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FOOD PRODUCTION IN  
KAZAKHSTAN AND CENTRAL  
ASIA**

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Ministry of Education and Science of the Republic of Kazakhstan

Toraigyrov University

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# TECHNOLOGY OF NATIONAL FOOD PRODUCTION IN KAZAKHSTAN AND CENTRAL ASIA

Tutorial

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The tutorial outlines the basics of national technologies for food preparation by the peoples of Kazakhstan and Central Asia. It considers the customs and rituals of the peoples in Central Asia, which have been observed since the dawn of time in the preparing and serving food.

The tutorial is of great interest for students majoring in 5B072700–Technology of Food Production, master students majoring in 6M072700–Technology of Food Production, as well as specialists of the agro-industrial complex.

Recommended by the Educational and Methodical Department of the Republican Educational and Methodological Council of the Ministry of Education and Science of the Republic of Kazakhstan on the basis of the Almaty Technological University (protocol No. 2 of June 21, 2019).

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## Introduction

Food and nutrition culture are closely interrelated in any traditional culture. Culinary customs and traditions are a part of the common culture of a people, in which its originality, character and history are reflected. Different nations of the world have been developing their gastronomic habits over many centuries and have created traditional cuisines which are an integral part of the national culture. Each people has its national cuisine, which is characterized by its own, different from the other, traditional dishes. Despite the fact that national cuisines vary among different peoples, each of them has been formed over many centuries in such a way as to provide the human body with nutrients and maximally contribute to an effective adaptation to the specific natural and climatic conditions of life.

Nomadism was formed as an alternative in unfavorable zones for agriculture – nomads live in zones of arid steppes and semi-deserts or highland areas where cattle breeding is the most optimal type of economic activity. The main food of nomads was various types of dairy products and animal meat, hunted wild animals, to a lesser extent products of farming and gathering.

The cuisine of the nomads is not rich, the nature where they live is not too generous to a man, but he/she has learned to take from it all that is necessary. Rational balance of meat and dairy products (the number of the last is several dozen), supplemented by wild flora provides the human body with the right amount of proteins, fats, carbohydrates, vitamins and minerals. Everything depends on the originality of the products and the methods of processing them. The set of products is determined by the nature and livestock, agriculture and various industries. But rather than the diversity of nomad products determines the nature of the national cuisine, different peoples, using the same initial products in the process of preparing dishes with special features of technology give it its own unique taste. Differences in culinary customs and traditions are related to the peculiarities of the geographical location, climate, the history of the people's development, and religion as a part of life influences the diet and culinary habits. In countries with a cold climate, there are traditionally many high-calorie, fatty dishes that help keep warm even on the coldest day. Most of the national products remained «overboard» mass production, and the technology of cooking some of them began to be forgotten. According to the authors, there is a need to preserve the traditional technologies of food products among the Central Asian peoples, which are both national property of each of them and contribute to the preservation of their health. All this served as the basis for the development of the tutorial which systematically describes the materials

of the technology for preparation of national foods of Kazakhs and peoples of Central Asia, while preserving the unique knowledge of each ethnos in the field of traditional technologies.

The food industry of the Republic of Kazakhstan actively cooperates with manufacturers of food products from different countries, which allows expanding the range of food products within the country and ensuring the sale of domestic products.

The main goal of the domestic food industry is to satisfy the constantly growing demand of the population for high-quality products in a wide range and to ensure a balanced diet.

The tutorial was prepared within the framework of the Tempus project «Development and implementation of master's programs in food safety, production and marketing of traditional food products (TradPro)». The project is cofinanced with the support of the European Commission.

## 1 Development of livestock sector in Kazakhstan

*«Move, do not be sedentary, wander through spring, summer and winter pastures and lands near the sea, without knowing the shortage. Let your milk, sour cream, and kymran not be decreased»*

*By Oguz-khan*

The development of livestock in Kazakhstan goes back to the prerevolutionary period. Even then, despite the considerable development of agriculture, the leading branch of agriculture in Kazakhstan was livestock.

Kazakh nomadic cattle breeding was of an extensive nature, and was associated with a pasture system, i.e. year-round or almost year-round keeping the majority of livestock at the pasture. The year-round grazing eventually determined the composition of the herd: it could include such animals that were able to migrate. These are primarily horses, sheep, which made up most of the herd of nomads. During nomadic pastoralism, all types of seasonal pastures were used during the year: winter, spring, summer and autumn ones. Consecutive movement through these pastures was a form of the production process. In each season of the year, roaming from place to place acted as a stage of the process, on the whole constituted a closed annual cycle.

In the late XIX – early XX centuries, the nomadic pastoralism and nomadic way of life were conducted by the Kazakhs of Mangyshlak, Temir, Atbasar, Kazalinsk and some other counties, although the extent of the spread of nomadic cattle in these districts was different. Each season of the year corresponded to its period of nomadic migration. The number of migrations during one season, the distance that nomadic farming took during the relocation for the day in different seasons, and partially the economic tasks were decided by cattle farmers in each season.

These are the main features of the nomadic cattle farm of Kazakhs in the late XIX – early XX centuries.

However, at the turn of the XIX–XX centuries, the most common was not nomadic, but extensive semi-nomadic cattle breeding. It was characterized by pasture and semi-stable breeding of livestock, farming, mowing, and staying in one place during the winter and, in this connection, the presence of stationary winter dwellings in addition to a portable yurt.

During the spring, summer, autumn, and partly winter, the seminomads put livestock to grass, in the worst, winter time (heavy frosts, winds, snow and ice) cattle were left and fed with hay (this is the point of semi-stable keeping of cattle). In conditions of semi-nomadic pastoralism, pastures differed not only in the seasons -summer, winter, spring-autumn ones – but also in the form of their use. Summer pastures of steppe northern regions of

Kazakhstan were usually in common use. Spring-autumn pastures were also mostly in common use; however, the range of farms that used this land together was significantly narrowed. Winter pastures were used in different way. The number of convenient wintering grounds at that time was limited, and therefore, as a rule, they were in the separate use of a small number of Kazakh farms.

One of the significant distinctive features of Kazakh semi-nomadic cattle farming in the late XIX – early XX centuries was haymaking, and it was at this time it began to spread rapidly.



Nomadic cattle breeding from VIII century B.C. to XVIII century A.D. favored animal breeders' development of approaches for selection of animals with superior adaptation to the living environment and year-round grazing

Nomadic cattle breeding is a special kind of producing economy, in which mobile cattle breeding is the predominant occupation, and the majority of the population is involved in periodic migrations. People from ancient times were engaged in nomadic cattle breeding in the territory of Kazakhstan.

Most of the territory of Kazakhstan is a steppe and semi-desert zone with a slightly watered surface. Short hot summer with dry winds and a long, severe winter with snowstorms make farming difficult. Therefore, the dominant way of doing business here is nomadic cattle.

Nomadic cattle breeding in its purest form in Kazakhstan existed in the west. Semi-nomadic cattle breeding is characteristic for the south. Agriculture served as a secondary and auxiliary occupation here.



The leading position of livestock in the economy of Kazakhstan has always been explained by the peculiarities of its vast territory (almost 280 million hectares), the overwhelming part of which was a natural pasture. A wide variety of soil and climatic zones in Kazakhstan has determined the existence of various forms and ways of conducting nomadic livestock.

At the moment, the livestock sector in Kazakhstan is developing dynamically. The potential of the agricultural sector is growing and allows us to build a system that opposes any challenges. A set of targeted programs aimed at the medium-term perspective has been developed. One of such programs is the project «Development of export potential of cattle meat», implemented by KazAgro National Managing Holding JSC.

### 1.1 Breeds of livestock animals developed in Kazakhstan

*Kazakh white-headed breed* was developed in Kazakhstan in the conditions of sharply continental climate by crossing the bulls of Hereford breed with the breeding stock of local Kazakh and Kalmyk cattle, which has been carried out since 1930. The task was set to unite in the future breed early maturity and high meat quality of Hereford with adaptability to local conditions by Kazakh and Kalmyk cattle. The obtained hybrids, mostly of generations II-III, were bred «in themselves». The work to develop the Kazakh white-headed breed was conducted in the area of obtaining meat-type animals. Animals of the new breed inherited from Kazakh cattle the rigidity of the body composition, from Hereford – early maturity, high yield of meat. The animals have a well expressed meat type of build.



The birthweight of heifers is 25–27 kg; of bullcalves is 28–30 kg. By breeding with suction, calves by 8 months have a weight of 240–250 kg, heifers 210–230 kg. Full-age cows weigh 500–560 kg, bulls 850–950 kg. The weight of certain cows reaches 750–800 kg, of bulls – 1100 kg. Kazakh white-headed cattle have good meat qualities. With intensive breeding of bull-calves, increments reach 900–1000 g a day and by the age of 15–18

months they reach a live weight of 450–480 kg. The best groups of bull-calves at the age of 18 months reached a live weight of 541 kg; the weight of the carcass was 295 kg, of internal fat – 35,6 kg. The content of bones in the carcass is 13,9. Slaughter yield of cows after fattening is 53 %–55 %, and 60 %–65 % for well-fed bull-calves. The meat is juicy, with fat deposited between the muscles.

The herd of Auliyekol breed is fully adapted to local conditions. This breed was approved in 1992, and was developed in Kostanay region in the Moskalevskiy tribal reproducer, by crossing the local Kazakh whiteheaded breed with the blood of the best world breeds of beef cattle such as: Sharal and Aberdeen-Angus. Light gray poll cows and bulls, gray shaggy calves – this is what this breed looks like, which was developed for the purpose to give meat that answers the highest international standards.



*Sheep breeding and goat breeding.* At the present stage of development of world sheep breeding, the main importance is attached to the breeding of sheep, which are distinguished by high meat productivity and early maturity.

Dynamically changing market conditions for sheep breeding products require a scientifically-based solution of problems in quantitative growth of sheep's livestock and their qualitative transformation on the basis of available material. In sheep-breeding, more than 70 % of the mutton produced is accounted for by the specific weight of meat-and-fat sheep breeding. The breeds of sheep in meat-fat sheep breeding, which are in demand on the domestic and foreign meat consumption markets, are included in the priority breeds for breeding in Kazakhstan.

Meat-fat sheep breeding due to low cost, while observing all the technological processes of feeding and keeping, the system of breeding work and reproduction, will undoubtedly be a highly profitable industry in many regions of the Republic of Kazakhstan.

Crossing of Kazakh fat-tailed coarse wool breed with sheep of *Edilbay* and *Hissar* breeds helped to create *Ordabassy* breed of sheep, by body weight exceeding Kazakh fat-tailed coarse wool breed by 10 %–15 %, with the number over 35 thousand head. The sheep are characterized with high body weight and early maturation, excellent meat quality and adapted to year-round driving-pasture system.

Edilbay breed Kazakh fine wool breed



*Kazakh fine wool breed*, of meat and wool type. It is developed on the experimental base of the Kazakh Research Livestock Institute. In breeding, mainly the Kazakh fat-tailed dam of generation I with the homogeneous wool of the 1st and 2nd classes was crossed with the generation II rams, which had homogeneous fine wool. Also the generation II dams having homogeneous fine and semi-rough wool were crossed with the same rams.

*Edilbay breed* with coarse wool of meat-and-fat type of productivity was created by folk selection at the end of the XIX century on semi-desert and steppe pastures in the interfluvium of the Ural and the Volga (Kazakhstan) by crossing Kazakh fat-tailed sheep with large Astrakhan coarse-wooled sheep. In the breeding process, the animals most adapted to the natural and climatic conditions of nomadic sheep breeding were selected for breeding. They tolerate severe cold winter and summer drought well, easily make large transitions and, in their morpho-physiological composition, have the ability to gain fat well on scanty, pasturable fodder. These features of the Edilbay sheep are based on the historically established system of conducting sheep breeding in prerevolutionary Kazakhstan, when a nomadic way of life was practiced with the widespread use of seasonal pastures.

Edilbay sheep are characterized by a strong constitution, proper body type, well-developed fat tail. Rams and dams are poll. The height at the

withers is 75–84 cm, the sloping body length is 77–82 cm, and the chest girth is 97–106 cm. The body weight of the rams is 110–120 kg, the best ones are 150–160 kg; dams 65–70 kg, the best are 90–100 kg. The dams are characterized by greater energy of growth and early maturation. The body weight of rams at birth is 6,0 kg, of gimmers 5,2–5,3 kg, at 1,5 years – 80 kg and 65 kg. When slaughtering young animals at 4 months, the carcass weighs 20–24 kg, and a fat tail is 3–4 kg.

The main color of the Edilbay sheep is black and red, and also brown one. Studies have shown that animals with different colors are characterized by unequal productivity.

Milking capacity of the sheep is high enough. According to the data of the Temir Experimental Station, the dams of this breed give an average of 150–155 liters of milk with fluctuations from 124,8 liters to 184,3 liters. The marketable milk of Edilbay sheep is used for the preparation of dairy products: airan (sour milk), primchik (cheese), kurt (cheese) and butter. The average fat content of milk is 5,8 % with fluctuations from 3 % to 9 %.

*Horse breeding.* The Kazakh language has about 80 synonyms for the word «horse». This is not surprising, because horses are the main value of nomadic peoples. Since ancient times, it is the truest friend of the Kazakh nomads, which gave them everything – food, clothing, entertainment, and the opportunity to hunt and fight. The horse was traditionally an integral part of the steppe life, an object of pride. It was carefully looked after and richly equipped. The reverent attitude of the Kazakhs to this animal has survived to this day.

The history of eating horse meat is estimated for thousands of years. A wild horse, along with other animals, was the subject of hunting for primitive man, and was domesticated, according to a number of scientists, just like a meat animal. Horse meat and mare's milk are mentioned as valuable food in the works of the great thinkers of antiquity – Herodotus, Strabo and Abu Ali Ibn Sina. The peoples of the East historically preferred horse meat to beef and mutton, and before the church ban, adopted in the 1st century AD, instructing Christians not to consume horse meat, Slavs also ate horse meat. By the way, this prohibition was caused by economic expediency: with the expansion of trade relations, the development of agriculture and the creation of horse armies, horses began to be assigned three main roles – drawing, working and military. In the second half of the XIX century, when mechanized vehicles and agricultural machinery appeared, the ban on the use of horse meat was lifted (in Austria in 1854, in France in 1866, in Russia in 1867, in Germany in 1879, in England – in 1883).

The nomadic peoples of the East have developed meat and dairy horse breeding throughout all these centuries. Huge massifs of pastures and the



possibility of year-round herd keeping of horses at the fodder contributed to this, and traditionally horse meat prevailed in the nourishment of nomads.

Horse breeding in Kazakhstan is the most priority branch of animal husbandry. In all respects – ecological, economic, medical and technological ones, it surpasses all others. Kazakhstan is a territory that has a huge number of natural pastures, and, correspondingly, animals are fed on grazing, and not food containing pesticides and fertilizers, so the meat is environmentally friendly. By its taste and useful qualities, horse meat does not only concede many species, but also surpasses them. It is easily digested, has dietary qualities and is rich in iodine. Most cattle breeders agree that the most delicious meat is still in the north-eastern and central regions of the country.

New meat and milk breeds have been selected in Kazakshtan – *Kushum* and *Mugalzhar*.

*Kushum* horse was bred in stud farms and other farms in the Ural and Aktobe regions. Its name was given after the Kushum River, which flows in Western Kazakhstan. As an independent breed, it was approved in April 1976.

The number of pedigree horses of the *Mugalzhar* breed (Emba specific breed type – the head of the breed) of Koktas JSC is 576 heads, including stallions – 24 heads, mares – 232 heads, including 181 mares of elite class (78 %), of first class – 49 heads (22 %). All stallions are elite. The breeding farm of Koktas JSC, Mugalzhar district, Aktobe region, is located in the semi-desert zone III (Mugalzhar station) with feather grass-fescue-wormwood vegetation on light chestnut soils, 250 km from Aktobe.

The goal of the selectionists was to create breeds that would have the same unpretentiousness, strong health and adaptability to any climatic conditions, like a Kazakh horse of *Jabe* type, but at the same time would have a large body weight. The keeping of *Jabe* horses does not require the costs for building stables and conservation of fodder, as these animals are at grass all year round, but the *Jabe*'s mare weighs no more than 370 kilograms. The weight of *Mugalzhar* mares brought by Kazakh horse breeders is 520–540 kg.

Kazakh

Kustanay



Kushum

Mugalzhar

Today this is the most common breed in Kazakhstan after *Jabe*. It accounts for about 30 % of the total number of livestock, and it is possible to meet horses of *Mugalzhar* breed practically throughout Kazakhstan: from hot Aral deserts to the highlands of East Kazakhstan.

*Kustanay* breed of horses was developed at the horse collective and state farms in the steppes of Western Kazakhstan. The nucleus of the breed was concentrated at the *Kustanay* and *Maikul* horse plants. The breed was developed from 1887 to 1951. The first date is associated with the organization of state factory stables: *Turgay* in 1887, *Kustanay* in 1888, and *Orenburg* in 1890. The latter is with the official recognition of the breed and the giving it the name *Kustanay*. The basis for creating a new breed was the crossing of a local Kazakh steppe horse with *Don*, *Strelets*, *Astrakhan* and half-blooded stallions.

*Kazakh* horse belongs to the steppe-type group of breeds. It emerged in the territory of Kazakhstan more than a thousand years ago. It is believed to be a descendant of an Asian wild horse. The breed was influenced by a number of other breeds, most of all – *Mongolian*, *Arab*, *Karabair* and *Akhal-Teke*, and more recently the *English thoroughbred*, the *Orlov trotter* and the *Don* horse.

There are two different types within the breed: *Aday* and *Jabe*. Purposeful selection work with *Jabe* began in the *Aktobe* region of the Soviet Union in the 1930 s. At present, on the basis of purebred development of horses of this type, a new factory breed – *Mugojar* – is being formed.

*Maral breeding*. Now the *maral* breeding is developing well in Kazakhstan. This branch is included in the 15 most promising areas in the development of the country's agro-industrial complex. *Maral*-growers of the



East Kazakhstan region (EKR) annually supply up to six tons of canned antlers for export, as well as domestic pharmacists.



Maral antlers are the raw material for the production of pantocrine. This is a valuable medicine, which, according to medical experts, has a beneficial effect on the human cardiovascular system, treats gastric diseases, relieves fatigue, increases vigor, and accelerates the healing of wounds. At resorts and sanatoriums of the East Kazakhstan region actively use pantoletic methods, many residents and guests of the country have already assessed the effect of this miracle-elixir on the body.

N. Toktarov, the chairman of the maral breeders association, made a proposal to create a unique health complex in Katon-Karagay where all methods of pantotherapy could be used. In his opinion, with proper state support this is feasible. In addition, such a complex will not only play an important role in the development of this industry, but will also make the EKR even more attractive for tourists.

*Camel breeding.* Camel breeding is an important part of the economy and the traditional livestock sector in Kazakhstan, an important reserve for the production of milk, meat and wool. In general, the industry thrives in the desert and semi-desert areas of the Western Kazakhstan. Camels are unpretentious animals, and feeding on local pastures is enough for them.

According to the most conservative estimates, no other kind of domestic animals gives as much benefit as a camel. All expenses for keeping a camel pay their ways from the realization of only wool. But in addition to wool, the camel gives also 300–400 kg of meat, including 150 kg of hunch fat, a large area of skin – and all this is practically for nothing! This is an exceptionally economical branch – camels feed on pasture all year round.



Recent years have seen a steady increase in the number of camels. More than 80 % of the total number of camels in the republic is bred in Mangystau, Atyrau, Kyzylorda and Aktobe regions. Our country is considered one of the most advanced camel countries in the world. At the same time, the huge potential of the republic for the further development of camel breeding is far from exhausted if it is assumed that camels adapted to the existence in severe climatic and fodder conditions are able to use pastures throughout the year without prejudice to other types of farm animals.

#### **1.2 Analysis of current condition and development prospects for meat cattle breeding in the Republic of Kazakhstan**

At the present stage, the requirements for meat cattle have changed: the intensity and longer duration of growth, high rates of meat production. Such properties are possessed by large tall animals of modern types of Kazakh white-headed, Hereford and Auliyekol breed.

Meat cattle breeding is a specialized branch for the production of high-quality meat and is based on the cultivation of cattle of specialized meat breeds. According to the Ministry of Agriculture of the Republic of Kazakhstan, the number of meat cattle as of 01.01.2017 amounted to 2043800 heads, incl. 1063985 cows. The share of pedigree cattle is 17,8 %.

The unacceptably low share of meat cattle from the total number of cattle and the volume of beef production means the need to actually recreate this industry.

Recommendations for breed zoning include the breeding of five breeds of meat cattle: Kazakh white-headed, Auliyekol, Santa Gertrudis, Hereford and Kalmyk.

In recent years, 67 entities of the republic have been engaged in meat cattle breeding, including: 14 breeding plants and 53 breeding farms.

Economic entities in the field of livestock breeding are guided by promising breeding plans developed by scientific institutions.

The bulk of the meat stock is concentrated in West Kazakhstan, Kostanay, East Kazakhstan, North Kazakhstan and Aktope regions. At present, the total number of pedigree cattle is insufficient and much lower than in countries with intensive management of this industry. This is the main goal of selection and breeding work: the qualitative improvement of herds in breeding plants and breeding farms, bringing the elite class and elite to a specific weight of 80 %.

Kazakh white-headed breed is the most common in the meat cattle breeding. Its livestock in the country accounts for 53,740 thousand heads (81,0 %). Thus, a record live weight of cows of this breed – 1056 kg (Pani 1038) and bulis – 1400 kg (Brussok 258) was registered at the Kalbatau breeding center of the East Kazakhstan region. The livestock population of the farm is 2404 thousand heads, incl. 784 cows. Two factory lines were created: Dubnyak 4534 and Brussok 258 – the ancestors of lines of poll animals.

The animals of the Shagatay poll and Ankaty enlarged types have been created and successfully improved at the Chapayev breeding plant as well as at the Aislu and Ankaty breeding farms (the former breeding plant of the West Kazakhstan region), specializing in the development of Kazakh white-headed breed. The animals of the Ankaty enlarged and Shagatay poll plant types are distinguished by the tallness, size and stretch of the trunk, with good development of the latitudinal measurements of the body.

Currently, Chapayev pedigree plant of the West Kazakhstan region contains 3,742 animals, including 1050 cows, represented by the factory lines of Vyun 72, Veteran 7880, East 7632 and Baikal 442. 76 % of polltype animals of the total number of livestock belong to the elite and elite record class.

Aislu breeding farm has 969 heads of Kazakh white-headed breed, 382 of them are represented by the plant lines of Landysh 9879, Cactus 7969, Salema 12747 and related group Mailana 13851. 70 % of cows are higher class of elite and record elite. The average live weight of first-calf heifers is 497 kg (elite record), and of full-aged cows is 567,6 kg.

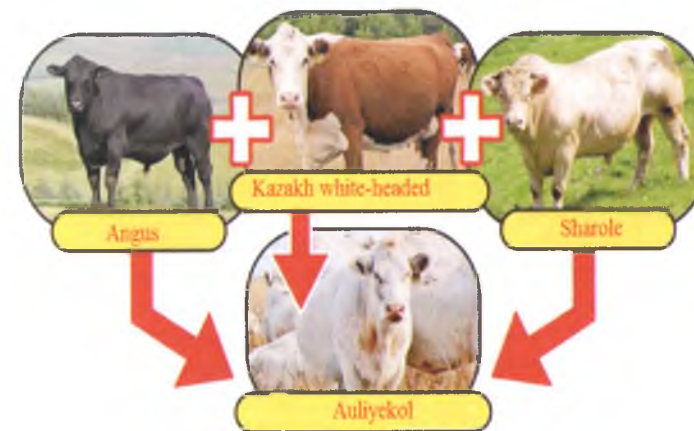
The herd of the Balkhash breeding plant LLP, Akmola region, totals 1140 goals, incl. 585 cows represented by the factory lines of Astika 1441, Iskota 1073, Mira 2497, Avgust 1074. The number of animals in the upper classes is 60,0 %.

