

# NATIONAL BREAD PRODUCTS

Nazarova Lobar Xolovna

Buxoro davlat texnika universiteti 3-bosqich talabasi

## Abstract

This article highlights national bread products, which hold a special place in the traditional food culture of the Uzbek people, as well as their technological processes. It provides information about the characteristics, composition of raw materials, preparation technology, and storage methods of various types of bread specific to different regions, such as patir, obinon, tandir non, qatlama, and other products. Furthermore, the article analyzes the role of bread products in nutrition, their biological and energetic value, and the directions for improving production based on modern technologies. The article is aimed at preserving national traditions, enhancing the quality of bread products, and exploring opportunities for industrialization.

**Keywords:** National bread, bread products, bread technology, tandir bread, patir, qatlama, traditional food, flour products, food technology, bread quality.

## Introduction

In the Republic of Uzbekistan, national bread products are produced in accordance with ancient traditions. Bread is not only a staple food item for our people, but also an integral part of the sacred heritage, culture and traditions. Currently, the production technology of these products is being improved in accordance with the achievements of modern science. Important technological processes in the process of preparing national bread products are the stages of selecting raw materials, making dough, mixing, resting, forming, baking and storing. High varieties of wheat flour are used as the main raw material. In some cases, mixed flour types (e.g., rye flour) or additional ingredients (ginger, flax, onion, sedana, etc.) are also used. The technological differences of the types of national bread depend on their territorial characteristics. For example, Samarkand bread is made with a special heavy dough, large and thick in diameter, and baked for a long time at high temperatures. Andijan patiri, on the other hand, is a thin dough, with a fat layer, and is baked in an oven or on a grill. The technology of oven bread baking deserves special attention. The oven is preheated (500–600°C), after which the pastry products are glued to its inner wall. The temperature of the oven affects the dough in a uniform way, keeping the outer layer of bread clear and the inside soft. Cooking time will take around 10–15 minutes. In recent years, the production of national bread products has been rapidly developing at industrial enterprises. Here, the process of dough production through automatic mixing machines, fermentation equipment and high-temperature ovens is simplified. At the same time, special attention is paid to the preservation of traditional recipes and cooking methods. In the countries of Central Asia and the Caucasus, along with mass varieties of bread products, local national bread products are produced. The production of these products developed according to the historically formed traditions of the indigenous peoples. [1]

Uzbek national bread products. The main part is made up of rounded products with thin middles and thick edges, with a picture on the surface. According to traditional technology, the dough of such breads is made from yeast. The yeast itself is prepared in a multi-step way using a variety of raw materials. For example, making yeast for Obi-bread is done as follows. Flour (3 kg), meat and other ingredients with a temperature of 38°C are distinguished dry soup (1.5 l) and creamed milk (0.2 l). Cleaned and grated onions (0.5 kg) are mixed and add yeast with a moisture content of 43.2%. Its initial acidity is 2.4 degrees. The yeast is baked at a temperature of 29°C for 16 hours to an acidity of 6.5 degrees. 17 kg of flour and water are added to the prepared yeast and the amount of yeast with a moisture content of 43.2% is increased, which means that the yeast sent to production is knotted. The yeast is baked for 4-6 hours until it reaches an acidity of 6.5 degrees and the finished yeast is sent to the mix. The amount of yeast used to make the dough (depending on the lifting force) is 25-30% of the amount of flour consumed. The yeast is renewed every 8-10 days. To produce the shirmoy bread dough, yeast made on the basis of pea-fennel juice is used. Juice is made from 0.02 kg of fennel, 0.25 kg of grated peas and 0.8 l water. To do this, water is poured onto the fennel seeds, brought to a boil and stored for 10-15 minutes. The prepared liquid is filtered and stored for 1 hour at a temperature of 80 °C to form juice mixed with crushed peas. After that, the juice is soaked for 13-14 hours at a temperature of 38-40°C. Add 0.4 kg of flour to the juice, cook for 1 hour at a temperature of 2-6 degrees Celsius at a temperature of 28-29°C. Oparaga 0. Add 5 kg of flour, 0.2 l bucket of water and cook half a pebble at the same temperature and duration. Half a race. From 5.5 kg of flour and 2.9 l water the pebble is prepared for 3 hours at a temperature of 30 °C. Its final acidity is 3 grads. On the basis of the pouch, a slurry is prepared with the addition of 20 kg of flour and 9 l water, 0.3 kg of salt, 1.7 kg of sugar, 1.55 kg of sheep fat. The slurry is boiled for 1 hour at a temperature of 35-40°C until 2.2 degrees Celsius acidity. By adding flour and water to the prepared slurry, the dough is prepared. [2]

