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THE TRANSFORMATION OF FOOD CULTURE IN RURAL AREAS AND ITS IMPACT ON THE MEDICAL AND SOCIAL SITUATION IN THE REGION

DOI 10.25789/YMJ.2019.68.23

УДК 392.81: 616.01/-09

The article presents the results of a study to identify the ongoing transformation of the daily food culture of the rural population, which allows us to talk about changes in the daily food culture in two conventionally divided aspects: material and spiritual, understood as traditions, taboos, proverbs and sayings related to food or specific dishes.

The purpose of the study is to identify changes in the traditional food culture in rural areas and compare with the actual nutritional value and incidence to determine indicative medical and social situations in the region. An analysis of the data shows that women are mainly involved in the preparation of everyday food. Respondents try to follow traditional cooking techniques of national dishes and use special dishes (25%). The modern daily rhythm of life requires saving time in cooking, so most (61%) of the villagers noted that instant food meets their needs to save time. The desire for diversity in food is so significant that 73% of the villagers said that it was customary in their family to cook dishes of other nations. Every second respondent likes national traditional dishes, 46% do not have special preferences, but love meat dishes. In conditions of intense diffusion of individual constituent cultures of peoples and the globalization of food culture, the cuisine of the peoples living in the North-East of the Russian Federation is mixed, not only in urban, but also in rural conditions.

During the transformation of the food culture in the actual nutrition of the population, there was a shift towards an increase in the diet of the share of simple carbohydrates and saturated fats with a deficiency of almost all the vitamins and minerals examined. These factors affect the health status of the population. A comprehensive assessment of the actual nutrition and analysis of the incidence of the adult population of the Republic of Sakha (Yakutia) over the past 20 years by the main classes of diseases should highlight a significant increase in oncological diseases. Cancer pathology increased in 2017 to the 1998 level by 2.6 times. However, the incidence rate of the circulatory system diseases in the republic in 2015-2017 was lower than the national average, while in previous years it significantly exceeded the national average.

Keywords: everyday food culture, fast food, world cuisines, actual nutrition, health, morbidity.

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Introduction. In the complex of life support systems of any ethnic group, the main role belongs to food as one of the components of a person's daily vital need. Since ancient times, a traditional nutritional model based on the consumption of meat, fish, and gathering products has played an important role in the livelihoods of the indigenous peoples of the North, which is most clearly reflected in the vocabulary associated with traditional food. But, during the XX century, Russia went through a period of dramatic economic, social and political transformations, which could not but affect the development of the indigenous peoples of the North, their traditional economic activities, which primarily led to the transformation of ethnic cultures of these peoples, including food culture [6].

The massive spread of urban lifestyles, the intensity of the modern rhythm of life, the development of the global market for goods and services, the increased availability in the countryside of a variety of «cookery» information, techniques and technologies for preparing everyday food cannot but lead to a mixture of peoples' cuisines at the global level. The influence of public opinion and the media circulating information on «harmful» and «wholesome» food, the expansion of the range of various nutritional services, the appearance of various diets, and the medicalization of the nutritional sector correct the taste preferences

of the villagers [8]. All these factors encourage rural residents to consume food products of large-scale industrial production, also because these products are cheaper in cost than natural ones. Borrowing a variety of dishes of other nations, adapting them to local cuisine with the change of ingredients from local raw materials and using other cooking technologies can be called kitchen meshes, because from dishes of other nationalities, in fact, only their names can remain. Moreover, during the survey, the villagers indicate the names of dishes of other nations with their national dishes [3]. Therefore, the scientific view of intercultural interaction is based on global and local approaches [2].

Food provides the entry into the human body of substances that form the basis of the processes of anabolism - the synthesis of individual body substances for the formation and renewal of cells and tissues, reimbursement of the body's energy consumption, normalization of the physical and neuropsychic development of the body, and improvement of working capacity. Therefore, from an early age, a person should have knowledge and sustainable skills based on scientific achievements in culture and food hygiene. One of these skills is that food should be varied and contains all the necessary components: proteins, fats, carbohydrates, mineral salts, vitamins and water [4].