Similar indicators are observed in some new herds. So, Krymskoye breeding farm, Kostanay region, has 4389 heads of livestock, incl. 2038

cows. The average live weight of first-calf heifers reaches 495 kg (elite record), and of full-aged cows is 545 kg (elite).

A special place in the pedigree cattle breeding in the Northern Kazakhstan is occupied by the Alabotinskiy breeding farm. On its basis, 8 tribal subsidiary farms with a total number of 1990 heads have been created, including 1012 cows. The number of animals in the upper classes is 92,0 %.

Soon, the creation of three factory lines of bulls of Kazakh whiteheaded breed will be completed. At this stage, it is planned to improve its gene pool to meet the needs of households.



The basis and prospects of meat cattle breeding in the northern Kazakhstani regions is represented by a relatively new breed – Auliyekol. This meat cattle refers to large breeds. The total number of the Auliyekol breed animals is 9026 heads, incl. 3632 cows. Moskalevskiy breeding plant, Kostanay region, includes 2,2 thousand heads, including 1019 cows. The average weight of cows is 525–553 kg, some individuals reach 700 kg.

AGF Diyevsкая LLP breeding farm, Kostanay region, is a large breed reproducer with a livestock of 2551, incl. 1142 cows. Here, there is also a daughter herd in the breeding farm of Vostok LLP with a population of 357 heads.

There are two breeding farms in Almaty region: Kerege, where 431 heads of livestock include 189 cows, 31,2 % of the elite and elite record class; Shanyrak LLP – 506 heads, incl. 220 cows, 29 % of which are of high class.

As a selection achievement, materials have been created for the testing two plant lines of the Auliyekol breed – Tabakura 1350 and Zenita-Chubatyi



1165, which, in terms of growth rate and other economic and useful qualities, exceed the breed standard (milk yield – 8,8 kg, or 19,4 %, the weight of bulls in 15 months – by 14,6 kg, or 14,9 %, the average daily gain – by 6.8 kg, or 37,8 %).

Hereford breed is developed at the Ural Agricultural Experimental Station. In total there are about 933 heads, incl. 186 cows. The genealogical structure is represented by related groups of bulls of British and Canadian origin.

The total number of Santa Gertrudis meat breed in the republic is 2,618 heads, incl. 779 cows. Part of the livestock is in the Ospanova A.O. Farm Household (471 heads), Zhaxylyk Farm Household (516 heads) and Akimbekov Farm Household (338 heads) in Almaty region.

There is a small number represented by Kalmyk breed: only 261 heads, incl. 156 cows. In particular, they are bred at Sultan LLP breeding farm, Zhambyl region.

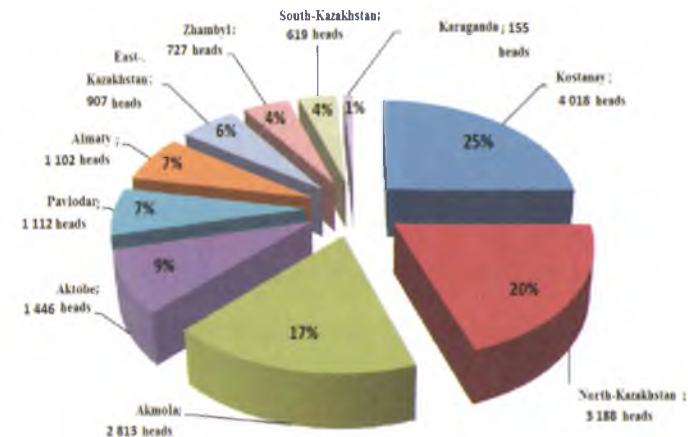
Kazakh white-headed (94 %) and Auliyekol (3 %) are classified as breeds of priority state support, Hereford (1,7 %), Santa Gertrudis (0,5 %) and Kalmyk (0,3 %) are classified as breeds of moderate state support.

KazAgroFinance JSC is a company established by the Government of the Republic of Kazakhstan in 1999 to solve one of the main problems in agriculture – the renovation of a technical park. Today the Company is the leader in the market of leasing services in Kazakhstan and provides financial support to every fifth large and medium-sized domestic agrarian.

Since 2011, KazAgroFinance JSC has started financing projects for the development of meat livestock breeding, which provide for a set of measures to create feeding grounds, breeding farms, reproductive centers, herd management centers, associated infrastructure (feed production, veterinary safety) that will withdraw meat production to a new level of development.

KazAgroFinance JSC imported 16,087 heads of meat pedigree cattle, including 5,321 heads in 2011 and 10,766 heads in 2012. The importation of the financed by KazAgroFinance cattle by regions:

In general, the Republic of Kazakhstan has a valuable gene pool of meat cattle breeds.



Zootechnical work aimed at enriching and efficient use of the gene pool in meat cattle breeding should include: improvement of breeds (creation of highly productive lines and herds of factory types), breeding and use of improved bulls, outstanding cows with high productivity, internal and external gene pool exchange, and preservation of local breeds. All this will contribute to strengthening the breeding base of meat cattle in the Republic of Kazakhstan.

### 1.3 Analysis of development of dairy cattle breeding in the Republic of Kazakhstan

A dairy cattle breeding is one of the most important livestock sectors. Today, in many CIS countries, there is a tendency to reduce the role played by dairy cattle in agriculture. The main reason for the problems, which hampers the development of dairy cattle breeding, is low profitability, as well as high competition with similar imported products. An equally important reason for the dairy cattle breeding to experience difficulties is the low level of interest of the population to work in this sector, in spite of the fact that cattle breeding in Kazakhstan, in particular dairy and meat cattle breeding, has deep national traditions.

Since 1999, there has been a positive trend in the development of the dairy cattle industry. The data of the Agency for Statistics of the Republic of Kazakhstan indicate that the number of cattle in the country for 9 years increased by 2124 thousand heads, by 54 % (4.369.405 heads, at the beginning of 2017, against 3,936 thousand heads in 1999). Gross production of milk over the same period increased from 3,498 to 5,300 thousand tons,

or 51,5 %. The average annual dairy productivity of cows increased from 1913 kg in 1999 to 2300 kg in 2008, or by 20,2 % (387 kg).

These indicators in dairy cattle breeding have been largely achieved through the selection process associated with research on the creation of new four intensive types of cattle. They include black and spotted one in the black and spotted and Auliyeaty breeds, red one in the red steppe breed, red spotted one in the Simmental and brown – in the Alatau breeds, using the best world gene pool of dairy breeds. The leading place among them is occupied by black-spotted and red-spotted Holstein Friesian and Schwyz by American breeders.

The current stage of livestock development, taking into account the fundamental changes in the socio-economic conditions of rural development, climate crises in the regions of the republic, the evolution of knowledge in the breeding and genetics of animals, requires new approaches to conservation, the use of the available diversity of genetic resources. Existing breeds, types, populations, offsprings of farm animals are the main basis for selection of new types, breeds of animals resistant to diseases that meet the requirements of the consumer market.

Certain positive changes have occurred in the breeding business. In dairy cattle breeding, 17 breeding plants and 94 breeding farms conduct selection and breeding work under the guidance of scientists.

Genetic resource of dairy cattle breeding in Kazakhstan is represented by 7 breeds: Black-spotted, Red steppe, Auliyeaty, Airshire, brown Latvian, alatau, and Simmental.

In terms of abundance, prevalence and economic significance for increasing milk production, today and in the long term the most significant are Alatau, Auliyeaty, Black-spotted, Red steppe and Simmental breeds that are well adapted to the natural and fodder conditions of their breeding regions in the steppe, semidesert and foothill zones.

These breeds are characteristic with a combination of dairy and meat productivity. In the conditions of long-term (Simmental), significant (Alatau, Red steppe, Auliyeaty) pasture and stall-pasture content (Black-spotted), the breeds show milk productivity in the range of 2,3–3,7 thousand kg of milk per lactation with a fat content of 3,67 %–3,85 %.

Along with positive qualities, the cows of these breeds had some disadvantages, which consisted in unsatisfactory development of the morphological and functional properties of the udder. In a certain part of the cows, this organ of milk synthesis did not meet the technological requirements in the industrial management of the industry.

Also, the use of nutrients for the production of milk left much to be desired, which led to an increased expenditure of feed.

Black spotted cattle are a milk-type breed that has become widespread in Akmola, Almaty, East Kazakhstan, North Kazakhstan, Kostanay and South Kazakhstan regions of the republic. Most fully their genetic potential is manifested only in the conditions of full and abundant feeding, both in summer and winter stall periods, ensuring the receipt of 3,5–4,0 thousand kg of milk for lactation in fat content of 3,65 %–3,8 %. The animals of this breed differ in sufficient living weight: 550–600 kg – cows, 800–1000 kg – stud bulis. Young stock has a high growth energy and by the age of 1 year bulis reach a living weight of 350–370 kg, heifers 290–300 kg.

The Red steppe breed of the dairy type of productivity is developed in Aktobe, Atyrau, Karaganda, Kostanay and North Kazakhstan regions of the republic. The breeding base is represented by 1 breeding plant, 12 breeding farms, 1 breeding and 9 distribution centers, with the presence of 52862 breeding stock, incl. 52,6 % of the elite-record and elite class. The average annual yield of cows in the best breeding herds is 3000 kg of milk for the first lactation, 3200–4000 kg for adults with the fat content of milk of 3,80 %–3,84 %.

Red steppe cattle take a sufficient specific weight in cattle breeding of Kazakhstan among dairy cattle. This is facilitated by relatively high yields, good feed payment, unpretentiousness, and adaptability to local natural climatic and fodder conditions, as well as other beneficial qualities of red steppe livestock, which ensured its wide distribution in the zone.

Auliyeaty breed of domestic origin became widespread in Zhambyl and South-Kazakhstan regions. The breeding population is small (8121). A distinctive feature of the Auliyeaty breed animals is a strong constitution, adaptability to a hot climate, some resistance to blood-parasitic diseases (theileriosis, pyroplasmosis).

The structure of the breed includes 6 lines of the factory type and about 60 families. The yield of the first-calf heifers for lactation at the leading breeding factory of Yunchi, Zhambyl region, reached 3824 kg, adult cows – 4792 kg at the fat content of milk 3,7 %. In the selection group of animals, the yield for lactation is 5300–5700 kg of milk.

Alatau breed is the cattle of the milk and meat type of productivity, by number (430 thousand heads) takes the fourth place in the dairy cattle breeding industry and is bred in the foothill areas of Almaty, Zhambyl, and East Kazakhstan regions. In pedigree herds, the yield of cows is 3,8–5,0 thousand kg for lactation.

Selection work with the breed and the new brown type of livestock is carried out at 5 breeding plants and 20 breeding farms, in which 18658 heads of tribal livestock are concentrated. About 70 % of them are classified as elite-record and elite.



In the leading breeding plants – the main reproducers of the breed, the milk productivity of cows varies between 3,7 and 5,6 thousand kg per lactation. The genetic potential of bulls is 8–9 thousand kg of milk, which allows raising the productivity of animals in the breed and the new brown type to 5,2–5,5 thousand kg of milk for lactation.

Simmental breed is one of the oldest cultural breeds of cattle, which has a combined milk and meat productivity. The number of cattle of this breed in the republic is more than 600 thousand heads. The breeding zone of the breed is the arid steppe, and the semi-desert zone of the East Kazakhstan and Pavlodar regions. The cows' yield in the breeding herds is 3,2–3,8 thousand kg, in breeding groups 5,0–6,0 thousand kg of milk with a fat content of 3,8 %–4,0 %. Selection work with the breed and the created new type is carried out at 5 breeding plants and 15 breeding farms with the available 27968 heads of tribal animals, where 67 % is classified as elite-record and elite. In pedigree formations, representatives of the milk type of red-and-white cattle occupy an average of 34 % of the total number of herds, having a milk yield of 3,4–4,3 thousand kg of milk for lactation, with a fat content of 3,75 %–3,89 %.

When breeding a dairy herd, genetic progress can be achieved in two ways: breeding within a population (closed population) and using the best global gene pool of related breeds (open population). The main method of breeding dairy cattle in closed populations is thoroughbred breeding and intra-breed selection. The largest distribution in open populations in the world was fixed for Holstein-Friesian breed, which gave a powerful impetus to the development of all dairy cattle. The experience of a number of countries shows that with Holstein development it is possible to increase the average milk yield per cow by more than 100 kg per year. The highest growth rates of productivity were obtained in the last decades in the USA (143 kg of milk per cow).

Holstein breed had a great influence on the genetic potential of the main dairy breeds in Kazakhstan – Auliyeaty and Black-and-white cattle. For example, a team of scientists from the Department of Dairy Cattle Breeding and Selection of Kazakh Scientific Research Institute for Livestock and Feed Production in the South of Kazakhstan in 2011 introduced a new black-and-white type of cattle – Sairam-by using bulls of Dutch, German, Holstein-Friesian, Black-and-white breeds with the cows of Auliyeaty and local black-and-white breeds. The new black-and-white type of cattle Sairam exceeded the productivity over the breed by 12,0 %. The productivity of the new population cows varies between 4,5–5,0 thousand kg of milk per lactation. Milk productivity of breeding nucleus among new types of dairy cattle at breeding plants are in the range of 6,778–7,533 kg, which is higher than the

indices for pedigree herds by 1,600–2,400 kg (23 %–25 %), and in comparison with initial breeds in 1,6–1,8 times.

In the recent 12 years to obtain a new generation of bulls as fathers, as a rule, stud bulls are used in the republic, which are among the top 10 in the world for their breeding value. Today, the sons of Holstein leaders of the USA, Russia, Belarus and the European Union countries pass tests at breeding plants and units. After that, no more than 15 % of stud bulls are intensively used. This allowed for 8 years (2 generations) to inseminate 65 %–70 % of the broodstock with the sperm of the stud bulls and enhancers and to achieve, at the same time, an annual genetic progress of at least 55–60 kg on average in the republic, and for the breeding plants of the 80–100 kg. The share of Holsteined livestock is planned to be increased to 40 %, and in the long term – up to 60 % and higher.

In dairy cattle breeding, the Alatau breed of cattle of the combined type of productivity, developed in 1950 in the Republic of Kazakhstan, is in demand among farmers. The milk productivity of Alatau cows on the average is 2,800–3,600 kg of milk for lactation with a fat content of 3,9 % with an average live weight of adult cows of 440–480 kg.

In 2007, a new type of brown dairy cattle, Ak-Yrys, was developed in the south-east of the republic by the method of interbreeding of Alatau cows with Schwitz bulls of American breeding. Dairy productivity of brown cows at leading breeding plants reached 4,5–5,3 thousand kg of milk for lactation with a fat content of 3,71 %–3,74 % with an average live weight of adult dairy cows of 580–595 kg. Excess of productivity over the breed was 14,0 %.

We should note the tendency to increase the number of the new type of red-and-white cattle Yertis (developed in 2009) with a productivity of 4,2–4,5 thousand kg of milk for lactation and a fat content of 3,76 %–3,82 %, having cows with live weight of 575–590 kg. A new type of red-and-white cattle Yertis was created in the north-east of Kazakhstan. The bulls of Monbeliard, German red-and-white, Holstein-Friesian breeds and cows of the local Simmental breed were taken as a basis. Excess of productivity over base analogues was 16,0 %.

Thus, the importation of highly productive animals of foreign breeding allows intensifying the development of domestic dairy cattle breeding, as well as raising the breeding and productive qualities of cattle in the republic. The use of imported animals can be carried out in two ways. The first is a massive one, to improve the breeding and productive qualities of local aboriginal livestock by crossing with cows of low productivity, bred in our country. It has already been proved by practice that in mass cross-breeding with the use of bulls of various foreign breeds (Schwack, Holstein,

Mollillard, Ayrshire), started in the 80s of the last century, a tangible result was obtained in increasing the milk productivity of cows. Unfortunately, the first direction is rather long-term although it is guaranteed to increase the breeding potential of productive and breeding qualities of local cattle.

The second direction is the importation of highly productive purebred cattle of foreign breeding and its use in purebred breeding. This is an accelerated way of development of cattle breeding. Despite the fact that the second direction is effective in the short term, it should be noted that highly productive animals of foreign breeding have not only a high genetic potential of productivity, but also a special metabolism of the organism. According to the data of long-term studies by domestic and foreign scientists – dairy farming breeders, the productivity of livestock by 60 % is determined by the level of feeding and by 30 % – by genotype or heredity (according to American data – by 40 %).

In recent years, in the Republic of Kazakhstan, as a result of a purposeful agrarian policy, especially in the dairy cattle breeding industry of the Almaty region, some progress has been made in increasing milk production and animal productivity.

According to the Agency of the Republic of Kazakhstan on Statistics, during the last five years there has been a significant increase in the number of breeding dairy cattle. So, for the period from 2009–2017, the number of breeding dairy cows in the Republic of Kazakhstan increased by 22,3 %. In scientific journals, it is also noted that the dairy productivity of cows in breeding farms, where foreign animals have been imported, as well as according to the Statistics Agency of the Republic of Kazakhstan, has increased. Milk production in the East Kazakhstan region occupies the first place; the share of participation is 13,83 %. In turn, Almaty and South-Kazakhstan regions produce 12,8 % and 12,6%. As for Astana and Almaty, the share of their participation in the market is minimal, and the reason for this is unfavorable of conditions for production.

Milk is produced continuously throughout the year, in all natural and climatic zones of the republic. At the same time, milk production is seasonal, increasing in the spring-summer period and falling in the autumn-winter time (in June the output is 3,5 times higher than in January). To expand the range, imports are used. At the same time, the volume of milk processing does not depend on the seasonal production of raw materials, which indicates the use of dried milk, mainly imported.

At present, there are about 15 milk processing enterprises operating in the Almaty region with different levels of processing capacity and technological, stock and raw materials. The enterprises of FoodMaster JSC, Raimbek Agro LLP, APK Adal JSC and Smak LLP work at the consumer

market of Almaty. Meanwhile, the resource potential of the raw milk in Turgar, Ili and Yenbekshikazakh districts is estimated at 62,38–107 thousand tons per year. At the same time, FoodMaster JSC has the greatest possibilities of supplying raw materials. The network of procurement centers covers more than 170 farms in Almaty, South Kazakhstan and Pavlodar regions. With a processing capacity of up to 45 thousand tons of milk per year, the company processes about 38 thousand tons of raw materials. RaimbekAgro LLP is in the second position in the region in terms of the level of processed milk. The processing capacity is up to 17 thousand tons of milk per year. Adal accounts for no more than 5 thousand tons of milk. Other enterprises process significant smaller volumes of raw materials and, accordingly, occupy the lowest positions in the total production of products.

It should also be noted that consumption is a very important indicator for the dairy market in Kazakhstan. Over the past 10–15 years, the consumption of milk in the Republic of Kazakhstan has doubled; however, in the country the level of milk consumption is three times lower than the norm, when the medical norm is 340 kg per person annually. If the level of consumption continues to grow and reaches the recommended medical rate, say by 2020, then with the help and protection of the state, this will give Kazakhstani commodity producers a chance to develop and strengthen their positions in the dairy market.



## 2 Traditions and customs in Kazakh food culture

*Each Kazakh irregardless of the place of residence shall know language and traditions of own people.*

Nursultan Nazarbayev,  
President of the Republic of Kazakhstan

The Kazakh national cuisine, as a mirror, reflects the soul of the people, its history, customs and traditions. For long time hospitality has been the most distinctive feature of the Kazakh people. The dear guest was cordially greeted, seated at the most honorable place, treated to the best that was in the house. First of all, the guest was served kumis, shubat or airan, then – tea with milk or cream, boursak, raisins, irimshik, and kurt. Then snacks of horse meat or lamb followed – kazy, shuzhuk, zhal, zhaya, suryet, karta, kabyrga. Any table shall necessarily have flat cakes made of wheat flour. The decoration of any dastarkhan and the most favorite dish among Kazakhs has always been meat in the Kazakh style. Boiled meat was usually served in large undivided pieces. The host cut the meat, treating every guest with dainty bits: pelvic bones and a shin gave to honorable old men, a brisket – to the son-in-law or the daughter-in-law, a cervical vertebra – to girls, etc. The host treated the most honored guest with a specially prepared ram's head. The guest had to divide the head between the present people, observing a certain ritual, which affected the ancient custom of respectful attitude to the guests, the elderly, children, close and distant relatives. Aromatic meat is eaten with thinly rolled and boiled dough pieces. An excellent addition to the dish is a rich aromatic broth – sorpa, which is usually served in bowls. At the end of the meal, kumis is served, again followed by tea. In our time, the feast has largely changed the forms, but has not lost the ancient laws of hospitality. On the contrary, its borders has widened: today's dastarkhan gathers not only Kazakhs, but also numerous guests living in a large multinational republic – Russians, Tatars, Ukrainians, Uzbeks, Germans, Uighurs, Dungans, Koreans ... Having lived near the Kazakhs for decades, sharing with them grief, bread and joy, the fraternal peoples could not but influence the culinary skills, life and culture of the Kazakh people, borrowing at the same time the best of its culture and way of life.

Modern Kazakh cuisine includes not only traditional Kazakh dishes, but also favorite dishes of Uzbek, Uighur, Russian, Tatar, Korean and other cuisines. That is why it is not difficult to notice international traits in modern Kazakh cooking, with the preservation of purely national features. Many products have changed for cooking food today.

Meat is the basis of most dishes. It is meat products that adorn any dastarkhan. The abundance of meat dishes is the reason to judge the richness and diversity of the festive table. From olden times Kazakh cooking was distinguished by its peculiar technology. The peculiarity of the Kazakh people's life left traces on the ways of cooking. In traditional Kazakh cuisine, preference has always been given to boiling. It is this process that allows you to get soft and delicate flavors of meat, gives it juiciness and aroma. A large place was given to half-finished products and long-term storage. After the slaughter of cattle, some of the meat was preserved for future use, wherefore it was salted, dried, and sometimes smoked. Delicacies were mainly prepared of horse meat – kazy, shuzhuk, zhaya, karta, etc.

Horse meat is an easily digestible diet meat containing a large amount of high-grade protein, optimally balanced in amino acid composition. If the beef is fully digested in the human body in 24 hours, then the horse is only in 3 hours. Horse fat occupies an intermediate position between animal and vegetable fats and has a choleric effect. Horse meat decreases the content of cholesterol in the blood, acts as an excellent regulator of metabolism, is used with dietary therapy of obesity and supplies the body with a number of essential microelements, vitamins, essential fats. Horse meat is endowed with the ability to multiply male power (they say, skins from kazy are especially useful) and neutralize the harmful effect of radiation.

Multi-page works have been written on the benefits of horse meat, and it is not possible to tell about all its advantages from the point of view of medicine. But one of the most striking things is that with all its useful qualities, properly prepared horse meat and especially delicacies from it are also amazingly tasty. Eating aromatic meat and getting true gastronomic pleasure from the process, gourmets can also be satisfied with the realization that they are simultaneously improving their body.

In order to deliciously cook horse meat, just salt is enough, and, say, if it comes to kazy, pepper and garlic would not be out of place. Horse meat is delicious in itself, the main thing is that the meat should be from a young animal (a horse of 2–3 years is almost ideal) and traditional technology was observed in choosing this or that part of the carcass.

In general, an inexperienced consumer often believes that the color of horse fat depends on the age of the horse. In fact, above all, it is affected with what the horse eats. So, in the foothills of the Trans-Ili Alatau, grasses are juicy, and the fat of the local horses is white. The same can be said about meat from the Kokshetau region. Steppe meat, for example, from the Semipalatinsk region has a darker color and yellow fat, but the experts consider it very tasty.

In addition to meat, milk and dairy products were widely used. Preference was given to sour-milk products, as it was easier to keep in conditions of nomadic life.

Bread was often baked in the form of flat cakes. The most popular baked products have always been and remain boursaks.

Kumis, shubat and airan have always been favorite drinks, and a special place has been occupied by tea.

Ancient utensils were made of leather, wood and ceramics. Each family had a cast-iron cauldron, where food was prepared. Tea was boiled in cast iron jugs, later – in samovars.

All Kazakh cuisine has been for a long period built on the use of meat and milk. They are horse meat and mutton, mare, sheep, cow and camel milk and products of their processing (early cheese, curd cheese, kumis).

The perfection of Kazakh cooking was in the direction of developing such semi-finished products of meat and milk that could have been preserved for a long time in nomadic conditions and at the same time were tasty and not bored with frequent use.

