

**Interreg
Danube Region**



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The Overview of Products and Actors of Agrobiodiversity Slow Food Tourism in Partner Danube Regions – Appendix 1: Catalogue of Products

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Activity 1.3: Mapping the Slow Food Tourism Assets and Stakeholders in Partner Regions

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1. Primorsko-Notranjska Region in Slovenia

1.1 Smoked Rainbow & Brown Trout



Image: Smoked Trout; Photo credit: <https://www.solaokusov.si/>

Scientific name of the product: *Oncorhynchus mykiss* or *Salmo trutta*

Common name of the product: Smoked Rainbow Trout (in the case of *Oncorhynchus mykiss*) or Brown Trout (for *Salmo trutta*)

Common name of the product in the territory of intervention: Dimljena postrv

Historical production area and origin: Primorsko-Notranjska region is known for its clean rivers, lakes and karst springs, which provide an ideal habitat for trout. One of the most significant areas

for trout farming and fishing is around Lake Cerknica and the Rakov Škocjan valley, where clear, cold waters flow through the karst landscape, providing a perfect environment for trout to thrive.

Historical Origins: Trout have been native to the rivers and lakes of Slovenia for centuries, and fishing for trout in this region dates back to ancient times when fish were a staple part of the local diet. Smoking fish, including trout, became popular as a preservation method due to the lack of refrigeration in earlier centuries. This process allowed fish to be stored for longer periods, especially during winter months, and provided a unique flavor profile that remains highly valued today.

Modern Trout Farming: In more recent history, trout farming became a significant activity in the region due to the ideal natural conditions. The Idrija and Postojna rivers, as well as smaller karst streams, are often associated with high-quality trout farming. Sustainable trout farms are now prominent in the area, using methods that respect the natural environment and water quality, ensuring that the fish grow in clean, natural conditions, which contributes to their excellent taste and texture.

Cultivars, species and types: **Rainbow Trout (*Oncorhynchus mykiss*):** This species is one of the most commonly farmed and consumed types of trout in Slovenia, known for its resilience and adaptability to different water conditions. Rainbow trout are especially favored for smoking due to their mild flavor and tender texture. **Brown Trout (*Salmo trutta*):** This species is native to Slovenia and can be found in the wild, particularly in the fast-moving streams and rivers of the karstic areas. Though less common in commercial farming, wild-caught brown trout is highly prized for its more pronounced flavor and firmer flesh, making it ideal for smoking.

Description: Colour and Texture: Smoked trout from the region typically has a delicate pink to orange flesh, which is tender yet firm. The smoking process imparts a subtle, rich flavor, enhancing the natural taste of the trout without overpowering it. **Flavor:** The smoking process adds depth to the mild, slightly sweet flavor of the trout. Depending on the wood used (commonly beech or oak), the smoked trout can have a light smoky aroma with hints of earthiness and a slightly buttery texture.

History of the product:

The tradition of smoking trout in the Primorsko-Notranjska region of Slovenia has deep historical roots, shaped by the region's geographical features, climate, and need for preservation methods in a time when modern refrigeration did not exist.

Historically, trout fishing in Slovenia and the broader Primorsko-Notranjska region can be traced back to ancient times. The region's rivers, lakes, and karstic springs provided an abundance of freshwater trout, particularly brown trout (*Salmo trutta*) and later rainbow trout (*Oncorhynchus mykiss*). Fish, including trout, played an important role in the local diet, especially for communities living in the karst regions, where agriculture was limited by the rocky terrain.

With fresh fish being highly perishable, early inhabitants of the region developed various preservation techniques, including salting, drying, and smoking. These methods allowed people to store fish for longer periods, particularly during the colder months when fresh food was scarce.

Smoking, as a preservation method, became popular due to its dual benefits: extending the shelf life of the trout and enhancing its flavour. The smoking process worked by:

1. Dehydrating the fish, which slowed the growth of bacteria and other microorganisms.
2. Infusing the trout with smoke, which added layers of flavour and acted as a preservative.

In rural Slovenia, families would use traditional smokehouses or simple home-built smoking sheds, where they smoked various meats, fish, and even cheeses. The wood used for smoking—often beech, oak, or alder—was selected based on local availability and the desired flavour profile. Trout smoked with beechwood, for example, became a staple in many households due to its mild, sweet smoke.

During medieval times, trout and smoked trout were considered delicacies, especially among the **monasteries** and **nobility** in Slovenia. Monasteries played a key role in preserving local fishing and farming techniques, as many were located near rivers or lakes where trout was abundant. **Smoked fish** was an essential part of monastic diets, particularly during religious fasting periods when meat was prohibited.

Smoked trout from the Primorsko-Notranjska region, with its clean waters and rich forests, became known for its distinctive flavour. Local communities would trade smoked trout with nearby regions or use it in festive meals and special occasions.

As agriculture and food production evolved in Slovenia, so did the methods for smoking and producing trout. The late 19th and early 20th centuries saw the rise of **trout farming**, particularly the introduction of **rainbow trout** (*Oncorhynchus mykiss*) from North America, which adapted well to Slovenian waters. The advent of trout farming allowed for a more consistent supply of trout, which in turn fueled the production of smoked trout as a commercial product.

In the post-World War II era, trout farming in the Primorsko-Notranjska region became more organized, with many local farmers setting up small-scale fish farms that capitalized on the region's clean, cold streams and lakes. These trout farms used traditional methods to raise trout in natural, low-density environments, ensuring high-quality fish for both fresh consumption and smoking.

By the late 20th century, smoked trout had become a well-established product in Slovenia. Many local farms and producers continued the centuries-old tradition of using natural smoking techniques, often pairing the fish with local specialties such as cheese, olives and wines. Trout smoking remained an artisanal craft, passed down through generations.

Today, smoked trout from the Primorsko-Notranjska region is considered a gourmet product. The clean, natural environment of the region, combined with traditional smoking techniques, gives the trout a unique flavour profile that distinguishes it from other smoked fish. Artisanal trout producers, especially small family-run businesses, still rely on traditional smoking methods using wood-fired smokehouses.

Smoked trout is now widely available in Slovenian markets and is often enjoyed as part of traditional meals or modern dishes, including salads, appetizers, and even in gourmet culinary

creations. The product is celebrated not only for its taste but also for its cultural significance, connecting modern Slovenes with the culinary traditions of their ancestors.

The history of **smoked trout** in the Primorsko-Notranjska region is a story of adaptation and tradition. From ancient preservation techniques to the development of modern trout farming, the practice of smoking trout has evolved while retaining its deep connection to the region's natural environment and cultural heritage. Today, smoked trout stands as a symbol of Slovenia's commitment to quality, tradition, and sustainable food production.

Smoked trout is specifically derived from **trout fish**, which belong to the family **Salmonidae**. The most commonly used species for smoking are: **Rainbow Trout** (*Oncorhynchus mykiss*) and **Brown Trout** (*Salmo trutta*)

Key Characteristics:

Type: Fish

Breeds/Species: **Rainbow Trout:** Known for its mild flavour and firm texture, often farmed and widely available, **Brown Trout:** Offers a richer flavor and is also popular for smoking.

Origin: **Farming:** In the Primorsko-Notranjska region, trout is typically raised in freshwater farms that take advantage of clean, cold-water sources, essential for high-quality fish production.

Smoked trout products are celebrated for their rich taste and are commonly featured in local cuisine, making them a popular delicacy in the region.

Description of the breed:

In Slovenia, particularly in the **Primorsko-Notranjska region**, the **autochtone** trout breeds primarily include:

Savinja Trout (*Salmo trutta fario*)

Size: Typically grows up to 50 cm in length, but larger specimens can occasionally be found.

Color: The coloration varies, featuring a greenish-brown back, which provides excellent camouflage against the riverbed. The sides are lighter, often with a silver hue, and covered with dark spots that can be red or black. The belly is usually pale or white.

Presence and Shape of Fins: Savinja trout have well-defined fins, with the dorsal fin being slightly larger than the others. The tail fin is forked, which aids in swimming.

Habitat: Native to cold, clean freshwater environments, such as mountain rivers and streams. Prefers well-oxygenated waters with abundant natural food sources, such as insects and small invertebrates.

Productive Characteristics: Highly valued for its rich flavor and texture, making it particularly desirable for culinary uses, especially in traditional dishes and smoking. It reproduces naturally in river environments, which helps maintain the population sustainably.

Altitude: Thrives in mountainous regions at altitudes ranging from 300 to 1,500 meters above sea level. Its ability to adapt to various freshwater conditions makes it suitable for aquaculture in Slovenia.

Conclusion: The Savinja Trout is an autochthonous breed in Slovenia, well-suited to the region's clean and cold waters. Its distinctive coloration, size, and culinary value contribute to its popularity in local cuisines, particularly for smoked trout dishes. Its habitat preferences align with the mountainous terrains of the Primorsko-Notranjska region, emphasizing its ecological significance.

Description of the type of farming

Type of Farming: Extensive Aquaculture- In the Primorsko-Notranjska region, trout farming, particularly for the Savinja Trout and other local species like brown trout and rainbow trout, is primarily an extensive or semi-extensive aquaculture practice. This means that the trout are raised in a more natural environment, typically outdoor freshwater systems, such as rivers, streams, or spring-fed ponds, which mimic their natural habitat.

Farming Conditions: Outdoor Farming: Trout farming in this region often takes place outdoors for most of the year, relying on the clean and cold mountain water that flows through local rivers and streams. The farming period extends year-round, but it is particularly active from spring to autumn when water temperatures are optimal for growth. **Natural Environment:** The trout live in well-oxygenated and cold water, which is critical for maintaining their health and ensuring high-quality fish. In winter, colder temperatures slow down their growth, but they continue to thrive in the natural, undisturbed environment.

Feeding Practices: **Natural Diet:** In extensive aquaculture, the fish primarily feed on natural organisms found in the water, such as insects, zooplankton, and small aquatic invertebrates. This diet contributes to the distinct flavour and high quality of the trout. **Supplementary Feeding:** Farmers may supplement this natural diet with high-quality commercial feed to ensure the trout grow at a healthy rate. The feed is often grain-based and enriched with essential nutrients like omega-3 fatty acids to enhance the fish's health.

Breeding Practices: **Low Stock Density:** The extensive farming method involves low-density stocking, meaning fewer fish are raised per cubic meter of water compared to intensive farming. This reduces stress on the fish and minimizes the risk of disease. **Minimal Human Intervention:** Because it is an extensive system, farmers allow the trout to live in a relatively natural environment, reducing the need for artificial interventions such as antibiotics or intensive feeding regimes. **Breeding Cycles:** Breeding and growth cycles are closely aligned with the natural rhythms of the fish, allowing for sustainable reproduction and population management.

Fishing and Harvesting Techniques:

Net Harvesting: When it comes time to harvest the trout, farmers typically use **nets** to capture the fish from the ponds or river enclosures. This is done carefully to avoid stressing the fish and to preserve their quality for sale.

Selective Harvesting: Since the farming is semi-extensive, farmers often practice **selective harvesting**, picking only mature fish for market while leaving younger ones to continue growing.

Environmental Impact: Extensive trout farming in the region is generally more environmentally sustainable compared to intensive methods. The use of natural water systems and minimal intervention ensures that the ecosystem remains balanced, and the quality of the water is preserved for both the trout and other aquatic life.

Conclusion: Trout farming in the Primorsko-Notranjska region is characterized by **extensive** practices, where fish are raised in their natural environment, fed a largely natural diet, and managed with minimal human intervention. This method produces high-quality, flavorful trout, particularly prized for smoking and local culinary traditions. The outdoor, year-round farming approach allows the trout to grow naturally, making this a sustainable and environmentally friendly practice.

In the Primorsko-Notranjska region, processors of **smoked trout** are often also the **breeders** of the trout. This integration of farming and processing is a hallmark of **small-scale, artisanal production**, where trout farmers manage the entire supply chain—from breeding and raising the fish to processing them into the final product.

Production period:

Year-Round Farming: Trout farming is carried out year-round, with the main harvest typically occurring between **spring and autumn** when conditions for growth and water temperature are ideal.

Processing Period: The smoking process generally follows the harvesting of mature trout, meaning the production of smoked trout is closely linked to the farming cycle. The highest production volumes of smoked trout typically align with peak harvest seasons in late spring and autumn.

Product characteristics:

Weight and Shape:

Weight: The trout used for smoking usually weigh between **200 to 500 grams** each when processed.

Shape: The fish are typically processed whole, with the head and tail intact for smaller trout, while larger trout may be filleted before smoking.

Production Technique:

Traditional Smoking Process:

- **Cleaning and Gutting:** Once harvested, the trout are cleaned and gutted, with the bones and internal organs removed, while leaving the fish intact for optimal presentation.
- **Brining:** The fish are typically brined in a saltwater solution, sometimes enhanced with spices or herbs, for several hours to season the fish and help with preservation.
- **Cold Smoking:** Traditionally, cold smoking is used, where the fish is exposed to smoke at a temperature below 30°C (86°F) for several hours to a few days. This method allows the fish to retain its natural moisture and flavor, while the smoke imparts a rich, distinctive taste.
- **Wood Choice:** The type of wood used for smoking is often a key factor in the flavor. Traditional smoking methods in the region use beechwood or fruit tree woods like apple or cherry, which add a subtle, sweet aroma to the smoked trout.
- **Tools:** The smoking process often uses traditional smoking chambers, which have been used for generations. These chambers are typically built out of stone or wood, with vents that allow the smoke to circulate around the fish. In smaller-scale farms, these chambers may be crafted by hand and have been passed down through families.

Modern Adaptations:

While traditional methods are still widely used, some processors employ modern smoking facilities with **temperature control** and **automated smoke generation**. These facilities ensure consistency in the smoking process, though the basic principles remain the same.

Aging/Resting: After the smoking process, the trout are typically left to rest and age for a short period (usually a few hours to a day), allowing the flavors from the smoke to fully penetrate the fish and develop further.

Ingredients and Their Origin:

Main Ingredient: The primary ingredient is locally farmed trout from freshwater streams, rivers, or aquaculture ponds in the Primorsko-Notranjska region. These trout are often bred using sustainable farming practices, with minimal environmental impact.

Brine: The brine solution usually consists of: **Salt:** Local sea salt or other high-quality salt is used, sourced from nearby coastal regions. **Spices and Herbs:** Some traditional recipes include herbs like bay leaves or peppercorns, although these ingredients can vary depending on local customs.

Wood: The type of wood used for smoking is locally sourced, such as beech or fruitwood, which is chosen for its slow-burning properties and mild flavor contribution.

Value of Traditional Tools and Techniques: **Cultural Significance:** The use of traditional smoking chambers and age-old smoking techniques reflects the cultural heritage of the region. These tools and methods have been passed down through generations, contributing to the unique taste and quality of the product. **Artisanal Approach:** Even when modern tools are employed, most producers in the region maintain an artisanal approach, ensuring the fish are smoked in small batches to maintain quality control.

Product Characteristics (Flavor, Texture):

Flavor: Smoked trout from the Primorsko-Notranjska region has a delicate smoky flavor, with hints of sweetness from the wood and saltiness from the brine. The natural flavor of the trout is preserved, offering a mild, earthy taste.

Texture: The texture is typically tender and moist, thanks to the cold smoking method, which preserves the fish's natural oils. The skin remains firm, while the meat is slightly flaky, making it ideal for consumption on its own or in dishes.

The smoked trout production in the Primorsko-Notranjska region is deeply tied to both traditional and sustainable practices. Farmers often act as processors, handling every step from breeding to smoking, ensuring the trout is of high quality and full of flavor. The traditional tools, such as smoking chambers, alongside the use of natural, local ingredients, highlight the artisanal nature of the product, making it a prized delicacy within the region and beyond.

Nutritional values and use:

High-Quality Protein: Smoked trout is an excellent source of high-quality protein, containing all nine essential amino acids. This makes it ideal for muscle repair, growth, and overall body maintenance.

Rich in Omega-3 Fatty Acids: Smoked trout is rich in omega-3 fatty acids, particularly EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid), which are beneficial for heart health, reducing inflammation, and supporting brain function. Omega-3 fatty acids are known to lower triglyceride levels, reduce the risk of heart disease, and support cognitive function.

Low in Saturated Fat: Smoked trout is relatively low in saturated fat, which is beneficial for heart health. The fat content is mostly made up of healthy unsaturated fats, which help reduce bad cholesterol (LDL) levels.

Rich in Vitamins and Minerals: **Vitamin D:** Smoked trout is one of the few natural sources of vitamin D, essential for bone health, immune function, and calcium absorption. **Vitamin B12:** An important nutrient for maintaining nerve function, red blood cell production, and DNA synthesis. **Phosphorus:** Essential for the formation of bones and teeth, phosphorus also plays a role in energy metabolism. **Selenium:** A powerful antioxidant that helps protect cells from damage and supports the immune system.

Low Carbohydrates: Smoked trout contains no carbohydrates, making it suitable for low-carb or ketogenic diets.

Moderate Sodium: Due to the smoking and salting process, smoked trout can be higher in sodium compared to fresh trout. While sodium is essential for maintaining fluid balance and nerve function, it's important for people with hypertension or sodium-sensitive conditions to consume it in moderation.

Uses of Smoked Trout

Smoked trout is a versatile ingredient used in a wide variety of dishes. Its delicate texture and smoky flavor make it suitable for both simple and more complex culinary applications. Here are some popular uses: appetizers and starters, salads, sandwiches and wraps, pasta dishes, spreads and pâtés, breakfast dishes, culinary pairings

Smoked trout is not only delicious but also packed with essential nutrients, particularly proteins, omega-3 fatty acids, vitamin D, and vitamin B12. Its versatility in the kitchen, combined with its health benefits, makes it a popular choice for both casual meals and gourmet dishes. In the Primorsko-Notranjska region, smoked trout remains a staple of local cuisine, celebrated for its flavor, nutritional value, and rich culinary history.

Indicative quantity produced and product distribution:

The production of smoked trout in the Primorsko-Notranjska region of Slovenia is generally limited and operates on an artisanal scale rather than mass production. This is due to the region's emphasis on high-quality, sustainable, and environmentally-friendly fish farming practices.

Indicative production volumes for smoked trout in the region are typically modest, with small to medium-sized farms focusing on premium products. Exact numbers can vary depending on the size of the trout farms and seasonal demand, but it is estimated that many local farms produce between a few hundred to a few thousand kilograms of smoked trout annually.

In Slovenia, the total production of smoked trout is relatively low compared to larger European fish-producing countries, as Slovenia prioritizes quality and traditional smoking methods. Trout farming in the Primorsko-Notranjska region benefits from clean waters and sustainable practices,

which ensure that the fish are of high quality, but this also means that production volumes are kept smaller to maintain these standards.

As a result, smoked trout from the region is often considered a **gourmet product**, primarily distributed locally or to specialty markets and restaurants.

Preparation, consumption and preservation:

1. Appetizers and Starters:
 - Smoked trout is often served on its own or with bread and butter as an appetizer. It can be accompanied by lemon, fresh herbs (such as dill or parsley), and capers to enhance its flavor.
 - It is also a popular addition to charcuterie boards, paired with cheeses, olives, and other savory snacks.
2. Salads:
 - Smoked trout can be flaked and added to green salads or potato salads for a protein boost. Its smoky, savory taste pairs well with fresh vegetables and light dressings.
 - A classic dish is a smoked trout and horseradish salad, where the rich fish is complemented by the spicy heat of horseradish.
3. Sandwiches and Wraps:
 - Thin slices of smoked trout can be used in sandwiches or wraps, often paired with cream cheese, fresh greens, or cucumbers.
 - A popular variation is the smoked trout bagel, featuring a bagel spread with cream cheese and topped with smoked trout, capers, onions, and dill.
4. Pasta Dishes:
 - Smoked trout can be used in creamy pasta dishes, where its bold flavor contrasts with light, creamy sauces. It works well with ingredients like garlic, lemon, and fresh herbs.
 - It is often used in pasta salads, adding protein and a distinctive taste to cold dishes.
5. Spreads and Pâtés:
 - Smoked trout can be blended with ingredients like cream cheese, sour cream, or Greek yogurt to make a smoked trout spread or pâté. These spreads are often served with crackers, bread, or as part of a larger appetizer platter.
 - A smoked trout mousse is another popular spread, made by whipping trout with cream and seasonings.
6. Breakfast Dishes:
 - Smoked trout is often used in breakfast dishes such as scrambled eggs, omelets, or even on eggs benedict as a substitute for smoked salmon.
 - A popular breakfast option is smoked trout with poached eggs, served with avocado and toast.
7. Culinary Pairings:
 - Smoked trout pairs well with a wide range of flavors, including citrus (lemon or lime), fresh herbs (dill, chives, or parsley), horseradish, and mustard.
 - It can be served alongside traditional Slovenian accompaniments such as potatoes, polenta, or rye bread.

You can find (and eat) smoked trout in:

Okrepčevalnica in ribogojnica Bubec, Feliks Peterneelj s.p., www.domacija-bubec.si

1.2 Rolled Pancetta



Common name of the product: Rolled pancetta

Common name of the product in the territory of intervention: Rolana panceta

Photo: Rolled pancetta; Photo credit: <https://ljubimdomace.si/ponudba/mesnine-iz-doline/domaca-rolana-panceta>

Category: Cured meats and sausages

Historical production area and origin

The Primorsko-Notranjska region of Slovenia, known for its diverse landscapes ranging from the Karst Plateau (*Kras*) to lush forests, has a rich tradition of pork curing, including the production of rolled pancetta (*panceta zvita*). While less internationally renowned than other Slovenian cured meats, pancetta from this region reflects the area's historical influences and its unique environment.

The production of pancetta in the Primorsko-Notranjska region stems from a centuries-old practice of preserving meat, deeply tied to the agrarian lifestyle of its inhabitants. The tradition was shaped by:

Italian influence: neighbouring the Friuli Venezia Giulia region of Italy, the area shares culinary techniques and traditions. Italian rolled pancetta likely served as the blueprint for the Slovenian adaptation.

Karst plateau heritage: The Karst region, part of Primorsko - Notranjska, is historically famous for its prosciutto (*pršut*) and other cured meats, owing to its ideal curing climate. Pancetta production naturally evolved alongside these traditions.

Rural self-sufficiency: Families in the region historically raised pigs and cured pork to ensure a year-round food supply. Pancetta was a practical and flavourful solution for preserving pork belly.

Production and Characteristics

Curing Process: pork belly is seasoned with sea salt, black pepper, garlic, and sometimes juniper berries, reflecting the area's proximity to the Adriatic and its Mediterranean influences. herbs such as rosemary and bay leaves are often added, tying the flavor profile to the local environment.

Rolling and Aging: the meat is tightly rolled and tied, then hung in dry, cool cellars or Karst caves where natural air circulation aids the curing process, aging times vary but typically last several months to develop a balanced flavour.

Flavour Profile: pancetta from Primorsko - Notranjska tends to be aromatic, with a pronounced herbal character. The addition of garlic and juniper lends depth, while the use of Adriatic salt ties it to the broader Mediterranean culinary tradition.

Geographical significance: The Primorsko - Notranjska region provides an ideal environment for curing meats. Karst plateau: Known for its dry, windy climate, the plateau is a natural curing chamber. The area's distinctive *bora* wind helps in the slow drying of meats, imparting a unique character. Connection to the coast: Proximity to the Adriatic Sea influences the seasoning and curing traditions, blending Mediterranean and inland techniques.

Cultural Context: In Primorsko - Notranjska, panceta is more than just a cured meat—it's part of the region's cultural identity. It is: used in traditional dishes such as stews, soups, or as a flavourful addition to vegetable and potato dishes, served thinly sliced as an appetizer, often alongside other cured meats like *pršut* and local cheeses.

Rolled pancetta in the **Primorsko - Notranjska** region reflects a blend of Italian and Slovenian culinary heritage, shaped by the area's geographical features and cultural practices. It remains a cherished part of the local gastronomic tradition, celebrated for its unique flavors and artisanal production methods.

Cultivars, species and types

Rolled pancetta, known as "pancetta" in Slovenian, is a traditional cured meat product enjoyed in various regions, including Primorsko - Notranjska. This delicacy is made from pork belly that is salted, seasoned, and then rolled into a cylindrical shape before being cured.

In the Primorsko - Notranjska region, pancetta is typically crafted from locally raised pigs, with a focus on traditional Slovenian breeds such as the Krškopolje pig. This breed is known for its quality meat and fat, which are essential for producing high-quality pancetta.

The preparation of rolled pancetta in this region involves specific curing methods and seasoning blends that reflect local culinary traditions. While the exact recipes can vary between producers, common seasonings include black pepper, garlic, and bay leaves. The pancetta is then rolled, tied, and left to cure for several weeks, allowing the flavours to develop fully.

It's important to note that while pancetta is enjoyed in Slovenia, it is also a staple in Italian cuisine, where it can be found in both flat and rolled forms. In Italy, the preparation methods and seasonings may differ, resulting in variations in flavour and texture.

In summary, rolled pancetta in the Primorsko - Notranjska region is a cherished traditional product made from local pig breeds, with preparation methods that highlight the region's culinary heritage.

Description: Colour and Texture

Rolled pancetta, or pancetta, is known for its appealing appearance and rich texture, which are indicative of its quality and preparation. Here's a detailed description:

Colour: exterior - typically light to dark brown, depending on the level of curing and spices used in the coating. If smoked, the outer layer may have a golden or slightly reddish hue; **Interior:** marbled with alternating layers of pinkish-red lean meat and creamy white fat. The fat provides a glossy, translucent quality when thinly sliced, the colour contrast between the meat and fat is sharp, emphasizing the rolled pattern when cut

Texture: before slicing - firm and compact, with a slightly springy feel when pressed due to the curing process, the rolled shape is tightly bound, often with string or netting, ensuring it holds its cylindrical form; **after slicing** - thin slices are pliable and tender, the lean meat has a chewy but not tough texture, while the fat is soft and melts easily, adding a silky mouthfeel; **when cooked** - the fat renders down, becoming crispy if fried, while the meat retains a savoury, tender bite.

The interplay of colour and texture in rolled pancetta makes it a visual and culinary delight, showcasing the craftsmanship of traditional curing methods.

History of the product:

Rolled pancetta, a cured pork belly product, has a long and storied history rooted in Mediterranean culinary traditions, with influences from both Italian and Balkan gastronomy. In regions like Slovenia's **Primorsko - Notranjska**, its history intertwines with rural life, seasonal food preservation practices, and cultural exchange.

Origins and mediterranean roots - ancient preservation techniques: the practice of curing meat dates back thousands of years, as salting, drying and curing were essential for preserving pork before refrigeration. Pork belly, prized for its balance of fat and lean meat, was widely used

for curing in ancient Mediterranean cultures. **Influence of the Roman empire:** The Roman empire brought advanced curing techniques to regions across Europe, including Slovenia. Early pancetta-type products emerged as a way to preserve pork belly while enhancing its flavour with salt, herbs, and spices.

Development in Slovenia - adaptation to local traditions: In Slovenia, rolled pancetta became popular in areas like **Primorsko - Notranjska**, where pig farming was central to rural economies. Slovenian farmers, particularly in the Karst region, adopted Italian curing methods but infused them with local ingredients such as garlic, black pepper, bay leaves, and juniper. **Connection to the Krškopolje pig:** The Krškopolje pig, a native Slovenian breed, has historically been valued for its high-quality meat and fat, making it ideal for pancetta production. This breed's use in traditional recipes highlights the importance of local biodiversity in shaping culinary heritage.

Cultural and economic significance - seasonal and festive use: Rolled pancetta was often prepared during the winter slaughter season (**koline**), a time of communal activity and celebration. It was a prized product stored for special occasions, symbolizing abundance and skillful food preparation. **Trade and Italian Influence:** Proximity to Italy, a country renowned for its pancetta, brought trade and cultural exchange that influenced Slovenian curing techniques. Rolled pancetta's cylindrical form mirrors Italian traditions, though Slovenian variations often incorporate regional seasonings and smoking techniques.

Modern revival - artisanal production: In recent years, rolled pancetta has seen a resurgence as part of the broader movement toward traditional and artisanal foods. Small-scale Slovenian producers emphasize sustainable farming and heritage breeds like the Krškopolje pig, preserving the authenticity of the product. **Recognition and Culinary Appeal:** Rolled pancetta is now celebrated as a key ingredient in both traditional Slovenian dishes and international cuisine, bridging history with modern tastes.

Rolled pancetta's journey from a practical preservation method to a cherished culinary tradition reflects the rich cultural tapestry of the Primorsko - Notranjska region and its Mediterranean connections.

Animal breed of origin

The animal breed of origin for rolled pancetta is pork, specifically from pigs. In the Primorsko-Notranjska region of Slovenia, a notable breed associated with traditional pancetta production is the Krškopolje pig.

Animal Type

Pig - Breed: Krškopolje pig (also known as the Blackbelt pig): the Krškopolje pig is the only indigenous Slovenian pig breed, known for its high-quality meat and fat, the breed's balanced fat-to-meat ratio makes it particularly suitable for curing and producing products like pancetta.

Rolled pancetta is not derived from cattle, sheep, goats, or other livestock. It is a pork product crafted from the belly of the pig, which is cured, seasoned, and rolled into its characteristic cylindrical shape.

Description of the breed

The **Krškopolje pig** is an **autochthonous Slovenian breed**, renowned for its suitability in producing traditional pork products like rolled pancetta. Here is a detailed description of the breed:

Physical appearance: the breed is easily recognized by the characteristic **black body with a white belt** encircling its shoulders and forelegs, medium to large in size, with a robust and well-muscled frame, Semi-lop ears that partially cover its face.

Adaptation and Habitat: native to the Lower Carniola (Dolenjska) and Primorsko - Notranjska regions of Slovenia. The Krškopolje pig is well-adapted to the hilly terrain and temperate climate of Slovenia. It thrives in outdoor or semi-outdoor conditions, including forests and pastures.

Meat Quality: known for its high-fat content and marbling, which enhance flavor and texture. The fat is particularly creamy and essential for the production of high-quality cured meats like pancetta. The balance of lean meat and fat makes it ideal for traditional curing processes.

Cultural Significance: the Krškopolje pig has been a cornerstone of Slovenian rural life and culinary heritage for centuries. It plays a crucial role in traditional pig-slaughtering festivities (koline), where various cured products like pancetta, sausages, and prosciutto are prepared.

Due to industrial farming trends, the Krškopolje pig population declined significantly in the 20th century. Today, it is protected as a rare breed under Slovenian national heritage programs and by organizations focused on preserving biodiversity. Farmers and producers now prioritize sustainable breeding and highlight its use in artisanal, high-quality cured meats, including rolled pancetta.

The Krškopolje pig's combination of adaptability, rich fat quality, and cultural importance makes it an ideal source for Slovenia's traditional rolled pancetta.

Description of the type of farming

The production of rolled pancetta, particularly from autochthonous breeds like the Krškopolje pig in Slovenia, relies on traditional, sustainable, and small-scale farming practices. Here's a detailed description:

1. Extensive and Semi-Extensive Farming: The pigs are raised with ample space to roam, either outdoors or in semi-outdoor systems, allowing for natural behavior and feeding patterns. Pigs have access to meadows, forests, and pastures, where they can forage for roots, grasses, acorns, chestnuts, and other natural resources. This natural diet contributes to the quality of the meat and its rich marbling. During colder months, pigs are sheltered in simple, well-ventilated stables or barns, with access to straw bedding for comfort and warmth.

2. Traditional and Sustainable Practices: Farmers often supplement foraged food with locally grown grains (barley, corn, and oats) and kitchen scraps, reducing reliance on industrial feed. Pigs are raised in low-density conditions to minimize stress and promote better health, resulting in higher-quality meat. The Krškopolje pig is a slow-growing breed, meaning it matures over a longer period compared to commercial pigs. This slower growth allows for better muscle and fat development, essential for the production of cured products like rolled pancetta.

3. Animal Welfare and Environmental Impact: Farmers prioritize the welfare of the pigs by allowing free movement, foraging, and social interaction. This humane approach ensures healthier animals and higher-quality pork. The extensive farming methods used are environmentally sustainable, as they involve minimal machinery and emphasize the natural ecosystem. Pigs play a role in land management, as their foraging behavior helps clear underbrush and aerate the soil.

4. Small-Scale and Family Farming: Pancetta production is often carried out by small family farms where generations have passed down knowledge of pig breeding and meat curing. Unlike industrial farming, small-scale farms focus on quality over quantity, raising fewer pigs but producing superior meat for cured delicacies.

5. Integration with Local Culture: In regions like Primorsko - Notranjska, pig farming and pancetta production are closely tied to rural traditions and local culinary heritage. Seasonal pig slaughter (koline) is a communal event where farmers utilize the whole pig, creating a variety of cured meats, including pancetta.

Harvesting period

The harvesting period for producing rolled pancetta is closely linked to the traditional pig slaughter season, which occurs during the colder months of the year. This period is essential for both practical and cultural reasons in regions like Primorsko - Notranjska in Slovenia.

The primary harvesting period for pigs is late autumn to early winter (typically November through February). This season aligns with traditional pig-slaughtering events known as koline in Slovenia.

Reasons for the Winter Period

Cooler Temperatures: The cold weather naturally aids in meat preservation, preventing spoilage before curing can begin. It provides ideal conditions for the initial salting and air-drying of the meat required for rolled pancetta.

Seasonal Cycle: Pigs are often raised throughout the warmer months, foraging on natural pasture and fattening on grains, acorns, and other seasonal foods. By winter, the pigs have reached optimal weight and fat levels, ensuring high-quality meat for curing.

Cultural Tradition: The winter slaughter season (**koline**) is deeply embedded in rural communities, where families gather to process the meat and prepare various cured products like **rolled panceta**, sausages, and prosciutto. This communal practice ensures that no part of the pig goes to waste.

Post-Harvest Process: After the pigs are slaughtered, the pork belly is immediately salted, seasoned, and prepared for curing. The curing process, including air-drying or smoking, begins soon after and can last several weeks to months, depending on local methods and desired flavor.

Production period:

The production period for rolled pancetta involves a series of steps spanning several weeks to months, beginning immediately after the pigs are harvested during the traditional slaughter season (November to February). This period encompasses salting, seasoning, rolling, and curing the pork belly.

Initial preparation (week 1): salting: fresh pork belly is generously salted to draw out moisture, inhibit bacterial growth, and begin the curing process, pork belly may also be seasoned with traditional spices such as black pepper, garlic, bay leaves, and sometimes juniper.

Resting and flavour absorption (1-2 weeks): the salted pork belly is left to rest in a cool environment (around 4–8°C) for one to two weeks to allow the salt and spices to penetrate the meat evenly, this step ensures that the flavours are well absorbed and that the curing process begins uniformly.

Rolling and tying (end of week 2): once the pork belly has been properly salted and seasoned, it is rolled tightly into a cylindrical shape, it is then secured with string or netting to maintain its form throughout the curing process.

Curing and drying (1-3 months): the rolled pancetta is hung in cool, well-ventilated spaces (often traditional curing rooms or cellars) with controlled humidity and temperatures. This stage lasts between 1 to 3 months, depending on the producer, desired texture, and flavour. Optimal temperatures for curing are around 10–15°C, with humidity levels between 60–80%. In some regions, pancetta may undergo light smoking to add flavour and aid in preservation, though this step depends on local tradition.

Aging and maturation (optional, up to 6 months): for more complex and intense flavours, rolled pancetta may be aged for an extended period, this step further reduces moisture content and enhances the pancetta's texture and taste.

Total Production Period: Minimum Production Time: Approximately 6–8 weeks (for simpler curing).
Extended Production Time: Up to 3–6 months for more artisanal, slow-cured pancetta.

Product Characteristics (Flavour, Texture): Flavour: Rich, savory, mildly salty, with complex herbal and aromatic notes; sometimes complemented by a subtle smokiness. The pancetta has a deep, umami flavour with a perfect balance between the sweetness of the pork fat and the saltiness from the curing process. Traditional seasonings such as black pepper, garlic, bay leaves, and sometimes juniper or herbs impart a slightly spicy, aromatic, and earthy note. The salt used during curing enhances the natural pork flavour without overpowering it. In some cases, pancetta may be lightly smoked, adding a delicate smoky undertone that complements its natural richness. The creamy fat delivers a buttery, slightly sweet taste that melts in the mouth, balancing the meat's savoury notes.

Texture: Silky, tender, and creamy with a melt-in-the-mouth quality when raw, and crispy yet chewy when cooked.

When sliced thin, the pancetta has a tender and pliable texture that is **smooth** and **silky**, thanks to the marbling of fat and lean meat. The high-quality pork fat softens as it warms, creating a luscious, melt-in-the-mouth texture when eaten raw or cooked lightly. The lean meat provides a pleasant chewiness that contrasts perfectly with the softness of the fat. When fried or rendered, the fat becomes crisp, while the meat retains a tender, savoury bite, intensifying its flavours.

Nutritional values and use:

Rolled pancetta, as a cured pork product, is high in calories, fats, and protein, while also providing small amounts of essential vitamins and minerals. Here is an approximate breakdown per 100 grams of rolled pancetta:

Nutrient	Amount (per 100g)
Calories	400–500 kcal
Protein	12–15 g
Total Fat	40–50 g
Saturated Fat	15–20 g
Cholesterol	70–80 mg
Sodium	1,500–2,000 mg
Carbohydrates	0–1 g

High in fat: The fat content, especially saturated fat, is significant and contributes to pancetta's creamy texture and flavour. This fat is energy-dense and provides a rich mouthfeel.

Protein source: Pancetta contains a moderate amount of protein, essential for muscle repair and growth.

High sodium content: Due to the curing process, rolled pancetta is high in sodium, which aids preservation but should be consumed in moderation.

Vitamins and minerals: Pancetta contains small amounts of **B vitamins** (B1, B2, B6, and B12), which are essential for energy metabolism. It also provides **iron**, **zinc**, and **selenium**, which support immune function and oxygen transport in the body.

Culinary use

Highly versatile—enjoyed raw, crisped in cooking, or as a flavor enhancer in various dishes, from pasta to stews and salads.

Indicative quantity produced and product distribution:

The quantity produced and distribution of rolled pancetta, particularly in Slovenia and regions like Primorsko - Notranjska, depend on several factors including local farming practices, the popularity

of traditional cured meats, and the size of production facilities. While precise figures can vary, here's an overview of general trends.

Quantity produced: Small, artisanal producers create hundreds to thousands of kilograms annually, especially around the seasonal pig-slaughter period.

Small-scale, artisanal production:

Rolled pancetta is typically produced on small-scale, family-owned farms rather than large industrial operations. In Slovenia, many producers focus on artisanal methods, where the quantity is often limited but of high quality. Small producers may make anywhere from hundreds to a few thousand kilograms of rolled pancetta per year, depending on the size of their operation, local demand, and available resources like pigs and curing facilities. Larger, more industrial-scale operations may produce higher quantities, but the focus on quality and traditional methods tends to limit mass production.

Regional production focus: The Primorsko - Notranjska region, known for its indigenous Krškopolje pigs, produces a significant portion of Slovenia's rolled pancetta. The production here is still predominantly seasonal, centered around the winter slaughter period (November to February).

Distribution: Mainly local, with increasing **national and international exports** as demand for traditional Slovenian cured meats grows.

The trend toward sustainable farming, heritage breeds (like the Krškopolje pig), and artisanal food production means that rolled pancetta's quantity is often intentionally limited to preserve traditional practices and quality.

Preparation, consumption and preservation:

Preparation: Rolled pancetta can be sliced thin for raw consumption or cooked by frying, rendering, or incorporating into dishes.

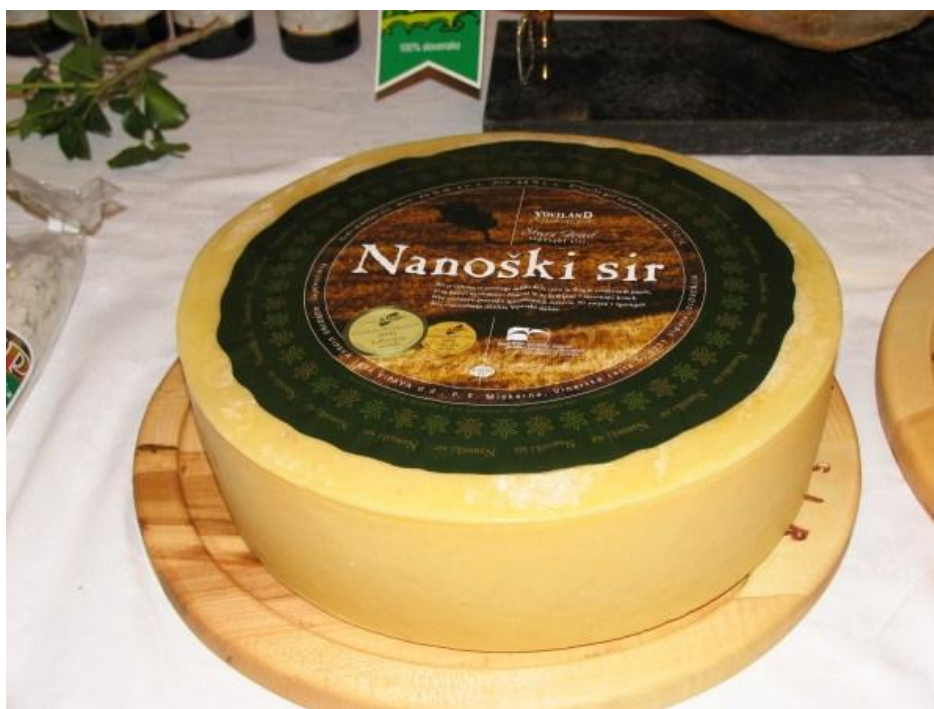
Consumption: It's enjoyed as part of charcuterie, in sandwiches, or as a flavourful ingredient in pastas, soups, and salads.

Preservation: Short-term preservation involves refrigeration, while longer storage can be achieved through vacuum sealing or freezing. Traditional curing and drying methods are also used for long-term preservation.

You can find (and eat or buy) Rolana panceta:

- Mesarstvo Lah s.p., Matjaž Lah, 031531492, lahmatjazz@gmail.com
- Kmetija Jagodnik Lačman, 051650669, Koseze 58, Ilirska Bistrica
- Ekološka kmetija Gruden, Lili Gruden, Šmihel pod Nanosom 58, Postojna, 041627266
- Kmetija Zajc, Planina 41, Planina, kmetija.zajc@gmail.com
- Predelovalnica mesa Premrl, Bogdan Premrl, Predajma 31, Postojna, 031433328
- Gostilna Skok, Dejan Skok s.p., Bač 50a, Knežak, dejan.skok@gmail.com, 031363758

1.3 Nanos Cheese



Common name of the product:
Nanos cheese

Common name of the product in the territory of intervention:
Nanoški sir

Photo: Nanos Cheese; Photo credit: Darinka Sebenik (<https://glasdezele.si/zanimivosti/>)

Category: Cheese or dairy product

Historical production or breeding area and origin:

Nanos cheese (*Nanoški sir*) originates from the Nanos plateau in the Primorska region of Slovenia. The cheese's name is derived from the Nanos mountain, a prominent and culturally significant landmark in the region. This area has a long history of cheesemaking and livestock breeding, particularly linked to sheep and cow farming, dating back several centuries.

Historical production and breeding Area

Nanos Plateau: The Nanos Plateau, located at the junction between the Karst and the Notranjska regions, has been a traditional center for pastoral farming due to its favorable natural environment. The plateau's rich pastures, abundant in wildflowers and aromatic herbs, contribute to the unique flavor of the milk and, subsequently, the cheese.

Cheesemaking Tradition: Historical records suggest that cheesemaking in the Nanos area dates back to at least the Middle Ages, when local farmers and shepherds utilized their livestock for milk production. The area's traditional farming communities practiced transhumance, moving their livestock to high-altitude pastures during warmer months. The fresh alpine grasses and herbs greatly influenced the quality of the milk used for Nanos cheese.

Breeding area: historically, both sheep and cattle were bred on the Nanos Plateau, with cattle milk becoming more predominant over time for Nanos cheese production. The cattle were predominantly autochthonous Slovenian breeds such as the Cika cattle (a hardy, native Slovenian breed known for its milk quality and adaptability to mountainous terrain).

Cultural and economic importance: the production of Nanos cheese was historically tied to self-sustaining farming and small-scale dairies. Cheese served as an essential source of nutrition for the local population and was often traded or sold in nearby markets, helping to support rural economies.

Recognition and legacy: Nanos cheese remains a symbol of Slovenian cheesemaking heritage. Today, it continues to be produced using traditional methods that have been passed down through generations, reflecting the rich cultural history of the region. It is celebrated as a high-quality product due to its connection to the natural environment of the Nanos Plateau and the long-standing traditions of dairy farming in the area.

History of the product

Nanos cheese (*Nanoški sir*) has a long tradition rooted in the Nanos plateau in Slovenia's Primorska region. Dating back to the Middle Ages, it originated from the need to preserve milk in pastoral communities practicing transhumance—seasonal livestock grazing on the plateau's rich, herb-filled pastures. These natural conditions gave the cheese its distinct flavor and quality.

Over centuries, local farmers and shepherds perfected cheesemaking using traditional methods passed down through generations. During the Austro-Hungarian period, Nanos cheese gained regional recognition for its durability and exceptional taste, reaching markets in Trieste and Ljubljana.

After World War II, production continued despite agricultural changes, maintaining artisanal techniques. In the modern era, Nanos cheese has become a celebrated symbol of Slovenian heritage, valued for its connection to the Nanos Plateau's unique environment and cultural traditions.

The animal breed of origin for Nanos cheese is primarily cattle. Historically, the milk used for Nanos cheese came from autochthonous Slovenian cattle breeds, particularly the Cika cattle. This hardy, native breed is well adapted to the rugged terrain and high-altitude pastures of the Nanos plateau, where it grazes on rich, herbaceous meadows, contributing to the cheese's distinct flavor and quality.

In some traditional variations, sheep's milk may have also been used, but the predominant milk source for Nanos cheese has been and remains cow's milk.

Description of the breed

The Cika cattle (*Cika*, also known as *Bohinj cattle*) is a small, autochthonous Slovenian breed that has been traditionally raised on the Nanos plateau and other mountainous regions of Slovenia. Known for its hardiness and adaptability, the Cika cattle plays a significant role in the production of high-quality milk for Nanos cheese.

Characteristics of the Cika cattle

Cika cattle are small to medium-sized. Adult cows typically weigh between 350–500 kg, while bulls can reach 550–650 kg. The breed is easily recognized by its distinctive red coat with white markings. The red can range from light to deep reddish-brown, and the white markings usually appear on the head, belly, and legs. Cika cattle have short, upward-curving horns. In some individuals, horns may appear slightly twisted.

Productive characteristics: Cika cows produce high-quality milk with a high fat and protein content, which is ideal for cheese production. The milk's richness is attributed to their diet of herbaceous alpine grasses and aromatic plants. A Cika cow produces between 3,000–4,000 liters of milk per lactation cycle. The breed thrives in high-altitude pastures (ranging from 700 to 1,500 meters above sea level) and rugged terrains where other breeds might struggle. Its ability to graze on sparse vegetation makes it particularly suited to the Nanos plateau. Historically, Cika cattle were valued for both milk production and light work on small farms. While modern farming focuses more on milk, the breed is still regarded as dual-purpose. The Cika breed is known for its docile temperament, making it easy to manage in traditional, small-scale farming systems.

Altitude and Habitat

Cika cattle are well-suited to mountainous regions and are typically found at altitudes ranging from 700 to 1,500 meters. They graze on natural alpine pastures rich in diverse herbs and grasses, which impart a unique flavor to the milk used for Nanos cheese. Their hardy nature allows them to withstand harsh weather conditions, making them an ideal breed for the rugged landscapes of the Nanos plateau and other Slovenian highlands.

Significance to the Region

The Cika cattle's ability to thrive in high-altitude, low-input environments makes it a vital breed for maintaining the traditional pastoral farming system of the Nanos Plateau. Its milk's superior quality contributes directly to the distinct flavor and texture of Nanos cheese, highlighting the breed's cultural and economic importance to the region.

Description of the type of farming:

The farming system associated with Nanos cheese production is primarily extensive, characterized by traditional, small-scale pastoral practices. This type of farming reflects the region's rich agricultural heritage and the natural environment of the Nanos plateau in Slovenia.

Farming Type: Extensive System

Livestock, particularly Cika cattle, graze outdoors on the Nanos plateau for a significant part of the year. Grazing typically takes place from spring to autumn (April to October), when the pastures are abundant with diverse grasses and herbs.

The cattle graze at altitudes ranging between 700 and 1,500 meters, depending on the season and availability of pasture.

During the colder months (late autumn and winter), when high-altitude pastures are no longer viable, cattle are kept in sheltered barns or stables. In this period, they are fed with stored hay and occasionally supplemented with locally sourced grains.

Animal feed

The diet of the Cika cattle plays a crucial role in the quality of the milk used for Nanos cheese.

Pasture grazing (spring to autumn): cattle feed primarily on natural grasses, wildflowers, and aromatic herbs such as thyme, sage, and clover, which thrive in the Nanos Plateau's meadows. This grazing imparts the milk with unique flavors and nutritional qualities.

Winter feeding: livestock are provided with high-quality hay harvested from the same pastures during the summer months. Depending on availability, small quantities of cereals (such as oats or barley) may be added to maintain the cows' nutritional balance.

Breeding practices

Traditional farming methods: the farming system is predominantly low-input, with minimal use of modern machinery or artificial supplements. Farmers rely on natural grazing and sustainable practices to maintain the health of the animals and the land.

Animal care: cattle are regularly monitored for their health, with a focus on natural breeding methods to sustain the native Cika breed.

Environmentally friendly: the extensive system contributes to biodiversity and soil health, as grazing cattle naturally manage the pastures by controlling plant growth and fertilizing the soil.

For Nanos cheese, the processors are typically also the breeders of the animals. This reflects the traditional, small-scale farming system in the Nanos plateau region, where local farmers manage the entire production process, from raising livestock to cheesemaking.

Animal breeding and milk production: farmers who produce Nanos cheese generally breed and care for their own Cika cattle or other livestock, ensuring control over the quality of the milk. The cattle graze on the farmers' own pastures, and their diet is supplemented with hay and grains produced locally.

Cheese processing: the same farmers often process the milk into cheese using traditional methods handed down through generations. This integration ensures that the final product reflects the specific qualities of the milk and the region's heritage.

Sustainability and traceability: this farm-to-table approach guarantees high levels of sustainability, traceability, and authenticity, as the farmers oversee every step of the process.

For Nanos cheese, the breeders of the cattle are also the processors, maintaining a close connection between animal husbandry, milk production, and cheesemaking. This integrated practice ensures that the cheese remains a genuine representation of the Nanos plateau's unique natural and cultural environment.

Production period

The production of Nanos cheese typically follows a seasonal cycle, closely tied to the grazing patterns of the cattle and the availability of fresh milk.

Main production season - spring to autumn (april to october): this is the primary period for Nanos cheese production, as cattle graze on the natural alpine pastures of the Nanos plateau. The milk produced during this time is rich in flavor and nutrients due to the diverse grasses and herbs in the cattle's diet, resulting in cheese of exceptional quality.

Winter production (limited) - late autumn to early spring (november to march): during the winter months, cheese production slows down significantly or stops altogether. If milk is available, it is typically derived from cows fed on stored hay, which may slightly alter the milk's flavor profile compared to pasture-fed milk.

Cheese maturation and aging: once produced, Nanos cheese is aged for several weeks to months. Cheesemakers may begin production in spring, but the fully matured cheese might only be ready for consumption by late summer or autumn, depending on the desired texture and flavor profile.

Product characteristics

Weight: 1.5–3 kg per wheel.

Shape: Circular, with a firm rind and semi-hard interior.

Production Tools: Primarily traditional (wooden vats, molds, and aging boards).

Aging Period: 3–6 months or longer for aged varieties.

Ingredients: Fresh cow's milk (Cika cattle), rennet, salt, and sometimes sheep's milk.

Nanos cheese is celebrated for its traditional production methods, deeply rooted in the cultural and natural heritage of the Nanos plateau, ensuring its place as a high-quality, artisanal Slovenian cheese.

Nutritional value and use

Nanos cheese is a nutrient-rich dairy product, offering a balance of essential macronutrients and micronutrients. Its nutritional profile is influenced by the natural milk from pasture-fed Cika cattle. Below are the approximate values per 100g of cheese:

Calories: 350–400 kcal

Protein: 22–25 g (rich in high-quality proteins with essential amino acids, making it an excellent source for muscle repair and growth)

Fat: 28–32 g (primarily composed of healthy saturated fats, with traces of unsaturated fatty acids, the fat content contributes to the cheese's creamy texture and flavor)

Carbohydrates: 0–1 g (minimal lactose content, especially in aged varieties, making it suitable for individuals with mild lactose intolerance)

Calcium: 700–800 mg (70–80% of the daily requirement, promotes strong bones and teeth)

Phosphorus: 450–500 mg (essential for energy metabolism and bone health)

Vitamin A: 300–400 IU (supports vision and immune function)

Vitamin B12: 1.5–2.5 µg (100% of the daily requirement, crucial for nerve function and red blood

cell production.

Sodium: 600–800 mg (naturally present and enhanced by the salting process)

Nanos cheese is prized for its distinct flavor profile, making it suitable for a variety of culinary applications:

Table Cheese - served on cheese platters alongside fruits, nuts, and bread, often paired with local wines from the Primorska region, such as Teran or Malvasia

Cooking - used as a grating cheese for soups, pastas, and risottos, melts well, making it ideal for dishes like casseroles, quiches, and savory pastries.

Salads and Appetizers - thin slices or shavings enhance salads, especially when combined with fresh greens and olive oil

Traditional Slovenian Dishes - incorporated into regional recipes, including polenta, žganci, and buckwheat-based dishes.

Storage: Nanos cheese should be stored in a cool, dark place, ideally at 8–12°C, wrapped in wax paper or a breathable cloth to maintain moisture and prevent drying. Once cut, it is best stored in the refrigerator and consumed within 2–3 weeks for optimal flavor.

Shelf life: properly aged Nanos cheese can last several months when stored under appropriate conditions, thanks to its low moisture content and protective rind.

Indicative quantity produced in one year

The annual production of Nanos cheese is relatively limited, reflecting its artisanal nature and the small-scale, traditional farming methods in the Nanos plateau region. Estimates suggest:

Indicative Annual Production: Approximately 50–100 tons of Nanos cheese are produced each year.

This quantity varies based on:

Seasonal milk yield: the production depends on the availability of milk from Cika cattle, which fluctuates with grazing conditions on the plateau.

Number of farmers and cheesemakers: Nanos cheese is primarily made by small, family-run farms, limiting large-scale production.

Aging times: since Nanos cheese requires several months of aging, the time investment affects how much cheese is released to the market in any given year.

The relatively small production volume underscores its artisanal quality, contributing to its reputation as a specialty product deeply tied to the traditions and environment of the Nanos Plateau.

Product distribution and market

Nanos cheese is primarily produced for commercial purposes, but it retains its artisanal and local character. The cheese is distributed through a mix of local, regional, and niche markets.

Farm sales: many producers sell Nanos cheese directly from their farms, offering it as a fresh, artisanal product to locals and tourists visiting the Nanos plateau region. These sales often occur in farm shops or through farmers' markets in nearby towns and villages.

Local specialty shops: available in delicatessens, local grocery stores, and outlets that focus on traditional Slovenian products.

