

PLOV IS AN IMPORTANT PART OF THE UZBEK NATIONAL ETHNIC CULTURE

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Abstract. The article describes a traditional dish, plov, palov or pilaf, which is an important part of the national ethnic culture of Uzbekistan. The characteristics of the components, necessary items for its preparation are given. Detailed information on the nutritional value of the main products: carrots, meat. Comparative characteristic of mutton and beef is considered. Recommendation of the use of pilaf as a dietary dish in a number of patients with various diseases.

Key words: uzbek, plov, pilaf, ethnic, culture

Introduction. Ethnic nutrition is an integral and most important part of national culture in its material manifestation. It is no secret that today national cuisines remain an important element of people's ethnic self-determination, allowing them to preserve traditional features that are signs of the national identity of peoples. Culinary traditions are an important part of the culture of every nation. Over thousands of years, national cuisine has been formed and precious culinary experience is passed on from generation to generation. Each traditional recipe has its own stories and legends. This is part of the multifaceted appearance of the people and the country [1, 2, 3].

Each dish has its own traditional rituals and methods of preparation. Of course, the most famous and beloved dish of Uzbekistan, as everyone knows, is pilaf. It is considered both an everyday and a festive treat. Not a single important event in the life of an Uzbek family takes place without it. In December 2016, Uzbek pilaf was included in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity [4].

Pilaf was invented in ancient times, and separate culinary methods for its preparation arose in different geographical zones. These are today the varieties of this dish in Tashkent, Fergana Valley, Samarkand, Bukhara, Khorezm and others. The prominent scientist of Uzbekistan K. Makhmudov is deservedly considered one of the most famous and recognized specialists in Uzbek pilaf. This extraordinary and talented person studied the historical, ethnographic and medical-physiological aspects of the preparation and consumption of this dish, and collected authentic recipes for its preparation. [5].

The culinary art of preparing pilaf closely borders on such disciplines as chemistry, biology, medicine and others. A real chef must have an understanding of the products that are used to prepare a dish. If we are talking about proteins, carbohydrates, fats, vitamins, mineral salts, chemical elements that are subject to culinary processing, this is the chemical side of the process. Also, when preparing pilaf, the cook must have knowledge about varieties and varieties, biological aspects of growing products. The medical side includes versatile aspects: cleanliness and compliance with sanitary hygiene standards, the ability to evaluate the nutritional value of the finished pilaf. Knowing who and when it is desirable or, conversely, undesirable to eat pilaf, for whom it will be useful and for whom it can harm, brings the cook, the cook who prepares the pilaf, closer to a nutritionist [6].

Before we begin describing the process of preparing this wonderful dish, we will tell you what traditional basic utensils are used. This is a cauldron, the volume of 12 liters is often used. It

requires a hearth; the dimensions are shown in the figure. A slotted spoon and a ladle are also needed.