This is how the production of smoked, salted-smoked and smoked-cooked semi-finished products from various parts of horse meat (horse sausages) fried of mutton and lamb liver was born and developed. The production of fermented semi-finished products and products – kumis, early-ripened cheeses, kurt, sarysu – was widely spread. They are not only light, transportable and non-perishable with long transportation, but also convenient for use in a cold form.

The products of agriculture entered the Kazakh menu later. The first grain, which became known to the Kazakhs and took the main place in their kitchen as a national cereal was millet. Then there were other products of agriculture - mainly grain (wheat, rye) and flour of it.

So, by the end of the XIX – beginning of the XX century, there was a characteristic feature of Kazakh cuisine and the Kazakh national table – the prevalence of meat and flour products and combinations of meat and flour in the main national dishes, a classic example of which is meat in the Kazakh style. At the same time, the use of various products made of processed mare and sheep's milk – kumis, kurt, airan, sarysu and irimshik – somewhat receded into the background.

Kazakh cuisine developed not in isolation, much was borrowed from the neighboring peoples of Central Asia – Uzbeks, Tajiks, Dzungars, and Uighurs. This borrowing concerned first of all the preparation of fried meat dishes (using oil) and more complex meat and flour products (samsa, manty), as well as the use of certain products (tea, fruits, melons), which became more widely used in the diet of Kazakhs. From Russian cuisine in the XX

century, Kazakhs borrowed daily consumption of vegetables (especially potatoes, carrots, cucumbers, radishes, most commonly used in salads), as well as the use of eggs and chicken meat, which with the development of poultry farming on the basis of grain farming have become traditional products in Kazakh cuisine.

However, neither technological borrowing nor expansion of product assortment in principle has changed the main national features of the Kazakh cuisine, its specifics, but only made it more diverse.

The modern Kazakh table, of course, is not limited to dishes of national cuisine. It is much more diverse in terms of the composition of the products, since along with meat it includes fish, vegetables, various cereals, fruits, canned foods.

In summer, almost every family prepares airan – sour milk diluted with water. It is drunk as a soft drink, or is filled with various cereal pottages. Airan is used for making kurt and irimshik. Kurt is a cottage cheese rolled in small round loafs and dried in the sun, and irimshik is a fatty crumbly cottage cheese.

Kazakh cooking is famous for its peculiar softness and tenderness of flavors. It strictly doses spices, differs in the duration of the cooking process with a simmering, which gives the product a special juiciness and softness.

The first dishes in Kazakh national cuisine are prepared mainly on meat broth with the addition of various products, as well as diluted whole and sour milk. Lamb, beef, horse meat and camel meat are widely used, as well as the bones of these animals, with the exception of horse meat, as the broth acquires an unpleasant taste and smell. Fish for cooking first dishes is used in a limited way – mainly for cold soups. Garnishes for soups are homemade noodles, salma, and dumplings. A feature in the preparation of the first dishes in the Kazakh style is the frying of cereals with butter or margarine. This treatment increases the ability of the cereals to quickly cook and improves their taste.

The second dishes are prepared mainly of various meat products (lamb, beef, horse meat, camel meat, saiga meat, and poultry). In this case, they are combined with vegetables, cereals, flour products or eaten almost unprocessed – in the form of shish kebabs. Some of the second dishes are made of fish and vegetables.

Products of flour take a big place in the Kazakh national cuisine. In this case, they can constitute in some cases the basis of a dish, in others it can only be a culinary complement to meat. For their preparation flour of higher grades is used.



Sweet dishes usually complete lunch, dinner or breakfast. The assortment of sweet dishes is very diverse, but the Kazakh national sweet dishes have their ancient history and their food and flavor characteristics.

Kazakh dastarkhan is rich in hot and cold drinks: tea, kok-shay, sheker-shay, suyk-shay, soft drinks of Shiye, Sairan, Urik, Alma, and Issyk. Especially tea is reputed. This drink is prepared with special diligence and love.

Pastry confectionery has long been used in Kazakh cooking. They are usually made with milk, sour cream, kатык, fat, eggs, sugar, water, aromatic and coloring substances added to the flour, this gives them high nutritional and taste value, as well as calorie content.

The dishes of antiquity are loved by many people till now and often on the table they coexist with modern ones. These are suzbe, zhent, kymran, uyz, fish kazy, wheat kozhe, umash with egg, kombe, karyn kombe, zhau-zhumur, ezhegey, etc.



Kazakhs like strong tea, which is drunk at any time of the year. Tea is usually added cream milk in. At tea table, questions of both family and state importance have long been discussed.

Kumis is also a favorite drink – a special way fermented mare's milk, known for its medicinal properties. Camel milk is in the same way used for making shubat.

### 2.1 Meat dishes

Horse meat should be considered national Kazakh meat, although now it is consumed less often than lamb and even beef. It is horse meat that national products such as kazy, karta, shuzhuk, etc. are made of. Names of most meat dishes are not associated with the composition of raw materials or the method of preparation, but with the names of parts for which, in accordance with national traditions, the horse's carcass is cut. Such are the shuzhuk, the karta, the kabyrga, the tostik, the zhanbaz, the zhal, the kazy, the sur-yet, the beldeme, and others.

To produce them, they use chilled or thawed meat, full fat rectum and intestines of the thick section, subcutaneous or internal fat, fatty tail fat, malt, sugar, black pepper, casing and twine.

*Sogym.* According to tradition, annually, Kazakhs carry out winter slaughter of cattle – sogym. They prepare this rite from the summer: they choose cattle, and in rich families 2–4 heads of cattle, put it on fattening and provide special care.

To perform the ritual of sogym, a day is assigned, a professional butcher – kassapshi – is invited, who cuts the carcass by observing all the requirements of the convention.

The carcass is cut without damaging the bones, at the joints, since each bone has a special significance. Women deal with entrails and intestines, which need to be treated so that there are no damaged areas.



Special attention is paid to the horse's intestines, from which the delicacy sausages – kazy and karta – are made. Bones of cattle (zhilik) and ribs are divided into two parts and are laid out on two flat dishes (tabak). The heads of horse and camel are not carved and cooked entirely as they are considered holy. Beef head is carved and boiled in parts.

By tradition, sogym shall be tried by all relatives, so the host invites them, elderly people, neighbors, the butcher and treats the guests with kuyrdak cooked of fresh liver.

The host solemnly presents to the butcher the due payment for work – «kolkesser».



*Yet ystau.* In the northern regions of the republic (Kokshetau, Northern Kazakhstan), meat of sogym is smoked (yet – meat, ystau – to smoke) for long-term storage. With this, the taste of meat improves, and it remains soft. For smoking of meat, a bark of a young birch is used.



*Beshbarmak (meat in the Kazakh style).* In the winter, meat dishes dominate in the Kazakh cuisinery. The most popular is beshbarmak - lamb and pieces of rolled dough cooked in broth. Beshbarmak means «five fingers». This dish is called so because it is conventional to eat it with your hands. A large dish with beshbarmak is put in the middle of the table. Meat is served with bones. Each guest is given a certain piece of meat. The head of the animal is presented to the most honorable guest. Beshbarmak washed down with sorpa – a strong broth, which is served in large pialas (drinking bowls).



The Kazakh cuisine is characterized with such dishes, which in their consistency occupy an intermediate position between soups and second

dishes. This is the national dish of meat in the Kazakh style. Its composition includes a lot of meat, dough and a relatively small amount of strong, concentrated, fat broth. Another characteristic feature of Kazakh cuisine is the widespread use of by-products (lungs, liver, kidneys, brains, tongue). At the same time, such pieces of meat as the saddle (back) are prepared in a pure form, almost exclusively through baking (in the past – in coals).

This is a national dish – for honored guests they cut a ram, and for especially honorable ones – a yearling or a colt. In case of a large number of guests, they cut a dry mare, so that the kazy were thick as sere (the thickness of fat – 20 cm). Boiled meat is usually served in a flat dish – tabak. To serve tabak correctly is an entire art. Each tabak should correspond to the age of the guests, their social status, family relations. Tabaks with meat are divided into bas (maim), sy (honorary), kuieu (for son-in-law), kelin (for daughter-in-law), zhastar (for youth), and zhay (ordinary). For each tabak, certain pieces of meat (mushe) are put. You can not change mushe. On the bas tabak they put bas (head), zhambas (hip bone), omyrtka (spine), kazy, karta, and zhal-zhaya. Thus, all the tabaks, considering the volume and number of guests, have fragrant, tasty, juicy meat. Each mushe (bone) has its own meaning. A man of old age is served with bas and zhambas; people of middle age – omyrtka, orta zhilik, sons-in-law, girls – assytky zhilik, tos (brisket). Respected people should not be served zhauyryn (shoulder) and kari zhilik (roy bone), which is considered a sign of disrespect. Offended guest may require alyp (penalty). Moiyn omyrtka (cervical vertebrae), domalash zhilik, zhauyryn, sirak (leg) are not served to guests.

The people have a proverbial expression: «The way you meet, I recognize by your sight; the way you respect, I recognize by your cup». Ability to please the guests is a real art. People who know these peculiarities are called tabakshy, and those who know how to cook meat are kazanshy.

Tabak tartu is an art, and the ability to cut meat is also an art. Yet turanshy (a person who cuts meat) must know what bone should be given to various people. Meat is cut into small, thin pieces. Kazy, zhal, karta, kuiryk (kurdyuk), shuzhyk are cut the last and put on top of meat. Kazy, zhal are cut in half-pieces, karta – in rings. Guests of honor are the first to take meat from tabak. People do not talk a lot at the meal. The host of the house, showing hospitality, tries unobtrusively to treat his guests. After the meat, the sorpa (broth) is served. At the end of the meal, guests bless dastarkhan.

*Bas tartu.* Respected guests and people who came from afar are given the head at the dastarkhan (bas – head, tartu – to present). Before cooking, skin from the head of a horse or a cow is removed; head of a sheep, goat, and sometimes cow is scorched. The lower part of the head is separated (jaws), the teeth are knocked out. Earlier, the head of a horse and a camel were



cooked entirely, considering these animals sacred. The head of a cow is boiled, previously divided into parts. Goat meat is not cooked for guests.



Tabak with a head is served with the front part forward, and the knife - from the side of the handle. The guest cuts off the head and distributes its parts, observing a certain ritual, in which the ancient custom of respectful attitude to those sitting behind the dastarkhan is shown: old people, children, relatives and distant relatives. The head with one eye is returned to the host of the house. The guest, who has a father, is not allowed to cut its head, as according to popular belief it means that his father can die. The rest of the meat on the tabak is cut into small pieces. The meat is first tried by a respected guest or adult.

*Mi-palau.* Brain pilau (mi – brain, palau – pllau). Brains are taken out the boiled mutton head and mixed with boiled, finely chopped liver, fat tail and head skin. Kumis, airan or suzbe (raw cottage cheese) is added to mi-palau. Then it is poured with sorpa (fat broth), which makes the dish more tasty and useful. Mi-palau is put into a deep bowl and given to the guests, beginning with the elders. In our time this dish is extremely rare.

*Shuzhyk* is valuable meat product. For its preparation, raw meat and internal fat of horse meat are cut into pieces, added at option with onions, garlic, salt, black pepper and tightly stuffed into the horse's casings preaged in salted water. Both ends are tied with a twine and hung for a while in a cool place. In the summer, in the villages shuzhyk is stored in flour, where it does not spoil for a long time. Shuzhyk of horse meat does not wither and remains juicy and soft. When stored in a refrigerator, the taste of the shuzhyk deteriorates.



Shuzhyk is served to respectable guests. It is laid on top of other meat in the tabak. It is kept specifically for respectable guests, matchmakers, relatives and friends.

Shuzhyk is prepared of meat and fat in a ratio of 1: 1, stuffing them into the small horse casings. 5 kg of horse meat, 5 kg of internal fat, 350 g of salt, 10 g of black ground pepper, at the discretion – garlic is added.

Prepared meat is rubbed with salt and aged for 1–2 days in a cool place at 3 °C–4 °C. The casings are washed and kept in salted water a little. Then the meat and fat are finely chopped and mixed. Garlic, pepper and salt are added and everything is mixed again. These contents are stuffed into casings. Both ends are tied with a twine, and the casings are hung out for 3–4 hours in a cool place.

Shuzhyk is smoked for 12–18 hours over thick smoke at 50 °C–60 °C, dried at 12 °C for 2–3 days.

Dried or smoked shuzhyk is boiled at low heat for at least 2,0–2,5 hours.

Before serving, it is cut into pieces not thicker than 1 cm, put on a dish, decorated with onion rings, greens.

*Kuyrdak (Kazakh grilled beef dish).* Traditionally, every family slaughters cattle for the winter – sogym. First, a prayer is read, then the animal's head is directed to the west (towards Mecca) and with the words «bismilla» its throat is cut. After the blood runs off, the skin is peeled off and the entrails are removed.



To prepare kuyrdak, finely chopped fat mutton, tripe, intestines, lungs and liver are fried in their own juice, sometimes with the addition of sour cream. This dish is called «bal kuyrdak». The butchers, having satisfied themselves with the kuyrdak, thank the host.

This dish can also be prepared of beef, lamb or horse meat.



850 grams of mutton liver, 500 grams of kidney, 300 grams of heart, 450 grams of fatty tail fat or 150 grams of fat mutton, 2 onions, 2 drinking bowls of broth, 1 teaspoon of black pepper, salt to taste.

Fatty tail fat or fat mutton is cut into cubes and fried. Add heart and kidneys, after 15 minutes, put liver and chopped onion, salt and pepper. pour in broth a little and bring to the readiness. Serve in a deep plate, sprinkle with greens on top. The kuyrdak is usually served with taba-nan flat cakes or soft bread.

*Manas kuyrdak.* There are several kinds of kuyrdak, one of them, now almost forgotten, is «Manas kuyrdak». It is prepared of wild animal meat – saigas, argali, and roe deer. Meat, chopped not very finely, is salted, fried in a cauldron until readiness and at the end of frying it is poured with sour cream and sprinkled with flour. Bring to the readiness, stir and serve on a dish.



*Kisse kuyrdak.* In the old days, in each zhuz, in each ru (kin), in each taipa (tribe), there were peculiarities not only in customs, everyday life and clothes, but in the preparation of certain dishes. These features have survived here and there to this day. For example, «kisse kuyrdyk» is very delicious prepared by the kerey, now living in China. The dish is made of fresh lungs, liver, kidneys, tripe, sliced intestines. Meat is added a little, garlic and bek (spices) are put according to taste.



*Tripe kuyrdak.* 1 kg of treated tripe, 600 g of lungs, 400 g of liver, 200 g of heart, 150 g of mutton, 300 g of fatty tail fat, 2–3 onions, 1 teaspoon of black ground pepper, 3–4 laurel leaves, about 2 drinking bowls of broth, salt according to taste.

The treated tripe is poured with water, salted, and put on fire. After boiling, laurel leaf and pepper are put and cooked with slow boiling for 1,5–2.0 hours before half-readiness. Then the tripe is cooled and cut into small pieces. On a heated frying pan with fatty tail fat, diced lungs are put and fried for 20 minutes. Then heart and mutton are added, everything is salted and continued to fry. In 5 minutes the tripe is put and again roasted for 10 minutes. Add liver, onions, add broth and bring to the readiness.

*Kazy-karta, zhal-zhaya.* The Kazakhs consider that the most delicious and healthy parts of the slaughtered horse carcass are kazy-karta and zhal-zhaya. The lustrous kazy, the patterned karta, the fat karyn (tripe), the kertpe zhal (zhal is the oblong deposition of fat in the undercrest part of the horse's neck), saryala zhaya (meat, interlaced with fat) is the decoration of the Kazakh dastarkhan.



Respected people are served mushe (pieces of meat with bones). Kazy-karta and zhal-zhaya are cut and laid on top of other meat.

To prepare kazy, meat with a layer of fat is cut from the ribs of the carcass. Prepared meat is salted, peppered. If desired, add finely chopped garlic and put into ainaldyrady (casings), which are tied on both ends.



Karta and karyn are eaten only fresh. Prepared kazy is jerked and smoked.

*Bukpa.* Bukpa is prepared in the summer time of a young lamb meat. When respected people come to the house unexpectedly, they are, by tradition, always treated. While the kumis is being beaten up and samovar is being put, the hosts cut a young lamb. For the preparation of bukpa, the meat bones are chopped with a sharp ax and put into the cauldron. A small amount of water is added, the lid is closed tightly and the dish is braised. The dish, cooked in its own juice, turns out very tasty. Bukpa can be well prepared only by experienced people. In the southern regions this dish is called «sirne».

*Sirne.* In the case of forced slaughter of cattle, meat of lambs of 2-4 day-old age is not thrown out, but used for preparation of «sirne». The carcasses are cut into pieces, laid in the cauldron and filled with mare's milk or fresh cream. To taste, add salt and braize on low heat, tightly closing the lid. In this case, milk (cream) is absorbed into the meat, and the bones become tender. The dish is especially useful for the elderly and children.



*Tomyrka* is a national dish that has recently been almost forgotten. In winter, after a fatty and hearty meal, guests are served with sorpa.



If you throw a piece of ice in a hot sorpa, you get a chilled drink tomyrka, which is consumed both as food and as a thirst quencher. «Tomyrka» has a peculiar smell, reminding Kazakh people their home.

*Tostik.* Lamb brisket – tostik – is carved from the carcass, then singed, salted and kept in the shade for a few days, avoiding direct sunlight (dried). After the salt is absorbed, the brisket is fried on fire. It becomes even more delicious, and does not get bored, like other fatty meat. But recently this dish began to be forgotten.



*Aksorpa.* In the old days, in the families where a horse or a cow was slaughtered for sogym, the bones were not thrown away after the meat was eaten from them. In the spring, when there was little meat left, they were boiled for a rich sorpa that had a white color (aksorpa). Kazakhs have always been able to cook a variety of delicious dishes, using all parts of the slaughtered animal.

*Salma.* Salma or kespe is a Kazakh national dish. For its preparation, the meat of beef or mutton is cut into small pieces, the bones are chopped. Then everything is put into a cauldron, poured with cold water and cooked until readiness, removing the foam. Non-fermented dough is cut into thin strips, lowered into sorpa and brought to readiness. If desired, add onions and spices. It is loved both in the city and in the village.



*Tuzdyk.* This is a sauce that Kazakhs eat with meat or fish. For its preparation, onions are cut into rings, poured with a fatty sorpa, salted, black pepper is added, if desired, and brought to a boil. Tuzdyk improves the taste of food. It is served both separately and in the food.



*Shyzh-myzh.* Kazakhs cook shyzh-myzh of the kidneys of slaughtered for sogym horse. To prepare this dish, the kidneys are wrapped with a thin layer of internal fat, fried on fire and immediately eaten.



The people have an expression: «It is better to have one shyzh-myzh than one thousand siz-biz (a respectful address of «You»)». This means that it is better to cover the dastarkhan once for a guest than a thousand times address him/her with respect. Treat – dam tatyssu – the beginning of a good relationship, a sign of friendship, an ancient tradition of Kazakhs.

*Karyn bortpe* (boiled in tripe). National meat dish, made in tripe. Fresh meat is cut into pieces, the bones are chopped. Then it is salted, peppered, added with onions and tightly put in cleaned turned out tripe. The opening is tightly tied, and in this form it is boiled in cauldron in salted water. The meat cooked in this way tastes special, not like ordinary boiled meat. Aromatic, juicy and very soft.



*Kara ala shyzhyk.* Fresh meat is cut into small pieces and fried in a pan with the addition of a small amount of fat. The prepared dish turns dark brown in color, in people it is called «kara ala shyzhyk» (kara-black, ala-pockmarked, shyzhyk – crispy crust after frying fatty part of peritoneum, fatty tail).



*Koidy uitip soyu.* The carcass of a slaughtered animal without the head is completely singed. This method exists from time immemorial. For these purposes, a young fat ram is usually chosen of white or gray color. Then the carcass is cut with the skin and boiled. The meat acquires an excellent taste. At large toys (events), such meat is not served often. The dishes prepared of it, emphasize the solemnity of the event, the wealth of the dastarkhan, the delicate taste of the hosts. Also, the meat of a foal, a bull-calf and heifer is prepared. This is a very original recipe.



*Burme.* A way of keeping meat fresh. Late in autumn, cattle are slaughtered in order to save hay and to avoid mortality. Fresh or pre-salted meat of carcass whole or cut is laid in a skin, which is carefully sewn so that the air does not enter. Meat preserved in this way remains fresh throughout the winter. Opening burme is a special event. Neighbors congratulate the hosts and enjoy fresh meat.



*Kombe.* Steppe Kazakhs, who have long been accustomed to the harsh conditions of a nomadic life, can do without utensils in order to cook their own delicious food. This method is called kombe, and in some places – shirkazan (earthy cauldron).



For this, a small pit is excavated, in which a fire is started. The pit is warmed from all sides well. After removing the ashes, the meat of a cut young lamb in its own tripe is placed in the hot pit. The tripe is tied with inserting a reed straw for exit of the steam, and lowered into the pit, filling hot sand so that the straw comes out. A fire is built on the top of the sand. After the steam comes out of the straw, they stop supporting the fire. 2–3 hours later you can eat meat. Prepared in its own juice in nature, it has an excellent taste.

Another kind of kombe is called koy kombe. Without removing the skin of a ram, it is eviscerated, the fatty tail is cut and, after salting, the skin is stitched. Then the carcass is smeared with a thick layer of clay, lowered into a hot pit, and the fire is built above. After 2–3 hours the meat is ready.

Sometimes meat is separated from bones, salt and onions are added to taste. This method is called zhauzhumyr. Kombe can also be prepared of wild animal meat.

*Zhaubuirek* are kidneys, Kazakh national, peculiar food. After salburyn (traditional hunting on quiet winter days) or successful solitary hunting, hunters prepare food from the kidneys and liver of the argali, saiga, or mountain goat. They are put on skewers and fried on fire, filling with wild onions. Zhaubuirek is also cooked in the villages, when small cattle are slaughtered. However, this dish has recently been rarely cooked.

*Kimay*. The fattiest casing of beef legs and entrails is cleaned and stuffed with meat, onions and pepper. Both ends are tied with a thread. Outwardly, kimay is similar to shuzhyk; however, this is a separate meat dish, which has its own unique taste.

*Borsha*. Meat of beef cattle is cut into thin oblong pieces (borsha are cuts on meat). Having been salted and peppered to taste, it is put on a skewer, then fried in hot coals, turning over for uniform roasting. The ready-made dish has excellent taste and a wonderful smell, very suitable during the kumis season.

*Buzhy (buzhygy)*. People call this dish differently: buzhy, buzhygy, karyn bortpe. For its preparation, meat, fat, liver, heart, lungs of small animals are cut into pieces, onions, salt and flour are added. Everything is mixed well and this mass is stuffed into the stomach and boiled. The dish has an excellent taste.

*Assip*. Finely chopped fatty tail fat, lungs, liver, kidneys and flesh are mixed with rice, onions, salt and stuffed into the stomach or in the casings and boiled. The meat and sorpa are very delicious.



*Tuimesh*. To preserve meat, it is cut, salted and dried. Sometimes a dried piece of meat is tenderized with a wooden hammer, and then salted. Such meat is called tuimesh (tuyu-tenderize). Tuimesh is quickly cooked; it is very tasty and appetizing.



*Ton may* is hardened fat, remelted internal fat, on which boursaks or other flour products are fried. Ton may is kept very long. When fat is remelted, thin crispy crusts – shuzhyk (fried out pieces) are obtained, which are added to kozhe for flavoring.



*Heldeme (saddle of mutton)*. Saddle of a lamb, 2 tablespoons of melted fat, 2 cucumbers, 2 tomatoes, salt, greens, pepper - to taste. For a side dish: 1 drinking bowl of rice, 2 teaspoons of butter, a pinch of salt. The himbar bone is excised from the carcass of a young lamb along the spine without cutting into 2 halves. The flank is cut, rubbed with salt and pepper and fried in fat in an oven. The cooked meat is cut from the vertebrae into slices,

decorated with tomatoes, cucumbers, sprinkled with herbs. Crumbly rice is served for the garnish.