As can be seen from the above, the traditional method of preparing yeast for mashing. It takes a long time. Therefore, in the bakery industry, bakery yeast is used not from yeast to make dough. The dough is pressed in medium and non-medium methods and mixed using liquid yeast. When the opara method is used, 40-50% of the flour used in the preparation of the dough is used to make the opara. When preparing dough in the non-traditional way, 10-20% of the total amount of flour is added to the dough that has been chopped in its place. When using a mixture of pressed and liquid yeasts is allowed to increase the acidity of the paste and the paste by 0.5 degrees. Steamed dough is sliced by machines or by hand and rounded. Another feature of Uzbek bread is that the dough cakes are shaped after the final touch. Grinding of dough mills in trolleys, filling chambers and cupboards for 20-60 min. will be carried out during the period. The bread pods of most varieties have a thin middle and a thick round (circle) around the edges, with a border in the middle. Varieties of such breads differ from each other not only by their recipe, but also by patterns in shape and surface. That is why the bread crumbs of most varieties are given a thin shape in the middle and thick around the edges. The surface of some is formed to uniform thickness. Due to the fact that the tip of the chisel is located in different shapes (circle, square, etc.), it is possible to create different patterns on the surface of the zuvala by piercing with it. Pieces of dough that are given shape are sent to bake (bake). According to



traditional technology, Uzbek bread is baked (closed) in special ovens. The temperature regime inside the oven, the method of heat delivery, the conical shape of the oven, the composition of the gaseous medium and a number of other factors significantly affect the quality of bread. For the production of a large number of Uzbek national bread, ovens of Bruver-Solikhov and Danko-Sultankho'jaev construction, created in the Republic, are used, as well as electric ovens in small bakeries. At the same time, part of the loaves is also baked in large ovens. The duration of baking bread ranges from 5-6 minutes (0.1 kg), depending on their mass, to 18-22 minutes. To ensure the crust of the loaves is dried, the dough is sprayed on the surface of the products after placing them in the oven or before plucking the bread from the oven. Master bakers are highly skilled at baking. But in the conditions of modern bakery industries, it is difficult to introduce a traditional technology for the production of these breads, consequently, to ensure the specific consumer properties of bread. Therefore, bringing the technological process as close as possible to traditional technological requirements is the main task. [3]

There are more than 50 varieties of Uzbek bread. Part of them is produced on the scale of the bakery industry of the republic. Therefore, about 25% of the total bread products are local bakery products. Significant quantities of Uzbek bread are made at home. Such bread can be conditionally divided into three groups. The group of "ordinary Uzbek breads" includes Obi-non and Gizhda from the highest, first and second varieties of wheat flour, Oyla-non - from the first and second varieties of wheat flour, from the first grade - Namangan, Kashgar, Lochira, Kulcha, Osiyogi and Chap-chap. The group of "Patir uzbek breads" includes "Dehnov", "Bakht" cakes, higher and first varieties - "Bahar" and "Shirmoy", "Yubiley", "Tashkent", "Onion", "Simple" and "Kata" from the first grade wheat flour. The term "patir" usually means bread made with the addition of butter. Therefore, in the recipe of all the drugs named above it is envisaged to use a mixture of sheep fat or margarine, from 2.5% (ordinary patir) to 12% (ordinary patir). In addition, according to the recipe, dry milk (2%), sesame seeds (0.3%), sugar for the "Bahar" patiri (10%), eggs (3.6%), eggs (3.6%) for the "Dehnov" patir (0.6%), sesame seeds (0.15%), peeled onions for the onion (20%) patiri. The group of "Shirmoy Uzbek breads" includes "X o'jayogliq", "Onion", "Milk", "Doctor-bread", "Toy-non", "Gift bread", "Guest-bread", "Cotton bread", "Shirmoy", "Bukhara", "Navoi", "Khorezm", "G ijduvon", "Angren". In the preparation of these breads, the recipe mainly uses sweet products (butter, eggs, natural or dry milk, sugar, spices, sesame seeds and similar raw materials). Uzbek bread is sold in bulk, the weight of one grain can vary from 0.1 kg (patir "Bahar") to 0.6 kg ("Bukhara bread"), depending on the variety. The acidity of bread from high-grade wheat flour is 2.5-3 grads, and the acidity of bread from the first higher grade flour is 3.0-3.5 grads. The moisture content of Uzbek bread consists mainly of 38-42% depending on the type of flour used and the amount of raw materials. Lochira's bread is an exception to this. To prepare this bread crumb, a dough with a moisture content of 42-43% is processed with flour to form a dough with a firm consistency. Thin (0.8 cm) pieces of dough are made and the entire surface is edged. In a stove or oven, the product is baked to a humidity of 28%. Adding flour to the dough will ensure the acidity of the finished bread by no more than 2.5 degrees. Therefore, Lochira bread can be included in the list of dietary products. [4]