Numerous publications and research results show that the actual nutrition of certain groups of the population of Russia is characterized by a decrease in the consumption of meat, dairy, fish products, vegetable oil, fresh vegetables and fruits in recent years. As an unfavorable fact, a decrease in energy intake with food (91%) should be considered, especially due to animal proteins. This creates the prerequisites for the formation of individual, especially low-income and living in extreme conditions of the Far North, categories of the population, and signs of protein-energy deficiency. The content of vitamins in the diets of certain population groups is 55-60% of the recommended level. In fact, the majority of the population revealed a malnutrition, due to both an energy imbalance and insufficient consumption of nutrients, primarily vitamins, macro- and micronutrients, essential amino acids, polyunsaturated fatty acids, with their irrational ratio [14-16]. In the nutritional structure, there are fewer protein products, therefore, essential amino acids, and the nutrition of the population has become pronounced carbohydrate-lipid nature with a reduced content of vitamins, minerals, dietary fiber and other vital nutrients and a large consumption of refined products [1; 8]. All this, along with a negative impact on the processes of acclimatization and immunity, is reflected in the prevalence of risk factors for noncommunicable diseases and alimentary-dependent pathologies [5; 12].

On average, an increase in the incidence rate is observed in the Russian Federation, the Far Eastern Federal District and the Republic of Sakha (Yakutia) (at the same time, higher rates are recorded in the republic). Thus, the incidence rate in 2017 compared to 1998 in the Republic of Sakha (Yakutia) increased by 41.1% (amounting to 1021.1 cases per 1000 population), on average in the Russian Federation - by 16.2%, and the Far Eastern Federal District - by 21, 8% (778.9 and 796.1 cases per 1000 population).

The purpose of the study is to identify changes in the traditional food culture in rural areas.

Materials and methods. Asociological study was carried out using a selective method-questioning of residents of rural settlements in Mirny, Namsky, Verkhny-Vilyui, Oymyakonsky, Suntarsky, Tomponsky and Ust-Aldan districts, with the exception of Mirny. Students who came from rural settlements were also interviewed. The survey was conducted

in July-August 2017 on the quota sample ($n = 1648$), the confidence interval was $\pm 5\%$. The selective method was compiled by taking into account the structure of the general population by the remoteness of the places of residence of respondents from district centers. The questionnaire questions concerned the daily nutritional culture of the entire family of respondents. Data processing and analysis was performed in the SPSSStatistics 22.0 software application.

Although quota selection is most common among nonrandom sample types and competes in accuracy with probabilistic types, interviewers select those that are most accessible to them for filling quotas. Accessibility also refers to the «coverage» of settlements, i.e. opportunities for traveling to certain settlements. In the sample, the proportions of only one of the indicated trait (place of residence) were observed; therefore, the quantitative characteristics of the remaining traits may not coincide with the structure of the general population.

Evaluation of actual nutrition was carried out by individual interviewing of respondents in accordance with the standards of the WHO international program on integrated prevention of noncommunicable diseases - CINDI. In the work, a special questionnaire was used by the Federal State Budgetary Institution "State Scientific Research Center for Preventive Medicine" of the Ministry of Health of Russia and the Federal State Budgetary Institution of Nutrition, Biotechnology and Food Safety, adapted for the surveyed population in accordance with the local living conditions of Yakutia. The analysis of daily diaries of nutrition respondents. Evaluation of the amount of food consumed was carried out in accordance with the «Album of servings of foods and dishes», 1995 [10].

The coding of dishes was carried out in accordance with the reference book «The chemical composition of Russian food products» [14].

When analyzing the incidence of the population by the main classes of diseases, the data of the Ministry of Health of Russia for 1998-2017 were used. [7].