*Kuiryk-baur (liver with fatty tail fat).* Fatty tail fat is cut into large pieces, put in a saucepan, poured with cold water. It is given a quick boil and simmered for 15 minutes. Then the liver is put, salt and pepper are added, and cooked until ready. After that the liver and fat are cooled and sliced. For each slice of the liver put a piece of fatty tail fat on. Garnish – tomatoes, cucumbers, peas and onions. Serve after sprinkling with herbs.

Liver – 145, fatty tail fat – 50, green peas – 25, pickled cucumbers – 30, tomatoes – 30, bunch onions – 10, pepper – 0,05, greens.



*Turli yetter.* Cold fried meat and chicken, boiled tongue and kazy (sausage) or smoked mutton are cut into thin slices, put on a dish and garnished with sauerkraut, prepared as follows: put minced bulb onion into squashed sauerkraut, add sliced apples, raisins, mix everything and season with vegetable oil, sugar, salt and pepper.

Beef – 60, tongue without neck hole – 55, kazy (horsemeat sausage) or smoked mutton – 35, chicken – 55, animal mixed fat – 5, sauerkraut – 70, soured apples or carrots – 20, raisins or dried fruits – 20, onions – 15, sugar – 5, cottonseed oil – 15, pepper – 5.



*Kabyrga with garnish.* Remove the costal bones from the sheep's brisket so that the ends of them remain. After that, slightly beat the brisket off, salt, sprinkle with pepper, finely chopped garlic and wrap it in the form of a roll, without closing the ends of the ribs; then tie up, fry and simmer until done.



When served, kabyrga is cut into 1–2 pieces per helping. Serve vegetables and cabbage salad for garnish. Mutton – 160 g, pickled cucumbers – 50 g, tomatoes – 30 g, fresh cabbage – 30 g, onions – 10 g, carrots – 10 g, cottonseed oil – 5 g, sugar – 1,5 g, vinegar 3 % – 5 g, garlic – 0,1 g, pepper, greens. In traditional Kazakh cuisine, cold dishes and snacks are served as a supplement to hot meat, flour or fish dishes. In the modern Kazakh cuisine, the assortment of cold dishes and snacks is very diverse – from vegetable, fish and meat salads to various cured, smoked and boiled meat, fish and by-products. The most favorite were and are dishes of horse meat: kazy, shuzhuk, zhaya, zhal, karta, etc.

Delicacies of horse meat (shuzhuk, zhaya, zhal, karta, sur-yet (jerked meat), Isayk fish assortment, Shalgam salad (of radish), aspik pike-perch, jellied fish, and horse meat delicacies.

*Kazy.* Kazy traditionally includes a chest-ribbed part, where the horse generates abundant fat deposits up to 5 centimeters thick. Classical kazy is made right with ribs: 24 ribs – 24 kazy from one horse. When the Kazakhs want to serve kazy as a sliced cold snack, the bone from the hot product is



taken out. By the way, this is the method the readiness of the delicacy is checked when cooking. In urban bazaars and at delicatessen shops, as a rule, there is a bit refined kazy, that is, without a bone. In most cases, this does not mean that the delicacy is not real or improperly cooked, just townspeople prefer kazy precisely as a snack, and it is more convenient for them to purchase a product without a rib. In Mangystau and Atyrau regions, the so-called kazy-assortment is also prepared: in addition to horse meat, fresh sturgeon strips are added to the delicacy.



5 kg of kazy, 350 g of salt, 10 g of black ground pepper, 1 bulb of garlic – at your discretion.

Cut the ribs with meat from the carcass of the slaughtered horse and allow the blood to drain for 5–7 hours. The casings are well washed and kept in salted water for 1–2 hours. Slightly dried up kazy should be cut in strips along the ribs. Cut the intercostal tissue with a sharp knife, removing the cartilages and not crumbling the fat. Prepared meat is salted, peppered, if desired, finely chopped garlic is added and wrapped in canvas for 2–3 hours. After that, the meat is put in the casings, the ends of which are tied up. Ready kazy can be cured or smoked. It can be used only in cooked form. It is better to cure the kazy in warm weather, hang it for a week in a sunny, ventilated place.

It is recommended to smoke kazy with thick smoke at a temperature of 50 °C–60 °C for 12–18 hours, dry for 4–6 hours at 12 °C.

It is required to cook kazy for at least 2 hours in a wide bowl on a low heat. To prevent the kazy from bursting during cooking, it should be pierced in several places. Cooked kazy is cut not thicker than 1 cm, stacked on a large dish, decorated with rings of onions and greens.

*Zhaya* is smoked fat from the undercrest part of neck. It is zhaya for which the most valuable cuts of horse meat in the area of croup and the muscles of the upper thigh with a 5–6 cm thick fat used. It is customary to give zhaya to the most honorable and respected guests.

5 kg of zhaya, 125 g of salt. For cooking, use the hip part of horsemeat. Remove the upper muscle layer with fat not more than 10 cm thick. Pieces of meat are salted by dry salting, put into a pan for salting out. Salted meat is dried, cured, smoked and cooked as zhal. Before serving, it is thinly sliced and decorated with greens.

*Zhal* is oblong deposition of fat in the undercrest part of the horse's neck. It is cut with a thin layer of meat, rubbed with a dry salting mixture and laid in a pan for salting. The salted zhal is dried for 10 hours. Zhal can be cured and smoked.

5 kg of zhal, 125 g of salt. Before cooking, the zhal is soaked in cold water, cooked at low heat for at least 2 hours.

Serve on the table in hot or cold form, cutting into slices. Decorate with onion rings.

*Karta*. An exquisite national delicacy of karta is prepared from a nondefatted rectum in the thick intestine. As experts say, the main thing is to wash it well, and then you can use it fresh when making meat in Kazakh style or smoked and boiled, as a cold snack.



1 karta, salt, green pepper or dill – to taste. The thick part of the rectum is well washed without removing the fat, then gently turned inside out so that the fat is inside, washed again and tied at both ends. The karta can also be boiled and smoked.

For jerking, karta is sprinkled with fine salt and kept in a cool place for 1–3 days, then dried. Smoke for at least 24 hours, and then dry for 2–3 days.

Karta is cooked for at least 2 hours on low heat, previously washed well. Before serving, cut into rings, decorate with green pepper or dill.

*Au-yei* (jerked meat) is made of shoulder with an under-shoulder rim.



5 kg of horse meat, 200 g of salt. Flesh of horse meat is released from tendons, cartilages and fat and cut into pieces of a rectangular shape weighing 0,5–1 kg and salted. It is kept in a cool place for 5–7 days.

Then it is dried for 10–12 hours. Sur-yet is smoked like zhal and zhaya. It used in cooked form. Before cooking, soak in cold water, cook until ready for at least 2 hours over low heat. Before serving, thinly cut, and decorate with onion rings and greens.

*Bastyрма.* 800 grams of mutton, 4 onions, 6–7 tomatoes, 5–6 cucumbers, spring onions, salt, pepper – to taste. For marinade: 6 tablespoons of 3 % vinegar. Flesh of mutton (brisket or ham) is cut into 5-6 large pieces per helping, lightly beated, sprinkled with salt, pepper. Add chopped onions, pour with vinegar and keep in the cold for 3–4 hours. Meat is strung on skewers and fried over hot charcoal, from time to time, sprinkled with fat. Serve with cucumbers, tomatoes and sprinkle with greens.



*Tostik (brisket).* Mutton brisket, 2 onions, 2 tomatoes, 2 cucumbers, 0,5 bowl of pickled cabbages, salt and pepper to taste. A fleshy wide trimming is removed from the mutton brisket and cut along in 2 halves, put on skewers and fried over hot coals.

In the process of frying, it is poured with a saline solution. Fried brisket is taken off and cut into small pieces. For garnish, they use fresh vegetables and pickled cabbages. If the mutton is old, then before roasting it is recommended to boil it to half-cooked.

*Stewed mutton.* 800 g of mutton, 2 tablespoons of melted butter, 1 carrot, 2 onions, 1 tablespoon of mashed tomatoes, greens, salt, spices – to taste. For side dish: 500 g of potatoes, 300 g of boiled peas. The meat is cut

into small pieces and fried in the heated fat together with onions, carrots, mashed tomatoes. Then add some broth, spices and stew till readiness. The prepared meat is salted and sprinkled with greens. Serve boiled potatoes and peas for a side dish.

*Salma.* For sorpa (broth): 1 kg of mutton or beef meat with bones, 2 onions, 1 carrot, 25 g of fat for frying onions, salt, spices, greens – to taste.

For salma: 1 drinking bowl of flour, 2 eggs, 50 g of water or broth, a pinch of salt.

Knead dough of flour, eggs, and salted water. Roll it out in a patty and cut into squares of 20 cm. Salma is boiled in broth, adding cut onions, salt and laurel leaf.

Sprinkle with greens when serving.

*Sorpa with fatty tail fat.* 500 g of mutton flesh, 100 g of fatty tail fat, 1 drinking bowl of corn or wheat flour, 4–5 potatoes, 2 onions, parsley leaves, salt and pepper – to taste.

Mutton flesh is cut into pieces of 25–30 g, poured with cold water and cooked for 25–30 minutes. Salt and pepper are added. Continuously stirring the broth, sifted flour, fried fatty tail fat, cut potatoes and onions are added.

Bring to the readiness. Before serving, the sorpa is poured into big kesse (bowl) and sprinkled with parsley leaves.



*Meat kespe.* For the broth: 1 kg of mutton or beef, 2 carrots, 1 onion, 2 laurel leaves, 2 tablespoons of warm fat, 0,5 bowl of kатык, dill, salt and pepper – to taste.



For noodles: 1 bowl of flour, 2 eggs, 50 g of water, a pinch of salt.



The mutton is cut into pieces of 40–50 g, rinsed, poured with cold water and put on fire. After boiling, the foam is removed, and the meat is simmered for 1–1,5 hour. During the time the meat is boiling, dough is prepared. Eggs and salted water are added to the sifted flour, everything is thoroughly mixed. The dough shall be proofed for 30–40 minutes, and then thinly rolled, slightly dried and shredded. 20 minutes before readiness, the shredded noodles, slightly fried onions and carrots are put into the broth, and everything is brought to the readiness.

Before serving, the noodles are poured into deep plates or bowls, if desired, poured with katyk and sprinkled with greens.

*Zhuta.* For stuffing: 1 kg of carrots or pumpkin, 100 g of butter, sugar – to taste. For dough: 500 g of flour, 1 bowl of water, 1 tea spoon of salt. For oiling kaskan – 2 tablespoons of oil.

The carrots or pumpkin are finely shredded, slightly stewed in butter. Give time to get cold, at option sprinkle with sugar. The dough is rolled out into a big thin sheet. The stuffing is put on the dough, rolled, the edges are pinched together. The dough with the stuffing is put on the grates of the kaskan and cook on steam for 25–30 minutes.

*Orama.* For stuffing: 1 kg of mutton, 4 onions, 100 g of fatty tail fat, 1 teaspoon of black ground pepper, salt – to taste. For dough: 500 g of flour, 1 bowl of water or broth, 1 teaspoon of salt. For oiling kaskan – 2 tablespoons of oil.



The dough and stuffing are made as for manty with meat. The dough is rolled out in a big thin sheet of not less than 50 cm in diameter, cut across in 2 or 3 parts and, having put the stuffing on it, the edges are pinched. The obtained peculiar rolls are put one by one on the grating of the kaskan and steamed for 40–45 minutes.

The prepared orama is cut into big pieces and served with the broth or a sauce.

*Stuffed zhauryn baglana (lamb shoulder).* Lamb shoulder, for cutlet paste: 100 g of mutton, 250 g of wheat bread, 0,5 bowl of water, 2–3 onions,

2–3 carrots, 1 thin slice of pumpkin, 1 radish, 1 tablespoon of butter, 3 tomatoes, 3 cucumbers, parsley leaves, salt, pepper to taste.

Make two cuts on the shoulder of a young lamb from inside and unroll the flesh to both sides. Beat a little, put a layer of the cutlet paste and mixed vegetables (onions, browned carrots, peeled and cut in cubes pumpkin, blanched radish). Everything is sprinkled with melted butter, spices, and then rolled, tied up with a twine and baked in the oven till readiness. During the frying, the extracted juice is poured on.

*Lagman.* For dough: 1 kg of flour, 2 eggs, 1 teaspoon of salt, 1 bowl of water. For tuzduk: 500 g of meat, 300 g of fatty tail fat or stewing fat, 300 g of cabbages, 3–4 onions, 3–4 potatoes, 1–2 carrots, 3–4 tomatoes, 5–6 cloves of garlic, 2 sweet peppers, salt and pepper – to taste.



The made dough is rolled out thinly, rolled up and shredded by 4–5 mm thick. It is cooked in boiling salty water, taken out, rinsed in cold water which is then made flow down.

For the gravy, meat and fatty tail fat is finely sliced, potatoes is cut in cubes, carrots, radish, cabbages and sweet pepper are shredded, onions are cut in circles, tomatoes in segments, the garlic is chopped up.

Brown the onions in the melted fat, put the meat and fry until juice is extracted.

Add garlic, potatoes, tomatoes, sweet peppers and carrots. Everything is thoroughly mixed and fried till half-ready. Pour with water, add salt, pepper, radish and cabbages and coddle till complete readiness.

*Sozha lagman.* For dough: 1 kg of flour, 2 eggs, 1 teaspoon of salt, 0,5 teaspoon of soda, 1 drinking bowl of water, 1 drinking bowl of oil for oiling.

For tuzduk: 500 g of meat, 300 g of cabbages, 3–4 onions, 2 eggplants, 2–3 sweet peppers, 2–3 tomatoes, 1 head of garlic. Laurel leaf, salt, pepper – to taste.

For omelette: 3 eggs, 1 tablespoon of milk, a pinch of salt.





The dough is kneaded of medium toughness, rolled in a ball, covered with a napkin and left for 1 hour.

After that the dough is moistened with a salt and soda solution (1 teaspoon of salt and 0,5 teaspoon of soda per 0,5 drinking bowl of warm water).

The dough is well pressed and kneaded in order to make the solution absorbed in it.

Then the dough is divided into small even pieces in the size of a walnut, which is then rolled out in strips in the size of a pencil.

The strips are thoroughly greased with oil, put on a board, and then each of them is stretched in a longer and thinner one.

For this, a short strip is taken at both ends and by beating it with the middle at the table, is stretched up to 1 m. After that it is doubled and all operation is repeated for the second time.

Having stretched the noodles up to the form of vermicelli, they are boiled in salty water and rinsed with cold one.

The gravy is cooked in the same way as in the previous recipe, but thinner.

Before serving, lagman is parboiled, put in bowls, poured with the gravy, and sprinkled with the cut omelette on the top.

*Pilau in the Kazakh style.* 600 g of mutton, 3 tablespoons of melted fat, 3 bulbs of onions, 5–6 big carrots, 1 bowl of rice, 1 bowl of dried apricots or apples, salt and pepper – to taste.

Onions cut in circles are put in well heated in the cauldron fat and fried till getting gold yellow color.

Cut in big pieces meat together with the onions are fried till the appearance of a brownish crust. Then shredded carrots, salt and pepper are added and everything is fried till the half-readiness.

Cover the contents of the cauldron with thoroughly rinsed rice.



Everything is poured with the water in the proportion: 1 helping of rice – 1,5 helping of water. The pilau is brought to boiling, piercing it in several places in order to make the fat better absorbed. Finely cut dried apricots or dried apples are put on the top and the pilau is simmered without stirring for an hour.

The cauldron with the cooked pilau is wrapped up and left to stand for about 10–15 minutes. After that the pilau is well mixed and served, having been put on a dish.

## 2.2 Dairy and cultured milk foods

Milk is given by milk domestic animals – mares, female camels, ewes, she-goats and cows. Foods prepared of milk are called «ak» – white.

Milk contains all required for organism food substances – fats, proteins, carbohydrates, mineral salts, vitamins. The traditional cuisine rather seldom used it raw. It mainly served for making various cultured milk foods. Mild fermentation is also provided for in certain milk and cereal dishes. As for crops, Kazakh cuisine prefers wheat and millet. The unique technology of preparation of dairy and cereal dishes provides their unique taste and original assortment, not found in the cuisines of other peoples.

Milk is not poured away, not stepped over; a wedding caravan is met with dairy products; milk, poured before the fire, prevents the spread of conflagration – all these rites indicate that dairy dishes occupy a significant place in the Kazakh national cuisine. Since ancient Kazakhs have used dairy products for treatment purposes. Sick people have been given milk, kumis, shubat, tossap – a mixture of ewe's milk with May honey. In a word, milk is the basis of a rich Kazakh dastarkhan.

*Sut (milk).* The Kazakh cuisine uses cow, ewe, mare, female camel and goat milk.

Milk is used for making sour cream, cream and butter. They get kefir, balyk, cottage cheese, curdled milk and whey from milk using fermentation starter. Cow, ewe and goat milk is used for making curdled milk, beating up

butter, preparing other dairy products. Kumis is obtained from mare's milk, and shubat is from camel's milk.



*Uyz (colostrum)*. This is the thick milk of a fresh calved cow. Kazakhs divided colostrum into three types: kara uyz – black colostrum (milk immediately after calving); sary uyz – (milk obtained after feeding the offspring); ak uyz – white colostrum (milk received the day after calving).

Yellow colostrum, mixed with milk, is poured into the stomach or gut and cooked with meat. White colostrum is collected in a bucket, boiled like milk, and drunk.

During the period of mass brood of animals, colostrum was one of the favorite products of the Kazakhs.

*Kymyz*. Kumis is a Kazakh national drink used by the people for several centuries. It is not only nutritious and very useful, but also personifies the wealth and generosity of the people. There are many ways to prepare kumis, associated with the customs and traditions of Kazakhs. In the spring, freshly mowed milk (saumal) is placed in a bottle of camel, foal or goat leather, where a special fermentation starter is added. In 2–3 days kumis is ready. By tradition, the first kumis is served to guests who bless the owners of the house. This<sup>1</sup> traditional rite is called kymyz muryndyk. By methods of preparation, quality, and maturity, kumis is divided into several types.



*Uyz kymyz* is a thick, sour kumis of the first milking. *Bal kymyz* is well-beaten kumis with the addition of jerky kazy. In

comparison with other types, it is thicker, has a yellowish color, a subtle sweetish taste, and is easily perceived by the body.

*Tay kymyz* is kumis of one-day sour.

*Kunan kymyz* is two-three-day, cured, fermented kumis.

*Donen kymyz* is three or four days, strong kumis.

*Besti kymyz* is four or five days, completely fermented kumis.

*Sary kymyz (yellow)* is prepared in the autumn. This is a healing, strong kumis.

*Kysyrdyn kymyzy* is kumis of mare milk, beaten up in the winter.

*Kyssyraktyn kymyzy* is kumis of a mare of the first pregnancy, very calorific.

*Tunemel kymyz* is fermented kumis with saumal added (fresh milk).

*Korabaly kymyz* is kumis that is stored for several days with the addition of fresh mare's milk.

The production of kumis requires special attention, particular utensils, otherwise kumis loses its properties. Such kumis is called «ainymal», «ainyngan» or «tatyp ketken», «tatymal» (with an after taste). Preparing the starter for kumis is a laborious affair. It is cooked in dishes made of the skin of cattle, which is smoked with juniper, spirea, birch bark and oiled. Dishes made of large-sized leathers are called saba, the smaller ones are mes, torsyk. They put smoked kazy in kumis and whip for a long time. After this it becomes stronger and less sour. Such kumis is called «oltirilgen kymyz» and its quality is very good.

Kumis is a drink, food, medicine, and support for the soul.

Dishes for kumis should be separate: kymyz shara (shara – bowl), kymyz ayak (drinking bowl), kymyz ozhau (small scoop). At the end of the milking season, the inhabitants of the village are invited to the last kumis and bless the hosts. This beautiful folk tradition is called «sirge zhiyar» (the last kumis).

*Shubat*. Among the dairy products, the most valuable after kumis is shubat, which is made of camel milk. Like kumis, shubat is fermented and stored in special dishes made of leather, wood or ceramics.





The only thing is that shubat is not whipped, but brought to the desired condition by mixing. It is a delicious, fatty and thick drink, not inferior to kumis by its calories and healing properties. 2–3 day old shubat is considered the best and of the highest quality.

When you add cow or sheep's milk to the camel one, you get katyk, and when you add suzbe (thick sour cottage cheese) or kurt, you get yezhigey (tender kurt).

In different regions of Kazakhstan, shubat is called in different ways: in Central and Western Kazakhstan – shubat, in Southern Kazakhstan – kymyran, in East Kazakhstan – tuye kymyz (camel kumis).

*Kurt* is cooked of boiling ewe, goat and cow's milk, fermented with airan. In the south of Kazakhstan, kurt is made of mare's milk.

Sour milk is boiled on low heat, with stirring constantly, until the mass thickens. The cooled mass is placed in a canvas bag and suspended to drain the liquid. Soft kurt is added with salt to taste. They make small lumps of it and stack them for drying on wooden boards.



To prepare kurt, sour milk is poured into a wooden barrel for a few days (kespek). Then irkit (curd cottage cheese of sour milk) is poured into a large cauldron, put on fire and continuously stirred until it thickens. After cooling, it is transferred to a clean linen bag to drain excess liquid. The received paste is used for making small balls which are dried on pure sheets (shypta or ore).

Kazakhs eat only dry kurt, because according to the folk saying, if you eat wet kurt, it may rain. Kurt is a national, very substantial product that can be stored for a long time. As a rule, it is preserved for the winter.

*Kurt kozhe*. The ancestors of the Kazakhs called kurt kozhe «winter kumis». To make this drink, put rice or millet in boiling water, add salt to taste. In another vessel, in a small amount of water, stir 1–2 cups of flour to a uniform paste. This paste is gradually poured into boiling water with rice or millet. Kozhe is obtained. Kurt is dissolved in cold water and added to kozhe. The amount of kurt is taken depending on the amount of water.



Especially delicious is a drink with the addition of kurt of ewe's milk. Unfortunately, these days, there is almost no such kurt. The prepared kurt kozhe is added with butter and shyzhyk (cracklings of internal fat) to taste. Then the dish is brought to the readiness, poured into bowl and served on the table. Kurt kozhe can be added to the broth. It is a very nutritious drink that restores strength and has healing properties.

*Nauryz kozhe is the main dish of festive family table*. Nauryz is a holiday of spring. Since ancient times, it has been known as the main holiday among the Turkic peoples. It is a holiday of life, renewal and awakening of nature. The tradition of Nauryz includes festivals, carnivals, sports, games, and songs. On this day people should be friendly and hospitable. Since ancient times Nauryz has been celebrated all over the community together. The matter is that after the movements, often at this time, the families gathered together, again met with each other after the winter, and therefore the holiday had a special significance, where the whole community, all the members of the family or the kin could come together. From the earliest times, in the celebration of Nauryz, great importance has been given to a rich table. It was believed that the richer the Nauryz table, the more successfully it would be the whole year. The main decoration of the festive table is Nauryz-kozhe.



Nauryz kozhe includes: water, meat, salt, fat, flour, cereals and milk. These components symbolize happiness, luck, wisdom, health, wealth, rapid growth, patronage of the sky. It is believed that on the first day of Nauryz,



you must definitely taste this dish to spend the whole year in prosperity and satiety.

The most popular recipe is when it includes meat (horse meat and mutton), karta, shuzhuk, kazy, zhal, zhay, sur yet, mutton liver, mutton kidneys, water – 6 glasses. Milk part includes ewe milk and cow milk, airan, kumis, suzbe, kurt, butter, and cereal and vegetable part, contains of millet – 1 cup, wheat or rice – 1/2 cup, onion – 4 pieces, garlic – 1 head, chilli pepper – 1/4 pieces, water – 2 cups for millet and 1 glass for wheat.

*Yezhigey* is a kind of kurt of red-brown color, tender, with sourish taste. Now it is rarely done. It is also prepared as kurt. It is served to the guests along with sour cream and butter.