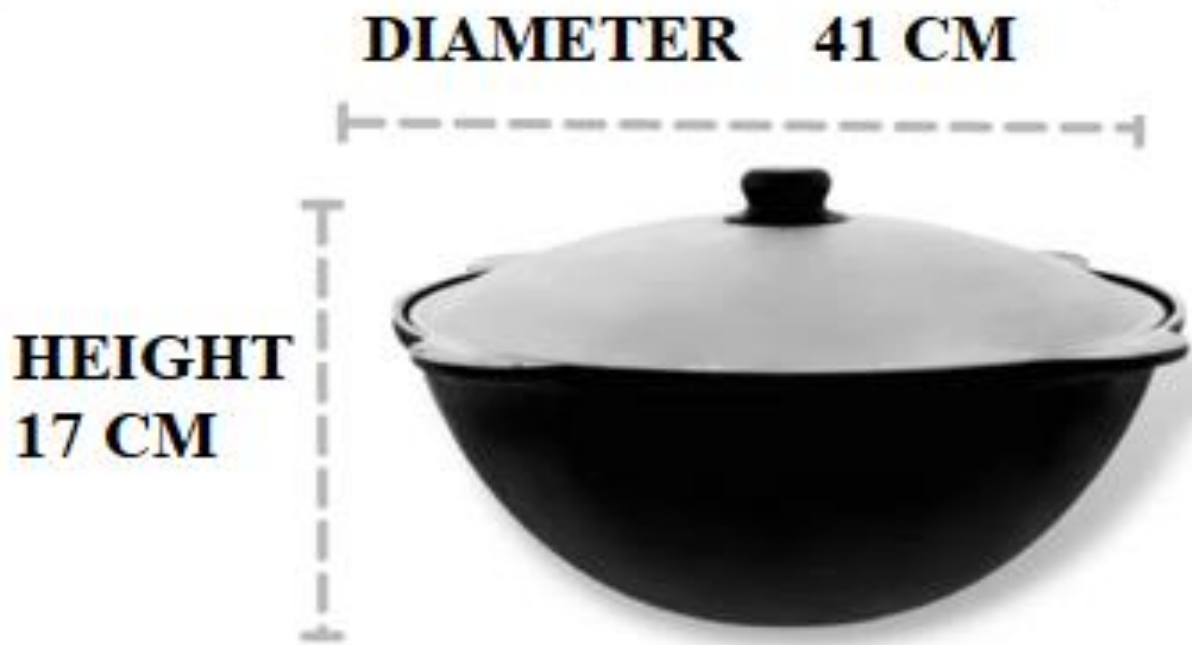


Figure 1. Iron cauldren– Capacity 12 litres.

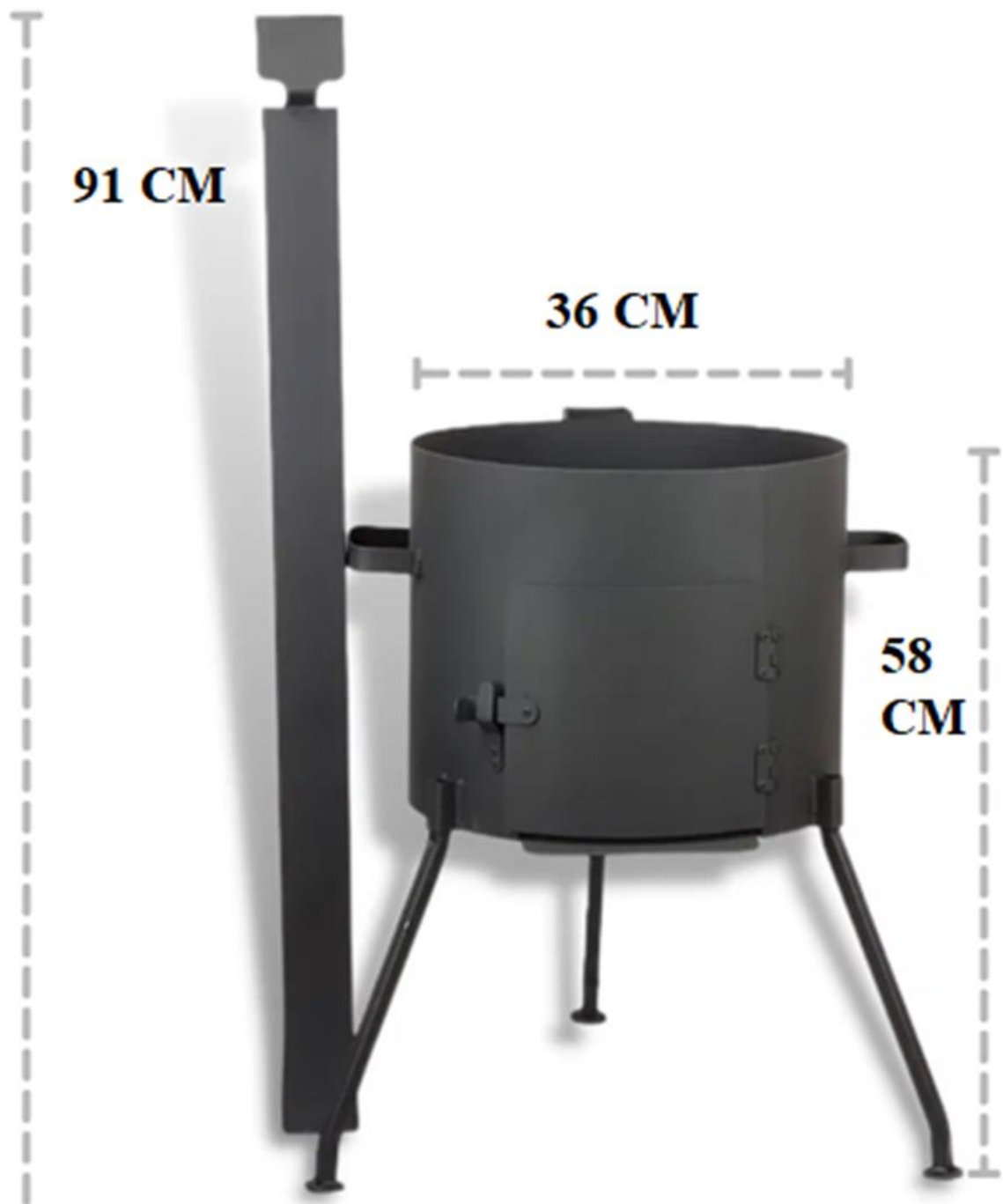


Figure 2. Hearth for cauldren.



