

Traditional Buryat Culture of Health and Application in Food Industry

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Abstract:

Nowadays food culture is quite different than before. Although our ancestor food traditions were very wise, since it brought human beings to modern stage of evolution, we don't cook traditional dishes and sometimes prefer them to fast and "junk" food. On the one hand is the "fast" food helps people to save their time to do many other interesting things. On the other hand is the fact that fast food frequently causes gastritis or oncology diseases. Only a comprehensive analysis of the problem will help us to develop the right way for conserving and developing of health culture. The aim of investigation is to investigate Buryat culture traditions of health and find an application in food industry. Methods: the analysis is given as an example of the food traditions of people of Republic of Buryatiya. Results: The article contains information about the most popular traditions and dishes of the national Buryat cuisine. Conclusion: innovation technology on creating of new food product is aimed to help people to stay healthy without wasting big amount of their time.

Key Words: - food traditions, national hospitality, national beverages, Baikal region, Tibet medicine.

INTRODUCTION

To start the analysis of presented sociological investigation in this article it is required to examine contemporary trends in culture and their influence on modern generation.

Firstly, informational field is getting denser. This previously unseen informational increase via different ways (books, magazines, newspapers, electronic devices, mass media) takes place and hits people. This process needs new educational technologies.

Secondly, borders between different scientific branches are changing. They are becoming more transparent. The process of scientific, social and cultural integration amplifies. This trend leads to interconnection and pervasion of social sciences into each other.

Thirdly, new socio-cultural stratification on humankind appears, i.e. former estate, classic and political division influence decreases whereas national, ethnical, sub-cultural, religious and corporative influence is increasing. This tendency stimulates formation of new sources of social tension and risk zones, so called "hot points".

Next, the culture takes new role in national security support. It encourages forming principles of mutual understanding and solidarity, agreement and tolerance preventing aggression and violence. Every ethnical group is looking for its national identity, image and its place in global society.

Lastly, cultural approach is changing in the sense of social and personal identity; cultural achievements and records, which are the symbols of involvement in historical traditions, are forming human self-consciousness.

It stimulates learning of different cultural languages, their sensitive and valuable meaning. Intercultural role increases as a tool for communion of culture, achievement

of cultural competency as a factor for showing intellectual and emotional development of a person define the strategy for younger generation breeding.

MATERIAL & METHODS

Just a brief description of the methods and materials will be provided, for more details see [1; 2]:

This research was a multi-year investigation of the health needs of Buryats people from different regions of their historical stay such as Djidinskiy, Tunkinskiy, Selenginskiy, Ivolginskiy and Zakamenskiy regions.

For this study the basic parameters were determined in the field while most of the hazard indicators were deduced from results of the analyses described below.

Between 90s and 2016, semi-structured interviews focused on the state of the health. Statistical data during the last quarter-century of health status of citizens of Republic of Buryatiya were analyzed.

Using e-library.ru, Bibliotech we searched the English-language literature that documented changes in health and traditional food systems in populations of Buryats origin. The following words "traditional foods", "health culture", "Buryats", "culture" were used in the initial search step.

RESEARCH

All of the factors above defined health culture as one of the most important part of formation of healthy way of life. The realities examined give the basis of necessity of this search. As a result, recommendations for health culture formation were developed.

Looking for health problems and healthy way of life of Buryat folk it is needed to take into consideration number of population. Thus, according to the statistical analysis, the highest population of Buryat at each regions in Republic of Buryatia is Zakamenskiy region which has 18

960 Buryat people; Ivolginskiy – 17 525, Selenginskiy – 14 444, Tunkinskiy – 14 318, Djidinskiy – 13 093. The following regions mostly have Buryat population; hence, it can be said that health culture traditions were well preserved from Russian folk's influence. This fact gave the possibility for objective sociological analysis for this survey [1; 3].

According to statistical data, during the last quarter-century birth rate decreased, mortality and sickness rate increased in all of the regions mentioned above, e.g. in Zakamenskiy region the percentage of people with chronic diseases was 19.4 % (1990s), and in 2010 it increased to 61.3 %.

The similar situation can be observed in the other searched regions of the Republic of Buryatiya: Ivolginskiy – from 18.6 % (1990) to 59.1 % (2010), Selenginskiy – from 17.5 % (1990th) to 57.4 % (2010). In Tunkinskiy region the situation is better. That could be related with the fact that the region is considered to be republican health resort. However, the trend is the same: from 9.4 % in 1990s to 21.3 % in 2010.

Djidinskiy region can be considered as reflection of Russia in a whole. According to the statistical data, there was 13.2 % of population with chronic diseases in 1990, in 2010 – 41.7 %. This data shows the decrease in population health in general, increase in chronic disease rate, and decrease in healthy way of life and in health culture [4].

So, to achieve the aim, the survey was performed in 5 regions of Buryatia where is the population's majority Buryat. In each region there were 200 persons questioned (totally 1000). All of the respondents were Buryats, 54 % - female and 46 % - male. 10 % of respondents were at the age of 25-35, 20 % - 35-55 and 70 % were 55-75 years old.