*Irimshik (cottage cheese)*. Or dried cottage cheese is a dairy product that has occupied its honorable place for a thousand years on the dastarkhan. Irimshik, prepared of ewe or goat milk, has a special taste and does not harden with prolonged storage. To prepare irimshik, use an enzyme produced by the pancreas of the lamb (abomasum), which is stored specifically for this purpose in salt form.



It is made of fresh or warmed cow, ewe or goat milk, where the abomasum is dropped to coagulate it. Then the abomasum is taken out, and the sour milk is boiled on low heat until the cottage cheese is completely separated from the whey. The ready product has an orange color. It is decanted from the whey, dried in a bag in the wind, then in the sun.

Irimshik can be stored for a long time, and can also be used without drying, immediately after straining.

There are two types of irimshik: ak (white) and kyzyl (red). Ak irimshik is made of fresh cottage cheese where butter is added. It is usually given to small children and elderly people. It is very calorific, cannot be kept for a long time and eaten immediately after cooking. Kyzyl irimshik is cooked for a long time, until a reddish color has been obtained. Then it is put into a linen bag and dried in the sun. It is usually cooked in the summer and eaten with butter or sour cream. It is stored for a long time and does not lose its taste qualities.

*Sarysu* (sary – yellow, su – water) – whey of yellowish color, remaining after the production of cottage cheese. Sarysu is added with sugar to taste and boiled until a thick reddish paste is obtained, which is transferred to a flat dish for cooling. The resulting solid mass is cut into pieces of different shapes. Sarysu is also called «Kazakh chocolate». Sarysu has laxative properties, so it is used in small amounts with tea. Now it is almost not cooked.

*Aklak* is a white cottage cheese made of ewe milk. Milk is boiled and allowed to curdle, then removed from the cauldron with a colander, May butter is added and mixed well. Aklak is given to children, the elderly, and also to people with a weakened organism (belkoterer) and to women in childbirth (kalzha). It is treated to new neighbors – «yerullk». Aklak is usually prepared in cattle-breeding villages.

*Uyz* is colostrum, the first milk after lambing. According to Kazakh customs, newborn children and the offspring of animals should try uyz to be stronger and more enduring. Those who have not tried colostrum are called «Uyzyna zharymagan» (not sated of colostrum).



Two-three-day sweet colostrum is used for preparation of uyz kozhe. To do this, add rice or millet and cook on low heat. Guests are invited to the kozhe, who, after a meal, give bata (blessing) to the hosts. When the hosts milk a lot of colostrum, they cook meat and along with it in a flat bowl they serve boiled and chopped casings, filled with colostrum.

*Uyzkaganak*. During the lambing of sheep, shepherds always carry a bucket and a buyen (specially dried large intestine, used instead of dishes). Shepherds milk a ewe and the colostrum is placed in the buyen, which is solidly tied and boiled in water, poured into a bucket. The resulting dish is called uyzkaganak.

*Koryktyk*. This dish is also called «taskoryk». In the hot summer days, when the stones are heated in the sun, the shepherds find a stone with a groove and boil milked ewe milk in it.



*Katyk.* For its preparation, ewe, cow or goat milk is boiled for a long time on a slow fire and cooled to a warm condition. Ferment is introduced, the milk is mixed and kept for 2–3 hours in a warm place. This is a delicious and thick dish. Such a katyk is called «dirildek» (trembling) or «menireu katyk» (dumb).



*Airan.* Airan is prepared both of fat-free, and of fat cow, ewe, goat and mare's milk. The milk is boiled and cooled to a warm state, added with ferment, shaken and allowed to stand for 2–3 hours. Airan can not be stored for more than a day, since it loses its useful properties.



Earlier, adults after the first thunder would send children to collect wild onions. After washing and grinding it, it was added to airan, which became even more useful.

*Suzbe* is prepared of fermented airan, poured into a canvas bag for decanting the liquid. Some salt to taste can be added to the decanted cottage cheese.

Suzbe can be added to broth or milk and drank like airan.



*Cuzbe* (to decant) is a kind of cottage cheese. For its production, the acidic airan is kept for a while, and then it is poured into a linen bag and suspended. When the liquid drains, a thick mass remains in the bag, which is salted to taste and thoroughly mixed. Usually suzbe is prepared in autumn or winter. The bitter-sour taste of suzbe evokes appetite. Suzbe is added to sorpa, which gives it a piquant taste. To quench thirst, the suzbe is placed in milk or boiled water.

*Sary may* (butter) is prepared of ewe, cow and goat milk. Usually, the butter is obtained from sour cream, churning it.

However, in some areas, butter is made of a warm fermented airan, which is also subjected to prolonged churning.

The heated airan is poured into a large container to make it easier to assemble the pieces of the floating butter. The remaining liquid can be drunk or used to make kurt.





No Kazakh dastarkhan can do without this valuable high-calorie product. For the preparation of butter, first, by separating milk, sour cream is obtained, which is beaten (may shaikau) in a large bowl. Prepared butter is cleaned (kylshyktaidy) repeatedly cutting it with the blunt side of a knife. At the same time, the villi caught in the butter stick to the knife. Especially appreciated is the May butter for its color, taste and unique smell. The butter is salted to taste; the water is drained and stored in a specially treated rumen (karyn) of animals. Karyn is filled with butter, leaving no air and water. Then the hole is tied, after which the karyn is sprinkled with salt. In summer, the butter is stored in a cool dark place. If a foreign body enters the butter, it spoils. «A whole karyn of butter is spoiled with a single pellet», says the Kazakh proverb.

When storing butter in the rumen, its quality improves. There are several types of karyn: «koy karyn» (ram's rumen), «kozy karyn» (lamb's rumen), «buzau karyn» (calf's rumen). In the absence of a rumen, excess butter is stored in the buyen (a small part of the stomach). Traditionally, the karyn is opened in especially solemn cases: at the birth of a child, during oraza, toys (fests), in honor of the honored guests, in case of the arrival of relatives. The hostess declares with special pride: «Karyn bastadym» (I opened the rumen). Karyn is an expensive gift, which is presented to relatives and friends as a sign of special recognition and love.

*Torta.* After obtaining melted butter, there is a thick mass of «torta» (rendering) on the bottom of the dishes that has an acidic peculiar taste. Torta evokes appetite, it is eaten eagerly. Guests are not treated with torta.

*Balkaimak (honey sour cream).* In Kazakh cooking, sour cream is divided into several types – raw (obtained when removing the upper fat layer of raw milk), boiled (obtained removing the upper fat layer of boiled milk).

To get balkaimak, raw sour cream is boiled on low heat until the appearance of fat. Add sugar, honey, flour, mix and cook for 8–10 minutes. Served for tea.



Bal honey, kaimak – sour cream, is a sweet dish, taking a special place on dastarkhan and considered a food for gourmets. For its preparation, fresh sour cream is boiled over low heat so that it does not turn into butter, adding

a small amount of honey and flour of the highest grade. Everything is carefully mixed. This is a rare treat.

*Tossap.* Thick ewe milk is added with honey, May butter and slowly boiled with stirring.

Tossap has healing properties and is easily absorbed by the body. Tossap is given to people with catarrhal diseases, weakened women in labor for a quick recovery.

*Ashygan kozhe.* Fermented broth – sour-milk drink. To make it, salted water is boiled in a voluminous bowl. In another dish, flour is diluted with cold water and poured into the boiling water in a thin trickle. At this, the proportions of the components are strictly observed. Ready-made mass is poured into special dishes «kubi». For fermentation, kumis and airan is added in the kozhe, which improves its taste. The kozhe has a white color.



In some places such kozhe is called «ashymal» (fermented) or «siyr kumis» (cow kumis). It has a pleasant sourish taste and quenches thirst well. You can add rice or millet in kozhe. This kozhe is called «kara kozhe» (black) and it should be well beaten before using.

*Sumessut* is a dish, the recipe of which has been preserved in the memory of only a few old men. It was prepared in advance and used in times of wars and long roamings. For children this was a kind of food, and for adults – a «nutritious chewing gum». To make sumetsut, a white fat lamb was cut, the hair of which was sheared and then singed. After that, the leather was carefully washed and kept in running water to remove odor for 2–3 days. Then the leather was boiled in a large cauldron in thick ewe milk. During the boiling the skin soaked, absorbing the milk. When the soaking process was over, the leather looked like an udder full of milk. Sumetsut was stored in the shade, laid out on a flat dish. During long travels an oblong piece of «tuttik» was given to a child. Not to allow his/her swallowing it, a thin long branch was attached to the tip. The baby sucked the tasty, thick, nourishing milk, leaving a thin skin that could be chewed like chewing gum.



*Kobik (skim)*. In the summer time, Kazakhs prepare kurt for the winter. At boiling of the filtered sour milk on a surface there is fat, sour and very pleasant on taste skim. Women use a wooden spoon to remove this skim, for children this is the greatest treat.

*Kopirshik (bubbles)*. Cow milk is boiled with the addition of kumis. When boiling it, bubbles appear and that is why it is called so. It is especially caloric both as a food and as a drink, it gives the person strength. Nowadays it is rarely prepared.

*Akirim*. White drink. Airan, katik, kumis or other fermented milk is added to a sorpa (broth) of dried meat, and carefully mixed. This mixture has a special property of quenching thirst, used as a dessert after a hearty meal. Nowadays it is often cooked in the villages, and for the townspeople it is considered a delicacy drink.

*Malta*. Not dissolved in broth, crushed remnants of kurt. The Kazakhs like malta. When the kurt is crushed and malta is prepared of it, it can no longer be put into broth for the second time. Dry malta is liked by adults and children, it is very nutritious, and if it is diluted with water, it becomes a tasty drink.

*Airan kozhe (drink)*. Crushed wheat, millet, or rice was boiled in a small amount of water, and then milk was added. Such a drink was prepared during the harvesting period, haymaking and used as a soft drink.

*Koirtpak (condensed airan)*. Cow milk or water was added in katyk, airan or kumis, and it was poured into a torsuk (a leather bag). After the long mixing, the sour taste appearing during fermentation was lost and the drink became pleasant to taste, easily digestible, easily quenching thirst.

*Airan-shalap*. Cold water was added to airan, mixed well and drunk when thirsty.



*Boza (home brew)*. Drink of re-fermented milk, airan. It was fermented with sprouted grain of millet or wheat. Irkit, airan, katyk and raw milk were poured into a barrel or a saba (animal leather dishes). The clot of these

products was used for making kurt, and the remaining serum was used to quench thirst.



*Barshyma*. A kind of airan, irkit, soured excessively due to a bad leaven or from long storage. Mostly it was used for making kurt.

*Turniyaz*. Butter, flour, crushed kurt, fried millet (tary) were added in milk and boiled. It was one of the favorite dishes of the Kazakhs in the southern regions. Sometimes the flour was fried separately and added to the ready-made drink.

200 g of millet, 2000 g of milk, 500 g of water, 50 g of flour, 150 g of butter, 1 teaspoon of salt. Diluted milk is boiled. Flour is slightly fried with butter and diluted with hot water. This mixture is poured into boiling milk, refined millet is added and cooked for 10–15 minutes on low heat until soft. Add the butter, crushed kurt, close the lid tightly and leave for 5–7 minutes for being well-stewed.

Milk and groats take a significant place in the Kazakh national cuisine.

*Zhent*. 5 drinking bowls of millet, 4 drinking bowls of irimshlk, 2 drinking bowls of sugar, 3 tablespoons of raisins, 2 drinking bowls of butter.

Millet and irimshik are mortared. The resulting paste is mixed with sugar and raisins, butter is added and cooled until it solidifies. Ready zhent is cut with a sharp heated knife.

*Kazyzhent*. 2–3 drinking bowls of millet (tary), 1,5 drinking bowls of irimshik, 2 drinking bowls of fat kazy, 3 tablespoons of sugar.

Millet, fat of kazy, and irimshik are mortared. Sugar is added, the mixture is cooled down and put under press.

*Zhanyshpa*. 1 drinking bowl of millet, 3 tablespoons of butter, 2 tablespoons of sugar, 3 tablespoons of sour cream.

Millet and butter are thoroughly rubbed with sugar, sour cream is added and mixed again. Then the whole mass is put under press. It is served in drinking bowls.

*Sutzhent.* 1 drinking bowl of millet, 1 drinking bowl of milk, 3 drinking bowls of butter, 3 tablespoons of raisins, 2 tablespoons of crushed dried bread or biscuits, 3 tablespoons of sour cream.

Washed millet is dropped into boiling milk and boiled for 5–8 minutes, then put in a colander or sieve. Then raisins, sugar, crushed dry bread or cookies, butter and sour cream are added in the millet. All this is thoroughly mixed and put under press.

*Fried wheat.* 7–8 drinking bowls of wheat, 1 drinking bowl of fatty tail fat.

Wheat is cleaned, blown through and washed with warm water. Fatty tail fat is finely cut and drowned in a hot cauldron. Cracklings are taken out; wheat is lowered into fat and roasted to a reddish color. You can use it with hot milk.

*Kurgak maisok (dry maisok).* 1 drinking bowl of millet, 2–3 tablespoons of butter (or 1 drinking bowl of fat broth).

This dish is prepared immediately before serving. Butter is put in millet and does not have time to soak the grain well, so it crunches.

You can pour the millet with hot water and allow it to swell and then put butter, in which case the taste of the dish will change slightly.

If the millet is soaked with a hot broth from kazy and let it stand for 20–25 minutes, then it will be maisok kazy.

*Millet with kurt.* 1 drinking bowl of millet, 1 drinking bowl of water, 10 pieces of fatty kurt

Fatty kurt is pounded and soaked with hot water, millet is added. Let it brew for 30–40 minutes. Then everything is mixed and served on the table.

*Talkan with butter.* 1 drinking bowl of talkan, 0,5 drinking bowl of butter.

Talkan is prepared of fried and peeled grains of millet, wheat and corn, which are mortared and then sieved. Ready talkan is carefully rubbed with butter until the butter is absorbed. Talkan can also be mixed with sour cream, milk, broth, water or raw eggs.

*Sorpa kozhe (millet soup).* 400 g of millet, 300 g of water, 1000 g of bones, 100 g of carrots, 1 tablespoon of salt. Greenery – to taste.

Washed and chopped bones are put in a saucepan, poured with cold water and cooked on a low heat for 1,5 hours. Ready meat is taken out and cut into pieces, and the broth is filtered. Put the millet and cook for 15–20 minutes. Add carrots and onions cut into small cubes and lightly fried in oil to the broth. Tightly close the lid and cook for 5–7 minutes.

Sprinkle with greens before serving.

*Sut kozhe (milk millet soup).* 450 g of millet, 3000 g of milk, 500 g of water, 50 g of butter, 1 teaspoon of salt. Washed millet is put in boiling salted milk and boiled for 1–2 minutes. Then reduce the heat and cook for 15–20 minutes. Before the end of cooking, add salt and sugar, and before serving, put butter on the table.

### 2.3 Flour foods and foods of vegetable origin

Flour products have long occupied a significant place in the Kazakh cuisine. Kazakh national flour products and sweets are prepared of the highest or first grade flour with the addition of milk, yeast, sour cream, eggs, fats, nuts, honey, sugar, water and salt. It is very important to observe the technology of preparation, the dosage of the products in the recipe, the temperature and the time of baking. All kinds of flour and sweet products are very caloric and highly digestible, so those who are inclined to fullness should eat them limitedly.



Among crops, Kazakh cooking prefers wheat and millet. The unique technology of preparation of dairy and cereal dishes provides their unique taste and original assortment, not found in the cuisines of other peoples.

A variety of flat cakes are called nan (bread) and differ in the form and type of dishes in which they are baked: Kazakh zhanpay nan (a flat cake to the size of the boiler), taba-nan (from taba frying pan).

*Taba-nan (wheat bread)* is baked of sour dough.



1 kg of flour, 2 tablespoons of yeast, 1 tablespoon of salt, 2 drinking bowls of warm water or milk.



For fermentation, yeast is bred in a small amount of warm water or milk, then 2 tablespoons of flour are added and this is put in a warm place. Once the yeast has risen, add the remaining water or milk, put the salt and start the dough. The flour is carefully screened beforehand. The ready dough is put in a large saucepan, covered with a lid, put in a warm place for lifting. As soon as the dough doubles, it is beaten and again left in a pan for lifting.

The ready dough does not sink during the beating. Depending on the volume of a frying pan, the dough is divided into large round pieces in such a way as to fill 2/3 of the pan volume. The frying pan is oiled, the dough is put and time is given to stand for 20–25 minutes. Then cover with a second frying pan and bury it in hot coals. After a while, the frying pan is removed and, without opening the lid, is turned over to the other side and again buried in coals. Baked bread has a brownish color.

In modern conditions, bread is baked in two frying pans in an oven at 200 °C–220 °C for 20–25 minutes. Ready bread can be eaten hot and cold. You can put chopped butter over the hot bread. According to the same recipe, you can prepare *taba-nan* with fatty tail fat. The prepared dough is greased with fat and pierced in several places. Put there slices of fatty tail fat and bake in the same way as *taba-nan*.

*Kazanzhappay (bread baked in a cauldron)*. 2,5 drinking bowls of flour, 1,5 tablespoons of yeast, 1,5 teaspoons of salt, 1 drinking bowl of milk or water, sour cream or butter – to taste. The dough is prepared in the same way as for *taba-nan*.

The prepared dough is rolled into a layer not more than 1 centimeter thick and spread on the inner surface of the cauldron, which is preheated well and oiled. The dough should fit closely against the walls of the cauldron, otherwise it may fall off when baking. Then the dough is laid over the entire surface, the cauldron is turned over the coals and begins to bake bread. After 25 minutes, *kazanzhappay* is ready. It is removed from the walls of the cauldron, cut into pieces of various shapes, greased with butter or sour cream to taste. *Kazanzhappay* can be baked in the oven at 200 °C. In this case, the cauldron is closed from above with a cast-iron frying pan.

*Baursak*. Kazakhs often prepare *baursaks* – pieces of sour dough boiled in fat. They are served for tea. Kazakhs joke: «In the morning we drink tea with *baursak*, in the afternoon we drink tea with *kuyrdak*, in the evening we drink tea with *beshbar-mak*».



For the dough: 3 drinking bowls of flour, 10 grams of yeast, 0,6 drinking bowl of water, 0,7 drinking bowl of milk, 2 eggs, 30 grams of margarine, 1 teaspoon of salt, 1 tablespoon of sugar.

For frying: 1–2 drinking bowls of fat.

The dough with the addition of all the ingredients is prepared by the sponge method. Ready dough is dressed into bundles, cut into pieces 3,0–3,5 cm long, given 15–20 minutes to rise and fried in hot fat.

*Shi baursak (fresh dough baursak)*. 2 drinking bowls of flour, 0,5 teaspoon of baking soda, 5 eggs, slightly more than 1 drinking bowl of water or milk, 1 teaspoon of salt.



For frying: 1–2 drinking bowls of fat. Dough is knead of flour, eggs, soda, salt and milk, thinly rolled out, cut into length and fried in hot fat.

*Domalak baursak*. For the dough: 2 drinking bowls of cottage cheese, 1 drinking bowl of flour, 3 eggs, 2 tablespoons of butter, 1 tablespoon of sugar, 1 teaspoon of salt, 1 drinking bowl of sour cream, 1 drinking bowl of powdered sugar.



For frying: 0.5 drinking bowl of fat.



Cottage cheese is wiped through a sieve, eggs, sugar, salt, flour, and melted butter are added and the dough is kneaded. It is rolled into bundles thick as a finger and cut into pieces of 20–25 g. Boil in boiling water until half-ready, tilt on a sieve and allow the water to drain. Pan in flour and fry in hot fat until golden brown.

Before serving, spread on a dish, pour with sour cream, sprinkle with powdered sugar.

*Kespe boursak.* 3 drinking bowls of flour, 1 teaspoon of yeast, 1 teaspoon of salt, 1 tablespoon of sugar, 150 grams of fatty tail fat, about 1 drinking bowl of water, 2 tablespoons of powdered sugar.

The dough is kneaded, as for *taba-nan*, only softer. Roll out and cut into strips weighing 110–155 g, rolled out as thick as a finger and twisted into strands. The ends of the bundles are joined. Peculiar propellers are fried in hot fat and sprinkled with powdered sugar.

*Shelpek.* 4–5 pialas of wheat flour, 1 drinking bowl of airan or raw milk, 2 tablespoons of melted butter, 2 tablespoons of sour cream, 20–30 g of yeast, 0,5 drinking bowl of water, 1 teaspoon of sugar, 2 cups of vegetable oil.



The dough is kneaded as for *hursaks*, cut into small pieces, rolled into flat cakes and fried in red hot fat until golden.

*Salma-nan.* For the dough: 2,5 drinking bowls of wheat flour, 0,5 drinking bowl of water, 1 egg, 1 teaspoon of salt, 4–5 tablespoons of butter.

For cooking: 4–5 drinking bowls of broth or water.



Fresh dough is allowed to proof for 15–20 minutes, then rolled into a thin layer and cut into small quadrangles. Boil them in boiling water or broth until cooked.

Before serving, pour with melted butter.

«*Damdy-nan*» flat cakes. 2 drinking bowls of flour, 1 tablespoon of yeast, 1 teaspoon of salt, 0,7 drinking bowls of warm water or milk



The dough is prepared as for *taba-nan*. Ready dough is cut into pieces, allowed to proof for 10–15 minutes. Then it is given a flat cake shape and allowed to finally proof for 10 minutes. Before putting in the oven, *noces* are made in the middle of cakes. Bake at 200 °C–220 °C for 20 minutes.

*Tandyr-nan.* 6 drinking bowls of flour, 50–60 g of dry yeast, 2 tablespoons of salt, 1,5 drinking bowl of water



The dough is prepared as for *taba-nan*, several times kneaded out. Make flat cakes of the ready-made dough and give them final 30–40 minutes to rise. After this, put a pattern on the middle of the flat cakes and bake in the oven at 200 °C–220 °C.

Previously, these flat cakes were baked in special *tandyr* furnaces.

*Belyash.* For the dough: 2,5 drinking bowls of flour, about 1 drinking bowl of milk or water, 0,5 teaspoon of yeast, 1 teaspoon of sugar, about 1 teaspoon of salt.

For meat stuffing: 600 grams of lamb or beef (duck or fish), 2 onions, 0,5 teaspoons of black ground pepper, 2 teaspoons of salt, 0,5 drinking bowl of water.

For frying: 1 drinking bowl of fat.



Ready yeast dough is well kneaded and cut into small buns, which are allowed to rise for 10–15 minutes. Then they are rolled out into flat cakes, the middle of which is stuffed. The edges of the flat cakes are wrapped. Fried in hot oil, lowering the open hole down. Belyashes are fried on both sides. When cutting belyash it is not powdered with flour, but oiled. The minced meat is prepared with milk on a large lattice of meat mincers (poultry or fish) with the addition of chopped onions, black ground pepper, salt and water.

*Kuimak (fluffy pancake).* For sour dough: 2 drinking bowls of flour, eggs, 1,5 cup of milk or water, 1 tablespoon of sugar, 0,5 teaspoon of salt, 1 tablespoon of yeast.

For unleavened dough: 2 drinking bowls of flour, 2 drinking bowls of milk, 10 eggs, 1 tablespoon of sugar, 2 tablespoons of fat, 0,5 teaspoons of salt.

For frying: 1–2 drinking bowls of fat.



Ready dough should have a liquid consistency. The dough is poured in small portions into the red-hot fat and fried on both sides. Before serving, pour with sour cream or butter, honey.

*Cheburek.* For stuffing: 400 grams of mutton, 2–3 onions, salt, ground black pepper to taste. For the dough: 3 drinking bowls of flour, 1 drinking bowl of water, 1 teaspoon of salt. For frying: 2 drinking bowls of vegetable oil.



To make stuffing, mutton and onions are minced in a meat grinder, then salted and peppered. The flour is brewed with salted hot water and not tough dough is kneaded. It is allowed to rise, cut into pieces, as for pies, rolled into a layer 2–3 mm thick. Minced stuffing is put in the middle of the patties, the edges are pinched and it is fried in a large amount of fat.

*Samsa.* For stuffing: 250 gram of mutton or beef meat, 1 teaspoon of cooking fat, 1 tablespoon of rice, 1 onion, 1 teaspoon of salt, a pinch of black ground pepper, 0,5 raw egg. For frying: 0,3 cup of vegetable oil.



