

GEOGRAPHICAL INDICATION

KAKHURI SHASHKHI

Registration № 31

Date of Registration: 19/12/2024

Geographical Indication: Kakhuri Shashkhi

Name of the Product for which the Geographical Indication is Registered: Shashkhi

Name and Address of Applicant: Ministry of Environment Protection and Agriculture of Georgia;
34 Marshal Gelovani Avenue, 0159, Tbilisi, Georgia

1. Name of Product: Kakhuri Shashkhi

2. Product Description

Kakhuri Shashkhi is a local, dry-cured product made from forest-fed pork that is salted, spiced, smoked, and aged. It is characterized by a thick, dark golden-yellow crust on one side. The product may be consumed either immediately after production, without additional thermal treatment, or after boiling.

The organoleptic characteristics of Kakhuri Shashkhi are determined by the pork used, the spices and seasonings, the smoking method (cold or hot smoking), the duration of brining, and the climatic conditions of the production area.

Kakhuri Shashkhi retains the natural structure of the meat. It has a uniform coloration ranging from red to dark red in the muscle tissue. In cross-section, the meat is evenly colored and has a pliable consistency, resulting from its placement in a brine solution, the so-called tsaki. The cut surface is fibrous to the touch, and the consistency of the muscle tissue depends on the proportion of muscle in the cut, as well as on the duration of drying and smoking.

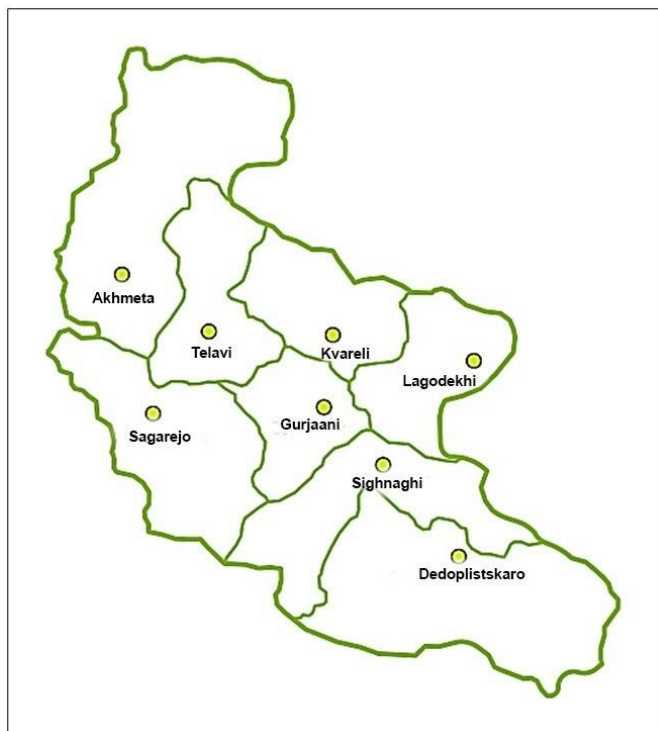
White or pink fat marbling is mainly located between the muscle tissue and the skin. The fat should not be yellow and should not be greased easily. Fat is also present within the layers of meat of Kakhuri Shashkhi. It has a characteristic smoky smell, along with a pronounced flavor and aroma from the spices. Kakhuri Shashkhi is moderately salty, with the salt content ranging within 6-8%.

3. Production Area

The production area for Kakhuri Shashkhi is Kakheti – a historical-geographical region in Eastern Georgia. Kakheti is one of the largest regions of Georgia, with an area of 11 310 square kilometers.

4. Raw Materials Used in Production

Kakhuri Shashkhi is made from the fresh, unfrozen, portioned pork of an adult pig. Shashkhi is made from the meat of forest-fed, Kakheti breed, or local pigs.