70 % of respondents stated that the health is the material value since human's body is one of the biggest subject of diseases, 20 % stated that health is the cultural value since healthy way of life leads to the health, 10 % stated that the health is the social value since personal health is paramount for a society. Also, some respondents noticed that present social level of life cannot support stability in the health level and form the health culture with the healthy way of life.

According to the data the majority of respondents noticed (60-65 %) that healthy/ill people ratio is 40/60 which reflects the average general health situation in the modern society.

50 % of respondents noticed that the health level depends on the physiological characteristics, 50 % state that the health level depends on the social conditions, level of life and another socially important factors affecting to the population health.

The majority of respondents are sure that formation of the health culture of Buryats is dependent on the usage of Tibet medicine. It is known that Tibet medicine is the science, art and philosophy that provide general approach to the health. This is the science because its principles are listed in systematic and logical structure based on the understanding of the body and its relations to the environment. This is the art because it uses diagnostic

methods proved by centuries. This is the philosophy of human and environmental unity and co-interaction. It uses unique temple techniques of Tibet medicine to change human perception so that physical recovery, fate harmonization and karma can be provided. Each method in usage is effective and can help almost every sick person [5; 6].

Sociological analysis of the contemporary health level of Buryats performed in 5 regions of Republic of Buryatia formulates general recommendations to form the health culture of Buryats considering traditional cultural-health methods:

- providing information to all categories of people about the health and the healthy way of life, positive and negative factors affecting to the health;
- providing “learning” of people in healthy way of life based on traditional cultural-health systems;
- providing recovering events including the support of initiatives related to formation of healthy way of life culture based on customs and traditions.

DISCUSSION

This sociological research proves the assumption that in traditional Buryat culture the unity of body, spirit and soul is still an axiom; that is why a human is examined as an organic part of a society, the nature and the universe. The similar approach is reflected in the theory and the practice of recovery, the traditional health culture itself. Recovery is formulated by the harmony of human and society in physical, psychological and spiritual components which can be basis of the health culture and medical practice in modern conditions.

In addition to this, the revival and distribution of Buryat cultural and educational traditions, based on patriotic fundamentals and historical and cultural knowledge, brings healing effect to the humans and the society.

Hence, this analysis could prove that culture-entertaining traditions of Buryats were under look through a prism of folk holidays in either spirit-symbolic or culture-psychological context.

The results of this research proved that physical culture traditions of Buryats are connected with harmony of the body, the spirit and the soul; it interact with a human, the society and the nature. This approach could be the basis of physical education in Buryatiya and decrease the effect of negative things in modern sports.

Buryat culture and everyday traditions, including rites, rituals and ceremonies, were closely connected with the health and social security. They have great meaning in cultural aspect of human and social recovery, so they could and have to be used today based on the modern realities. In addition to this, the usage of Tibet medicine principles, which provides holistic approach to the health, principles of which were listed above, becomes basis of new layer in the health culture [7; 8].

Traditions and food culture are priceless treasures that are carefully cherished by people, and always being developed. There is no doubt that they are an important

testimony of the past of the people, its achievements and worldview.

Buryat food traditions are amazing by creating a unique "white" foods based on milk, special dishes of meat, meat products [9; 10].

There are four types of processing of meat and by-products according to Buryat food traditions: a) freezing of raw materials, b) boiling c) frying, g) drying in the wind in barns. Another way to use meat is producing semifinished meat. The prepared meat was stored in wooden barrels, animal skins, cloth bags in sheds on the shelves, hooks, and also buried into the snow. Meat was cut into large, medium, small pieces by a sharp knife on special wooden boards and trays.

"Uuse" is beef prepared for winter time. From ancient times, cattle were killed for food in strictly certain season at the beginning of the winter (end of November–beginning of December). Poor people killed one cattle, the rich - two or three. It was enough until May. Harvesting meat was made in original method adopted by many Mongolians because of the climate and lifestyle.

"Nari" - ribs, spinal vertebrae, hips, colon and other best pieces carcasses were placed in a wooden barrel and buried in the snow. Some meat parts was packed in barrels and put in the barn for using in the near future.

"Meat in the skin". Beef and sheep meat were wrapped up in the skins in a special way. One vertebra was removed in the middle of the carcass and then it was folded in two. Small holes were made in the back part and legs of a front part of the carcass were put into them. Perfectly preserved carcass was stored until spring without losing the taste and quality.

"Hirma" - viscera of cattle, except of the heart, liver and kidney were placed into the paunch and frozen. Hirma was ready for use, it only had to be cut in frozen condition and then it need to be boiled.

"Tarhi" - small pieces of soft meat were mixed with brain and wild onion. The mixture was put in a gut.

"Ereelzhe" (hiima) - sausages made from a mixture of liver and fat.

"Harhinsag" (lamb book) is tripe stuffed with chipped meat and fat. The edges of tripe were fixed by chop sticks.