Mix unleavened dough and roll it out in the form of circles. The edges are greased with a raw egg. Put minced meat and pinch the edges in the form of a crescent. Fry in fat. To make stuffing, mince meat in a meat grinder, fry in fat, and add salt, pepper, rice and brown onions.

*Samsa in tandyr.* For the dough: 1,5 drinking bowl of flour, 1 teaspoon of salt, 0,5 drinking bowl of water. For stuffing: 400 g of mutton or beef fillet, 1–2 onions, 1 teaspoon of salt, 50 grams of fatty tail fat, 1 teaspoon to grease, black ground pepper to taste. Mix the unleavened dough and give it 15–20 minutes to rise. Divide into pieces of 40–42 g and roll out flat cakes of them.

Minced meat and pieces of fatty tail fat are put in the middle of the flat cake. The dough is wrapped as an envelope. The base is sprinkled with water and stuck on the hot walls of the tandyr. Samsa is sprinkled with cold water and the tandyr is closed with a lid. Ready samsa is greased with oil. Samsa can be baked in the oven at 300 ° C for 7 minutes.

To do this, the samsa is placed on hot sheets and sprinkled with water.

*Samsa of lung and liver.* For the dough: 2 drinking bowls of flour, 2 tablespoons of butter, 0,5 drinking bowl of water, 1,5 teaspoons of salt. For



stuffing: 450 g of lungs, 170 g of liver, 2 onions, 1 pinch of black ground pepper, salt – to taste.

For the sauce: 1 teaspoon of flour, 50 g of broth. Heap the flour and put butter in the groove. Add hot saline and knead not tough unleavened dough, which is rolled into sausage and cut into pieces of 100 g weight. Roll out patties on which the prepared stuffing is laid. The dough is wrapped in a triangle, laid on sheets and baked in the oven. To prepare stuffing, lungs, liver and heart are boiled separately, passed through a meat grinder. Add the brown onions, salt, pepper and white liquid sauce, prepared of broth and flour. Offal samsa is served hot.

**Fish pie.** For the dough: 2 drinking bowls of flour, 1 tablespoon of butter or margarine, 1 teaspoon of salt, 0,5 tablespoon of yeast, 2 teaspoons of sugar, 1 drinking bowl of water. For stuffing: 420 g of fish fillet, 50 g of butter or margarine, 1 tablespoon of vegetable oil to grease the frying pan, 1 teaspoon of beaten egg to grease the pie.



Yeast-raised dough prepared with straight fermentation is rolled into a layer 1 cm thick and spread on a greased frying pan. Put rice cooked until half-ready on the dough, finely chopped fish, onions and pieces of butter or margarine on the top. Add salt, pepper and cover with another layer of rolled dough. Both layers of the dough are pinched and left in a warm place for 25–30 minutes. Bake in the oven at 220 °C. Ready cake is greased with whipped egg.

**Meat pie.** For the dough: 2 drinking bowls of flour, 2 tablespoons of butter, 0,5 drinking bowl of water, salt – to taste. For stuffing: 400 grams of mutton, beef or saiga meat, 3 cloves of garlic, 0,5 drinking bowl of rice, salt and pepper to taste, 3 tablespoons of broth, 1,5 tablespoons of fat to grease. Flour, butter and water with salt dissolved in it are mixed. The mixed dough is put under a damp cloth for 2,5–3,0 hours.

Meat for stuffing is cut into small pieces. Add garlic, washed rice, salt and pepper. On the prepared frying pan, put dough with the thickness of 6–7 mm so that its edges hang from the edges of the pan. Lay the prepared stuffing on the dough, close the top with a flat cake of the same thickness.

but smaller diameter, join the edges and pinch. Make a hole in the center of the cake that is covered with a cork of dough.

The cake is greased with fat and baked in the oven for 1,0–1,5 hours. Then the cork is pulled out, and broth is poured into the cake and again put in the oven for 30 minutes. Serve hot and cold.

**Poultry meat pie.** For the dough: 2 drinking bowls of flour, 3 tablespoons of butter, 3 tablespoons of water or broth, salt – to taste. The pie is prepared in the same way as in the previous recipe. The only exclusion that for stuffing the poultry meat flesh without bones is taken.

**Nuts with sugar.** 2 tablespoons of butter, about 0,5 drinking bowl of sugar, 1 drinking bowl of any nuts. Heat butter, add sugar, put on a slow fire. Cook until the sugar completely dissolves and thickens.

Add there crushed nuts and mix thoroughly. Transfer to a flat cup and level. The top is decorated with candies.

**Chak-chak.** For the dough: 2,5 drinking bowls of flour, 3 eggs, 1–2 tablespoons of sour cream or milk, a pinch of salt, 1 teaspoon of sugar, 2 teaspoons of butter.

For the syrup: 1 drinking bowl of honey, 2–4 tablespoons of sugar.  
For frying: 1 drinking bowl of melted butter or fat.



Eggs, sugar and butter are thoroughly rubbed. Add salt, milk or water, pour in flour and quickly knead the dough. Allow it to rise for 40 minutes, then roll into a thin layer up to 4 mm thick. Cut across strips 15 mm long and 4 mm wide. The obtained peculiar noodles are fried in boiling melted butter until golden, thrown back on a sieve, allowed to drain.

Honey is boiled with sugar until a semi-solid ball is sampled (a drop of honey, put into the water, does not dissolve, but solidifies in the form of a ball). Lower the chak-chak into the cooked syrup, mix everything well and put it into plates greased with oil, giving the dish a shape of a slide.

Chak-chak can be decorated with walnut kernels or lollipops.



### 3 Traditional dishes of Central Asia

#### 3.1 Uzbek and Tajik cuisines

When getting acquainted with the national cuisine of Uzbeks and Tajiks, very soon you pay attention not only to the frequent coincidence of the names of many dishes, but also to something more significant – the coincidence of the overwhelming majority of the principles in the selection of products and technology of cooking.

Of course, it is impossible to explain the reason for such similarity only by the similarity of natural conditions. The similar food raw material that the peoples of Central Asia have, of course, largely determines the originality of their cuisines, the selection of combinations of food products, but can not by itself lead to the coincidence of the principles and methods of cooking, to the use of the same kitchen appliances.

The reason for the similarity of Uzbek and Tajik cuisines is undoubtedly connected with the close intertwining of the historical destinies of these two peoples.

Even in the IV–VII centuries, there were two groups of peoples in Central Asia – some of them were descendants of the ancient population of agricultural oases, others – alien nomadic cattle-breeders.

Tajiks are descendants of the most ancient Iranian-speaking local population that existed on the territory of Tajikistan for many centuries A.D. They received their current name after the Arab conquest in the VIII century. Already in the X century, Tajiks, whose original occupation has always been agriculture and gardening, have developed into a people.

Since the end of the X century, various Turkic-speaking peoples collapsed into Central Asia, which had already been seeping into the environment of the local Iranian-speaking population for several centuries. The Turks began to press the Tajiks from the valleys into the mountains or partially assimilate with them. By the XII century, the Turkic-speaking population of the Mesopotamias of the Amu Darya and the Syr Darya formed the basis of the Uzbek people. Together with the Tajiks, it was subjected in the 13th century to the Mongol conquest, which for a long time interrupted the development of the Central Asian peoples.

At the beginning of the XVI century, Central Asia was conquered by the nomadic tribes that remained after the collapse of the Golden Horde and came from the north, from the Kipchak steppes (khan's Kazakhstan). They mingled with the local population, especially with the Turkic-speaking population, and became the final ethnic stratum in the formation of the Uzbek people. Having settled in the interfluvial area, former nomads began to

gradually adopt the agricultural way of economy of Tajiks and other local people, their culture and simultaneously exert their influence. So, in the XVI century, in Central Asia, the Bukhara and Khiva khanates appeared, which existed until 1920 (from the end of the XVIII to the late XIX century, there was also a third one – the Kokand Khanate). These states did not have a national character. Both Uzbeks and Tajiks came in parts to Bukhara, Khiva, and Kokand. Ethnic boundaries between these nationalities, except for different languages, in general were not clearly expressed in everyday life and in spiritual life. Much more important was the social partitions, sharply separating in these feudal states the life and culture of townspeople and farmers, merchants and craftspeople, the feudal-bay tops, mullahs, muftis, kadis and ishans from the mass of the working peasants.

Therefore, the cuisine of these khanates did not differ by national features, but rather by social, class ones.

The table of peasants was dominated with the flour products, flat cakes, sour milk, few vegetables, legumes, while the well-to-do layers used mainly meat dishes, feathered poultry, many fruits and sweets. But at the same time the principles of culinary processing worked out over centuries during the close interaction of different peoples in Central Asia turned out to be common property in the end and were the same for all estates and nationalities living on the territory of present-day Uzbekistan and Tajikistan.

The modern cuisine of Uzbeks and Tajiks is characteristic with the use of a large amount of meat, mainly mutton, and an absolute exclusion of pork and fat poultry – ducks, geese. Other poultry (chicken, turkey) are also rarely used, while fowls (pheasant, partridge, quail) often serve to supplement the diet.

Both peoples are notable for the increased consumption of local cereals (wheat, white durra, rice) and legumes (rotoch chickpeas, mung beans), some vegetables (turnips, pumpkins, radishes, and carrots), various fruits and nuts (apricots, grapes, cherries, plums, melons, pistachios, walnuts). At the same time, there are almost no fish dishes, limited consumption of eggs.

The common is the use of the same approach to the use of sour milk (kатык) in a variety of dishes, especially in the first ones and products made of it (suzma, kurt). The similar is the approach to the use of fats (combinations of vegetable and animal ones), increased use of spices, especially onions, red pepper, Ajwan (cumin), basil, turmeric, dill, cilantro, mint (garlic is less commonly used). Among the dressings that are not related to spices, barberry and bujgun are popular.

However, more than in the choice of products, the unity of Uzbek and Tajik cuisines is revealed in the choice of basic culinary techniques.

The main methods of cooking are roasting – mainly in fats and to a lesser extent on an open fire – on a charcoal brazier or in tandoor (tanur). When frying in fats, a special oil overheating is used, and not only meat products, but also flour products and vegetables, are fried to the same degree.

Another method – cooking with steam – is also used by both Uzbeks and Tajiks.

These methods of processing gave rise to the same kitchen inventory and the use of one type of oven. Roasting is carried out in cauldrons – open metal boilers with thick walls, cooking with steam – in special manty-kaskans.

Finally, Tajik and Uzbek cuisines are characterized by the same principles of serving dishes to the table, their special order, the strong thickening of soups, the semi-liquid consistency of the main dishes and the combination of cereals, legumes and vegetables with meat and dough (pilau, shavli, halissa, khalim).

These are the main features that unite the Uzbek and Tajik cuisines. The differences between them relate to particulars. So, Tajiks, along with mutton, willingly use goat meat, more often than their neighbors eat game, and Uzbeks have some dishes of horse meat and milk, which have survived to our days as a reminder of the distant nomadic past of their ancestors. Among beans, mountain chickpeas are the most preferred for Tajiks, and Uzbeks prefer local small beans. There are also differences in the composition of individual dishes, and these differences are often regional rather than national. In every major city of Uzbekistan or Tajikistan - Khiva, Bukhara, Samarkand, Khudzhent, Dushanbe and others - they have long been preparing their own kinds of pilau (the main national dish of both Tajiks and Uzbeks) with slightly different components than neighbors, with variations in the laying food products. In addition, in the mountainous part of Tajikistan and in densely populated areas, dishes that are unique to Tajik national cuisine and do not have Uzbek counterparts (for example, khalissa, kushan) have long been preserved and come to our time. They testify to the greater antiquity, complexity and sophistication of the Tajik cuisine in comparison with the Uzbek cuisine. They are such dishes that we will stop on in the Tajik cuisine section. The section devoted to Uzbek cuisine, both pure Uzbek dishes and common culinary products for Uzbeks and Tajiks will consider for example various kinds of common soup – shurpa or fried pies – samsa.

Since the population in Uzbekistan is almost three times more than in Tajikistan, there are naturally more regional dishes in Uzbek cuisine. Therefore, it is more expedient to start consideration of Central Asian cuisines precisely with it.

However, before proceeding to recipes, it is necessary to disassemble in more detail the features of such groups of dishes in the Central Asian cuisine, like soups, meat, vegetable, flour and sweet dishes.

Preparation of these dishes is very specific, especially if they are compared with the same groups of dishes of European cuisine.

Soups occupy a rather large place in Uzbek and Tajik cuisine. Their uniqueness lies in the fact that they are much denser in consistency and very often resemble gruel rather than soup in our usual view. In addition, these soups are fat, concentrated, because they contain fatty tail fat or melted butter, even if they lack meat.

But apart from all these purely external differences, soups of Central Asian cuisine differ in the composition of the products and in the technology of cooking. Specific is the use of local cereals (small Central Asian beans) and joughara (sorghum) – maize, rice and their combinations in soups. As for vegetables, carrots, turnips, pumpkins are almost always present in soups, and in much greater proportion than in European soups. The rate of consumption of onions is also extremely high: three times to five times more than the European one. As for the technology of Central Asian soups, then the main feature should be considered, firstly, the preparation of «fried» soups (at first, the hard part is fried, then poured with water), and secondly, the use of kатык and suzma (sour cream) to prepare sour-milk soups. The first method gives a significant reduction in the time when cooking meat soups, the second – gives soups a very special sour taste, increases their caloric content and digestibility.

Some soups are typical only for Uzbek cuisine – such as kurtova, shopirma, kakurum, and sikhmon. They are based on the use of dairy products and appeared, apparently, even among the nomadic ancestors of the Uzbeks. Other soups prepared of grain raw materials (chickpea soup, kashk, brinchoba) are found only among Tajiks and are associated with the oldest agriculture.

Soups are closely connected with meat dishes, as most of them are cooked with meat or postdumba (fatty tail casing), especially among Uzbeks.

A common feature in the processing of meat is the habit of not separating meat from bones. Both in the soups and in the second dishes, the meat is necessarily cooked and roasted with the bone. An only possible exception is kebabs, and only when they are cooked of tenderloin. A specific technique for processing poultry and game is also mandatory removal of skin from it, either before or after heat treatment. Common to both peoples is the production of meat-reserved dishes – kavur-daka and khassipa (khassiba), which are eaten cold or used as semi-finished products in soups and pilau. Most meat dishes consist of one meat component, it is devoid of any garnish,



except for onions. It is also characteristic to combine meat and boiled dough. Among them, the most popular and famous outside Central Asia are manty (a kind of large pelmeni) and lagman, shima, manpar (kinds of noodles cooked in combination with meat). Both these dishes have different variations among Tajiks and Uzbeks.

A few words should be said about the peculiarities of using vegetables. There are almost no separate vegetable dishes in Uzbek and Tajik cuisines. Vegetables are used in soups, sometimes they serve as appetizers for meat dishes or pilau, and in this case they are eaten raw (onions, rhubarbs, radishes), but more often serve as a kind of semi-finished products for cereal, meat or flour dishes: zirvak to pilau or shavle, filling to samsa, vaja (kaila) to lagman or shima. In this case, vegetables are used in the same way as meat – they are fried in large amounts of fat and then mixed with meat, corn or dough.

It has already been mentioned above that Uzbek and Tajik cuisines widely use flour products, both of steam, boiled, and especially of baked and fried dough. It is no exaggeration to say that it is the flour products that make up almost half of the dishes of the Asian cuisine in different types, and a considerable number of them, especially the numerous types of flat cakes, are 100 % floury and are used either as bread or as separate dishes with kатыk. Most flour products, more often flat cakes (noni, patyrs, lochire, chevati, katlama) and samsa, are baked in a special oven - tandoor (tanura), to the heated walls of which flour products soaked in water are fastened. This circumstance alone makes it difficult to prepare Central Asian flour products in other conditions (for example, in the oven of a gas cooker) when it is impossible to reach the necessary temperature and, consequently, to obtain a product of such consistency and taste as in tandoor. That is why we give only a limited number of recipes for flour products, and those that, for lack of tandoor, can be baked in the oven, and with the example of which it is possible to show the specifics of Central Asian technology, for example, the characteristics of fermentation and kneading of dough. Three other ways of baking flour products used in Uzbek and Tajik cuisines are quite accessible outside of Central Asia. These are baking in the boiler – without oil and with oil lubrication, baking between two pans on the coals, as well as frying in hot oil.

Sweet table in Uzbek and Tajik cuisines is specific, varied and extensive. Suffice it to say that neither Uzbeks nor Tajiks like most other peoples of the Middle East (Arabs, Persians, and Turks) know dessert as the final dish. Sweets, drinks and fruits, which complete any meal on the European table, are used twice in the East during meals, and sometimes three times – they are served before, and after, and during the meal.

It is true, in recent years this custom among Tajiks and Uzbeks begins to gradually disappear, as more and more people come to the conclusion that eating sweets before meals spoils the appetite. But according to the established tradition and habit, the eastern table and to this day has before the start of the lunch several kinds of sweets, sweet drinks, fresh, dried and jerked fruits, especially raisins and apricots, melons and watermelons, as well as roasted and salted nuts.

Just like fresh fruits, berries, grapes and melons, tea accompanies the whole lunch in Uzbekistan and Tajikistan. Tea begins lunch, it is drunk with a fatty meat snack and flour products, and especially the second dishes, and it finishes meal, washing down sweets.

In different regions, tea of various types is drunk. In most of Uzbekistan, especially in rural areas, in the east and south (Samarkand, Numangan, Andijan, Fergana, Kokand) they prefer green tea. In Tashkent and in the surrounding northern Uzbekistan it is customary to drink black tea. In Kara-Kalpakia (west of the republic) they drink green and black tea, but mostly with milk. In Tajikistan, green tea is drunk mainly in summer, while black one is common throughout the winter. By the way, tea in Central Asia is consumed without sugar.

Among the other characteristic drinks prepared for the table, we can note sorbet (sharvati) – fruit broths (or «infused drinks») with sugar. In Uzbekistan, however, sorbets are less common than in Tajikistan, so they will be discussed in the chapter on Tajik cuisine.

As for the sweets themselves, they can be divided into six groups: siyem (fruit and vegetable syrups), bekmes (concentrated fruit and berry syrups such as molasses), navata (various combinations of crystalline and sweetened grape sugar with the addition of dyes and spices), sweets on a nut and raisin base, and, finally, a variety of halva and halva-like sweets. Most of them are known outside Central Asia as oriental sweets that do not have a clear national identity. Indeed, such sweets as navat and halva are cooked throughout the Middle East, their «home» are various centers in Iran and in the territory of our Central Asian republics. It must be said that Uzbek and especially Tajik confectioners (Kandalatchy) have long been among the most famous in the East. However, the preparation of these famous sweets is so specific, it is based on the use of special furnaces and tools, complex skills (for example, rapid stretching with hands of a thick sugar syrup in a thread) that reproduction at home is impossible or extremely difficult. For the preparation of most types of real halva, it is required, for example, sesame seeds, a strong broth of the Turkestan soap root (foculum phiegmatic) and various food colorings (e.g. turmeric).



Therefore, we only give recipes of those sweets that can be easily prepared home and which therefore can be rarely found in the trade – these are various nut-fruit blends and halva-like sweets that do not contain saponins. At the same time, sweets, most characteristic, as far as possible, for Uzbekistan and Tajikistan, have been selected, although many of them are common in other Central Asian republics.

At the same time, recipes for sweets, popular in Uzbekistan, but most typical for Tajikistan, are given in the section on Tajik national cuisine, although the national aspect in the field of making confectionery is small.

### 3.2 Traditional meals of Uzbek cuisine

#### *First dishes*

Shurpa is a meat soup, most often with vegetables and fat mutton. Poultry can also be used as a meat (usually small game). Shurpa includes a lot of onions – about 4–5 times more than in European soups (for the same amount of liquid), and the main vegetable component, by which name it is usually called, is taken in the same volume or weight as the meat enclosed in it.

If vegetables are put less than meat in shurpa, then this shurpa is named after the type of meat on which it is prepared. Shurpa can be cooked in two ways: boiling meat and vegetables without pre-heat treatment (this method is more often used in Uzbek cuisine); pouring with water already pre-processed by frying meat and vegetables (this method is used for soups like mastava and others and less often for shurpa).

Shurpa includes 4–5 spices – red and black peppers, coriander, laurel leaf, ajowan or dill. Turmeric is sometimes used.

Since shurpa is always tried to be made thick, rich and fat, the amount of liquid in it per person should not exceed 1,5 glasses.

Therefore, in all the recipes listed below, the water rate is given taking into account boiling – about 3 liters (0,5–1,0 liter less for shurpa with preliminary frying of products).

Shurpa, like other Central Asian soups, is cooked on low heat. Meat in shurpa is cooked at the beginning for 1,5–2,0 hours, after which vegetables are added to the broth and the soup is continued to be cooked for another 30–45 minutes. When pouring water after pre-frying, the meat is cooked twice as fast – for 1 h. Without frying, the meat goes in a large piece with a bone, and for shurpa with the preliminary frying of the products. As in other fried-up soups, the meat (lamb brisket) is cut into small pieces with bones.

*Piyeva (onion soup)*. Onion soup with a large concentration of onions is typical for all Central Asian cuisine. However, the recipes for its preparation are different for different peoples of Central Asia. In the Uzbek cuisine,

piyeva is cooked with meat, and onions are taken three times more by weight than meat. Piyeva predominantly includes onions of sharp varieties. Water for piyeva is taken about twice as much as weight of the onions.

#### *Cereal soups*

Uzbek cereal soups with meat (mutton) are cooked exclusively by roasting. Meat, onions, as well as carrots, turnips or tomatoes, if they are included in the dish, are cut into small cubes (1 cm – meat, 0,5 cm – vegetables) or thin straws and fried in pre-burnt fatty tail fat for 15–20 min in the cauldron. Then the meat and vegetable roasting is poured with cold water and brought to the boiling. Then any cereal (wheat, mung beans, joughara, rice) is put into it and only then salted.

The amount of water in the above recipes is 2,0–2,5 liters.

Soups are simmered for at least 1 hour. Spices are added 5–7 minutes before the end of cooking – dry ones in a ground form, fresh ones – finely chopped. When a soup is cooked, they give it 10 minutes to stand – to stew. The consistency of the soup should resemble a liquid gruel.

*Katykli (sour-milk soups)*. Sour-milk soups in Uzbek cuisine are divided into two types – meat and non-meat katykli.

Meat katykli necessarily includes meat, or postdumba (fatty tail casing), traditional vegetables and local cereals. But the main liquid component in them is dairy products – katyk or suzma, which are previously diluted in water. In this case, the amount of katyk by weight refers to meat and cereal as 2:1:1, that is, about half of the whole mass of soup, and the amount of suzma is 1:1:1, that is, in undiluted form it is one third of the soup. At the same time, katyk or suzma is introduced into the ready-made dish and, thus, they are not decreased in volume during cooking. Therefore, the basis of sour-milk soups, which is cooked with water, should actually be a gruel at the end of cooking, that is, most of the water, and sometimes all of the water must evaporate from them. This determines the following rules for the preparation of sour milk soups:

- 1) finely chopped meat and vegetables are boiled in a relatively small amount of water, expecting that most of it should boil out to the end of cooking.

- 2) rice is cooked together with meat and vegetables, joughara – before meat and vegetables, mung beans with rice – after meat and vegetables. It is necessarily simmered.

- 3) the ready gruel, obtained as a result of cooking meat, vegetables and cereals, is removed from the fire, filled with finely chopped spicy greens of coriander, basil and savory, allowed to stand under the closed lid for 10–12 minutes and then poured with katyk or diluted to a thick liquid sour cream and everything is thoroughly mixed.

As for the non-meat katykli, they are of a more ancient origin and their methods of preparation do not have a general scheme, since they appeared isolated from each other and at different times. But a common feature for them is that dairy products are not introduced at the end of cooking, but in the beginning and they are subjected to heating. Such are the sikhmon, kakurum, shopirma, kurtova.

*Second dishes.* Pilau is one of the most widespread dishes in the Middle East and has received the greatest development in Uzbekistan. Here, a classical Central Asian technology for the preparation of pilau has been created, the number of type of which reaches several dozen.