According to Prof. I. Shubitidze, "the local pig populations in Georgia (Kakhetian, Rachan, Imeretian, Megrelian, Abkhazian, Svan) are formed from the wild boar (Caucasian form) as a result of direct domestication in ancient times." This is confirmed by studies in craniology, blood groups, and serum proteins conducted by Georgian scientists (R. Michitashvili, S. Potskhveria, et al.; "Kakhetian Pig", Tbilisi, 2020).

Kakheti is surrounded by forested mountain slopes, and keeping and raising the local, forest-fed pig for the production of Kakhuri Shashkhi is a long-standing tradition. The local, forest-fed pig is characterized by its ability to adapt to living conditions and reproduce in harsh environments, as well as

its endurance and its ability to absorb natural food resources, which other animals cannot utilize.

In winter, they make good use of grape waste – pomace, as well as waste from melons and fruits. Starting in early spring, they make good use of various field grasses, and in July-August, they consume the leftover grain after the harvesting of cereal crops. As soon as the fruit begins to ripen in the forest, they move to the mountainous areas and mass-harvest wild fruits: Oak, beech, chestnut, hazel, rowan, yew, hawthorn, blackberry, dogwood, spindle, and other fruit-bearing plants. Local, forest-fed pig typically weighs between 80-120 kg. It is characterized by dense bristling, with a black, brown, reddish, or gray color, which can be spotted or striped. It has a long snout and gives birth to 5-8 piglets.

The following ingredients are also used to make Kakhuri Shashki:

Salt – Coarsely ground table salt is used for salting, which is a crystalline product composed mainly of sodium chloride (not less than 97%). Its granulometric composition ranges from 2.5 mm to 4 mm, and it is the so-called "khorshosa" (thick seed) salt. In the case of iodized salt, deiodization is recommended, for which the salt must be spread in a thin layer to be directly exposed to sunlight (no more than 1 cm) for 2-3 days, and it should be stirred periodically. For the same purpose, the salt can also be preheated by stirring it.

Spices:

Pepper (Latin: Piper) is a genus of plants in the family Piperaceae, the species black pepper. (*Piper nigrum*) (in fact, it is the green, unripe fruit. It turns black through processing and drying), which contains the alkaloid piperine and essential oils. In Sul Khan-Saba Orbeliani's dictionary, it is mentioned as "mgorvala" (A. Makashvili, Botanical Dictionary: Plant Names. Tbilisi, "Sabchota Sakartvelo", 1991).

Garlic (*Allium sativum*) is an annual bulbous plant in the Amaryllidaceae family. It is found growing wild in the Caucasus. It has dark green, narrow, lance-shaped leaves. The bulb consists of 2 to 50 cloves. Each clove is covered by a thin membrane, and the bulb as a whole is covered by 2 to 8 shiny membranes.

The bulb and green parts are used for food. A garlic clove contains 35-42% dry matter, 6.0-7.9% crude protein, 7.0-28.8 mg of vitamin C, 0.5% reducing sugars, 20-27% polysaccharides, etc. Garlic gets its specific taste and smell from its essential oil (0.23-0.74%), which contains phytoncide.

Sugar is a sweet product obtained from sugar beet or sugarcane. The energy value of 100 grams of sugar is 1.68 megajoules (approximately 400 kcal).

Bay leaf can also be used.

Bay laurel (*Laurus nobilis*) is a perennial tree or shrub of the laurel family that is cultivated in Georgia, mainly in Kolkheti. It is noteworthy that bay laurel is drought-tolerant, therefore it is also cultivated in Eastern Georgia. In Georgia, only various forms of the noble bay laurel are common.

5. Production Stages

Stage I –Pig Butchering

For the production of Kakhuri Shashkhi, it is recommended that the pig's live weight be 90-100 kg at the time of butchering.