Figure 3. Necessary objects for cooking pilaf

In the traditional national version, known since the time of Avicenna, the preparation of pilaf uses 7 components. The initial letters of the products made up the name of the dish - “palov osh”: p - piyoz - onion, a - ayoz - carrots, l - lahm - meat, o - olio - fat, oil, v - vet - salt, o - ob - water, sh – shaly – rice. It is possible to prepare dozens of types of pilafs from these products [7, 8, 9].

Depending on the quantity, type of products used and method of preparation, “kavurma” pilaf is distinguished, in which a notable feature is the frying of onions, meat and carrots during cooking. This type of pilaf is prepared in the Fergana Valley. Moreover, despite the presence of a unifying moment in the form of frying products, some nuances differ in the methods of preparation and the use of various variants of one of the main products - rice in the Andijan, Fergana and Namangan regions of the Fergana Valley.

Another variety is “sofi” pilaf. This culinary method is based on boiling meat and carrots. This kind of pilaf is typical for the Samarkand and Bukhara regions. A special place is occupied

by pilaf, which is prepared as a festive dish, usually at wedding events, which is why it is called “wedding” pilaf - “tui” oshi.

The description of products for preparing pilaf, bearing in mind the above-described order of products, should begin with onions. Onions are an ancient vegetable crop in Uzbekistan. The population consumes onions in large quantities and in a variety of dishes: manti, samsa, shurpa, fresh salads. Semi-sharp varieties with juicy, tender onions are used in home cooking and in many vegetable and meat dishes. Onions are very good for health thanks to phytoncides with bactericidal properties, vitamins, antioxidants and other biologically active substances [5, 10].



Figure 3. Products needed for cooking pilaf.

Carrots are an integral part of Uzbek pilaf. The amount of carrots you add depends on the type of dish. Typically, this amount is related to the amount of rice. In some cases, the volume of carrots is 50% relative to rice, in others it is an equal amount, and thirdly, carrots can be twice the volume of rice. It should be noted that carrots increase the volume of the finished dish, contribute to better cooking of meat and enrich the pilaf with vitamins and other beneficial substances.

Traditionally in Uzbekistan, yellow carrots, or yellow and red carrots in various ratios, are used for pilaf. To be fair, it should be said that some families prefer to cook pilaf with red carrots. The main difference when choosing carrots for pilaf is that yellow carrots are not sweet, unlike red ones. It is perfectly digestible, looks wonderful and gives the pilaf a special color

and fullness of taste. Again, this is a matter of taste, as many people love the sweetness of red carrots in pilaf.

An interesting question is the comparison of the nutritional value of raw and boiled carrots [11, 12, 13]. These data are presented in Table 1.

Table 1. Nutritional value of raw and boiled carrots per 100 g.

Nutritional value	Raw carrots	Cooked carrots
Proteins	1,3 g	0,8 g
Fats	0,1 g	0,2 g
Carbohydrates	6,9 g	8,2 g
Calorie content	35 kcal	35 kcal

“Raw carrots are difficult to digest, boiled carrots are easier to digest. Carrots help get rid of dropsy, soothe pain in the intestines and strongly drive urine” [14]. In folk medicine, carrots are used quite often. For example, carrots boiled in meat broth are offered as a dietary dish for cardiovascular and gastrointestinal diseases. It has long been known that eating one fresh carrot stops heartburn. To summarize, we can say that pilaf cooked with a lot of carrots is a true dietary dish.

The central product of pilaf is meat, which is a valuable food product. In metabolism, meat is the main source of protein. In muscle tissue, the main proteins are myosin and tropomyosin, they make up to 60%. The respiratory muscle pigment, myoglobin, is responsible for the dark red color of fresh meat. In the open air it transforms and changes color to light red. There is less myoglobin in the meat of young animals, which is why their meat is lighter.

In pilaf, mutton and beef are traditionally equally common in Uzbekistan. Lamb is often used for pilaf along with sheep tail fat. Thanks to fat, the calorie content of the dish increases and the taste of pilaf improves. mutton is usually dark red in color, with a layer of subcutaneous fat covering the back and lower back. When preparing pilaf, the lamb is not chopped finely; portions are about 150 grams. At the same time, it is not subjected to deep frying; during cooking, strong boiling is not allowed, otherwise the meat will be overcooked and spoil the appearance of the finished dish [5, 6].