The main types include pilaus which received the name from those historical and geographical provinces or even the states where they originated. They have technological differences. These are the Fergana, Samarkand, Bukhara, and Khorezm pilaus. In addition, there are pilaus, the composition of which varies depending on the purpose (simple, festive, wedding, summer, winter). A number of pilaus differ, finally, in that they contain different leading meat. After all, mutton is not always used in pilau, it is often replaced in Uzbekistan with kazy (horse sausage), postdumba (fatty tail casing), quails, pheasants, and chicken. Not always the composition of Uzbek pilau includes rice. Sometimes it is only part of the pilau, and sometimes is completely replaced with wheat, peas or mung bean.

But for the vast majority of pilaus a set of products is standard: mutton, rice, carrots, raisins or apricots and a mixture of three spices – red pepper, barberry and ajowan (cumin).

The preparation of the real Uzbek pilau consists of three operations:

1) oil caking; 2) cooking zirvak; 3) laying rice and bringing the pilau to readiness.

**Oil tempering.** Oil must be tempered in metal (preferably cast iron, but by no means enameled) utensils with a thick, oval-rounded bottom – in a cauldron, a boiler or in a saucepan similar to them. This dish must first be heated, then oil poured into it and tempered on a moderate or even low fire (the fire should not touch the bottom of the dishes) so that it does not boil outwardly. The degree of oil readiness (its overheatedness) can be determined by a violent crackle or bounce of the large salt thrown into it or by the extraction of a whitish haze. The oil is usually poured onto the bottom of the cauldron in a layer of 1 cm to 3 cm, depending on the number of products to be put.

The most commonly used is a combination of vegetable oils (cottonseed, linseed, sunflower, sesame, walnut) with animal fats (horse, goat, lamb, beef, poultry fat and bone fat). Sometimes only vegetable oils are

taken – sunflower and sesame, giving a palatable taste to pilau. Butter and melted butter shall not be tempered.

The oils are combined in the order listed, i.e., cotton – with horse fat, sunflower – with mutton one, etc.

**Preparation of zirvak.** Products are laid in the overheated oil in the following sequence, unless the recipes specify otherwise: meat, cut into small or large pieces, onions cut into cubes or thick rings, carrots cut more often by straws (more rarely – in cubes). Carrots in pilau are always put half the rice (by weight) and about the same as meat. Deviations from these rates in individual types of pilau are extremely insignificant.

Each of the three main components of zirvak is roasted sequentially in such a way that all products retain their characteristic look and color. At the beginning of the zirvak cooking, the fire is increased; by the middle and towards the end, the fire is reduced. The products should not stick to the walls and bottom of the scaldron. In the cooked zirvak, i.e., about 20–30 minutes later, spices are added. It is usually a mixture of three spices (red pepper, azhgon, and barberry), taken in equal parts and prepared in advance. The mixture of spices is put in pilau at the rate of 1,0–1,5 teaspoons (heaped high) per 500 grams of rice.

These spices, mixed together, are usually sold in Uzbekistan under the name «Mixture for pilau».

Then zirvak is salted and poured with a little amount of water at the rate of a quarter or half a glass for every 500 grams of rice. In some types of pilau, water in general can not be added, especially in cases where small portions and there are quite a lot of oil in the prepared zirvak.

Laying rice and bringing pilau to the readiness. The prepared zirvak is levelled and the fire is reduced even more. The zirvak is covered with an even layer of rice, which is lightly pressed with a (perforated) spoon, but in no case is mixed with zirvak. Then the pressed rice surface is carefully poured with water, making sure that it does not destroy the layer of rice. To do this, use the following method: put a saucer on rice and pour water on it, which evenly flows on the rice from the edges of the saucer. Then carefully remove the saucer from the scaldron by means of a lace attached in advance to it. The rice should be covered with water in a layer of 1,0–1,5 cm. If the rice is very dry and hard, the water is poured a little more than the normal rate. Then the fire is increased, but make sure that the pilau is boiling evenly. The water over the rice is salted a little bit and sometimes spices are added to it, especially turmeric, which in this case gradually and evenly color the rice in a golden-lemon color. During boiling, the pilau is not covered with a lid, but when the water completely evaporates, it is covered very tightly with a plate or dish. Before this, to make sure that the pilau is ready, a perforated



spoon is several times flatwise struck on the surface of the rice, which must be followed by a dull sound. In addition, it is noticeable that the rice becomes free-flowing. Then pilau is pierced in several places with a wooden stick, and then the surface of the rice is levelled with a perforated spoon, without mixing it with zirvak, and covered with a plate for 15–20 minutes to stew the pilau.

Only after that, the plate is carefully removed, trying to ensure that the drops of water from it do not fall into the pilau. The pilau is evenly mixed and served.

Sometimes pilau is not mixed, but laid on the dish in layers in the reverse order in comparison with the laying, i.e. first rice, then zirvak - onions and carrots and, finally, meat.

*Shavli.* Along with pilau in Uzbekistan, there is another dish called shavli that is very similar to pilau in the composition of products. Often, those who are not familiar with Uzbek cuisine take shavli for pilau, and in cookbooks they are sometimes confused and in the recipes of pilaus describe the preparation of shavli.

The fact is that almost all the basic components of the pilau remain in the shavli – first of all rice (or another, replacing it grain or bean base), as well as meat, carrots, onions. However, the ratio of these products, the addition of tomatoes to them, and most importantly, the method and duration of cooking are completely different. This has an effect on the fatness, consistency and taste of shavli and thereby distinguishes it from pilau.

First of all, quantitative differences are evident:

- 1) the ratio of rice, meat and carrots is 1,5:1:1 or sometimes 2:1,5:1,5. In this case, instead of meat, you can take other vegetables or fruits, but their total weight with carrots relative to rice will not change;
- 2) the ratio of onions and tomatoes is 1:1. There are more onions in shavli than in pilau;
- 3) the content of fats (oils) is by 50 % more than in pilau;
- 4) the zirvak of shavli has more water than the one of pilau – at the rate of 1 liter of water per 1 kg of put rice.

The procedure for preparing shavli. It is much easier to prepare shavli than pilau, but at the same time it is simpler to taste, more ordinary than pilau:

- 1) zirvak is prepared like for pilau, but there are also tomatoes added in it (in the end);
- 2) all the water is immediately poured into the prepared zirvak (at the rate indicated above) and allowed to boil out, after which rice, salt, spices are laid;
- 3) shavli is boiled by stirring, until the water is completely evaporated

If the water is not enough, and the products are not yet ready, it is allowed to add the boiling water during the cooking.

4) the prepared shavli as well as pilau is put for stewing in a closed dish for 15 min.

#### *Uzbek porridges*

Uzbek porridges are mostly cooked with meat. By its preparation and composition (cereal or bean base, meat, spices, sometimes vegetables), they are even simpler than shavli. The most specific are such porridges as khalim, mokhora and bulamik.

#### *Meat and game dishes*

As elsewhere in the East, kebabs occupy a significant place among meat dishes, or, as they are more often called outside of Central Asia, shish kebabs. However, the preparation of a number of Uzbek kebabs differs from the standard ways of cooking shish kebabs, common in restaurant practice, not only by preliminarily preparing the meat, but also by technology, as Uzbek kebabs are not always cooked on charcoal with the use of skewers, and are often cooked in cauldron and even on the walls of tyndyr or on steam. Several such recipes of specific Uzbek kebabs, including game ones, are given below.

*Kazan-kebab (kebab in cauldron)* 750 g of mutton, 500 g of onions, 0,75–1,0 glass of dill or cilantro, 1 pod of red pepper or 1 teaspoon of ground red pepper, 2 teaspoons of ajowan.

This kebab should be prepared of young, but well-nourished, fat mutton. Cut the meat into small pieces and add salt. Onions should be cut into rings and mixed with finely chopped dill or cilantro. Then put the meat and onion-dill mixture in layers, so that the whole laying is placed no lower than the middle of the cauldron or reached its top by two fingers. In the penultimate layer from above put a pepper pod, cut longwise half-and-half.



The cauldron is tightly closed and put on a very weak fire for about 1 hour. 2–3 minutes before readiness, kazan-kebab is sprinkled with ajowan (cumin). Serve with pickled onions.

*Meat and vegetable dishes* have relatively recent origin in Uzbek cuisine. Most of them are borrowed. However, some are ingrained as national, and they are characterized by Uzbek technology - the initial frying of meat in fat with the subsequent laying of vegetables. Below are two meat and vegetable dishes: the more ancient – the gushtnut and the relatively new – narkhangī. Gushtnut has equal ratio of meat and peas, narkhangī contains meat four times less than vegetables.

*Meat and dough.* Manty is a kind of pelmeni (dumplings). Their preparation consists of three operations: kneading the dough, preparing the filling, making and cooking the manty.

The main difference of manty from other types of pelmeni is not that they are relatively larger in size - this is only an external feature. Manty are different with stuffing and boiled not in water, but on steam, and in special dishes – manty-kaskan. If there is no manty-kaskan, then the manty can be cooked in a large saucepan. At the bottom of it a deep plate should be installed, and oiled. Put one row of manty, cover with another plate, pour the bottom of the pan with water, close the lid tightly and put on very weak fire.

Steaming creates the opportunity to keep the shape of manty, make the dish beautiful externally and at the same time give it a different taste than pelmeni, which are boiled in a lot of water.

*Lagman* is a dish widely distributed in Central Asia. It has Uzbek, Tajik and Dungan varieties that do not differ in principle, but differ in part by the composition of the products and the features of cooking noodles. Lagman consists of two main parts, where each is prepared separately, and then combined together into one dish before serving.

The first part is noodles and the second one is vaja, giving the lagman the basic taste and aroma. As for noodles, its purpose is to give the lagman as a whole a more delicate texture. To do this, the noodles should be rolled as thin as possible.

*Vegetable dishes.* There are almost no pure vegetable dishes in the Uzbek cuisine. As an exception, separately from meat and cereals they cook and eat only pumpkin, corn on the cob and a mixture of vegetables called kuk-blyron.

Pumpkin is cut into large cubes, flash fried until a crust is formed, and then with a small amount of boiling water and sour cream is stewed for 10–15 minutes on low heat.

Corn in the milk-wax ripening cobs is fried on skewers over the coals. Uzbeks rightly believe that baking corn in ashes, taking place in other

nations, greatly impairs the taste of the product. Therefore, they prefer to fry it over the coals, and then dip it into salted boiling water and pour with butter.

Kuk-blyron is the most specific Uzbek vegetable dish, serving both as a side dish, as a filling for pies, and as an independent dish. It is a combination of different greens, stewed in oil or mutton fat.

The middle of each rectangle is rolled out with a small rolling pin even thinner and stuffing is put on. It is folded in half and pinched slightly deeper than the edges so that the edges of the samsa remain stratified, like book sheets. This is the way varaki samsa stuffed with minced meat is prepared.

*Stuffing.* For meat stuffing use meat, passed through a meat grinder, mixed with onions, salt, red and black pepper, mint or ajowan (cumin) and fried in oil. For 500 g of meat take 250 g of onions (or slightly more), 2 teaspoons of red and black pepper, 4 teaspoons of mint or cumin.

For onion filling use a mixture of chopped bulb onions with green ones (tenth or fifth of the weight of bulb onions), eggs, black pepper and salt.

For greenery filling use a mixture of greens, given in the recipe of kuk-blyron (see above).

*Roasting.* In a cauldron with a capacity of 3 liters, you can fry 6–7 patties at once. The frying time is approximately 1 minute (the dough should obtain a pale yellow color).

*Dairy products* in the Uzbek cuisine are overwhelmingly similar to dairy products of other Turkic-speaking peoples of our country. Such products, mainly serving as semi-finished products, are katyk, kaimak, suzma and kurt.

See their preparation in the section «Basic dairy products of the peoples of Central Asia, the Caucasus, Tatarstan and Bashkiria». The only specific for the Uzbek cuisine dairy products are chivot and pishlok.

*Chivot* is katyk, fermented with dill without access to air. To prepare it, you need a clay glazed jar, carefully washed and dried in the sun.

Katyk is mixed with finely chopped dill and salt, poured into a jar almost to the top (not reaching its edges by 1–2 fingers), after which the neck of the jar is closed with a wooden circle of 1,5–2,0 cm thick and poured with the sealing wax. Put the jar in the sun and keep so for about three months (usually from mid-August to early November).

In the central European part of the former USSR, the chivot is better to be fermented from July to September-October (while in cloudy days and at night put in a warm room).

*Pishlok* is Uzbek cottage cheese, prepared in a special way, giving the product a distinctive taste.

Boil *katyk* or even ordinary curdled milk and separate the whey from the flakes, letting the liquid flow well. Put the formed clot into porcelain or enameled dishes, densely greased with butter.

Level the surface, add limited salt and without mixing put open to the draft (only cover with gauze from dust) for a day. After that, stir cottage cheese, put it in a linen bag, tighten it and put it under the press for another day. The resulting pishlok is eaten by lightly frying it in melted butter.

*Pickles and seasonings.* The Uzbek cuisine almost never uses pickles. The exception is a national snack of salted marinated wild onions – *piyez ansura*, which grows in the mountainous areas of the Samarkand and Surkhandarya regions.

This onion is consumed only in salt-marinated form. You can prepare common onions in the same way, although it tastes not so pleasant as real *piyez-ansur*.

### 3.3 Traditional meals of Turkmen cuisine

Turkmen cuisine has not been studied so far. The fact is that, firstly, the Turkmen cuisine, both in technology and largely in terms of the range of products used, is close to the cuisine of other Central Asian peoples – Uzbeks and Tajiks, and for a long time it was believed that there was no Turkmen cuisine at all; secondly, residents of different regions of Turkmenistan have their ethnographic characteristics, including in the field of nutrition, which made it difficult and is still difficult to determine the general characteristics of Turkmen national cuisine.

However, it differs from Uzbek and Tajik cuisines in a number of peculiarities, related first of all to the peculiarity of the natural conditions of Turkmenistan, to the unusual placement of its population and the relative isolation of some Turkmens from others.

Huge desert areas with rare oases of Turkmenia determined the occupation by cattle breeding and contributed to the fact that for most Turkmens the main food products were meat and milk. Only among some Turkmens, for example, Murchalins, engaged in agriculture, flour dishes prevailed in the past.

Turkmens primarily see value in mutton. However, it is used more often by Turkmen-Tekeans, while Turkmen Yomuds, Saryks and others use meat of gazelles (mountain goats), young non-working camels, feathered game

(pheasants, partridges, quails). Beef was little known earlier in Turkmenistan, and in the case of the Balakhani Yomuds it is completely unknown.

Turkmen cuisine is more than the cuisine of other Central Asian peoples characterized by purely meat dishes, more precisely, dishes of one only meat that has been heat-treated without admixture of other products or side dishes.

In most cases, there are common in all Central Asia methods for cooking meat – frying it in own fat in small pieces, followed by preservation in the glazed inside pottery. Turkmen call it «govurma» – a dish similar to the Kazakh and Uzbek «kavurdak», as well as roasting meat of young animals over the coals (*kebab* or *shara*). At the same time, the national Turkmen shish kebab (*kebab*) is «keyikjeren kebab», that is, a shish kebab of young mountain goat meat. Finally, in Turkmenistan, as in Tajikistan, they often hake meat in tandoor (*tamdyr*).

Along with that, Turkmens have such national ways of preparing and preserving meat that are not found among neighboring peoples and are conditioned by specific natural conditions: the presence of high air temperature, dry hot winds and strong heating of sand. One of these ways, common among Yomuds, is to dry meat in the wind under the boiling sun. Very large pieces of meat, along with bones, are strung on the tip of a high pole and left for a few days. Such dried-jerked meat is called «kakmach». Another way – *Teki* – is based on the combination of different media. Prepared (i.e., washed and rubbed with salt and red pepper) stomach of a sheep or goat is stuffed with meat and fat cut into small pieces so that there is no air left. After that, the stomach is sewed up and buried in hot sand for a day and in the evening it is torn out and tied to a high pole. This change of conditions is repeated until the stomach withers. Then the meat that is enclosed in it acquires a special pleasant taste, it does not damage for a long time. This meat is called *garyn* (gastric).

In modern Turkmen cuisine, purely meat dishes are giving way to combined meat and cereals, meat and dough and meat and vegetable dishes, common among other peoples of Central Asia and Kazakhstan, that is, pilaus, *manty*, *beshbarmak*, etc.

True, among the Turkmen these dishes have own names, often different. This leads to the fact that they often suppose completely different dishes. So, for example, in Turkmenistan, pilau is called *ash*, *manty* – *byorek*, *beshbarmak* for most Turkmens is *gulak*, for Tekians – *belke*, and for northern Yomuds – *kurtuk*. From this example it can be seen that the Turkmen cuisine combines dishes typical for Uzbek-Tajik and Kazakh-Kyrgyz cuisine.



Only a small part of the Turkmen second dishes is distinguished by original technological methods and a combination of products not used by neighboring peoples. Such dishes are of meat-cereal and meat-dough ogurjali-ash, yshtykma, etli unash and gatykli unash.

As far as milk is concerned, camel and sheep ones are the most popular. They are mainly used for the production of different dairy products with the help of lanten, rennet and yeast fermentation, followed by straining, churning, squeezing and drying. Turkmens have a varied milk table, where dairy products undergo complex biochemical and chemical-physical treatment. These are, for example, the original Turkmen dairy products of agaran, chal, karagurt, teleme, sykman and sargan.

Originality of Turkmen dairy products is conditioned not only by the originality of the source product – camel milk, but also by the uniqueness of the climatic conditions of Turkmenistan – dry subtropics, creating special conditions for lactic acid fermentation and yeast fermentation.

Camel milk and its products, mainly chal, are more characteristic for the western and southwestern parts of Turkmenistan, while oases in the east and southeast more often consume sheep's milk.

Unlike Uzbek and Tajik cuisines, Turkmenistan cuisine uses much less vegetables which is again explained by climatic conditions and in most cases by the semi-nomadic, not the agricultural way of life of the Turkmen in the past. Perhaps, they more often use radish and tomatoes, much less often and less – a pumpkin and carrots, even less often – mung beans. The lack of vegetables in the diet is compensated in part by greens – sorrel, Turkmen saitbush (gara selme), Turkestan spinach (ysmanak) and tubers of scorzonera (scorzener). Among fruits, apricot (dried apricot) is the most common, used not only in meat and flour, but also in fish dishes. Melons and water-melons are widely used.

The set of spices used differs somewhat from Uzbek and Tajik. Along with the indispensable onion and red pepper among Yomud-Balanchans, Tekians and Saryks, black pepper among Yomud-Ogurjaly, most Turkmens widely use mint, wild parsley and ajowan. Tekians use buzgun (galls of pistachio-tree) for game dishes instead of turmeric, the Turkmen use saffron (especially Ogurjaly), and finally, asafoetida or its substitute – garlic. Apparently, Turkmens are the only people within the USSR who use asafoetida (chomuch) as spice and even make from it a special seasoning – alaja (among yomuds).

Asafoetida is found wild in Southeast Kazakhstan, but the author does not have any information about using it in Kazakh cuisine. However, the Kazakhs in Xinjiang and the Dungans, Uighurs living in Kazakhstan, used asafoetida in the past. In view of the sharp odor, asafoetida is used in minimal

doses: it is not put into dishes, but a piece of asafoetida is used for drawing one or two lines on the bottom of the boiler, and then rice, vegetables, meat, etc are put. This is enough to give the whole dish garlic-onion aroma. One line is equal to two bulbs according to the strength of the smell.

Turkmen cuisine also differs from the cuisines of other Central Asian peoples by a set of fats. Much more widely than melted fatty tail lard, spread throughout Central Asia, melted butter of camel's milk (sary yag) and especially sesame oil is used in Turkmenia, which Turkmens use not only for the production of meat dishes, but also for flour, sweet, and fish ones.

The presence of Turkmen national fish dishes, created by the Caspian Yomuds-Ogurjaly, sharply distinguishes the Turkmen cuisine as a whole from other Central Asian cuisines. Even among the Karakalpaks living along the banks of the Amu Darya and the Syr Darya, fish dishes occur more or less sporadically. They have a central place in the food among the Ogurjaly. At the same time, it is important to emphasize not only that the product, which is rare in the conditions of Central Asia, is unusual in itself, but also that the technology of its preparation is special.

Turkmens-Ogurjaly have adapted fish to traditional Central Asian technology (for example, frying on a spit or in hot oil, in a cauldron), as well as to traditional Asian plant products – sesame, rice, apricots, raisins, pomegranate juice, which, from the point of view of Europeans, completely do not combine with fish. As a result, a bizarre mixing has been created, which, thanks to carefully thought out proportions of the main products and a skilful combination of spices and fats, gives new, pleasant and unexpected flavor effects.

The main condition for the preparation of Turkmen fish dishes is the presence of a completely fresh, best just caught fish: only with such a fish the sweet and acidic range of condiments can be organically combined: the question of the fish variety is already more or less of secondary importance. The Ogurjaly themselves use mainly sturgeon, stellate sturgeon, as well as sea and river pike perch, catfish, mullet, carp and kutum.

For the production of Turkmen fish dishes outside of Turkmenistan it is possible to use, in addition to the listed fish species, cod, merlus, onion eye, notothenia, halibut, all perch and carp fish. At this, frozen sea fish or fillets do not need a preliminary defrosting. At the same time, the use of all herrings is excluded due to their specific odor, incompatible with the sweet-acidic seasoning.

Red fish in the Turkmen cuisine is especially often used for cooking fish kebabs (balyk shara), as well as kavurdak (balyk gavurdak). At this, the same as for meat technology is completely preserved. For balyk shara, pieces of fish pre-salted and alternated on a rod (spit) with circles of onions,

are fried over the coals. For balyk gavurdak, as for ordinary kavurdak, small pieces of fish with bones removed are fried in their own fat (specially cut from the abdominal part) in the cauldron, sometimes with a small addition of the caked sesame oil. After putting into clay jars it is filled with melted fatty tail lard.

The rest fish dishes – gaplama, chyome, balyk berek, balykly yanakly ash – are much more complex combinations of products and processing techniques. Some of them resemble the preparation of pilau and manty, i.e. meat products and others have no analogues among meat dishes, since the speed of cooking fish in comparison with meat dictates a special technology.

The Ogurjaly, as a rule, subject fish to mixed methods of preliminary and thermal treatment. For example, fish is dried, and then fried; treated with salt and acid, and then stewed or fried; or boiled, and then stewed and treated with acid. The main purpose of these operations is to adapt the fish to a sweetish-sour and sweetish-hot range of accompanying products and spices.

Thus, the fish dishes created by the Turkmen of the south-western part of the republic stand out from the common Central Asian cuisine and are the original contribution of the Turkmen people to the world culinary art.

That is why when reviewing the main national dishes of Turkmen cuisine we will pay attention mainly to the most original dairy products of camel milk and to fish dishes of Turkmens-Ogurjaly.

The overwhelming majority of Turkmens, especially those neighboring Uzbekistan and Tajikistan, i.e. in the eastern and central regions of Turkmenistan, are closer in their cuisine to the peoples of these republics.

Differences in traditional dishes and tastes of Caspian Turkmens and Turkmens from the eastern regions of the republic are visible at least from the following example. When the Tekians eat beef and they like it, they say: «What a delight, like a lamb!» When the Ogurdjaly people eat lamb, they praise it in their own way: «What a delight – just like sturgeon!»

It is known that Turkmens, like the rest of Central Asia, drink a lot of tea, but the Tekians, Saryks, Merens drink green tea, as their immediate neighbors are Uzbeks, and Yomuds-Balhlans and the Ogurjaly prefer black tea like Kazakhs. At the same time they drink fresh camel milk with black tea, which is used by them for «brewing» tea, and then they put it on the coals for a while. This use of milk instead of water for tea brewing is explained to a large extent by the fact that the water in the habitats of Yomuds is too salty and hard.

As for sweets, they are basically the same among Turkmen as among Uzbeks, but their assortment essentially boils down to the nabat and bekmeses (doshabs) of watermelon and less often grape juice. The only real national Turkmen sweetness is a special mass of the halva type, prepared of

the roots of the lilac plant – desert candle (chyrysh) – *Eremurus grandiosa* L., from which the Yomuds extract the gum tragacanth and cook jam-like mass of it in combination with vegetable juices (grape, watermelon, melon, etc. .) and spices.