Slovenian markets: distributed to larger food markets and cheese retailers across Slovenia, especially in cities like Ljubljana and Koper. Often featured in restaurants and hotels that emphasize local cuisine, where it is served as a table cheese or used in regional recipes.

Export: due to its niche appeal, some Nanos cheese is exported to nearby countries such as Italy, Austria, and Croatia, where there is demand for high-quality, traditional cheeses. Export volumes are limited, making it a sought-after product in international specialty markets.

Online sales: some producers and distributors have begun offering Nanos cheese through e-commerce platforms, catering to international food enthusiasts and Slovenian expatriates.

While the majority of Nanos cheese is produced for sale, small-scale farmers may retain a portion for personal or community use, especially for traditional family events and celebrations.

Preparation, consumption and preservation

Nanos cheese is a versatile ingredient in both traditional Slovenian recipes and modern cuisine. Its unique flavor makes it suitable for various dishes, from simple pairings to elaborate meals.

Traditional recipes using Nanos cheese

Polenta with Nanos Cheese: grated or melted Nanos cheese is served over soft or grilled polenta, a classic dish in the Primorska region.

Štruklji (rolled dumplings): Nanos cheese is used as a filling for these traditional Slovenian rolled dumplings, often served with butter or cream sauce.

Baked dishes: incorporated into baked casseroles or used as a topping for potato or vegetable gratins, adding a nutty, savory flavor.

Žganci (buckwheat spoonbread): paired with Nanos cheese for a hearty, rustic meal.

Cheese platters: served with honey, nuts, and dried fruits, highlighting the cheese's flavor.

Consumption practices: As a table cheese: commonly enjoyed as a snack or appetizer, paired with crusty bread and local wines like Teran or Refošk. Often included in charcuterie boards, alongside dried meats like prosciutto or pancetta.

Cooking: melts well, making it ideal for gratins, soups, and baked pasta dishes. Grated or crumbled over fresh salads or used as a filling in savory pastries.

To maintain its quality and flavor, proper preservation techniques are essential:
Storage conditions: store Nanos cheese in a cool place (8–12°C) or in the refrigerator, wrap in wax paper or cheese cloth to allow it to breathe while preventing it from drying out, avoid plastic wraps, which can trap moisture and promote spoilage.

Shelf Life: freshly cut Nanos cheese should be consumed within 2–3 weeks, whole, uncut wheels can last for several months if stored under optimal conditions.

Other documents on the product:

You can find (and eat or buy) Nanoški sir:

- Kmetija Žgajnar, www.kmetija-zgajnar.si, Studenec 28, Postojna, 031649714
- Ekološka kmetija Gruden, Lili Gruden, Šmihel pod Nanosom, Postojna, 041627266

The regulation on the registration of Nanoški cheese is published:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:260:0013:0014:SL:PDF>

1.4 Buckwheat Porridge



Scientific name of the product: *Fagopyrum esculentum*

Common name of the product: Buckwheat porridge

Common name of the product in the territory of intervention: Ajdova kaša

Image: Buckwheat Porridge; Photo credit: <https://okusno.je/recept/ajdova-kasa>

Category: Cereals, grains and flours

History of the product

Buckwheat (*Fagopyrum esculentum*) is not a true cereal grain but rather a pseudocereal, originating from East Asia—particularly in the regions of China and the Himalayas. It was domesticated around 6,000 years ago and spread to Europe via the trade routes during the Middle Ages.

Historical production in Slovenia: Buckwheat was introduced to Slovenia and the surrounding regions around the 15th century and quickly became a staple crop, especially in the Alpine and Pre-Alpine regions like Gorenjska, Štajerska, and Primorsko-Notranjska. The karstic and mountainous areas were well-suited for buckwheat because it thrives in poor soil and at high altitudes, where other grains such as wheat or barley struggle to grow.

In the Primorsko-Notranjska region, buckwheat has historically been grown in small fields, with its porridge (ajdova kaša) becoming an important dish in the local diet. Buckwheat porridge was traditionally used during hard winters, as buckwheat is fast-growing and resilient to cold climates, and was commonly paired with stews, meat, or vegetables.

Cultural Importance: Buckwheat became deeply embedded in Slovenian culinary tradition, and buckwheat porridge is still a popular dish today. Slovenia continues to celebrate buckwheat festivals in regions like Gorenjska, reflecting its long-standing agricultural and cultural significance.

Cultivars, species and types: There are two primary species of buckwheat that are commonly cultivated: Common Buckwheat (*Fagopyrum esculentum*): This is the most widely cultivated species of buckwheat, used for making buckwheat flour, groats, and porridge. It is the species most associated with traditional buckwheat porridge (*ajdova kaša*) and other culinary uses worldwide. Tartary Buckwheat (*Fagopyrum tataricum*): This species is less commonly grown and is more bitter

in flavour than common buckwheat. However, it is known for its high nutritional value, especially in antioxidants and rutin (a flavonoid with health benefits). Tartary buckwheat is more resilient to poor growing conditions, often cultivated in harsher climates such as the Himalayas and parts of Eastern Europe.

Buckwheat does not have as many recognized cultivars compared to true cereals like wheat or rice, but there are several varieties or cultivars that have been developed to adapt to different climates and soil types, especially in Europe and Asia. Common Cultivars of *Fagopyrum esculentum*: 'Kora': A widely grown variety in Eastern Europe and Russia, known for high yields and adaptability to poor soils. 'Pyra': This variety is well-suited for northern climates, producing robust grains. 'Darja': Developed in Slovenia and popular for its high grain quality, particularly used for porridge and flour. 'Lileja': A Polish cultivar, known for its resilience to drought and cooler temperatures. 'Emka': Known for its consistent grain size and high flour quality, common in Central Europe.

Tartary Buckwheat Varieties: 'Hokkai T10': A variety from Japan that is high in rutin, used for specialty products like buckwheat tea and functional foods. '**Islek**': A cultivar grown in the mountainous areas of Tibet, China, and parts of Eastern Europe, prized for its nutritional content but more bitter taste.

While the varieties of buckwheat may not be as numerous as some other crops, the types of products derived from buckwheat play an important role in defining its use in food production:

Buckwheat Groats (Whole or Cracked): Whole groats: The hulled seeds of buckwheat, commonly used to make porridge or as a base for dishes. Cracked groats: Groats that have been broken down, which cook faster and are often used in soups or stews.

Buckwheat Flour: Used for making buckwheat bread, pancakes, and pastries. It is gluten-free, making it a valuable alternative for those with gluten sensitivities.

Buckwheat Tea (Sobacha): Made from roasted buckwheat groats, this tea is popular in countries like Japan and Korea for its earthy flavor and health benefits.

In the Primorsko-Notranjska region and other parts of Slovenia, the main species cultivated is common buckwheat (*Fagopyrum esculentum*), and varieties like Darja are adapted for local growing conditions. The region's traditional dishes often include buckwheat porridge (ajdova kaša), made from either whole or cracked buckwheat groats, and buckwheat flour is also used in baking and various culinary traditions across the country.

Description

Shape: Whole Buckwheat Groats: Triangular or Pyramid-shaped: Buckwheat seeds (groats) are small, typically measuring around **2-3 mm** in size, and have a distinctive three-sided, pyramid-like shape, which is unique compared to true cereal grains. The outer husk is usually removed before consumption, leaving the **hulled groats** that are smooth and slightly rounded. **Cracked Buckwheat Groats:** These are simply broken-down versions of whole groats. They appear smaller and more irregularly shaped, often used for quicker-cooking applications.

Weight: Buckwheat groats are lightweight, and their density can vary slightly depending on whether they are whole or cracked. A typical serving of uncooked groats (about ¼ cup) weighs around 40-50 grams. When cooked, buckwheat expands significantly, becoming soft and fluffy, increasing in volume but not in weight.

Colour: Uncooked Groats: Pale green to light tan: Hulled buckwheat groats typically have a natural pale green to light tan colour, which can vary based on the variety of buckwheat and the region where it is grown. Roasted Groats (Kasha): In some regions, especially in Eastern Europe, buckwheat groats are toasted before cooking, which turns them a rich brown colour. This process enhances the flavour, giving the groats a nutty taste. Cooked Groats: Once cooked, whole groats typically take on a light brown colour, and the roasted versions deepen to a more golden or deep brown flavour.

Whole Buckwheat Groats: Earthy and Nutty: Buckwheat has a rich, earthy, and nutty flavour profile, which distinguishes it from milder grains like rice or wheat. This robust flavour can be an acquired taste for some, but it lends itself well to both sweet and savory dishes. Mild Bitterness: Some varieties of buckwheat, especially Tartary buckwheat, can have a slight bitterness, but the bitterness is generally mild in common buckwheat. Roasted Groats (Kasha): When roasted, the flavor becomes even more intense and nutty, with a toasty quality that adds depth to dishes. Cooked Texture: Soft and Chewy: When cooked properly, buckwheat groats have a pleasantly chewy and soft texture. They absorb liquids well but can still retain a slightly firm core, depending on the cooking method. Fluffy: Cooked buckwheat, particularly when boiled in water or broth, can become fluffy, making it ideal for porridge or as a base for hearty dishes.

Harvest period

The harvest period for buckwheat generally occurs in late summer to early autumn. In the Primorsko-Notranjska region of Slovenia, the typical timeline is as follows:

Sowing: Buckwheat is usually sown in late spring, around May, when the soil temperature is warm enough for germination.

Growth: Buckwheat grows quickly, often maturing within 10 to 12 weeks after planting. This rapid growth is one of its advantages, allowing farmers to cultivate it in a relatively short growing season.

Harvesting: The harvest usually takes place from late August to mid-September, depending on the specific variety and local climate conditions. Farmers typically monitor the plants for signs of ripeness, such as yellowing leaves and brown seeds.

Considerations: Weather Conditions: The exact timing of the harvest can be affected by weather, such as rainfall or temperature fluctuations, which may lead to variations in maturity across different fields. Post-Harvest Processing: After harvesting, the buckwheat is dried and hulled to produce the groats that are then used to make buckwheat porridge (*ajdova kaša*).

This timing allows for optimal conditions for harvesting, ensuring the best quality of the buckwheat seeds.

History of the product

Buckwheat (*Fagopyrum esculentum*) has a rich history that dates back thousands of years. Its origins can be traced to **East Asia**, particularly in the regions around **China** and the **Himalayas**, where it was domesticated around **6000 years ago**. The plant was cultivated primarily for its seeds, which served as a food source due to their high nutritional value.

By the Middle Ages, buckwheat made its way to Europe through trade routes. It gained popularity particularly in Eastern Europe and the Balkans, where the climate and soil conditions were favorable for its growth. Its resilience to poor soil conditions made it an essential crop in regions where other grains struggled.

In Slovenia, buckwheat was introduced around the 15th century and quickly became a staple food. The mountainous and karstic terrain of the Primorsko-Notranjska region was well-suited for buckwheat cultivation, allowing local communities to thrive on this nutritious grain.

Buckwheat porridge, known as *ajdova kaša* in Slovenia, became an integral part of the local diet. Traditionally, it was consumed by farmers and rural communities as a hearty and sustaining meal. The porridge was often paired with meat, vegetables, or dairy products, making it a versatile dish.

The use of buckwheat porridge extended beyond daily meals; it also played a role in various cultural practices and celebrations. In some regions, buckwheat was considered a symbol of health and prosperity, and dishes made from it were often served during festive occasions.

Over the centuries, traditional farming practices surrounding buckwheat have remained relatively unchanged. Farmers often practiced crop rotation and intercropping with legumes to enhance soil fertility. This sustainable approach contributed to the continued popularity of buckwheat as a reliable food source.

The cultivation methods also evolved, with modern agricultural techniques improving yields while maintaining the integrity of the crop. Despite these advancements, many farmers in Slovenia continue to embrace traditional methods to produce high-quality buckwheat.

In recent decades, buckwheat has experienced a resurgence in popularity, particularly due to the rising interest in gluten-free and health-conscious diets. As awareness of its nutritional benefits grew—such as its high protein content, rich source of fiber, and presence of antioxidants—buckwheat porridge has found a place in modern cuisine.

Today, buckwheat porridge is celebrated not only in Slovenia but also in various culinary traditions around the world. It can be found on the menus of health-focused restaurants and is often featured in recipes that emphasize whole grains and plant-based ingredients.

The history of buckwheat porridge is a testament to the crop's resilience and adaptability, as well as its deep-rooted significance in local cultures. From its origins in East Asia to its establishment as a staple in Slovenian cuisine, buckwheat has provided nourishment for generations. As modern dietary trends continue to embrace the health benefits of whole foods, buckwheat porridge remains a beloved dish, celebrated for its versatility, flavor, and nutritional value.

Nutritional values and use

Savory Dishes: Buckwheat porridge (*ajdova kaša*) is often prepared as a savory dish, paired with mushrooms, onions, garlic, and meat (such as bacon or sausage) or served alongside vegetables and stews. Its earthy flavor makes it an excellent complement to strong, robust flavors like roasted meats, wild mushrooms, and hearty vegetables (e.g., cabbage or root vegetables). **Sweet Dishes:** Buckwheat can also be used in sweet applications. Cooked with milk or cream and sweetened with honey, cinnamon, or fruits, buckwheat porridge is a nutritious and comforting breakfast option.

Nutritional and Health Benefits: Buckwheat is a gluten-free pseudocereal, making it suitable for individuals with celiac disease or gluten intolerance. It is also valued for its:

High fiber content, promoting digestion and satiety.

Rich in protein, particularly for a plant-based food, with a good balance of essential amino acids, including lysine.

Rich in minerals, including magnesium, phosphorus, and manganese, essential for bone health, energy metabolism, and antioxidant protection.

Antioxidants, especially in Tartary buckwheat, which is known for its high levels of rutin, a flavonoid that supports cardiovascular health.

Indicative quantity produced

The indicative quantity of buckwheat produced in the Primorsko-Notranjska region of Slovenia is relatively modest compared to larger grain crops. While specific production figures can vary year to year based on environmental conditions and farming practices, estimates suggest that the region produces around 100 to 500 tons of buckwheat annually.

This quantity primarily reflects the artisanal and small-scale nature of buckwheat farming in the region, with local farmers focusing on quality rather than mass production. Buckwheat is often cultivated in combination with other crops, and its production is typically intended for local consumption, including traditional dishes like buckwheat porridge (ajdova kaša).

In Slovenia as a whole, buckwheat has seen a slight revival in recent years due to growing interest in health foods and gluten-free options, which may influence future production trends. However, it still remains a niche crop within the broader agricultural landscape.

Product distribution and market

Buckwheat, particularly in the Primorsko-Notranjska region, is primarily produced for local consumption, but there is also a market for it beyond local boundaries. The increasing interest in health foods and gluten-free products has contributed to a growing demand for buckwheat.

Distribution channels:

Local Farmers' Markets: Buckwheat is often sold at local farmers' markets throughout the region, where farmers directly connect with consumers. These markets highlight local agricultural products, including buckwheat groats and flour.

Specialty Stores: Health food stores and specialty grocery shops frequently stock buckwheat products, catering to health-conscious consumers. These outlets often carry various forms, including whole groats, cracked groats and buckwheat flour.

Organic and Natural Food Stores: Many organic stores emphasize sustainable and local products, making them ideal locations for buckwheat sales. Consumers looking for organic options often find locally sourced buckwheat here.

Restaurants and Cafés: Local eateries and restaurants, especially those focused on traditional Slovenian cuisine or health-oriented menus, often feature buckwheat dishes like ajdova kaša or use buckwheat flour in various recipes.

Online Sales: With the rise of e-commerce, some local producers have started to sell buckwheat products online, reaching a broader audience beyond the region.

Consumption Trends: While a portion of the buckwheat produced is for local consumption, there is an increasing trend of selling excess production to nearby regions and even exporting some quantities to larger markets, particularly where demand for gluten-free products is high.

Overall, while much of the buckwheat is consumed locally, its market presence is expanding, driven by health trends and the growing popularity of traditional Slovenian cuisine.

Preparation, consumption and preservation

Preparation: Cooking Buckwheat Groats: Rinsing: Start by rinsing the buckwheat groats under cold water to remove any dust or impurities. **Cooking:** Use a ratio of about 1 cup of groats to 2 cups of water. Bring the water to a boil, add the rinsed groats, and reduce the heat to low. Cover and simmer for about 15-20 minutes or until the water is absorbed and the groats are tender. Avoid overcooking, as they can become mushy.

Making Buckwheat Porridge (Ajdova Kaša): Once cooked, the groats can be served as a porridge. You can mix in ingredients like milk, honey, fruit, or nuts for a sweet version, or sautéed vegetables and spices for a savory option.

Buckwheat Flour: Buckwheat flour can be used to make pancakes, bread, or noodles. It is gluten-free and often combined with other flours to enhance texture.

Consumption: Traditional Dishes: Buckwheat porridge (*ajdova kaša*) is a staple in Slovenian cuisine, often served alongside meats, stews, or sautéed vegetables. It can also be used in soups, salads, or as a side dish.

Health Foods: With its rising popularity in health-conscious diets, buckwheat is often featured in gluten-free recipes, such as muffins or breakfast bowls.

Culinary Versatility: Buckwheat can be used in both sweet and savory dishes, making it a versatile ingredient in various cuisines.

Preservation:

Storage of Groats: Dry and Cool Place: Store uncooked buckwheat groats in an airtight container in a cool, dry place. They can last for 6 months to a year if stored properly. **Refrigeration:** For longer storage, consider keeping them in the refrigerator or freezer to extend shelf life.

Cooked Buckwheat: Cooked buckwheat can be refrigerated in an airtight container for about 3-5 days. It can be reheated in a pot with a bit of water or in the microwave. For longer preservation, cooked buckwheat can be frozen. Portion it into freezer-safe containers, and it can last for about 3 months.

Buckwheat Flour: Store buckwheat flour in an airtight container in a cool, dry place. For optimal freshness, refrigeration is recommended, especially if it's a whole grain flour, as it can go rancid due to the natural oils.

You can find (and eat or buy) buckwheat porridge:

- Ekološka kmetija Korošec, Mira Korošec, Dolenje jezero 11, Cerknica, 041283782
- Oštirjeva kmetija, Boris Jakopin, Kamna gorica 9, Cerknica, ostirjeva.kmetija@gmail.com, 041190910

Recipes and instructions how to use buckwheat porridge:

<https://okusno.je/triki-in-nasveti/kako-pravilno-skuhati-ajdovo-kaso.html>

1.5 Linden Honey



Photo: Linden honey (left); Photo credit: <https://www.nasasuperhrana.si/ponudnik/ekoloska-kmetija-in-cebelarstvo-dolgan/>; Honey biscuits (right); Photo credit: <https://okusno.je/recept/medenjaki>

Scientific name of the product: Mel Apis mellifera

Common name of the product: Linden honey

Common name of the product in the territory of intervention: Lipov med

Category: Other

History of the product

Linden honey has a long history in the Primorsko - Notranjska region of Slovenia, an area characterized by its karst landscape and rich biodiversity. This honey is derived from the nectar of linden trees (also known as lime or basswood trees), which are significant in Slovenia both ecologically and culturally. The linden tree is considered a national symbol, often associated with community gathering places and cultural traditions.

The region's tradition of beekeeping is deeply rooted in its rural lifestyle and its favorable natural conditions for linden trees. Linden honey from this area is valued for its light amber color, delicate taste with a hint of menthol and balsamic notes, and a variety of health benefits. Historically, the production of linden honey has supported local economies and has been an integral part of the cultural identity of this Slovenian region.

This type of honey is renowned not only for its quality but also for its connection to sustainable agricultural practices in Slovenia. In recent years, it has gained recognition as a specialty product reflecting the region's unique environmental and cultural heritage.

Cultivars, species and types

Linden honey, derived from the nectar of linden trees (*Tilia* spp.), showcases diverse profiles based on the species of linden and the regional environment. Below are details on its cultivars, species, and types:

Cultivars and Species: *Tilia cordata* (Small-leaved linden), *Tilia platyphyllos* (Large-leaved linden), *Tilia americana* (American basswood), *Tilia tomentosa* (Silver linden):

Types based on harvest region: monofloral linden honey, mixed floral honey with linden

Characteristics in central Europe (e.g., Slovenia, Poland, Germany): honey has herbal and floral notes with mild citrus or balsamic flavors.

Specialty types: organic linden honey: produced without synthetic chemicals or additives; Raw linden honey: unprocessed, retaining its natural enzymes and nutrients. Crystallized linden honey: fine-grained texture due to natural crystallization. These varieties make linden honey a prized product in both culinary and medicinal applications, reflecting the unique ecology of the regions where linden trees thrive. Let me know if you'd like insights into its health benefits or culinary uses!

Description

Linden honey itself, being a liquid or crystallized substance, does not inherently have a "shape." However, it can be described by its physical characteristics:

Liquid State: freshly harvested linden honey is smooth and viscous, the fluid flows easily but has a syrup-like consistency.

Crystallized State: over time, linden honey naturally crystallizes, forming fine to medium-sized crystals, in this state, it has a grainy or creamy texture, depending on storage conditions.

Packaging Shape: linden honey is typically stored in jars, which can be cylindrical or have customized shapes reflecting local or artisanal branding, sometimes, hexagonal or hive-themed jars are used to represent the honey's origin.

Harvest period

Linden honey is typically harvested during the blooming period of linden trees, which occurs from late spring to early summer. Depending on the region, this can range from late May to early July. The timing of the harvest depends heavily on local climate conditions and the specific variety of linden trees present. Bees collect nectar from the fragrant yellowish-white flowers during this short flowering window, resulting in honey with its distinctive flavor and properties.

For example, in parts of Europe, such as France and Eastern Europe, the peak harvest time for linden honey aligns with late June through early July. In North America, where linden trees (also called basswood trees) are native, the harvest period is similarly tied to these months.

Nutritional values and use

Linden honey is rich in natural sugars, enzymes, vitamins, and minerals, making it a valuable food with numerous health benefits. Below are its typical nutritional components (per 100 grams):

1. Calories: ~300 kcal
2. Carbohydrates: ~80g (mainly fructose and glucose)
3. Proteins: ~0.3g
4. Fats: ~0g
5. Water: ~17-18%
6. Vitamins: small amounts of B-complex vitamins (B1, B2, B3, B6) and vitamin C.
7. Minerals: contains potassium, calcium, magnesium, iron, and phosphorus.
8. Enzymes: includes glucose oxidase and catalase, which contribute to its antibacterial properties.
9. Antioxidants: polyphenols and flavonoids, which protect against oxidative stress.

Uses of Linden Honey

Linden honey is prized for its versatility in culinary, medicinal, and cosmetic applications:

Culinary uses: sweetener: used as a natural substitute for refined sugar in teas, coffee, and baked goods; flavor Enhancer: its mild floral taste with hints of mint complements herbal teas, pancakes, and desserts; preservation: can be used in pickling or as a coating to preserve fruits.

Medicinal Uses: soothing colds and sore throat: its antibacterial and anti-inflammatory properties help alleviate symptoms of respiratory conditions; stress relief: known for its mild sedative effects, it is often paired with herbal teas like chamomile to promote relaxation; digestive aid: linden honey helps soothe stomach ailments, reduces acid reflux, and supports gut health; wound healing: applied topically, it accelerates the healing of minor cuts, burns, and ulcers.

Cosmetic uses: skin care: used in face masks and creams for its moisturizing and antibacterial effects; hair care: helps condition and strengthen hair when added to shampoos or treatments.

Indicative quantity produced

In Slovenia, around 2,000 tonnes of honey are produced annually, with linden honey being one of the more prominent types. This production level aligns with national self-sufficiency but fluctuates based on environmental conditions. The Primorsko – Notranjska region, known for its diverse flora and beekeeping tradition, contributes significantly to the production of linden honey, though exact regional quantities are not specified.

Slovenia has a deep-rooted beekeeping heritage and is recognized globally for its quality honey, including linden honey, which is prized for its aroma and health benefits. The majority of Slovenian honey production is carried out by over 10,000 beekeepers, with about 8,000 being active members of the Slovenian Beekeepers' Association.

Product distribution and market

In Slovenia, linden honey is an important product both for local consumption and international markets, supported by a well-developed distribution network. Honey consumption per capita in Slovenia is about 1.1 kilograms annually, with the country's honey production, including linden honey, ranging between 1,300 to 2,550 tonnes annually. This level of production generally meets domestic demand, making Slovenia largely self-sufficient in honey production.

Linden honey, a popular variety, is widely available in markets, directly from beekeepers, and through cooperatives. Some producers also market their honey under quality assurance labels, such as the "Slovenski Med" with Protected Geographical Indication (PGI). These labels help ensure the authenticity and origin of the product, appealing to consumers seeking premium, local honey.

The honey is distributed through local stores, farmer's markets, and online platforms, and is also a prominent feature in Slovenia's culinary and wellness tourism. For instance, tourists can participate in beekeeping experiences and purchase honey products as souvenirs. Furthermore, Slovenia actively promotes its honey products, including linden honey, in international markets, highlighting their high quality and sustainable production practices.

Preparation, consumption and preservation

Preparation

Linden honey is a natural product, and its preparation involves minimal processing to retain its nutritional value and beneficial properties. The process includes: harvesting: bees collect nectar from linden blossoms, typically during late spring to early summer, honey is harvested by extracting it from beehives using honey extractors; filtration: to remove impurities like wax and bee fragments, the honey is filtered gently without heating to preserve its enzymes and nutrients; bottling: after filtration, the honey is stored in sterilized jars or containers to maintain freshness; some producers sell raw, unfiltered linden honey for those seeking maximum nutritional benefits.

Consumption

Linden honey is versatile and can be enjoyed in various ways: as a sweetener: added to teas, herbal infusions, coffee, or milk as a healthier alternative to refined sugar.; in cooking and baking: used in dressings, marinades, or as a glaze for meats and vegetables, incorporated into cakes, cookies, or bread for natural sweetness and flavor; medicinal use: taken directly (1–2 teaspoons) for sore throat relief or to soothe colds, mixed with warm water and lemon for a detoxifying drink; cosmetic use: applied topically as a natural face mask or mixed with oils for skin moisturization.

Preservation

Proper storage is essential to maintain the quality of linden honey: Optimal storage conditions: store in an airtight container in a cool, dark place; avoid exposing honey to direct sunlight or high humidity, which can degrade its quality.

Temperature: kept at room temperature (15–25°C or 59–77°F) to prevent crystallization or fermentation. Handling crystallization: if honey crystallizes, the container would be gently warmed in a water bath (not exceeding 40°C) to liquefy it without losing nutrients.

Shelf life: honey can last indefinitely if stored properly, though flavor and aroma might change slightly over time.

You can find (and buy) linden honey:

- Apigea d.o.o., Tadej Smrdel, 040618386, Slavnina 38, Postojna
- Branko Peternelj, Zalog 4, Postojna, branko.peternelj@studioproteus.si, 041724031

Recipe for honey biscuits:

<https://okusno.je/recept/medenjaki>

1.6 Apple Juice



**Scientific name
of the product:**

Malus domestica

**Common name
of the product:**

Apple juice

**Common name
of the product
in the territory
of intervention:**

Jabolčni sok

Photo: Apple juice; Photo credit: Saša Zrimšek (left), Sadjarska kmetija Pečar (right)

Category: Processed product of plant origin - Other fruit's drink (Apple)

Historical production area and origin

Origin: Apple juice originates from apples, which are believed to have been first cultivated in Central Asia. The drink itself evolved from the ancient practice of fermenting apples into beverages like cider, particularly in ancient Mesopotamia and Roman Britain.

Historical Production Areas: Apple juice production began in Europe, particularly in the Middle Ages, and expanded to North America with European settlers. Major modern production areas include the United States, China, Poland, and Germany.

Cultivars, species and types

The Primorsko - Notranjska region in Slovenia is known for its rich agricultural heritage, including the cultivation of apples. This region, which spans across the coastal and inner parts of Slovenia, offers a diverse climate that is favorable for apple growing. Apples have been cultivated here for centuries, and numerous local cultivars and varieties have been developed.

The Primorsko - Notranjska region is home to various traditional and modern apple cultivars. Some of the most notable varieties include:

Golden delicious: one of the most common and well-known apple varieties in the region. Golden delicious apples are sweet, with a mild flavor and a smooth, yellow-green skin. They are widely grown due to their adaptability to different climates, including those of Primorsko - Notranjska.

Uses: eaten fresh, used in baking, and processed into apple juice.

Jonagold: a hybrid between Jonathan and Golden delicious, this cultivar is known for its sweet-tart taste and large size. Jonagold apples have a yellow skin with red blushes. Uses: ideal for fresh consumption, baking, and making apple-based products like cider or juice.

Idared: known for its tartness and firm texture, Idared apples have red skin and white flesh. They are highly resistant to diseases, making them an ideal variety for the region's conditions. Uses: primarily used for cooking, juicing, and making apple preserves.

Pippin (Slovenian variety): a local Slovenian apple cultivar, often found in older orchards. Pippins are small to medium-sized apples with a sweet-tart flavor and greenish-yellow skin. Uses: typically eaten fresh or used for making cider and juice.

Braeburn: braeburn apples are known for their crisp texture, balanced flavor, and distinct red-orange coloration. The variety is often grown in the Primorsko - Notranjska region, benefiting from the region's milder climate. Uses: great for fresh consumption and also works well in baking and making sauces.

Gravenstein: this variety is known for its distinctive tartness and fragrant aroma. Gravenstein apples have a streaked red and green appearance and a juicy texture. Uses: Used fresh, in cider making, or as a cooking apple.

Local and heritage varieties

The Primorsko - Notranjska region is also home to some heritage apple varieties that have been passed down through generations, particularly from the era of traditional Slovenian farming. These include: **Slovenska pippin:** a traditional Slovenian variety often grown in local orchards. **Slovenska zlata:** known for its golden-yellow skin and sweet flavor, typically found in the region's local markets. These local cultivars are important both for cultural heritage and for preserving genetic diversity in apple cultivation.

Climate and Soil Impact on Apple Cultivation

The Primorsko - Notranjska region benefits from a mild Mediterranean climate, especially along the coastal areas, with warm summers and mild winters. This climate is ideal for growing apples that require a certain level of heat to ripen properly. **Soil:** the soil in this region is generally well-drained, which is conducive to growing high-quality apple varieties. The proximity to the Karst and the coastal plains adds to the soil's fertility, supporting the growth of apple trees.

Apples in the Primorsko - Notranjska region are used not only for fresh consumption but also for the production of apple juice. Varieties such as Idared and Jonagold are particularly popular for juicing because of their balance of sweetness and acidity.

Description

The apples cultivated in the Primorsko - Notranjska region of Slovenia are known for their quality, diverse characteristics, and adaptability to the mild Mediterranean climate.

Golden Delicious: round to slightly conical shape, with smooth, well-defined contours. Typically ranges from 150 to 200 grams per apple. Yellow-green skin, often with a golden hue that intensifies as the apple ripens. Some apples may have a slight red blush on the sun-exposed side. Sweet and mild with a subtle hint of tartness. Its flavor is delicate, making it a favorite for those who prefer a less intense apple taste. Crisp and juicy, with a firm flesh that holds its texture when sliced. The texture becomes softer as the apple ripens further.

Jonagold: round to slightly oval, with a uniform appearance. The fruit has a smooth surface. Jonagold apples typically weigh between 180 to 250 grams. A yellow-green base with a blush of red. The color can vary slightly depending on ripeness, with a deeper red hue on the side exposed to the sun. It has a fruity, honeyed sweetness with a hint of citrusy tang. Firm and crunchy, with a juicy flesh that is perfect for snacking or using in recipes. The apple's flesh tends to stay crisp even after baking.

Idared: round to slightly flattened shape, with a slightly uneven surface. Typically ranges from 160 to 220 grams. A distinct red with a greenish-yellow base. The skin has a slightly matte finish. Tart with a noticeable sharpness that mellows with ripening. The flavor is tangy and refreshingly acidic, with a touch of sweetness as it ripens fully. Firm and crunchy, with a slightly coarse texture. The flesh is very crisp when fresh but becomes softer after cooking or juicing.

Pippin (Slovenian Variety): small to medium-sized, typically round to slightly irregular. Some apples may have an elongated shape. Around 120 to 180 grams. Greenish-yellow with a slight red blush on the sun-exposed side. The skin can sometimes have a russeted texture. A unique sweet-tart flavor with a slightly spicy undertone, making it more complex compared to other apple varieties. Firm and crisp with a refreshing juiciness. The flesh is dense and has a bit of graininess near the core.

Braeburn: round with a slightly flattened bottom. The fruit is generally symmetrical and firm. Typically, 170 to 230 grams. A mix of red-orange and green on the skin. It has a vibrant, eye-catching appearance, often with a striped or blushed look. Sweet-tart with a distinct balance of sharpness and sweetness. Braeburn apples have a strong, refreshing flavor with a slightly spicy finish. Crisp and juicy, with a firm flesh that holds up well in cooking.

Gravenstein: typically round, with a slightly flattened appearance. The skin often has some irregularities, especially near the stem. Usually ranges from 150 to 200 grams. Yellow-green with a bright red blush. The apple has a vibrant appearance, and the color can vary slightly depending on exposure to sunlight. Tart and fragrant with a sharp, almost citrusy flavor. It has a strong, refreshing taste that is balanced by a subtle sweetness. Juicy and crisp when freshly picked. It

softens somewhat when cooked, making it ideal for making apple sauce and other processed apple products.

Harvest period

The harvest period for apples in the Primorsko - Notranjska region of Slovenia typically depends on the variety of apple being grown, as different cultivars ripen at different times. Generally, apple harvesting in this region occurs between late summer and autumn.

Late summer to early autumn: Early varieties like Gravenstein start harvesting in late august, while mid-season varieties like Jonagold and Pippin are ready by September.

Autumn: Varieties such as Golden delicious and Idared are harvested towards the end of September and into October.

The mild Mediterranean climate of the Primorsko - Notranjska region allows for a gradual ripening process, with apples maturing in stages from late summer to fall, depending on the variety. Variations in the weather can sometimes lead to earlier or later harvests for some varieties.

History of the product

The Primorsko - Notranjska region in Slovenia, with its Mediterranean climate and fertile soil, has long been an area known for its apple cultivation. The production of apple juice, like many other traditional agricultural practices, evolved over centuries, with early forms of apple-based beverages such as cider eventually leading to the development of modern, non-fermented apple juice.

The history of apple juice production in the Primorsko - Notranjska region reflects the broader historical trends of apple cultivation in Slovenia, as well as the shift from fermented apple beverages like cider to modern non-fermented apple juice. From its early roots in ancient apple cultivation and small-scale production, apple juice gradually became a commercial product during the industrial era. In the modern era, the focus has shifted to producing high-quality, natural apple juice, with an emphasis on organic farming and local varieties.

Today, apple juice continues to play an important role in the cultural and economic life of the region, contributing to both the local economy and Slovenia's growing reputation for quality agricultural products.

Apples, and by extension apple juice, have long been embedded in the culture of the Primorsko-Notranjska region. The harvest season for apples, particularly in the fall, is a time for celebrations, with local apple festivals and traditional apple-based products (such as apple juices, apple pies, and apple preserves) playing a significant role in local food culture.

Apple juice in the region has not only been a part of everyday consumption but also a symbol of the region's agricultural heritage. Over time, it has become a key product in the tourism industry, with visitors from around the world sampling the region's fresh juices and learning about traditional apple farming practices.

Nutritional values and use

Apple juice is a refreshing, naturally sweet beverage made from fresh apples. The nutritional values of apple juice can vary slightly depending on whether it is made from freshly pressed apples, concentrate, or with added sugar, but here is a general overview of its typical nutritional content:

Nutritional composition (per 100 ml of apple juice)

- Calories: 45-50 kcal
- Water: 88-90%
- Carbohydrates: 11-12 g
 - sugars: 9-10 g (mainly natural sugars, such as fructose and glucose)
- Protein: 0.1 g
- Fat: 0 g
- Fiber: 0.1 g
- Vitamins:
 - vitamin C (Ascorbic Acid): 1-5 mg (varies based on processing)
 - vitamin A: 5-10 µg
 - vitamin E: 0.1-0.2 mg
 - folate: 1-2 µg
- Minerals:
 - potassium: 100-120 mg
 - calcium: 3-5 mg
 - magnesium: 2-3 mg
 - iron: 0.1 mg

Apple juice from the Primorsko - Notranjska region, made from high-quality local apple varieties, is a nutritious and refreshing beverage enjoyed both locally and beyond. With its rich vitamin content, natural sugars, and hydrating properties, apple juice is a healthy option when consumed in moderation. Its versatility in cooking, baking, and beverages also makes it a staple ingredient in many culinary traditions, including in Slovenia.

Indicative quantity produced

The Primorsko - Notranjska region of Slovenia is known for its fertile soil and favorable climate for apple cultivation, but the exact indicative quantity of apple juice produced in the region is not always clearly documented in publicly available sources.

Given the size of the region's apple production and its focus on quality and organic farming, it is reasonable to estimate that several million liters of apple juice are produced annually in the Primorsko - Notranjska region. This would include both artisanal and commercial production, catering to both local consumption and broader markets. However, without more specific industry data, it's difficult to pinpoint an exact figure.

Product distribution and market

The Primorsko - Notranjska region of Slovenia, known for its high-quality apple production, has a well-established apple juice market that extends both locally and internationally. The distribution of apple juice from this region is influenced by several factors, including the scale of production, local consumer preferences, and the presence of larger processing facilities. Below is a breakdown of the distribution and market dynamics for apple juice in the region.

The domestic market is the primary destination for apple juice produced in the Primorsko-Notranjska region. Apple juice, often made from locally grown varieties like Jonagold, Golden Delicious, and Idared, is sold through various channels. Smaller-scale, artisanal producers sell freshly pressed apple juice directly at local farmers' markets or through farm shops. These outlets

attract consumers looking for fresh, natural, and often organic products. Organic and health food stores are key retailers for high-quality, additive-free apple juice, catering to consumers interested in pure, preservative-free beverages.

Within Slovenia, apple juice from the Primorsko - Notranjska region is distributed in nearby regions like Osrednjeslovenska (Ljubljana) and Podravska. These areas often have strong ties with the agricultural products of Primorsko - Notranjska, including apple juice.

Many local establishments, particularly in the Primorsko - Notranjska and coastal regions, serve apple juice made from local apples. Apple juice is often featured in menus, particularly as a fresh, non-alcoholic option for tourists.

The Primorsko - Notranjska region is home to a number of agricultural fairs, food festivals, and apple-themed events. These venues offer apple juice producers an opportunity to showcase their products directly to the public and generate sales. Apple festivals in particular are popular events, where local apple juice is a staple product.

There is an increasing demand for organic apple juice in both the domestic and international markets. Slovenia has been a pioneer in organic farming, and the Primorsko - Notranjska region, in particular, has many producers who emphasize organic apple production. As consumers become more health-conscious and seek beverages free from additives and preservatives, the organic apple juice market continues to grow, both locally and abroad. As part of the broader health and wellness movement, apple juice is increasingly seen as a healthier, natural alternative to sugary sodas. This has led to an increase in both fresh apple juice and premium juices that are marketed as 100% fruit with no added sugars or preservatives.

Artisanal apple juice, which is produced in small batches and often made from local apple varieties, has become a popular trend among consumers who value quality and authenticity. Producers in the Primorsko - Notranjska region have capitalized on this trend by marketing their products as craft juices, emphasizing their connection to the region's traditional farming and apple-growing heritage.

The apple juice produced in the Primorsko - Notranjska region is often consumed by tourists visiting the area. The region's tourism industry, particularly in the coastal and Notranjska areas, promotes local food and beverage products, including apple juice, as part of the Slovenian culinary experience. Visitors can find apple juice in local restaurants, bistros, and tourist shops, and it often serves as a souvenir for those wanting to take a piece of the region home with them.

Preparation, consumption and preservation

Preparation

Harvesting: apples, often from local varieties like Jonagold or Golden delicious, are harvested once they reach optimal ripeness, typically in late summer to early autumn.

Pressing: the apples are washed, sorted, and crushed to extract the juice. This is typically done using traditional cold-pressing methods for artisanal production, or mechanical pressing for larger-scale commercial production.

Filtration: The juice is filtered to remove pulp and sediment, resulting in a smooth, clear liquid. In some cases, a light pasteurization process may follow to ensure the juice is safe for consumption and to extend its shelf life.

Bottling/packaging: once processed, the apple juice is bottled or packaged, either in glass bottles, cartons, or plastic containers for sale and distribution.

Consumption

Fresh apple juice: consumed straight from the bottle, freshly pressed or cold-pressed, often served chilled. It is a popular beverage for breakfast, as a snack, or as a refreshing drink in warm weather. Mixed drinks: often used in cocktails, smoothies, or mixed with other juices like carrot or orange for a flavorful, nutritious drink.

Culinary use: Can be incorporated into baking, desserts, or cooking (e.g., for marinades, sauces, or glazes).

Health benefits: known for its hydration properties and vitamins, apple juice is a popular choice among consumers focused on wellness and natural beverages.

Preservation

Refrigeration: freshly made apple juice should be refrigerated and consumed within a few days to maintain its flavor and nutritional quality.

Pasteurization: to extend shelf life, many producers use pasteurization (heating the juice to kill bacteria) or flash-pasteurization methods. This makes it safe for longer storage and transport. Canning or bottling: juice is often sealed in airtight containers, such as glass bottles or cartons, to maintain freshness. This method allows the juice to be stored for several months.

Freezing: apple juice can also be frozen for long-term storage, but this may alter its texture and taste slightly once thawed.

Concentrate: some juice is processed into concentrate, which has a longer shelf life and is often reconstituted before consumption.

Other documents on the product:

You can find (and buy) apple juice:

- Kmetija T'Dolenj, Laze pri G. Jezeru 1, Grahovo, Helena Kotnik, kmetija.tdolenj@gmail.com, 041363421
- Ekološka kmetija Ileršič, Pod Srnjakom 23, Rakek, Tomaž Ileršič, 031652133
- Družinska kmetija Biščak, Buje 5, Vremski Britof, anton.biscak@buje.net, 041518805
- Pri Andrejevih, turistična kmetija, Narin 107, Pivka, info@andrejevi.si, 041536094
- Gostilna Skok, Dejan Skok s.p., Bač 50a, Knežak, dejan.skok@gmail.com, 031363758
- ROBERT BROŽIČ – NOSILEC DOPOLNILNE DEJAVNOSTI NA KMETIJI, Gornji Zemon 15, Ilirska Bistrica, sara@izgozda.si, Sara Brožič
- EkoTurizem HUDIČEVEC, Emilijan Simčič s.p., Razdrto 1, Hruševje, 031 / 39 02 03, info@hudicevec.si

Home production of apple juice (video):

<https://tinyurl.com/cfzshr2j>

1.7 Pickled Turnips



Scientific name of the product: Brassica rapa

Common name of the product: Pickled turnips

Common name of the product in the territory of intervention: kislá repa

Photo: Pickled turnips; Photo credit: <https://okusno.je/recept/jota-z-repo-brez-mesa>

Category: Vegetables

Historical production area and origin

Pickled turnip has a rich history and is produced in various regions worldwide, but its origin and historical production are strongly associated with East Asia, the Middle East, and Europe

Europe: turnips were a vital food source before potatoes gained prominence. Pickling was a common preservation technique, particularly in Eastern Europe and the Mediterranean region, where vinegar and salt brines were used.

Historical Production Areas: China and Japan: Traditional regions for the production of pickled turnips for local consumption and export. Levant Region (Middle East): Countries like Lebanon and Syria developed distinctive methods using beetroot for color. Mediterranean Europe: Italy, Greece, and Eastern European countries historically produced pickled turnips for winter storage.

Modern Production

Today, pickled turnips are made globally, with industrial production thriving in East Asia (China, Japan, and Korea) and the Middle East. Artisanal and homemade pickling remain popular in traditional cuisines worldwide. The diversity in preparation methods reflects local ingredients, preservation techniques, and culinary traditions.

Cultivars, species and types

In Slovenia, particularly in the Primorsko - Notranjska region, turnips are a traditional crop, especially valued for pickling and fermentation. The following cultivars and types are notable:

- Kranjska okrogla (Carniolan round turnip): This indigenous Slovenian variety is characterized by its round shape, white flesh, and violet-tinged upper skin. It's commonly used for making "kisla repa" (sour turnip), where the turnip is grated and fermented.
- Repa tropinka (Grape skin soured turnip): In regions like Kras, Vipavska Dolina, Istria, and parts of Brkini, a traditional method involves fermenting whole turnips with grape skins. This process imparts a distinct flavor to the turnips, which are later peeled, grated, and cooked similarly to standard sour turnips.

Types of pickled turnip preparations

- Kisla Repa (Sour turnip): A staple in Slovenian cuisine, prepared by grating turnips and fermenting them, similar to sauerkraut. It's often served as a side dish or incorporated into various traditional recipes.
- Tropinka fermentation: This method involves layering whole turnips with grape skins in wooden barrels, filling with warm water, and allowing them to ferment for at least a month. The resulting turnips have a more pronounced flavor due to the active acetic bacteria from the grape skins.

These traditional practices highlight the rich culinary heritage of Slovenia and the Primorsko-Notranjska region, where turnip cultivation and pickling are integral to local gastronomy.

Description

General Shape: Most pickled turnips are derived from round or oval turnips. The shape can vary from perfectly spherical to slightly flattened, depending on the cultivar.

Preparation influence: Whole turnips retain their original shape, while grated or sliced turnips lose their distinct structure, adopting the form of thin strips, shreds, or slices.

Raw Turnips: Individual turnips typically range from 100g to 300g before pickling. Some larger varieties can weigh up to 500g.

Finished Product: Pickled turnips lose some water content during the fermentation process, resulting in a slight reduction in weight.

Raw to pickled transformation:

Traditional white turnips: Start with white flesh and pale purple or greenish skin. When pickled, they may stay white or take on added hues from the brine.

Beet-brined turnips: Common in Middle Eastern styles, these turnips are a vibrant pink due to the addition of beetroot in the brine.

Tropinka method: In Slovenia, turnips fermented with grape skins develop an earthy, slightly yellow or tan tone from the grape tannins.

Clarity: Pickled turnips often exhibit a semi-translucent appearance due to the fermentation process.

Fermented Turnips: Mildly sour with a tangy and earthy undertone, similar to sauerkraut. Natural sweetness from the turnip remains, especially if pickled for a shorter time. Some preparations add spices, resulting in spicy, garlicky, or herbaceous notes.

Salt-Pickled: Salty and briny, often balanced by subtle sweetness. Less sour than fermented styles if vinegar is used instead of lactic fermentation.

Crunchiness: Retain a crisp texture if sliced or shredded, particularly when pickled for a shorter period.

Softness: Whole pickled turnips, especially those fermented longer, may become tender but still firm enough to hold their shape.

Aroma: Distinct fermented aroma, with lactic acid notes reminiscent of yogurt or kimchi. Some preparations (e.g., with garlic or spices) can carry a pungent, savory smell.

Harvest period

The harvest period for turnips used in pickling varies depending on the climate, region, and the specific cultivar.

Harvest Timing: Cool-season crop: turnips are typically grown as a cool-season crop because they thrive in moderate temperatures, they are planted in early spring for a summer harvest or in late summer to early fall for an autumn harvest. **Ideal growth period:** turnips mature in 6 to 10 weeks after sowing, depending on the variety, for pickling, turnips are usually harvested when they are fully mature but not overly large, ensuring a tender texture and mild flavor.

Harvest period by region

Temperate climates (e.g., Slovenia and Primorsko - Notranjska region): spring planting: harvest occurs from late May to early July; autumn planting: harvest occurs from late September to November, before the first heavy frost. This is the preferred harvest period for pickling turnips, as cooler temperatures enhance the flavor and sweetness.

Mediterranean climates: turnips may be grown year-round, but the best quality for pickling comes from fall and winter harvests.

Best Stage for harvesting: size: turnips are typically harvested when they are 5–10 cm in diameter. Larger turnips can become woody and less suitable for pickling. **Texture and flavor:** for pickling, tender turnips with a firm texture and slightly sweet flavor are ideal. The starches in the root convert to sugars during cooler weather, improving their taste.

The harvest timing is critical to ensure the best flavor and texture for pickled turnips, aligning with traditional practices in many regions, including Slovenia.

History of the product

Pickled turnip has a long and diverse history, with roots in multiple cultures around the world. Its development is closely tied to the history of agriculture, preservation methods, and culinary traditions.

Early cultivation of turnips: Turnips (*Brassica rapa* subsp. *rapa*) were among the first root vegetables cultivated by humans, dating back over 4,000 years. Native to Central Asia and the Mediterranean, turnips were widely grown in Europe, Asia, and the Middle East as a staple crop.

Preservation necessity: In ancient times, preserving food for winter or during periods of scarcity was essential. Fermentation and pickling were some of the earliest methods for extending the shelf life of vegetables, including turnips. Pickling likely began as an accidental discovery when vegetables were stored in brine, leading to fermentation.

Regional Development

East Asia: China: Pickled turnips were part of the broader tradition of vegetable preservation, dating back to the Zhou Dynasty (1046–256 BCE). These early pickles were used to complement staple grains like rice. Japan: During the Edo period (1603–1868), turnips were pickled with rice bran, salt, or vinegar to make products like *senmaizuke* and *takuan*. The process was both a culinary tradition and a way to conserve resources. Korea: In Korean cuisine, pickled turnips (similar to *danmuji*) were developed alongside other pickled vegetables like radishes and cabbage, forming part of the rich tradition of *kimchi*-making.

Middle East: In the Levant (Lebanon, Syria, Jordan), pickled turnips have been a culinary staple for centuries. The addition of beetroot to the brine gives the turnips their characteristic pink color, a hallmark of Middle Eastern pickling. These pickles were commonly served as a condiment with grilled meats, falafel, and wraps.

Europe: Ancient Greece and Rome: Turnips were cultivated and preserved through pickling, often in vinegar or brine, as a food for soldiers and commoners. Eastern Europe: Pickling turnips became common in colder regions, where fermentation was a natural method of preservation. In Slavic countries, sour turnips were eaten alongside sauerkraut as a winter staple. Slovenia and the Primorsko-Notranjska Region: Turnips, such as the *Kranjska okrogla* variety, were fermented into *kisla repa* (sour turnip) as a traditional food. This practice dates back centuries and is integral to local gastronomy.

North Africa and the Mediterranean: Pickling turnips with olive oil and spices was common in North African cuisine, influenced by the preservation methods of the Romans and Arabs.

Global Spread: European settlers brought turnips and pickling techniques to the Americas in the 17th and 18th centuries. Turnips were widely grown and preserved for sustenance during long winters. East Asian immigrants introduced their pickling traditions to other parts of the world, spreading dishes like *takuan* and *danmuji*.

Industrialization: The 19th and 20th centuries saw the commercialization of pickled turnips, with factories producing jarred pickles for global markets. Variations in recipes emerged, incorporating regional spices and ingredients to cater to diverse tastes.

Contemporary Trends: Pickled turnips are now celebrated in both traditional and modern cuisines. They are valued for their tangy flavor, versatility, and health benefits due to probiotics from fermentation. Artisanal and small-batch pickled turnips have gained popularity in recent years, appealing to consumers interested in traditional methods and natural ingredients.

In regions like the Middle East and Eastern Europe, pickled turnips are a symbol of cultural heritage and communal cooking traditions. Historically, turnips were inexpensive and easy to grow, making pickled turnips accessible to all social classes. Recognized for their probiotic properties and nutritional value, pickled turnips have gained a reputation as a functional food.

From ancient preservation practices to modern culinary innovations, pickled turnip reflects the ingenuity and adaptability of food cultures worldwide.

Nutritional values and use

Pickled turnips retain many of the nutrients found in fresh turnips, with added benefits from the pickling process, such as probiotics (if naturally fermented). However, the exact nutritional profile

Digestive health: high fiber content promotes regular bowel movements, fermented pickled turnips provide probiotics that support a healthy gut microbiome.

Immune support: rich in Vitamin C, which strengthens the immune system, the fermentation process may enhance bioavailability of certain nutrients

Low-calorie, weight-friendly: low in calories and fat, making it a great option for weight management, satisfying due to its fiber content

Antioxidant properties: contains antioxidants from vitamins and phytonutrients, which may reduce inflammation

Electrolyte balance: potassium helps regulate fluid balance and muscle function

Heart health: fermented pickled turnips may help reduce cholesterol and improve blood pressure due to beneficial probiotics

Culinary Uses

Condiment or side dish: served alongside dishes like falafel, shawarma, kebabs, and grilled meats in Middle Eastern cuisine

Ingredient in recipes: added to sandwiches, wraps, or salads for a tangy crunch, used in soups, stews, or stir-fries for added flavor and texture

Flavor enhancer: the sour and salty taste complements rich and fatty dishes, balancing flavors.

Snack: eaten on its own as a tangy, low-calorie snack.

Preservation for winter: in traditional cuisines, pickled turnips serve as a vital preserved food for colder months.

Pickled turnips are a nutritious, versatile food with a unique flavor profile, widely used in traditional and modern cuisines worldwide.

Indicative quantity produced

Comprehensive data on the production of pickled turnips in Slovenia is limited, as official agricultural statistics often do not provide detailed figures for specific processed products like pickled turnips. However, some insights can be drawn from available information:

Turnip cultivation: Turnips are traditionally cultivated in various regions of Slovenia, including the Primorsko - Notranjska region. Specific data on the area dedicated to turnip cultivation is scarce, as turnips are often grouped with other root vegetables in agricultural statistics.

Traditional dishes: Pickled turnips are integral to Slovenian cuisine, featuring in traditional dishes such as *bujta repa*, a hearty stew from the Prekmurje region. This dish highlights the cultural significance of pickled turnips in Slovenia.

Home production: Many Slovenian households prepare pickled turnips at home, especially in rural areas where traditional preservation methods are still practiced. This home production contributes to the overall consumption but is not captured in official statistics.

Commercial production: While there are local producers and small-scale operations that produce pickled turnips for sale, the production volume is relatively modest and primarily serves local markets.

In summary, while pickled turnips hold a cherished place in Slovenian culinary traditions, particularly in regions like Primorsko - Notranjska, precise data on their production quantities is not readily available. The practice persists through a combination of home preparation and small-scale commercial production, reflecting its cultural importance rather than large-scale industrial output.

Product distribution and market

Pickled turnips in Slovenia are both sold on the market and prepared for personal consumption, reflecting their cultural significance and culinary versatility.

Commercial Sales: Local Markets: pickled turnips (*kisla repa*) are commonly sold at local farmers' markets across Slovenia, particularly in regions with a strong tradition of turnip cultivation, such as the Primorsko-Notranjska, Prekmurje, and Štajerska regions. Vendors often sell freshly fermented or jarred pickled turnips, catering to local demand.

Grocery Stores: Small jars of pickled turnips are available in some supermarkets and specialty food stores. These are often produced by local or regional brands that focus on traditional Slovenian foods.

Specialty Stores: Shops focusing on traditional Slovenian or organic products may carry artisanal or small-batch pickled turnips.

Personal Consumption

Homemade Pickling: in rural and semi-urban areas, many households prepare pickled turnips for personal use. This practice is deeply rooted in Slovenian tradition and remains popular for its simplicity and affordability, homemade *kisla repa* is often considered superior in flavor and quality compared to commercially available options.

Seasonal Consumption: pickled turnips are typically prepared in the fall, following the turnip harvest, and stored for winter consumption, they are a staple ingredient in traditional dishes, such as *bujta repa* (a hearty pork and sour turnip stew).

While Slovenia's pickled turnips are primarily consumed domestically, some small-scale producers may export to neighboring countries with similar culinary traditions, such as Austria, Croatia, or Hungary. Niche markets for Slovenian artisanal foods abroad may also include pickled turnips as part of a larger offering of traditional products.

