background of the globalization of technogenic pollution of the environment cause deterioration in the quality of life and health of the population, especially vulnerable population groups - women of reproductive age [5].

There are important physiological, neurological and hormonal characteristics for women's health that change throughout the life cycle and affect the need for nutrition at different ages, as well as during pregnancy and lactation [2, 6]. Increased attention to women's healthy nutrition should be aimed not only at avoiding nutrient deficiencies, but also at improving overall health [1], including fertility [7], reducing the risk of chronic diseases, ensuring socio-economic growth and development [3].

Therefore, research to assess the nutritional status of modern women is the basis for the development of recommendations for improving the quantitative and qualitative indicators of nutrition, which in turn will provide a key opportunity to improve health and quality of life [4, 8].

Aim of research: to study the peculiarities of nutrition of women living in the cities of the industrial region.

**Materials and methods.** The physiological and hygienic assessment of the nutrition of fertile women was carried out within the framework of clinical-hygienic assessment of reproductive health of the population of women of the industrial city of the Dnipro and the control, conditionally "pure" city of Novomoskovsk

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Dnipropetrovsk region, who applied for a consultation to the Center for Family Planning and Human Reproduction of the CE «Perinatal Center with the DRC».

The developed selection criteria allowed to form homogeneous groups of observations of the female population, which meets the requirements for such epidemiological studies of a conceptual nature.

The actual nutrition was studied using the 24-hour diet reproduction recommended by the WHO [4], indicating in the questionnaire the respondents the diet, the amount of food consumed, the set of dishes and individual food consumed per day. For a more accurate analysis of the population's nutrition data collection was carried out within 7 days with subsequent averaging of the results.

The hygienic assessment of the daily set of food products of the inhabitants of the region was carried out in accordance with scientifically grounded requirements [2].

The obtained data were processed by traditional methods of variational statistics, using licensed statistical software packages of Statistica v.6.1 (Statsoft Inc., USA, license number AJAR909E415822FA).

**Results.** Studies have found significant violations of the requirements of nutrition, including its regime - only 51.7% of women in the industrial region eat 3-4 times a day, eat twice a day 40.2% of women, 8.1% of women eat in different diets (from one to several times a day). Thus only 30,3% of respondents eat at the same time. Most women consume food unevenly, with the largest amount of food in general accounted for dinner - 45.9%. Only 39.4% of the female population consumes the largest amount of food for lunch.

Our study showed that the average daily range of food for women in industrial regions is excessive in consumption for two groups of food products – bread and bakery products, as well as sugar and confectionery – by 9.9 - 48.3% compared to the recommended level (p <0,05).

Estimation of consumption of animal products of importance to the organism shows that the deficit of milk and dairy products in the diet of women of reproductive age reaches 32,3% and is most pronounced for cheese and sour cream – 56,0% (p<0,001).

Equally important in the nutrition of the female population are other proteins of animal origin, the receipt of which occurs in the body, mainly due to meat, fish and eggs. The consumption of meat and meat products for women is 61,0% (p<0,001), fish -47,2% (p<0,01) from the recommended norm.

The consumption of fats by women of reproductive age in general is almost consistent with the recommended needs and is 98,3%.

The low consumption of vegetables, fruits and berries - sources of vitamins, trace elements and dietary fiber - 31.6% (p <0.01) is also of concern. Taking into account the excess consumption of potatoes by the female population by 40,6% (p<0,01), the deficit of other vegetables and fruits in this group is even more pronounced and is 52,3% (p<0,001). The results obtained can be explained by national food traditions, economic opportunities, individual attitudes to the consumption of certain products.

**Conclusion.** Nutrition of women living in the cities of the industrial region does not meet the requirements of rational nutrition in violation of diet, quantitative and qualitative composition of the diet, which is excessive for consuming bread and bakery

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products, sugar and confectionery products - by 9.9% - 48.3 %, and is characterized by a shortage of other groups of food products.

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## Innovative trends of science and practice, tasks and ways to solve them

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