Stage II – Cleaning

After stunning/butchering and bleeding of animal, the carcass is scalded, the bristles are removed, and the skin is scraped. For this process, the butchered pig is rubbed with wheat bran or corncob husks and thoroughly washed with hot water. Processing is done without skinning. After this process, gutting begins. First, the head is cut off, and the outer part of the anus is removed. Gutting is done on a table or in hang position, an incision is executed along abdominal line. First, the bladder is removed, followed by the intestines along with the stomach, and then the liver. The gallbladder is carefully removed. The fat is trimmed from the internal organs, the diaphragm is opened, and the heart and lungs are removed. The heart is cleaned of blood clots. The inside of the carcass is also cleaned. After this procedure, the carcass is cut along the spine into two equal parts.

Stage III – Cooling and Cutting the Meat

After the cleaning stage is complete, the meat is cooled to a temperature of 2-3°C for 2-3 days, or in a refrigerator for 24 hours. During this time, the meat “ripens,” acquiring a pleasant smell and aroma, and becoming juicy and tender. Cooling helps to preserve the meat's freshness and pleasant color. After this process is complete, the carcass is cut and portioned into 2-4 kg pieces. In some cases, the cooling process is preceded by cutting the carcass into thin slices weighing 1-2 kg or 3-4 kg and placing them in cold water for cooling. If the air temperature is 24-25°C, the water should be changed twice a day, in the morning and evening, until the water runs clear.

Stage IV – Salting, Spicing, and Aging

After the meat is cooled and trimmed, it is salted, spiced, and aged. For this, the meat pieces are rubbed by hand with salt (90-93%), garlic, bay leaf, and black pepper (1.5-2%). and sugar (4-5%), after which the meat pieces are packed tightly into a suitable container – a wooden or stainless steel bowl, which should then be weighted down. The curing time is 3-7 days and depends on the thickness of the meat pieces. After this, the meat pieces are washed and placed in a brine, for which 1.5-2 kg of salt is added to 10 l water, and, to fix the color, add 0.06-0.07% of the total weight of the brine (approximately 0.01 g) of sodium nitrite. The brining period is 7-12 days, which also depends on the size and thickness of the meat pieces. Sometimes, other spices can also be used for flavoring, for example, ginger (*Zingiber officinale*, Rose) and star anise (*Illicium anisatum* (L.)). The added spices must not be ground. The spices (5-10 g, in a variable proportion) should be boiled in 3-5, l of water, which, after cooling, is added to the brine. In this case as well, the curing time in the brine is 6-7 days.

Stage V – Drying

After being soaked in the brine, or the so-called *tsaki*, the meat is rinsed with cold water and dried at a low temperature of 4-5°C for 2-3 days to prepare it for smoking. It is also possible to smoke the meat directly without drying it, by hanging the wet meat in a traditional clay bread oven.

Stage VI – Smoking

After drying, the meat is smoked. There are two smoking methods: hot and cold smoking.

In the cold smoking method, the meat is hung in an enclosed structure where smoke from an external fire is channeled into the room through a flue.

The hot smoking method is more common. In this case, a traditional bread oven is used. The oven is heated using wood from deciduous trees—oak, beech, and walnut shells. Charcoal coals accumulate in the oven, and the pieces of meat are hung on poles placed inside it so that the resulting smoke can reach every piece of meat evenly. A damp covering is placed over the oven (burlap, linen, or coarse wool-cotton fabric can be used for this purpose). The covering must be damp to prevent a fire. One or two air vents are made in it. During smoking, the temperature of the meat pieces reaches 75-80°C. The smoking duration is 2-4 days and depends on the thickness of the meat pieces and the number of pieces hung in the oven.

Smoking can also be done without the drying stage, in this case, the meat taken from *tsaki* is drained and then smoked. The juice released from the meat during smoking create steam when they touch the coals, and the meat is also steamed in addition to being smoked.

In addition to an oven, a smokehouse can also be used, a chamber where both hot and cold smoking methods can be employed. Generally, a smokehouse is built from brick, stone, or is a metal structure. In the case of hot smoking, a fire is lit in the middle of the room to smoke the pieces of meat hung above. In cold smoking, the fire is lit outside the room, and the smoke enters the room through a special connector—the smoke pipe.