Pickled turnips are widely enjoyed in Slovenia through both personal production and market distribution. While many people prepare them at home, they are readily available at local markets,

specialty shops, and some supermarkets. Their distribution emphasizes cultural preservation and regional identity rather than large-scale commercialization.

Preparation, consumption and preservation

Preparation

Traditional Slovenian Method (*kisla repa*): Ingredients: fresh turnips (grated or whole), salt, optional: grape skins, spices, or garlic (for added flavor in some regions)

Steps: Cleaning and Grating: turnips are washed, peeled, and grated (or sliced thinly); Salting: the turnip is mixed with salt and packed tightly into a fermentation vessel, such as a ceramic pot. Fermentation: the salted turnips are left to ferment at cool temperatures (10–15°C) for 2–4 weeks, a heavy weight (e.g., a stone or plate) is placed on top to keep the turnips submerged in their brine. Storage: once fermented, they are transferred to jars or kept in the pot and stored in a cool, dark place

Consumption

As a side dish: served alongside main courses, such as pork, sausages, or roast meats, commonly paired with hearty dishes to balance rich flavors.

In traditional Slovenian recipes:

Bujta Repa: a rustic stew from the Prekmurje region made with pickled turnips, pork, onions, millet, and spices, traditionally prepared during pig-slaughtering season.

Jota: a sour turnip and bean stew, often made with sauerkraut as a variation. It's popular in the Primorsko and Karst regions.

Turnip pie: in some regions, pickled turnips are used in savory pies or strudels. Snacks and salads: pickled turnips are sliced thin and served as a tangy snack or mixed into salads for a refreshing crunch.

Condiment: used in sandwiches or wraps, adding a tangy flavor to dishes.

Preservation

Fermentation: traditional fermented turnips can last several months if stored in a cool, dark place, the natural acidity prevents spoilage and preserves nutrients.

Jarred pickles: vacuum-sealed jars of pickled turnips, either homemade or store-bought, have a shelf life of 6–12 months when unopened.

Freezing: pickled turnips can be frozen after fermentation for extended storage, though this may slightly alter their texture.

Cooks and Restaurants

Traditional Restaurants: many Slovenian *gostilnas* (traditional inns) feature dishes with pickled turnips, particularly in the autumn and winter months, regions like Prekmurje, Primorsko, and Gorenjska are known for their authentic preparation.

Notable Restaurants: *Gostilna Rajh* (Prekmurje) - known for its refined take on *bujta repa*, *Gostilna Ašič* (Primorska) offers traditional dishes with local produce, including pickled turnips. Cooks and chefs: slovenian chefs, especially those focused on promoting traditional and

sustainable cuisine, often use pickled turnips in innovative ways, renowned chefs like Ana Roš (Hiša Franko) may include local ingredients like pickled turnips in their seasonal menus. Pickled turnips are a cornerstone of Slovenian cuisine, with applications ranging from traditional stews to modern dishes. They are cherished not only for their unique flavour but also for their cultural and nutritional value.

Other documents on the product:

How to prepare pickled turnip:

<https://okusno.je/domace/kako-pravilno-kisati-zelje-in-repo.html>

<https://www.vsirecepti.si/kisanje-repe-v-kozarcih/>

<https://www.facebook.com/watch/?v=413902616164410>

Recipe for Jota s kislo repo:

<https://okusno.je/recept/jota-z-repo-brez-mesa>

1.8 Walnut potica



Image: Walnut potica; Photo credit: Saša Zrimšek

Common name of the product: Walnut potica

Common name of the product in the territory of intervention: Orehova potica

Category: Processed product of plant origin - Sweets

Historical production area and origin

Walnut Potica (*orehova potica*) is a traditional Slovenian pastry with deep cultural roots. It is primarily made from **walnuts** (*Juglans regia*) and has a long history that dates back to centuries, linked closely with Slovenia's culinary and agricultural traditions.

Origin and Cultural Significance:

Slovenian Heritage: Potica, in its various forms, is one of Slovenia's most iconic desserts. The walnut version, *orehova potica*, is believed to have originated during the Middle Ages in Slovenia, particularly in the Upper Carniola region and Central Slovenia. Potica is closely tied to **Christian holidays**, such as **Easter** and **Christmas**, when it is most traditionally prepared.

Roots in Monasteries: Potica is thought to have been developed in monasteries, where early recipes were created by monks experimenting with doughs and fillings. Over time, the recipe became part of Slovenian households, especially among wealthier families who could afford the ingredients.

Integration of Walnuts: Walnuts have been cultivated in Slovenia for centuries, especially in areas with mild climates like the Primorska region and parts of Lower Carniola. The tree thrived due to Slovenia's fertile soil and varied microclimates. The use of walnuts in potica likely began once these nuts became more commonly available and affordable, offering a rich, local filling for the pastry.

Geographical Areas of Production

Upper Carniola (Gorenjska): Known for its Alpine environment, this area has a strong tradition of making potica, particularly for festive occasions. The walnut variety is highly popular, and the tradition of baking potica has been passed down through generations.

Lower Carniola (Dolenjska): Known for the cultivation of walnut trees, this region also has a long history of walnut-based recipes. Here, walnut potica became a staple dessert, especially for Easter celebrations.

Primorska: Though this region is more associated with Mediterranean crops, walnuts have historically been grown in its Karst and Vipava Valley areas. Potica from Primorska often uses the local walnuts for its filling.

Walnut Potica's Spread and Influence:

The preparation of walnut potica has evolved from being a rural homemade dessert into a national symbol of Slovenian cuisine. It has traveled beyond Slovenia's borders through emigration, becoming a special dish for Slovenian diaspora communities around the world. However, the recipe remains deeply rooted in Slovenian villages, where traditional methods of preparing the dough and filling are still followed.

In 2010, potica was included on Slovenia's list of protected cultural heritage, and the recipe continues to be a celebrated feature of Slovenian culinary identity.

Walnut Potica has its origins in medieval Slovenia, where it was developed in religious settings and then spread to rural households. The Upper Carniola and Lower Carniola regions have been historically significant in the production of walnut potica, with walnuts being an important local ingredient. The dessert remains a central part of Slovenian festive traditions and is one of the country's most cherished foods.

History of the product

Walnut Potica (*orehova potica*) is one of Slovenia's most iconic traditional desserts, with a rich history dating back centuries. This pastry, made from rolled dough and filled with ground walnuts, holds deep cultural, religious, and culinary significance in Slovenia. Its history reflects the evolution of Slovenian cuisine, the influence of European baking traditions, and the importance of local ingredients like walnuts. Potica originated in Slovenia during the Middle Ages, particularly in monastic kitchens. The earliest versions of potica were simple pastries made by monks in

monasteries. These religious communities experimented with available ingredients, creating various doughs and fillings, which evolved into more sophisticated recipes over time.

As the recipe for potica became more refined, it was integrated into Slovenian religious and festive traditions, particularly Christian holidays like Easter and Christmas. By the 16th century, potica was already well-known in Slovenian households, especially among wealthier families who could afford the more luxurious ingredients used in the pastry. It was traditionally baked for special occasions, symbolizing wealth and celebration due to its rich ingredients and elaborate preparation. Potica recipes evolved significantly over the centuries, reflecting both local agricultural conditions and European culinary trends. The earliest poticas were likely filled with basic ingredients like honey or herbs, but as walnuts (*Juglans regia*) became more widely available in Slovenia, walnut potica became one of the most popular variations.

Walnut Potica and the Spread of Walnuts: Walnuts were introduced to Slovenia and much of Europe from Persia (modern-day Iran) by the Romans. They flourished in the temperate regions of Slovenia, particularly in Lower Carniola (*Dolenjska*) and Primorska, and became a staple in Slovenian cooking. By the 17th and 18th centuries, walnuts were commonly used in baking, and walnut potica emerged as a favorite version of the pastry due to the nut's availability and its rich, distinctive flavor.

During the 19th century, potica solidified its status as a national dish in Slovenia. It became a symbol of festive baking across different regions of Slovenia, each adding its unique touch to the preparation and filling. Although there are many variations of potica with different fillings (e.g., tarragon, poppy seeds, cheese), the walnut-filled version has been the most popular and widely recognized, especially due to the widespread cultivation of walnuts.

By the early 20th century, as many Slovenians emigrated to North America and other parts of the world, they brought their culinary traditions with them. This led to the spread of walnut potica in Slovenian expatriate communities, particularly in the United States and Canada, where it became a staple during Easter and Christmas celebrations.

In 1912, the first recorded written recipe for potica appeared in the famous Slovenian cookbook "Slovenska Kuharica" by Felicita Kalinšek, which featured instructions for preparing the pastry with various fillings, including walnut. This solidified potica's reputation as an essential part of Slovenian cuisine. After World War II, Slovenia, as part of the former Yugoslavia, saw potica remain a beloved dish across different social classes, despite changing political landscapes. It continued to be a staple of Slovenian cultural and religious celebrations. The walnut version remained particularly important due to its association with wealth and festivity, as walnuts were often considered a symbol of abundance.

In recent decades, potica has been officially recognized as part of Slovenia's **intangible cultural heritage**. It plays an essential role in Slovenian identity, particularly as the country sought to preserve its cultural distinctiveness after gaining independence in 1991. Walnut potica, in particular, has remained central to Slovenian festive customs, and families pass down recipes across generations.

In 2010, potica was included in Slovenia's Register of Intangible Cultural Heritage, marking its significance in the country's gastronomic tradition. The pastry has also gained Protected Geographical Indication (PGI) status from the European Union, which protects traditional products linked to specific regions. This highlights potica's authentic Slovenian roots and its place as a national culinary treasure.

Today, walnut potica is widely regarded as a symbol of Slovenian culinary tradition. It is baked year-round but remains a crucial part of holiday celebrations, especially during Easter and Christmas. Many bakeries across Slovenia still prepare potica using traditional methods and locally sourced ingredients, particularly walnuts grown in the country's Dolenjska and Primorska regions.

In addition to its domestic popularity, potica has also become a key export product. It is available in various forms at Slovenian bakeries and restaurants and has even been served to foreign dignitaries and during international events to showcase Slovenia's rich culinary heritage.

In the case of Walnut Potica (*orehova potica*), the processors — typically small-scale producers, artisanal bakers, or families — are often not the primary producers of the walnuts (the main ingredient) but may source them locally from regional walnut farmers or their own small orchards.

However, in more rural and traditional settings, particularly in Slovenia's countryside, it is not uncommon for some families or small producers who make walnut potica to also grow their own walnut trees. This means that in these specific cases, the processors may indeed also be the producers of the walnuts. These individuals manage walnut trees on their land, harvest the walnuts, and use them directly in their homemade potica.

On a larger scale, for bakeries or commercial producers of walnut potica, walnuts are usually sourced from local farmers or cooperatives, but the processors focus primarily on the pastry preparation and not on the cultivation of walnuts themselves.

In summary: Small, artisanal producers or families may grow and harvest their own walnuts and then use them to make walnut potica. Commercial producers typically source walnuts from local farmers or suppliers but are not directly involved in growing the walnuts themselves.

This reflects a mix of self-sufficiency in more rural areas and market-based sourcing for larger or urban producers.

Walnut Potica Preparation

Walnut Potica (*orehova potica*) is a traditional Slovenian pastry made from rolled dough filled with a rich, ground walnut filling. It is an iconic dish deeply connected to Slovenian heritage, especially prepared for festive occasions like Easter and Christmas.

Description

Shape: Walnut potica is typically baked in a cylindrical or ring-shaped mold (similar to a bundt cake). The dough is rolled out thin, spread with a walnut filling, and then tightly rolled up, forming a spiral when sliced. Once baked, the potica has a golden-brown, crispy exterior.

Weight: A typical walnut potica weighs between 1 to 2 kilograms depending on the size of the baking mold and the recipe.

Flavor: Walnut potica has a sweet, nutty flavor with hints of honey and butter, accompanied by the rich, earthy taste of walnuts. The dough is soft yet slightly dense, and the walnut filling provides a creamy, aromatic center.

Production Technique

The production technique for walnut potica is largely traditional, passed down through generations. However, modern appliances like mixers and electric ovens are sometimes used to facilitate the process in contemporary settings. Despite these conveniences, the essential hand-rolling and filling processes remain true to tradition.

Ingredients: Dough Ingredients: flour (wheat flour, traditionally local), milk (often whole milk), butter (or margarine, though butter is preferred), eggs (free-range, locally sourced in rural areas), sugar, yeast (fresh or dry yeast), salt, optional flavorings such as vanilla or lemon zest
Filling Ingredients: ground walnuts (local walnuts from regions such as Lower Carniola or Primorska in Slovenia), sugar, milk or cream, butter, honey (often local, providing additional richness), optional additions like cinnamon or rum for added flavor.

Processing Phases and Times

Preparation of the Dough: Mixing and Kneading: Wheat flour, yeast, sugar, milk, and butter are combined to form a soft, elastic dough. The dough is then kneaded, either by hand or with a mixer, until smooth. Rising: The dough is left to rise for 1 to 2 hours in a warm place, doubling in size. This step ensures a light and airy texture once baked.

Preparation of the Walnut Filling: Grinding the Walnuts: Walnuts are finely ground, either by hand or using a grinder. They should have a slightly coarse texture to provide a rich filling. Making the Filling: Ground walnuts are mixed with sugar, butter, milk, honey, and any optional flavorings like cinnamon or rum. The filling is gently heated, ensuring it is smooth and well-combined but not too runny.

Rolling the Dough: After the dough has risen, it is rolled out into a large, thin rectangle on a floured surface. This step is crucial, as the dough must be evenly thin but not too fragile to handle the filling.

Spreading the Filling: The walnut filling is evenly spread across the rolled-out dough, leaving a small border around the edges. Care is taken to distribute the filling uniformly for a balanced taste. Rolling the Potica: The dough is carefully rolled into a tight log from one side to the other. The roll must be tight enough to prevent air pockets but not too tight to avoid breaking the dough. Some recipes call for brushing the dough with melted butter during rolling for added richness. Shaping and Baking: The rolled dough is placed into a buttered baking mold, typically a cylindrical or ring-shaped pan. The ends of the roll are tucked in neatly, ensuring a smooth, uniform shape. Second Rising: The shaped potica is left to rise again for about 30 to 60 minutes before baking. Baking: Potica is baked in a moderate oven at around 180°C (350°F) for approximately 45 to 60 minutes. The baking time depends on the size of the potica and the oven used. It is considered done when the crust is golden brown and a toothpick inserted comes out clean. Cooling and Serving: After baking, the potica is carefully removed from the oven and left to cool.

Once cooled, it is typically dusted with powdered sugar and sliced into spiral-shaped pieces, revealing the walnut filling inside.

Traditional vs. Modern Techniques

Traditional Methods: Historically, potica was made entirely by hand, with dough kneaded manually and walnuts ground using simple hand tools. Traditional wood-fired ovens were used for baking, which gave the potica a unique, slightly smoky flavor.

Modern Adaptations: While modern appliances like electric ovens, mixers, and grinders are often used today, many producers, particularly in rural areas, continue to follow the traditional hand-rolling and baking techniques. The essence of the process — the long rising time, careful rolling, and attention to ingredients — remains unchanged.

Ingredients and Their Origin Walnuts:

Locally sourced from regions like Lower Carniola (*Dolenjska*) and Primorska, where walnut trees have been grown for centuries. Slovenian walnuts are prized for their flavor and quality. **Flour:** Wheat flour, typically from local mills, is used to ensure the freshness and consistency of the dough.

Honey: Often, local honey is used in the filling to add sweetness and depth of flavor. Slovenia has a long tradition of beekeeping, particularly using Carniolan bees.

Butter and Milk: In rural areas, butter and milk are often sourced from local farms, ensuring the richness and freshness of the dough and filling.

Walnut Potica is a pastry deeply rooted in Slovenian tradition. While some modern conveniences have been adopted in the production process, the core traditional techniques—from hand-rolling the dough to crafting the walnut filling—are still widely practiced. The end result is a flavorful, festive pastry that reflects Slovenia's rich culinary heritage, with local ingredients playing a central role in maintaining its authentic taste.

Period of production of the processed product

The production of walnut potica (*orehova potica*) is primarily tied to festive occasions and religious holidays in Slovenia, particularly Easter and Christmas. However, it can be made year-round for special events, celebrations, or as part of traditional family gatherings.

Peak Production Periods:

Easter: Walnut potica is traditionally made in large quantities during the Easter holiday. In Slovenia, it is an essential part of the Easter meal and is often included in baskets brought to church for a traditional blessing.

Christmas: Potica is also a key dessert during the Christmas season, made for Christmas Eve and Christmas Day feasts. Families prepare it as part of the festive spread, and it is often gifted to relatives and friends.

Year-Round Production:

While Easter and Christmas are the most common times for production, walnut potica can also be prepared throughout the year for other celebratory events, such as weddings, baptisms, and

birthdays. Some artisanal bakeries and households make it on demand, especially for tourists or food markets.

Seasonal Ingredient Availability: The availability of walnuts may slightly influence production, as walnuts are typically harvested in the autumn (from September to October). However, since walnuts can be stored for long periods, the production of walnut potica is not strictly seasonal and can be made year-round, provided that the stored walnuts remain in good condition.

In summary, while walnut potica is traditionally made for Easter and Christmas, it can be produced at any time of the year, especially for special occasions and celebrations.

Nutritional value and use

Walnut potica (*orehova potica*) is a rich and indulgent pastry, and its nutritional value can vary based on the specific recipe and portion size. However, here are some general nutritional aspects:

Nutritional Composition (per 100g): calories: Approximately 300–400 kcal, carbohydrates: 40–50 g, Sugars: 15–20 g, fat: 15–25 g, Saturated Fat: 5–10 g, protein: 6–8 g, fiber: 2–3 g

Key Nutrients: Walnuts: A major ingredient, walnuts are high in healthy fats, particularly omega-3 fatty acids, which are beneficial for heart health. They also provide protein, fiber, vitamins (like vitamin E), and minerals (such as magnesium and phosphorus). **Dough Ingredients:** The dough typically includes flour, eggs, milk, and butter, contributing additional carbohydrates, protein, and fats. Eggs provide essential amino acids, while milk adds calcium and other nutrients.

Uses of Walnut Potica

Walnut potica is versatile and serves various culinary and cultural purposes:

1. **Festive Dessert:** It is a staple during festive occasions such as Easter and Christmas. Families often prepare it as part of holiday meals and share it with friends and relatives.
2. **Celebratory Treat:** Walnut potica is commonly served at celebrations like weddings, birthdays, and other special events, symbolizing abundance and hospitality.
3. **Everyday Snack:** Outside of special occasions, it can be enjoyed as a snack or dessert with coffee or tea, making it a delightful addition to any gathering.
4. **Gift Giving:** Potica is often made as a gift for loved ones during holidays, showcasing culinary skills and the tradition of sharing food.
5. **Culinary Heritage:** Beyond its delicious taste, walnut potica represents Slovenian culinary heritage, often made using traditional methods that are passed down through generations. It can be a part of cultural events and festivals celebrating Slovenian cuisine.

Indicative quantity produced in one year:

The indicative quantity of walnut potica produced in Slovenia can vary widely depending on the region and specific production practices. However, here are some general insights:

Annual Production Estimates

Artisanal and Home Production: In rural areas, many families prepare walnut potica for holidays and special occasions. It's estimated that thousands of households make several loaves each year, particularly around Easter and Christmas.

Commercial Production: Bakeries and small producers in Slovenia might produce hundreds to thousands of loaves annually. Larger artisanal bakeries might produce several tons of potica during peak seasons.

National Context: While exact national figures can be hard to pinpoint, estimates suggest that over 100,000 loaves of walnut potica could be made during peak holiday seasons across the country.

Overall, while exact numbers can vary, the production of walnut potica is significant in Slovenia, reflecting its cultural importance and popularity, especially during festive times.

Product distribution and market

Walnut potica (*orehova potica*) is an integral part of Slovenian culinary heritage, and its distribution and market reflect its popularity and cultural significance.

Distribution Channels

Local Bakeries: Many artisanal and family-owned bakeries produce walnut potica, especially during the festive seasons of Easter and Christmas. These bakeries often sell directly to customers in their communities.

Farmers' Markets: Walnut potica can frequently be found at local farmers' markets, where home bakers and small producers showcase traditional Slovenian foods. This setting allows for direct interaction with customers and emphasizes the artisanal nature of the product.

Cultural Festivals: During Slovenian cultural festivals and food fairs, walnut potica is often featured, providing exposure and promoting its heritage.

Restaurants and Cafés: Many restaurants and cafés in Slovenia include walnut potica on their menus, particularly those that emphasize traditional Slovenian dishes.

Market Demand

Seasonal Demand: The demand for walnut potica peaks during holiday seasons, with significant increases around Easter and Christmas. Many families prepare it as part of their festive meals, contributing to high sales volumes during these times.

Gift Market: Walnut potica is often given as a gift during holidays, which creates additional market demand. It is viewed as a thoughtful and culturally significant present.

Tourism: With growing interest in Slovenian cuisine from tourists, walnut potica is increasingly recognized as a must-try dish. This tourism-related demand helps sustain the market for both artisanal and commercially produced potica.

The distribution and market for walnut potica are characterized by a blend of traditional practices and modern adaptations. Its strong cultural significance and seasonal demand help sustain its production and sales, making it a beloved staple in Slovenian cuisine. As interest in artisanal foods grows, there are promising opportunities for walnut potica to reach new audiences both in Slovenia and abroad.

Preparation, consumption and preservation

The preparation of walnut potica (*orehova potica*) involves several key steps, often following traditional recipes passed down through generations:

1. **Dough Making:** The dough is made from flour, yeast, milk, eggs, butter, sugar, and salt. It is mixed, kneaded, and allowed to rise until it doubles in size.
2. **Filling Preparation:** The filling consists of finely ground walnuts mixed with sugar, milk, honey, and optional flavorings like cinnamon or rum. This mixture is heated to achieve a smooth consistency.
3. **Rolling and Assembling:** The risen dough is rolled out into a thin rectangle, spread with the walnut filling, rolled tightly, and placed in a greased mold for a second rise before baking.
4. **Baking:** The potica is baked until golden brown, typically in a moderate oven. It is then cooled before being sliced and served.

Preservation: Walnut potica can be stored at room temperature for several days. For longer preservation, it can be wrapped tightly in plastic wrap and refrigerated, where it can last for up to a week. **Freezing:** It can also be frozen. To freeze, wrap it securely in plastic and then in aluminum foil. When ready to consume, it should be thawed in the refrigerator and served at room temperature or gently warmed.

Traditional recipes often vary by region or family. Some may include unique ingredients or flavorings, such as citrus zest or different spices.

Family Recipes: Many families have their own secret variations that have been passed down, reflecting personal or regional preferences.

Local Bakeries: Numerous artisanal bakeries across Slovenia specialize in walnut potica, with some known for their traditional methods and recipes.

Restaurants: Many Slovenian restaurants serve walnut potica, especially those focused on traditional cuisine. They may offer it as a dessert or as part of a tasting menu featuring local specialties.

Walnut potica is not just a traditional pastry; it embodies Slovenian culture and hospitality. Its preparation is steeped in tradition, with various recipes reflecting local customs. Consumed during significant celebrations and enjoyed throughout the year, it continues to be cherished by many, both in Slovenia and among those who appreciate its unique flavor and heritage.

2. Prešov Region in Slovakia

2.1 Bryndza

**Scientific name of the**

product: Bryndza is derived from milk, typically sheep's milk, scientifically categorized as *Ovis aries* (sheep). For mixed variants, cow's milk (*Bos taurus*) may also be used.

Common name of the product: Bryndza.

Common name of the product in the territory: In Slovakia: Bryndza.

In other regions, it may be referred to as "Sheep cheese spread" or similar terms.

Image: Bryndza; Photo credit: <https://www.nasezdravie.sk/magazin/rumancek-kamilkovy-harmancek>

Category: Cheese or dairy product

Historical production or breeding area and origin: Traditional production areas: Bryndza is traditionally produced in the mountainous regions of Slovakia, especially in the regions of Liptov, Orava, Gemer and Spiš. Particularly renowned in Slovakia, where it holds Protected Geographical Indication (PGI) status under the name "Slovenská bryndza." Historical origins trace back to the 15th century, when mountain shepherds developed methods to preserve sheep milk in the form of cheese.

History of the product: Bryndza was initially created as a way to preserve sheep milk in mountainous regions. It gained prominence due to its long shelf life, nutritional value, and versatility in traditional cuisines. Slovak bryndza became widely popular by the 18th century when production methods evolved to include mixing and milling cheese into a smooth, spreadable paste. It is a key element in Slovak national dishes like bryndzové halušky (potato dumplings with bryndza).

Animal breed of origin: Primarily sheep from the following breeds: Wallachian Sheep, Improved Wallachian Sheep, East Friesian sheep, Tsigai sheep and Lacaune sheep

Description of the breed: Wallachian Sheep: The Wallachian Sheep is a traditional and ancient breed found mainly in Central Europe, particularly in mountainous and hilly areas. It is hardy, resilient, and well-suited for harsh climates and poor-quality pastures.

Improved Wallachian Sheep: The improvements focus on higher yields of milk, meat, and better-quality wool while maintaining its suitability for mountain pastures and sustainable farming systems.

East Friesian sheep: Highly productive dairy breed originating from the Friesland region of Germany and the Netherlands.

Tsigai sheep: Medium-sized, hardy, and well-suited to mountainous terrain. Known for their rich milk with high fat and protein content.

Lacaune sheep: High-milk-yielding breed, with a robust build and adaptability to various climates.

Description of the type of farming: Extensive pastoral farming: Sheep are grazed in natural pastures, often in mountainous or semi-mountainous areas, following traditional transhumance methods.

Seasonal farming: Sheep are grazed in early spring (March-April) in the lower-lying parts of the defined area. In May and over the summer months they move to higher pastures.

Sustainable practices: Traditional shepherding emphasizes biodiversity and low environmental impact.

Production period: The primary production period is April to September, aligning with the sheep's lactation cycle and grazing availability.

Product characteristics:

- Colour: white to yellowish
- Consistency: fine, spreadable with occasional flakes
- Aroma and flavour: delicious, pleasantly sour like sheep's cheese, slightly spicy and salty
- Ingredients: the proportion of lump sheep's cheese is, on a dry matter basis, more than 50,0 % by weight, dry matter not less than 44,0 % by weight, fat on dry matter not less than 38,0 % by weight, salt as NaCl not more than 3,0 % by weight

Nutritional value and use: High in protein, good source of calcium, and vitamin A, B12 and D. Contains probiotics, promoting gut health.

Uses: Base for traditional dishes like bryndzové halušky, pirohy or spreads.

Eaten raw, as a spread on bread, or mixed into salads.

Indicative quantity produced in one year: Estimated production in Slovakia: 2000-4000 tons annually, depending on demand and milk yield.

Product distribution and market

Domestic market: Predominantly consumed within Slovakia and neighboring countries.

Export: Increasingly exported to countries with Slovak communities or an interest in specialty cheeses.

Market trends: Appreciated in gourmet and health food sectors for its natural and probiotic properties.

Preparation, consumption, and preservation

Preparation: Bryndza is made by milling fermented sheep cheese with salt. Traditional methods emphasize hand-milling, though mechanized processes are now common.

Consumption: Often served fresh, paired with potatoes, bread, or dumplings. It is also a component of traditional Slovak meals.

Preservation: Stored at low temperatures (2-6°C) and typically consumed within a few weeks of production.

2.2 Parenica Steamed Cheese Roll



Scientific name of the product: Steamed cheese roll

Common name of the product: Parenica

Common name of the product in the territory of intervention:

In Slovakia: Parenica.
Elsewhere: Often referred to as "steamed cheese roll."

Image: Parenica; Photo credit: <https://www.syrex.sk/vyrobky/parenica-cerstva>

Category: Cheese or dairy product

Historical production or breeding area and origin: Traditional production areas: Central and northern Slovakia, particularly in regions with a strong shepherding tradition, such as Orava, Liptov, and Spiš.

History of the product: Parenica originated as a practical way for shepherds to store and preserve fresh milk. Its unique method of steaming and shaping into rolls or spirals reflects Slovak cheesemaking ingenuity. The smoking process was historically used for preservation and to add

flavor. Over time, parenica became a staple in Slovak cuisine and a symbol of local cheese craftsmanship.

Animal breed of origin: Primarily sheep from the following breeds:

Wallachian Sheep, Improved Wallachian Sheep, East Friesian sheep and Tsigai sheep

Description of the breed

Wallachian Sheep: The Wallachian Sheep is a traditional and ancient breed found mainly in Central Europe, particularly in mountainous and hilly areas. It is hardy, resilient, and well-suited for harsh climates and poor-quality pastures.

Improved Wallachian Sheep: The improvements focus on higher yields of milk, meat, and better-quality wool while maintaining its suitability for mountain pastures and sustainable farming systems.

East Friesian sheep: Highly productive dairy breed originating from the Friesland region of Germany and the Netherlands.

Tsigai sheep: Medium-sized, hardy, and well-suited to mountainous terrain. Known for their rich milk with high fat and protein content.

Description of the type of farming

Traditional pastoral farming: Sheep graze freely on natural mountain pastures rich in herbs, contributing to the cheese's unique aroma and flavor.

Sustainable practices: Emphasis on ecological and animal-friendly farming methods, often using low-impact shepherding traditions.

Production period: From April to September, corresponding to the grazing season and the sheep's lactation period.

Product characteristics:

- Form: Parenica takes the form of two interconnected rolls of cheese ribbon 5 - 8 cm high and 6 - 8 cm in diameter. Traditionally, the two rolls are tied with cheese thread.
- Smell: Parenica has a characteristic smell of sheep's milk and a smoky aroma obtained by smoking with hardwood smoke.
- Taste: Smooth, pleasantly salty and cheesy after sheep's milk.
- Consistency: Elastic, with a softened texture, forming strands when broken.
- Colour: Yellow to brown on the outside after smoking, white to buttery yellow inside.
- Composition: Minimum 53 % dry matter; minimum 50 % fat in dry matter, maximum 3 % NaCl
- Microbiological requirements: Contains natural milk micro-organisms of the genera Lactobacillus, Enterococcus, Lactococcus and Streptococcus.

Nutritional value and use: Rich in calcium, phosphorus, and essential fatty acids

Uses: Served fresh or smoked as a delicacy. Accompanies traditional Slovak dishes or charcuterie boards. Used in grilling or melting due to its elastic texture.

Indicative quantity produced in one year: Limited production, as sheep milk-based parenica is more artisanal, with an estimated annual output of 200-500 tons, depending on the season and demand.

Product distribution and market

Domestic market: Sold mainly in local markets, traditional dairies, and specialty shops.

Export: Limited, due to the artisanal nature of the product. Primarily shipped to niche markets interested in traditional or gourmet cheeses.

Market trends: Gaining interest among health-conscious and gourmet consumers due to its natural and high-quality origin.

Preparation, consumption, and preservation

Preparation: Cheese curds from sheep milk are steamed, stretched, and hand-rolled into spirals or ribbons. Smoked parenica is treated with natural wood smoke, enhancing flavor and preservation.

Consumption: Traditionally enjoyed fresh or smoked, often with bread or as part of cheese platters. Can be grilled or melted for use in various dishes.

Preservation: Stored at 4-8°C.

Unsalted parenica has a shorter shelf life (~2 weeks), while smoked variants last longer due to natural preservation.

2.3 Chamomile



Scientific name of the product:

Matricaria chamomilla (synonym *Chamomilla recutita*)

Common name of the product:

Common name of the product in the territory of intervention:

In Slovakia, it is commonly known as "Rumanček kamilkový" or "Harmanček" or "Kamilka"

Image: Chamomile; Photo credit: <https://www.nasezdravie.sk/magazin/rumancek-kamilkovy-harmancek>

Category: Aromatic herbs and spices

Historical production area and origin: Chamomile is native to Europe and Western Asia. It has been traditionally cultivated and used throughout Europe, including Slovakia, for its medicinal properties since ancient times.

Cultivars, species and types: In practice, several registered varieties are cultivated. Currently, 5 varieties are authorised in Slovakia, including two diploid α -bisabolol varieties 'Bona' (1984) and

‘Novbona’ (1997), two tetraploid α -bisabolol-mix varieties ‘Goral’ (1990) and a tetraploid α -bisabolol variety ‘Lutea’ (1997), which are registered until 2027 and 2030 respectively. The variety is maintained by Mária Oravcová - VILORA, Stará Ľubovňa. The fifth variety registered in 2013 is ‘Lianka’. The maintainer of the variety is the University of Prešov in Prešov and the registration is valid until the end of 2033.

Description: Chamomile is an annual herb reaching 20–50 cm in height. It has a branched stem with feathery, finely divided leaves. The plant produces characteristic daisy-like flowers with white petals (ligulate florets) surrounding a yellow cone-shaped center (tubular florets). The flowers emit a sweet, apple-like fragrance.

Harvest period: The harvest date is at the time of technical maturity, i.e. when 1/3 - 1/2 of the tubular flowers on the bed are in bloom and the white tongue-shaped flowers are in a horizontal position. This is usually on the third to fifth day after flowering, in dry weather.

History of the product: Chamomile is one of the most important cultivated, but also wild-harvested medicinal plants. It is one of the oldest and best known medicinal plants used by mankind from the time of ancient Egypt to the present day. It is a native species from front Asia, southern and eastern Europe, from where it has spread as a weed in cereals all over the world. In Slovak folk medicine, it has been a popular remedy for digestive issues, inflammation, and as a calming agent.

Nutritional values and use: While chamomile is not significant as a nutritional source, it contains beneficial compounds such as flavonoids (e.g., apigenin), terpenoids, and antioxidants.

Uses:

- **Medicinal:** Treating gastrointestinal disturbances, reducing inflammation, relieving anxiety and insomnia.
- **Cosmetic:** Ingredient in skincare products for its soothing effects.
- **Culinary:** Consumed as herbal tea; sometimes used to flavor dishes.

Indicative quantity produced: Exact figures vary, but Slovak varieties of rumanchek belong to the world's top and are in demand by growers abroad, in almost all countries of the European Union, as well as in other countries of the world, e.g. Canada, the United States of America, Chile, Iran and Israel.

Product distribution and market: Chamomile products are widely available in pharmacies, health food stores, and supermarkets. They include dried flowers, teas, essential oils, and extracts. The demand remains strong due to its popularity in herbal medicine.

Preparation, consumption and preservation

- **Preparation:** Dried chamomile flowers are steeped in hot water to make tea. Essential oils are extracted through steam distillation.
- **Consumption:** Commonly consumed as a tea, using 1-2 teaspoons of dried flowers per cup of hot water, steeped for about 5 minutes.

- **Preservation:** Store dried flowers in airtight containers, away from light and moisture, to maintain their potency.

2.4 Yellow Gentian



Scientific name of the product:

Gentiana lutea

Common name of the product:

Horec žltý / Yellow Gentian (in English)

Common name of the product in the territory of intervention:

Horec žltý (Slovak, Czech);
Genziana gialla (Italian); Gelber
Enzian (German)

Image: Yellow Gentian; Photo credit: <https://www.zdrava-potravina.sk/horec-zlty-koren/>

Category: Aromatic herbs and spices

Historical production area and origin: The plant is native to mountainous regions of central and southern Europe, particularly the Alps, Pyrenees, Balkans, and Carpathians. It thrives in high-altitude pastures and limestone-rich soils.

Cultivars, species and types: Horec žltý is part of the genus *Gentiana*, which includes over 400 species. While *Gentiana lutea* is the most prominent species used for medicinal and culinary purposes, other species include:

- *Gentiana acaulis* (trumpet gentian)
- *Gentiana purpurea* (purple gentian)

These species differ in size, flower color, and ecological preferences.

Description: Horec žltý is a perennial herbaceous plant that can grow up to 1.4 meters tall. It has:

- Large, oval, lance-shaped leaves.

- Yellow, star-shaped flowers in whorls along the upper part of the stem.
- A thick, fleshy root system rich in bitter compounds.

The plant is highly aromatic, with a characteristic bitter taste.

Harvest period: The roots (*Gentianae radix*) are harvested in March or October and November, typically after the plant is about 5-7 years old.

History of the product: Horec žltý has been used since antiquity for its medicinal and aromatic properties. The ancient Greeks and Romans employed it as a digestive aid and remedy for various ailments. Over centuries, it became a staple ingredient in traditional European liqueurs (e.g., Gentian schnapps, Suze) and herbal medicines. Its name derives from Gentius, an Illyrian king, who is said to have discovered its healing properties.

Nutritional values and use: Horec žltý is not typically consumed for nutritional value but for its medicinal and aromatic compounds. Key properties include:

- **Bitter glycosides:** Amarogentin (one of the most bitter substances known) and gentiopicrin.
- **Minerals:** Trace elements beneficial for health.
- **Uses:**
 - **Medicinal:** Digestive stimulant, appetite enhancer, and remedy for gastrointestinal disorders.
 - **Culinary:** Flavoring agent in bitters, aperitifs, and herbal teas.

Indicative quantity produced: The production of horec žltý is limited due to its protected status in the wild. However, cultivated production is increasing in regions like France, Switzerland, and the Balkans. Precise figures depend on demand, with smaller-scale production supporting medicinal and liquor industries.

Product distribution and market:

- **Local markets:** Often sold as dried roots or in tincture form in herbal medicine stores.
- **International markets:** Primarily distributed as a raw material for the pharmaceutical and liquor industries.
- **Key markets:** France, Switzerland, Germany, and Italy dominate production and export.

Preparation, consumption and preservation:

- **Preparation:**
 - Roots are cleaned, dried, and ground into powder or sliced for use in teas and tinctures.

- Used as an infusion in alcohol for bitters or aperitifs.
- **Consumption:**
 - A few drops of gentian extract in water are consumed to aid digestion.
 - Aperitifs flavored with gentian, such as Suze, are popular in Europe.
- **Preservation:**
 - Dried roots should be stored in airtight containers in a cool, dry place.
 - Extracts and tinctures are preserved with alcohol to extend shelf life.

2.5 Spišská borovička Juniper Distillate



Scientific name of the product:

Spišská borovička is a juniper distillate. The scientific name of juniper is *Juniperus communis* L. alternatively *Juniperus oxycedrus* L.

Common name of the product:

Spišská borovička

Common name of the product in the territory of intervention: Spišská borovička

Image: Spišská borovička; Photo credit: <https://spisskapalenica.sk/produkt/>

Category: Processed product of plant origin; Wines, musts and spirits

Historical production area and origin: Spišská Borovička is made according to the original recipe, dating back to the second half of the 18th century, from the reign of Maria Theresa. The establishment of one of the first distilleries on our territory also dates back to this period. It is no coincidence that this distillery was located in one of the royal towns of Spiš - Stará Ľubovňa.

Cultivars, species and types: Spišská borovička is made from juniper (*Juniperus communis* alternatively *Juniperus oxycedrus*) and it is bottled in 0,5 l and 0,7 l glass bottles.

Description:

Alcohol content: 40 % vol.

Appearance: Clear liquid without sediment or cloudiness, floating with dried juniper berries or twigs.

Colour: Slightly yellowish.

Taste and smell: Typical of juniper berries, deliciously delicate, with no extraneous odours.

Harvest period: Junipers are harvested in autumn when they are fully ripe and dark blue to black in colour.

History of the product: Spišská borovička has a rich history dating back to the 18th century, when it began to be produced in Spiš. Spišská borovička was popular as a stomach elixir and later became a popular drink. Its tradition has also been documented in historical records from the 18th and 19th centuries.

Nutritional values and use: It has healing, disinfectant and supportive effects on the digestive tract. It is traditionally consumed as an aperitif or digestif.

Indicative quantity produced: Precise data on the production quantities of Spišská borovička are not publicly available, but it is a popular drink in Slovakia with a significant share of the spirits market.

Product distribution and market: Spišská borovička is available on the Slovak market and is a popular gift for foreign visitors.

Preparation, consumption and preservation

Preparation: In the preparatory phase of production, the drinking water is treated in a softening plant. The measured quantity of alcohol is mixed with the appropriate quantity of juniper spirit, bonificant and liquid invert sugar and made up with the treated drinking water to achieve the desired degree of maturity. After thorough stirring and checking the ethanol content, it is racked into a storage tank, where it is racked and left to rest for at least 14 days. After sensory and analytical evaluation by the plant laboratory, the bottling is instructed. At the last stage, the finished spirit is filtered and filled into consumer packaging, into which juniper berries or juniper twigs are inserted by hand.

Consumption: Served neat, chilled or at room temperature.

Storage: Store in a cool, dark place to preserve quality.

2.6 Paska Easter Bread



Scientific name of the product:

No specific scientific name (it is a traditional baked product), but associated with wheat flour, scientifically known as *Triticum aestivum*.

Common name of the product:

Paska (Easter bread).

Common name of the product in the territory:

Slovakia: Paska; Ukraine: Паска (Paska); Poland: Pascha; Russia: Кулич (Kulich)

Image: Paska; Photo credit: Source: <https://dobruchut.aktuality.sk/recept/30142/velkonocna-paska/>

Category: Processed product of plant origin: Bread and savory bakery products

Historical production area and origin

- Originates from **Eastern Europe** and **Slavic regions**, particularly tied to religious Easter traditions.
- Found historically in Ukraine, Slovakia, Poland, and Russia.

Cultivars, species, and types

Paska uses wheat flour and can incorporate the following:

- **Flour type:** Soft or all-purpose wheat flour (*Triticum aestivum*).
- **Additives:** Includes variations with raisins, candied fruits, or nuts depending on the local tradition.

Description

- **Shape:** Typically round or cylindrical, sometimes with decorative patterns on top.
- **Texture:** Soft and airy, rich due to butter and eggs.
- **Color:** Golden brown crust with a light-yellow interior.
- **Flavor:** Sweet, slightly tangy (if fermented longer), with subtle citrus or vanilla notes.

Production Period

The production period for **Paska** aligns with the religious and cultural celebration of **Easter**, which varies each year but typically falls between **late March and late April**.

- **Home Production:** Often begins a few days before Easter, usually on **Holy Thursday or Good Friday**, as it is meant to be fresh for Easter Sunday.
- **Commercial Production:** Bakery production starts **2–3 weeks before Easter** to meet market demand, with peak production occurring in the **week leading up to Easter**.

Ingredients like flour, butter, and eggs are readily available year-round, allowing production flexibility. However, the baking of Paska is culturally and seasonally restricted to the Easter period.

History of the product: Paska has been baked for centuries as part of Easter celebrations in Slavic and Christian traditions. It symbolizes the resurrection of Christ, renewal, and abundance. For religious rituals it is often blessed in church before being shared among family members during Easter breakfast.

Nutritional values and use

- **Nutritional values (per 100g):**
 - Calories: ~290 kcal
 - Carbohydrates: 50g
 - Protein: 7g
 - Fats: 8g
 - Fiber: 2g
- **Use:**
 - Consumed as part of Easter feasts, often with butter, cheese, or other traditional accompaniments.

Indicative quantity produced: Local bakeries and families produce **thousands of loaves during Easter**, with large-scale production in industrial bakeries.

Product distribution and market

- Sold in **local bakeries, markets, and supermarkets** before Easter.
- Exported in smaller quantities to regions with Eastern European diaspora.

Preparation, consumption, and preservation

- **Preparation:** Paska is made with a rich dough of wheat flour, milk, eggs, butter, and sugar, often flavored with citrus or vanilla. Decorations like crosses or braids are added on top.
- **Consumption:** Typically eaten fresh during Easter breakfast or dinner.
- **Preservation:** Stored in an airtight container at room temperature for 3–4 days or frozen for longer preservation.

3. Krk Island in Croatia

3.1 Broskva Kale



Image: Broskva, Photo credit: Bruna Kocijan

Scientific name of the product: Brassica oleracea L. var. Acephala

Common name of the product: Broskva, (lisnati kelj, raštan, stočni kelj, prokula, raštika, raščika, ukret, vukret, for similar varieties in other parts of Croatia)

Common name of the product in the territory of intervention: Krčka/bodulska broskva

Category: Vegetables

Historical production area and origin

Krk island (Coastal Croatia, Herzegovina, Montenegro for similar varieties)

Cultivars, species and types

Broskva is a variety of kale. There are a large number of different varieties, but they all have a common feature: in the vegetative phase there is no formation of a head (thus the name acephala). It is considered one of the closest relatives of wild cabbage.

Description

Krčka broskva is characterized by a deep and strong development of its roots system. The stem is thick and tough. It can grow up to one meter, and forms a loose yellowish rosette at the top. The lower leaves are round to oval shape, wavy to jagged edges, and are located on long stalks. They can grow quite large in size. The surface of the leaf is smooth and slightly wavy, and covered with wax. The color of the leaves are green to blue green with slight appearance of purple colors (Lešić et al., 2016). It has a mild, slightly bitter taste, which becomes more pronounced when the leaves are older or larger. The bitterness can be reduced by cooking, which often softens the flavor and makes it more palatable.

Harvest period

Year-round. However, broskva leaves grown during the summer are traditionally used for feeding livestock, and during the winter, after a period of low temperatures, broskva becomes "sweeter" and more suitable for human consumption.

History of the product

Broskva originates from the Eastern Mediterranean. It represents traditional culture of the Adriatic region. It has fed generations because it tolerates unfavorable climatic conditions such as drought, high temperatures and low temperatures.

Nutritional values and use

High vitamin C, A and K content, calcium, iron, folate, and dietary fibre. Low caloric value.

Indicative quantity produced

Due to the fact it is primarily a subsistence crop, there is no record on the quantities produced. Traditionally, every house on the island was growing some broskva for its needs, nowadays it is seen in elderly households.

Product distribution and market

Broskva is mainly grown as a subsistence crop (a crop that serves for direct use of the family). Although it is a frequent culture, it is not yet a registered variety, which would be of great importance due to its high nutritional value and ease of cultivation. However, due to a large number of populations and cross-pollination with other Brassicae, it is difficult to separate its properties from other similar populations and varieties. In recent years its popularity has grown significantly due to the scientific research that has shown its health benefits. Many restaurants are interested in adding it to their menus, and there is much more demand than supply. It cannot be found in any supermarket, only in family gardens, and rarely in farmers' markets.

Preparation, consumption and preservation

Broskva is most commonly simply sautéed in a pan with olive oil and garlic, and eaten as a side dish with meat or fish. It is also prepared as a stew that usually contains potatoes, onion and garlic. Another traditional use on the island is a stew with naturally fermented broskva, potatoes, dry sheep meat, and beans, called "kiselica". The fermentation is done in barrels with grape must, and kiselica is then eaten throughout the winter time.

The tips of broskva called "cime or cimice" in dialect - coming from the Italian word cime (time), are normally eaten in the same way as wild asparagus - in a salad with boiled eggs.

3.2 Wild Asparagus



Scientific name of the product: Asparagus acutifolius

Common name of the product: Wild asparagus

Common name of the product in the territory of intervention: Šparoga

Photo credit: <https://plavakamenica.hr>

Category: Vegetables

Historical production area and origin

The exact origins of asparagus are difficult to determine, though it is known to be native to the Eastern Mediterranean and parts of Asia. Today, asparagus is found naturalized in various parts of the world, but the exact time of its naturalisation is unclear. The length of time it has been used as a medicinal vegetable is also uncertain, though the Romans were familiar with it and valued it highly as early as 200 B.C. O

Cultivars, species and types

Asparagus acutifolius

Description

In Croatia, wild asparagus, known as šparoga, is a prized seasonal delicacy. The spears are thin, delicate, and typically dark green with hints of purple. They range from 15 to 30 centimetres in length and have a lightweight, slender shape. The flavour is intense, slightly bitter, and earthy, with a hint of nuttiness, making it a favourite ingredient in traditional dishes, especially in the coastal regions of Kvarner, Istria and Dalmatia.

Harvest period

The harvest period for asparagus in Croatia typically occurs in the spring, usually from late March to early June. The exact timing can vary depending on the region and weather conditions each year.

History of the product

Wild asparagus, known locally as šparoga, has a long history in Croatia, particularly along the Adriatic coast in regions of Kvarner, Istria and Dalmatia. The plant, *Asparagus acutifolius*, is native to the Mediterranean and has been a part of the local diet for centuries. The use of wild asparagus in Croatia dates back to ancient times. The Greeks and Romans, who once inhabited the coastal regions of Croatia, were known to have consumed wild asparagus. They appreciated its medicinal properties as well as its culinary uses. On the island of Krk, the whole family goes on "šparoga hunts" in the early spring. This activity is not just about foraging but also a social event, with families and friends gathering to search for the slender, green shoots in forests, fields, and along the coast. Wild asparagus is deeply embedded in Croatian cuisine. It is often used in traditional dishes such as fritaja (a type of omelet) with eggs, or mixed into pasta, risottos, and soups. The unique flavour of wild asparagus has made it a sought-after delicacy in both local households and high-end restaurants.

Nutritional values and use

Indicative quantity produced: Asparagus grows in the wild in Croatia, primarily in forests and undergrowth, and it has long been a local custom for locals to disappear into the wilds of nature in search of this gourmet treasure. Asparagus is a highly nutritious vegetable, offering a range of vitamins, minerals, and other beneficial compounds. It is the richest in potassium, phosphorus, sulfur, calcium and magnesium. It contains a lot of microelements such as iron, copper, zinc, fluorine and iodine. It is an excellent source of folate and vitamin C. Asparagus is rich in nutrients that have anti-inflammatory properties and antioxidants that help fight free radicals, which are responsible for a number of diseases. In addition, it also contains glutathione, an element that helps detoxify the body and fight against malignant cells.

Product distribution and market

Wild asparagus cannot usually be found in supermarkets, only in farmers' markets. Usually people find them themselves and use them for their own needs, however when sold in farmers' markets the prices can go up to 60 euros per kilo in the beginning of the harvesting season

Preparation, consumption and preservation: It is rarely eaten raw, mostly cooked, and used in dishes such as soups, stews, salads, or on its own. Some of the most popular recipes are:

Asparagus Frittata (Fritaja s Šparogama) is a popular dish on the island of Krk. The asparagus is sautéed with onions and then mixed with eggs to create a simple yet flavorful frittata. It's often enjoyed as a light meal or appetiser.

Ingredients: Wild asparagus, eggs, onions, olive oil, salt, and pepper.

Šparoge na salatu (Asparagus Salad) is a fresh and light dish typically served in spring. The asparagus is lightly blanched and then combined with ingredients like boiled eggs or potatoes dressed simply with olive oil, vinegar, and seasoning.

Ingredients: Asparagus, boiled eggs, potatoes or beans, olive oil, vinegar, salt, and pepper.

Asparagus Risotto (Rižoto sa Šparogama) is a creamy dish that highlights the flavour of asparagus. The dish is prepared with rice, sautéed onions, and garlic, cooked in a broth, and finished with fresh asparagus and grated Parmesan cheese.

Ingredients: Asparagus, rice, onions, garlic, vegetable or chicken broth, white wine, Parmesan cheese, and olive oil.

3.3 Forest Mushrooms: Porcini, Chanterelles, Black Trumpets



Scientific name of the product:

Fungi (Boletus edulis, Cantharellaceae, Craterellus cornucopioides)

Common name of the product:

Forest mushrooms (Porcini mushrooms, Chanterelles, Black Trumpets)

Common name of the product in the territory: Šumske gljive (Vrganji, Lisičarke, Crne trube)

Photo credits: KD Dubašnica (vrganji), www.ludens.media (lisičarke), www.plantea.com.hr (crna tuba)

Category: Other

Historical production area and origin

Mushrooms have been foraged and consumed by various cultures for thousands of years. Their use can be traced back to ancient civilizations in Europe, Asia, and the Americas. Ancient Greeks and Romans recognized some mushrooms as edible and used them in cooking, while others were used for medicinal purposes. Krk is the richest Mediterranean island in terms of Basidiomycota. The collection of these mushrooms on the island during mushroom seasons attracts a large number of foragers, not only from neighbouring regions of Croatia, but also from neighbouring countries. Consequently, most of the mushrooms collected on the island of Krk are consumed outside the island.

Cultivars, species and types

Porcini mushrooms (Boletus edulis), Chanterelles (Cantharellaceae), Black trumpet (Craterellus cornucopioides)

Description

The porcini mushroom is a species of edible mushroom from the Boletaceae family. They most commonly grow in deciduous and coniferous forests, particularly under oak, beech, pine, and spruce trees. They prefer acidic soils and are often found in old forests with abundant vegetation. The cap is light or dark brown, initially semi-round, later becoming open, moist, sticky, and 5-25 cm wide. The tubes are white, later yellowish or greenish, and do not change colour when pressed. The stem is solid, thickened, especially in the lower part, 5-12 cm tall, and 2-6 cm thick. The flesh is white, firm when young, later becoming spongy, with a pleasant smell and taste. The spores are spindle-shaped, smooth, and the spore print is brown.

Chanterelles are very common in forests throughout Europe, especially in northern and central European countries. They grow in mixed and coniferous forests, particularly under oak, beech, pine, and spruce trees. The cap is wavy-edged, pale orange or yellow, with a diameter of 3 – 8 cm, and the stem is short, up to 8 cm long. The chanterelle is an edible mushroom known for its delicate flavour and rich, exotic aroma. It has a distinctive chemical composition that can be sensed by its aroma alone.

Black trumpet is an edible mushroom from the Cantharellaceae family. It is widespread in Europe, Asia, and North America. It grows in groups at the end of summer and in autumn in broadleaf forests (beech, oak). Its fruiting body has a trumpet-like appearance, is upright, and is not distinctly separated into a cap and stem. It is dark brown to blackish-grey in colour, grey at the base, funnel-shaped, completely hollow from the middle to the bottom, with an irregularly undulating edge, 2-9 cm wide and 2-10 cm high. The flesh is grey to black, thin, elastic, and fibrous, with a pleasant smell and taste.

Harvest period

The porcini mushrooms can grow from April to November, but it is most abundant from the end of May to the end of September.

The chanterelles grow from early summer to mid-autumn.

Black trumpets grow in late summer and autumn.

Nutritional values and use

In 100g of raw chanterelles, there are:

- 0.5 grams of fat
- 1.5 grams of protein
- 6.9 grams of carbohydrates.
- 3.47 mg of iron

- 0.354 mg of copper
- 0.286 mg of manganese
- 506 mg of potassium
- 5.3 mg of vitamin D

In 100g of raw porcini mushrooms there are:

- 82 kcal
- 7.4% protein
- 1.7% fat,
- 9.2% carbohydrates.
- iron (0.7 mg),
- phosphorus (22.3 mg),
- zinc (4.2 mg),
- copper (0.8 mg).
- thiamine (0.105 mg)
- riboflavin (0.09 mg)
- niacin (6 mg), pantothenic acid (2.64 mg)
- vitamin C (4.2 mg)

In 100g of raw Black trumpets there are:

- 30-40 kcal (125-167 kJ)
- Protein: 2-3 grams
- Fat: 0.5-1 gram
- Carbohydrates (5-7mg)
- Iron: About 2-3 mg
- Phosphorus: Around 20-30 mg
- Potassium: Approximately 300-400 mg
- Vitamin D: Around 1-2 mg
- B Vitamins: Includes significant amounts of B2 (Riboflavin), B3 (Niacin), and B5 (Pantothenic acid)

Product distribution and market

Although the quantities of mushrooms collected on the island of Krk annually are extremely large, they do not have commercial significance and are not widely available in the local market due to unregulated and uncontrolled foraging.