Results and discussion. In the study, we divided the everyday home meal of the family into its components: cooking, which is associated with the distribution of responsibilities between family members, cooking technology, its speed, knowledge and observance of some national traditions, rituals, the desire to diversify the menu, sources of

information for new recipes etc. In this sequence, we followed how modern cuisine meshes of the surveyed villagers occur. An analysis of the data shows that women are engaged in preparing everyday food; however, other members of the respondent's families are not «aloof» (Table 1). Today, social reality is becoming more complicated due to the development of post-industrialism and sociocultural communications, and the rhythm of life is accelerating not only in cities, but also the countryside. To the questions «how is the traditional technology of preparing national dishes preserved in such conditions?» And «how much new technologies in cooking are in demand?». The respondents answered that they are trying to comply with traditional technologies for preparing national dishes. 25.4% of respondents said that they use special dishes, "22.5% - modern technologies and household appliances to speed up cooking, although they believe that the taste of the dish is changing. 16.8% of respondents do not see a big difference in cooking technology, so they use modern technology and equipment. 14.7% think that life is developing, and therefore the technology of cooking is changing. An insignificant part (7.0%) of the villagers surveyed admits that they do not know traditional technologies, therefore they use modern technologies.

As noted above, the modern daily rhythm of life requires saving time on household needs, including when cooking. As can be seen from the data (Table 2), the majority of the villagers surveyed (61.4%) noted that such types of food meet their needs to save time, in addition, 27.9% of respondents also save on food costs. As you know, not only the rhythm of life forces you to consume factory semi-finished products, fast food, but their prices are not comparable to natural foods that are currently not available to everyone [13].

Apparently, the desire for diversity in food is so significant that the villagers prepare dishes of other nations for their families. So, 72.9% of respondents answered that it is customary in their family to cook dishes of other nations. Almost a quarter of respondents (24.1%) gave a negative answer. However, given how deeply the cuisines of the peoples of the USSR mixed up, these data may indicate that dishes of other peoples that were «mastered» back in Soviet times are no longer perceived by respondents as «strangers». Respondents called many popular dishes of the peoples of the former USSR, as well as European,

Table 1

Who usually cooks everyday food in the family of surveyed villagers, %

Usually cooking	Bcero	District (ulus)					
		Mirninsky	Namsky	Oymyakonsky	Suntar	Tomponsky	Ust-Aldansky
I usually (myself) cook for the family	42.3	23.1	51.5	39.8	55.4	29.6	38.6
I have no time, so my spouse is more involved in this	6.3	2.8	7.0	8.2	7.4	1.9	15.9
We have a grandmother (grandfather), usually she (he) cooks for our family	8.0	6.0	10.5	10.2	5.8	14.8	6.8
We have a priority set in our family and we follow it all	4.1	7.4	4.5	4.1	1.9	1.9	2.3
Children have more time, so they cook for the family when we are at work	2.1	2.3	0.5	4.1	1.6	3.7	2.3
Who comes home before the rest, he begins to cook	27.9	30.6	23.0	31.6	24.8	42.6	29.5
Mother/father	5.7	19.9	2.0	-	0.4	1.9	2.3
Sister/brother	0.7	2.3	-	-	0.4	-	-
No answer	2.9	5.6	1.0	2.0	2.3	3.7	2.3

Table 2

Evaluation of the distribution factors of fast food (fast foods). convenience foods. %

Factor spreading	Total	District (ulus)					
		Mirninsky	Namsky	Oymyakonsky	Suntar	Tomponsky	Ust-Aldansky
These products are cheaper	27.9	39.8	21.0	30.6	22.1	31.5	25.0
They are comfortable. can be cooked quickly. a lot of time is required	61.4	62.0	60.5	50.0	64.3	63.0	68.2
Such dishes are tastier than our traditional food	7.9	12.5	8.0	10.2	5.0	-	6.8
Everyone today eats such food. I do not want to lag behind life	5.2	4.2	9.5	9.2	2.7	1.9	-
My daily food is boring. why not eat something new from time to time	11.7	10.2	20.0	4.1	10.5	7.4	11.4
Such food is good for health. low-calorie. does not allow to gain excess weight	0.8	0.9	-	3.1	0.8	-	-
Other	7.7	6.0	4.0	11.2	11.6	1.9	9.1
No answer	27.9	39.8	21.0	30.6	22.1	31.5	25.0

oriental cuisines, asking them to indicate the name of their favorite dishes in the questionnaire.