Beef differs by type: veal, young meat, bull meat and cow meat. Traditionally, beef is raised from 3–4-year-old cows and bulls. The meat is dark red in color with flecks of fat. When preparing pilaf, the beef is cut into small pieces measuring 2.5 x 2.5 cm. Rib bones without the meat separated from them are also added. It is possible to add other meat bones.

Let us consider comparative data on the chemical composition of lamb and beef [15].

Table 2. Comparative aminoacid content in lamb and beef.

Essential amino acids	Mutton		Beef	
	Contents per 100g	Percentage of daily requirement	Contents per 100g	Percentage of daily requirement
Tryptophan	200 mg	80%	210 mg	84%
Isoleucine	750 mg	38%	780 mg	39%
Valin	820 mg	23%	1030 mg	29%
Leucine	1120 mg	22%	1480 mg	30%
Threonine	690 mg	123%	800 mg	143%
Lysine	1240 mg	78%	1590 mg	99%

Methionine	360 mg	28%	450 mg	35%
Phenylalanine	610 mg	31%	800 mg	40%
Arginine	990 mg	20%	1040 mg	21%
Histidine	480 mg	32%	710 mg	47%

Data from Table 2, which contains information on the content of essential aminoacids in mutton and beef, indicates that their content in beef exceeds that in lamb. So, if the difference in amino acids such as tryptophan, isoleucine and arginine is insignificant, then there is 1.25 times more valine in beef than in lamb, 1.28 times more lysine, 1.31 times more threonine, and 1.31 times more leucine. 1.32 times, and histidine - 1.48 times.

Table 3. Comparative content of vitamins in mutton and beef.

Vitamins	Chemical name	Mutton		Beef	
		Contents per 100g	Percentage of daily requirement	Contents per 100g	Percentage of daily requirement
Vitamin B1	Thiamine	0.08 mg	5%	0.06 mg	4%
Vitamin B2	Riboflavin	0.14 mg	8%	0.15 mg	8%
Vitamin E	Tocopherol	0.6 mg	6%	0.4 mg	4%
Vitamin B3 (PP)	Niacin	7.1 mg	36%	8.2 mg	41%
Vitamin B4	Kholin	90 mg	18%	70 mg	14%
Vitamin B5	Pantothenic acid	0.55 mg	eleven%	0.5 mg	10%
Vitamin B6	Pyridoxine	0.3 mg	15%	0.37 mg	19%
Vitamin B9	Folic acid	5.1 mcg	1%	8.4 mg	2%
Vitamin H	Biotin	-	-	3.04 mg	6%

In terms of vitamin content (Table 3), in general, there is a slight increase in indicators in beef, with the exception of vitamin B4 - choline, which is 1.29 times more in lamb, and lamb also has more vitamin E - tocopherol - 1.5 times, than in beef. At the same time, beef contains vitamin H - biotin, which is not found in mutton.

In terms of nutritional value, beef has higher caloric content - 208 kcal, protein content - 18.6 g, cholesterol - 80 g. On the contrary, lamb has higher levels of fat - 16.3 grams, water - 67.3 grams. According to other authors, mutton of average fatness has a fat content in the range of 8-10% of the total mass of meat. Lamb above average fatness has a fat content of 20-205%. In beef, the fat content is 4-6% and 10-15%, respectively [6].

Concluding this part of the article, we would like to recall that traditional medicine has been using the method of treating cardiovascular diseases with meat juice with the addition of bee honey for a long time. The scientific basis for this method is given in the "Treatise on Heart Medicines" by Abu Ali ibn Sino back in the 10th century. The "Canon of Medical Science" of this great scientist provides detailed information about the nutritional and medicinal properties of meat. "Meat is food that strengthens the body and it turns into blood faster than any other food..." - this is what Abu Ali ibn Sino said [14].

A necessary component for preparing pilaf is fat. In this case, it is possible to use fat of animal origin - mutton tail fat or beef fat. Often a combination with vegetable oil is used, which can be cottonseed, sunflower, olive, corn, sesame, hemp and others. This combination of fats



gives a delicate taste and aroma and increases their digestibility. It is noteworthy that there are combinations of three or four types of fat: cottonseed, sunflower, mutton fat, beef fat, etc.

The technological feature of fats is also of great importance; they reach a very high temperature - 200 - 300 degrees C. At the same time, they do not ignite, do not decompose, combine well with the aromatic and coloring substances of onions, carrots and meat, and are perfectly absorbed by the components of pilaf. Together, this gives the pilaf a beautiful, characteristic appearance and a wonderful juicy and delicate taste [5, 16].