Preparation, consumption and preservation

Rižoto s vrganjima (Porcini Mushroom Risotto): Porcini mushroom risotto is a creamy dish with a rich, earthy flavour thanks to the porcini mushrooms. It is prepared by sautéing rice with onions, gradually adding white wine and broth, and finally mixing in porcini mushrooms and seasonings. This dish is especially popular during mushroom season.

Ingredients: rice, porcini mushrooms, onion, white wine, parsley, vegetable seasoning, extra virgin olive oil, salt and pepper

Fritaja s lisičarkama (Chanterelle fritata): A chanterelle frittata is a savoury egg dish featuring chanterelle mushrooms, known for their delicate and slightly peppery flavour. The mushrooms are sautéed and then mixed with beaten eggs, often with added herbs and cheese, before being cooked until golden and set. This dish makes for a hearty breakfast or light meal, highlighting the unique taste of chanterelles.

Ingredients: chanterelle mushrooms, onion, garlic, eggs, oil, butter, salt and pepper.

Gulaš s prahom crnih truba (Goulash with black trumpet mushroom powder): Goulash with black trumpet mushroom powder is a rich and flavorful stew. The black trumpet mushrooms add a deep, earthy taste that enhances the overall depth of the dish. It's a hearty meal, often served with potatoes or bread, perfect for cooler weather.

Ingredients: beef, onions, cloves garlic, carrots, parsley roots, a piece of celery root, red wine, teaspoons black trumpet mushroom powder, ground paprika, smoked ground paprika, tablespoon tomato paste, bay leaf fresh, parsley, salt, pepper.

3.4 Acorn



Image: Acorn; Photo credit: <https://species.wikimedia.org/>

Scientific name of the

product: *Quercus pubescens*

Common name of the product: Acorn

Common name of the product in the territory of intervention: Žir, Želud

Category: Other

Historical production area and origin

Acorns are produced by oak trees (*Quercus* spp.), and their historical production and origins are strongly linked to the natural range of these trees. Oak trees are indigenous to the Northern Hemisphere, with a high prevalence in North America, Europe, and certain regions of Asia. The dominant oak species on the island of Krk is the downy oak (*Quercus pubescens*). The downy oak is characteristic of Mediterranean regions and is often found in areas with rocky soil, such as Krk. This species is well adapted to the dry and warm climate conditions that prevail on the island. The acorns of the downy oak are an important part of the local ecosystem. They serve as a food source for various wildlife, including birds, small mammals, and even some livestock. In addition to the Downy oak, several other oak species grow on Krk, including Turkey oak (*Quercus cerris*), English oak (*Quercus robur*), sessile oak (*Quercus petraea*), and holly oak (*Quercus ilex*). The acorns from all these oak species have been used as animal feed, while acorns from the downy oak and holly oak were primarily used for human consumption due to their lower tannin content.

Cultivars, species and types: Downy Oak (*Quercus pubescens*) acorn

Description

The acorns are small, elongated oval in shape, measuring 1-3 cm in length and 0.6-1.8 cm in diameter, with a pointed tip. The cap is shallow, 8-15 mm in height, and 6-15 mm in width. They are situated on a stalk up to 1 cm long or can be sessile, often found in clusters of up to four. They mature in September and October of the same year. The years when oak trees produce an unusually large number of acorns are called "mast years." During a mast year, the trees produce a significant abundance of acorns, which can have various ecological effects, such as providing a surplus of food for wildlife and influencing the population dynamics of species that rely on acorns. Mast years occur every 5-10 years, or in some cases, every 8-12 years. They are irregular because they are influenced by many different factors, including climate conditions, the presence of oak pests, and so on. Mast years, in turn, affect the populations of many animal species, some of which are considered delicacies, such as the edible dormouse (*Glis glis*) and wild boar (*Sus scrofa*).

Harvest period: September and October.

History of the product

The history of acorns on Krk island is deeply connected to the country's cultural, ecological, and agricultural heritage. The name of one of the municipalities is Malinska-Dubašnica, with the second part of the name deriving from the Old Slavic word for downy oak. Additionally, in our municipality, there is a maritime heritage interpretation center named DUBoak, which is also inspired by the oak tree. Oak trees, which produce acorns, have been a significant part of the Croatian landscape for thousands of years, and their acorns have played various roles in the lives of the people and the environment. In the past, especially in poorer regions and during difficult times, acorns were used as a food source. To remove the bitterness caused by tannins, acorns were boiled or roasted. After preparation, they were ground into flour, which was used to make bread or porridge. Also, acorns have traditionally been used as feed for pigs, especially in areas with large forested regions.

Nutritional values and use

The seeds of oak trees have high energy value due to the proteins, carbohydrates, fats, and other substances they contain. Because of this, acorns are a favourite food for many animals that inhabit oak forests. However, throughout history, in poorer regions and during times of scarcity, acorns were sometimes used in human diets as well, which happened on the island of Krk as well. The bitterness and astringency caused by tannins can be removed by boiling or roasting, making acorns edible.

Besides that, acorns are often collected and used for planting new oak trees as part of forest conservation projects. These initiatives are important for preserving biodiversity and restoring

natural habitats, especially in areas that have suffered deforestation or other ecological disruptions.

Indicative quantity produced

Acorns are not a major commercial product and are typically not cultivated or harvested on a large scale. The production of acorns primarily occurs naturally in oak forests, which cover significant parts of Croatia. In the area of the municipality of Malinska - Dubašnica, the dominant species of oak is Downy oak (*Quercus pubescens*), and in the whole of Croatia there are seven different species of oaks. These are Turkey oak (*Quercus cerris*), English oak (*Quercus robur*), Sessile oak (*Quercus petraea*), Holly oak (*Quercus ilex*), Kermes oak (*Quercus coccifera*) and Hungarian oak (*Quercus frainetto*). Except for Hungarian oak, all other species grow on the island of Krk.

It should be noted that collecting and commercial use of acorns requires a permit from “Hrvatske šume”, a state enterprise responsible for forest and woodland management in the Republic of Croatia.

Product distribution and market

The market and distribution of acorns in Croatia are relatively niche and primarily focused on the traditional, ecological, and artisanal sectors. Acorns are not a common commercial product, but they have specific uses in certain industries and local practices. There is no commercial production of acorn flour on Krk island, and only a few official producers in the whole of Croatia.

Preparation, consumption and preservation

There is a tradition of making a coffee substitute from roasted acorns, which was particularly popular during wars and crises when other foodstuffs were scarce. Also, acorns can be ground into flour, which is then used to make bread. The flour is usually mixed with other types of flour to reduce bitterness and improve texture.

3.5 Vrbnik Žlahtina



Scientific name of the product: *Vitis vinifera*
"Žlahtina"

Common name of the product: Vrbnička žlahtina

Common name of the product in the territory of intervention: Žlahtina
(Žlajtina, Belina)

Image: Vrbnik Žlahtina; Photo credit: Turistička zajednica otoka Krka

Category: Fruit

Historical production area and origin

The word "žlahtina" comes from the old Slavic word "žlahtna", meaning noble. Žlahtina has historically been produced in the Kvarner region and northern islands of the Croatian coast. Its exact place of origin has not been determined until now. Folklore says that the variety came from the area of former Persia to the territory of France. Concerning morphological and other characteristics, it is classified in the ecological-geographical group of varieties *Proles orientalis*. The variety came from France via a longer route to the area of today's Croatian territory coast (Rijeka, Sušak, Grižane, Novi Vinodolski, island of Krk).

Description

The tops of the shoots are bent, bare, green and shiny, with a slight reddish tint. The shoots are strong, round, striped, with long green articles with a bronze shade on the sunny side. The leaf is medium-sized, three-parted or more often five-parted, pentagonal. Upper side the sinuses are medium to deeply incised, open to slightly overlapped, while the lower ones are lateral sinuses medium deep and mostly open. The sinus of the petiole is completely open in the shape of the letter U. Face of the leaf is smooth, dark green in colour, and the reverse side is bare, lighter green,

with rare bristly hairs on conducting vessels. The flower is morphologically and functionally bisexual. The grape cluster is medium to large, pyramidal, simple or sometimes winged, medium packed to packed. It usually contains about 100 berries. The petiole is medium long and round.. The berries are medium-sized to large, round in shape, with firm yellow-green skins, golden yellow, and sprinkled with dots. The meat is juicy, with a pleasant taste.

Harvest period: September

History of the product

There are some of the records that confirm that wine was made and preserved in the Croatian littoral in ancient times such as records of Pliny the Elder, where he mentions wine from Krk that is saved in amphorae. Žlahtina is mentioned in the statutes of Krk and Vrbnik (the statute of Vrbnik was written 1388) and the Vinodol Code which was written in 1288, in the times when islanders were making some much wine that the statutes stipulates how to reduce competition from non-islanders. Written data on the cultivation of Žlahtina on the Croatian coast date back to 1853, where it is mentioned as the most important grape variety in Grižane, close to Krk island.

In 1883 there were 383 ha of vineyards in the Vrbnik municipality, very likely most of them were Žlahtina variety. The Catholic church played an important role in preserving and promoting viticulture, with some monasteries being owners of large areas under vineyards.

The variety was before grown primarily on high altitude in small plots surrounded with dry walls, whereas today it is primarily present in the Vrbnik field, which was often flooded due to ground waters, until a drainage system was put in place. In the end of 19th century, when peronospora and phylloxera wiped out most of the wine production, Žlahtina was grafted onto resistant american vine varieties.

Nutritional values and use

In terms of sugar content, the variety is average, but with lower yields it achieves very good quality (between 15 and 18%). The variety is characterized by higher acidity than most cultivated varieties in this area, nice freshness and balance, which ranks it as quality varieties. In elevated, sunny positions, it can give top quality grapes.

Žlahtina produces fresh wines of moderate fullness and strength. Considering a high reproductive potential, on fertile soils it bears abundantly, which is directly reflected on the quality of the wine. The wines of Žlahtina are best enjoyed when they are young. It is not suitable for long storage

(except for rare harvests from extremely good locations). Freshness is the reason for using Žlahtina in the production of sparkling wines.

Indicative quantity produced

Žlahtina is the most economically important wine grape variety in the Kvarner/ North adriatic coast region of Croatia. Today it is grown on approximately 152 ha in Kvarner, and small plots in Istria region. The production of Žlahtina wines has been steadily increasing, and the current estimates are that yearly production is around 800 000 - 1.000 000 L per year.

Product distribution and market

The most important žlahtina wineries include: "PZ Vrbnik", "Obrt za vinarstvo i rasadničarstvo - Šipun", "Ugostiteljstvo i turizam Nada", "PZ Gospoja", "Katunar - vinarija d.o.o.", "Ivan Katunar - family agricultural farm", "Winer Petar Čubranić and sons", and "Association of small winegrowers and cellarers - Mali VIP". The basement of the company "Frajona d.o.o." is located in Malinska.

The largest producer of žlahtina grapes and wine outside of Krk island is located in Vinodol, and it is the company "Pavloimir d.o.o.", while "Vinodolska poljoprivredna zadruga Studec" produces žlahtina wine exclusively for the supply of its catering establishment "Konoba u vinogradu", at the microlocation "Under Sv. Mihovil".

Žlahtina wine by PZ Gospoja and PZ Vrbnik is sold in major supermarkets all over country, and in some specialty markets abroad.

Preparation, consumption and preservation

Products Made from Žlahtina:

- Still Wine

Depending on the producer, these are mainly wines obtained through quick primary processing, controlled fermentation, and short aging, usually in stainless steel tanks or less often in barrique or other wooden barrels. These are dry wines with 0.5 to 3 g/L of residual sugar, total acidity of 5 to 6.5 g/L, and an alcohol content of 10.8 to 12% by volume.

Recently, there have also been Žlahtina wine types on the market with fuller body and structure, obtained through maceration techniques and aging on lees. Most are dry, but sometimes semi-dry wines with a residual sugar content of 4-12 g/L and an alcohol

content of 13-13.5% by volume, categorized under the traditional label "premium wine with controlled geographical origin."

- Sparkling Wine

This is obtained by secondary fermentation of the wine using the champenoise method, meaning fermentation in the bottle, followed by aging and maturation in the bottle, usually for 1-3 years, with an alcohol content of 12-12.5% by volume and total acidity of 5.5-6.5 g/L. Žlahtina sparkling wine is typically an extra brut (less than 6 g/L of residual sugar, and in Žlahtina, no more than 2-3 g/L), and rarely brut (less than 15 g/L of residual sugar). The pressure developed in the bottle at a temperature of 20°C is between 5-6 bar. A notable sparkling wine from Žlahtina is Valomet, the first sparkling wine in the world placed in a cage at a depth of 30 meters under the sea, made from Žlahtina grapes. Fermentation lasted 90 days, and the pressure developed in the bottle was 6 bar. The bottles are under the influence of external pressure in an anaerobic environment where oxidation and gas exchange are excluded. The impact of CO₂ on aroma development is very positive, with yeast autolysis slightly higher than usual in the cellar. The increased concentration of dissolved CO₂ results in longer-lasting and finer effervescence. The sparkling wine is without expedition liqueur and sugar, completely dry, with notable drinkability and enjoyment.

- Pearl Wine

This is produced using the charmat method, i.e., fermentation in tanks. Secondary fermentation of the wine occurs in an autoclave tank. The alcohol content is 12-12.5% by volume and total acidity is 5.5-6.5 g/L. The pressure developed in the bottle ranges from 1 to 2.5 (up to 3.0) bar at a temperature of 20°C. It is mostly produced from young Žlahtina wine with residual sugar. After 20-25 days, fermentation is stopped by rapid cooling, and the naturally produced pearl wine is filtered and bottled. The resulting carbonic acid gives the wine a sharp and refreshing taste.

- Prošek (Dessert Wine)

A traditional dessert wine of the Croatian coast and littoral. It is made from late-harvest grapes left to ripen on the vine or dried in the sun with appropriate care and attention. After the grapes dry, concentrating the fruit sugar, they are crushed and destemmed, followed by maceration for several days and alcoholic fermentation. After fermentation, the wine is aged in barrique or wooden barrels. Prošek has an alcohol content of 15% by volume, total acidity of 4.5-5 g/L, and a residual sugar content of 80-120 g/L.

3.6 Krk Olive Oil



Scientific name of the product: *Olea europaea* L., *Olea europaea* var. *Plominka*, *Olea europaea* var. *Drobnica*

Common name of the product: Krk Olive Oil

Common name of the product in the territory: Domaće uje

Image: Krk Olive Oil; Photo credit: <https://www.grad-krk.hr>¹

Category: Processed product of plant origin - Oils

Historical production area and origin

The olive tree (*Olea europaea*) is native to the Mediterranean Basin. It has been cultivated for thousands of years, with origins in the Eastern Mediterranean region. The cultivation of olives spread throughout the Mediterranean due to their adaptability and economic importance.

History of the product

Olive cultivation in Croatia dates back to ancient times, influenced by Greek and Roman civilizations. The Romans, who had a significant presence in the region, played a crucial role in spreading olive cultivation throughout their empire, including the Adriatic coast. During Roman times, olive cultivation expanded significantly. Historical records indicate that the Romans introduced advanced agricultural practices to the region, including improved techniques for olive cultivation and oil production. Throughout the mediaeval period, olive cultivation continued to be

¹ <https://www.grad-krk.hr/krcko-maslinovo-ulje-zasticeno-europskom-oznakom-izvornosti>

a significant part of agriculture along the Croatian coast. Monastic communities and local farmers maintained and developed olive groves, contributing to the local economy and cuisine. Olive growing once represented a significant source of income for the local people. In 1850, Dubašnica had about ten mills for grinding olives. From these mills, it produced up to 700 barrels of oil (1 barrel = 66 litres). Part of the oil was used for local needs, while the rest was exported by sailing ships to Trieste, Venice, Chioggia, Bakar, and Rijeka.

Physical and organoleptic characteristics

Plominka is a vigorous-growing olive variety and is also known as Plemenka, Plaminka, and Krupna. The name and synonyms were derived from the cultivation area as well as the shape and size of the fruit. The tree has vigorous growth, with long, round, but thin branches that bend toward the ground. The leaf is symmetrical, firm, dark green in colour, elliptical, with a sharp tip, approximately 9 cm long and about 1 cm wide. The fruit is fleshy and tapered, with an average weight of 2.8 g. The oil is of good quality, with a pronounced olive fruit flavour, moderate pungency and bitterness, while also having a distinct fruity aroma and a harmonious scent and taste.

Drobnica is an indigenous Croatian olive variety and is considered the oldest olive variety in this region. It is named after its small fruit. The tree develops a very strong trunk with a large base. The crown is very lush and upright. Drobnica has an upright growth habit, with a very tall trunk. The shoots are long, and the leaves are sparse. Drobnica develops flowers from March to May, with blooming starting in late May and early June. This variety produces a large amount of pollen with good viability, making it a good pollinator for other olive varieties. The fruit is round and elongated in shape, with an average weight of 2g. Before ripening, the fruit is green, gradually turning purple and finally black. The fruit has a thin skin that is difficult to separate from the flesh. The oil content in the fruit is around 23%, depending on the cultivation area and several other factors. The oil is of exceptionally high quality, with a well-defined pungent flavour and a fine bitterness.

There are several mills on the island where the producers take their olives for processing into oil.

The island of Krk is the northernmost Croatian (and Mediterranean island), which means that the continental influence on the Mediterranean climate is most pronounced here. It is well known that olives grown in such an environment produce oils with a high content of oleic acid and polyphenols. These compounds give the oil freshness and aromaticity, as well as high nutritional value and oxidative stability, protecting it from spoilage. The low temperatures during the winter months, including occasional snowfall, and the high temperatures in summer, along with drought, cause biological stress to which the olive responds by producing secondary metabolites—polyphenols—high-value components that give Krk olive oil its specific pungent and

bitter taste. The interaction of natural factors, indigenous varieties, human factors, and the tradition of olive growing and oil production has ultimately resulted in a product with characteristics unique to the entire island of Krk.

Period of production of the processed product

Olive varieties native to the island of Krk, including Plominka and Drobница, are harvested from as early as October to mid-December at the latest.

Nutritional value and use

Olive oil is recognized as a nutritionally and health-valuable agricultural product. It is an integral part of the Mediterranean diet, which UNESCO included in the World List of Intangible Cultural Heritage in 2010. At the time of being placed on the market, a product labelled with the designation of origin "Krk Olive Oil" must have the following physicochemical and organoleptic properties determined by methods prescribed by applicable regulations:

Free fatty acids expressed as oleic: < 0.5%

Peroxide value: <8 mmol O₂/kg

K232: < 2.25

K270: < 0.20

Indicative quantity produced in one year

According to the "Strategic Program for Sustainable Agricultural Development" of the city of Krk from 2012, the olive groves on the island of Krk consist of 130,000 olive trees. Based on collected data, the average yield on the island of Krk ranges from 500 to 800 tons of processed olive fruit, resulting in 650 to 1,000 hectoliters of olive oil.

Product distribution and market

The olive oil is mostly sold farm-gate, in direct contact of farmers with tourists. Due to its high level of polyphenols it is very popular, and the farmers sell it easily for higher prices than oils from Dalmatia are sold. This also means that it is quite difficult to find it in official shops, and it is mostly sold in small packages as a souvenir rather than an actual food item. It is very difficult for someone who does not have olives of their own in Croatia to afford cooking on Krk olive oil exclusively. Due to its popularity there has been an upsurge in young farmers planting new olive groves.

Preparation, consumption and preservation

The production of olive oil involves several steps: cleaning and washing the fruits, grinding, mixing the paste, separating the solid from the liquid parts, and finally separating the oil into oil and water. It should be stored in a cold, dry and dark place with a stable temperature.

Olive oil is commonly used in cooking as a seasoning, for frying, enhancing the flavour of dishes, and for medicinal purposes.

3.7 Šurlice



Image: Šurlice; Photo credit: KD Dubašnica

Scientific name of the product: Šurlice

Common name of the product: Šurlice

Common name of the product in the territory of intervention: Šurlice

Category: Processed product of plant origin - Pasta

Historical production area and origin: Island of Krk.

History of the product

Homemade pasta, known on Krk as "pašta," is one of the island's signature symbols. It is almost impossible to find a traditional Krk family that doesn't carefully guard their recipe for this piece of Kvarner gastronomy. The most famous representative of Krk pasta is *šurlice*. They are named after

the shape of an elephant's trunk ("surla" in Croatia), and the people of Krk have been preparing them according to a traditional recipe for a long time. The history of pasta preparation in Europe is linked to the Italian sailor Marco Polo, who brought the ancient Chinese art of making pasta to the Mediterranean coasts in the 13th century. Like the rest of the Mediterranean, pasta soon became popular in our region and remains one of the favorite dishes of coastal cuisine, an essential ally of every traditional cook. Šurlice have become one of Krk's most famous specialties precisely because of their versatility. It is not unlike the Istrian fuži, but more elongated and thinner, and is most often served with thick meat gravies or frutti di mare sauces. When a dish is prepared with lamb, as in Baška or, for special occasions, with game, a palatable everyday meal becomes a memorable gastronomic experience. The custom of preparing šurlice in catering establishments has also been preserved in Dobrinj, a charming small town in the interior of the island of Krk.

It is currently obtained from commercially available wheat flour and chicken eggs, Krk olive oil, marine salt.

Processed product description and its production technique

First, the flour needs to be scalded with boiling water. Then, the mixture should be stirred with a wooden spoon, after which oil and salt should be added, and finally, the egg yolks. The dough, once prepared, should be covered with a cloth and left to rest for a while. Next, the dough needs to be divided into several pieces, and each piece should be rolled into a long strip (similar to gnocchi). Cut the strip into pieces about 0.5 cm wide (approximately 10 grams). After that, using a thin skewer (in the past, knitting needles were used), place the cut piece of dough in the center around the skewer and gently roll it between your palms to a length of about 10 cm. Carefully remove the šurlica from the skewer so that it remains hollow inside (like spaghetti). Then with a skewer (or a knitting needle) and place the cut piece of dough in the centre around the skewer. Then gently roll it between palms to a length of about 10 cm. The last step is to carefully remove the šurlica from the skewer so that it remains hollow inside.

Period of production of the processed product: Šurlice are used in Krk's gastronomy throughout the entire year.

Nutritional value and use:

Average nutritional value per 100g of product:

Energy value: 1093 kJ / 257 kcal

Fat: 0.8 g

Of which saturated fatty acids: 0.3 g

Carbohydrates: 54 g

Of which sugars: 3.1 g

Protein: 0.9 g

Salt: 0.01 g

Product distribution and market

Is the product sold on the market (If so, indicate the sales point)? Or is the product only for self-consumption?

Šurlice are mainly made by local families for their own use, or they are prepared by restaurateurs themselves. Alternatively, one can hire someone who possesses the skill to make *šurlice*. There is only one commercial brand from Krk selling šurlice, and they can be bought in several shops in Croatia.

Preparation, consumption and preservation

Šurlice s gulašom (Šurlice with Goulash):

In a pot, sauté the chopped lamb meat, then add garlic, tomatoes, parsley, and seasonings. It will take a bit longer to make a nice sauce, which should be simmered with wine and water as needed. The more patient you are, the better the stew will be. Let the stew cook on a low flame while you prepare the šurlice in as much water as possible since you'll have a lot of šurlice.. When everything is ready, serve with a glass of red wine.

Ingredients (for 6 people):

- 1.5 kg šurlice
- 2 kg lamb
- 3 onions
- 2 fresh tomatoes
- 0.2 l oil
- 6 cloves of garlic
- 0.2 l wine
- parsley
- salt, pepper
- grated Parmesan

Šurlice s škampima (Šurlice with champi):

In a large pan, over medium heat, add olive oil and wait for it to heat up. Add finely chopped onion and garlic, and briefly sauté. Then add the shrimp and sauté them briefly as well. Glaze with white wine and wait for it to evaporate a little. Add the peeled tomatoes and shrimp stock.

Stir everything well and season with salt and pepper to taste. Cook briefly to allow all the flavors to meld together. Pour the shrimp sauce over the *šurlice* and sprinkle with parsley.

Ingredients (for 6 people): 700 g shrimp; 2 onions, finely chopped; 2 cloves garlic, finely chopped; 400 g peeled tomatoes or tomato purée; 200 ml white wine; fish stock (as needed); salt, to taste pepper, to taste; parsley, finely chopped

3.8 Krk Sheep



Image: Krk sheep; Photo credit: Vid Jurešić

Specific name of the product:

Krk sheep (Krčka ovca - Ovis aries sp.)

Common name of the product:

Krk Sheep

Common name of the product in the territory of intervention:

Krčka pramenka

Category: Other - Animal breed

Historical production or breeding area and origin: Krk island

History of the product

The Krk sheep is an indigenous breed of sheep from the island of Krk in Croatia. This breed is adapted to the harsh conditions of living on rocky terrain with poor vegetation and lack of water, making it exceptionally hardy and modest. In the end of the 19th century, with the development of the textile industry, there was an increased demand for high-quality wool, which resulted in the

import of different merino breeds that were used to refine Yugoslav local breeds (pramenka strands). This resulted in a number of new breeds, among which the Krk sheep.

Description of the breed

Krk sheep are medium-sized with relatively light heads and mostly without horns. Their wool is coarse and heterogeneous, predominantly white, but sheep with grayish or brownish hues also occur sometimes. Adult ewes weigh between 30 and 40 kilograms, while rams are somewhat heavier, reaching weights of 40 to 50 kilograms. Judging by the average body weight of Krk sheep 67 years ago (32.7 kg), today's Krk sheep is significantly more developed. This can be attributed to the genetic influence of larger breeds (merino, Istrian sheep) and improved nutrition.

The milk of the Krk sheep is of very high quality, rich in fats and proteins, and was often used for cheese production, today less, mostly in small batches for family needs. Krk sheep produce a relatively small amount of coarse wool (1-1.5 kg), which was mainly used for making traditional items such as bags and rugs. Since the breeding in the last three decades has been mainly focused on the meat quality and the size of ewes, the wool quality declined.

Krk sheep are under special protection as it currently has the smallest recorded numbers of autochthonous sheep breeds in Croatia. There are programs and initiatives aimed at preserving and increasing the population of this breed, including incentives for breeders and support for marketing activities related to products derived from the Krk sheep.

Description of the type of farming

Sheep on the island of Krk are mainly bred in a completely extensive manner, with year-round staying in pasture. Today they are mostly bred for the production of meat, primarily young lamb, which is extremely valued on the market. The meat of the Krk sheep is valued for its characteristic flavor, derived from grazing on the aromatic plants and grasses of the island. Krk sheep, with its very low requirements, is ideal for maintaining the landscape and preventing pasture overgrowth.

As there is currently a huge decline in the number of the sheep on the island due to golden jackal and wild boar invasion, the traditional pastures are also being overgrown with bush and there is rising concern for wildfires. This has also led to a more intensive system of farming, since the sheep need to be fenced in every night, to protect them from wild boar and jackal attacks.

Most of the breeders also slaughter the sheep themselves. Currently there is one abattoir on the island. Any kind of processing is currently done only by family members for their own consumption.

Production period

Lambs are slaughtered in the springtime, traditionally primarily in the days preceding Easter, and with the mass tourism also increasingly during the summer months.

(Older) sheep are traditionally slaughtered in late autumn/winter time.

Product characteristics

Traditionally, young lambs were sold, and older sheep were eaten by the breeders' families. Today few people eat sheep meat, and only whole young lamb is sold for roasting on a spit, normally for some festivity.

All parts of the sheep were used traditionally: lard for frying, brain, stomach, liver, kidneys, spleen, lungs, intestines, blood.

One specialty made from Krk sheep is kaštradina - pressed and salted sheep loin naturally dried on bora wind. It is first kept in salt for 10 days, then smoked for 10 days, then hung out on the wind. The period of drying depends on the amount of wind, could be 10 days and up.

Nutritional value and use

The energy value of lamb is approx. 200-300 kcal, in 100 g. Lamb contains 65% water, 15% fat, 18% protein, and carbohydrates only in traces. It is a source of biologically valuable proteins, vitamin B complex and some minerals. It is also easy to digest.

Indicative quantity produced in one year

In the past 20 years the numbers have dropped from 18 000 to currently only 6000-7000 sheep and lambs present on the island.

Product distribution and market

Most of the Krk lambs are sold on informal market, by direct farm-gate sales. Other products from Krk sheep are predominantly produced for self-consumption.

Preparation, consumption and preservation

Lamb meat is prepared roasted, as žgvacet (stew), boiled (with soup as a mandatory appetizer) or in various other ways.

Internal organs are also prepared in a variety of ways, of which the liver is especially valued and can be eaten on its own. Liver can be also prepared like a stew, which is eaten with polenta. Blood

is also consumed, it is preferable to cook it immediately after slaughter so as not to stand too long. It is simply cooked on onion for a short time.

In the past, all the intestines and stomach were cleaned, and today mostly only larger parts and those that are easier to clean are eaten. To prepare tripe, the intestines are cut into pieces and prepared like a stew. Potatoes can be added to sliced cooked trip, and a side dish of bread.

Dry sheep meat was cooked with broskva or cabbage and beans, and eaten in stews, or cooked with polenta.

3.9 Krk Sheep Cheese



Scientific name of the

product: Krk sheep cheese -
Krčki ovčji sir

Common name of the

product: Krk Sheep Cheese

Common name of the

**product in the territory of
intervention:** Bodulski sir,
Formajela, Bodulska
formajela

Image: Krk sheep cheese; Photo credit: OPG Mate i Kate/Kašetica PGŽ

Category: Cheese or dairy product

Historical production or breeding area and origin: Krk island

History of the product

Krk sheep cheese has been produced probably for the past 1000 years. It has been a staple food on the island, something that generations have grown up on. As the type of farming has not changed dramatically until very recently with the arrival of allochthonous predators to the island, so the aromatic taste of vegetation and salty brush the sheep graze, and its healthy fat, has been present in the milk. Before almost every family on Krk had a few sheep for meat, cheese, and wool, and goats were kept for fresh milk. Today has been increasingly challenging to find Krk sheep cheese,

as there are less and less sheep breeders, and the ones that still keep sheep rarely keep them for the milk, or only milk them to produce cheese for family needs. The administrative and hygienic regulations for small dairy facilities was an important factor that pushed away many from the idea of entering into serious cheese production. Even though the regulation today is somewhat more lenient, only two dairies making traditional Krk sheep cheese have survived, and even they are on the verge of closing, thus risking a loss of the tradition.

Animal breed of origin: Krk sheep - krčka ovca

Description of the breed

The Krk sheep is a crossbreed created during the 18th and 19th centuries. century by crossing with merino rams imported from Spain, France, Italy and Austria. The Krk sheep belongs to the group of pramenka sheep, sheep with combined production characteristics, and the focus of breeders on its products (meat, milk and wool) has changed throughout history, depending on the market. Thanks to the environment, the Krk sheep is relatively small (body weight 24 to 43 kg), but quite resistant and adaptable to the scarce breeding conditions. Lactation begins in mid-March and lasts 4.5 to 5 months, during which the sheep produces between 70 and 100 liters of milk. Per milking the sheep gives only about 200 dl of milk.

Description of the type of farming

Sheep on the island of Krk are mainly bred in a completely extensive manner, with year-round staying in pasture. The island's karst pastures are low-productivity, i.e. they have sparse vegetation and the sheep thus walk a lot to find vegetation and graze on herbs and brush, with a lot of salt brought by bura wind, which gives the meat its aromatic flavour and high amounts of fat.

There is currently a huge decline in the number of the sheep on the island due to golden jackal and wild boar invasion. This has also led to a more intensive system of farming, since the sheep need to be fenced in every night, to protect them from wild boar and jackal attacks, and since they spend less time in the pasture they also need to be given some additional feed, usually hay from the neighbouring regions (Istria and Lika), and sometimes some mixed feedstock (grain, corn). This, however, is still not the predominant practice.

The sheep are usually milked until they are about 9-10 years old.

There are only two official Krk cheese producers on the island, who have some sheep on their own and also buy milk from other farmers. Other farmers make cheese for family needs only.

Production period: end of February - mid June

Product characteristics

Krk cheese is artisanally handcrafted on family farms. It is produced as semi-hard and hard full-fat 100% sheep cheese. The cheese has a regular cylindrical shape, although traditionally it used to be spherical (from Vrbnik) or square (from Baška) - when it was made without using molds. The cheese typically weighs about 1kg, with variations ranging from 580g to 1700g, while the diameter is approximately 13 cm, with variations from 11.5 cm to 15 cm. Its rind is uniformly brownish-yellow, without cracks or impurities, and the cheese may be coated with a thin layer of vegetable oil. The interior is pale yellow and uniform in color, with a slightly elastic texture that is easy to slice. On the cut surface, there are a small number of tiny, round, sparsely distributed holes. The aroma is pleasant, typical of sheep's cheese, while the taste is moderately acidic.

White curd cheese called skuta is soft, supple, and creamy in texture, with a recognizable aromatic scent. It is also low in fat. Skuta can be spread on bread and it's also often used as an accompaniment or an ingredient in various savory and sweet dishes, from appetizers to desserts, including the famous Krk cake "presnac/presnec/presnoc".

Nutritional value and use

Krk sheep's milk contains an average of 6.5% fat and 18.34% dry matter substance, while its density ranges between 1.035 and 1.038. Three-month-old Krčki sir contains an average of 32.30% water, 33.57% fat, 28.26% protein, 1.35% milk sugar and 4.52% ash.

Indicative quantity produced in one year: Unknown

Product distribution and market

There are two small dairies producing Krk sheep cheese: OPG MAGRIŽ, Lakmartin 40b, 51517 Kornić, and OPG Mate i Kate, Supec 8, 51516 Vrbnik. Cheese produced from other farmers is not commercially available.

Preparation, consumption and preservation

Milking is done by hand. Evening milk is typically stored in a refrigerator or lactofreeze and mixed with morning milk. It is then heated to a temperature of 35°C, with variations between 33°C and 37°C, depending on the farm. Into the heated milk, a microbial mesophilic culture, most commonly "KAZU 300", is added. The amount of added culture, depending on the household, varies from 2.5 to 4 g per 100 liters of milk for cheese-making. A solution of CaCl₂ is often added to the milk. The milk is then thoroughly stirred and left to rest for about 30 minutes. After that, at a temperature

of about 33°C (with variations from 32 to 35°C), a powdered rennet preparation is added to the milk in the amount of about 1 g per 10 L of milk. The required amount of rennet is dissolved in 100 mL of water and slowly poured into the milk with constant stirring. After stirring, the milk is left to rest in a covered pot to prevent the surface layer of milk from cooling. Curdling usually takes about 30 minutes. The quality of the curd, or the end of curdling, is checked with the "finger test," during which the curd breaks under the fingers like porcelain, and the separated whey has a greenish color. The curd is then usually cut with a regular knife to the size of a pea or wheat grain. This is followed by stirring and reheating the curd grains to a temperature of 39°C, which usually takes 10 to 15 minutes. The curd grains are then allowed to settle for about 10 to 30 minutes.

Traditionally, the whey was then squeezed with hands, but nobody does it like that any more (which created the traditional "formajela shape"). Today, the whey is separated from the settled curd grains, which are scooped up with a strainer and transferred to small perforated moulds. The moulds are filled halfway, and the cheese mass is pressed by hand and left in the moulds for about 24 hours. The cheese in the mould should be turned every 10 minutes during the first hour, and later every two to three hours. After shaping, the cheese is brined for about 12-20 hours. The ageing of Krk cheese begins after brining. After brining, the cheeses are left for about 2-3 days on dry cloths to drain and dry, and then they are placed on wooden shelves in the aging room. In the ageing room, the cheese must be turned twice, and approximately two to three times a week, it is washed and wiped. For washing the cheese, lukewarm, salty water is used, which can be slightly acidified with acetic acid.

On some farms, the ageing rooms are equipped with air conditioning to regulate the necessary temperature. The ageing process typically lasts around 60 days, with variations from 30 to 90 days, but sometimes much longer, depending on the consumption of the cheese. After the first 20 days of ageing, the cheese should be coated with vegetable oil or, less commonly, olive oil. On some farms, after 2 months of ageing, the cheese is placed in a stone jar (a stone container) where it is submerged in oil (usually vegetable), for the next several months, up to a year, depending on consumer demand. This produces a hard sheep cheese, suitable for grating. To produce 1 kg of Krk cheese, an average of 6.20 L of milk is required, with variations from 5.0 to 6.50 L.

Besides the hard cheese, a type of white curd cheese called skuta is also produced as a by-product of cheesemaking, by cooking of the whey from the cheese production. There is a significant amount of whey in the production of Krk sheep cheese, usually around 50%. Skuta is produced by cooking whey in a pot with constant gentle stirring. Coagulation and separation of whey proteins begin at a temperature of 70 to 80°C. At 90°C, the proteins rise to the surface of the whey, where they are collected using a strainer and placed into containers. The entire process of making skuta takes approximately 45 minutes.

3.10 Norway Lobster



Scientific name of the product: *Nephrops norvegicus*

Common name of the product: Norway lobster

Common name of the product in the territory of intervention:

Kvarnerski škamp

Image: Kvarnerski škamp;

Image: Norway lobster; Photo credit: <https://www.jutarnji.hr>

Category: Crustaceans; Other - Crustacean breed

Historical production or breeding area and origin

The Norway lobster can be found from Iceland and Norway all the way to Morocco, including the Adriatic Sea. In the Adriatic, the densest populations are found around the islet of Jabuka, in the Velebit Channel, as well as in the Kvarner and Kvarnerić regions. This is one of the 30 populations of the Norway lobster that exist globally.

History of the product

The Kvarner scampi has a rich history connected to the Kvarner Bay, where it is considered one of the most prized seafoods. Its history is linked to fishing, gastronomy, and local tradition. The Kvarner Bay provides ideal conditions for scampi due to the specific characteristics of the seabed and the abundance of nutrients.

Animal breed of origin: Marine crustacean

Description of the type of farming

The shrimp is one of the most important commercial crustacean species throughout Europe. In Croatia, shrimp fishing is regulated by the Marine Fisheries Act. Among other things, it stipulates that individuals with a total length of less than 7 cm are not allowed to be caught, as they reach sexual maturity and can reproduce around this size. In our region, shrimp are caught using traps and trawl nets. For shrimp to reach the weight of an adult specimen, it takes a considerable amount of time. Therefore, it is essential to fish responsibly to ensure this valuable population remains sustainable.

It feeds on the carcasses of fish, mollusks, and other crustaceans. The Adriatic shrimp breeds once a year, usually in the summer. During the winter, females carry their eggs attached to the underside of their exoskeleton. Larger females have more eggs. During this time, they mainly stay in their burrows.

Product characteristics

This marine crustacean from the lobster family is a smaller, slimmer, and pinker version of its relative. Males are larger than females, growing up to 26 cm. The continuous growth of scampi alternates with periods of moulting its chitinous exoskeleton and the formation of a new one. The scampi typically resides at depths of 200 to 800 metres but is also found in shallower areas. In the Adriatic Sea, it has been recorded at depths of 30 to 300 metres. The Kvarner scampi lives at shallower depths than is typical for this species. It is not considered a distinct species, but it is possible that the area it inhabits and the food it finds in the Kvarner region give it a unique and recognizable flavour compared to other scampi populations.

Nutritional value and use

Kvarner scampi are rich in high-quality proteins. Also, it contains low fat, with most of it being unsaturated fatty acids, including omega-3 fatty acids, which are beneficial for heart health. It is rich in vitamin B12, which is important for nerve health and red blood cell production. It also contains B vitamins, including niacin and riboflavin. Also, it is a good source of minerals such as zinc, selenium, and iodine, which are important for immunity, thyroid function, and antioxidant protection. It is low in calories, making it suitable for a low-fat and low-calorie diet.

Product distribution and market

Due to its high demand, the Kvarner scampi has unfortunately reached a concerning level of overfishing, leading to a significant increase in price. As a result, it has not only become difficult to

obtain but has also turned into a luxury, even for the local residents who live at the very source of the Kvarner scampi. Furthermore, since most scampi are reserved for restaurants, we typically find medium or small-sized Kvarner scampi at the markets.

Preparation, consumption and preservation

Due to its exceptional taste and texture, the Kvarner scampi is rightfully considered one of the best scampi in the world, making it highly sought after. This reputation is largely owed to the creativity of restaurants and their chefs, as well as visitors who share their impressions and spread the good word about the unique qualities of this delicacy. Some of the most popular recipes are:

Carpaccio od Kvarnerskog škampa (Carpaccio of Kvarner scampi)

Ingredients: large peeled Kvarner scampi tails, 100 ml Kvarner shrimp broth, lemon, salt and pepper, olive oil, teaspoon butter, clove garlic, teaspoon soy sauce, pickled Peppadew pepper, Fresh chives.

Risotto od kvarnerskog škampa (Kvarner scampi risotto)

Ingredients: Risotto rice (Arborio, Carnaroli, or Vialone Nano), olive oil, salt and pepper, white wine, fresh parsley, ground chilli, onion, Kvarner shrimp stock, Kvarner shrimp tails, butter.

Škampi na buzaru (buzara-style shrimp.)

Ingredients: head-on large shrimps, olive oil, breadcrumbs, minced garlic, fresh parsley, whole tomatoes, dry white wine, salt, black pepper.

4. Hajdú-Bihar County in Hungary

4.1 Hajdúsági Horseradish



Image: Hajdúsági horseradish; Photo credit: "Érmellék" website

Scientific name of the product: Hajdúsági horseradish (*Armoracia rusticana*)

Common name of the product: Hajdúsági horseradish

Common name of the product in the territory of intervention: Hajdúsági horseradish

Category: Aromatic herbs and spices

Historical production area and origin: Hajdúság

Cultivars, species and types: Botanically speaking, there are no varieties of horseradish. Initially, the standard load was everywhere. In later times, through vegetative reproduction, the homogeneous wild-type population evolved through popular selection into subtypes with constant characteristics in the north and south, according to the favourable climatic and soil conditions of the macro-micro geographical environment. The names of the landraces that have evolved indicate their wider or narrower areas of production, such as Hajdúsági.

Description

It is cultivated as an annual crop for commodity production. In the first year it develops only bracts, which are large, up to 30 cm long, oval and stalked. The leaf plates are intact, rarely lobed and sessile. Leaf margins serrated. On the flower-stalk it develops short-stalked leaves, which are sessile and with intact margins. It develops flower stalks only after several years of being left in place. Inflorescence a complex tent with many flowers.

The consumed fruit of the horseradish is the rhizome, which develops from the thickening of the taproots of the previous year's reproduction, in about 180 days from planting to harvesting. At the bottom of the rhizome are the taproots, which will serve as the reproductive material for the following year. The horseradish grown in the region of Hajdúság has distinct characteristics from other varieties: thick, deep green, lush foliage, twisted at the upper third, straight, cylindrical rhizomes, light brown outside, bone-white flesh. Its flavour is never woody; its relatively low content of allyl isothiocyanate gives it a distinctive pungent flavour, also known as pungent-pepper, after the sweet-pepper.

Harvest period

Horseradish is usually harvested from the end of October to the end of November.

History of the product

The horseradish introduced to the Carpathian Basin by the ancient Hungarians and the horseradish found here was a hybrid of the wild varieties. Records of its cultivation date back to the 17th century, and it may have been introduced to the region in the early 19th century. Hog horseradish production in the area gained momentum in the late 1800s and early 1900s. Prior to the turn of the century, horseradish was a perennial crop in the 'leaden gardens' of almost every porch in the Hajdúság region, in varying numbers. After the turn of the century, at the beginning of the 1920s, Gábor Szilágyi, a vine grower from Bagamér in the chateau of the diocese of Václav, imported 'tasty, noble' horseradish from Austria, naturalised it and, over a period of years, multiplied it by appropriate selection. The villages in the area were also involved in the production and by the 1940s and 1950s the present-day landscape had developed.

Nutritional values and use

Its use may be for fresh consumption or for industrial processing, according to its quality classification.

Product distribution and market

It is mainly grown for sale.

Preparation, consumption and preservation

The classes are used to decide whether the horseradish is suitable for consumption or industrial processing:

Class I: The body is smooth-surfaced, cylindrical, unbranched, sound and healthy; length over 20 cm, diameter over 25 mm. It must be free from wilting, worm-eaten or cracks. The basal roots have been removed by breaking. The leafy remains of the head must be cut off in such a way as to cause as little damage as possible to the dormouse.

Class II: Same in all respects as Class I, but with a difference in diameter of more than 20 mm.

Class III: This class includes rhizomes which show cut surfaces due to the elimination of branching; slightly cracked or worm-eaten; over 15 cm in length and over 15 mm in diameter at the centre.

Class IV: A mass of poorly developed rhizomes and thicker basal roots. They must be free from defects, 10 cm long and at least 10 mm in diameter.

Carved quality: the mass of Class I to II hogweeds which have been carved out of the 'fungal - rotten - worm-eaten' lesions. The total carved area must not exceed 1/3 of the surface area of the body. The length of the rhizome shall be min. 17 cm, maximum diameter over 20 mm. Root quality: the length and diameter are indifferent, free from foreign matter, mould and decay.

4.2 Flat Cabbage from Hajdúhadház



Image: Flat cabbage from Hajdúhadház; Photo credit: County Values website²

Scientific name of the product: Flat cabbage from Hajdúhadház (*plana brassica*)

Common name of the product: Flat cabbage from Hajdúhadház

Common name of the product in the territory of intervention: Flat cabbage from Hajdúhadház

Category: Vegetables

Historical production area and origin: It is believed that when István Bocskai settled the "hajdúk", they brought with them the seeds of this type of cabbage. In Transylvania this type of cabbage can still be found today. Hajdúhadháza has more sunshine and more acidic soil, which is more favourable for the plant, which is why it produces a higher sugar content than its Transylvanian relative.

² <https://www.hbmo.hu/ertektar/ertekoldal.aspx>

Description

A particularly thin-leaved cabbage. Morphological appearance and nutritional value make it one of the most sought-after cabbage varieties. Its gastronomic value is due to the delicate structure of its head. It is an excellent food ingredient in both sweet and pickled forms. It has a thin membrane of leaves and a small stalk, which are easily broken down to the stalk and have a thin cord. High in sugar, unique in taste and flavour, it is a registered variety of cabbage.

Harvest period

This is a mid-late cabbage, so it is important to plant it before mid-July and harvested in November.

History of the product

From the 1960s onwards, Hajdúhadháza steadily lost its arable land, thanks to the land consolidation. Today only 10-12 hectares remain, of which one hectare belongs to the municipality. Local residents also have land in the neighbouring municipalities, and processing takes place exclusively in Hajdúhadháza.

In the old days, the housewife would grow the seedlings by the end of the school term, then the whole family would go out into the fields, plant and water the plants, and from then on they were left to the weather. Nowadays, more stringent plant protection is needed because of the wide variety of pests. It should be cut at the end of November, and it's also good to be bitten by the tern so that it turns sour just in time for Christmas, and can be used for pig slaughtering for cabbage.

Nutritional values and use

They are grown for their own use and for sale.

Product distribution and market

It is also grown in home gardens and for sale in markets.

Preparation, consumption and preservation

The high sugar content of flat cabbage means that it does not keep for long, so it must be processed soon after cutting or thrown on the market. It needs to be sprayed ten times during its growing season to keep it healthy, preventing the spread of fungal toxins. It is also important to rotate the crop and to plant it on a good previous crop: for example, corn has fewer pests, but cereal crops are so infested with parasites that the following year the crop is almost unprotected. This is a mid-late cabbage, so it is important to plant it before mid-July.

4.3 Bread from Báránd



Scientific name of the product: Bread from Báránd
Common name of the product: Bread from Báránd
Common name of the product in the territory of intervention: Bread from Báránd

Image: The bread from Báránd included in the application for the Hajdú-Bihar Product Award 2024

Category: Processed product of plant origin - Bread and savory bakery products

Historical production area and origin: It comes from Báránd, Hajdú-Bihar county, where the first Báránd Bakery was opened.

History of the product

The Bakery from Báránd, which has a 66-year history, was opened 66 years ago by the Balogs of Bárándi. Since then, the company has changed hands five times, most recently in 2020, but the recipe and technology remain unchanged to this day.

Bread baked in a Hungarian oven using traditional leavening technology. The products are made of high quality, Hungarian raw materials, by the hands of workers from Báránd. Thanks to the leavening technology, the breads are tasty, do not crumble, have a long shelf life and can be eaten for up to a week with a good taste! The main ingredient is wheat, which was and still is grown in many places in the Great Plain. The bread is often decorated with letters made from their own homemade dough.

Since 2012, the Bread Festival has also been held in Báránd, where Hungary's first four-oven circular oven was inaugurated. These festivals naturally also include a cooking competition.

Grower and processor are not the same.

The excellent quality is guaranteed by the traditional brick-built kiln, the long-matured sourdough and the bakers' handiwork, all made with a secret recipe. The traditional 2, 3 and 5 kilo weknik are the result.

Nutritional value and use

They can be eaten on their own or spread with other ingredients, margarine, liver paste, etc. or with various types of salami or ham.

Product distribution and market

The bread is sold in many cities or villages outside the village. The bakery in Báránd, where bread from Báránd is produced, currently delivers to more than 20 municipalities, with a gradually expanding network of partners and a range of products. They currently bake 14 types of bread based on traditional recipes and more than 40 types of pastries. There are also fanatical customers who travel to Báránd just to buy the bakery's products and then take bread from Báránd to Transylvania or even overseas. According to a regular customer who regularly visits the bakery from Debrecen: "You buy bread from Báránd and wine from Tokaj".

Preparation, consumption and preservation

Secret recipes

4.4 Garland Pretzels from Debrecen Market



Scientific name of the product: Garland pretzels from Debrecen market

Common name of the product: Garland pretzels from Debrecen market

Common name of the product in the territory of intervention: Garland pretzels from Debrecen market

Image: The Garland pretzels from Debrecen market; Photo credit: Website collecting Debrecen values³

Category: Processed product of plant origin - Bread and savory bakery products

Historical production area and origin: Debrecen

³ <https://www.debreceniertektar.hu/debrecen-kiemelkedo-ertekei/debreceni-vasari-fuzeres-perec>

History of the product

Before the appearance of confectionery products (first decade of the 20th century), families in Debrecen most often consumed pretzels, after scones and scones, from the group of baked pastries. While loaf and scones were baked in every household, only a few women specialised in pretzel baking. They made a variety of pretzels for markets, fairs, religious festivals and family events. They were given in two different ways: strung in bundles or by the piece. There was never a specialised shop for selling pretzels. It was only possible to buy pretzels on holidays, at fairs or to order directly from the producer.

The long tradition of pretzel-making in Debrecen, in connection with changes in lifestyle, tastes and habits, had declined sharply by the second half of the 20th century. Pretzel making was a means of livelihood for lonely women and their families. By the 1950s, only 12 pretzel-makers were still registered. In the last decades, only one elderly woman in Debrecen made pretzels, usually with one oven per week, which amounted to about 200-250 pieces. Due to her health, she stopped making pretzels in 2000 and the future of her workshop is uncertain.

Processed product description and its production technique

The basic ingredients are wheat flour, butter, home-made sour cream, salt, milk, previously fermented sourdough and later yeast. After the advent of sugar, it was added as a flavouring agent, giving it a more distinctive sweet taste. The main ingredient is wheat, which was and still is grown in many places in the Great Plain. In the old days, most of the many ingredients could have come from animals kept at home and from home-grown wheat.

Among the different types of pretzels at the fair in Debrecen, the best known and most popular was the small butter pretzel. It was a round, finger-thick, light brown cake with a hole in the middle, about 2-2,5 cm in diameter, weighing 10-15 g, with a light brown colour and a naturally sweetish, crispy taste from the butter.

Nutritional value and use

It was only possible to buy or order directly from the producer on public holidays, at fairs or by unloading in the streets and squares.

Product distribution and market

They also made it for their own consumption and for sale.

Preparation, consumption and preservation:

Traditionally, part of the flour was used to make a leaven, made from the pre-soaked dried bread dough (crumbs) left over from previous baking, to which the remaining fine flour, home-made sour cream, salt, sugar after the sugar had appeared, milk if necessary, and then melted butter was added before the kneading was completed. The hard dough was left to ripen, then cut into small pieces, flattened and rolled into finger-thick rope-like strands. These were cut into pieces about 10 cm long, bent into a circle, tied at both ends and rolled onto a greased, floured baking tray in the oven with a small baking sheet. The oven was heated with sunflower seeds, chaff and very rarely with wood. They were baked over a slow fire for a short time, 4-5 minutes. As the pretzels baked, the reddened pieces were quickly strung on the pretzel picker, a 1.5-2 m long wooden iron stick with a wooden handle. When there were enough (40-50 pieces), they were pulled out and poured into a bowl and left to dry. 35-40 pieces were strung on a string about 60 cm long.

In today's method, the dough is kneaded directly from the ingredients without leavening: yeast, which has been proofed in lukewarm milk, is mixed with fine flour, sour cream, sugar, salt and butter and kneaded into a dough of firm consistency. Once the dough has ripened, the subsequent steps and the baking process are the same as for the traditional pretzel. No stringing is done and the pretzels are sold by the piece.

4.5 Bag of Nuts from Böszörmény



Scientific name of the product: Bag of nuts from Böszörmény

Common name of the product: Bag of nuts from Böszörmény

Common name of the product in the territory of intervention: Bag of nuts from Böszörmény

Image: Bag of nuts from Böszörmény; Photo credit: website collecting Hajdúböszörmény values⁴

Category: Processed product of plant origin - Sweets

Historical production area and origin: Hajdúböszörmény

History of the product

In the 1830s, in the menu of the Alföld taverns, we can read about the former peasant's sack as a 'delicacy', which is somewhat similar to the shape and ingredients of the nut bag. The dough was kneaded from the same raw material, rolled out to a thickness of 3-4 mm, filled with stuffing and baked in the oven.

Family recipe books from Böszörmény show that in poorer peasant families, nut sacks (as a kind of snack) were popular for family and festive occasions. It was considered a simple, cheap cake, which is why it was included in some family recipe books. The few ingredients were available on the family farm. That's how the recipe was passed down from great-grandmother to grandmother

⁴ <https://hajduboszormeny.hu/boszormenyi-dios-zsak>

to mother. The familiarity and popularity of the Bag of nuts from Böszörmény is confirmed by the fact that we have come across it in several Böszörmény family recipe books.

The Bag of nuts from Böszörmény can be classed among the simple home-made “béles” of the past. In the 17th century, women were already making “béles”, but in different forms from one region to another. These “béles” were sold in the markets of the larger villages or were served by the wealthier farmers to their day labourers. The “béles” dish is also found in manuscript grooms' books and in wedding menus.

The old peasant's “béles” was mostly unleavened, simple but also made in a more delicate composition. It is more modest where it is a common dish. In some regions, it was made from wheat flour kneaded with water, salt, milk or sour cream, rolled to a thickness of three to four millimetres, shaped and baked in an oven.

The dough for the Bag of nuts from Böszörmény is made using flour, butter, egg yolk and vanilla sugar. Their origin is not known. The main ingredient is wheat, which was and still is grown in many places in the Great Plain.

Processors prefer to prepare it at home and probably buy the most important ingredients. In the past, it was likely that most ingredients could be bought at home or in the neighbourhood.

Processed product description and its production technique

Homemade cake made from crumbly dough. The dough for the Bag of nuts is made using flour, butter, egg yolk and vanilla sugar. The baked product is a golden-brown dough with a matte surface, with a walnut filling and a crumbly texture. 12 cm round shape.

Nutritional value and use

They used to be made for the home as cakes and sold at markets, but now they are more commonly made for the home.