The national bread of the peoples of the Caucasus and Central Asia. Many varieties of Uzbek bread are also produced in other countries. At the same time, the production of peculiar national varieties of bread was developed by the indigenous population living in these countries. *Chaboti bread produced in Tajikistan* is prepared according to a simple recipe, while in the preparation of "Kulcha" bread 20% fat-free natural milk and 5% sheep fat (in relation to flour mass) are used as additional raw materials, 7% margarine for "Noni rhubarb", 2.5% sheep oil and 1% sesame seeds are used as additional raw materials. The appearance of these breads does not differ significantly from the Uzbek bread. In *Kyrgyzstan*, such breads as "Komoch nan", "Gulcha nan" are used according to a simple recipe, and in the preparation of "Shakek" bread 15% margarine and 3% skimmed dry milk are used as an additional raw material, in the preparation of "Chuy nan" - 2.4% eggs. "Chuy nan" has a rounded shape, thin and edged in the middle, thick at the edges, with two deep lines drawn from the entire surface. "Komach nan" has a similar shape and is produced without deep stripes on the surface. These loaves are produced in bulk, weighing 0.8 and 1.0 kg, respectively. "Shakek" is a piece of bread sold in pieces weighing 0.2 kg. Production of national bread products such as "Taba nan", "Sutti nan" and "Damdi nan" has been launched in Kazakhstan. Shaping the dough crumbs is done after grinding, that is, before sending them to bake, mainly not by grinding, but by cutting off the surface of the dough crumb using a knife. "Taba nan" is produced from higher and first grade wheat flour with a weight of 0.4 kg, and "Sutti nan" is produced from the first grade wheat flour in units weighing 1.0 kg. The nuts have a round shape, on the surface of which there are 10-12 rows of strips. "Damdi nan" is produced from the highest grade wheat flour in a weight of 0.4 kg and the first grade flour at a weight of 0.5 kg. The bread product is rounded, the middle is thin and edged, the edges have a thick shape. [5]

In *Turkmenistan*, plain and "kulcha" *chureks* are mainly produced as national bread products. Chureks are mainly oblong, sometimes circular, with a series of deep stripes on their surface. Compared to Uzbek bread, chureki is much thicker, due to which their mage acquires a distinctly expressed porosity. Shaping the dough crumb and drawing deep lines on its surface is mainly done manually. Before cooking, rub flour and boil on the surface. Ordinary chureks are produced from the highest and first grade wheat flour in a weight of 0.5 and 1.0 kg, "Kulcha" churek is produced from the first grade wheat flour in a weight of 0.5 and 1.0 kg respectively. In the preparation of "Kulcha" chure, 1.2% melted butter, 4% skimmed milk and 2.8% eggs are used as an additional raw material. In *Azerbaijan*, mainly chureki, is spread as a national bread product. Azerbaijani and Ganja chureks are produced from high, first and second varieties of wheat flour in bulks weighing 0.2, 0.4, 0.5, 1.0 kg. He feeds mainly according to the simple recipe. It is also suggested that some varieties use eggs in the recipe to rub the dough crumbs onto the surface. At home, national bread products are also prepared, such as "Yukha" (thin) and "Galin" (thick). "Yukha" is about 2 mm thick and 25-50 cm in diameter, "Galin" is 30 cm in diameter and 3-4 cm thick. In *Georgia*, the production of national bread products of various shapes and names, mainly made according to a simple recipe, has been established. Gurji bread, called "shoti", is made from high first and second grade wheat flour in pieces. It has an elongated shape reminiscent of a crescent. Some areas of the surface may be covered with edibles and sprinkled with flour. Lavashi "Madauri" is Supreme. The first, second and