You should definitely remember the need to maintain a balance between the fats consumed, carbohydrates included in pilaf, and the body's energy expenditure. Excessive consumption of these substances together with pilaf directly leads to obesity, which is one of the main modifiable risk factors for the development of many diseases: diabetes mellitus, atherosclerosis, which underlies a whole group of diseases - cardiovascular, cerebrovascular. [17, 18, 19, 20, 21, 22, 23].

The foundations of dietetics are laid in the traditions of the Uzbek people, whose experience says that pilaf should not be consumed every day, but once a week or month. There should be no overeating, since abuse can negatively affect human health.

It's time to talk about rice.

Rice is one of the most ancient plants consumed by humans. In regions where rice is traditionally cultivated on plantations - tropical and subtropical regions of Asia, Africa and America, rice is equated to bread in terms of prevalence and frequency of consumption. In Central Asia, rice cultivation dates back to the 3rd century BC. Currently, rice growing in Uzbekistan is one of the most promising areas of agriculture. Uzbek rice is one of the most delicious and valuable types of rice [16, 24].

An important fact is that the world produces about 500 million tons of rice. Rice is the staple food of more than half the world's population, mainly Asian peoples.

Among the variety of types of rice, the variety of rice - devzira - stands out. This is a lightly polished rice native to Central Asia. The high content of amylose, one of the main polysaccharides of starch, makes the grain denser and provides rice with an incredible ability to absorb liquid and odors during cooking, while the weight and volume of the grain can increase several times. Depending on the place of growth, year of harvest, raw materials and method of grain processing, Devzira varieties differ in color, hardness, grain shape and its properties [26, 27].

The red color of the grain is due to the soil pigment characteristic of the clayey soils of the place of growth - the Fergana Valley. Due to weak processing, this pigment is retained on the cereal.



Figure 3. Rice Devzira.

The historical method of processing devzira involved the use of exclusively manual labor. The scales were peeled off the grains manually or using a machine powered by water. Over time, more modern equipment began to be used for hulling (husking) rice, which leaves significantly less flour on the grain. As a result of more thorough grinding, the color of the grain itself also becomes lighter.



Figure 4. Rice Chungara.

A variety of devzira is the chungara variety, otherwise it is called white devzira. Kyrgyzstan is considered the birthplace of this variety. The grains are covered with a matte-transparent flour, and after washing they become very light and acquire a pearlescent tint. During cooking, Chungari grains increase in volume by almost 2–2.5 times and become longer than those of other devzira varieties.

In addition to red and white, there are also very exotic varieties of devzira, known only to local residents, fine connoisseurs of Uzbek cuisine and real rice gourmets. Devzira dastarsaryk has a yellowish tint, which appears as a result of smoking the grain. And the main distinguishing feature of one of the most expensive types of devzira kora-koltak, or kora-kiltirik, is its black color, which is given to the cereal by black veins on the grains [6, 16, 26, 27].

Before cooking, it is recommended to rinse the devzira thoroughly, ridding the grains of the characteristic flour coating. In this case, the finished rice will be airy and crumbly. It should be noted that varieties of devzira are used for preparing pilaf mainly in the regions of the Fergana Valley.

In other regions of Uzbekistan, Laser rice can be consumed; it is grown in Khorezm. This is a variety of long grain white rice, the grain is transparent and contains a minimal amount of starch. Somewhat reminiscent of the Basmati variety. Laser rice does not crumble, cooks easily, does not become overcooked, retains its crispness, and expands 2-3 times when cooked. Nutritional value per 100 g of product: proteins 6.7 g, fats 0.7 g, carbohydrates 78.9 g. Energy value 344 Kcal.



Figure 5. Rice Laser.

Among other varieties of rice, we can mention the Alanga variety, round grain rice, large, white, transparent pearl color, contains little starch, grown in the Khorezm region of Uzbekistan. Being inexpensive in price, this variety of rice is used by the population to prepare pilaf “for every day” [26, 27].



Figure 5. Rice Alanga

In conclusion, we can say that thanks to a favorable balanced combination of products, pilaf is highly digestible. This applies more to pilaf prepared from rice varieties with high water absorption. The higher this indicator, the more the rice swells and the better and faster it is digested in the stomach. It is important that this dish also has a sufficient fiber content, necessary for normal intestinal motor activity. The above-described qualities of pilaf make it possible to classify it as a dietary dish that can be used for many diseases. An exception is diabetes mellitus, since pilaf is a high-calorie dish rich in carbohydrates.

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