Product distribution and market

Is the product sold on the market (If so, indicate the sales point)? Or is the product only for self-consumption? It used to be sold at markets, but nowadays it is more commonly made at home.

Preparation, consumption and preservation

1. Mix the cold butter and cold fat in the flour and knead the dough with the other ingredients. Put the dough in the fridge overnight.
2. The next day, for the filling: beat the egg whites, add the walnuts, icing sugar, vanilla sugar and lemon zest.
3. Roll out the dough from the fridge and cut out with a 12 cm round cutter. Place a teaspoonful of filling in the centre of the dough and pinch the edges together like a bag. You can also roll the dough into the size of a walnut and put it in the fridge. The next day, stretch one by one, add the filling and shape.
4. Place on a baking tray lined with baking paper.
5. Place in a preheated oven at 180 degrees, turn the heat down to 160 degrees after a few minutes and bake for 15-20 minutes.
6. Sprinkle with vanilla icing sugar while still hot.

4.6 Homemade Bread from Böszörmény



Scientific name of the product: Homemade bread from Böszörmény

Common name of the product: Homemade bread from Böszörmény

Common name of the product in the territory of intervention: Homemade bread from Böszörmény

Image: Homemade bread from Böszörmény; Photo credit: the website collecting Hajdúböszörmény values⁵

Category: Processed product of plant origin - Bread and savory bakery products

Historical production area and origin: Hajdúböszörmény

History of the product

Wheat was a grain known and consumed by the Hungarians, who settled in the lowlands a thousand years ago, as early as the Ugric period. The origin of the word (an Old Turkic word of the "csuvas" type) suggests that it was known as early as the Bulgarian-Turkish coexistence. Bread is probably a Palaeolithic neologism from the early Palaeolithic base language. The original meaning of bread may have been 'a kind of food made from semolina'. By the 17th century, the word bread had come to mean only fermented bread. In the 18th century, lowland wheat bread became a household name in Europe, its excellent quality, unusual size and special fermenting agent admired by English, French and German travellers and encyclopaedists. The excellent quality of the bread is due to the steel wheat of the lowlands, which can be found in Hajdúság and Hajdúböszörmény.

The basic ingredients of wheat bread are: bread flour, sourdough, yeast, salt, lukewarm water and, depending on the custom, boiled potatoes.

Sourdough: a loaf of bread dough was left over from each baking, rolled out thinly, left to dry on a cloth for 2 days and when it was well dry, it was broken up and stored in a canvas bag until the next baking. If bread was to be baked, the leaven was soaked the night before. In earlier times, the ingredients for bread were probably home-grown or locally produced, as they were available in the lowlands. The main ingredient is wheat, which was and still is grown in many places in the Great Plain.

⁵ <https://hajduboszormeny.hu/boszormenyi-hazi-kenyer>

In earlier times, the ingredients for bread were probably home-grown or locally produced, as they were available in the lowlands. Nowadays this is no longer possible.

Processed product description and its production technique

Shape: large round, tall, weighing 3-4-5 kg, 40-45 cm in diameter, 25-30 cm high, with notched sides. Colour brownish-reddish or black, with a curved bulging. The underside is pale brown, giving a drum-like sound when abraded. Pleasant smell, easy to slice, does not crumble. Taste is typical of bread, slightly salty. An airy white bread with an airy, elastic interior, which grows tall and stays fresh for 8-10 days.

Product distribution and market

Is the product sold on the market (If so, indicate the sales point)? Or is the product only for self-consumption? Because of their everyday use, they were made primarily for the home, but could also be sold at markets.

Preparation, consumption and preservation

Sourdough: a loaf of bread dough was left from each baking, rolled out thinly, left to dry on a cloth for 2 days and when it was dry, it was broken up and stored in a canvas bag until the next baking. If bread was to be baked, the leaven was soaked the night before. Its outstanding characteristics are due to the way in which it is made: the longer the leavening period, the fuller the development of the aromas and the slower the ageing. It is roasted in ovens in households.

4.7 “Mágnás” pie from Bösörmény



Scientific name of the product:

“Mágnás” pie from Bösörmény

Common name of the product:

“Mágnás” pie from Bösörmény

Common name of the product in the territory of intervention: “Mágnás” pie from Bösörmény

Image: “Mágnás” pie from Bösörmény; Photo credit: the website collecting Hajdúbösörmény values⁶

Category: Processed product of plant origin - Sweets

⁶ <https://hajduboszormeny.hu/boszormenyi-magnas-pite>

Historical production area and origin: Hajdúböszörmény

History of the product

The history of pie invites you on a journey through thousands of years and many, many culinary and social adventures. As early as 9500 BC, our ancestors, with the right tools, were known to have made dough from cereal flour, the ancestor of the pies and tarts we know today.

Sweet pies were a major innovation in the kitchen. Sugar from sugar cane was a luxury item on the early modern continent that only aristocrats had access to, and sweet pies would not be served on the tables of the poor for centuries. Honey was used to sweeten many things, but the invention of a German chemist marked a turning point in the appearance and popularity of pies, pastries and desserts in general. Andreas Sigismund Marggraf, in a laboratory in Berlin in the mid-18th century, experimented with the possibility of making sugar from fodder beet - not only the beginning of European sugar production, but also the introduction of sweet treats to a wider and wider public and the start of a veritable triumph of sweet pies in their many forms.

In Hungary, pies with a sweet filling sandwiched between two crumbly layers are the most famous. The top layer is usually a lattice made of the same dough. It is a matter of personal taste as to the proportion of leavening agents used in the dough ingredients, in addition to flour, sugar and fat, and how thin or thick the dough should be.

In addition to the usual ingredients (e.g. flour, salt, eggs, etc.), women in Böszörmény used lard. These ingredients were probably available locally or even in the houses in the older times. The main ingredient is wheat, which was and still is grown in many places in the Great Plain.

In the past, most of the ingredients may have been either grown around the house or the animals raised, and most of the ingredients were sourced from the local area. Nowadays, this is no longer the case.

Processed product description and its production technique

The dough for the “Mágnás” pie from Böszörmény is made using flour, fat, baking powder, sugar and eggs. The crumbly lattice cake keeps its crumbliness for several days, keeping its shape when sliced. The cubed pie displays the bottom sheet of pastry, the filling and the lattice made from the same pastry. The pleasing appearance is enhanced by the golden-baked lattice of the finished cake. A thin sprinkling of icing sugar can be added to taste. The taste and smell of the “Mágnás” pie from Böszörmény is determined by the characteristic crumbly dough taste and smell and the walnut filling.

“Mágnás” pie from Böszörmény is a real peace pastry, made with fat, sour cream and baking powder, thus preserving the crumbliness and local flavour. The housewives of Böszörmény did not generally follow the use of margarine or butter as a fat, and stuck to lard. Unlike in other settlements, the grids placed on the surface of the fried dough were not greased with egg, so that the smell and taste of the fried dough could be directly felt.

The main steps in the production of the product:

1. Preparation of the dough: Knead the flour, fat, baking powder, egg, sour cream and a little salt.
2. Roll out 2/3 of the dough, put it on a baking tray.
3. Preparing the filling: mix the egg yolks with the sugar, add the chopped walnuts and the beaten egg whites.

4. Brush the top of the pastry in the pan with homemade peach jam and then spread the filling on top.
5. Use the remaining pastry to grate the top of the pastry.
6. Bake in a 180°C oven until done.

Nutritional value and use

They used to bake these pies for family gatherings or on weekends.

Product distribution and market

Is the product sold on the market (If so, indicate the sales point)? Or is the product only for self-consumption? They mainly made them at home, for their own use.

Preparation, consumption and preservation

The main steps in the production of the product:

1. Preparation of the dough: Knead the flour, fat, baking powder, egg, sour cream and a little salt.
2. Roll out 2/3 of the dough, put it on a baking tray.
3. Preparing the filling: mix the egg yolks with the sugar, add the chopped walnuts and the beaten egg whites.
4. Brush the top of the pastry in the pan with homemade peach jam and then spread the filling on top.
5. Use the remaining pastry to grate the top of the pastry.
6. Bake in a 180°C oven until done.

A nutritious food, so eaten after working in the fields.

4.8 Millet “béles”



Scientific name of the product: Millet “béles”

Common name of the product: Millet “béles”

Common name of the product in the territory of intervention: Millet “béles”

Image: Millet “béles”; Photo credit: the website collecting Hajdúböszörmény values⁷

Category: Processed product of plant origin - Sweets

Historical production area and origin: Hajdúböszörmény

History of the product

In Volume IV of Hungarian Ethnography we can read about the “béles”, and its different variants. Peasant farmers used to bake unleavened “béles” for their day labourers, called old peasant “béles”. The dough of the simpler old peasant “béles” was kneaded with flour, eggs, fat and sour cream. In the 19th century, millet was used as a filling for “béles”, especially in the Lowlands. Cottage cheese, cabbage, poppy seeds, jam, nuts and stuffing were also popular in the various regions. Millet is also known from the writings of Elek Fényes: 'Being a favourite food of the common people, millet is abundantly bought from this end everywhere'.

The Millet “béles” was a popular type of pasta in many settlements in our county, including Hajdúböszörmény, Debrecen, Szovátá and Hajdúnánás. We came across a description of this pastry in the recipe book of a family in Hajdúböszörmény; but Millet “béles” is also remembered by elderly housewives. Several of them recalled that millet was a favourite crop on their family farm. As well as feeding the animals, they cooked it in milk and husked it to make a filling for the “béles”. Millet flatbreads were a favourite, as was flange porridge.

All peasant families produced millet, which was the filling. It was eaten in many different ways, e.g. pasta porridge, inverted porridge, porridge with flanges, porridge pie, porridge soup. It was also common to feed animals with unhulled cologne. They also worked with additional ingredients for the dough, such as flour and eggs, which were probably grown, reared and produced traditionally at home or in the area.

In the old days, the producer and the grower or breeder could have been the same person, but that is not really feasible today.

⁷ <https://hajduboszormeny.hu/koles-beles>

Processed product description and its production technique

Preparation of the dough: Knead the flour with the fat, egg, sour cream and salt, knead into a rectangle. For the spreading, melt the fat, mix in the flour and brush the rolled out dough with it. Fold and refrigerate for at least 30 minutes or overnight.

Filling: Wash the millet and cook it in milk with sugar, vanilla sugar and cinnamon.

Roll out the chilled dough on a floured board and cut into 8x8 cm pieces. Place the filling in the centre of the dough, folding the four corners over each other.

Nutritional value and use

It was made to feed day labourers, for peasant families at home, because it was cheap to make.

Product distribution and market

It was made more for the home and still is today.

Preparation, consumption and preservation

The dough of the simpler old peasant “béles” was kneaded with flour, eggs, fat and sour cream. In the 19th century, millet was the filling for “béles”, especially in the lowlands. Cottage cheese, cabbage, poppy seeds, jam, nuts and stuffing were also popular in the various regions.

Preparation of the dough. For the spreading, melt the fat, mix in the flour and brush the rolled-out dough with it. Fold and refrigerate for at least 30 minutes or overnight. Filling: Wash the millet and cook it in milk with sugar, vanilla sugar and cinnamon. On a floured board, roll out the chilled dough and cut into 8x8 cm pieces. Place the filling in the centre of the dough, folding the four corners over each other.

4.9 Millet “málé” with jam



Scientific name of the product: Millet “málé” with jam

Common name of the product: Millet “málé” with jam

Common name of the product in the territory of intervention: Millet “málé” with jam

Image: Millet “málé” with jam; Photo credit: the website collecting Hajdúböszörmény values⁸

⁸ <https://hajduboszormeny.hu/lekvaros-koles-male>

Category: Processed product of plant origin - Sweets

Historical production area and origin: Hajdúböszörmény

History of the product

The raw material was grown in peasant families and milled in dry mills as early as the 1600s. The production of the Karcag windmills was significant, where wheat flour was milled in one mill and millstones were used to grind millet in the other, according to the book 'Millstones of Karcag'. The technique of milling millstone was a miller's activity known and practised throughout the lowlands. Family recipe books and the recollections of some elderly housewives confirm that the consumption of various millet dishes was common in peasant households in Böszörmény. This was due to the fact that, as in other settlements, the abundant millet was grown by all families to feed the animals, or the millet was used to make various desserts for the family by skilful local housewives. Millet "málé" with jam is one of these popular desserts.

Hulled millet was used for food and hulled flax for animal feed throughout the whole of the Great Plain, including Hajdúság and Hajdúböszörmény. Nowadays, families with a healthy diet, especially in the lowlands, are increasingly turning to millet-based foods. On the one hand, it has a positive effect, as it alkalises the body, and on the other hand, it is gluten-free, so it can be eaten by people with celiac disease.

Some of the ingredients could be produced in the houses, but some ingredients could be obtained from nearby places, from traders.

Processed product description and its production technique

The dough for the millet "málé" with jam is made using millet, milk, salt, butter, cow's curd, eggs, sour cream, granulated sugar and lemon zest. A high-sided baking pan is greased and the prepared dough is poured into it, spread evenly and then spread with jam and sour cream. The baked dough is sliced into cubes, the loose texture of which resembles a pleasantly flavoured millet. Its taste is enhanced by the jam and sour cream on the surface of the dough.

The main characteristics of the product, which distinguish it from similar products of this type, are its specific, unique and different properties: the Millet "málé" with jam, which is chilled after baking, is sliced into cubes, has a pleasant golden-yellow appearance with a characteristic aroma and is best enjoyed fresh.

Nutritional value and use

Millet is a positive ingredient, as it alkalises the body and is gluten-free, so it can also be eaten by people with celiac disease. Millet was popular with peasant families. All families produced millet to feed their animals, or the millet was used to make various desserts for the family by skilful local housewives.

Product distribution and market

Rather, it was made for the home, for the family.

Preparation, consumption and preservation

The main steps in the production of the product:

1. The milk is heated with a pinch of salt. Wash the millet and add it to the hot milk, stirring continuously. It is ready when bubbles appear.
2. Stir in the butter and wait for it to cool.

3. Separate the eggs, beat the yolks with the sugar and vanilla sugar until white, then add the cottage cheese and lemon zest. Mix well the cooled millet and the prepared mixture.
4. Beat the egg whites until stiff peaks form, then gently add the egg whites and mix well.
5. Line a medium high (about 5 cm) baking dish with baking paper and pour the batter into it.
6. Spoon the jam and sour cream on top of the pastry.
7. Bake in a preheated oven at 180°C for about 55 minutes.

4.10 “Lepény” with Plum



Scientific name of the product:

“Lepény” with plum

Common name of the product:

“Lepény” with plum

Common name of the product in the territory of intervention: “Lepény” with plum

Image: “Lepény” with plum; Photo credit: the website collecting Hajdúböszörmény values⁹

Category: Processed product of plant origin - Sweets

Historical production area and origin: Hajdúböszörmény

History of the product

Nowadays, its creation is not tied to an occasion. It's excellent for breakfast, snack, with coffee and tea, or as a second course after a more substantial soup on a weekday. It tastes best fresh, but keeps its pleasant flavour for a few days. Documents from the 14th and 16th centuries show that in peasant households, bread made in ovens was joined by pastries, or loaves, which were more delicate than bread. Among the traditional loaf pastries is the “lepény” with plum, which is regularly baked at major family celebrations and is also mentioned in Volume IV of Hungarian Ethnography.

⁹ <https://hajduboszormeny.hu/szilvaslepeny>

It is also a dessert that families could make from ingredients produced at home or in the neighbourhood. Nowadays, it is still made at home, but the ingredients are more commonly bought, although plums are also grown in gardens.

Processed product description and its production technique

It is oven-baked, but can also be made in the oven. "Lepény" with plum is a sweet pastry, baked with fresh plums cut in half on top. It's a home-made cake with a showy appearance. It has a soft, spongy texture, a reddish-brown to bluish surface and a reddish-brown bottom. The flavour is very delicately succulent from the cinnamon-sugar coated plums and the aroma is excellent. It tastes best fresh, but keeps its pleasant flavour for a few days.

"Lepény": a collective name for a type of flat pastry, baked pastry with various seasonings. Its shape covered with a filling is an old festive pastry of the peasant kitchen. It used to be baked without a pan, in the bottom of the oven.

Nutritional value and use

Nowadays, its creation is not tied to an occasion. It's excellent for breakfast, snack, with coffee and tea, or as a second course after a more substantial soup on a weekday. It has been the main holiday dish in the rest of the country for the last century, and even more so in the Lowlands, where it is regularly baked at weekends. Poor peasant women also sold it at markets.

Plum paste is a traditional type of pasta that was baked from time to time in the peasant families of the past from loaf dough. Plum cake is still baked in and around Hajdúböszörmény. Basically, a seasonal pastry, it is nowadays also baked in winter from frozen plums. This type of pasta is a healthy, additive-free, homemade baked pasta.

Product distribution and market

Poor peasant women also sold it at markets. It was also prepared at home for the family.

Preparation, consumption and preservation

The plum tart is made from yeast dough, and is started by boiling the flour and milk in the yeast. Then add a little sugar and salt, mix it together as it is, and leave it to rise for a good half an hour. Meanwhile, cut the plums into quarters, sprinkle with cinnamon sugar and leave to stand. Once the dough has risen, roll it out, prick it, put it in the pan, brush it with plum jam, then drain the plums and finally put them on top. When you're done with that, let it rise for another half an hour and then bake it. The tarts were covered with plums, cottage cheese, porridge, poppy seeds and cabbage.

4.11 Cottage Cheese and Potatoes “lepény” (according to the tradition of Hajdú-Bihar)



Scientific name of the product: Cottage cheese and potatoes “lepény” (according to the tradition of Hajdú-Bihar)

Common name of the product: Cottage cheese and potatoes “lepény” (according to the tradition of Hajdú-Bihar)

Common name of the product in the territory of

intervention: Cottage cheese and potatoes “lepény” (according to the tradition of Hajdú-Bihar)

Image: Cottage cheese and potatoes “lepény” (according to the tradition of Hajdú-Bihar); Photo credit: the website collecting Hajdúböszörmény values¹⁰

Category: Processed product of plant origin - Sweets

Historical production area and origin: Hajdúböszörmény

History of the product

In the Great Plain, every Saturday was famous for baking tarts, but this did not exclude the cottage cheese tart from the celebrations. The pie with a filling not covered with dough was the food of the greatest feasts. It was made for special occasions in the 18th and 19th centuries. It was baked for

¹⁰ <https://hajduboszormeny.hu/turos-krumplis-lepeny-hajdu-bihari-hagyomany-szerint>

weddings. Many Lowland groomsman's books start the entire cake-taking period with the arrival of the cheesecake.

The dough for the cottage cheese and potato pie is made using yeast, flour, milk, sugar, a little fat or butter, egg yolks and salt. On the top: a cottage cheese filling enriched with egg yolks, sugar, vanilla and boiled potatoes. The ingredients for the pastry are also predominant in this cake. In the old days they were produced in the villages and in the fields belonging to the houses.

In the old days, the ingredients were produced in the villages and in the fields belonging to the houses, so the family that grew the wheat and raised the animals could also have made the cake.

Processed product description and its production technique

The dough for the cottage cheese and potatoes "lepény" is made using yeast, flour, milk, sugar, a little fat or butter, egg yolks and salt. On the top: a cottage cheese filling enriched with egg yolks, sugar, vanilla and boiled potatoes. The top is spread with egg yolks mixed with sour cream and a little melted fat. For the round version, cinnamon is sprinkled to taste.

The pastry is soft and spongy, with a salty and sweet taste. The salty taste of the mashed potatoes goes well with the cottage cheese, making the filling soft and airy. The potato curd gives this delicious cake a very special flavour. The version prepared in the pan is served in cubes or rhombuses, the round (breadcrumb) version is served cut in half or quarters. Sprinkle with vanilla icing sugar. After baking, the top will be a nice yellowish brown. Thickness of dough: 1-1,5 cm, thickness of filling: 1-1,5 cm. Weight of 1 slice: 4-5 dkg.

Nutritional value and use

In the Great Plain, every Saturday was famous for baking tarts, but this did not exclude the cottage cheese tart from the celebrations. The tart with a filling not covered with dough was the food of the greatest feasts. It was made for special occasions in the 18th and 19th centuries. It was baked for weddings. Many Lowland groomsman's books start the entire cake-taking period with the arrival of the cheesecake. Poor peasant women also sold the cheesecake at markets. In the 18th century, Debrecen's flatbread bakers formed guilds.

Product distribution and market

Is the product sold on the market (If so, indicate the sales point)? Or is the product only for self-consumption? In the Great Plain, every Saturday was famous for baking tarts, but this did not exclude the cottage cheese tart from the celebrations. The tart with a filling not covered with dough was the food of the greatest feasts. It was made for special occasions in the 18th and 19th centuries. It was baked for weddings. Many Lowland groomsman's books start the entire cake-taking period with the arrival of the cheesecake. Poor peasant women also sold the cheesecake at markets. In the 18th century, Debrecen's flatbread bakers formed guilds.

Preparation, consumption and preservation

Cottage cheese and potatoes "lepény" (according to the tradition of Hajdú-Bihar) recipe

Ingredients:

- for the dough: 1 kg flour, 5 dl milk, 5 dkg yeast, 10 dkg sugar, 3-4 egg yolks, 1 teaspoon salt, 10 dkg fat or butter

- for the filling (topping): 30 dkg cottage cheese, 60 dkg cooked, cooled mashed potatoes, 1 dl sour cream, 3 egg yolks or 2 eggs, 1 tsp. salt, 15-20 dkg sugar, 2 tsp. vanilla sugar, 1 tbsp. semolina
- topping: sour cream, 1 egg yolk, a little melted fat, vanilla, sprinkled with ground cinnamon to taste

To assemble the dough: yeast is run in lukewarm milk with a little sugar. Mix the egg yolks with the sugar and a pinch of salt, then add the lukewarm milk. Sift the flour, add the yeast. Knead until the dough is bubbly, then add the fat (lard or butter) and mix well. Leave to rise in a warm place. The dough is then rolled out to the thickness of a finger.

To assemble the topping: boil and mash the potatoes, add them to the flavoured cottage cheese and spread them on the surface of the rolled out dough.

The top is spread with a mixture of sour cream, egg yolks, a little melted fat or butter and vanilla. Sprinkle with cinnamon to taste.

The round version of the pastry is baked in the bottom of the oven or on a baking tray in a not too hot oven. Bake in the oven at 200 °C and later at 180 °C for 20-25 minutes.

4.12 "Öhön" from Hajdúnánás as a Traditional Hajdúság Shepherd's Meal



Scientific name of the product: "Öhön" from Hajdúnánás as a Traditional Hajdúság Shepherd's Meal

Common name of the product: "Öhön" from Hajdúnánás as a Traditional Hajdúság Shepherd's Meal

Common name of the product in the territory of intervention: "Öhön" from Hajdúnánás as a Traditional Hajdúság Shepherd's Meal

Image: "Öhön" from Hajdúság from the website collecting Hajdúböszörmény values¹¹

¹¹ <https://hajduboszormeny.hu/boszormenyi-slambuc>

Category: Processed product of plant origin - Pasta
Historical production area and origin: Hajdúnánás

History of the product

The food, which is typical of the Hajdú-Bihar region, was probably first prepared on the Hortobágy. Besides Hortobágy, it is also known and prepared in other parts of the county, e.g. In Hajdúnánás, the "capital of straw cooking", which initiated the declaration of this very popular local dish, which is also popular in Hajdúszoboszló, Hajdúböszörmény, Derecske, Konyár, Sárrétudvari, Léta and Komádi, as a county value.

In the authentic version, only four main ingredients are the backbone of the dish: bacon, onions, potatoes and "lebbencs" pasta. There are no other spices other than salt and possibly pepper. In fact, everything could be made from it at home, which is why it was such a popular product. They could produce it in the traditional way.

All ingredients could be collected at home, which is why it was such a popular product. They could produce it in the traditional way.

Processed product description and its production technique

The 4-ingredient dish is a very filling one-dish meal. The real "öhön" is prepared in a kettle. The flavour is special because it is cooked in the pot. It has few ingredients, yet it has a very unique taste.

Nutritional value and use

Made at home for the family, it was a real peasant meal. It was also often made for day labourers and shepherds. It is filling and difficult to spoil, making it a very practical dish. Nowadays, it is also available in restaurants, and there are festivals and competitions to see who can make the best.

Product distribution and market

It is also produced at home for home consumption, but is also available in restaurants.

Preparation, consumption and preservation

The Hungarian opens cooking by peeling a sausage. When he has peeled enough potato and cut it into rings, he goes to the frying. He chops the salted bacon into small pieces, straight into the iron pot. Put the iron pot on the fire and cook slowly, stirring to prevent burning. When the bacon drippings start to brown, add crumbled pasta, the better, the more you crumble the pasta, stir it into the fat and bake. The fatty pasta browns nicely, he doesn't leave it aside, he bakes it until it's dark red. Sure enough, it's already smoking, but there's nothing burnt and black in the dough. He removes it from the fire, sets it on the floor, stirs it until it stops baking. Then he sets the pasta aside and puts half a spoonful of good pepper in the fat. The fat comes to a strong bubbling from the pepper, the hot fat turns a burgundy red. He then mixes the pepper fat with the fried pasta and adds enough water to cover it. Add salt, hang it on the cooking wood or put it on the iron leg at home, put a good fire under it, and the pasta will rise quickly in the thin iron pot, without getting soggy. The little juice is soon boiled off, but the potatoes and pasta are cooked until then. The dense dish wheezes and steam puffs out of it, which is why it's called "susinka". The cook stirs it with a long-handled spoon, especially scratching the sides and bottom of the iron pot to prevent the thick food from sticking. The fire becomes blackened. The food cooks slowly and even starts to

cook. The spoon is no longer the main tool. The cook hangs the iron pot by the ear and turns the cooking pasta. The coagulated material turns in one piece in the iron pot. If a small piece sticks to the side of the iron pot, he scrapes it off with his spoon to get the rest. This way it bakes slowly. It is of special interest that the shepherds used to count the time it took to cook the food by stacking the cards of the old 32-card Hungarian card. When the food had been spun, they would put down a card and spin it again. Since then, the pasta has been turned over 32 times so that the side that has been cooking on the bottom comes out on top.

Real "öhön" can only be cooked in a kettle, and there is no way to replace good (mangalica) bacon with any other kind of fat, or to make them without using a lot of egg noodles. In terms of preparation, 'as many houses as there are customs' is typical, with individual practices, but the main cooking characteristics with character are retained. In the authentic version, only four main ingredients form the backbone of the dish: bacon, onions, potatoes and "lebbencs" pasta. There are no spices other than salt and possibly pepper. Provided the ingredients are of the right quality, no other seasoning is needed, and good bacon and the smoke from the embers add enough flavour to this great but very simple dish. One thing to know about slambuc is that it can only be cooked outdoors, in a pot, with wood. The indoor version, made on a gas stove, has nothing to do with slambuc because it lacks the flavour that can only be achieved by cooking in a pot, and also the little bit of fly ash that blows in the wind during cooking, which gives it its special taste. Some people make it with red pepper and a little tomato and green pepper, but the 'roots' method does not require this, and all of them produce a rich, delicious and filling dish. There are therefore variations not only from one region to another, but also from one family to another within a town, e.g. Hajdúnánás, for example, some people serve it with pickled cucumber in all cases, or fry the pasta, which is also an 'improved' way of preparing it. In any case, spicy peppers, green peppers and tomatoes are not needed for "öhön" from Hortobágy or, if you prefer, for the öhön from Hajdúnánás öhön, which is a root-preserving dish, and even pepper can be omitted. Smoked bacon must not be added to real "öhön". It is no longer an original dish from Hajdúság, but many people nowadays still make it that way, according to their own taste. Salty white bacon is the real thing, like bacon cooked on a spit. But if you look at the real recipe of Imre Fekete, also from Hajdúnánás, in the local publication Rural gastronomy tour in Hajdúság, the ingredients for 25 people are as follows.

There are therefore several ways to make a "öhön", and the following will help you (ingredients for 12 servings):

The secret of the simple magnificence of the buckwheat stew lies in the following 'delicacies': traditional bacon - preferably mangalica - and meat, home-made or home-made pasta with 8-10 eggs, good potatoes, a kettle, as slambuc can only be prepared in a kettle, good stamina, good knowledge of cooking, patience, a glass or two of white or red wine for the cook, home-made pickles for serving.

First render the fat from the bacon over a medium fire, then fry the meaty bacon and the bacon rind in it. Then sauté the onion, cut into strings, and fry the potatoes, cut into cubes or rings. After seasoning with salt and pepper, add enough water from the potato soaking liquid to cover the potatoes by a fingerful and cook until the potatoes are tender. Then crumble the pasta over the potatoes and allow it to incorporate into the potatoes. You don't need to touch it until it comes together, when the pasta starts to mix with the potatoes on its own, you may want to prick it with a spoon. When it has come together, you can check when you can turn it by shaking it, as this is when the ball of potato dough comes together. Theoretically, it should be turned 32 times, but not everyone can wait that long. The real masters are the ones who fry it thoroughly, but some people like it a little juicier, so it's OK to get the pot on the burner sooner.

4.13 “Bocskai” Loaf



Scientific name of the product: “Bocskai” loaf
Common name of the product: “Bocskai” loaf
Common name of the product in the territory of intervention: “Bocskai” loaf

Image: “Bocskai” loaf; Photo credit: the website collecting Hajdúnánás values¹²

Category: Processed product of plant origin - Sweets

Historical production area and origin: Hajdúnánás

History of the product

In recognition of his victorious struggle for freedom, István Bocskai received a golden crown from the Turkish Sultan on 12 November 1605. Afterwards, it was kept at his princely seat in Kassa, but after his death on 29 December 1606 it was transferred to the Imperial and Royal Treasury in Vienna. All this happened in the spring of 1610, and although Hungary is still the sole owner of this important national relic, it has not yet been returned to us. In 2014, the Móricz Pál Local History Collection came up with the idea of creating a replica of the original crown, which has been a jewel of the museum ever since. Its presence and its role in fostering the local and, in general, the “hajdú” identity is outstanding.

Our various loaf baking sessions also gave rise to the new idea of making a loaf the same size as the original work of art, with dough decorations on the surface to symbolize the beadwork and gemstone inlays. After the mould was made, the baking and moulding process aimed to make the cake reminiscent of the “Bocskai” crown in both form and decoration, while emphasising the doughy nature of the product, even with the elements of the glaze. We would also like to promote

¹² <https://nanasiertekek.hu/site03.html>

the "Bocskai" crown, a creation of special significance for the "hajdúk", as the symbol of our only victorious war of independence, in the form of a loaf baked in an oven. As this gastronomic curiosity is modelled on the golden head of István Bocskai, together with the ornaments on it, we have given it the name "Bocskai" loaf.

It's a new thing today, so the ingredients are no longer made by processors and their origin is not indicated.

Processed product description and its production technique

It has a real Hungarian loaf shape, made in the shape of a ball. Unlike the original and simple loaf, this one is specially decorated. It resembles the "Bocskai" crown, which makes it completely unique. The preparation of the loaf itself should not be different from the traditional Hungarian loaf, but it is highlighted in the ingredients that most of the ingredients are selected from local products from Hajdúnánás.

Nutritional value and use

They are made in the museum's oven every time they prepare for a festive event or take part in a museum educational session about the time of István Bocskai. But they also want to put such a speciality on the table of the participants of a professional conference.

Product distribution and market

Is the product sold on the market (If so, indicate the sales point)? Or is the product only for self-consumption? They tend to be prepared for special events.

Preparation, consumption and preservation

Ingredients: half a kilo of "hajdú" flour, 10 dkg of "korona" sugar, 5 dkg of margarine, 4 eggs from Hajdúnánás, 2.5 dkg of yeast, 0.5 litre of milk from Hajdúnánás, a little salt.

The preparation of the loaf itself should not be different from the traditional Hungarian loaf, but it is highlighted in the ingredients that most of the ingredients are selected from local products from Hajdúnánás.

4.14 Paired Sausages from Debrecen



Specific name of the

product: Paired sausages from Debrecen

Common name of the

product: Paired sausages from Debrecen

Common name of the product in the territory of

intervention: Paired sausages from Debrecen

Image: Paired sausages from Debrecen; Photo credit: the website collecting Debrecen values¹³

Category: Cured meats and sausages

Historical production or breeding area and origin: Debrecen

History of the product

The creator of the Paired sausages from Debrecen is not known, it was probably not a single person, but it took several centuries to acquire its present form and flavour thanks to the butcher-butcher societies of the city, the many bourgeois women who made and sold food in these societies. Paired sausages from Debrecen is therefore a true community creation. As a practical snack, there are basically two main varieties of sausages that have developed and spread throughout the world. It is assumed that it was already known in the 17th century by German traders and fairgoers who visited the wholesale fairs in Debrecen, who brought with them the reputation and the approximate method of preparation, offering a choice of sausages to those from Frankfurt, Vienna and Bavaria. This is how the dish made in the heart of the city became known and loved as Debreziner in German territories and in places where it was introduced through German intermediaries, including the USA and Australia.

In addition to the fairs, sausages, whose fat was also a special delicacy, were a favorite dish of the shepherds who came to the weekly markets and drove their animals to the Debrecen border. The making and selling sausage at fairs and weekly markets was the job of the bourgeois women of the Civic League, who were organised into a society in the 19th century. The second generation of

¹³ <https://www.debrecen.hu/hu/turista/cikkek/hungarikum-a-debreceeni-paros-kolbasz>

Debrecen pork sausages dominated between the two world wars. Not only did it exist as a traditional home-butcher's product, but it was also produced by the predecessor of Debrecen Hús Zrt., a Debrecen meat company founded in 1894. This launched the career of the Debrecen pair as a cheaper industrial product suitable for mass consumption by the urban petty bourgeoisie, and it went from being a food of fairground fairs and shepherds to a favorite dish of the urban petty bourgeoisie.

As a result of its history, there are many different types of Debrecen available today, but experts believe that the locally produced is still the real thing. In recent years, the city has seen a real movement to rebuild the image of Debrecen's paired sausages, one of the first steps of which was the declaration of the product as an Outstanding National Value, and subsequently, in October 2015, it was also declared a Hungaricum.

Product characteristics

The original Paired sausages from Debrecen were a home-made product, so the proportions and seasoning of the meat were not always the same everywhere. Its flavour is influenced by a variety of factors due to the specific nature of the seasoning. From the second half of the 19th century, for example, high-quality paprika became an indispensable part of the recipe.

The Paired sausages from Debrecen is 30-32 mm in diameter, with a rind and 120-140 mm long. The casing is clean, free of damage and continuity defects, not mouldy, adheres well to the stuffing, bright red and translucent with bacon and meat particles. The consistency is firm, elastic, well-assembled, easy to slice, succulent and unique. The incised surface shows marbled, bright red to paprika-coloured, 6-8 mm meat grains and white or orange-red to paprika-coloured, 6-8 mm bacon grains, also embedded in the meat mass, evenly distributed. It has a pleasantly smoky, spicy aroma and harmonious flavour.

Nutritional value and use

It is usually eaten on its own, with something like mayonnaise or mustard and bread. But it can also be added to various dishes.

Product distribution and market

The City of Debrecen, the Debrecen Valuables Committee, the Debrecen Gastronomy Foundation, and a community of producers and restaurateurs interested in reviving the noble tradition of Debrecen paired sausages have created an agreement in which they have laid down the principles and quality criteria for the presentation of Paired sausages from Debrecen and its gastronomic presentation. The aim of the Debrecen Paired Sausage Codex is to protect the reputation of the Debrecen Paired Sausage, which has been declared an Outstanding National Value, and to protect the cultural traditions and gastronomic values of the community that created the sausage, and to renew it in an outstanding quality.

It is already produced and sold in several places in the country and is famous throughout Europe.

Preparation, consumption and preservation

There are four varieties of paired sausages:

- Traditional version: sausage made from 100 percent beef
- Kosher version: Kosher sausage made from beef or beef and lamb
- Standard version: Sausages made from approximately 30 percent beef and 70 percent pork or mangalica meat
- Premium version: 100 per cent sausage made from pork or mangalica meat.

4.15 Hajdú Kashkaval Cheese



Specific name of the product: Hajdú Kashkaval cheese

Common name of the product: Hajdú Kashkaval cheese

Common name of the product in the territory of intervention: Hajdú Kashkaval cheese

Image: Hajdú Kashkaval cheese from the website collecting Hajdúböszörmény values¹⁴

Category: Cheese or dairy product

Historical production or breeding area and origin: Hajdúböszörmény

History of the product

Since the first written mention of kashkaval cheese in around 500 BC, made by the founder of medicine Hippocrates during a journey to Rome and the peoples of Eastern Europe, it has travelled a considerable distance and time. Today, it is as much a part of the American pastry as it is of a Lebanese schoolgirl's pastry in Beirut. The rich history of this cheese has spanned many countries and centuries. Its name derives from the Italian word "caciocavallo", which translates quickly as "horse cheese", from the Latin words "caseus" - cheese, and "caballus" - horse. However, this may suggest that the cheese was transported on horseback, as kashkaval is not made from horse milk. It probably came to Eastern Europe from Italy, where it was known in most places, with different spellings, as kashkaval, kaskaval, cascaval, etc., and played a prominent role in the lives of cheese-makers in the region. His travels reached a new stage in the last century, when he was encountered by Lebanese and Syrian travellers in Eastern Europe. They immediately fell in love with its taste and smell and took it home, where it became one of the most popular cheeses in the Levant region, known as 'Asha'awen'. Its use here is also widespread. A slice of kashkava is often added to plain unleavened bread for breakfast, but it is also a favourite topping for traditional pasta dishes.

¹⁴ <https://hajduboszormeny.hu/a-hajdu-kashkaval-sajt>

The Hajdú-Kashkaval type of cheese has also been made in Hungary for centuries. From the very beginning, Hajdúböszörmény and Hajdúság were one of the most important research bases in Hungary for kashkaval cheese made from cow's milk, and the cheeses developed and produced here have achieved the greatest international success. This is one of the reasons why, for a long time in Hungary, this type of cheese was known simply as 'hajdú cheese', but it started its world conquest under the international name of kashkaval. It is therefore natural that the best-known Hungarian brand name on international markets is Hajdú, and Hajdú kashkaval (kashkawan in some regions) is now considered an etalon among cheeses in many parts of five continents.

Although a version made from sheep's milk is also widespread in the world, the factory in Hajdúböszörmény is mainly famous for its kashkaval cheese, made from cow's milk supplied by local dairy farmers.

Product characteristics

Kashkaval is a type of cheese that, like parenica and mozzarella, is a heated-cooked cheese. It is a piquant, distinctive but not pungent cheese with a slightly salty, yellowish taste. It melts easily, grates well and has many uses in the kitchen. The Kőröstej Hajdúböszörmény Factory is proud to preserve the rich tradition of this cheese and to carry on its national heritage. The kneading machines used today were similar in operation to those used in the previous half of the last century, and the cheeses are shaped and rolled with the same care and handwork as they were centuries ago. Of course, automation was essential for certain processes, particularly in the packaging sector. It is also thanks to the modern packaging machines used today that Kashkaval cheeses can now be produced in Hajdúböszörmény in huge quantities, but still in premium quality. From the beginning until today, an important element of the packaging of Hajdú kashkaval has been the unavoidable red, white and green motifs, which emphasise the Hungarian production. The traditional 8 kg round disc is still one of the most popular products of the factory, but the cheese is supplied to partners in a variety of shapes, sizes and flavours to meet market demand. Today, sliced and flavoured varieties are popular, as well as herb, hot pepper, cumin and smoked.

Nutritional value and use

These products are now made for sale.

Product distribution and market

They are sold in Hungary and abroad.

Preparation, consumption and preservation

The traditional 8 kg round disc is still one of the most popular products of the factory, but the cheese is supplied to partners in a variety of shapes, sizes and flavours to meet market demand. Today, sliced and flavoured varieties are popular, as well as herb, hot pepper, cumin and smoked. Although a sheep's milk version is also widely used in the world, the factory in Hajdúböszörmény is famous for its kashkaval cheese, which is made from cow's milk supplied by local dairy farmers. It is with pleasure and the same dedication that the cheese makers of centuries before our era, in the time of Hippocrates, made kashkaval here today. It can be eaten on its own or added to main dishes.

5. Sarajevo Canton in Bosnia and Herzegovina

5.1 Wild Blueberries from Bjelašnica



Common name of the product: Wild blueberry from Bjelašnica
Scientific name: *Vaccinium myrtillus*
Common name in the territory of intervention: Borovnica

Image: Picking blueberries; Photo credit: internet Agroklub

Category: Wild Fruit

Historical production area and origin: Blueberry in Bjelašnica is a wild product traditionally collected by local communities and hikers in Bjelašnica. Wild berries grow in untamed forests and mountains, unaided by human intervention, and are foraged sustainably in the late summers by local pickers. In Bjelašnica, they are completely free of pesticides, herbicides, heavy metals and

other toxins. Blueberry can also be cultivated and its cultivation is extending in other parts of BiH such as Una Sana canton. Wild blueberries, tiny in form and black-purple in hue, have more intense flavour and tart compared to the cultivated varieties.

Cultivars, species and types: The flowers are bell-shaped, white, pale pink or red, sometimes tinged greenish. The fruit is a berry 5–16 mm in diameter with a flared crown at the end. They are pale greenish at first, then reddish-purple, and finally uniformly blue when ripe.

This plant is resistant to winter and tolerates temperatures of -20 and even -25 °C without problems, and if it is covered with snow, it can withstand lower temperatures. It is particularly adapted to Bjelašnica because of its altitude and climate with rigorous winters. Blueberry is a medicinal herb with delicious fruits and is used both in medicine and cooking.

Collectors point out that blueberries have numerous advantages over raspberries or other berries because the plant bears fruit between 30 and 50 years, picking is easier, and the fruit is more stable and resistant to transport.

Description: These small, round berries are about 5–16 mm in diameter, and their colour can range from blue to purple. It is classified in the Cyanococcus within the genus Vaccinium. The flavour of blueberries is generally subtle with common descriptors being, sweet, floral, woody, drying, and musky with a touch of soft acidity. Mouthfeel is juicy and there is a pleasant “squirt” of juice as you bite down on a single fresh ripe blueberry. The exact taste is between a green and red grape, but sweeter.

Harvest period: In Bjelašnica, harvesting season runs from end June to September. Blueberries have a longer harvesting period than many other berries such as raspberry and allows for better organization and utilization of labour.

History of the product: The blueberry has been known since prehistoric times. Native to North America, it has been collected for 13,000 years. Early explorers had noticed wild blueberries during their expeditions in America. In 1615, Samuel de Champlain saw Native Americans harvesting wild blueberries. They dried them, ground them into powder to make a paste. Combined with corn, honey and water, it made a pudding. During an expedition, found Indians who used blueberries for their medicinal properties and made a strongly aromatic tea from the roots. It was used as a relaxant during pregnancy. The first highbush blueberry bush was successfully cultivated for commercial production in the early 1900s, and today, nearly 1 billion pounds of blueberries grow. There are over 150 varieties of blueberries (the Bluetta, the Patriot, the Rancocas, the Paty, the Berkley, the Bluecrop etc)

Nutritional values and use: Blueberries primarily consist of 14% carbs, 84% water, and small amounts of protein and fat. Blueberry and wild bilberry have a fairly uniform pH (3.2–3.6). Blueberries are low in calories and fat yet provide decent amounts of healthy fiber. Calories: 57 - Fiber: 2.4 grams Fat: 0.3 grams. Most of the carbs come from simple sugars like glucose and fructose, but blueberries also contain some fiber. These berries have a score of 53 on the glycaemic index (GI). As this score is relatively low, blueberries should not cause major spikes in blood sugar and are considered safe for people with diabetes. Dietary fiber is an important part of a healthy diet and may have protective effects against various diseases. 148 grams of blueberries provides 3.6 grams of fiber. In fact, around 16% of the carb content in these berries comes in the form of fiber. Blueberries are a good source of several vitamins and minerals, including vitamin K1, vitamin

C, an antioxidant important for skin health and immune function, Manganese and Small amounts of vitamin E, vitamin B6, and copper.

Indicative quantity produced: 22,14 K kg exported from BiH

Product distribution and market: Wild blueberries from Bjelašnica are sold to collection points and the main one is Boletus in our area. They are also sold on local markets fresh during harvest season. The prices of blueberries have doubled in 10 years from 10KM per Kg. It was sold at an average of 24 KM per Kg in 2024.

Preparation, consumption and preservation: They are often eaten fresh but may also be frozen or juiced. They can be used in a variety of baked goods, jams, and jellies, as well as for flavourings.

- **Blueberry jam** ingredients (for 450 ml): 600 gr of blueberries (fresh or thawed) , 300 gr of sugar and 1 tablespoon of lemon juice

1. Place blueberries, sugar and lemon juice in a saucepan
2. Put the pot on a low heat so that the sugar slowly dissolves, stirring from time to time with a wooden spoon.
3. When the sugar starts to melt and the fruit starts to heat up, take a potato masher and mash the blueberries, if you wish, leave some whole.
4. After the sugar has completely dissolved, increase the heat, let it boil and cook for 15 minutes, stirring all the time.
5. If you want to check if the jam is ready, put a saucer in the fridge for a few minutes, take it out and put some jam on it. If when you run your finger through it, the jam has the texture of a gel and does not spill, it is ready.
6. Pour the jam into a sterilized hot jar (leave two fingers empty). Immediately turn the jar over so that it rests on the lid.

- **Blueberry sirup**

Ingredients: 750 ml fresh blueberries, cleaned and washed, 500 ml of water and 100 g of brown or regular sugar/of your choice, you don't even need to add sugar.

Restaurant such as Šabići or pension Umoljani are currently proposing it on a regular basis, in particular as sirup /beverage, but this locally collected berry offers great potential in cooking as a dressing or in pastry and could be explored.

Other documents on the product:

-Tourism agency from Sarajevo offers wild picking activities to its travellers:

<https://funkytravels.com/organic-fruit-picking-in-bosnia-and-herzegovina/>

-List of companies buying collecting wild fruits and plants including Borovnica:

<https://snagalokalnog.ba/en/blueberry-harvest-in-una-sana-canton-around-10000-bam-of-income-per-hectare/>

-It is a source of income for many families:

<https://www.agroklub.ba/eko-proizvodnja/popravljanje-budzeta-u-berbi-borovnica-jedna-porodica-moze-zaraditi-i-do-20-hiljada-maraka/70048>

<https://www.akta.ba/vijesti/bih/42672/na-bjelasnici-i-nane-od-70-godina-beru-borovnice-otkupna-cijena-niska>

5.2 Rose Hips from Bjelašnica



Scientific name of the product:

Rosa canina

Common name of the product:

Rosehip, Dog rose

Common name of the product in the territory of intervention:

šipurak, divlja ruža

Image: Rosehip fruits; Photo credits: Alterural Septembre 2024 Bjelasnica (left); Alterural Field Nisici September 2024 (right)

Category: Fruit

Historical production area and origin: The Rosa Canina, commonly known as dog rose or wild rose, has been naturally growing in the region of Bjelašnica for centuries. This area, known for its mountainous terrain and diverse flora, provides ideal conditions for the growth of wild rose bushes. Historically, the locals have harvested the rose hips (fruits of Rosa Canina) for their nutritional and medicinal value. The high altitude and clean environment of Bjelašnica contribute to the quality of the plants, making it a significant area for the natural production of Rosa Canina in Bosnia and Herzegovina.

Cultivars, species and types: Rosa Canina is the primary species and is part of the broader Rosa genus, which includes many other wild and cultivated roses. This species is the most common type of wild rose found in Europe and Western Asia. There are several cultivars bred from Rosa Canina for specific characteristics such as flower colour, size, or growth habit. Some popular cultivars include:

- Rosa Canina 'Assisiensis': A thornless variety of Rosa Canina
- Rosa Canina 'Schmid's Ideal': Known for larger hips and being resistant to diseases

There are several natural variations and types of Rosa Canina based on the region or specific characteristics of the plant:

- Rosa Canina var. Canina: The typical wild variety found throughout Europe
- Rosa Canina var. Andegavensis: A regional variation found in certain parts of France

-Hybrid types: Crosses between Rosa Canina and other rose species to enhance certain traits like hardiness of ornamental value

Description: Rosa Canina, commonly known as dog rose, is a deciduous shrub that typically grows between 1.5 to 3 metres in height, though it can reach up to 5 metres. It has long, arching stems covered in small, curved thorns. The flowers of Rosa Canina are usually pale pink or white, with five flat petals, and measure around 4 to 6 cm in diameter. They are single-flowered, giving a simple, open appearance that is ideal for attracting pollinators. The fruit of Rosa Canina, commonly known as a rose hip, is oval or round and typically measures between 1 to 2 cm in diameter. The weight of a single rose hip can vary depending on environmental conditions, but it typically weighs between 2 to 5 grams. The flowers of Rosa Canina are usually pale pink or white, while the rose hips are bright red or orange when fully ripe. The flavour of the rose hips is slightly sweet with a tart, citrusy taste. They are commonly used in teas during all winter by local communities but also very often in jams, and syrups due to their high vitamin C content and antioxidant properties.

Harvest period: In Bjelašnica the harvest period for Rosa Canina (dog rose) typically begins in late summer and extends through early autumn, generally from August to October.

History of the product: Rosa Canina has a long history of use, dating back to ancient civilizations such as the Greeks and Romans, who used it for its medicinal properties. During the Middle Ages, it was cultivated in monastic gardens and widely used in remedies for treating colds, infections, and digestive problems. In the region of Bjelašnica, Bosnia and Herzegovina, Rosa Canina has been traditionally harvested by locals for centuries. The mountain's clean environment and ideal growing conditions made it a valuable source of rose hips, rich in vitamin C. Over time, it has become a staple in local products, including teas, jams, and syrups, continuing its legacy as a health-boosting plant.

Nutritional values and use: Rosa Canina, particularly its fruit known as rose hips, is highly valued for its rich nutritional content and versatile uses. Rose hips are especially renowned for their exceptionally high vitamin C content, ranging from 500 to 1500 mg per 100 grams, making them one of the richest natural sources of this essential nutrient, which plays a crucial role in boosting immune function and promoting healthy skin. In addition to vitamin C, rose hips contain vitamin A, which supports vision and immune health, as well as B vitamins, vitamin E, and small amounts of vitamin K. They are also rich in dietary fiber, which aids in digestion, and provide essential minerals such as calcium, magnesium, and potassium. Rose hips are known for their antioxidant properties, which help protect the body from free radicals and inflammation. The fruit is commonly used to make herbal teas, syrups, jams, and even oils, which are popular for skincare due to their hydrating and rejuvenating effects. In traditional medicine, rose hips have been used to treat colds, flu, and digestive issues, as well as to improve overall health.

Indicative quantity produced: The indicative quantity of Rosa Canina (rose hips) produced can vary greatly depending on the region and cultivation practices. In areas like Bjelašnica in Bosnia and Herzegovina, where wild harvesting is common, the yield can be anywhere from 500 to 1,500 kilograms per hectare annually. However, in controlled agricultural settings with optimized conditions, production can reach up to 2,000 kilograms per hectare. The amount harvested also depends on weather conditions, altitude, and the extent of wild or cultivated growth.

Product distribution and market: In regions like Bjelašnica, rose hips are harvested for commercial purposes and sold in various forms, including dried, in teas, jams, syrups. Points of sale typically include local markets, specialty stores, herbal shops. Additionally, some of the harvested product is used for personal consumption, especially in rural communities where it has a long tradition of home use in teas and preserves. It is used for self-consumption by nearly all families in winter as a tea, with a great source of vitamin C.

Preparation, consumption and preservation: Rosa Canina, particularly its rose hips, is prepared by drying or cooking into jams, syrups, and teas. Rose hip tea is popular in regions like Bjelašnica, where it is consumed for its high vitamin C content. Rose hips are also used in traditional recipes such as:

- Šipurak/rosehip tea
- Rosehip jam needs the following ingredients:
2 kg mature rosehip, 5-6 kg of sugar, one lemon juice (optional) and water
- Rosehip syrup/Sok od šipurka

Recipe for jam/pekmez:

To make rosehip jam (pekmez or džem od šipka), first clean and wash the rosehips, removing stems and seeds. Boil them in water until soft, then purée the mixture and strain to remove any remaining solids. Return the purée to the pot, add sugar, and cook over low heat, stirring frequently until it thickens, which usually takes about an hour. Optionally, add some lemon juice for flavor. Once thickened, pour the hot jam into sterilized jars and seal them while still warm. Let them cool, and the jam is ready to be stored.

These are often made at home, but some restaurants in rural Bosnia, especially around Bjelašnica, serve rosehip products. Rose hips are preserved by drying or as jams and syrups, allowing them to be enjoyed year-round.

Nearly all visited local rural restaurants are proposing rosehip as a tea or a jam to accompany the traditional doughnuts/uštipci. Large quantities are bought directly from the individual collectors in Bjelašnica during the season by the company Boletus doo.

There is an interesting declination of rosehip processed into flour:

<https://www.facebook.com/zivotnieliksir/>

https://bonapeti.rs/n-128111-Bra%C5%A1no_od_%C5%A1ipka_-_koristi_i_primena

5.3 Pramenka Sheep Bjelašnica



Common name of the product:
Pramenka Sheep Bjelašnica

Common name of the product in the territory of intervention: ovca Pramenka



Image: Pramenka sheep, Bjelašnica and Pramenka sheep Nišići; Photo credit: Alterural

Category: Meat – roast lamb

Historical production or breeding area and origin: The Pramenka sheep is one of the oldest and most resilient breeds in the Balkans, with its origins in the mountainous regions such as Bjelašnica in Bosnia and Herzegovina, as well as the wider Dinaric Alps. These sheep have historically been bred in the harsh, rugged landscapes of Bjelašnica, where they adapted to the challenging climate and terrain. Nomadic shepherds practiced transhumance, moving their flocks to higher pastures during summer months. The Pramenka sheep is known for its hardiness and ability to thrive in such environments, making it valuable for the production of meat, wool, and milk. Different strains of Pramenka, like the Bosnian and Herzegovinian Pramenka, are closely associated with areas like Bjelašnica, where traditional sheep breeding has been an integral part of local life for centuries.

History of the product: The history of raising *Pramenka* sheep and consuming their meat has deep roots in the rural areas of the Balkans, especially in Bosnia and Herzegovina. This hardy, native breed has been cultivated for centuries, primarily in mountainous regions like Bjelašnica, where they thrive in tough conditions. *Pramenka* sheep were traditionally kept for multiple purposes: milk, wool, and meat. Their meat is highly valued for its flavor, which is influenced by the

animals' natural diet of wild herbs and grasses on mountain pastures. Throughout history, *Pramenka* sheep played a crucial role in the sustenance of rural communities, and their meat was a staple in traditional Bosnian cuisine, especially during festive occasions and religious holidays. The traditional methods of raising and grazing these sheep, along with their natural diet, contribute to the high quality and distinctive taste of their meat, which remains popular in both local and regional markets to this day.

Animal breed of origin: Pramenka sheep is an autochthonous breed found in the mountainous regions of the Balkans, including Bjelašnica in Bosnia and Herzegovina. It is medium-sized, with rams weighing between 50 to 70 kg and ewes around 40 to 50 kg. The coat is typically white or grey, with some individuals having patches of brown or black. Pramenka sheep are known for their hardiness, thriving in high-altitude areas of up to 2000 m, and are valued for meat, milk, and wool production, making them important for traditional livestock farming in these regions.