Every second respondent likes national traditional dishes, 46.3% do not have special preferences, but prefer meat dishes. Almost a third of respondents (37.0%) admitted that they like flour products, pastries, and a quarter of respondents prefer fish dishes. When asked whether respondents know ritual dishes and ritual food, the majority (77.4%) answered that they know, and 17.0% of respondents admitted that they did not know.

Table 3 shows the opinions of the villagers surveyed what exactly is being lost in the food culture today, dividing it conditionally into everyday practices of the actions taken and spiritual components, i.e. the use of proverbs and sayings related generally to nutrition. Respondents noted the same proportion of the loss of traditions and rituals in the culture of everyday nutrition, a little less indicated restrictions (taboos) in food. We attribute this to everyday practice, i.e. the commission of certain actions that are given certain meanings and ideas.

According to the results of studies conducted by employees of the Center for Nutrition Research Institute of Health NEFU named after M.K. Ammosov, there are differences in the daily calorie intake among respondents depending on gender and ethnicity. The daily energy consumption in men was 2308, in women 1801.3 kcal ($p < 0.05$). The caloric value of the diet of the rural population was statistically significantly higher (1787.1 and 2129.2 kcal, respectively, $p < 0.05$). The highest calorie diet was observed from the surveyed areas in Suntar ulus (women average 1983 kcal / day, in men

Table 3

Respondents' assessment of the loss of traditions and rituals in the culture of everyday nutrition, %

Loss	Total	District (ulus)					
		Mirninsky	Namsky	Oymyakonsky	Suntar	Tomponsky	Ust-Aldansky
	778 people	32 pax	229 people	175 pax	20 pax	277 people	45 pax
Eating traditions	29.2	31.3	29.3	22.9	35.0	31.0	37.8
Food related rituals	28.9	18.8	27.5	29.7	60.0	30.3	17.8
Bans on eating certain foods	22.9	25.0	23.1	20.6	35.0	24.2	15.6
Proverbial heritage about food (proverbs, sayings)	15.7	18.8	14.4	18.3	55.0	13.4	6.7
Traditional food storage systems	13.5	15.6	13.1	12.6	30.0	14.4	4.4
Other	0.4	-	0.9	-	-	0.4	-
I believe that some traditions are preserved, and not which are forgotten	12.0	15.6	15.7	14.9	-	8.3	6.7
No, I believe that traditions are preserved	11.2	6.3	12.7	8.6	-	12.3	15.6
No answer	17.5	18.8	16.2	15.4	10.0	19.1	24.4

- 2777 kcal / day.). The lowest calorific value is observed in the Mirny district (for women, on average, 1566 kcal / day, for men - 1730 kcal / day).

The study also examined the intake of minerals and vitamins. So, in terms of iron consumption, there is a deficit in all uluses, a total of 11.8 against 18 mg per day. Calcium consumption in all uluses is also significantly lower than normal (1000 mg), in some uluses 2 or more times. On phosphorus, the average consumption in the republic was 893.9 mg per day (normal 800 mg). For potassium, 2039.3 mg versus 2500 mg (normal). Magnesium intake was also lower than the recommended figures (220.5 versus 400 mg per day).

There is also a significant deficit in the consumption of vitamins for all major species, since the deficiency in vitamin C is more than 37%. For vitamins B1 - B2, the deficiency is about 50%. There is also a significant deficiency in vitamin PP and retinol (52–70% of the recommended norm).