jaidari are made from wheat flour, mainly by hand. Lavash "Madauri" is oval in shape, and the surface of the product is covered with small bumps and holes. "Trakhtanuli" is long, "Mrgvali" gurji bread has a circular shape. All gourri breads are usually kneaded with one end or the other, which is explained by the fact that they are located vertically in the oven (oven) during the process of baking. *In Armenia*, such national breads as "Matnakash", "Arman" lavash, "Dogik" are made with a simple recipe. The "matnakash" bread is reminiscent of chureks with its elongated, oval shape. It is produced from high, first, second grade and soybean wheat flour in bulk (mass 0.5-1.0 kg) or sold in bulk (mass 1.5-2.2 kg). The lavash "Arman" is on a long oval shape and is 3 mm thick. Due to the elastic consistency, lavash can be lightly bent and wrapped without breaking. The mass of one piece of lavash does not exceed 0.3 kg. Dougik bread with an outer diameter of 30-32 cm and an inner diameter of 10-12 cm is made from the specialty wheat flour. Its mass can be up to 1.0 kg. [6]

In conclusion, it can be said that national bread products are one of the most important components of the ancient traditions, customs and cultural heritage of the people of Uzbekistan. Bread is not an ordinary food product, but a symbol of the spirit of the people, diligence, hospitality and national thinking as a whole. Each of its types is a product of the way of life, experience and taste of one region, one generation. The technology of bread production determines not only the quality of these products, but also their cultural and economic significance. Technological processes formed on the basis of traditional methods - kneading, resting, baking in the oven or oven - have been improved over the centuries and are in harmony with modern technologies. This expands the possibilities of mass production of national products, while at the same time serves to preserve their natural taste and beneficial properties. In today's context of globalization, the preservation of national bread products and their international promotion has become urgent. With the cooperation of local bakeries, industrial enterprises, research institutes and educational institutions, not only the range of national products will expand, but also the feeling of professional mastery and respect for national values will be strengthened among the younger generation. Therefore, in-depth study, improvement and promotion of the production of national bread products and their technology is a common task for every specialist, producer and consumer. An approach in this direction will ensure not only food security, but also serve national pride, culture and economic stability. [7]

### References:

1. M.G.Vasiyev. Technology of bakery products. Tashkent: "Generation of the New Century". (2009).
2. Suyunov, K. K. National bread products and their baking technology. Tashkent: Science Publishing House. (2018).
3. M.G. Vasiyev, M.A. Vasiyeva, Kh.J. Ualov, M.A. Saidkhodjaeva. Bread products production technology. Tashkent. "Labor." (2002)
4. Ismatova S. N. Prospects of the use of quinoa and amaranth for expanding of food reserve of poultry farming // Isabayev I.B., Ergasheva Kh. B., Yuldasheva S.J. // Austrian Journal of Technical and Natural Sciences, 2020, Vol. 7-8, pp. 26-30.

5. Ismatova S. N. Research of Impact of Direct Bioconversion of Secondary Grain and Fruit Raw Materials by Probiotic Microorganisms on Increasing the Protein Value of Feed Additives. //Journal of Pharmaceutical Negative Results, 2022, Vol.13, Special Issue 08 pp. 2370-2374.
6. Ergasheva K.B., Current State of Processing of Seed Wheat in the Republic //Yuldasheva S.J., Khuzhakulova, N.F., Ismatova S.N., Ruziyeva Z. //Journal of Pharmaceutical Negative Results, 2022, Vol.13, Special Issue 08, pp 2381-2386.
7. Ismatova S. N. Determining the optimal modes of the technological process of obtaining dietary flour from oat grain. // Ismatova S. N. Yuldasheva S. J., Khujakulova N. F.// In *E3S Web of Conferences* (Vol. 390), 2023, EDP Sciences.