Description of the type of farming: Breeding of Pramenka sheep is primarily extensive, meaning it is carried out largely outdoors. The sheep graze on natural pastures, particularly in mountainous areas like Bjelašnica, during the warmer months of the year, typically from spring to early autumn. During winter, they are kept indoors or in sheltered areas. The primary feed consists of natural grasses and herbs from the pastures, and in winter, they are supplemented with hay and sometimes grains. Breeding practices follow traditional methods, with the sheep being allowed to roam and graze freely during the grazing season, supporting their adaptation to the harsh conditions of high altitudes.

In the case of Pramenka sheep, the breeders are often also the processors. Many small-scale farmers who raise Pramenka sheep are involved in the full cycle of production, from breeding and raising the animals to processing their meat, milk, and wool into traditional products. This includes producing items such as cheese, wool textiles, and lamb meat. Additionally, these breeders often grow or source the feed, such as hay and grains, that supplement the sheep's diet, especially during winter months. This close integration of breeding and processing is common in traditional farming practices in regions like Bjelašnica.

Production period: The production period for Pramenka sheep typically follows a seasonal cycle. Lambing occurs in late winter or early spring, depending on the region, with the lambs being raised through spring and summer when the sheep graze on natural pastures. Milk production peaks during spring and summer, making it the primary period for producing cheese and other dairy products. Meat production is common in late summer to early autumn, after the lambs have matured. Wool is sheared once a year, usually in late spring or early summer, following traditional practices.

Product characteristics: The Pramenka sheep is a medium-sized breed, with rams weighing between 50 to 70 kg and ewes around 40 to 50 kg. The sheep are typically reared using traditional extensive farming methods, where they graze on natural pastures during the warmer months, especially in mountainous regions like Bjelašnica. The production of meat, milk, and wool follows these traditional techniques, which have been passed down through generations. Due to the highly preserved biodiversity in Bjelašnica, the sheep are fed with more than 48 varieties of plants and herbs. The tools used in production are often traditional, such as manual shears for wool and simple tools for cheese-making. The shearing of wool takes place in late spring using hand tools,

while cheese production involves using natural milk and traditional wooden moulds. The cheese is aged for several weeks to months, depending on the variety, in cool, ventilated spaces, often following traditional ageing practices. The main ingredients used in the production of Pramenka products are:

- Milk from the sheep, which is used for making cheese and yoghurt
- Natural feed from the pastures, which consists of wild grasses and herbs, influencing the flavour of both the milk and meat
- Hay and grains are used as supplementary feed during the winter months

Nutritional value and use: calories: 250 Kcal, 25 G proteins, 15g total Fat , 6 g Saturated fat, 3 fatty acids omega 3, 70 mg cholesterol, 2,5 mg iron, 5 mg zinc, 4 microg of Vitamin B12 per 100 g of product

Indicative quantity produced in one year: The indicative quantity of Pramenka sheep products produced in one year varies based on the region and farm size. On small traditional farms in areas like Bjelašnica, a typical flock may produce approximately 50 to 100 lambs per year, yielding 500 to 1,000 kg of lamb meat. Milk production can range from 100 to 150 liters per ewe per season, resulting in cheese production of around 20 to 40 kg per ewe annually. Wool production is relatively modest, with each sheep yielding about 2 to 3 kg of wool per year. These quantities can fluctuate depending on the climate, pasture quality, and farming practices.

Product distribution and market:

- Directly processed on site (like restaurant Visočica)
- Sold to restaurants
- Male usually sold to private customers and intermediaries for Bajram (Eid)

Preparation, consumption and preservation: Pramenka sheep meat is typically prepared by slow roasting, grilling, or using stews to enhance its rich flavor and tender texture. One of the most popular methods is roasting a whole lamb or sheep on a spit (ražanj), especially for festive occasions. The meat is commonly served with vegetables or bread and is a key dish in Bosnian celebrations. For preservation, methods like drying, smoking, or freezing are used, with dried meat (suho meso, stelja) being a traditional staple in many households. These techniques ensure the meat can be enjoyed year-round.

Other documents on the product:

<https://avaz.ba/lifestyle/zdravlje/465024/janjetinaslano-meso-slatki-zalogaji>
<https://tztz.ba/ba/majstor-mijo-zna-sve-tajne-najbolje-janjetine-vazno-je-nasoliti-janje-tuzlanskom-soli/>
<https://tztz.ba/ba/majstor-mijo-zna-sve-tajne-najbolje-janjetine-vazno-je-nasoliti-janje-tuzlanskom-soli/>

5.4 Buckwheat from Nišici Plateau



Image 15. & 16. Buckwheat; Photo credit:

Scientific name of the product: *Fagopyrum esculentum*

Common name of the product: Buckwheat from Nišici plateau

Common name of the product in the territory of intervention: Heljda

Category: Cereals, grains and flours pseudocereal (because of the way it is used, it is called cereal, and the young leaves can sometimes be used, and therefore it is an alternative grain)

Historical production area and origin: An old culture that has been used for human and animal nutrition for several thousand years. It originates from Tibet, Punjab, from where the Mongols carried it in their campaigns and spread it to other areas. It is assumed that it came to our area from the Himalayas via Russia, Romania and Hungary. According to historical records, the cultivation of buckwheat is mentioned in the 18th century as a period of cultivation in BiH at higher altitudes.

Cultivars, species and types: Order Polygonales, Family Polygonace. In our area only *esculentum* is used, and there are more, i.e. 15 species within the genus, but three are the most important in the economy: Common buckwheat *Fagopyrum esculentum*, bitter (Tatar) *Fagopyrum tataricum* and perennial *Fagopyrum cymosum*.

Description: Buckwheat's root is spindly, branched and penetrates up to 25-30 cm, while the veins penetrate up to 1 m. The tree is upright, ribbed, hollow and 50-150 cm high, and in some varieties up to 300 cm. It is green-red in colour, which turns red with age. The leaves are heart-shaped, lanceolate or triangular. The flowers are clustered, dimorphic (heterostyle), meaning that there are flowers with longer stamens or longer pistils. Heterostyly can reduce fertilization by up to 50% in case of mismatched stamen and pistil lengths. Flowering lasts 30-45 days, which is important

because buckwheat is a honey plant with 1,000-2,000 flowers per plant. The fruit is a triangular nut (grain) with sharp edges, with a colour ranging from black to yellow-reddish (Gadžo, et al, 2017). It is a honey-bearing plant that, depending on the time of sowing, can be an excellent summer and autumn pasture for bees, especially in periods of reduced flowering of other plants. Due to the long flowering period, under favourable conditions (warm days without wind and cool nights with moderate humidity) one hectare can produce up to 200 kg of honey.

Harvest period: July, August depending on the time of sowing, i.e. conditions for sowing. The vegetation period is 3 months

History of the product: In the territory of Bosnia and Herzegovina in the 19th century, buckwheat was sown in the area of today's Goražde, Fojnica, Prozor and in many villages located at a higher altitude. After World War II, the period of industrialization and large-scale migration from villages to cities, especially from villages at higher altitudes, began, which caused the cessation of buckwheat production in Bosnia and Herzegovina. Also, with the improvement of technology, the production of a new assortment of grain, primarily wheat, which has significantly higher yields, but also more valuable white flour, begins. In the 2000s, with the development of organic production projects, larger buckwheat plantations were established by importing the Daria variety from Slovenia, and in this way buckwheat production was renewed in BiH. However, as the price of buckwheat seeds was high, plantings decreased over time so that now, according to FAO, the harvested area is 702 ha. Currently, Nišići plateau offers excellent conditions for its production and the highest production level in BiH.

Nutritional values and use: Buckwheat is the richest in carbohydrates (about 73%), proteins (about 12%) and vegetable oils (2-3%), and contains significant amounts of minerals such as potassium, phosphorus, calcium, magnesium, sodium, zinc, copper and iron. Of the vitamins, B complex vitamins predominate, along with significant amounts of niacin. Buckwheat fruit is easily digestible, which makes it ideal for feeding children, the elderly and those with digestive problems. Buckwheat, as a gluten-free grain, is suitable for people suffering from celiac disease, and it is also significant because of its positive effects on reducing the concentration of sugar and fats in the blood, which contributes to lowering harmful cholesterol. Buckwheat also has a beneficial effect on improving memory and is recommended for people engaged in intensive intellectual work, which is why it is known as "student food" in Russia. Its flour can also be used to prepare poultices in the treatment of ringworm, eczema and ulcers. In addition to flour and pasta, tinctures, teas from buckwheat leaves and flowers are made from buckwheat, which contain the bioflavonoid rutin, a substance from the vitamin P group that is used in vein diseases. Buckwheat pillows, quilts and collars are made from the flakes, suitable for people who have health problems with the spine, asthma, etc.

Indicative quantity produced: 442 tons in 2022 (according to FAOSTAT) 1-1.5 tons per ha, which is the average in the EU as well.

Product distribution and market: Sales points are "dm" stores, social networks, Eko Heljda Tarčin, Halilovići doo Ilijaš, in all better equipped markets, BioNatura Vareš and local farmer shops on site in Nišići such as Mlin, Seljačka posla and other small shops located on the road between Kamenica and Bijambare.

Preparation, consumption and preservation:

- Buckwheat pie - Beat a pancake mixture of 2 eggs, buckwheat flour, wheat flour, milk, carbonated water and salt. Bake the pancakes and leave them aside to cool. In the meantime, prepare the filling by mixing and mashing the mature cheese with cream, cottage cheese, eggs and oil with a fork. Coat the mold (diameter 22 cm) with oil, put one pancake on the bottom and coat it with the previously prepared filling. Repeat the process until all the ingredients are used and the last pancake is placed. Cut the pie crosswise into pieces, then cover with the rest of the mixture. Bake for 30 minutes at 200C, until golden.
- Buckwheat tea
- Pasta
- Tarhana (type of soup)
- Pancake flour
- Various tinctures in combination, for example, with artichoke

Other documents on the product:

- Bio Natura Vareš <https://bionatura.ba/kontakt/>
- Halilović doo Ilijaš <https://www.biohalilovic.ba/>
- Heljda Sarajevo https://www.facebook.com/HeljdaSarajevo?locale=hr_HR
- Bio Corner Prijedor <https://zdravahranabc.ba/product/pahuljice-od-heljde-500g/>

5.5 Triticum Spelt from Nišići Plateau



Scientific name of the product: Triticum spelt
Common name of the product: Triticum spelt from Nisici plateau, pir, krupnik
Common name of the product in the territory of intervention: Spelta

Image: Spelt; Photo credit: internet

Category: Cereals, grains and flours

Historical production area and origin: Spelt is one of the oldest types of wheat, known since 7,000 to 9,000 years ago and is considered the ancestor of common wheat. The latest research

(Gadžo et al., 2017) indicates that spelt originated in the Transcaucasia area, north of the Black Sea, through the spontaneous crossing of wild grass species. Traces of this wheat were found in the tombs of Egyptian pharaohs, and the Romans and Asian tribes spread it throughout Europe. In archaeological sites in Europe, it has been identified in layers dating back to 2,000 years before Christ. Until the middle of the 20th century, spelt was an important chaff type of wheat in the world.

Cultivars, species and types: family Poace, genus Triticum, type of spelt

Description: It is a close relative of common wheat. The root reaches deep and has excellent suction power. The tree is upright, hollow and prone to lying down, up to 2 metres high. Ears are 20 cm long, without axils. The grains are long and narrow, surrounded strongly by chaff. They provide good protection against insects, which reduces the use of insecticides, on the other hand, they require peeling by machines, which makes production more expensive. It is not demanding in terms of nutrients, so it almost does not even need to be fertilized, which enables cheaper cultivation, but also a substitute for wheat cultivation. Where wheat fails, spelt succeeds. It has a sweet taste.

Harvest period: mid-July, i.e. when grain moisture is 12-13%

History of the product: Until the middle of the 20th century, spelt was an important chaff type of wheat. However, with the spread of non-mushy varieties, its importance has declined. Due to its quality characteristics, spelt is cultivated again in the mountainous areas of Germany, Switzerland and Austria, and with the growth of organic agriculture it is also spreading to the arable land of other European countries. Given that this culture is grown at higher altitudes, with industrialization and large migrations from villages to cities, this culture in Bosnia and Herzegovina stopped being cultivated until 1996, when spelt found its place as part of projects for the development of organic products, considering that it has a hard, protected grain, there is less possibility of pest attacks, so the need for insecticides is also significantly lower. And for the same reason, it is more resistant to weather (un)opportunities.

Nutritional values and use: Although spelt is a relative of wheat, it differs both in terms of physical and nutritional values. It contains complex carbohydrates (mucopolysaccharides) that have more functions, for example, spelt has more protein, carbohydrates and dietary fiber than wheat. Restoration of bones, joints, cartilage. It has almost all vitamins from group B, then fats, minerals, vitamins and cellulose in an ideal ratio. A significantly higher amount of Ca, Mg, P and Sn than other cereals, as well as zinc and amino acids. Since it regulates the level of sugar in the blood, it is important in the diet of diabetics. Like wheat, it contains gluten, but it is easier to digest, and in addition, it provides energy that is gradually released and well-integrated into the body, and is a desirable food for the nutrition of athletes as well as for people recovering from illness.

Indicative quantity produced: no data, and according to the yield that can be expected in organic production, they are 2-3 t/ha, while in experiments on the experimental field of the Faculty of Agriculture and Food, yields of up to 5.5 tons/ha were achieved

Product distribution and market: Sales points are "DM" stores, social networks, Eko buckwheat Tarčin, BioNatura Vareš, Halilovići doo Ilijaš.

Preparation, consumption and preservation: Some good ideas are spelt risotto, soup or stew. In addition, it is easy to replace wheat flour with spelled flour, and vice versa - you will get a similar result, and avoid using and repeating the same food, affecting the variety of nutrition.

Homemade wholemeal spelt bread

Ingredients:

- 4 cups wholemeal spelt flour
- 1 tablespoon of active dry yeast
- 3 spoons of extra virgin olive oil (or oil of your choice)
- 1½ teaspoons of salt
- 1 tablespoon of coconut sugar
- 1¼ cups water approx

Spelt and apple muffins

- 300 grams of whole grain spelt flour
- 1 cup of sugar for white coffee
- ¾ cup of oil
- 1 cup of milk
- 1 baking powder
- 3 apples

Individual producers also produce powder from young shoots of spelt, which are dried, ground and sold as a powder as an excellent addition to smoothies. A young plant can be used to make juices that have a detoxifying effect.

Other documents on the product:

<https://www.facebook.com/spelta.ba/>

Bionatura Vareš, <https://bionatura.ba/kontakt/>

Halilović doo. Ilijaš <https://www.biohalilovic.ba/>

5.6 Fermented Juniper Juice from Bjelasnica



Scientific name of the product: Fermented juniper juice

Common name of the product: Fermented juniper berry juice

Common name of the product in the territory of intervention: Sok od smreke

Image: Juniper fruits, juice; Photo credits:

Category: Beverage

Processed product : Other - wild collected plant

Historical production area and origin: It has been identified in Egyptian tombs as far back as 1500 AD for medicinal purposes. The Roman empire would grind it and use it as a replacement for pepper which became scarce. It became a popular spice in Northern civilizations like Germany, England and Scandinavia to flavour food and drinks. Common juniper is native to the UK, Europe and much of the northern hemisphere. It thrives on chalk lowland, moorland, in rocky areas and old native-pine woodland. It is most often found as a low-growing, spreading shrub or small tree.

History of the product: It is a traditional beverage in the Balkans dating back, at least, to the medieval period. Fermented juniper juice is a bittersweet lemonade. It can be consumed as it or sweetened with honey or sugar, and even mixed with fresh or soda water. Juniper (*Juniperus communis*), known as the common juniper, is an evergreen plant from the cypress family. This evergreen shrub has a height of 0.5 to 7 m, with very narrow, pointed, prickly leaves, a very resistant, densely and irregularly branched shrub. Its green fruits are egg-shaped, and the ripe ones are round and dark-black or purple, have a resinous and aromatic smell and a bitter-sweet taste. The whole plant is medicinal, but the fruits are most often used. Only fully ripe fruits, purple in colour, two-year-old, are medicinal. They are harvested in Bjelašnica and Nišići from the end of summer to the beginning of winter, and dried in a draughty place.

The refreshing and medicinal effect of juniper, a simple drink, is multifaceted and mainly derives from the essential oil, which is mostly found in the berries. Spruces are said to improve metabolism, the activity and ability of the body to react, and primarily affects the urinary, respiratory, digestive and nervous systems. Spruce tea is used against cough, lung catarrh and other diseases of the respiratory organs. It purifies the blood and cures catarrh of the bladder and causes sweating. The processors are also the collector producers of the plants which form the

main ingredient of the processed product, but it can also be processed by agro-industrial companies such as Boletus Doo, which is directly bought from the collectors.

Product description and its production technique: This healthy and refreshing drink “Sok od smreke” is made by pickling juniper berries, i.e. boiling and fermenting them to produce a drink that contains the healthy properties of juniper fruits. The production technique is an ancestral method.

Ingredients: 1.5 dl of juniper berries, a few slices of lemon, half an apple, 1 l of water

Preparation:

1-The berries are washed, put in a clean jar or bottle, lemon and apple cut into slices are added and water is poured (not to the top of the jar - leave some space for boiling).

2- Berries are left for 10-12 days in a warm place (at a temperature of about 25 degrees). After about 10 days, the juice is ready, strain it, cool it and, if desired, add more lemon or fruit syrup, such as cherry syrup, if you want the juice to be sweet.

3-Put a new lemon and an apple in a jar with juniper berries and add water again, and in 10-12 days you will have new juice. You can repeat this process until the berries fall to the bottom of the jar - this is a sign that they can no longer be used.

Period of production of the processed product: The period of production in autumn after first frost during the collection. However, it can be prepared all year. For this recipe, dried berries can also be used.

Nutritional value and use: Juniper berries are high in vitamin C, flavonoid antioxidants, monoterpenes, and coumarins, all of which may offer various health benefits.

Indicative quantity produced in one year:

For small-scale, traditional producers, the estimated production could be around 50 to 150 liters per year per producer, depending on the availability of juniper berries and other factors related to the ancestral method of production.

Product distribution and market: The product is sold on the local market and also used for self-consumption by the collectors. The juice is served in most Bosnian coffee shops, and you can buy the berries themselves from organic food producers and 1 kg costs 6 KM.

Preparation, consumption and preservation: Juniper berry offers many other possible uses. It is possible to prepare a Juniper sirup, to use it in alcoholic drinks, such as for the production of local gin. Smreka is slightly carbonated, so it's a nice alternative beverage. It also has a nice aromatic juniper-y flavor, quasi-reminiscent of gin. It is also used as an aromatic plant for stews and cooking fermented cabbage.

Other documents on the product:

<https://balkanlunchbox.com/fermented-juniper-berry-juice-smreka/>

<https://blog.mountainroseherbs.com/how-to-make-smreka>

<https://www.desrosiersinternational.com/product-page/juniper-berry-oil-wild-bosnia-herzegovina-15ml>

5.7 Salted Dried Lamb Meat, Stelja from Sarajevo Region



Image: Stelja, dried meat; Photo credit:

Scientific name of the product:

Salted dried meat product

Common name of the product:

Salted dried lamb meat, Stelja from Sarajevo region / Salted dried meat

Common name of the product in the territory of intervention: Stelja / štelja

Category: Processed product of animal origin

Processed product of animal origin: salted dried meat

Historical production area and origin: The historical production area and origin of "stelja" are primarily in the mountainous regions of Bosnia and Herzegovina, particularly in areas where sheep farming is prevalent. It has been traditionally prepared by rural communities for preservation purposes, utilising natural drying techniques and salting as a method to ensure meat availability throughout the winter months.

History of the product: Stelja is a traditional product originating from Bosnia and Herzegovina, dating back several centuries. The technique of preparing stelja involves salting and drying sheep meat, which was commonly done by families living in rural, mountainous areas. This method of preservation ensured that communities had a reliable protein source throughout harsh winters. Over time, stelja became a staple in local diets and a cultural symbol of the pastoral lifestyle of the region. The tradition of preparing stelja has been passed down through generations, reflecting the culinary heritage and resourcefulness of Bosnian villagers. Today, stelja is valued for its unique flavour and artisanal production methods, often enjoyed as a delicacy.

Stelja is typically made from the meat of sheep, particularly local breeds such as Pramenka, an autochthonous sheep breed found throughout the Western Balkans, including Bosnia and Herzegovina. Pramenka sheep are medium-sized, adaptable to harsh climates and varied terrains. Their coat colour can vary, but it is often white, with some animals having darker patches on the

head or legs. Pramenka sheep are often horned, with curved horns that can differ in shape between males and females. They are highly valued for their resilience, good grazing ability, and adaptability to rough mountainous conditions. Traditionally kept for their wool, milk, and meat, Pramenka sheep produce lean and flavourful meat, which makes it particularly suitable for drying and salting, contributing to the distinctive taste of stelja.

In the case of stelja, the processors are often also the breeders of the animals. Traditional production of stelja typically takes place on small family farms where the farmers raise their own sheep, such as the Pramenka breed, and use the meat to produce the final product. This close integration of breeding and processing ensures that the entire production process remains in the hands of local farmers, maintaining the authenticity and quality of the product.

Processed product description and its production technique: Stelja is a traditional salted and dried meat product made primarily from sheep. It typically has a weight ranging from 1 to 3 kilograms per piece, depending on the size of the sheep and the specific cut of meat. The product is generally rectangular or irregular in shape, with a firm, dark brown exterior and a drier texture. The flavour is rich, slightly salty, and smoky if a smoking phase is included, with an intense umami profile characteristic of aged, preserved meats. The production technique is traditional and has been passed down through generations, relying on natural drying and artisanal methods.

Production technique:

1. **Meat Selection and Preparation:** The production begins by selecting the meat, usually from mature sheep of the Pramenka breed. Cuts typically come from the shoulder, back, or thigh. The meat is trimmed to remove excess fat, leaving a leaner cut suitable for curing and drying.
2. **Salting Phase:** The prepared meat is generously rubbed with coarse sea salt, which acts as a preservative. This salting process lasts for about 5 to 7 days, depending on the thickness of the cuts and environmental conditions. During this period, the meat is kept in a cool, ventilated area, allowing the salt to penetrate deeply. Sometimes, spices such as garlic, pepper, or bay leaves are also added to enhance flavour.
3. **Washing and Resting:** After the salting phase, the meat is rinsed to remove excess salt and left to rest for about 24 hours. This step allows for redistribution of the salt within the meat and stabilises the flavour.
4. **Drying Phase:** The salted meat is then hung in a well-ventilated, shaded area for drying. The drying phase can take from 3 to 6 weeks, depending on the ambient temperature and humidity. Traditional drying usually takes place during the cooler months to ensure proper preservation without spoilage. During this period, natural airflow aids in slowly dehydrating the meat, resulting in a firm texture and concentrated flavour.
5. **Optional Smoking Phase:** In some regions, the drying process includes smoking, which imparts a distinct smoky flavour to the stelja. The smoking is done using local wood, typically beech, and lasts for about a week, with periodic exposure to smoke.

Ingredients and their origin:

- **Sheep Meat:** The main ingredient is sheep meat, typically from local breeds like Pramenka, raised in the mountainous regions of Bosnia and Herzegovina.
- **Salt**
- **Optional Spices:** Garlic, pepper, and bay leaves are sometimes added to enhance the flavour, and these ingredients are often sourced from local farms or markets.

Period of production of the processed product: The production of stelja typically takes place during the colder months of the year, usually from late autumn to early spring (November to March). This period is ideal because the cooler temperatures and lower humidity levels create the perfect conditions for salting and drying the meat without the risk of spoilage. The entire production process, from salting to drying, generally takes between 5 to 10 weeks, depending on weather conditions and the desired level of dryness of the final product.

Nutritional value and use: Stelja is a high-protein product, rich in essential nutrients derived from sheep meat. It provides a significant amount of protein, averaging around 25-30 grams per 100 grams of product, which makes it a good source of amino acids for muscle growth and maintenance. The fat content varies depending on the cut of meat used, typically ranging from 10-15 grams per 100 grams, with a combination of saturated and unsaturated fats. It also contains important micronutrients like iron, zinc, and vitamin B12, which are crucial for energy production and overall metabolic health. The sodium content is relatively high due to the salting process, averaging around 3-5 grams of salt per 100 grams, which makes stelja a product best consumed in moderation, especially for individuals monitoring their salt intake.

Use: Stelja is traditionally used as a savoury ingredient in various dishes or enjoyed on its own as a dried meat delicacy. It is often served thinly sliced as an appetiser or part of a charcuterie platter, accompanied by cheese, bread, and fresh vegetables. Stelja is also used as a flavour enhancer in stews, soups, or casseroles, adding a rich and smoky depth to dishes. In Bosnian cuisine, it pairs well with traditional flatbread and pickled vegetables, making it a popular choice for festive occasions or family gatherings.

Indicative quantity produced in one year: The indicative quantity of stelja produced in one year is estimated to be around 50 to 100 kilograms for small family farms. This amount is more realistic given the traditional production methods and the fact that many small farmers produce stelja mainly for personal use or local sales. This estimation is based on the typical capabilities of small-scale producers and the number of sheep available for processing.

Product distribution and market: Stelja is primarily produced for self-consumption by small family farms, with a portion sometimes sold locally. When it is sold, it is typically available at regional markets, small butcher shops, or directly from the producers at farmers' markets. Sales are usually limited to local communities or nearby towns, and stelja is not commonly found in larger retail chains due to its artisanal nature and limited production scale. The product is often exchanged or gifted within the community, reflecting its cultural significance.

Preparation, consumption and preservation: Stelja is prepared through a traditional process of salting and drying sheep meat, which allows it to be preserved for long periods without refrigeration. After salting, the meat is dried in a cool, shaded area, sometimes with the addition of smoking to enhance its flavour. Once dried, stelja is typically stored in a dry, well-ventilated space, where it can be kept for several months.

Consumption: Stelja is often eaten as a delicacy, served thinly sliced alongside traditional accompaniments such as cheese, pickled vegetables, and fresh bread. It is a popular choice for festive occasions, particularly during winter and holidays. The flavour profile is intense, and it is often enjoyed with other traditional Bosnian dishes.

Traditional Recipes and Uses:

- Stewed Stelja (Stelja na saftu): Stelja is sometimes used in stews, where it is cooked with onions, potatoes, and various spices to create a hearty, flavourful dish. The saltiness of stelja adds depth to the stew, making it a comforting winter meal.
- Grah / pasulj sa steljom: Another traditional use is in a bean stew (pasulj), where stelja is added to enhance the smoky, savory flavour. The dried meat is cooked with beans, bay leaves, and garlic, creating a rich and satisfying dish.
- Charcuterie Boards: Thin slices of stelja are also popular on charcuterie boards, paired with other local specialties like suho meso (dry-cured beef), kajmak (creamy dairy spread), and traditional flatbreads.

Cooks and Restaurant, in BiH stelja is not commonly found in mainstream restaurants but may be featured in rural or traditional eateries, especially those that focus on authentic Bosnian cuisine. Some etno-restorani (ethnic restaurants) and guesthouses in mountainous regions, like those in the areas around Bjelašnica or Nišići plateau may serve stelja as part of their menu, emphasizing locally sourced ingredients and traditional preparations. Overall, stelja remains a highly valued part of Bosnian culinary heritage, best enjoyed as part of family gatherings or special occasions, where its deep flavour and cultural roots are most appreciated.

Other documents on the product:

<https://www.agroklub.ba/prehrambena-industrija/stelja-i-pastrma-proizvodi-sa-dugom-tradicijom-kako-ih-pripremaju-majstori/64982/>

5.8 Torotan Cheese from Sarajevo Region



Image: Torotan cheese; Photo credit: Mljekara Perfetto Plus

Scientific name of the product: Caseus bovinus torotanus in pelle ovina / Torotan cheese made from cow's milk in a sheep's skin sack

Common name of the product: Torotan cheese

Common name of the product in the territory of intervention: Torotan sir

Category: Processed product of animal origin: dairy product

Historical production area and origin: Torotan cheese originates from Bosnia and Herzegovina, specifically from the mountainous regions where traditional cheese-making practices have been passed down through generations. The production of this cheese is closely tied to pastoral life,

particularly in rural areas of central Bosnia, like Bjelašnica or Nišići plateau, where sheep and cow farming has long been a cornerstone of local agriculture. Torotan cheese has historically been produced in mijeh (sheep or goat skin sacks), which gives it a unique flavour and texture. The tradition of making Torotan cheese remains an integral part of the cultural and gastronomic heritage of the region.

History of the product: Torotan cheese has been made for centuries in Bosnia and Herzegovina, using traditional techniques passed down through generations. It was originally produced in rural, mountainous regions, where preserving milk in sheep skin sacks (mijeh) was a common practice. The cheese became a staple in local households, valued for its unique taste and long shelf life.

Torotan cheese is traditionally made from the milk of Bosnian dairy cattle and sheep. In particular, the autochthonous breed 'Buša' cattle is often used in the production of this cheese. Buša cattle are small in size, with a coat that ranges from grey to brown in colour. They are well adapted to the mountainous regions of Bosnia and Herzegovina, where they thrive on limited resources. These cattle are known for producing high-quality milk with a rich fat content, which is ideal for cheese-making. The sheep used for milk are typically from local breeds such as the 'Pramenka,' known for their resilience and ability to produce flavorful milk even in harsh conditions.

In the case of Torotan cheese, the processors are often the same individuals or families who breed the cattle and sheep that provide the milk. This is particularly true in traditional, rural settings where small-scale dairy farming and cheese production have been practised for generations. These farmers oversee the entire process, from animal care to milk collection and cheese-making, ensuring the quality and authenticity of the final product.

Processed product description and its production technique: Torotan cheese is a traditional Bosnian dairy product made from cow's milk, and sometimes with the addition of sheep's milk. The cheese typically weighs between 1 to 3 kilograms and has a semi-hard texture, with a slightly crumbly yet creamy consistency. The shape varies, but it is commonly cylindrical or moulded into blocks depending on the container used during production. The flavour is rich, slightly tangy, and salty, with earthy notes from the ageing process in sheep's skin sacks (mijeh), which imparts a unique aroma. The production technique is entirely traditional, passed down through generations. The process begins with fresh cow's or sheep's milk, which is heated and mixed with rennet to coagulate. Once curdled, the curds are cut and drained of whey, then placed into mijeh (sheep or goat skin sacks) for ageing. The ageing process can last anywhere from 1 to 6 months, depending on the desired flavour intensity. During this time, the cheese ferments naturally, developing its characteristic taste and texture. The key ingredients are fresh milk from local breeds of cattle or sheep, rennet (often natural), and salt. The animals are typically raised in the mountainous regions of Bosnia and Herzegovina, where they graze on natural pastures, which enhances the flavour of the milk and, subsequently, the cheese.

Period of production of the processed product: Torotan cheese is traditionally produced throughout the year, though the highest quality cheese is often made during the spring and summer months when cows and sheep graze on fresh mountain pastures. The ageing process can take from 1 to 6 months, depending on the desired flavour and texture.

Nutritional value and use: Torotan cheese is a rich source of essential nutrients, including protein, calcium, and healthy fats. It typically contains around 20-25% fat, 15-18% protein, and is low in carbohydrates. Due to its nutrient density, Torotan cheese is often consumed as part of a balanced diet, either on its own, with bread, or as a complement to traditional Bosnian meals. It is especially valued for its long shelf life and unique flavour profile, making it a popular choice in rural households and during festivities.

Indicative quantity produced in one year: In the regions of Bjelašnica and Nišićka Visoravan, the annual production of Torotan cheese is becoming increasingly rare. Currently, only a few households still maintain the tradition of producing this cheese, with an estimated annual output of around 300 kilograms. The cheese, once a staple of daily consumption in these areas, is gradually disappearing from both the tradition and everyday diet. Younger generations are less involved in this artisanal production, and as a result, Torotan cheese is now produced primarily for local consumption by families that continue to uphold this heritage.

Product distribution and market: Torotan cheese, once primarily produced for self-consumption, is now also available for purchase in local and national markets. It can be found in stores such as Konzum and through producers like Pađeni, who offer it in various sizes, typically ranging from 300g to 800g, packaged for broader distribution. Despite its availability in larger retail settings, the traditional method of production remains limited to a few households in regions like Bjelašnica and Nišićka Visoravan. As a result, the artisanal version of Torotan cheese is still a rarity and highly sought after by those who value its authentic taste.

Preparation, consumption and preservation: Torotan cheese is traditionally prepared using raw cow's milk, and sometimes with the addition of sheep's milk. After curdling with rennet, the cheese is aged in sheep or goat skin sacks (mijeh), which imparts a distinct flavour. It is typically consumed as part of a meal with bread, vegetables, or cured meats. In traditional Bosnian cuisine, Torotan cheese is often served as an appetiser or a side dish, and it is particularly enjoyed during family gatherings and festive occasions. It can be used in various recipes, such as baked dishes or in combination with grilled meats (such as ćevapi), or paired with honey for a sweet-salty flavour contrast. It is also preserved by storing it in cool, dry places, and its long shelf life makes it ideal for preservation in mijeh, which allows the cheese to mature and develop its flavour over time. Some local restaurants and traditional Bosnian taverns, particularly in rural areas around Bjelašnica and Nišićka Visoravan, still feature Torotan cheese on their menus. However, it remains a specialty product and is not widely used in commercial kitchens. Due to its unique flavour and texture, it is primarily appreciated by locals and culinary enthusiasts who seek out traditional foods.

5.9 Honey from Nišići Plateau



Scientific name of the product:

Common name of the product:

Honey from Nisici plateau

Common name of the product in the territory of intervention:

Nisicki med

Image: Mlin Nisici; Photo Credit: Mlin Nisici

Category: Processed product of plant origin: Sweets (slatka viskozna tečnost)

Historical production area and origin: Historical records found in Spain indicate that honey was produced 30,000 years ago thanks to cave drawings of man taking honey. Then records from 10,000 years ago show that it was cultivated by the Assyrians and Egyptians, then by the Greeks and Romans. The Egyptians were known for their skill in beekeeping and were the first to develop methods for raising bees and producing honey. In the Middle Ages, honey production was highly valued and spread throughout Europe. Many families engaged in this as a significant source of income, passing on the traditional skills of beekeeping and honey production. Beekeepers took special care of their bee colonies, and beekeeping became essential, especially in self-sustaining colonies. Monks in monasteries often took responsibility for beekeeping, raising bees to produce honey and wax.

History of the product: Honey has always played an exceptional role in the everyday life of the Egyptians - it was used as food, medicine, and even as an embalming agent. They believed that honey was a divine gift and often used it in religious ceremonies.

Each type of honey has specific characteristics and a unique taste, which depends on the type of flowers or plants that the bees pollinate. For example, acacia honey has a mild and sweet taste, while chestnut honey has a darker amber color and a rich, caramelized taste. Lavender honey has a pleasant floral aroma of lavender, while olive honey has a special spicy tone.

On the Nišići plateau, mountain meadow honey is produced, which is a combination of blackthorn, hawthorn, wild cherry, etc. Given that it is at higher altitudes, smaller quantities of honey are produced, but of exceptional quality with a lot of minerals.

Processors are usually not the producers of the plants which form the main ingredient of the processed product. But there are also producers of buckwheat, which is a honey plant on which bees graze.

Processed product description and its production technique: The honey is stirred with a rolling pin, waits for it to stabilize, then is filled into sterilized jars and closed with a metal lid. Packs and distributes. Depending on the beekeeper, the methods of production differ in some details, so that someone moves and therefore has a different type of honey. Depending on the method of feeding during the winter, the quality of honey also varies.

Those who do not move have more authentic honey, but also a smaller amount produced. Also, some beekeepers in the fight against diseases, primarily varroa, use organic preparations such as foodstuffs or garlic. The entire production process is based mainly on traditional methods with the use of certain new methods, techniques in the treatment and prevention of diseases.

Period of production of the processed product: from May in the lower regions to mid-July at higher altitudes

Nutritional value and use: Honey is considered one of the healthiest foods. 100 grams of honey contains 286 calories, which is significantly less than 100 grams of sugar. It has significant antioxidant, antibacterial, anti-inflammatory properties. It also contains flavonoids, phenolic acid, vitamin C, tocopherols, glutathione and numerous trace minerals depending on the type of grazing. Since it contains sugar fructose, which is a natural invert sugar, the human body does not need to break it down like ordinary sugar, so it is more digestible and a faster source of energy over a longer period of time, which is recommended especially for athletes. It cleans the blood of toxins, but it is also stronger because it stimulates hemoglobin production.

Honey is used directly in food, but also as a substitute for sugar in the production of cakes, candies, pastries, rahat lokum, compote. Honey is also used to make mead - brandy, liqueur, non-alcoholic drinks, then it is used in pharmacy, cosmetics, etc.

Indicative quantity produced in one year: 4700 tons

Product distribution and market: The majority of honey producers sell on doorsteps, On the Nišići plateau, the following beekeepers were met or interviewed– Senad Milovac 062 124 961, Zlatan Herić 061 366 533 or Senad Alic 062 124 961 then at fairs, and in certain sales facilities such as health food stores, e.g. Malak Shop, DM actions. The medium price for one kg of honey sold on site is about 12,5 Euros. Among many beekeepers we met, many are scaling down their production because the public subsidies are too low and not supportive enough. The productivity in mountain areas such as in Sarajevo canton cannot reach the same level of productivity as in Herzegovina region. They also reduce their production because there is a lack of labour force to help them in season. In particular beekeeping requires strong technical knowledge.

Preparation, consumption and preservation: Many traditional Bosnian pastries can be prepared based on honey instead of sugar such as Ruzice or Hurmasice. There are a few simple recipes using honey.

Honey cream. It is prepared as follows: 3 glasses of cream are well whipped (beat like egg whites), add 1 glass of honey and 1 tablespoon of gelatin, previously stirred in cold water, and then in warm water. All this is mixed well and poured into suitable dishes (forms), then cooled.

Compote from garden strawberries. Strawberries are washed well, drained and dried in the sun, thinned on a cloth. After that, they are carefully mixed with the same weight of honey, left for 2-3 hours before use. They can also be placed in well-closed jars for winter use. Raspberries can be stored in a similar way.

Cucumbers with honey. Clean young, medium-sized cucumbers, cut them into rings and add 200-300 g of honey to each kilogram, mix and leave for several hours before us.

Other documents on the product:

Pčelinjaci Zrno <https://www.facebook.com/pcelinjaci.zrno/>

Med Čolić <https://www.facebook.com/med.colic>

Biljna apoteka Aromatika <https://aromatica.ba/?v=07159c47ee1b>

Pčelarstvo Šabanović <https://www.facebook.com/medsabanovic/>

Medene Sarajevo <https://www.facebook.com/medenetortesarajevo>

Hasan Smailbegović <https://www.facebook.com/groups/2982128408492685/user/100000702994761>

5.10 Buckwheat Flatbread from Nišici



Scientific name of the product: N/A

Common name of the product:

Buckwheat flatbread

Common name of the product in the territory of intervention:

Lepinica od heljde

Image: Buckwheat flatbread, Photo credit: <https://www.klix.ba/biznis/privreda/porodica-kojic-donaciju-heljde-pretvorila-u-unosan-biznis-i-delicije-koje-svi-oboavaju/150824024>

Category: Processed product of plant origin - Bread and savory bakery products

Historical production area and origin: The Nišićka Visoravan (Nišići Plateau) region, renowned for its fertile plains and rich tradition of grain cultivation, is a historical area for the production of buckwheat. Farmers here have long grown buckwheat alongside other grains due to the area's favourable climate and soil conditions, ideal for buckwheat's resilience and nutrient-rich yield. Traditional recipes, like the buckwheat flatbread known as lepinica, are deeply rooted in the plateau's culinary heritage. This nutritious bread highlights the simplicity and sustenance of local ingredients, symbolizing the plateau's agricultural legacy.

History of the product: The buckwheat flatbread, known as lepinica, has origins dating back centuries within Bosnia and Herzegovina, particularly in regions like the Nišićka Visoravan. Originally, lepinica was made by local communities as a practical and nutritious food, providing a staple for those working in agriculture. Its ingredients were simple and readily available—buckwheat flour, water, and salt—making it both affordable and rich in fiber and nutrients. Over generations, lepinica became an enduring symbol of local tradition, often enjoyed with other regional foods like cheese, kaymak, and cured meats, and is celebrated as a healthy, gluten-free alternative in modern cuisine today.

Appearance and Texture: Lepinica is a round, flat bread with a dense and slightly moist texture. Its dark, earthy color and firm structure come directly from the buckwheat flour used in its preparation.

Aroma and Flavor: The bread has a subtly nutty and earthy aroma, with a mild, slightly bitter flavor characteristic of buckwheat. Its taste reflects the traditional simplicity of ingredients, often just buckwheat flour, water, and a pinch of salt, retaining the wholesome essence of the grain.

The essential ingredient, buckwheat, is grown on the Nišićka Visoravan, where the climate and soil conditions contribute to producing a nutrient-rich, flavorful grain. This regional buckwheat is key to achieving the authentic taste and texture of lepinica, which has sustained the community as a healthy, gluten-free bread choice for generations.

In the case of lepinica od heljde, the processors are typically also the producers of the buckwheat, the main ingredient in this traditional product. Many families and small-scale farmers on the Nišićka Visoravan grow buckwheat locally, both for their own use and for small community markets. These producers handle the entire process—from cultivating and harvesting the buckwheat to milling it into flour and preparing the lepinica.

Processed product description and its production technique There are different ways to prepare lepinica—some recipes include yeast for a lighter texture, while for uštipci od heljde, an egg is often added, giving them a soft interior and a slightly richer flavor. It is also sometimes mixed with wheat flour, which can create a slightly softer texture. Here, we will describe the simplest method of preparation.

Weight and Shape: Lepinica od heljde is a small, flat round bread, typically weighing between 100 and 200 grams per piece, with a rustic, earthy appearance and a dense texture.

Flavour: Its flavor is mild and nutty, with a slightly bitter undertone typical of buckwheat, balanced by a subtle saltiness. This distinct taste comes from the high-quality, locally-grown buckwheat flour,

which enhances its unique character. The technique for making lepinica od heljde is traditional, passed down over generations and involving simple, natural ingredients.

Ingredients: buckwheat flour, water, salt.

Preparation

1. (10-15 minutes): The buckwheat flour is freshly milled or obtained from local mills. It is combined with water and salt in a mixing bowl, forming a thick, cohesive dough.
2. Mixing and Kneading (5-10 minutes): The dough is kneaded gently until smooth, ensuring even hydration and a dense yet pliable texture.
3. Shaping (5 minutes per piece): Small portions of dough, each weighing around 100-200 grams, are shaped by hand into round, flat discs, about 1 cm thick. This hand-shaping is a traditional method that preserves the rustic look and unique texture of the bread.
4. Resting (10-15 minutes): The discs are left to rest briefly, allowing the flour to fully absorb the water, which enhances the texture and prevents cracking during cooking.
5. Cooking (5-10 minutes per piece): Lepinica is traditionally cooked on a preheated iron skillet or in a stone oven, both typical of Bosnian households. The cooking time is about 5 minutes on each side, giving the bread a slight crispness on the outside and a moist, tender crumb within.

Period of production of the processed product: Lepinica od heljde is traditionally produced throughout the year, as buckwheat flour can be stored for extended periods.

Nutritional value and use: Lepinica od heljde is highly valued for its nutritional profile, being rich in fiber, protein, and essential minerals like magnesium, iron, and zinc. Buckwheat is naturally gluten-free, making lepinica a suitable option for those with gluten sensitivities. It also contains antioxidants and has a low glycemic index, which supports balanced energy release and stable blood sugar levels. Traditionally enjoyed as a staple food, lepinica can be served with a variety of accompaniments, such as cheese, kaymak, or yoghurt. It is also versatile enough to pair with stews, meats, or vegetables, making it suitable for both daily meals and special occasions. In modern cuisine, it's often appreciated as a healthier, gluten-free bread alternative.

Indicative quantity produced in one year: The annual production of *lepinica od heljde* varies depending on the availability of locally-grown buckwheat and community demand.

Product distribution and market: Lepinica od heljde is primarily produced for self-consumption, especially by families on the Nišićka Visoravan, where it holds cultural and dietary significance. However, it can also be found at local markets and small shops in the surrounding region in particular Doni Oaza at Bijambare park restaurant, which is the speciality of the place and also at different smaller inns on the main road between Sarajevo and Olovo. It is served hot with kajmak.

Preparation, consumption and preservation: Lepinica od heljde is typically prepared by mixing buckwheat flour with water and a pinch of salt to form a dense dough, which is then shaped into flat, round discs and cooked on an iron skillet or in a traditional stone oven. In some recipes, wheat flour is added for a lighter texture, or yeast is included to make the bread rise slightly. This simple preparation method preserves the natural flavors of buckwheat and reflects the traditional, rustic cooking style of the Nišićka Visoravan.

Lepinica is enjoyed fresh, often served with local dairy products like kaymak or cheese, as well as with cured meats, stews, or even honey for a sweeter version. It is a staple at family meals and traditional gatherings and is often served warm as an accompaniment to main dishes or as a standalone snack.

Due to its dense texture, lepinica has a relatively short shelf life and is best consumed within a day or two of preparation. It can be wrapped in cloth to maintain moisture or stored in a cool place. For longer preservation, lepinica can be frozen and then reheated before serving, although some flavor and texture may be lost.

Lepinica is versatile and can be used as a base for toppings, similar to flatbreads, or as a wrap for various fillings. Its wholesome flavor pairs well with both savoury and sweet additions, making it adaptable for modern culinary experimentation while honoring its traditional roots.

Buckwheat lepinica is often served in hospitality establishments across the Nišićka Visoravan region, along with traditional buckwheat uštipci.

5.11 Aronia Berry from Nišići Plateau



Scientific name of the

product: Aronia

melanocarpa

Common name of the

product: Aronia (Aronia berry from Nisici plateau)

Common name of the product in the territory of intervention: Aronia

Image: Aronia berries and Aronia plantain on Nišići plateau; Photo credits: Alterural

Category: Fruit

Historical production area and origin: Aronia originates from North America, where natives used it in food and to treat colds and strengthen immunity. At the beginning of the 20th century, it began to be cultivated in Eurasia, especially in the north of Russia, thanks to its resistance to low temperatures (up to -35°C). From Russia, cultivation spread to the countries of the former USSR and Europe. Aronia was first officially recognized as a fruit species in the variety list of the USSR in 1975 (Alter, 2010).

Cultivars, species and types: order Rosales, family Rosacea,

Description: Aronia is a perennial shrub with a height of 2-3 m, sometimes up to 4 m, with a diameter of about 2 m. It is compact at first, but later spreads under the weight of the fruits. Red chokeberry grows more luxuriantly than the typically shorter black chokeberry (Brand, 2010). Aronia thrives at altitudes of up to 1200-1500 m, in different climates, from Siberia to the Mediterranean, thanks to its resistance to cold. Damage occurs at -23°C at the beginning of winter, and at -35°C in mid-winter; the root freezes at -12°C. In summer, high temperatures and drought make the fruits more astringent.

It requires a moderate amount of water, with an optimal annual amount of precipitation of 500-700 mm, while higher amounts of up to 1000-1200 mm can increase the yield by up to 30%. Aronia requires a lot of light and does not do well in the shade. Stressful conditions, such as drought and temperature fluctuations, reduce fruit mass, but increase quality due to increased synthesis of antioxidants. It is a self-pollinating plant that, in unfavourable conditions for pollination, can successfully set up to 40-60% of fruits.

Harvest period: July - September, the vegetation period lasts 170 days

History of the product: The use of aronia as a fruit species began in the former USSR, it found its way to Europe via Ukraine, Moldova and Bulgaria, and in the early 1980s it spread to Scandinavian countries, Czechoslovakia and especially Poland, which is today the leading producer of aronia. Due to ties with the USSR, aronia also reached East Germany, especially Saxony, where three large plantations were built, and the fruits were used in the food industry and as a vegetable pigment. Today, aronia plantations are estimated to cover about 20,000 hectares worldwide, with an annual production of 150,000 to 200,000 tons. Apart from Poland, significant production also exists in Germany, where industrial fruit processing has developed (Nikolić, 2015).

Nutritional values and use: Aronia fruit contains dry matter (15-20%), total sugars (9-15%), reducing sugars (7-13%), total polyphenols (1500-25000 mg/100 g) and anthocyanins (800-1000 mg/100 g (Ochmian et al., 2012) It is rich in vitamins B, C, P and E, as well as minerals (potassium, zinc, magnesium, iron, etc.). Polymerized proanthocyanins are dominant, especially epicatechin (66%), while cyanidin group glycosides (cyanidin 3-xylosid) are the main ones (Slimestad et al., 2005). , in the form of liqueurs, marmalade, jam, brandy, but also high-quality wine.

Indicative quantity produced: no data, from the conversation I learned that what is evident is that the areas under chokeberry are decreasing due to sales problems because production is becoming more and more expensive, including the final product and producers believe that in order to increase production, incentives would be needed for processing aronia.

Product distribution and market: Individual farms sell aronia products through social networks. On the website of OPG from Kiseljask, <https://plantaza.eu/kod-kojih-bolesti-pomaze-sok-od-aronije/> you can find aronia juice in the form of tea company Mediimpex, Bonito.ba, ZENTA farm doo, Organic production HERCEG, Herbafarm <https://www.facebook.com/AronijaTravnik>. On Nisici plateau, aronia is available fresh in season or as processed juice at various locations directly on site: Restoran Mlin, Brvnare Nisicka Visoravan, Nisicka Oaza (which also has a wide plantation) and at RPG "Heric" listed under.

Preparation, consumption and preservation:

Boiled aronia

Ingredients: 1 kg chokeberry, 500 g of currants (preferably white), 1 lemon, A little water, 1 kg of sugar

Preparation:

1. Wash chokeberry, currants, lemon and cook together with water on low heat until they soften.
2. Then separate the water and put the fruit in a container and add sugar and boil.
3. Serve with venison steaks, new potatoes and peas.

Jam of aronia

Ingredients: 3 kg of aronia, 3 kg of sugar, 600 ml of water, 2 larger or 3 smaller lemons, 4 teaspoons of vanilla flavour or, if desired: cinnamon

Preparation:

1. Place aronia berries in a large pot, add water, and bring to a boil. Simmer for about 10-15 minutes until the berries soften.
2. Add the sugar and stir until it dissolves completely. Continue cooking on medium heat, stirring occasionally.
3. Add the lemon juice and vanilla (or cinnamon, if desired) and mix well.
4. Reduce heat and let the jam cook slowly, stirring occasionally, until it thickens to your desired consistency. This may take about 1-2 hours.
5. Pour the hot jam into sterilized jars, seal them tightly, and let them cool completely at room temperature.

5.12 Nišićke Keške Traditional Dish



Image 23. & 24. Keške; Photo credit: Internet

Scientific name of the product: /

Common name of the product: Keške (Nišićke Keške traditional dish)

Common name of the product in the territory of intervention: Keške

Category: Processed product of plant and animal origin; Other: traditional dish based on meat and cereals

Historical production area and origin: Keške has a deep historical connection to the Balkans and the Middle East, with roots that trace back to the Ottoman Empire. The dish is particularly popular in Bosnia and Herzegovina, Turkey, and parts of the Levant. It was traditionally prepared in rural areas during significant cultural or religious celebrations, especially among Bosnian Muslims for Bajram (Eid) and in Turkey, often during Ashura. The recipe likely originated from ancient methods of cooking whole grains and meat in one pot, which was common in agricultural societies. Over time, it evolved into a ritual dish, valued for its simplicity, nutrition, and communal preparation. In Bosnia and Herzegovina, Keške has been passed down through generations, especially in villages, and remains a cherished symbol of hospitality and tradition.

History of the product: Keške is the name for a simpler traditional dish that is usually prepared for religious holidays in some parts of Bosnia and Herzegovina. Keške is chicken or beef and wheat or barley stew and its name comes from the Turkish language. The root of the word is "češke", which means food prepared from flour and meat. Although this dish was originally, in these regions, prepared only for major religious holidays, Christmas, Eid, in recent years it is prepared more and more often throughout the year, especially in winter.

Varieties with which the products is obtained: Keške, as a processed product of both plant and animal origin, is primarily obtained by cooking wheat (often *Triticum aestivum*) and meat, usually beef (*Bos taurus*) or chicken (*Gallus gallus domesticus*). There are different varieties of Keške depending on the type of meat and preparation method, which can be described by their physical

and organoleptic characteristics. In the beef Keške variety, wheat is cooked until soft and partially mashed, creating a thick, porridge-like consistency. The beef is cooked until tender, then shredded and mixed with the wheat. This variety has a robust, full flavor with a slight chew due to the texture of the wheat, and its richness comes from the beef. Beef Keške is traditionally popular in Bosnia for larger gatherings or during colder months due to its hearty nature. On the other hand, chicken Keške has a similar consistency but is lighter in color compared to the beef version, as chicken meat easily softens and blends with the wheat. Chicken Keške has a milder flavor, with a smooth texture that highlights the natural taste of the wheat. It is considered a lighter version and is often preferred during warmer months.

The fundamental ingredients for Keške are all locally sourced, where wheat is grown in agricultural regions such as Nišići plateau, where soil and climate conditions are ideal. Beef and chicken are sourced from local farms in rural areas of the country, with traditional cattle breeds and free-range chickens preferred for their quality and flavor. The preparation of Keške, passed down through generations, is deeply rooted in Bosnian culinary tradition and relies on locally sourced, fresh ingredients, enhancing its cultural significance.

Processors can but do not always have to be the primary breeders of the animals or producers of the plants used in its preparation. Instead, local farmers and agricultural producers in Bosnia and Herzegovina supply the main ingredients: wheat and meat. Wheat is cultivated by grain farmers, especially in fertile regions like Nišići Plato, while cattle and poultry farmers supply the beef and chicken. The preparation and processing of Keške are often done by individuals or small-scale food producers, especially for traditional and ceremonial occasions. These processors usually obtain their ingredients from local suppliers, who specialize in the breeding of animals and cultivation of wheat, rather than being directly involved in the primary production themselves.

Describe the processed product and its production technique: The finished product has a soft, creamy texture with a hearty and savoury flavor that varies slightly depending on the type of meat used. Typically, Keške is portioned by serving size rather than by a fixed weight or shape, as it is often prepared in large quantities for communal gatherings.

Period of production of the processed product: The dish is made throughout the year, although much more often during the winter. This probably comes from the fact that keške can stand for several days in a cold place. So when there were no refrigerators, keške was made in the winter and kept in cold rooms.

Nutritional value and use: Keške is a nutritious dish valued for its balanced combination of protein, fiber, and carbohydrates. Here's an overview of its nutritional value and common uses:

1. Carbohydrates: The primary ingredient, wheat, is a rich source of complex carbohydrates, providing long-lasting energy and aiding digestion due to its fiber content.
2. Protein: Depending on the type of meat used, Keške is an excellent protein source. Beef offers a higher protein content and additional nutrients like iron and B vitamins, while chicken provides lean protein with less fat.
3. Fat: The fat content varies based on the meat used. Beef Keške has a moderate amount of fat, while chicken Keške is typically lower in fat, making it a lighter option.
4. Fiber: The wheat component contributes a significant amount of dietary fiber, which aids digestion, helps regulate blood sugar, and promotes satiety.

5. Vitamins and Minerals: Keške contains iron, magnesium, B vitamins, and zinc, essential nutrients supporting energy levels, immune function, and muscle repair.