In the Republic of Sakha (Yakutia), an increase in the incidence rate in recent years has been noted for many classes of reasons, but a significant increase in oncological diseases should be highlighted. Cancer pathology has grown 2.6 times in 2017 compared to the 1998 level (reaching 10.5 cases per 1000 population), while the national average growth was 148.1%, in the Far Eastern Federal District - 163.2% (11.4 and 11.1 cases per 1000 population, respectively).

Circulatory system diseases are the main cause of premature death of the

population. If on average in the country there is an increase in circulatory system diseases (in 2017 compared to 1998 - 2.1 times, amounting to 32.1 cases per 1000 people), then in MS (Y), on the contrary, from 2014 there has been a decrease in the incidence of for this reason (in 2017 compared to the level of 2013 by 46.3%, by 1998 - by 12.6%, amounting to 20.2 cases per 1000 people). On average, in the Far Eastern Federal District, after a marked decrease in the incidence rate in 2014, its growth was again recorded, in 2017 reaching 24 cases per 1000 people. The incidence rate of the circulatory system diseases in the republic in 2015-2017 was lower than the average for the Russian Federation, while in previous years it significantly exceeded the average Russian values.

The decrease in mortality from diseases of the digestive system in the republic to a certain extent is due to a decrease in the incidence rate for this class of diseases. The number of registered relevant diseases in patients diagnosed for the first time in their life decreased in 2017 compared to 2013 (the highest value in the reporting period was noted) by 39.2% and amounted to 58.3 cases per 1000 population (however, this is significant higher than the 1998 level - by 72.5%). It should be noted that if the dynamics of this indicator on average across the country and the Far Eastern Federal District was relatively stable, then in the Republic of Sakha (Yakutia) it tended to noticeably increase in the period 2000-2013 with its subsequent significant decrease. The indicator for

the republic significantly exceeds the average data of the Russian Federation and the Far Eastern Federal District (in 2017 - by 71.5% and 43.6%).

Conclusion. In conditions of intense diffusion of individual constituent cultures of peoples and the globalization of food culture, the cuisine of the peoples living in the North-East of the Russian Federation is mixed, and not only in urban, but also in rural conditions. Metisation is accompanied not only by a change of products by local components, but also by technology.

As follows from the data obtained, there are changes in the distribution of responsibilities in cooking for respondent families. In traditional culture, the woman was responsible for cooking. Among 42.3% of the respondents engaged in cooking for the family, only half were women. An even more "flexible" form of adaptation to modern conditions is the answer "who comes home earlier than the others, he begins to cook" (27.9%). A shift in the metisation of the cuisine of different peoples is evidenced by the list of names of favorite dishes (respondents entered the names themselves), among which are not only their national dishes, but also other peoples. When asked at what rate the components of food culture are being lost according to the surveyed villagers, less than a third of the villagers said that today they forget traditions and rituals, taboos in everyday food and out of turn into proverbs, sayings related to food. Perhaps, these phenomena are associated with insufficient consumption by the villagers of basic food products,

such as meat, fish, and dairy products. They are characterized by excessive consumption of bread and bread products (pasta, cereals, flour). Due to the last group of products, caloric intake is replenished.

Thus, during the transformation of the food culture in the actual nutrition of the population, there was a shift towards an increase in the proportion of simple carbohydrates and saturated fats in the diet with a deficiency of almost all of the examined vitamins (C, B1, B2, PP, retinol (microgram ret. Equiv.) And mineral substances (iron, calcium, potassium, magnesium). These factors, of course, affect the health status of the population and the high increase in the incidence. In this connection, the transformation of food culture cannot but affect the medical and social situation and does not affect the sustainable development of the region.

This research was supported by the Russian Foundation for Basic Research, the project «The Problem of Valorization and Popularization of Nutrition Culture of the Peoples of the North in Modern Conditions (on the Example of Yakutia)» No. 17-21-08001 and fulfillment of the state task of the Ministry of Education and Science of Russia by application No. 17.6344.2017 / БЧ and registration number AAA-A17-117021310139-5 «Clinical and genetic aspects of diseases characteristic of the indigenous people of Yakutia in modern conditions».

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