"Dried meat" is meat cut into long strips of 20-40 cm which was dried and hanged in the shade of the barn. Meat was also dried in the summer, but then it was tough.

Fried meat in the tripe (semi finished dish) – the tripe full of meat was used as provision for journey.

The Buryats use fermented dairy products (Tarak, Kurunge, etc.), based on the using of all fractions of milk to give unique dishes and drinks - of arsa, tarasun, salamat and others.

Kurunge is fermented milk product prepared from cow milk, widespread among the peoples of North Asia: Buryat Mongols, Tuvans, etc. The flavor is a pleasant, sour fizzy liquid of density, differs from koumiss (Kalmyk milk drink).

How to make this product has been known by people of North Asia for a long time, including Buryatia, Mongolia and Tuva, in past they was lead a semi-nomadic

life and having developed domestic animal breeding so they widely manufactured Kurunge, and in the summer months it served to them as an important source of essential nutrients. Since the second half of the 13th century, the recipe of Kurunge gradually began to spread among the Yakuts and Khakassia people, which is known now as the territory of Krasnoyarsk region and Sakha-Yakutia republic. Now, technology of Kurunge is already known not only in Buryatia, Mongolia, Tuva and Khakassia, but also among people of Oirat and Tungus (Russian Federation).

Thus, the production of Kurunge is currently involved in almost all the nationalities inhabiting northern Asia.

Over the last quarter century producing of kurunge was widespread among the Buryat population of Irkutsk region (Russian Federation) in the areas of: Bokhanskij, Alarsky, Nukutsky, Olkhon, Bayanday, etc., as well as in the Republic of Buryatia. In some areas of the country in spite of the intensive development of animal husbandry making of kumys was developed relatively weak. Therefore, in areas with poorly developed horse breeding mare's milk can be replaced by Kurunge.

Currently, Mongolia, Buryatia and Khakassia use Kurunge not only as food, but as recycling by distillation. The result of this processing is milk wine "Tarasun" and a high-calorie drink "Arsa", which is used for these peoples as favorite drink during the summer months.

Traditional beverages have their special property: the basis of mixed fermentation - lactic acid fermentation and alcohol fermentation, have high bioactivity, promote digestion of food [11; 12].

CONCLUSIONS

Currently, the Department of Social and technological services of East Siberia State University of Technologies and Management researches aimed to expanding of the range of traditional food.

The purposes of research work are investigation and development of parameters of producing of heat-treated protein product on the basis of raw materials of animal origin which is fermented by combined inoculum.

The most common protein products are cheese and curd products, casein, and others. However, a disadvantage of these protein products is using of organic acids, mono strain starters during their producing. It is known that poly strain symbiotic microorganisms and yeast starters have a significant biotechnological potential.

Technology for producing a protein product is to prepare low-fat milk, pasteurization, refrigeration, fermentation using combined inoculum which contains microbial association of kefir grains and strain of *Lactobacillus bulgaricus*, addition of biomass of molten kefir grains, thermal processing, dehydration of protein coagulate.

The protein product is made of milk which is fermented by combined inoculum of microorganisms. Quality indicators of the protein product shown in Table 1

Table 1. Characteristics of the new protein product

Indicators	Characteristics and Standards
Sensory: Appearance and consistency Taste and smell Color	Soft, spreadable, without tangible particles of milk protein. Net fermented, without foreign tastes and odors Milky white
Physico-chemical: Fat content,%, not less Protein mass fraction,%, not less Moisture content,%, not more Acidity, ° T, max Temperature at issue, ° C	0,6 17,7 73 160 4-6
Microbiological: Yeast CFU / g, more mesophilic lactobacilli, CFU / g, not less than thermophilic lactobacilli, CFU / g, not more L. bulgaricum, CFU / g, not less than (Coliforms) in 3.0g S. aures, 10.0 g pathogens, including Salmonella in 50.0 g	2*10 ⁵ 2*10 ² 1*10 ⁶ 1*10 ⁵ not allowed not allowed not allowed

The data presented in the table indicate that the technology for producing a protein product provides high organoleptic, physical and chemical indicators. Protein product has a soft, spreadable consistency without significant particle of milk protein, pure fermented, without foreign tastes and odors taste and smell, milky-white color, with moderate acidity [2].

A distinctive feature of the protein product is to use a combined inoculum which generates specific properties. Symbiotic relationship of lactobacillus and yeasts stimulate the enzyme complexes of microorganisms, which significantly affects the biological value of the finished product. The proportion of the total amino acids in the protein product is following: 12.089 mg%, of which 36.63% are essential. In 10 g of product found vitamins (B₁ – 0.036 mg, B₂ - 0.16 mg, B₃ - 0.4 mg, B₄ - 78.4 mg, B₆ - 0.05 mg, B₉ - 4.9 mg, B₁₂ - 0.43 mg), biotin (3.9 mg), ascorbic acid (1.1 mg).

Thus, the feature of the new method for producing a protein product is the high content of functional dietary nutrients. That technology could be manufactured without using of chemical preservatives. This could be used not only for small folks but also be spread as global food tradition.

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