Indicative quantity produced in one year: The indicative quantity of *Keške* produced annually can vary widely depending on the region and household practices, as it is traditionally prepared for specific occasions rather than regular, large-scale production. In Bosnia and Herzegovina, where *Keške* is often made for celebrations, and family gatherings, the quantity per household or family is relatively small but concentrated during certain times of the year.

Product distribution and market: *Keške* is mostly made only for self-consumption for special occasions or as an everyday dish. It is cooked in all communities and in particular in Catholic communities for Christmas and important family and religious events.

Preparation, consumption and preservation:

Preparation: *Keške* is traditionally made from chicken or beef and barley (instead of wheat) in Nišići, and the whole chicken is used in the preparation. It takes several hours to cook *keške*, and traditionally a larger quantity is cooked

Ingredients:

- 2 kg of barley in Nišići or wheat in other regions
- 2 kg of chicken.
- salt only at the end according to preference

Preparation of keške in Nisici.

1. Clean and wash the barley or wheat well and leave it in warm water for a short time.
2. Then the barley/wheat is crushed in a wooden bowl- "Stupa". Stupa is a narrow, deep wooden container in which barley/wheat is placed and struck with a clean, solid object, most often it was an iron bar called "čuskija". With this step, the wheat is separated from the husk. After washing, the wheat is ready for cooking.
3. Place the barley and chicken in a large pot, add water and cook over low heat, occasionally shaking the pot. A little bit of salt can be added, but it is usually added only when serving the dish. A little oil can also be added. The dish is cooked when the meat easily separates from the bone.
4. The next step is to remove all bones and skin from the dish and the dish is ready to serve. In some regions, such as the Nišić plateau, a small cup of milk is added at the end, although this is not a common practice in other parts of Bosnia.

Alternative cooking method is to cook chicken and wheat/barley separately, and then, when cooked, put everything together in one big pot. In this case, the chicken meat is first separated from the bones and skin, chopped and then added to the wheat. Cook together to combine and occasionally add the water in which the chicken was cooked. Cook on low heat and stir occasionally.

Consumption: Before serving, the dish is heated, salted, and sprinkled with a little melted butter or oil.

Preservation: *Keške* can be stored for 5-6 days in the fridge or can be frozen

Other documents on the product:

<https://www.youtube.com/watch?app=desktop&v=H35M7oyP88Y>

<https://bljesak.info/lifestyle/hrana/tradicionalno-blagdansko-jelo-koje-odmara-zeludac/404522>

5.13 Ašura



Image: Ašura; Photo credit: <https://www.aa.com.tr/ba/balkan/>

Scientific name of the

product: Multi-fruit/grain dessert

Common name of the

product: Ašura (Multi-fruit/grain dessert)

Common name of the product in the territory of intervention: Ašura

Category: Processed product of plant origin - Sweets

Historical production area and origin: Ašura, as a dish prepared on the Day of Ašura, has a rich history in Islamic tradition and has spread to various regions, including Bosnia and Herzegovina. In BiH, Ašura is especially associated with rural areas, and it is traditionally prepared on the Nišićka plateau. The Nišićka plateau is home to many families who have passed down Ašura recipes for generations. In this region, Ašura is not just a sweet dish but also a symbol of community and solidarity, as it is traditionally shared with family and neighbours. The combination of ingredients such as wheat, dried fruits, and nuts has been used in the local cuisine for centuries, due to the availability of agricultural products in the area. Ašura can be made with anywhere from 7 to 77 ingredients, depending on family traditions and availability.

History of the product: The dish “Ašura” has deep historical and cultural roots, particularly within Islamic tradition, where it is prepared on the Day of Ašura. This day holds significance across various Muslim communities and is associated with historical events such as the deliverance of Prophet Musa (Moses) and his people, as well as the martyrdom of Imam Husayn at the Battle of Karbala. The preparation of Ašura as a dish has spread across numerous regions, including the Balkans and the Middle East. In Bosnia and Herzegovina, “Ašura” has become closely linked with rural areas and is particularly celebrated on the Nišićka plateau.

Varieties with which the product is obtained: Ašura, as a processed product of plant origin, is traditionally made from a variety of grains, dried fruits, and nuts, all of which are fundamental to its preparation. The primary raw materials include:

1. Wheat or Barley: These grains form the base of the dish and are boiled until soft. The wheat used is typically of a local variety, historically grown in rural areas such as the Nišićka plateau.
2. Dried Fruits: Commonly used fruits include raisins, dried apricots, figs, and sometimes dates. These provide a natural sweetness and are rich in vitamins and minerals. The use of dried fruits is

a traditional practice, allowing for the preservation of fruits harvested during the summer months for use in the colder seasons.

3. Nuts: Walnuts, almonds, and hazelnuts are often added to enhance the texture and nutritional value of the dish.

Physical and Organoleptic Characteristics:

- Appearance: A thick, porridge-like consistency with visible grains, fruit pieces, and nuts.
- Texture: Soft and chewy due to the combination of boiled grains and dried fruits, with occasional crunchiness from the nuts.
- Flavor: Sweet, with subtle tartness from the dried fruits and a nutty undertone. Spices like cinnamon or clove are sometimes added for warmth and depth.
- Aroma: A mix of fruity sweetness and nutty richness, with potential hints of spice.

The fundamental raw materials for Ašura are typically sourced from Bosnia and Herzegovina, particularly rural areas like the Nišićka plateau, which is renowned for its agricultural tradition. The grains and fruits used in Ašura are often harvested from local farms, maintaining the authenticity and traditional values of the dish.

This makes Ašura not only a cultural delicacy but also a product deeply tied to the land and local agricultural practices.

The grains and fruits used in *Ašura* are usually grown by local farmers in regions like the Nišićka plateau in Bosnia and Herzegovina, but the individuals who prepare *Ašura* do not necessarily cultivate these crops themselves. Instead, they rely on regional agricultural production. The wheat, barley, and fruits are often purchased from local producers, making the process a collaborative effort between local farmers and households.

Processed product description and its production technique: Ašura is typically a porridge-like dish, served in bowls or small plates. It doesn't have a defined shape since it consists of a thick mixture of boiled grains, dried fruits, and nuts. The weight of the prepared Ašura depends on the quantity of ingredients used, but it is often prepared in large batches due to its traditional sharing nature. The production technique for Ašura is traditional, with roots in local customs passed down through generations. The process of preparing Ašura in Bosnia and Herzegovina, particularly on the Nišićka plateau, remains unchanged from the traditional methods used for centuries.

Detailed Processing Phases and Times:

1. Soaking and Preparing Grains (Wheat or Barley): The wheat or barley, which forms the base of the dish, is soaked overnight to soften. After soaking, it is boiled in a large pot until tender, which can take several hours. This phase ensures the grains are soft enough to blend with the other ingredients.
2. Preparation of Additional Ingredients (Nuts, Dried Fruits): While the grains are boiling, nuts like walnuts, almonds, or hazelnuts are chopped, and dried fruits such as figs, raisins, and apricots are soaked in warm water to rehydrate them. The rehydration process takes about 20–30 minutes, and the fruits are then cut into smaller pieces.
3. Cooking the Ingredients Together: Once the grains are soft, the dried fruits and nuts are added to the pot. Some versions of Ašura also include chickpeas and beans for added texture. These ingredients are mixed and simmered together to blend the flavors. This stage typically takes about an hour.

4. Sweetening and Flavoring: Depending on preference, sugar or honey is added to sweeten the dish. In some versions, spices like cinnamon, cloves, or vanilla extract are added to enhance the flavor. The mixture is cooked for another 15–20 minutes to allow the sweetness and spices to infuse into the grains.

5. Cooling and Serving: Ašura is left to cool before being served, either at room temperature or slightly chilled. It is often garnished with more chopped nuts, pomegranate seeds, or shredded coconut for decoration and added texture.

Ingredients

- Grains (Wheat or barley)
- Dried fruits (Raisins, figs, apricots, plums, pears, apples...)
- Nuts (Walnuts, almonds, hazelnuts)
- Sweeteners (Sugar or honey)
- Spices (Optional: cinnamon, cloves)
- Water (For boiling and soaking)

The dish is a reflection of local agricultural products available in Bosnia and Herzegovina, with ingredients often sourced from local farms on the Nišićka plateau. The traditional method emphasizes simplicity and the use of natural ingredients, contributing to its cultural importance as a dish shared with family, friends, and the community during significant religious events.

Period of production of the processed product: The period of production for *Ašura* traditionally coincides with the Islamic month of Muharram, specifically around the 10th day, which is the Day of Ašura. This timing is significant due to the religious and cultural importance of the event in Islamic history. However, in some regions, especially in Bosnia and Herzegovina, the production and preparation of *Ašura* may extend beyond this day, particularly in rural areas where it is made as a communal dish and shared with neighbours, family, and those in need.

Nutritional value and use: Ašura is a nutrient-rich dish made from a combination of grains, dried fruits, and nuts, providing a variety of essential macronutrients and micronutrients that support overall health.

1. Grains (Wheat or Barley): carbohydrates, fiber, B-vitamins, minerals: Including iron, magnesium and zinc.
2. Dried Fruits: Natural Sugars, dietary fiber, vitamins, potassium:
3. Nuts (Walnuts, Almonds, Hazelnuts...): Healthy Fats, protein, vitamin E.
4. Spices (Cinnamon, Cloves - Optional): Contain antioxidants and have anti-inflammatory benefits. Enhance the flavor profile of the dish without adding extra calories.

Typical Nutritional Breakdown (Per 100g): Calories: 200-300 kcal, Carbohydrates: 45-55g, Protein: 4-6, Fat: 5-10g, Fiber: 4-6g, Sugars: 20-30g (from dried fruits and sweeteners)

Use:

- Dessert: Enjoyed after meals.
- Snack: A nutrient-dense option to sustain energy.
- Sharing: Commonly distributed to family, friends, and the community.

This dish's balance of carbohydrates, fats, and proteins provides long-lasting energy while offering a wide range of vitamins, minerals, and antioxidants.

Indicative quantity produced in one year: The annual production of Ašura is not formally tracked since it is a homemade, non-commercial dish. The annual production of *Ašura* increases significantly during the Islamic month of Muharram, especially on the Day of Ašura, as it is a time when families and communities prepare and share this traditional dish more than on other days.

Product distribution and market: Ašura is primarily made for self-consumption and shared within the community, but it is not typically sold in markets or commercial sales points.

Preparation, consumption and preservation: Preparation: Ašura is traditionally prepared by boiling grains like wheat or barley until soft, followed by the addition of rehydrated dried fruits (such as raisins, figs, and apricots), nuts (like walnuts and almonds), and sweeteners (sugar or honey). Spices like cinnamon and cloves may be added for additional flavor. The dish is typically prepared in large batches, especially during the Islamic month of Muharram, and is served cold or at room temperature.

Consumption: Ašura is consumed mainly on the Day of Ašura and is shared with family, friends, and the community as a symbol of unity and generosity. It is served as a dessert or snack and can be eaten on its own or alongside other traditional dishes.

Preservation: Ašura is best consumed fresh, but due to its low moisture content, it can be stored in a cool place or refrigerated for a few days. The dried fruits and nuts used in the dish help extend its shelf life, but it is usually made for immediate sharing and consumption.

Traditional Recipes and Uses: While Ašura is primarily prepared at home, some traditional Bosnian restaurants and cooks may prepare and serve it during religious events or special gatherings. There are no widely known commercial restaurants that specialize in Ašura, as it remains a dish closely tied to family and community traditions.

Possible other documents on the product to be annexed:

Here-under is an indicative list of additional potential products that were identified during our field visits to the producers. They could also be declined as significant raw or processed products from Bjelašnica and Nišići plateau. They need to be further evaluated and developed with the contractors.

- ✓ Bjelašnica mountain teas (varying from each collector/ producer but it is made only from local collected plants. The base is with local rosehip, thyme, mint, linden tree and elderflower). Each family or service provider has its own mix. The whole community collects and dries the plants for the winter teas, which are in fact herbal teas. A more detailed study of Bjelašnica's own blends would be in order, given the high quality of its flora. This massif marks the boundary between the Central mid-mountain of Bosnia and the Herzegovina region, with its mild Mediterranean hinterland climate. The essences are powerful and in great demand for medicinal plants and cosmetic industries. Specialized companies such as Tahirovic, Faveda and Halilovic doo offer these processed products in a variety of forms: ointments, teas, soaps, creams, essential oils and more.

- ✓ Wild cranberries from Bjelašnica used for teas.
- ✓ Dried wild pears from Nišići and Wild pear Brandy / Rakija from Nišići
- ✓ Elderly flower sirup (very common)
- ✓ Barley soup from Nišići and Bjelašnica (proposed at Koliba umoljani restaurant)
- ✓ Sutlja / Rice pudding
- ✓ Topa / Dairy product (very common)
- ✓ Many preserves (Turšija) could be included in this inventory process for the Slow food development in Canton Sarajevo (Cornellian jam, dried wild pears etc..) Kiseli Kupus / lacto fermented cabbage from Bjelašnica with mountain juniper berries. This used to be a very common preserve in the mountainous areas, where the cultivation of vegetables was shortened by long winters. They use it further for sarmas (stuffed cabbage) or just eat this as a salad in winter. This is particularly nutritive food, as a good source of vitamin c and probiotics. Ancestral preservation techniques used by mountain dwellers in the Balkans, and in particular lacto-fermented foods in the form of pickles, offer opportunities to explore in greater detail as part of a slow food project. These skills are still available, and although not always offered by local restaurants or stores, they can be exploited. A wide range of products are available
- ✓ Potkriza old dish based on meat
- ✓ Wild garlic / Srijemuš from Sarajevo region has strong potential for further culinary exploitation.
- ✓ Homemade tarhana soup with dried boletus/cep mushrooms from Nišići
- ✓ Maslanica pita from Sarajevo, Mandra
- ✓ Nettle Pita from Bjelašnica mountain which is also very common
- ✓ Kunica ice tea / Yarrow/milfoil ice tea from Bjelašnica (proposed at Sabići restaurant)
- ✓ Sarajevska Kljukuša. Potatoes are indeed very important production from both areas and offer high quality as is the case for Fojnica or Nevesinje. The product would be interesting for geographical protection. Nearly all producers have potato production and even organic certified (Halilovic doo) on Nišići plateau.
- ✓ Halva from wheat and spelta
- ✓ Jarevi hljeb, which is homemade bread with local mixed cereals baked in a "serpa" dish.
- ✓ There are also simple recipes that are not time consuming, not expensive for service providers and which often do not contain meat for vegetarians: such as "Pura" or "Cicvara" or "zaljevak", which could be developed in the menus and would certainly fit with their guests' expectations.
- ✓ Local goat cheese from Nišići and Bjelašnica based on a Travnik recipe. Though still produced in a small quantity, the demand is increasing and the producers intend to increase this production. It can be found at Didova Farma in Ostojici village and Nišići plateau and used to exist in the past.
- ✓

Illustration of other important products with a potential for Slow food inventory and valorization:



Image: Boletus Mushrooms Nisici , Image: Jarevi hljeb – flatbread; Photo credits: Alterural



Image: Goat cheese, Didova farma & Image: Lepinica from Nisici Photo credits: Alterural



Image: Rosehip tea, Photo credits: Alterural

6. Western Serbia Region

6.1 Arilje Raspberry



Scientific name of the product: Raspberry - *Rubus idaeus*, a plant from the rose family (Rosacea)

Common name of the product: Raspberry

Common name of the product in the territory of intervention: ARILJE RASPBERRY / ARILJSKA MALINA

Image: Arilje Raspberry; Photo credit: Sportsko-turistički centar Arilje

Category: Fruit

Historical production area and origin: The area where Arilje raspberry is produced is known as Arilje Malinogorje. It includes the territory of the municipality of Arilje and neighbouring villages bordering the municipality of Arilje. The territory is located in the southwest part of Serbia between Zlatibor, Western Pomoravlje, Dragačevo and Stari Vlah. It is located in the valleys of the Moravica, Veliki Rzav and Mali Rzav rivers, which belong to the Western Morava basin. It is bounded from the north by the river Đetinja. Geographically, this is a mountainous area with altitudes of 400 meters in the Moravica valley (southwest part), and over 1.000 meters (western part of Arilje Malinogorje). Raspberries produced in the Arilje Malinogorje have special quality and properties recognized by consumers from the world market. That special, unique quality is determined by: climate, soil, wind rose and cultivation method.

History of the product: The first significant varieties of raspberry arrived in Serbia at the end of the 19th century, when raspberry trees adorned the yards of wealthier people. That the raspberry is something more than an ornamental plant became clear in the late fifties of the 20th century, when mass production was started, and several cultivation areas were set aside. The real production revolution took place in the early 1970s, when the first cold stores were built in the Arilje Malinogorje. The innovative approach that combined the variety, new technology and the entrepreneurial spirit of the producer, created the famous export product of Serbia, and brought the glory of the raspberry capital of the world to Arilje municipality.

Harvest period: In our ecological conditions, raspberries ripen from mid-June to the end of July.

Product description: The fruits of the most common varieties in the Arilje Malinogorje are medium to large with an average weight of 4-5 grams. The fruit is firm and of good quality, with a pleasant aroma and sweet- sour wine taste. Raspberry fruit is an important raw material for the processing industry. In Serbia in recent decades, more than 90% of the produced quantities of raspberries are frozen in cold stores and processed into semi-finished products (Roland, Semolina and Block) and delivered mainly to the world market.

Nutrition values and use: In the fruits of tame raspberry varieties, the content of dry matter ranges from 10.10 to 18.32%. The largest share in the total weight of the fruit is sugars (3.66-8.99%), where glucose and fructose predominate, followed by cellulose 5.33%, acids 1.32-2.51% (citric, malic, salicylic, and traces of formic), nitrogenous substances 0.8-2.8 %, (proteins 0.5%), pectin substances 0.5-2.8%, mineral substances 0.31-0.60% (within these substances there are microelements: iron 1.0 mg and copper 0.14 mg in 100 grams of fruit flesh), fatty substances 0.3%, coloured and tannic substances 0.1-0.3% and finally aromatic substances.

Fresh raspberry fruit is rich in various vitamins, especially vitamin C (100 g. raspberry juice contains 17.0-53.2 mg of vitamin C, 0.9 mg of vitamin B6, 0.3 mg of vitamin PP (amidnicotinic acid) and smaller amounts of vitamins B1 and B2).

The fruit has a low energy value, 100 grams of fresh fruit releases 167.4 kJ of energy, or about 40 calories.

In the processing industry and domestic crafts, a wide range of highly sought-after products is obtained from raspberries: concentrate, juice, syrup, compote, jam, sweets, wine, special treasures and strong alcoholic beverages (liqueur, brandy). In some highly developed countries, raspberry fruits are dried, ground and used in powder form.

Indicative quantity produced: Almost a quarter of raspberry production in Serbia takes place in this region. The maximum quantity of raspberries purchased and processed in the Arilje Malinogorje range from 20,000 to 25,000 tons per year.

Preparation, consumption and preservation: Arilje raspberry is collected in an organized manner from the producers at the buying stations, where the primary classification is also carried out. It is then transported by adequate means of transport (trucks) to cold stores, where technologists also perform an additional quality check and classification of raspberries.

Product distribution and market: Arilje raspberry is sold fresh and frozen in small packages of up to 1 kg. Frozen raspberries are sold in packages of up to 15 kg. The countries to which raspberries are exported the most are Germany, Belgium, the Netherlands and the USA.

From 2008, Arilje raspberry has registered appellation of origin in the Institute for the Protection of intellectual property (Republic of Serbia). The label holder is General Association of Entrepreneurs of the Municipality of Arilje.

6.2 Buckwheat

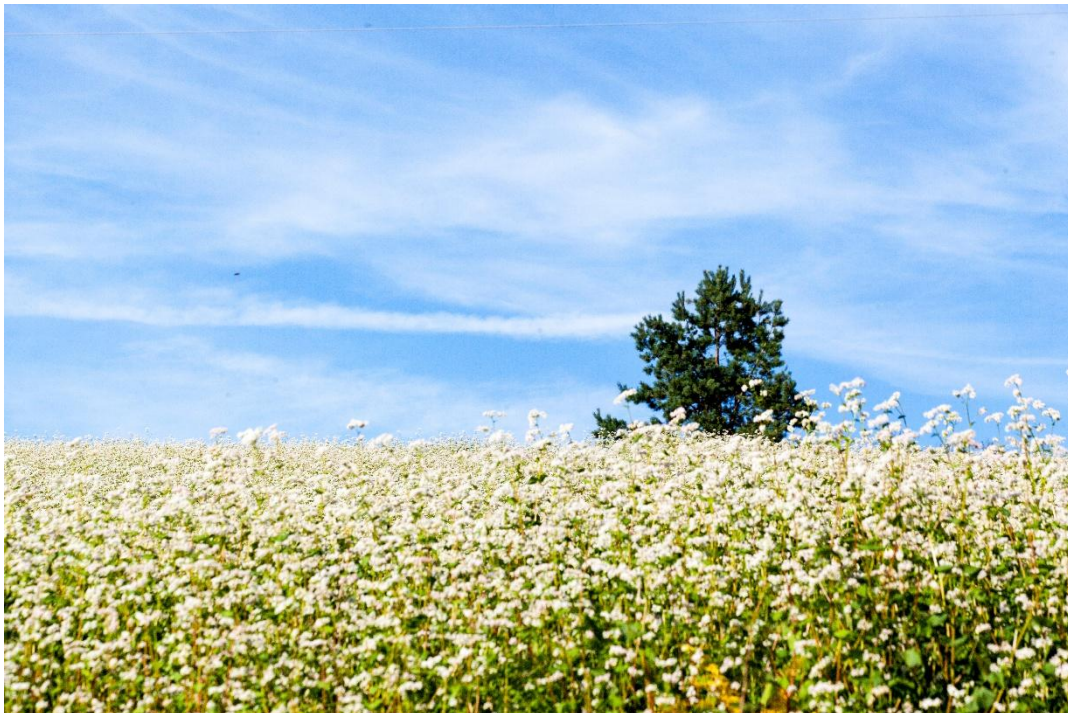


Image: Buckwheat; Photo credits: Turistička organizacija Zlatar, Nova Varoš

Scientific name of the product: Buckwheat (*Fagopyrum esculentum*, *F. cymosum*, *F. tataricum*)

Common name of the product: Buckwheat

Common name of the product in the territory of intervention: BUCKWHEAT (HELJDA)

Category: Cereals, grains and flours

Historical production area and origin: The Zlatar Mt. is said to be the capital of buckwheat in western Serbia, given that this cereal tolerates a harsher climate very well and is more resistant to diseases than wheat. The villages of Radijevići and Komarani are leading in production, where this cereal is grown organically on tens of hectares of land. Buckwheat yields are around 1.5 tons of grain per hectare. The stem is 30 - 150 cm tall, ribbed, branched, red when ripe, the leaves are heart-shaped.

History of the product: According to tradition, buckwheat was cultivated in the area of Nova Varoš in XIV century. Due to the black colour of the flour, after the WWII, it was considered poor people's food, so buckwheat was eradicated from our fields. However, due to its exceptional nutrition and medicinal properties, today its popularity is at its peak, and intensive production of this cereal is possible only in the municipalities of south-western Serbia, which are characterized by a harsh mountain climate. On the other hand, buckwheat production due to low yields and difficult growing conditions is a big risk for small producers because sometimes only two days of hot wind are enough to decimate the crop.

Product description: The fruit is triangular, black or dark silver, with or without wings. Its composition does not differ much from other grains. Its pulp makes up 20-40% of the total weight of the fruit. Inside it is a seed that is dark brown and also triangular in shape. The endosperm is opaque, white and has more starch than the grain endosperm. In the middle of the endosperm there is a germ, and the cotyledons are in the shape of the Latin letter S. The absolute weight of the grain (weight of 1000 grains) ranges from 18 to 32, and in tetraploid up to 38 grams.

Harvest period: September. Buckwheat ripens unevenly and takes a long time. Harvesting begins when most of the fruits are ripe.

Nutritional value and use: 100 g of buckwheat has 1435 kJ, i.e. 343 kcal. In this same amount of buckwheat, there are 71.5 grams of carbohydrates, 13.2 grams of protein and only 3.4 grams of fat. Hulled grain contains about 80% starch, 10-15% protein, 1-2% crude fiber, 2-3% fat and 1-2% mineral matter; iron, phosphorus and iodine as well as an increased content of B1 and B2 vitamins. Unlike cereals, buckwheat is gluten-free and therefore can be used even by those who are sensitive to gluten, as well as those suffering from celiac disease.

Although buckwheat botanically does not belong to cereals, it is included as its flour is suitable for human consumption. It is used as porridge, less often for the production of bread. In culinary terms, buckwheat seeds are very valuable and tasty. Buckwheat, like rice, is used in the form of buckwheat porridge and as an addition to dishes, along with vegetables and meat. Buckwheat flour, with the addition of wheat or rye flour makes very tasty bread with a pleasant smell of buckwheat. Buckwheat is a good source of fibre and one of the best sources of vegetable protein from grains. It even contains lysine and tryptophan - essential amino acids that are lacking in most plant-based foods and that are scarce in other grains. Buckwheat is rich in vitamins (B, E, P) and minerals (calcium, iron, phosphorus, magnesium, copper). Buckwheat can be used in various ways in the diet. It can be cooked as rice or side dish, added to soups and salads, or used as an ingredient in pastries and doughs. It can also be used to prepare porridge. Buckwheat can also be used to prepare healthy snacks such as buckwheat pancakes or energy balls, and it is also a honey crop.

Impact on health: Although research into the effects of buckwheat on the body began very late, only in the second half of the 20th century, numerous positive effects of consuming buckwheat on human health have been discovered to date:

- It reduces the risk of heart disease
- It helps in losing weight and
- Improves immunity
- improves mood,

- strengthens the hair
- improves the condition of bones, teeth and nails,
- protects the skin,
- prevents the occurrence of anemia,
- controls i.e. prevents asthma attacks.

Indicative quantity produced: Under ideal conditions, buckwheat yield is around 4-5 t/ha, while in poorer conditions it is around 2 t/ha.

Product distribution and market: Buckwheat is distributed on the market as: whole buckwheat flour, hulled buckwheat flour, buckwheat flakes and buckwheat pasta.

In the bakery industry: Buckwheat flour is used in a mixture with wheat flour (ratio 1:1) for the production of bread, pastries, pancakes, pasta, as well as buckwheat flakes, which have a higher nutritional value than corn, wheat, and barley flakes, due to the proteins present.

In the production of pasta: Buckwheat flour is used in the production of pasta according to the following recipe: 150 g. buckwheat flour, 100 g. wheat flour T-400, 2 eggs, two spoons of water and salt. The flour is mixed and sifted. Eggs, water and salt are mixed a little, flour is gradually added to them and a fairly hard dough is kneaded. The dough is rolled in flour and placed in a plastic bag to rest for 2 hours. Then it is rolled out and cut into noodles, which must be dried for some time. They are boiled for 10 minutes in salted water. They go well with all kinds of meat sauces and can be topped with butter or sour milk.

Buckwheat can be found on the market in specialized stores and health food stores.

Preparation, consumption and preservation: For buckwheat hulling and processing of hulled buckwheat, there are industrial lines that enable 100% hulling of buckwheat and obtaining clean kernels, buckwheat grains. The shelled buckwheat grain is further ground in a stone mill or on mill rollers and used in the bakery industry, and the buckwheat casing, as a secondary product, after sterilization, is used in the production of pillows. Unshelled buckwheat grain must first go through the grain cleaning phase. In that phase, all kinds of organic and inorganic impurities are removed. Cleaned and unhusked grain can be ground in a stone mill or on mill rollers to obtain integral buckwheat flour, which is also used in the bakery industry and pasta production.

6.3 Ivanjica Potato



Image: Ivanjički krompir; Photo credit: Miloje Ostojić, Turistička organizacija Ivanjica



Image: Ivanjički krompir; Photo credit: Miloje Ostojić, Turistička organizacija Ivanjica

Scientific name of the product: Potato

Common name of the product: Ivanjica Potato

Common name of the product in the territory of intervention: Ivanjički krompir

Category: Processed product of plant origin: - Other: Vegetables

Historical production area and origin: Potatoes have been grown in Europe since 1575.

History of the product: Around 1759, the Germans brought potatoes to the area of Vojvodina, and as early as 1782, monks from Srem brought potatoes to the Ovčar-Kablar Gorge to the Blagoveštenje Monastery (Annunciation). The geographical area of the production of Ivanjica potatoes is the area that is bounded from the west, south-west and south by the slopes of the Starovlaška Mts. (Zlatibor, Zlatar, Ozren, Jadovnik, Vlahovi, Golija), in the east by the confluence of the Studenica with the Ibar and the Čemerno mountain, in the north by the Dragačevo basin on the slopes of the Jelica mountain, with an altitude ranging from 328 to 1833 m.

The entire Ivanjica potato production area is considered a hilly-mountainous type of area whose climatic characteristics are determined by altitude, landforms, and the presence of larger forest complexes. The altitude of the area ranges from 328 to 1833 m, where potatoes are mainly grown at higher altitudes, but there are also some at lower altitudes, and their quality does not differ.

Product description: Ivanjica potatoes are tubers of red and white potatoes of well-known varieties, which are grown in a defined geographical area and possess certain specific properties. The name *Ivanjički krompir* refers to potato tubers of the following varieties: red potato varieties (Desire, Bela Rosa), as well as white potato varieties (Agrija, Carrera, Riviera and Kennebec). Ivanjica potatoes are potato tubers with an oblong oval to round shape and a smooth to moderately rough skin. Skin colour is light beige to ocher in white potatoes and beige to brown in red potatoes. The colour on the cross section of raw potatoes is pale beige to yellow-orange in red potatoes and white to intense yellow in white potatoes. The colour of the cooked tuber ranges from whitish yellow to light yellow.

The cooked tuber is characterized by a floury texture with good chewiness or a creamy texture with moderate chewiness, a mild to moderately sweet taste and a pleasant moderate aroma of boiled potatoes. The tubers of Ivanjica potatoes are intended for the human consumption market, so for most consumers, the most important thing is their external appearance and culinary properties.

Potatoes with a diameter of more than 45 mm can be called Ivanjica potatoes. The shape of the tuber is oblong-oval to round.

Harvest period: Harvest that is extraction and collection of Ivanjica potatoes takes place in the period from September 1 to November 1, more precisely in the phase when the skin no longer peels off on its own from the potato (tuber). Potatoes are harvested by hand or by machine, and after harvesting, they are collected by hand in polypropylene mesh bags (PP bags).

After harvesting, Ivanjički potatoes are graded (calibration), whereby the seeds are separated from the fraction that represents Ivanjički potatoes. Calibration is done manually or mechanically. All potatoes with a diameter of over 45 mm belong to Ivanjički potatoes, which can be classified according to the customer's requirements into the following classes:

- Extra class 45-80mm
- I class up to 1% deviation 45-80mm
- Class II includes potatoes over 80mm.

Nutritional value and use: Ivanjica potatoes include varieties with high biological and technological properties, which are characterized by a high content of dry matter - minimum 18.5%, 4-6 months of storage after harvest.

The special properties and quality are the result of the unique conditions of the geographical area where Ivanjički potatoes are grown, but also of the special skill of the producer resulting from a tradition of production for more than a century. The special properties of Ivanjicki potato are:

- Dry matter content minimum 18.5%
- Tuber size over 45 mm in diameter
- Tuber shape: oblong-oval to round
- Flesh colour of raw potatoes: pale beige to yellow-orange (red potatoes) and white to intense yellow (white potatoes)
- Tuber skin colour: light beige to ocher (white potatoes) and beige to brown (red potatoes)
- Shell roughness: smooth to moderately rough
- Colour of cooked tuber: whitish yellow to light yellow
- The texture of the flesh of cooked tubers: floury with good chewiness to creamy with moderate chewiness
- Taste and smell of boiled tubers: slightly to moderately sweet taste with a pleasant moderate smell of boiled potatoes

Indicative quantity produced: Ivanjica potatoes are grown on about 3,500 hectares, and the average yield per hectare is close to 40 tons.

Product distribution and market: Ivanjica potatoes are mainly distributed to cold stores for further processing. They are exported to Albania, Romania, Bulgaria and Russia. They can also be found on local markets.

Preparation, consumption and preservation: In order to produce Ivanjica potatoes, the following traditional cultivation methods are applied:

Land preparation includes the usual operations - deep plowing, spreading of manure, mineral fertilizers, milling.

Seed potatoes are planted manually or mechanically. Planting time is from April 1st to June 1st. The planting time depends on the altitude at which it is planted. At lower altitudes, planting is done earlier, while at higher altitudes, it is done later when weather conditions permit and the snow melts.

Planting spacing is at an inter-row distance of 70-75 cm and a row distance of 20-45 cm, with 30,000-45,000 plants per 1 ha. On plots where potatoes are planted, a two-year or four-year crop rotation is used. However, smaller producers, due to the limited number of plots, sometimes apply a monoculture of two years of planting potatoes in a row on the same plot. During the "rest" of the plots, small grain or buckwheat is planted. In the stage before "closing the rows", the rows are wrapped manually or mechanically. The characteristic of the production of Ivanjica potatoes is that dry tillage is applied, i.e. that production is carried out without irrigation.

Fertilization is done with organic and mineral fertilizers. The removal of the above-ground part of the potatoes is done 2 weeks before the extraction of the potatoes, which coincides with the time period from August to the beginning of September.

After harvest, Ivanjica potatoes are stored in cellars, attics or specialized warehouses where constant low temperatures between 2 and 15 degrees Celsius are maintained.

6.4 Vodnjika Cider



Scientific name of the product: N/A

Common name of the product: Vodnjika Cider

Common name of the product in the territory of

intervention: VODNJIKA

Image: Vodnjika; Photo credit: Predrag Simić

Category: Processed product of plant origin: - Other: Type of cider

Historical production area and origin: Vodnjika has been a favorite "winter drink" of the highlanders for centuries, once drunk by the ancient Slavs, because they considered it a drink of miraculous power and a cure for severe colds and other respiratory infections, as it contains vitamin C and antioxidants (plant acids and medicinal bitter substances).

History of the product: The primary name is vodnjika, but it is also called *Queen of immunity*, *Elixir of youth*, *Winter Drink of the Highlanders* or *Drink of the Slovenian Gods*. Vodnjika is a homemade drink which raises immunity. This drink is filled with vitamins and almost forgotten these days especially in urban areas.

Vodnjika does not have a unique recipe; it is a reflection of the climate in which it is produced. According to the traditional recipe, vodnjika is made of several varieties of different fruit - wild apples, pear Takiša, hip, juniper, hawthorn berry, blackberries, sloes, dogwood, thorns. The drink can also be refined with quinces, medlars, prunes. None of that will disintegrate in the water, and it will squeeze out everything healthy it has.

Fruits and vegetables are first washed well and the stalks are removed from them. Then they are placed in a barrel or tub of water. After 25 to 45 days, the fruit boils and can then be drunk.

According to the traditional recipe, vodnjika is prepared from spring water, several types of different fruits (depending on what can be provided at the moment), and most often from: wild apples, takiša or oskoruša pears, dogwood, juniper, wild strawberries, hawthorn, thorns, forest blackberries, wild cherries. Honey or sugar is often added to speed up fermentation, but it is not necessary.

Period of production of the processed product: After picking, wild fruit should be washed, stems and damaged parts should be removed. The fruit should then be mixed with water (2.5 litres of water is added to 1 kg of fruit), and honey or a spoonful of sugar can be added to taste. After the start of fermentation, all healthy substances are rapidly extracted from the fruit. The amount of alcohol that is created in the drink in this process is about 1%. In a wooden or plastic barrel, the well should be left to steep and stand for at least 40 days, at room temperature.

The pears should be takiša, which gives a special quality to the drink. It is recommended to make vodnjika in October or November, when there is an abundance of fruit, and the temperatures are slightly lower. When vodnjika gets a slightly sharp taste, the rule is that as much water as you take out, add as much water and then it can last all winter.

Nutritional value and use: Once vodnjika ripens, it is aromatic, sour and sweet in taste, refreshing and real treasury of vitamins, herbal acids, resistant matters and other medicinal characteristics of wild and untreated fruit.

Considering that vodnjika is obtained by fermentation from medicinal herbs and unsprayed fruit, it is a completely natural drink, without preservatives and pesticides, with preserved medicinal features of the plants it contains, because it is not thermally processed.

Vodnjika is used by drinking 1 glass a day, which is quite enough to satisfy all the needs of the body.

In folk medicine, watercress is used as a medicinal agent:

- for problems with urination,
- in digestive disorders,
- for expectoration in asthma,
- for speeding up metabolism, in those who are on a weight loss course, and
- it is also interesting that it is among the best home remedies for hangovers.

Product distribution and market: Vodnjika is mainly prepared for personal use, but lately it is also present at local manifestations.

6.5 Plum Brandy



Image: Plum brandy; Photo credit: Turistička organizacija Tara – Drina, Bajina Bašta

Scientific name of the product:

Brandy

Common name of the product: Plum brandy

Common name of the product in the territory of intervention:

ŠLJIVOVICA
(PREPEČENICA)

Category: Processed product of plant origin - Type of cider

Historical production area and origin: The first mention of brandy and attempts to make it appear in medieval Serbia. The rulers from the time of Nemanjić had foreign doctors at their courts who were engaged in distillation and thus produced something that resembles today's grape brandy, comovica and herbal. They were used only for medicinal purposes, and only many decades later as stimulants. Although there is no exact evidence about the beginnings of the use of strong drinks in Serbia, the half of the 15th century is taken as the age when they appeared in society.

History of the product: Production of fruit brandies in our country has a long tradition. For the production of brandy, all types of fruit containing sugar can be used, from which ethyl alcohol (ethanol) is produced during alcoholic fermentation. For the production of fruit brandy, healthy, ripe fruits are used. Ripeness is extremely important due to the presence of aromatic substances and a sufficient amount of sugar from which alcohol is created. It is only possible to obtain high-quality brandy from high-quality raw materials, i.e. fully ripe fruit. The most suitable local fruits for the production of brandy are plums, apples, pears, cherries, sour cherries, peaches and berries (raspberries, currants and blackberries).

Plums have always had and until today have preserved a leading place in our fruit growing. It makes up about 60% of the total number of all fruit trees and participates in approximately the same percentage in the total production of fruit. In terms of plum production, our country used to be the first in the world. The distinctive plum region is the western part of Serbia.

This spread of plums was contributed, first of all, by very favorable climatic and soil conditions, and then by the easy raising of plum trees and the success of plantations in extensive growing conditions. The multiple use value also influenced the spread of the plum. About 80% of the total plum production is processed into brandy.

The plum Požegača (madžarka, bistrica, cepača) produces a very aromatic and drinkable plum brandy, the best of all fruit brandies. The reputation of our plum brandy comes from this very high-quality raw material. The amount of sugar in meat is usually between 10 and 14%.

Plums for processing into brandy are harvested at full technological maturity, and Požegača reaches full technological maturity when the part of the flesh next to the stone begins to darken. Plums for brandy are removed from the fruit tree by shaking the tree and collecting the plums.

Since brandy is mostly produced on small private farms that do not have the necessary equipment, the plums are often placed whole in the boiling vats without first muddling. Fermentation of whole fruits is slowed down, especially if they are somewhat firmer, and often lasts for several months, which is why a lower yield of alcohol and more volatile acids is obtained.

Alcoholic fermentation. Plums are placed in boiling vessels. The vessels are not filled to the top, but 25% of the empty space is left. Fermentation takes place in closed vessels, because oxygen from the air causes undesirable oxidative changes. Fermentation lasts two to three weeks, and the most suitable temperature is from 15 to 25 °C.

Distillation (roasting) of brandy is the process of separating the liquid components. It is about the process of extracting ingredients from a liquid mixture, through the process of evaporation, and then condensing those ingredients. Alcohol has a lower boiling point than water and therefore turns into distillate faster.

Distillation usually takes 4-5 hours. The resulting distillate of 20-25 vol.% alcohol is called raw soft brandy and is used as a "prepek" for šljivovica (prepečenica) brandy. Raw soft brandy is re-distilled in the same cauldrons, which are filled to 70% volume.

Fermented plum juice is distilled until the ethanol content in the distillate is a maximum of 86 vol.%. The distillate must have the aroma and taste that come from the plum used.

After being produced by distillation, brandies need to age for some time (maturation of the brandy). For some brandies, it is important to keep the original smell and taste. Such brandies should mature in glass bottles (lozovac, komovica, vodka). Other types of brandy, such as cider, whiskey, cognac (vinjak) and plum brandy are aged in wooden barrels. At the same time, they take on the colour and certain aromatic substances characteristic of the type of wood from which the barrel is made. It is considered that the minimum aging time of brandy in oak barrels is eight weeks. Brandy in barrels should be stored in rooms where the temperature is between 15 and 20 °C.

Aged brandies have a more harmonious taste, are more drinkable, softer and with a pronounced bouquet. By bouquet is meant a special aroma that is formed by longer aging.

Period of production of the processed product: September and October

Nutritional value and use: Basic quality parameters of šljivovica (prepečenica) brandy:

- Volatile ingredients - minimum 2,000 mg/l a.a.
- Methanol - maximum 2,000 mg/l a.a.
- Ethanol - minimum 37.5 vol.%
- HCN - maximum 50 mg/l a.a.
- Benzaldehyde - 1,000 mg/l a.a.

The rulebook on categories, quality and declaration of brandy and other alcoholic beverages limits the methanol content to a maximum of 2 vol.% of absolute alcohol.

Indicative quantity produced in one year: It is estimated that the total production of brandy in Serbia, for the market and for own needs, is up to 55 million liters per year, of which around 40 million liters is production of šljivovica (prepečenica).

6.6 Sita Liquid Jam



Scientific name of the product: N/A

Common name of the product: Sita Liquid Jam

Common name of the product in the territory of intervention: Sita

Image: Sita liquid jam; Photo credit: Turistička organizacija Prijepolje

Category: Processed product of plant origin: Preserves, jams, creams

History of the product: Sita is made from apple or pear juice and is a completely organic product without any additives or sweeteners. In appearance and texture, it is most reminiscent of honey, and it is squeezed according to a recipe and with a tool inherited from ancestors.

Sita is a fruit syrup that has the sweetness and smell of the fruit from which it is pressed and is a completely organic product because it is made from unsprayed fruit, which has been growing on rural farms since ancient times. It can be consumed as a drink, diluted with water, but it is best when mixed with young cream. It can also be used as a topping for cakes and sweet pies.

The climate of the municipality of Prijepolje, and especially of the village of Hisardžik, is moderate and favorable for fruit, especially pears. Mostly, these are the old, almost forgotten varieties, which give a special taste and charm to the Sita. *Begovača* pears, which ripen at the end of autumn, are the best for the Sita, although it is also made from other local varieties (*ječmenka*, *mirisavica*, *stranjanka*, *šećerka*, *žuta ranica*, *ramandalija*, *tvrdognila*, *kaluđerka*, *drvišica*, *takiša*, *buzdovanica*), then apples, *šarenika*, *arapka* and *pamuklija*.

Two to two and a half loads of apples and/or pears go into one measure. After each fruit is thoroughly washed (twice), it is placed under a “stupa” where it is crushed and ground (“stupa” is an ancient device made of wood that is used in making Sita).

The entire manufacturing process takes up to three days. On the first day, the fruit is chopped and ground, and the next day, the juice is squeezed. On the third day, the juice is boiled into syrup. The squeezed juice usually spends the night in a barrel and the next day it is boiled, 100 liters of liquid for 10 to 12 hours, that is, until the Sita gets its density. 10 to 15 liters of juice are obtained from 100 liters of juice.

Period of production of the processed product: End of summer/beginning of autumn

Indicative quantity produced in one year: 10-15 liters per household

Product distribution and market: Sita is not sold on the open market but is traditionally distributed to relatives and friends.

6.7 Buckwheat Pie



Scientific name of the product: Pie
Common name of the product: Buckwheat pie
Common name of the product in the territory of intervention: Heljodopita

Image: Heljodopita; Photo credit: Regional development agency Zlatibor Ltd

Category: Processed product of plant origin - Bread and savory bakery products

Historical production area and origin: Pies have been a popular food since the earliest times, and the first knowledge about them comes from ancient Egypt and Ancient Greece. When the ancient Romans conquered Greece, they were conquered by the taste of pies, so they took the recipes with them. As the Roman Empire expanded, the deliciousness of the pies traveled through Europe and the Mediterranean countries, and each country adapted the recipes to their own customs and foods. Buckwheat was cultivated and first grown in the interior of Southeast Asia, probably around 6,000 BC, and from there it spread to Central Asia and Tibet. From there to the Middle East and Europe. Under the influence of different cultures, geographical climates and living conditions, a perfect blend of traditions was created: buckwheat pie.

History of the product: Buckwheat pie is a specialty of the Užice and Zlatar region, made from buckwheat pancakes and filled with Zlatar cheese, cream (kaymak) and eggs.

Ingredients

Pancakes

- 250 g of whole wheat flour
- 150 g of buckwheat flour
- 450 ml of milk
- 450 ml of water
- a little oil for frying

Pie filling:

- 200 g of Zlatar cheese

- 200 g of cream (kaymak)
- 3 eggs
- 100 ml of milk

Pour flour and one liquid into a bowl. Mix well with a mixer so that the dough is smooth, without lumps. Add another liquid. Fry the pancakes in a Teflon pan with a little oil (half a teaspoon or less). The dough is "rough" from bran and buckwheat and is a little harder to spread. Pancakes must be a little thicker than regular ones.

Mash the cheese with a fork, add cream, eggs and milk. The filling is liquid.

Line a round tray of the appropriate size with baking paper and stack the pie. Pour 2-3 tablespoons of filling onto one pancake, spread, cover with another, pour filling again, etc. Spread the last pancake on top, and if there is more filling, pour it around.

Bake at a higher temperature for about half an hour (220-250°C).

Period of production of the processed product: All year long

Product distribution and market: Buckwheat pie, in addition to being prepared in households, can be found on restaurant menus in Western Serbia and beyond.

6.8 Zlatibor Beef Prosciutto



Specific name of the product: Prosciutto

Common name of the product: Zlatibor prosciutto

Common name of the product in the territory of intervention: ZLATIBORSKA GOVEDA PRŠUTA / ZLATIBOR BEEF PROSCIUTTO

Image: Zlatibor Beef Prosciutto; Photo credit: Agricultural Development Company "Zlatiborski Eko Agrar" LLC

Category: Cured meats and sausages

Historical production or breeding area and origin: West Serbia region is known for its diverse agricultural production. Livestock production is also often present in households in this region.

History of the product: Zlatibor prosciutto (dried and smoked meat) is one of the most famous local dry meat products made according to the traditional procedure exclusively at Mt. Zlatibor. In addition to the very desirable sensory properties, it is featured by a high protein content which makes it a valuable food product from a nutrition point of view. The inhabitants of Mt. Zlatibor are known as producers of meat and meat products because that area, with its natural climate characteristics, is predestined to be a livestock breeding region. Today, the dried meat products are the most important items in the rich variety offer of culinary specialties of Mt. Zlatibor, followed by dairy products.

Animal breed of origin: In breeding, domestic coloured beef is most widespread in the Simmental type, which has weaker genetic potential due to uncontrolled crossings with less productive breeds. On the largest number of farms, cattle breeding is based on the free use of grass areas during the summer period and a tied system of breeding in facilities during the winter period.

Description of the type of farming: Cattle production is extensive, and the production results are far below the technological norms and the genetic potential of the cattle.

Production period: The process of producing beef prosciutto takes a minimum of 45 days.

Product characteristics: The natural environment where pastures are seen everywhere around, is an ideal area for cattle breeding, i.e. meat production for production of Zlatibor prosciutto. The ecologically clean area, high mountain pastures with a grass cover of great abundance in plant species and of an exceptionally high nutritional value, is an extraordinarily good potential to produce good quality feed for animals.

When asked what makes this prosciutto a unique product, the answer given a few decades ago was just the uniqueness of nutrients, which is reflected in the specific floristic composition of the pasture vegetation, but also specific micro-climatic conditions prevailing at this mountain.

As a raw material for the production of Zlatibor beef prosciutto, the musculature of the highest quality body parts (leg, back, steak) is used from grown up cattle, of a domestic colourful Simmental breed, that are bred at Zlatibor mountain or in the wider area of the Zlatibor District.

Only at Mt. Zlatibor, three large air currents create a wind rose beneficial to humans, but also to the products from the Zlatibor area. The warm winds of the Mediterranean Sea and the crystal-sharp air of the Alps and the Dinarides, meet the strong currents from the Carpathian Mountains just above Zlatibor Mountain bring pleasant smells of the clean and healthy winds from three continents. Meat producers prepare their products according to traditional recipes.

The finished product should contain:

- From 40% to 45% of water (optimum 45%)
- Salt contents in the finished product should be in the range from 4% to 5%.
- In regard to sensory indicators, the finished product must have the following features:
- A uniform size of pieces (when produced from the same anatomical parts)
- A moderately firm consistency
- The surface of the product must have the same brown-red color without the presence of
- Soot and resin
- At the cross-section, the muscle tissue must be red (without the presence of dark rings on the periphery) and with a moderate presence of lined fat tissue
- Taste and smell must be pleasant, specific, and characteristic of dried and smoked beef.

Nutritional value and use

Nutritional value of Zlatibor beef prosciutto

- Energy value 756.52 KJ / 180.98 Kcal
- Fat 4.20 grams
- Carbohydrates 1.33 grams
- Protein 34.03 grams
- Salt 2.18 grams

Indicative quantity produced in one year: The production center of Zlatibor beef prosciutto is the village of Mačkat, where 80% of professional family and industrial plants of registered prosciutto producers in the municipality of Čajetina operate, producing about 6 tons of beef prosciutto annually.

Product distribution and market: Products are sold at the market, doorsteps, traditional product stores, but also in retail chains.

Preparation, consumption and preservation: Beef prosciutto is stored at a temperature of 2 to 10 °C, in a clean and dry place, protected from light and moisture.

6.9 Užice Pork Prosciutto



Specific name of the product: Prosciutto
Common name of the product: Užice prosciutto
Common name of the product: užička svinjska pršuta / užice pork prosciutto

Image: Užice pork prosciutto; Photo credit: Agricultural Development Company "Zlatiborski Eko Agrar" LLC

Category: Cured meats and sausages

Historical production or breeding area and origin: West Serbia region is known for its diverse agricultural production. Pig farming is less common than cattle farming - mostly is present in households in this region and less in organized industrial production.

History of the product: Užice pork prosciutto is a permanent fermented pork product, which is produced according to traditional technology in the Zlatibor region. It is produced from the best quality parts of the pork carcass: thigh and loin.

Animal breed of origin: The domestic pig is a domesticated subspecies of the wild boar and is raised as a domestic animal for its meat (pork), fat, and meat products. In addition to the domestic pig, the Moravka, Mangulica and Resavka breeds are less bred. The Moravka or Moravian pig originated in the Morava River basin, by crossing the local pig breed - Šumadinka, with the Berkshire, which was imported to Serbia at the end of the 19th century. The Resavka originated from the unplanned crossing of the Šumadinka and Berkshire in the Velika Morava, Mlava and Resava river basins, as well as in the eastern mountainous regions of Serbia.

Description of the type of farming: Domestic pigs are often raised on open-air farms.

Production period: The production process lasts about 4 weeks (7 days of salting, 21 days of drying and smoking), and sometimes even shorter, and in that period the mass loss of the treated pieces amounts to 40-45%.

Product characteristics: As a raw material for the production of Užice pork prosciutto, the musculature of the highest quality carcass parts (meat of I category) from the anatomical regions of the thigh and back is used.

Slaughter of pigs and primary processing of carcasses is done in a standard way. The same applies to the cooling of halves - halves (24 hours at temperatures of 0 - + 4°C).

After cutting the halves, the main parts used for the production of Užice pork prosciutto are used and a detailed separation of the surface fat and connective tissue is carried out. The back is formed as a separate muscle mass, while the thigh is cut into several muscle parts that are shaped into pieces 15-20 cm long and 4-8 cm thick.

After salting, the meat halves are rinsed with cold water, tied with string, arranged on sticks so that they do not touch each other, and placed in a room with good air circulation. After draining for a few hours, drying and smoking begin.

Sticks with stacked meat are placed in 2-3 rows, at a height of 200-250 cm from the heat source. Up to 5 well-arranged fireplaces are used as a heat source, and only hard wood species (beech, oak, hornbeam) are used for co-heating.

The temperature of the room should be 8-10°C (maximum 12) and the relative humidity should be 70-75%. Given that the production of Užice pork prosciutto is mainly done in the winter period (November-February), the specified temperatures and air humidity are achieved by occasional heating and cooling (without fire). The process of drying and smoking lasts about 3 weeks, and sometimes even longer if the pieces of meat are larger. During this period, the sticks with meat are rearranged 2-3 times so that all pieces are treated under approximately equal conditions.

In terms of organoleptic quality indicators, Užice pork prosciutto has a moderately firm consistency and a brown-red colour on the surface. It is red in cross-section and regularly marbled with smaller groups of fatty tissue. The smell and taste of the product are quite pleasant with the characteristics of salted, smoked and dried pork. Overall, the aroma is very pleasant and specific to this type of product and geographical origin.

Nutritional value and use

Nutritional values per 100 g of pork prosciutto

- Energy value: 826.77 KJ / 197.79 Kcal
- Fats: 9.20 g of which saturated fatty acids 3.30 g
- Carbohydrates: 2.00 g of which sugars 0.96 g
- Proteins: 26.61 g
- Salt: 2.96 g

The finished product has a water content of 40% and NaCl about 4.5%.

Indicative quantity produced in one year: The production center of Zlatibor beef prosciutto is the village of Mačkat, where 80% of professional family and industrial plants of registered prosciutto producers in the municipality of Čajetina operate.

Product distribution and market: Products are sold at the market, doorsteps, traditional product stores, but also in retail chains.

Preparation, consumption and preservation: Pork prosciutto is stored at a temperature of 2 to 10 °C, in a clean and dry place, protected from light and moisture.

6.10 Užice Pork Bacon



Specific name of the product: Bacon
Common name of the product: Užice pork bacon
Common name of the product in the territory of intervention: Užička svinjska slanina

Image: Užice pork bacon; Photo credit: Regional Development Agency Zlatibor Ltd

Category: Cured meats and sausages

Historical production or breeding area and origin: Production of dried meat products from beef, pork and sheep has a long and rich tradition in Serbia. The area of the Zlatibor mountain has extremely favourable climatic conditions for the production of permanent dried meat products, including Užice pork bacon.

History of the product: Užice pork bacon is a permanent dried meat product that is produced according to a traditional recipe in the area of Zlatibor region, and as far as the Zlatibor mountain and its slopes. Canning meat in pieces using the combined use of salting, drying and smoking methods has a very long tradition. Previous experiences and established production processes in the world, in terms of the type of meat used, the way of processing the musculature, the composition and amount of salt, the conditions and length of salting, drying and smoking, have influenced the emergence of a series of specific products, one of which is: Užice pork bacon.

Animal breed of origin: The domestic pig is a domesticated subspecies of the wild boar and is raised as a domestic animal for its meat (pork), fat, and meat products. In addition to the domestic pig, the Moravka, Mangulica and Resavka breeds are less bred. The Moravka or Moravian pig originated in the Morava River basin, by crossing the local pig breed - Šumadinka, with the Berkshire, which was imported to Serbia at the end of the 19th century. The Resavka originated from the unplanned crossing of the Šumadinka and Berkshire in the Velika Morava, Mlava and Resava river basins, as well as in the eastern mountainous regions of Serbia.

Description of the type of farming: Domestic pigs are often raised on open-air farms.