Stage VII – Storage

After the smoking process is complete, the finished Kakhuri Shashkhi is stored in a cool, clean, and dry place. Storage in a refrigerator at a temperature of no less than 2°C to 5°C is recommended. It can be consumed without additional thermal processing.

6. Geographical Area, Reputation, and Human Factors

The organoleptic and taste characteristics and production technology of Kakhuri Shashkhi are determined by the geographical area and natural climatic conditions where the pigs are raised and the product is produced, as well as by the raw materials and ingredients used.

Kakheti has a transitional climate between humid subtropical and continental. The region's climate is influenced by both dry Central Asian and the Caspian Sea air masses, as well as moist air from the Black Sea to the west. However, the intrusion of moist air masses from the Black Sea is prevented by the Likhi and Meskheta ridges, which separate Western Georgia from Eastern Georgia. As a result, the annual precipitation amount is significantly less in the Eastern (400-1600 mm) than in Western Georgia. The rainiest seasons are spring and autumn, while the driest are winter and summer, respectively.

In most of Eastern Georgia, especially in the lowland areas, summers are hot and winters are cold. Altitude has a significant influence on the climate. Above 1,500 m, summers are relatively cool, and above 2,000 meters, it sometimes freezes even during the summer months. The average winter temperature is around 0°C; in summer, it reaches +23-30°C.

Such natural environmental conditions are favorable for the quality and quantity of the fruit of plants that grow naturally in the forests of Kakheti, such as oak, beech, chestnut, walnut, hornbeam, maple, apple, elderberry, blackberry, hawthorn, barberry, and others), which ultimately significantly determines the good taste characteristics of the pork. It is also noteworthy that the harvest in the forests of Kakheti amounts to several thousand tons annually. Its effective use was, and is, made possible precisely by nomadic pig farming".

The fact that wild boar were abundant in the forests of Kakheti is confirmed by Vakhushti Bagrationi. In his "Description of Bostan-Kalaki and the Geareji Mountain", he writes: "To the east and south of Nagebi there is a great plain, and a great grove on the banks of the Mtkvari, where the kings would hunt year after year on boars". ("Description of the Kingdom of Georgia (Geography of Georgia. Printed from the original manuscript of Vakhushti Bagrationi. Edited by G. Janashvili. Published by the journal "Mogzauri", Tbilisi, A. Kutateladze's Express Printing House, N. K. №21, 1904).

There, describing Inner Kakheti "the other side and Inner Kakheti", he writes: "On the right side of the Pankisi Gorge, up to the border of Kisiqi, they call it Shigint-Kakheti, which is bordered: on the east by the Alazani River; on the right by the border of the Kisiqi line; to the west by the mountains of Hereti and Kakheti; to the north by the Pankisi border. This region is wooded, with little open land; its forests are mostly fruit-bearing, it has few streams and rivers, and it is known for its vineyards, orchards, and fine, good wine. Birds, except black francolins and partridges, which breed in the woods, are numerous; livestock: sheep are few, others are many, **but pigs are the most numerous: for one peasant has S – U – Ch – Ts**",¹ which, according to the explanation by G. Janashvili (the editor) there, means that **"every peasant has 200, 400, 1000, and 2000 pigs"**.

"In Kakheti, a totemic custom related to the pig has survived to this day, which is held annually at the Nekresi Monastery complex. The complex consists of various buildings, some of which date back to the 4th-5th centuries, Some date back to the 8th-9th centuries. The main cathedral dates to the 6th century and was built by Saint Abibos of Nekresi.