### 3.4 Peculiarities of Kyrgyz cuisine

Initially, it is worth noting that the nomadic way of life of the Turks, as well as the centuries-old neighborhood and interaction with other peoples greatly influenced the formation of local culinary traditions. As a consequence, the composition and technology of cooking Kyrgyz food is close to Kazakh and Uzbek. It is characterized primarily by the availability of a wide range of meat dishes. Kyrgyz prefer mutton and horse meat, actively use small poultry and game. A lot of greens and spices are used for dressing meat. Peppermint, thyme, sorrel and mountain onions perfectly reveal the taste of local dishes and fill them with inviting scent.

Along with meat food, sour-milk products are also popular. Kumys, airan, kaimak and bishtak are frequent guests on the festive table. Kyrgyz cuisine is also unthinkable without flour dainties. Fragrant flat cakes, lavish pies, bread baked in tandyr furnaces are one of the favorite treats in Kyrgyzstan.

And, of course, the highlight is oriental sweets. Halva, navat, sweet pastry – the taste of these dishes is difficult to compare with something. Naturally, local cuisine stores a lot of interesting recipes, but since it is impossible to list them all, it's worth to highlight the most popular and extraordinary dishes.

*Snacks.* In an ideal presentation, the snack is a light meal, which is presented to guests before serving the main dishes. In the Kyrgyz cuisine, on the contrary, it is quite rich and high-calorie. It is characterized by the use of a large amount of meat, offal and vegetables.

Seasoned with spices and herbs, fragrant with various flavors, it is able to hit the most demanding gourmets. One of the popular Kyrgyz snacks is byzhi – the oldest dish of Turkic hunters, which is a blood sausage of mutton lungs. It is served cold, sliced into thin rings.

Among appetizers of sub-products, *chu-chuk sausages* are in great demand. The basis for them is the horse's casings stuffed with finely chopped meat. They undergo a long process of heat treatment, which eliminates the unpleasant odor. They are boiled, then fried in hot oil, as a result of which the sausages acquire a ruddy color and a crispy crust. At first glance, perhaps, the dish does not look very attractive, but its taste and spicy aroma immediately make you forget about what it is made of.



Since the Kirghiz like mutton, their table can not do without assyp – fragrant sausages of mutton by-products. Their filling includes liver, heart and boiled rice. All this is richly sprinkled with spices, herbs and onions. This national food has an incredible taste, memorable for many years.

Among the meat delicacies, *zhergem* stands out. The appetizer looks simple, but has a magical taste. It is a boiled beef or lamb tongue. It is served cold, cut into thin slices and decorated with herbs and spices. In the Kyrgyz cuisine there are several options for hot starters. These include *sussamyr* – the liver of a lamb, baked in an oven with sour cream sauce. A special dish of Kyrgyz people is *zhashtyk* – small poultry gizzard baked with cheese and cream.

*First dishes.* In the Kyrgyz cuisine, as in any other national one, the first dishes are mostly soups. The technology of their preparation consists of two stages, which provides a thick consistency and increased fat content. They are characterized by the use of a wide range of basic ingredients. So, the structure necessarily includes lamb, milk, flour and various grades of cereals. Among vegetables, they use potatoes, carrots, radishes, peppers, tomatoes and green onions. For a more saturated flavor, all is seasoned with spices and herbs.

Depending on the characteristics of the main components' heat treatment, there are two types of Kyrgyz soups – *kainatma* (with roasting) and *kuurma* (without roasting). For the first ones, preliminary frying of vegetables and meat with the use of fatty or beef fat is typical, with their further cooking in a small amount of water. As a result, the food turns rich, filling and with a high fat content. Soups without roasting are lighter; they are prepared on the basis of meat broth or milk. Often, in addition to vegetables, many fruits are added here, as well as airan or kumis. *Kuurma* has a delicate taste and a pleasant fruit aroma.

The most popular first dish in Kyrgyz cuisine is *shorpo* – a fatty soup based on mutton broth with the addition of potatoes, fresh tomatoes and green onions. It is prepared exclusively of fresh meat, must be seasoned with spices and a lot of greens added, in particular parsley, cilantro, basil and zira. This food is only served hot, along with flat cakes or lavash.

Depending on the set of basic ingredients, several varieties of *shorpo* are distinguished. *Ak-shorpo* and *shorpo-arashan* are classified as dietary foods. They are cooked on the basis of meat broth, but at the same time a little sour cream or *susma* are added. They often use airan as a dressing here. The piquancy is given with the paprika, ground pepper and fragrant oriental spices.

In autumn, *ermen-shorpo* is popular in Kyrgyzstan. They use for it the meat of a young goatling and its insides. According to ancient traditions,

before slaughtering, the animal is grazed for several days in the fields where wormwood grows, and then a couple of days is fed with ordinary grass. This technology makes it possible to make meat as useful as possible, and the soup with a slight taste of bitterness, according to local residents, has medicinal properties. *Ermen-shorpo* really has a unique taste. Many additional herbs, such as mint, thyme, herbs and spices, endow it with a special scent. The food is eaten warm, while the meat is taken to the table separately from the broth.

In the spring-summer period, the favorite food of the Kirghiz is *green shorpo*. In addition to mutton, the composition here includes paprika, potatoes and carrots. The broth is seasoned with a lot of spices, necessarily greens, mainly sorrel, parsley, dill and coriander, are added. In addition to the above options, in Kyrgyz cooking you can meet *shorpo* with fish, meatballs, small-bird meat (chicken and goose), tomatoes, walnuts, turkish peas, radish and cabbages. Its cooking options are insanely numerous – each separate region of the country has its own recipes.

Along with *shorpo*, another pearl of Asian cuisine is *kesme* – vegetable filling soup with noodles, cooked on fresh lamb broth. It is characterized by a thick consistency and a rich orange color, which is achieved through the use of a large amount of fat and home-made noodles. Thanks to a lot of spices, the soup is rather salty, but spicy enough.

Among cereal soups, *mash kordo* is often found. Cooked on the basis of mutton, less often beef broth, with the addition of rice, as well as finely chopped vegetables, it turns out rather thick. Oriental spices give it a pleasant, even exquisite flavor. This dish is served in small earthen bowls, brightly adorned with greenery.

*Mash kordo* can be competed by *umach ash* having Tatar roots, and translated literally as «ground soup». Its main components are small crumbs, formed as a result of grinding flour, lightly moistened with salt water. They are brewed in fresh water, while adding sauteed onions and tomatoes. For a more saturated flavor, many spices and a few crushed garlic cloves are added here. They serve it in hot form, together with finely chopped greens.

The first dishes also include *batta* – an ancient Kyrgyz dish, which is a thick soup of rice and lamb. Its peculiarity consists in the separate preparation of cereals and meat parts. The meat of the ram together with the vegetables (onion and radish) is pre-fried, the rice is cooked separately. When serving, the cereal is sprinkled with braised meat and poured with a sauce similar to that prepared for *lagman*. As a result, the dish turns rich and caloric.

The Kyrgyz cuisine also includes many varieties of milk soups. They are not only delicious, but also extremely useful. Such foods are rich in

vitamins and minerals, are easily absorbed by the body, so they are often referred to the category of dietary dishes. A simple variant of such foods is *shurugan* – a light milk soup with green onions. It is served to the table with unleavened cakes. No less popular is *syut boorsok* – a sweet broth with noodles. It is prepared on the basis of whole milk with the addition of dough pieces and served with fresh cream and honey (sometimes replaced with sugar).

A delicious, sweet dish is *umach syut ash*, or a milk-based ground soup. It is prepared according to the same principle as the *umach ash*. Premade flour cakes are boiled in boiling milk, and in the end they are filled with melted butter. The food is simple in cooking, but incredibly tasty.

The Kyrgyz also like milk dressing soups. Various types of cereals (rice, millet, sorghum), macaroni and fresh whole milk are used for their preparation. The most preferable variants of this culinary performance is *keptyurme* – a thick soup made of millet porridge. It is characterized by a soft consistency and gentle taste, which is achieved through the use of honey and cream. From the *talkan* (cereals based on wheat, oats, barley and corn) Kyrgyz cook *kymyran ash* and *kuruttap* – varieties of fresh dairy soup.

*Talkan* also serves as the basis for the soup of *zharma*. Depending on the cereal basis used in Kyrgyzstan, several of its varieties are distinguished: *arpa zharma* (of barley *talkan*), *tobuya* (of chick peas), *ata* (of corn). For its preparation, in addition to cereals, use fresh milk or *airan*. The food is served both cold and hot. In the hot summer days it is used as a soft drink.

*Ubay* is another original dish of Kyrgyz national cuisine. For its preparation use *kurut* – dry curd balls. Cooked in boiling milk, the mashed *kurut* has a pleasant aroma and is perfectly combined with saity cakes. *Ubay* is a universal soup, it can be consumed both in cold and hot form, the taste qualities in this case do not change at all.

*Second dishes.* The assortment of hot second dishes in Kyrgyz cuisine is quite rich. For their preparation, they mainly use horse meat and mutton, small-bird meat and all kinds of offal. It does not do without vegetables, fresh and dried fruits. A variety of spices and herbs emphasize and complement the taste of key ingredients. Special attention is paid to the heat treatment of products when cooking. By combining its different options - cooking, frying and stewing, the masters succeed in the end to get juicy, tender and fragrant dishes.

The most respected dish among the Kyrgyz is *bashbarmak*. Filling, fragrant, tender lamb meat in combination with fine home-made noodles and spicy sauce - this dish is undoubtedly a worthy decoration for any table. In Kyrgyzstan, it is always prepared for holidays or as a treat for dear guests. According to local traditions, only men are engaged in cooking. The process

of cooking noodles and sauce is entrusted to women. Mainly meat of a young lamb and often added by-products – liver, lungs and stomach – are used for *bashbarmak*. Noodles and finely chopped meat are seasoned with sauce of onions and black pepper, as well as a number of spices, which greatly improves the taste.

Not only mutton, but also other types of meat are used for preparation of *bashbarmak*. The Kyrgyz are particularly fond of this dish when it is made of horsemeat, because it is easily digested and crumbles well. In the north of Kyrgyzstan preference is given to a variant of camel and wild animal meat – deer, roe deer, and capricorn. In some regions, in the cooking process, part of the horse's rectum and a little abdominal fat is added to the base. The last culinary invention of the Kyrgyz became a vegetable *bashbarmak*. The meat of a young lamb in combination with stewed vegetables and thin noodles looks quite good. Although this option is not very common, but such a recipe has the right to exist.

The second most important national dish of the Kyrgyz is *pilau*. Just like in other Asian countries, Kyrgyzstan has its own technology for its preparation. The main ingredients used are lamb meat, vegetables and hard varieties of rice. To improve the taste, it is often added tomatoes, paprika and garlic. It does not dispense, of course, without spices and greens. In each region there are different options for cooking *pilau*. In the south, *aiym paloo* is popular. They use by-products and fatty tail fat for it, in addition to lamb. To give it a rich flavor, they add a few segments of fresh quince and a sprig of barberry.

In the central regions, *pilau in the Uzgen style* is often found. Its main difference is the use of solid varieties of rice. After a long heat treatment, the *Uzgen* rice is not boiled soft, so the food turns out to be tender and crumbly. They use stewed vegetables and lamb brisket (*kirsen*) pre-fried in fire for the filling. In the dish, it is also customary to add a little quince and a pair of denticles of young garlic, which gives the rice a special flavor. In general, in the national Kyrgyz cuisine there are about 20 versions of cooking *pilau*. The most popular are the following types with mung beans, noodles, *chuchuk* and *kuurdak*, raisins and dried apricots. Delicacy with quails, pheasants, partridges and snowcock are especially valued.

The second dishes also include *shavlya* – rice porridge, slightly reminiscent of *pilau*. It is prepared on the basis of mutton or beef broth. There are two options for cooking – with roasting and without roasting. The second is used as a side dish for *bashbarmak*. But if only a little spices, stewed vegetables and greens are added, the usual porridge immediately turns into an appetizing independent dish, without which none holidays go by.



The classic cooking delicacies of Kyrgyzstan include *oromo* – one of the variants of the Central Asian dolma. It is chopped meat wrapped in cabbage or grape leaves. Leaves of horse sorrel or sebaceous shell of the lamb stomach are also used as a basis for it. The filling consists of mutton minced meat, boiled rice, spices and herbs. For a more saturated taste, they add a little paprika, bitter pepper and fragrant onions. Among the inhabitants of the Issyk-Kul basin, a variant with fish filling is widespread, the basis for which is mainly trout fillets. *Oromo* is served hot, with watering a small amount of broth and fresh sour cream.

Among the meat dishes, an honorable place is occupied by *tash kordo* – an ancient dish of Kyrgyz hunters. The technology of its preparation was formed long time ago and since then it has practically not changed. The basis here is a lamb carcass. It is cut and marinated with mountain onions, garlic and other spices. Fry the meat in a specific way. To do this, dig a deep (up to 1,5 m) pit, which is lined with stones inside. A bonfire is made in it. When it burns out and a sufficient amount of coals is formed, the lamb carcass suspended on a spit is lowered into the recess that is tightly closed with branches and animal skin. As a result of stewing on the hot coals the meat is well baked, becomes very juicy and just melts in the mouth.

Kyrgyz cuisine is simply unthinkable without a fragrant *shish kebab* (kebep). All kinds of meat, except horse meat, are used for it. Often, even fillets of sturgeon, stellate sturgeon and trout are used. In many cases, the food is prepared of lamb or by-products – liver, lungs, heart. Pre-pickled meat is fried on a brazier, then it is additionally baked in a tandoor. Especially popular is the kebep, cooked on hot stones or coals. As a result, the meat is very tender and fragrant. Serve it with garlic cakes.

Light dairy dishes are popular in the Kyrgyz cuisine. These include the *shirin-kyryuch*, which literally means «sweet rice». Prepare it on the basis of milk and solid varieties of rice. In some cases, add peas, raisins, dried apricots or mung beans.

*Flour products.* Dough dishes occupy a significant place in the traditional Kyrgyz cuisine. The assortment of flour dishes here is very diverse. Flat cakes, bread, «windmills», twiglets, chak-chak and kattama are just a small part of what can be found on the Kyrgyz table. The dishes are made of wheat, less often corn cereals. They are baked in tandyr or on special flat round cast-iron baking trays (kemechtane). The most famous flour products include manty, samsa and chuchvara.

*Manty* are fiat cakes made of thinly rolled, unleavened dough, stuffed with chopped minced meat, a traditional dish of Asian people. They have an oval, triangular or square shape. The filling consists of a young lamb meat, seasoned with spices and herbs. Sometimes a little pumpkin and potatoes are

added there. *Manty* are cooked mainly on steam in special pots - kaskans. Sometimes they are fried in oil or boiled in water. The dish is served hot, decorated with finely chopped herbs and spicy tomato sauce.

Peculiar «relatives» of *manty* are *khoshans* – flour cakes with chopped minced meat. In contrast to the first they are not cooked on steam, but fried in oil. The dough for them is very juicy and friable. The *khoshans* themselves have a light golden crust.

Meat cakes are quite spicy to taste and are served along with kumis or table vinegar.

*Samsa* is considered a pearl of the Kyrgyz cuisine. It is delicious, filling and very cute pies made of fresh puff pastry with a variety of fillings. Lamb meat or beef, vegetables and legumes are used as a filling for them. It is necessary to add spices, a lot of greens, paprika and onions there. *Samsa* is mostly triangular in shape, baked in tandyr furnaces and served with marinated onions.

Among products made of unleavened dough, there is a huge demand for *chuchvara*. Its appearance resembles ordinary pelmeni (dumplings). It is prepared of thinly rolled dough, which is folded in the form of envelopes and filled with chopped beef meat. The food is always served with tomato broth, so it's more like a first dish. Its taste is complemented with a hot sauce based on tomatoes, red peppers and paprika. Airan and table vinegar are served as a seasoning for these Kyrgyz dumplings.

Baked foods of yeast dough are popular in the cooking of Kyrgyzstan. An ancient ritual dish of Kyrgyz is *boorsok* – bold rounded cakes made of sponge dough, fried in deep frying. They have a soft, porous structure and a barely perceptible sweetish taste. After frying in hot oil they get a golden, crispy crust. Give them to tea, sprinkling sugar powder on top.

One of the varieties of *boorsok* is *kattama* – round puff cakes stuffed with sauteed, finely chopped onions and greens. They are evenly flash fried in deep-frying on both sides until a crust is formed. Served as a supplement to meat broths.

*Sweet pastries.* In the eastern tradition sweets are an integral part of any feast. Various delicacies are usually served both before and after the meal, and in most cases they are not cleaned from the table at all. The assortment of confectionery in the Kyrgyz cuisine is quite diverse and rich. The ones of the most popular are halva, nishalda, chekme, navad and parvarda, although the list does not end there.

*Halva* is an ancient oriental dessert with Iranian roots. The first mention of it refers to the V century BC. For its preparation, they use molasses, honey and sunflower seeds. In the Kyrgyz version, sesame, almonds, pistachios, apricot kernels and walnuts are added.

The ancient Kyrgyz delicacies include chekme, slightly resembling American popcorn. Previously, these sweets were always given to wrestlers on the eve of important competitions, because it was believed that they were nutritious, give strength and energy to athletes. The food is prepared of corn kernels fried in hot oil. Raisins and walnuts are often added to it. The dish is served to the table with airan or kumis, sprinkling sugar or sugar powder on top.

A counterpart of chekme in Kyrgyzstan is *badyrak* – corn or wheat grains fried in hot vegetable oil. They are fried until small flakes are formed, then sprinkled with sugar and served to the table. Dessert looks simple, but has a good taste, which is noted by numerous tourists.

*Nishalda* refers to exquisite oriental desserts. It is prepared on the basis of egg white with the addition of sugar syrup and licorice root. For a more intense taste, cognac and a little lemon juice are added. As a result, the delicacy is very gentle, light and fragrant.

An ancient Kyrgyz treat is *bal kaimak*. Its structure and color resemble condensed milk. A minimum of ingredients is used for its preparation. A little cream, sugar, flour – and the hands of true housewives give birth to a real culinary masterpiece. Sugar is sometimes replaced with navat or honey. In some regions, fruit bal kaimak with dried apricots, raisins and forest berries is often found.

Especially popular among the Kyrgyz are such sweets as *zhansak* and *balmanyz*. They have healing properties, help restore strength and increase the protective functions of the body. The first is prepared of a honey-nut mixture, after cooling it resembles usual sweets. *Balmanyz* is the Kyrgyz version of the nuts-and-honey bar. Cooked only from natural products (walnuts and honey), this dessert is in great demand both among adults and children.

A particular category of sweets is baked goods. *Sanza* and *kinkga* are popular among the confectionery products. They are sweet flat cakes of unleavened dough, which are deep-fried. They have a ruddy, crispy crust and are served to tea. Analogs of *sanza* are *yutaza* and *zhenmomo* – flat cakes made of yeast dough and steamed. Outwardly they resemble *manty*. Served for tea or sour milk drinks.

The Kyrgyz cuisine has popular pies made of puff pastry – *ton bayanshi* and *mayandi tonmeme*. They are baked in tandoor or deep-fried. Raisins, fruit or jam are used as the filling. Among the variety of Kyrgyz treats, *ton mosho* is clearly distinguished - small fluffy cakes in the form of windmills from yeast dough. Like the *boorsok*, they are fried in hot oil, which gives them a light golden crust. *Ton mosho* have a sweetish-salty flavor and are perfectly combined with hot tea.

*Drinks*. Popular drinks in Kyrgyzstan are made of talkan and based on fermented milk products. The first group includes *maxym*, *achyma* and *bozo*. All of them are an old soft drinks based on leaven, malt and wheat or corn talkan. *Kumis*, *suzma* or beer is used as a starter. These drinks perfectly quench thirst, have medicinal properties, in particular, they can normalize blood pressure and increase hemoglobin. Their taste is rather harsh and resembles kvass.

*Ak serke*, *zharma*, *karaden*, *aladen*, *ezgen kurut* and *ezgen suzme* are remarkable among beverages with a sour milk base. The technology of their preparation consists of breeding *suzma* or *airan* in broth with the addition of a small amount of warm boiled water. Drinking this improves digestion, so it is served after eating fatty foods. The Kyrgyz cuisine also has a popular *sherbet* – a kind of soft drink. Its basis is fruit juice and ice cream, and dogwood, dog rose, rose and a range of aromatic spices are added for a more original taste.

The first place among the hot drinks is occupied by *tea*. It is believed in the East that it has healing properties, so it must be treated to dear guests. To avoid tea's losing its taste, it is brewed only in porcelain teapots and insisted no more than 5–7 minutes. Kyrgyzstan has developed own traditions of tea drinking over the years. In the north, preference is given to black varieties. For a more intense flavor, a number of spices (cloves, cardamom, black pepper), as well as cream and milk, are added here. In summer, tea with *kurut* and *suzma* is popular.

The southern regions prefer *green tile tea*. It is very strong, characterized by a light, bitter taste. It is usually served to the table as a soft drink. A separate category is *meme-tea*. Cooked on the basis of mountain herbs, with the addition of aromatic berries and fruits, it is mainly used for medicinal purposes, because it is an excellent remedy for catarrhal diseases.

The Kyrgyz cuisine really has much in common with the culinary traditions of other nations. However, local chefs were able to diversify the range of dishes and bring something new, giving special national features!



## Conclusion

The processes of globalization taking place in the world have led to a change in the traditional way of life among the modern descendants of Central Asian peoples. Only a few of them retain their nomadic lifestyle. The radical changes in the way of life among nomadic peoples occurred with their transition to a settled way of life, which is especially characteristic of the Soviet period when the share of agriculture in their economy management increased. Soviet reformers began to develop virgin lands, plowed rangelands, resulting in livestock transformation from extensive to intensive. There are also changes in the gastronomic preferences of the population, which are transformed with the experience of cooking dishes of different nations.

You can find much in common between the traditional national dishes of the Central Asian peoples, which is due to the nomadic way of life in the past and the general historical development in the Soviet period. However, the changes that affected the characteristic lifestyle brought innovations to the traditional cuisine, which is an optimally balanced diet, expressed in its seasonality, when meat predominates in winter, and in the spring-summer period, milk and dairy products become the predominant food. The centuries-old system of balance and equilibrium collapsed in a short period of time. Dishes that were consumed in a certain period of time or on certain occasions are on the table throughout the year. Violation of fat and protein balance affected the health of people and led to an increase in the number of people with overweight, with cardiovascular diseases, lung diseases, etc.

In our opinion, the preservation of the technology for traditional food production of the Central Asian peoples and their adaptation to modern market conditions is not only the preservation of the world cultural heritage, but also the guarantee of sustainable development of these territories. Producing traditional foodstuffs, receiving raw materials from native breeds of animals and plant varieties, the peoples of Asia preserve a unique gene pool that constitutes a strategic reserve.

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Учебно-методическое объединение  
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Решение о присвоении  
грифа УМО РУМС МОН РК по направлениям подготовки кадров  
высшего и послевузовского образования на базе АТУ  
(протокол № 2 от 21 июня 2019 года)

Рассмотрение и рекомендация учебников и учебных пособий к присвоению грифа УМО РУМС  
МОН РК на базе АТУ по направлениям подготовки кадров высшего и послевузовского образования

Учитывая положительное экспертное заключение УМК по группе образовательных программ  
«Производство продуктов питания» направления подготовки «6В072 Производственные и  
обрабатывающие отрасли», УМО РУМС приняло решение о присвоении учебному изданию  
«Technology of National Food Production in Kazakhstan and Central Asia» авторов Исаевой К.С.,  
Кажибасовой Г.Т., Павлодарский государственный университет им. С.Торайгырова  
грифа УМО:

«Рекомендовано УМО РУМС МОН РК по направлениям подготовки кадров высшего и  
послеступенного образования на базе АТУ в качестве учебного пособия для обучающихся  
бакалавриата по группе образовательных программ «Производство продуктов питания».

Заместитель председателя УМО РУМС МОН РК,  
Первый проректор АТУ, д.т.н., профессор

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