Production period: Winter period, November-February. Pork halves are used for production, and the process itself lasts about 4 weeks (1 week of salting, 3 weeks of drying and smoking).

Product characteristics: Slaughter of pigs and primary processing of carcasses is done in a standard way. The same applies to the cooling of hulls - halves (24 hours at temperatures of 0 - + 4°C. After cooling, the halves are completely used, leaving crispy shoulders on them. These halves contain the musculature of the neck, shoulder, thigh, and back with associated fat tissue and skin. Halves are salted with pure salt (NaCl) by rubbing about 3% salts on the mass of raw material. Salting lasts 7-8 days at a temperature of about 5°C, and during salting, usually on the third day, additional salting is done. After salting, the meat halves are rinsed with cold water, tied with string, arranged on sticks so that they do not touch each other, and placed in a room with good air circulation. After draining for a few hours, drying and smoking begin.

Sticks with stacked meat are placed in 2-3 rows, at a height of 200-250 cm from the heat source. Up to 5 well-arranged fireplaces are used as a heat source, and only hard wood species (beech, oak, hornbeam) are used for co-heating.

The temperature of the room should be 8-10°C (maximum 12) and the relative humidity should be 70-75%. Given that the production of Užice pork bacon is mainly done in the winter period (November-February), the specified temperatures and air humidity are achieved by occasional heating and cooling (without fire). The process of drying and smoking lasts about 3 weeks, and sometimes even longer. During this period, the sticks with meat are rearranged 2-3 times so that all pieces are treated under approximately equal conditions.

During processing, meat loses 17-20% of its mass. The finished product has exceptional and specific organoleptic properties, and the salt content is about 3%.

In terms of organoleptic properties, Užice pork bacon has a moderately firm consistency and a characteristic colour of muscle and fat tissue. Fields of muscle tissue can be seen on the section of the finished product. On the section of the finished product, you can see fields of muscle tissue of red-pink colour and fields of fat tissue of white to light yellowish colour. The product has a slight smell of smoke and overall has a very pleasant smell and taste. Overall, the aroma is very pleasant and specific to this type of product and geographical origin.

Nutritional value and use

Nutritional values per 100 g of pork bacon

- Energy value 540.0 kcal

- Proteins 40.0 g
- Carbohydrates 1.0 g
- Fats 42.0 g, of which saturated 14.0 g

Indicative quantity produced in one year: The production center of Užice pork bacon is the village of Mačkat, where 80% of professional family and industrial plants of registered bacon producers in the municipality of Čajetina operate.

Product distribution and market: Products are sold at the market, doorsteps, traditional product stores, but also in retail chains.

Preparation, consumption and preservation: Pork bacon is stored at a temperature of 2 to 10 °C, in a clean and dry place, protected from light and moisture.

6.11 Stelja - Sjenica Bedding



Specific name of the product:

Cured lamb meat

Common name of the product:

Stelja (bedding)

Common name of the product in the territory of intervention:

Sjenička Stelja

Image: Stelja; Photo credit: Turistička organizacija Sjenica

Category: Cured meats and sausages

Historical production or breeding area and origin: The area from which Sjenička stelja originates includes the territory of the municipalities of Sjenica and Tutin, where the largest plateau in the Balkans and one of the largest in Europe, the Sjenica-Pešter plateau, is located. Climate is an extremely important factor that determines the natural conditions in which the process of producing dried meat products takes place. Among the areas in our country that are characterized

by suitable climatic conditions for the production of dried meat products, in addition to the Zlatibor region, is the Sjenica-Pešter plateau.

History of the product: Sjenička stelja is one of the domestic autochthonous meat products, which is produced according to the traditional procedure in the territory of the municipality of Sjenica as well as in the territory of the municipality of Tutin. The human factor is of particular importance in the production of Sjenička stelja. Namely, the tradition of making Sjenička stelja has been preserved and passed down from older generations to younger ones, especially the skill in preparing raw materials.

Animal breed of origin: Sjenička stelja is produced from sheep that are excluded from the production area through selection. Selection of sheep is carried out once a year, after driving the sheep to pasture and milking or during sheep shearing (from mid-May to mid-June). Usually, about 20-25% of the sheep are selected from the flock. By selection, all the sheep are singled out, which for various reasons are no longer suitable for further reproduction. This product is produced from deboned and shaped sheep carcasses, originating from the autochthonous breed of sheep - the Sjenica Pramenka. Simply put, selected sheep carcasses are, after deboning and shaping, dry salted, smoked and dried. The finished product has characteristic quality characteristics and a very specific purpose.

Primary processed, cooled, deboned and shaped sheep carcasses, obtained by slaughtering sheep of the autochthonous breed Sjenička Pramenka, are used as raw material for the production of Sjenička stelja. Only marked, healthy heads, aged 18 months and older, are used for meat production.

Description of the type of farming: Sjenica sheep, as an autochthonous breed, are ideal for breeding in mountainous areas. Breeding is extensive - characterized by grazing livestock on pastures and low-yielding breeds.

Production period: Winter period. The period of intensive production of dried meat products is from October to March.

Product characteristics: After processing carcasses in slaughterhouses, salting and de-salting of bones and shaped sheep carcasses is carried out. In the production process of Sjenička stelja, only dry salting is allowed. Only coarse sea salt is used, without any other additives in the amount of 3.5 to 5% in relation to the weight of the treated carcass for the production of stelja. After desalting, smoking, drying and ripening is done. The smoking process usually lasts from 10 to 15 days, from 6 to 12 hours a day, which depends on the mass of processed carcasses and weather conditions. Dry beech, oak or hornbeam wood is used to produce smoke, which must come from that area. The smoke is produced in the traditional way, by burning wood in an open fireplace, so that the combustion is silent (without flame) so that the temperature of 20 °C is not exceeded during the entire period of smoking.

The smoking process runs simultaneously with the gradual reduction of moisture, i.e. drying. During the drying process, complex biochemical processes take place that lead to a change in the meat structure, chemical composition and sensory properties, which is often referred to as "ripening" or fermentation.

Based on experience, manufacturers decide when the drying process is complete. When drying is judged to be complete, the final product is removed from the smokehouse and stored (storage) in an appropriate storage room.

Sjenička stelja consists of two halves joined together, which contain: neck, loins, back, ribs, chest, bellies, thighs with knees and tail.

Indicative quantity produced in one year: There are no official data on the amount of Sjenička stelja produced in one year. It is estimated that around 3,000 sheep is raised in the area of the municipalities of Sjenica and Tutin are slaughtered for processing and produce around 30,000 kg of final product.

Nutritional value and use

Nutritional values per 100 g of stelja

- Energy value 293.0 kcal
- Proteins 17.0 g
- Carbohydrates 0.0 g
- Fats 25.0 g

Product distribution and market: Products are sold at the market, doorsteps, traditional product stores, but also in retail chains.

Preparation, consumption and preservation: The recommended storage temperature for Sjenička stelja is from 4 to 10 °C, with minimal air circulation.

From 2017, Sjenička stelja has indication of geographical origin in the Institute for the Protection of intellectual property (Republic of Serbia). The label holder is the Association of producers of Sjenica lambs „Sjenička jagnjetina” (2011).

6.12 Sjenica Lamb



Specific name of the product:

Raw meat

Common name of the product: Sjenica Lamb

Common name of the product in the territory of intervention: Sjenička jagnjetina

Image: Sjenica sheep; Photo credit: Turistička organizacija Sjenica



Image: Sjenica sheep; Photo credit: Turistička organizacija Sjenica

Category: Other - Row lamb meat

History of the product: The Sjenica-Pešter plateau is one of the few areas where, despite the negative trends in the development of agriculture and villages, the autochthonous breed of sheep - the Sjenica Pramenka - has been preserved to this day. In some villages of this region, the sheep was almost the only domestic animal, and in all the villages of this region, the breadwinner on which the survival of the population depended.

Animal breed of origin: Of the sheep breeds, in the area of the Sjenica-Pešter plateau, the Sjenica sheep is mainly bred. This sheep is one of the most famous domestic breeds of sheep with triple combined production traits. It is grown for the production of milk, meat and wool. It got its name from the town of Sjenica, and it is also called the Pešter or Sjenica-Pešter sheep.

The Sjenica sheep is mostly grown in the area of Sjenica and Pešter, but it is widespread in western and central Serbia, northern parts of Montenegro, Kosovo and Metohija, as well as in Bosnia and Herzegovina. The harsh climate, high altitude, vast pastures without enough water, as well as the meagre winter diet, have created exceptional resistance in this sheep. The body mass of adult sheep ranges from 70 to 90 kg for rams, and from 58 to 65 kg for ewes. Average fertility is 120%, while in better herds with good housing conditions and better nutrition, that fertility is significantly higher, reaching 130-140%.

Description of the type of farming: Sjenica sheep, as an autochthonous breed, are ideal for breeding in mountainous areas. Breeding is extensive - characterized by grazing livestock on pastures and low-yielding breeds.

Production period: Production of Sjenica lamb takes place according to traditional technology and has a long and rich tradition in this region.

Summer feeding of sheep begins with driving the sheep out to pasture. That period is usually from the beginning of May to the end of October, that is, until the first snow. The summer diet of sheep is mainly limited to grazing without any feeding.

In the winter period, when the snow no longer allows sheep to move and graze, they are fed with hay from natural or sown meadows exclusively from this area. About 300-350 kg of hay should always be provided for one sheep. Feeding is usually done with grainy food, i.e. oats and barley and sometimes rye in the amount of up to 0.6 kg.

Product characteristics: Sjenica lamb has a unique quality and specific properties (taste, aroma, smell), recognized by buyers from the world market, among other things, as a result of various grasses and aromatic plants that graze the Sjenica sheep, which is the trademark of this region.

The technological process of production: The technological process of production includes the slaughter of lambs of different age categories (3 weeks to 9 months), primary processing and cooling of carcasses, in registered slaughterhouses in this geographical area. In total, about 20,000 lambs for slaughter are produced annually in the area of the Sjenica-Pešter plateau. Production of Sjenica lamb takes place according to traditional technology (manual skinning), and it has a long and rich tradition in this region.

Indicative quantity produced in one year: In total, about 20,000 lambs are produced annually in the area of the Sjenica-Pešter Plateau.

Nutritional value and use: As a rule, Sjenica lamb is distinguished by its top quality and, above all, specific sensory properties, especially due to its characteristic spicy taste and smell which makes it very appreciated and sought after on the domestic and world market. Meat quality is primarily determined by the following quality factors: hygienic-toxicological, nutritional and

sensory. The traditional way of growing and feeding Sjenica sheep on natural meadows and pastures, based on existing plant resources, from an extremely clean and untouched area, as well as the slaughter of lambs and primary processing of carcasses in registered slaughterhouses from this area, while respecting the principles of HACCP, enables the production of safe Sjenica lambs.

Product distribution and market: Products are sold at the market, doorsteps, traditional product stores, but also in retail chains.

Preparation, consumption and preservation: Domestic free-range lamb from the indigenous Sjenica sheep breed is mainly raised individually on households in the Sjenica Highlands. It is sold to butchers and cold stores for further processing and distribution. Some of the sheep are sold to catering establishments where traditional Sjenica lamb is prepared.

From 2012, Sjenica sheep has registered appellation of origin in the Institute for the Protection of intellectual property (Republic of Serbia). The label holder is the Association of producers of Sjenica lambs "Sjenička jagnjetina" (2011).

6.13 Čvarci - Pork Scratchings



Common name of the product: Pork Scratchings
Common name of the product in the territory of intervention: Čvarci

Image: Čvarci; Photo credit: Turistička organizacija Užice

Category: Other - Processed pork meat

Historical production or breeding area and origin: West Serbia region is known for its diverse agricultural production. Pig farming is less common than cattle farming - mostly is present in households in this region and less in organized industrial production.

History of the product: Čvarci are a specialty popular in South-eastern Europe, a variant of pork rinds. They are a kind of pork cracklings, with fat thermally extracted from the lard. Čvarci are mostly a rustic countryside specialty, common to the cuisines of Serbia, Bosnia, continental Croatia, Slovenia, Romania, Bulgaria and North Macedonia. They can also be found in other countries throughout Central and Eastern Europe: in Poland, Czech Republic, Slovakia, Austria, Hungary, Ukraine and Belarus.

Animal breed of origin: The domestic pig is a domesticated subspecies of the wild boar and is raised as a domestic animal for its meat (pork), fat, and meat products. In addition to the domestic pig, the Moravka, Mangulica and Resavka breeds are less bred. The Moravka or Moravian pig originated in the Morava River basin, by crossing the local pig breed - Šumadinka, with the Berkshire, which was imported to Serbia at the end of the 19th century. The Resavka originated from the unplanned crossing of the Šumadinka and Berkshire in the Velika Morava, Mlava and Resava river basins, as well as in the eastern mountainous regions of Serbia.

Description of the type of farming: Domestic pigs are often raised on open-air farms.

Production period: The production process takes place in parallel with the production of other dried pork products (October – November). Traditional time for pork processing in the Balkans is late autumn, and čvarci are consumed throughout the winter.

They are usually homemade, with industrial production not as pronounced. In larger cities they can be obtained on farmer markets or in supermarkets.

Product characteristics: Preparation of čvarci involves melting the lard. Lard is cut in blocks of about one inch (2.54 cm) in size and slowly fried in their own fat. Milk may be added at this point in order to obtain caramel colour. Process lasts until all fat melts away and only a kind of tough crispy pork rind remains. Onion or garlic may be added as a spice and salt is always used as a condiment. Pieces of skin may or may not be attached. In most common varieties of čvarci, some percentage of pork fat remains.

A special variety of čvarci known as duvan čvarci are mostly produced in the Western Serbia region. In case of duvan čvarci, the process of slow fat frying/cooking is prolonged until all the fat has been extracted. The remainder is a mass of delicate fibers which resembles finely chopped tobacco, thus giving the name to the variety.

Indicative quantity produced in one year: Čvarci are mainly made for personal use. There is no data on the estimated amount of production per household.

Nutritional value and use

Nutritional value of čvarci per 100 g

- Energy value 657 kCal
- Proteins 31.75 g
- Carbohydrates 0.5 g
- Sugars 0.4 g
- Fiber 0 g

- Fats 59.58 g of which saturated 41.43 g

Product distribution and market: Products are sold at the market, doorsteps, traditional product stores, but also in retail chains.

Preparation, consumption and preservation: As with most traditional pork products, they are considered to be winter food. They can be eaten on their own as a snack, served with heated fruit brandy common to the same region, called rakija, or they can be used as an ingredient in other food recipes.

6.14 Zlatar Cheese



Common name of the product: Zlatar Cheese

Common name of the product in the territory of intervention:
Zlatarski sir

Image: Zlatar cheese; Photo credit: Turistiička organizacija Zlatar, Nova Varoš

Category: Cheese or dairy product

Historical production area and origin: Zlatar cheese belongs to cheeses in brine - a large group of products known since ancient times. They are characterized by simple processing, ripening and storage in brine, which serves to preserve the quality and safety of the product in adverse conditions. Cheeses in brine were traditionally produced during the summer months in milk vats and sold in the fall. These are cheese whose ripening and storage until consumption is done in brine, i.e. solution obtained by dissolving salt in water or whey. The association of Zlatarski cheese with the area of Zlatar can be attributed to the existence of favorable conditions for the production of dairy products. The natural conditions of the mountain massif, which is under the influence of a moderate-continental climate and an altitude above 1000 m, the geographical position and the

specific landscape composition of the area, formed a unique floristic composition and vegetation composition of the plant cover.

History of the product: During the important historical-social changes that occurred after the WW2, the general image of the village gradually changed. Industrialization and the latent favouring of urban over rural culture changed over the years the social and to some extent the economic structure of the village. In the Zlatar region, like other rural areas, the economic atmosphere began to change due to the opening of agricultural cooperatives, which purchased agricultural products. This is precisely the time when the production of full-fat cheese was singled out as primary within cheese production, when the term “Zlatar cheese” was also differentiated in relation to the cheeses of other cattle-breeding areas.

Zlatar cheese is produced in villages of Nova Varoš municipality (partly in Prijepolje and Sjenica) in the region of Zlatar Mountain, bordered by the rivers Veljušnica, Kladnica, Zložnica and Mileševka.

Animal breed of origin: The racial composition of the represented cattle consists of domestic-coloured cattle in the Simmental type with about 90%, followed by pure Simmental, Bush and cattle of the Friesian breed. Traditionally, Zlatar cheese was produced from a mixture of cow's and sheep's milk, but today, when the number of sheep in Zlatar is getting smaller and smaller, it is almost exclusively produced from cow's milk.

Description of the type of farming: Animal husbandry is extensive in these areas. During the summer, the herds graze on the mountain pastures, while in the winter, the barn farming method is applied.

Production period: For the production of Zlatar cheese, raw full-fat cow's milk from healthy cows from a defined geographical area is used. The milking process is performed in the morning and evening hours throughout the year, while midday milking is represented by some producers during the summer season.

Production technique: In production of Zlatar cheese fresh cow milk and rarely a mix of cow and sheep milk is used. It is a production of full-fat cheese in brine of unpasteurised milk. In the production region several hundred producers produce Zlatar cheese and sell it directly in green markets, network of acquaintances and friends or to marketers who place it further in the market. At the same time, only about 10 dairy plants are registered in Nova Varoš municipality, which enable trade with restaurants, stores and other registered facilities. Part of households is strategically oriented to production of cheese especially those with top quality products, direct sale and available storage of big amounts of cheese. Dairy plants from Nova Varoš and several from Priboj, Ivanjica and Sjenica use this area as a base for raw materials. Zlatar cheese is not produced by any of the dairy plants, but sometimes, according to the market demand they deal with purchase and trade, and the range of their products they focus on yoghurt, fresh milk, permanent cheeses, etc. It is estimated that the area of Nova Varoš municipality contains about 12.000 head of cattle with the breeding calves.

For the production of Zlatar cheese, raw full-fat cow's milk from healthy cows is used. The milking process is carried out in the morning and evening throughout the year, while midday milking is

represented by some producers during the summer season. Milking is done by machine or by hand.

Immediately after milking, the raw milk is roughly filtered through a cloth and poured into appropriate plastic or enamel containers. After the filtering process, rennet is added to the milk in an amount of about 1.5-2 ml/l, with mixing to achieve homogenization. Curing is the coagulation of milk by adding liquid rennet. The temperature of the curdled milk ranges from 29-35°C and is determined empirically. The room temperature has to be in the range of 20-25°C, and the cheese making process lasts at least 2 hours. In order to preserve the temperature of the milk, the container in which the curd is made is covered with a cloth and wrapped in a thick cloth. The formed lump is cut crosswise after an hour and left to stand for 30 to 60 minutes to separate the whey. When the whey is separated, the curd is transferred to cloths (bras) and weighed. The pressing process lasts 4-6 hours, and the end of pressing is determined by experience. The thickness of the curd in bras is about 5 cm, and by the pressing process it is reduced to 2 cm, which is not the final thickness of the slice. After the pressing process is completed, the lump is cut with a knife into regular slices of rectangular shape and dimensions of 10-12 cm x 10-12 cm, or circular slices of similar dimensions. Slices of cheese are placed in plastic or wooden packaging by first salting the bottom of the container, after which the row of cheese is followed by the row of salt. The amount of salt used is determined empirically.

After stacking the cheese to the top of the bowl, a wooden circle and a stone are placed on top to weigh down the cheese. The cheese prepared in this way is left to mature. The slices must be submerged in the whey and must not be allowed to float to the surface. In the first days, the ripening process takes place in room temperature conditions of 20 to 25°C, then the cheese is moved to cooler rooms where the temperature ranges from 10 to 15°C. Zlatarski cheese is stored in packaging units in a cool (approximately 10 °C) and dark place.

Product characteristics: Zlatar cheese that is placed on the market has appropriate physical-chemical and the following sensory characteristics:

- A slice of Zlatar cheese has a regular rectangular shape with dimensions of 10-12 cm x 10-12 cm or a circular slice of similar dimensions. The thickness of a slice of Zlatarski cheese ranges from 1.0 cm to 1.5 cm.
- The cross-section of the slice has a compact structure with small or no cavities present.
- The colour is white to white-yellow cheese dough.
- The smell is mildly lactic acid (from fermentation), without foreign and unpleasant odors.
- Zlatar cheese has a clearly expressed pleasant taste of fermented cheese, not too salty and sour, without the presence of bitterness.

Indicative quantity produced in one year: Data on the amount of milk processed into cheese per one year are collected on an annual basis, and they are variable depending on the dairy herd and the strategic decision of the producer - while some decide to sell milk to dairies, others focus on processing milk into cheese or a combination of the two options. It is estimated that on the territory of the municipality of Nova Varoš there are about 12,000 head of cattle with breeding stock. Currently, around 350 dairy cows are bred, whose milk production is used for processing into Zlatar cheese.

Nutritional value and use: Zlatar cheese has the following chemical composition:

- a) Milk fat content in dry matter at least 50%,
- b) The table salt content is a maximum of 3%.
- c) pH value of at least 4.5
- d) Water in fat-free matter is at least 67%²,

Product distribution and market: Products are sold at the market, doorsteps, traditional product stores, but also in retail chains.

Preparation, consumption and preservation: Cheese care is carried out during the ripening and storage process, usually every seven days, and is the process of draining the whey, removing impurities, washing the lid and the container in which the cheese is located from the inside and outside, and refilling the cheese with whey or water. Some producers who do not have enough whey pour water over the cheese. Zlatar cheese is stored in packaging units in a cool (approximately 10 °C) and dark place. During the storage process, the described cheese care measures are carried out.

6.15 Sjenica Cheese



Common name of the product: Sjenica Cheese

Common name of the product in the territory of intervention: Sjenički sir

Image: Sjenica cheese; Photo credit: Turistička organizacija Sjenica

Category: Cheese or dairy product

Historical production or breeding area and origin: The area from which Sjenički sir originates includes the territory of the municipalities of Sjenica and Tutin, where the largest plateau in the Balkans and one of the largest in Europe, the Sjenica-Pešter plateau, is located. Climate is an extremely important factor that determines the natural conditions in which the process of producing milk products takes place. Among the areas in our country that are characterized by

suitable climatic conditions for the production of milk products, in addition to the Zlatibor region, is the Sjenica-Pešter plateau.

History of the product: Sjenički sir is one of the products from Zlatibor region which has a great potential for further development and commercialization as well as achieving additional value for small entrepreneurs in the region. It is produced in villages of Sjenica and Tutin municipality, very appreciated in the market, of special flavor and made of two types of milk - sheep and cow milk - produced of cattle raised in pastures of Pešter of high nutritional value.

Animal breed of origin: Of the sheep breeds, in the area of the Sjenica-Pešter plateau, the Sjenica sheep is mainly bred. This sheep is one of the most famous domestic breeds of sheep with triple combined production traits. It is grown for the production of milk, meat and wool. It got its name from the town of Sjenica, and it is also called the Pešter or Sjenica-Pešter sheep.

Description of the type of farming: Sjenica sheep, as an autochthonous breed, are ideal for breeding in mountainous areas. Breeding is extensive - characterized by grazing livestock on pastures and low-yielding breeds.

Production period: Production of Sjenica sheep cheese is seasonal, and cow cheese is produced year-round.

Product characteristics: Indigenous (traditional) Sjenica cheese is produced of raw sheep milk recognized as one of the most appreciated type of sheep cheese of characteristic flavour, spicy and expressed taste, very white in colour and specific dough material. In the past few decades, concerning the amounts, cow cheese produced on the same technology dominates the market; because cow-breeding prevails in comparison to sheep-breeding (milking and breeding of sheep are far more difficult and require greater involvement of labour).

The milk from which Sjenica cheese is produced has the following composition:

- Fats 6.40 to 8.88, average 7,74%
- Protein from 5.41 to 6.09, average 5,70%
- Lactose from 4.28 to 4.52, average 4,40%
- Total dry matter from 18.68 to 20,48%, average 19,58%
- Dry matter without fat from 10.95 to 11.62, average 11,18%

The composition and quantity of sheep's milk is influenced by race, stage of lactation, daily variations, and seasonal variations, number of lactations, age of sheep, udder health and nutrition as the most important paragenetic factor. Interbreed genetic differences in the manifestation of milk yield traits of sheep are quite pronounced.

In terms of vitamin content, sheep's milk has a particularly high content of vitamin C, followed by vitamins A, B1, B2, B6 and B12, and considerably less carotene.

Production technique: Milking of sheep is mostly manual, but it can also be mechanical. It is performed in a specific way by simultaneous milking of 2 sheep. During milking, the milk is strained through several cheesecloths and after milking it is strained again. Near the pens where the milking takes place, there are usually katuns (apartments, vats), where cheese is produced and ripened.

So, when the cheese is made, it is stored in baskets or buckets in "dairies" made of wicker or solid material (concrete blocks, bricks...).

This milk has a much higher energy value than other types of milk, because it has a much higher amount of protein and fat. Due to the high content of dry matter, sheep's milk is almost exclusively used for cheese production.

The traditional method of production (coagulation, self-pressing and pressing, cutting and salting of cheese, ripening, storage and nurturing) in the conditions of a clean natural environment with spacious meadows and pastures, results in a widely known high-quality cheese.

The technology of Sjenica sheep's cheese is adapted to the conditions in which it is made, and in order to protect it from spoilage, the cheese is generously salted and stored in brine so that aerobic micro flora cannot develop. The technology and characteristics of milk processing in the area of the Sjenica-Pešter Plateau, as well as in many mountainous regions, is a technology in which the similarities, but also the specifics of the production of white cheeses in brine, are highlighted.

As for the production technology of Sjenica sheep's cheese, it is reflected in the simplicity of the production process. The method of processing and conditions of cheese production are adapted to seasonal (summer) work in the mountains and in rural households.

Production process of Sjenica cheese

Milking → Squeezing → Coagulation (curdling) → Cheese pressing → Self-pressing → Shaping → Cutting and salting the curds → Stacking the cheese curds into baskets and ripening → Pressing and ripening

Indicative quantity produced in one year: Sjenica mixed cheese, which is obtained from cow's and sheep's milk, is produced in much smaller quantities, and its annual production is from 50 to 70 tons. The so-called "mixed" cheese is mostly produced to order, that is, for a well-known customer. The production of this cheese is mainly carried out by agricultural farms. Cow's cheese is produced in small factories, dairies, registered workshops for milk processing, as well as in registered agricultural farms, using raw materials from a defined geographical area and using traditional technology. About 400 to 450 tons of Sjenica cow's cheese are produced annually on the registered farms, which, together with other producers, gives a figure of 900 to 1,000 tons of annual production of Sjenica's cow's cheese on the Sjenica-Peshter plateau.

Nutritional value and use

Nutritional values per quantity of 100 g of Sjenica cheese

- Energy value 347 kcal
- Proteins 20.00 g
- Carbohydrates 0.00 g
- Fats 30.00 g

Product distribution and market: The greatest share is sold in green marketplaces in direct sale and over a network of trades and mediators with restaurants, catering facilities and diaspora.

Preparation, consumption and preservation: Sjenica cheese is stored and preserved in wooden or plastic packaging units in a cool place (at approximately 10 °C) protected from light. The above-described measures for cheese care are also implemented during the storage process.

From 2012, Sjenica cheese has registered appellation of origin in the Institute for the Protection of intellectual property (Republic of Serbia) under serial number 59. The label holder is the Association of Sjenica Cheese Manufacturers "Sjenički sir" (2011).

Reg. no 59 APPELLATION OF ORIGIN

Sheep Cheese from Sjenica

Description: Sheep cheese from Sjenica is soft, full fat cheese by sheep in pickle with the pieces of regular dimensions 10x10 and 15x15 cm with the height of around 3-5cm and the weight of around 250-350gr. The pieces can be of different shape depending on the package, and mostly are in a form of triangle or cut or cube, with no deformities or damages. The smell is typical, milky sour, prominent and mildly piquant. The taste is pleasant, aromatic, milky sour, well expressed, predominantly salty. The cheese matures in its own salty whey for at least 60 days.

Geographical area: Sheep cheese from Sjenica is produced exclusively on the area of the municipalities of Sjenica and Tutin or at the broader region of plane Sjenica and Pester.

<https://www.zis.gov.rs/wp-content/uploads/Reg-no-59-Sheep-Cheese-from-Sjenica.pdf>

6.16 Fast Milk Cheese



Common name of the product: Fast Milk Cheese

Common name of the product in the territory of intervention: Meki beli sir

Image: Fast Milk Cheese; Regional Development Agency Zlatibor Ltd

Category: Cheese or dairy product

Historical production or breeding area and origin: West Serbia region is known for its diverse agricultural production. Livestock production is also often present in households in this region.

History of the product: The method of making cheese is the same as the method of making white cheese from sheep's milk. Possible differences occur only to the extent that they are related to the properties of the milk itself. To make this cheese, you need almost the same equipment that is needed to make cheese from sheep's milk.

Animal breed of origin: In breeding, domestic coloured beef is most widespread in the Simmental type, which has weaker genetic potential due to uncontrolled crossings with less productive breeds. On the largest number of farms, cattle breeding is based on the free use of grass areas during the summer period and a tied system of breeding in facilities during the winter period.

Description of the type of farming: Cattle production is extensive, and the production results are far below the technological norms and the genetic potential of the cattle.

Production period: Fast Milk Cheese is produced year-round.

Product characteristics: White cheese is a representative of a number of different varieties that differ in technological operations, but, basically, the technological process of production is the same for all of them. It is made from sheep's or cow's milk, or the two milks are mixed, hence the main difference of individual varieties.

Production technique: Good and fresh cow's milk is heated in enamel pots in winter to a temperature of 25-30°C, and in summer to a temperature of 18-20°C. So much rennet is added to the heated milk that it curdles in 4-6 hours. Liquid rennet is usually used, and it is factory-made. (Previously, rennet was used that the peasants themselves made; now it is rarely done). Put the container with milk in a warm place, in winter and spring next to the fireplace or stove, and in summer in the room or kitchen.

The lump is cut with a clean knife first crosswise and then into 5-6 cm cubes. The cut lump is left to exist for a while and during that time it is observed what kind of whey comes out of it. White whey is a sign that the milk has not yet curdled; green and clear whey, on the contrary, is a sign that the milk has curdled.

If it is found that the milk is curdled, the lump is placed in a strainer, and the strainer is hung up to strain. Shake the strainer from time to time to facilitate the release of the whey. When the whey stops leaking in jets, further work is started.

Remove the strainer and place it on the cheese table. A clean board is placed over the strainer and pressed from above with a clean stone.

It remains under load until it drains well. Squeezing and pressing takes 6-12, and sometimes 24 hours. During the summer, the curd should be pressed in the cellar or in another cooler room so that it does not turn sour. In the winter, it can also be drained in the kitchen. The temperature during squeezing and pressing is the same as for sheep's milk cheese.

After squeezing, the weight is removed from the lump, the strainer is un-folded and the lump is cut into small square pieces. The thickness of the pieces depends on the thickness of the curd, and this in turn on the amount of curd and the strength of pressing. The slices are thicker in winter and

thinner in summer. Slices that are too thin should be avoided, because they flatten out a lot in the ripening vessels.

The slices are arranged in smaller wooden bowls. Once one layer is stacked, salt is added on top, then another layer is stacked on top of it in the same way, and so on until the top of the mushroom. When the container is full, wait a few days, then place a clean wooden board on top of the cheese, and a stone over it.

The dishes are kept in a cooler place in the summer and in the kitchen in the winter, while the cheese is still young. When the cheese has settled, the dishes are replenished with new slices.

Indicative quantity produced in one year: In Užice and Čajetina, the largest volume of milk is delivered to dairies, while household milk processing is weak. The trend of milk processing within the farm is much more pronounced in Nova Varoš, Prijepolje and Priboj. The production of cheese in the Republic of Serbia varies greatly from year to year, on average it is almost 60 thousand tons and shows a constant tendency of growth. Of the total amount of cheese, 66% is produced in industrial and other facilities of legal entities and entrepreneurs. The remaining quantities are produced on farms, within registered facilities for milk processing and sold directly to end consumers on the markets. The average production of cow's milk cheese in the dairies of the Republic of Serbia is 3.4 thousand tons and shows a significant growth trend.

Nutritional value and use

Nutritional values per quantity of 100 g of Fast Milk Cheese

- Energy value 105.0 kcal
- Proteins 11.5 g
- Carbohydrates 3.5 g
- Sugars 0.0 g
- Fiber 3.5 g
- Fats 4.4 g

Product distribution and market: The greatest share is sold in green marketplaces in direct sale and over a network of trades and mediators with restaurants, catering facilities and diaspora.

Preparation, consumption and preservation: Cheese made in this way can be eaten immediately after making it, but it is tastier when it ripens. In 2-3 weeks, it fully matures and, if properly prepared, can last for months.

At the beginning of ripening, the cheese is softer, and when it matures, it becomes firm like other cheeses of this type.

6.17 Kaymak



Image: Kaymak; Photo credit: Turistička organizacija Užice

Common name of the product: Kaymak

Common name of the product in the territory of intervention: Kajmak

Category: Cheese or dairy product

Historical production or breeding area and origin: The history of kajmak originates from a type of dessert that was made in the Turkish city of Afyon, which otherwise became famous for its recipes for the production of ratluk and a type of thick cream that were made as far back as 3000 years before Christ. It is known that kajmak was made in Europe, the Middle East and Central Asia. Even today, unlike Europeans who make kajmak from cow's milk, the inhabitants of eastern countries use buffalo milk. It is a mandatory part of breakfast in the Middle East, and residents of Iran and Iraq use it to prepare a type of dough. In Afghanistan, green tea is drunk for breakfast, and with it, a traditional pastry called Naan, which is spread with cream, is eaten.

History of the product: In the Balkans, kajmak is produced in mountainous regions, especially in Serbia and Bosnia. It is mainly served as an appetizer, but also as an addition to other dishes. The most famous combination is cream with a bun, as well as a side dish for burgers and kebabs. Metaphorically speaking, kajmak indicates something that is on the top, something which is the best. Kajmak is the Turkish word the fat layer formed after cooling on the top of milk that is

skimmed and used as a dairy product. Written data on dairy products processing in the Balkans are scarce and can be found in travel journals and church notes. The first data on kajmak as a significant dairy product in our region were available in the second half of the 19th century and in the 20th century.

Animal breed of origin: In breeding, domestic coloured beef is most widespread in the Simmental type, which has weaker genetic potential due to uncontrolled crossings with less productive breeds. On the largest number of farms, cattle breeding is based on the free use of grass areas during the summer period and a tied system of breeding in facilities during the winter period.

Description of the type of farming: Cattle production is extensive, and the production results are far below the technological norms and the genetic potential of the cattle.

Production period: Kajmak is produced year-round.

Product characteristics: The kajmak quality starts developing with raising and feeding cattle and is completely achieved due to quality of raw milk from cows grazing on naturally preserved pastures with high floristic richness. Zlatibor is recognized as a mountain that nature was generous to, a mountain with clean waters, unpolluted air, pleasant climate and insolation, and with lush pasture vegetation. Authentic microflora of the high mountain area, getting activated during the ripening process, gives kajmak the specific taste and aroma.

Kajmak is produced on daily basis, after each milking or once a day from milk gathered from the morning and evening milking. If the process is done once a day, milk from the evening milking is kept until morning. In that case, milk is first filtered and then stored in the cooling chamber (refrigerator) until further processing. Kajmak is a product made by separating the top layer of the thermally processed and cooled milk (from cow, sheep, goat, buffalo or from their combination). After processing, ripening and maturing a specific product is created. According to the ripening level, the product can be sold as fresh or mature kajmak.

Indicative quantity produced in one year: During the year, over 122 million liters of raw milk are produced in the Zlatibor District, which creates good conditions for increased production of kajmak.

Nutritional value and use: According to the Ordinance on quality of dairy products and starter culture (Official Gazette RS, No 33/2010), during production and trade kajmak must meet the following requirements:

- a. it must be white or yellowish in colour
- b. it must have characteristic pleasant smell and taste
- c. it must contain at least 75% of milk fat in dry matter
- d. it must contain at least 60% of dry matter
- e. it must contain maximum 2% NaCl

Fresh kajmak is ready to be consumed immediately after it is produced i.e. up to two weeks after the production process. The fresh kajmak has layered structure with a milky, soft spreadable texture, a part of which is not strained. It is characterized by continuity of the water phase with milk fat mostly retaining its original form. The colour of fresh kajmak is distinctly light (ivory to pale

yellow) depending on the milk it is produced from. Smell and taste of fresh kajmak are mild, milky, reminding of boiled milk and closer to butter than to cheese.

Mature kajmak is made after a certain period of ripening that may take from a couple of weeks to several months. It undergoes through a number of physical and chemical changes under the effect of the micro flora of air. Mature kajmak has fine grained consistency instead of the fresh kajmak's layered structure; it is far easier to spread for the higher fat composition so that the protein phase is replaced by fat phase. Taste and aroma become more distinct, intensive and closer to strong mature cheeses.

After studying sensory properties, it can be concluded that kajmak aroma changes from butter to cheese during the maturing process while the structure changes in the opposite direction from cheese to butter.

Product distribution and market: The greatest share is sold in green marketplaces in direct sale and over a network of trades and mediators with restaurants, catering facilities and diaspora. Kajmak is part of every restaurant offer, not only in the hotel and rural tourism of the west Serbia, but also in the wider region, and the recognition of kajmak has been confirmed in the former Yugoslavia.

Preparation, consumption and preservation: Containers with kajmak during ripening are kept in a room with a cellar temperature (around 15-18°C). After 15 to 20 days, kajmak is ripe and can be stored for a long time in a cool and drafty place. For longer storage, it is necessary to protect the surface, preferably with a coating of melted butter. During ripening, the aroma of the cream changes, from butter to cheese, while changes in consistency (structure) are directed from cheese to butter.

6.18 Uzice Flat Bread Bun



Common name of the product: Uzice flat bread bun
Common name of the product in the territory of intervention: Užička komplet lepinja

Image: Uzice flat bread bun; Photo credit: Regional development agency Zlatibor ltd

Category: Bread and savory bakery products

Historical production area and origin: The Užice flat bread bun is a traditional dish that is inextricably linked to the city of Užice and the entire Zlatibor area. This delicious treat is believed to have originated between the two world wars and has become a staple in bars, hotels, restaurants and bakeries across the city.

History of the product: The Užice flat bread bun (so-called “komplet lepinja” or “lepinja sa sve”) is a local specialty that is prepared today in many bakeries and taverns in the Užice and Zlatibor regions, that is, in the area of western Serbia.

Product characteristics

Ingredients for preparing a flat bread bun:

- 1 bun
- 1 egg
- 1 tablespoon of the old Užice kaymak (clotted cream)
- 4 tablespoons of gravy (roast lamb or pork gravy; it can be found in any barbecue restaurant)
- Solid fuel stove or the “smederevac” stove (you can use an electric stove as well, but in that case we cannot guarantee the full experience)

Cut off the top third of the bun. Coat the bottom part with kaymak. Add the egg to kaymak. Use the fork and mix the egg and kaymak on the bun until it is completely covered with the mixture. Make small holes in the bun using the fork so the mixture is easily absorbed. Put it in the "smederevac" stove oven. When the bun is baked, pour warm gravy on it!

Mix flour and salt to make dough. Mix yeast and sugar in the warm water and leave it to rise. Add sunflower oil and raised yeast to flour. Let the dough rise in a warm place. Divide dough into 4 pieces and make four buns. Grease the baking sheet and bake in the "smederevac" stove oven or any other solid fuel stove.

Dough:

- 500gr of flour
- 250ml of warm water
- 3 tablespoons of oil
- 1 teaspoon of salt
- 1/2 teaspoon of sugar
- 1 package of yeast Serve with yoghurt.

Eat only with bare hands – do not use cutlery! Break a top of the bun into small pieces with your hands and dip them slowly into gravy and baked egg and kaymak. When you are done eating the top, eat the rest of the bun in the same way. Chin and hands smeared with gravy are the clear sign you have eaten the Užice flat bread bun properly. Do not take bites like you do when eating a hamburger (the top and the bottom part of the bun are supposed to be apart). Do not add prosciutto, grilled skinless sausages or anything else to the Užice flat bread bun!

Period of production of the processed product: All year long

Product distribution and market: The Užice flat bread bun is an indispensable breakfast in Western Serbia. It is found on the menus of all restaurants and fast food shops.

Nutritional value and use: Nutritional values per quantity of 100 g

- Energy value 330.0 kcal
- Proteins 18.0 g
- Carbohydrates 60.0 g
- Fats 4.9 g

The famous gastronomic website Taste Atlas announced Užice flat bread bun (Užička komplet lepinja) the winning world breakfast for 2023 (<https://www.tasteatlas.com/komplet-lepinja>)

7. Northern Montenegro

7.1 Red Cabbage



Image: Red Cabbage; Photo credit: Musa Ramovic

Scientific name of the product: Brassica Oleracea
Common name of the product: Red cabbage
Common name of the product in the territory of intervention: Crveni kupus -sarac

Category: Vegetables

Historical production area and origin

Red cabbage has been grown in our region for decades, none of the current population remembers when the seeds were brought to this area. What is characteristic is that most residents keep the same seeds for decades.

Cultivars, species and types: Red cabbage

Description

This cabbage is used exclusively for preparing the winter salty drink "RASO", in smaller quantities it used for preparing winter food. It has small cabbage heads, which are very hard. The color of the cabbage head is a dark red color, very sour.

Harvest period: It is grown in the period June-November, and the drink is made in the period November-December.

History of the product

The generations that are now engaged in the production of this type of cabbage do not remember when the seeds were brought here, which confirms that the seeds have existed in this area for a long time, decades/centuries ago.

The seeds that are produced require a time of one year. In autumn, good heads of cabbage are selected and dug into the ground. It stays that way until spring. In the spring, it is dug up, planted but in such a way that the upper part the cabbage heads remain above the ground. It is planted at a distance of 70 cm. During the summer, the heads bloom and release pod-shaped seeds. When the seeds ripen, they are dried and stored for the next year. The seeds are sown in early spring, and are grown that way until June, when they are transplanted.

Nutritional values and use

The cabbage is rich in vitamins and fiber, especially vitamin C. The drink made from cabbage is also rich in vitamin C and is used during the winter months (November-February) as a dietary supplement, mostly with high-calorie foods.

Indicative quantity produced

50-100 pieces per families, for preparation cca 100l of Raso

Product distribution and market

Usually, this product is made just for own usage. In new time some of local producers sell it at the local market.

Preparation, consumption and preservation

Cabbage is washed, cut into 4 slices and salted. It needs to stand for at least 24 hours, after which it is poured with water. It should stand like this for at least 20-30 days, depending on the outside temperature. A low temperature is suitable. If desired, the water can be remix after 20-30 days to mix the salt concentration. When the drink is ready, it is used directly from the barrel, without any additives.

7.2 Buckwheat



Scientific name of the

product: *Fagopyrum
esculentum*

Common name of the

product: Buckwheat

**Common name of the
product in the territory of**

intervention: Heljda

Image: Buckwheat; Photo credit: Musa Ramovic

Category: Cereals, grains and flours

Description

Buckwheat is a plant that belongs to the group of alternative cereals and is mostly grown in hilly and mountainous areas. Buckwheat cultivation yields seeds that are used to make high-quality flour that does not contain gluten. Buckwheat seeds are used for food. The seeds are triangular-pyramidal in shape, dark brown in color. It has an envelope and an endosperm. During grinding, the casing gives it a dark color.

Harvest period: The vegetation period of buckwheat is 90-120 days, it develops best when it has at least 12 hours of daylight. It requires a moderate ratio of liquid and moisture in the air. When 2/3 of the flower turns dark brown, the seeds are collected, i.e. the harvest is done.

History of the product

This seed is believed to have been brought from Asia centuries ago.

Nutritional values and use

Buckwheat has highly nutritious nutritional values, contains important minerals and vitamins, and buckwheat flour is the most widely used. It can be used alone or in combination with wheat flour for the preparation of bread, pies, cakes, etc.

Buckwheat has a rich source of amino acids, contains vitamins, minerals, and what makes it a healthy food is the high content of antioxidants and essential nutrients that are responsible for creating a good immune system in humans and proper functioning of the body.

Product distribution and market

Buckwheat flour can be bought from local producers, but also in all supermarkets and local markets.

Preparation, consumption and preservation

Indicate also any traditional recipes, cooks and restaurants that use it, and any other possible uses
Buckwheat grain can stay longer, while flour can be stored in a dry and dark place for several months.

Traditional restaurants usually have dishes that contain buckwheat flour in their menu. Buckwheat pita is one of the most famous specialties of our region.

Any other documents on the product to be annexed:

<https://www.organicmarket.me/organski-proizvodjac/macanovic-zeljko/me>

7.3 Corn



Scientific name of the product: Zea Mays
Common name of the product: Corn
Common name of the product in the territory of intervention: Kukuruz jarik

Image: Corn jarik; Photo credit: Musa Ramovic

Category: Cereals, grains and flours

Historical production area and origin

It is considered the oldest variety of corn in this region, which is suitable for the mountainous region. Succeeds even at 1500 meters above sea level. It used to be the main variety, but today

only individuals grow it exclusively for human consumption. There are two varieties, white and yellow corn, which is typical for some regions.

Description

It has a short and dense piston, necessarily 8 or 12 rows, yellow or white.

Harvest period: Already in August, the first fruits of corn can be used, but only for baking or cooking. If they remain in the fields until October, then they are dried for several months, crowned and then ground into fine flour.

History of the product

It is considered the oldest variety of corn in this region, which is suitable for the mountainous region. Succeeds even at 1500 meters above sea level. It used to be the main variety, but today only individuals grow it exclusively for human consumption. There are two varieties, white and yellow corn, which is typical for some regions.

Nutritional values and use

Corn has a high nutritional value, it is rich in minerals and vitamins, so it is widely used by people who care about their weight, but also by those who have various diseases because it does not contain gluten.

Indicative quantity produced

Usually, producers sow 1-2 kg of grain, and if it's a good year, they can grow up to 50 kg of corn.

Product distribution and market

The product can be bought in specialized health food stores, on the market or directly from the manufacturer.

Preparation, consumption and preservation

Flour obtained from corn is used to prepare corn bread and "kacamak". Traditional restaurants offer dishes made from cornmeal.

7.4 Pasinka Apple



Image: Pasinka apple; Photo credit: Musa Ramovic

Scientific name of the product: Malus Pumila.pomum

Common name of the product: Pasinka apple

Common name of the product in the territory of intervention: Pasinka

Category: Fruit

Historical production area and origin

It is generally known that the types of apples known to us today, as well as those before them, were created mainly by natural hybridization and further by human selection of the best varieties, and they mostly came to us from the areas of central Asia and Anatolia and Mesopotamia, via trade caravans, merchant ships, etc. . Also, many conquerors of the Balkan Peninsula left their mark on our orchards from the Roman and Ottoman Empires, who are believed to have brought with them many varieties of fruits and vegetables, including Pasinka.

Cultivars, species and types: Domestic winter apple variety - Pašinka

Description - History of the product

Pašinka is an old type of apple that is considered to have been brought during the Ottoman rule, it is a very lush variety, with a spreading canopy of 5-7m and a tree height of 10-12 meters, we have examples of it that are over 100-120 years old, however the condition of yield and vitality of the plant declines already at the age of 80, it is very resistant especially to late spring frosts, the flowering time is around May 15.

The shape of the fruit is characteristic for an apple, the average height of the fruit is about 60mm with a width of about 75mm, the average weight of the fruit is about 120-150 grams, the color of the fruit is green-yellow to reddish depending on the subtype of the variety, in the first days after harvesting it has a sweet and sour taste, while it becomes sweeter as it ripens and can be stored long after harvest.

Harvest period: Harvesting begins at the end of September and lasts about 20 days due to the periodic ripening of the fruit tree.

Nutritional values and use

The use of apples is very widespread, and they are mostly used fresh or processed, in our country Pašinka is used fresh throughout the winter, and the juices obtained by squeezing this apple are a real delicacy "PAŠINA JUICES" which are obtained by cold pressing apples. , after which they are pasteurized and hermetically sealed exclusively in glass packaging.

Nutritional value of apple on 100 gr, cca the most is Carbohydrates, 13,8 %, than 10% of sugar, fiber 2,4%, and energy just 52 calories

Indicative quantity produced

It is very difficult to indicate, in one village cca 10-15 t per year.

Product distribution and market

Considering that it is a small amount of product, it is not taken to the open market, it is used more for special occasions, tastings, friendly gatherings, and a small part is sold in order to cover certain costs.

Preparation, consumption and preservation

Indicate also any traditional recipes, cooks and restaurants that use it, and any other possible uses
Preparation, consumption and preservation: the preparation of Pašinka juice consists first of all in its picking and collection, after which it is taken to the processing plant, where the next step is washing, grinding of apples, drying with filtration, then pasteurization of the fruit juice and packaging in sterile glass packaging, after that the finished product is stored in the basement in a dark and cool place.

7.5 Kacamak



Image: Kacamak; Photo credit: Musa Ramovic

Scientific name of the product:

Kacamak

Common name of the product:

Kacamak

**Common name of the product
in the territory of intervention:**

Smocani kacamak

Category: Processed product of plant origin – Other: Potato, flour, cheese and milk cream

Historical production area and origin: In the north of Montenegro, potatoes and cereals are mostly produced, so the diet is based on these foods.

History of the product

Kacamak is a typical dish for the mountainous region (north of Montenegro). There are several types of kačamak depending on the flour used. It can be made from corn flour, wheat, buckwheat, etc. The difference is reflected in the fact that potatoes are added to the kacamak made of wheat and buckwheat flour.

Product description and its production technique

KACAMAK is prepared in the way that the first the potatoes are cleaned, cut and boil in the salt water. When the potatoes are cooked, add the flour and continue cooking for another 20-30 minutes. After that, the mixture should be mixed so that all lumps disappear. When the mixture is ready, add the mixture of cheese, cream and butter.

Period of production of the processed product: all year, but mostly in winter time.

Nutritional value and use

Kacamak is a high-calorie dish due to the addition of dairy products and the composition of the flour that is cooked. The dish is mostly prepared for breakfast or during main meals as a warm appetizer.

Product distribution and market

Kacamak can be ordered in traditional restaurants, rural households that provide tourism services.

Preparation, consumption and preservation

The most popular restaurants where can order kacamak are Savardak and Kozak.

7.6 Plum Vinegar



Common name of the product: Plum vinegar
Common name of the product in the territory of intervention: Sirce od sljiva

Image: Plum vinegar; Photo credit: Musa Ramovic

Category: Processed product of plant origin - Other fruit's drink (Plums and water)

Historical production area and origin

Northern Montenegro is known for the production of plums, and during the winter months it was necessary to provide enough food and drinks for the family. This drink was created because it was the easiest way to preserve fruit, at that time there was no possibility to process large quantities of fruit into juices and save them for use.

History of the product

None of the generations that make this pizza today know how and when the recipe was created, so it is considered that the recipe is centuries old.

Plum vinegar is made from an old variety of plum that still exists today, which is Pozegaca.

Period of production of the processed product: this product is preparing during September

Nutritional value and use

The acid obtained by fermentation helps in the digestion of food, so it is very suitable for drinking in the winter months

Indicative quantity produced in one year: 50-100l per family

Product distribution and market: Just for own usage

Preparation, consumption and preservation

The process of preparing this drink is very simple. Plums should be picked, washed and placed in a barrel. A wooden barrel is best. Then it is poured with water and left to ferment naturally. The required period for fermentation is 30-40 days, depending on the temperature. When the product is ready, it should be diluted with water before use and, if desired, add sugar.

7.7 Leafy Cheese



Specific name of the product: Leafy cheese

Common name of the product: Leafy cheese

Common name of the product in the territory of intervention:
Kolasinski/ lisnati sir

Image: Leafy cheese; Photo credit: Musa Ramovic

Category: Cheese or dairy product

History of the product

This type of cheese has been made for decades/centuries in the same way. Originally, the recipe was created in the village of Moraca (Kolasin), but as girls got married, they spread the recipe to nearby territories. Today, it is mostly made in the municipality of Kolasin, but also in the municipalities of Mojkovac and Bijelo Polje.

Animal breed of origin: Cheese is made from cow's milk

Description of the type of farming

During the summer, the cows from the area are fed on the pastures (May-October) and are fed with hay, a mixture of cereals in the winter months.

Processors are also the breeders of the animals that constitute the main ingredient of the leafy cheese.

Production period: all year

Product characteristics

Leafy cheese is made from two types of milk, one that has been left overnight and the other from morning milk. When the milk is mixed, the curds are added and heated to a certain temperature. Then the mixture is cut several times. Then the water is separated from the cheese and it is folded and pressed several times to get the shape of leaves. The more it is folded, the thinner the leafies become.

Nutritional value and use

Since this cheese is used very young, just a few days, it does not have a high level of fat, and contains enough protein and protein.

Indicative quantity produced in one year: depend of the families, but 5-30 kg per day, on the year it will be 2-10 tones. There are farmers which has over 20 cows and they produce more cheese.

Product distribution and market

Cheese is sold in specialized stores, local markets and directly from the producer.

Preparation, consumption and preservation

Leafy cheese is the main ingredient of kacamak, which is offered to all traditional restaurants.

Other documents on the product:

<https://www.youtube.com/watch?v=KuzwHO7iLBo>

<https://rtcg.me/vijesti/crnomgorom/396652/evo-kako-se-pravi-lisnati-kolasinski-sir.html>

7.8 Beef Sausage Sudzuk



Common name of the product: Beef Sausage
Common name of the product in the territory of intervention: Govedji sudzuk

Image: Beef sausage sudzuk; Photo credit: Musa Ramovic

Category: Cured meats and sausages

Historical production or breeding area and origin

This product is traditionally made during the winter months. At a time when there were no freezers, it was necessary to devise a way to preserve meat for winter days. Since mostly wealthy people slaughtered the cow for the winter, when they separate the meat that will be dried, the rest is ground and natural spices are added, mostly only (sea) salt, garlic and pepper. All this is mixed well, when it has stood enough, then the intestines are filled and prepared for drying.

Animal breed of origin

Sudzuk can be made only from beef, but the best mixture is when there are mixtures, when there is meat from ox, cow, beef and sheep. In very small quantities, some also add horse meat (but these are limited quantities). Only natural spices, salt, pepper and garlic are added to the meat, no preservatives are added.

Description of the type of farming

For the production of sudzuk, meat from animals from our own breeding is used. The cattle are fed during the summer months on pasture, and during the winter months they are fed with hay and a mixture of cereals, which are also from their own production.

Often, the processors are also partly the breeders of the animals, because sometimes you just buy meat and prepare sudzuk according to your own recipe.

Production period: usually in winter time, (November-January), but in new time almost over the year, because people use a new technology.

Product characteristics

The meat is selected, ground and seasoned. It stays like that for at least 24 hours. Then the intestines are filled, which are also of animal origin (beef or beef). After filling and shaping, it should be left overnight. When it is ready for drying, it dries for 7-14 days, depending on the temperature. Low evening temperature is suitable for drying, and during the day it is only smoking.

Nutritional value and use: high-calorie product, almost 35% fat, followed by proteins and carbohydrates.

Product distribution and market

The product can be found in all supermarkets, but it is mostly from commercial production. It is possible to buy from local producers at local markets, fairs or directly.

Preparation, consumption and preservation

Sudzuk is a mandatory ingredient of all cold appetizers, represented in all restaurants.

Other documents on the product:

<https://www.youtube.com/watch?v=WP8tT3rpSi4&t=63s>

4-5 m of video