According to tradition, "the people attribute one miracle to the Church of Nekresi: the enemy had besieged the Nekresi Church and the Georgians who had taken refuge there. Every day, every hour brought the enemy closer to victory. The food ran out, and there was no sign of salvation. The people grew anxious; the women also took up arms, prayed, and prepared for the battle. Suddenly, a commotion broke out: it had occurred to one of the men in the squad, who were committed to a life-or-death battle, to slash the pigs and unleash them on the enemy. "Let's do it that way", – exclaimed others with joy. First, the squealing of the pigs filled the air, then the gate of the Nekresi fortress opened, and a herd of wild boars, driven mad with pain, charged straight at the besiegers. The Persians stared at the spectacle in surprise for a moment, then they came to their senses and realized: the animals were attacking them, defiling everything around with 'unclean' blood. "Oh, cursed Giaurs (infidels),² What have they come up with"! the infidels shouted as they scattered. The siege was broken. The herd of boars was followed by a company of Georgians, who easily defeated the confused enemy and escaped to safety. Since then, every year on Christmas Day (the day this miracle occurred) The Nekresoba festival begins, which lasts for a week. The main event is that pigs are brought to the church as a sacrifice" (K. Kenkishvili, journal "Istoriani", December 2011, №12).

¹ According to the Old Georgian script, letters had corresponding numerical equivalents, in this case: S–200, U–400, Ch–1000, Ts–2000

² An offensive word that was used by Muslims toward people of other religions.

"The sacrificial pig designated for Nekresi was called "Lom-Takhi" (lion-boar), which was treated with special care by the Kakheti pig farmers. It was often fed separately, well cared for, and its sale was strictly forbidden. It is plausible that this custom is very ancient, and that there may even have been a shrine to the pig-protecting god at Nekresi, whose festival lasted for at least 12 days. This is suggested by the fact that Nekresoba falls on December 25, the day on which the entire Georgian nation breaks the Christmas fast with pork. This pork-eating period lasts for 12 days, the new year arrives on the sixth day, and on St. Basil's table, alongside bread, basil, and candles, we also see a pig's head. (R. Michitashvili et al. "Kakhetian Pig", 2020).

In Kakheti, the tradition of processing and preserving meat has always been a priority. During the centuries-long period of prolonged warfare, smoked pork was one of the most reliable sources of energy for the Georgian warriors - the warriors carried with them salted meat, as it could be kept for a long time and was practical to use. (I. Shubitidze, "Kakhetian Nomadic Endemic Pig Breed", 2021).

7. Labeling

Kakhuri Shashkhi can be supplied to consumers packaged or unpackaged. The label must indicate the product's name:

In Georgian – კახური შაშხი

In English – **Kakhuri Shashkhi**

In Russian – **Какхури Шашхи**

Information about the Protected Geographical Indication “Kakhuri Shashkhi” placed on the market shall be provided to consumers in accordance with the requirements “On Provision of Food Information to Consumers” as defined by legislation of Georgia.

Additionally, on the food label, in addition to "Kakhuri Shashkhi", the words: "Protected Geographical Indication" and the state quality mark, the use of which is regulated in accordance with the procedure established by the legislation of Georgia, shall be indicated in the main field of vision.

8. Control Bodies

Kakhuri Shashkhi, produced using traditional methods and in accordance with the specifications herein, is a traditional, artisanal product protected by geographical indication. Accordingly, the requirements established by Resolution №173 of the Government of Georgia – Technical Regulation "Simplified Rules for Food/Animal Feed Hygiene" are applied.

State control of Kakhuri Shashkhi in accordance with the requirements established by Georgian legislation is carried out by LEPL the National Food Agency or a controlling body – a legal entity delegated by the Ministry to perform the specific task related to state control and accredited by the relevant authority of Georgia or the European Union and the Organisation for Economic Co-operation and Development (OECD).

The group /organization of producers of Kakhuri Shashkhi (if any), for the purpose of ensuring the quality, reputation and authenticity of Kakhuri Shashkhi, shall monitor the use of the name of the marketed goods and take other actions specified by the legislation of Georgia.