

Traditional values of Croatian indigenous cheeses

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Summara - Iraq

Spread of cheese
from Summara
followed the same
pathways like wheat
for bread.

Traditional cheeses



- Appeared accidentally in some areas as a result of a long tradition of development of some cheese-making technology (recipe) of production that is transferred from generation to generation
- Climate
- Geographical position
- Soil
- Water
- Botanical composition of natural pasture
- Animal breed and animal husbandry management
- Tradition and habits of the local population



Mediterranean zone

Austro

Hungarian

Ottoman

Venice's



Mediterranean cheeses in Croatia

- Full-fat ewe's milk.
- Made from the milk of native sheep breeds.



Breed/Parameters	Dalmatian Pramenka
Milk fat (%)	7.56
Protein (%)	6.24
Lactose (%)	4.36
Total solids (%)	18.80
Solids non fat (%)	11.48
pH	6.70
Freezing point (°C)	-0.5609
Somatic cell counts/ml	682,445

Modified according to: Matutinović et al. (2007):
Mljekarstvo 57 (1)

Mediterranean cheeses in Croatia (2)

- Made in houses built from stone
- The cheese was ripened in a ripening chamber with controlled but variable temperature and air humidity (**up to 19°C** and up to 90 %, respectively) .

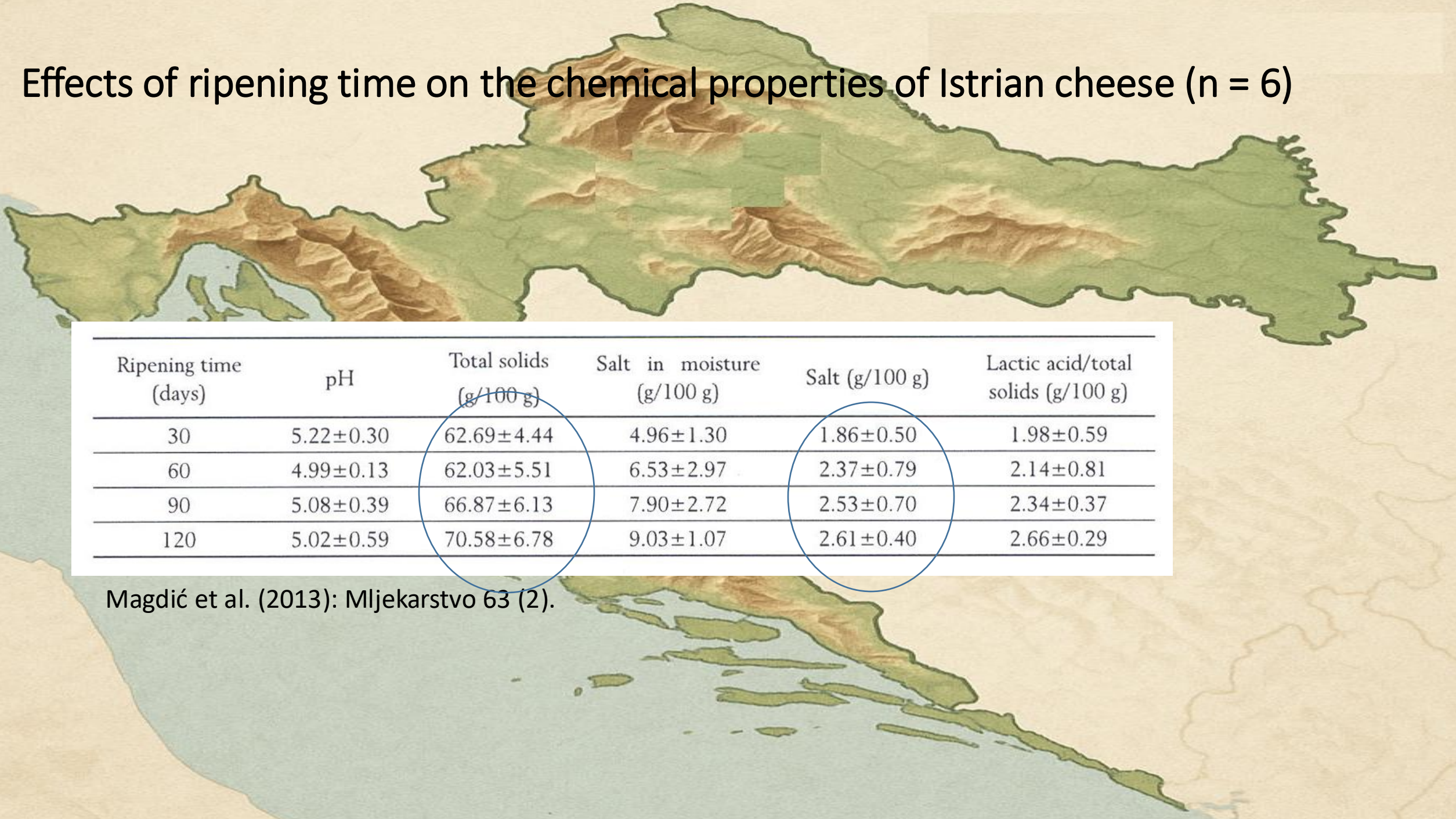


Istrian cheese (PDO)



- Sheep milk hard cheese
- Cylindrical shape
- Full taste and aroma, pronounced scent of sheep and the local plants
- Moderate elastic but easy to cut

Effects of ripening time on the chemical properties of Istrian cheese (n = 6)

A topographic map of the Istria region, showing the coastline and inland terrain with various elevations indicated by green and brown shading. The map serves as a background for the slide.

Ripening time (days)	pH	Total solids (g/100 g)	Salt in moisture (g/100 g)	Salt (g/100 g)	Lactic acid/total solids (g/100 g)
30	5.22±0.30	62.69±4.44	4.96±1.30	1.86±0.50	1.98±0.59
60	4.99±0.13	62.03±5.51	6.53±2.97	2.37±0.79	2.14±0.81
90	5.08±0.39	66.87±6.13	7.90±2.72	2.53±0.70	2.34±0.37
120	5.02±0.59	70.58±6.78	9.03±1.07	2.61±0.40	2.66±0.29

Magdić et al. (2013): Mljekarstvo 63 (2).

Grobnik cheese



- Cylindrical shape with a diameter of 35 cm, height 15 cm.
- Ripened in brine, no rind.
- Chalky-white color with many circular or slightly elliptical eyes.
- Body is hard, not elastic, granulated, but not too dry.
- Very salty with a pleasant taste .
- Could be stringent taste if ripened longer.

Krk cheese



Small cylindrical cheese
Color: light yellow-deep gold.
Flavour: delicate, full, strong
and intense.

Paški cheese (PDO)

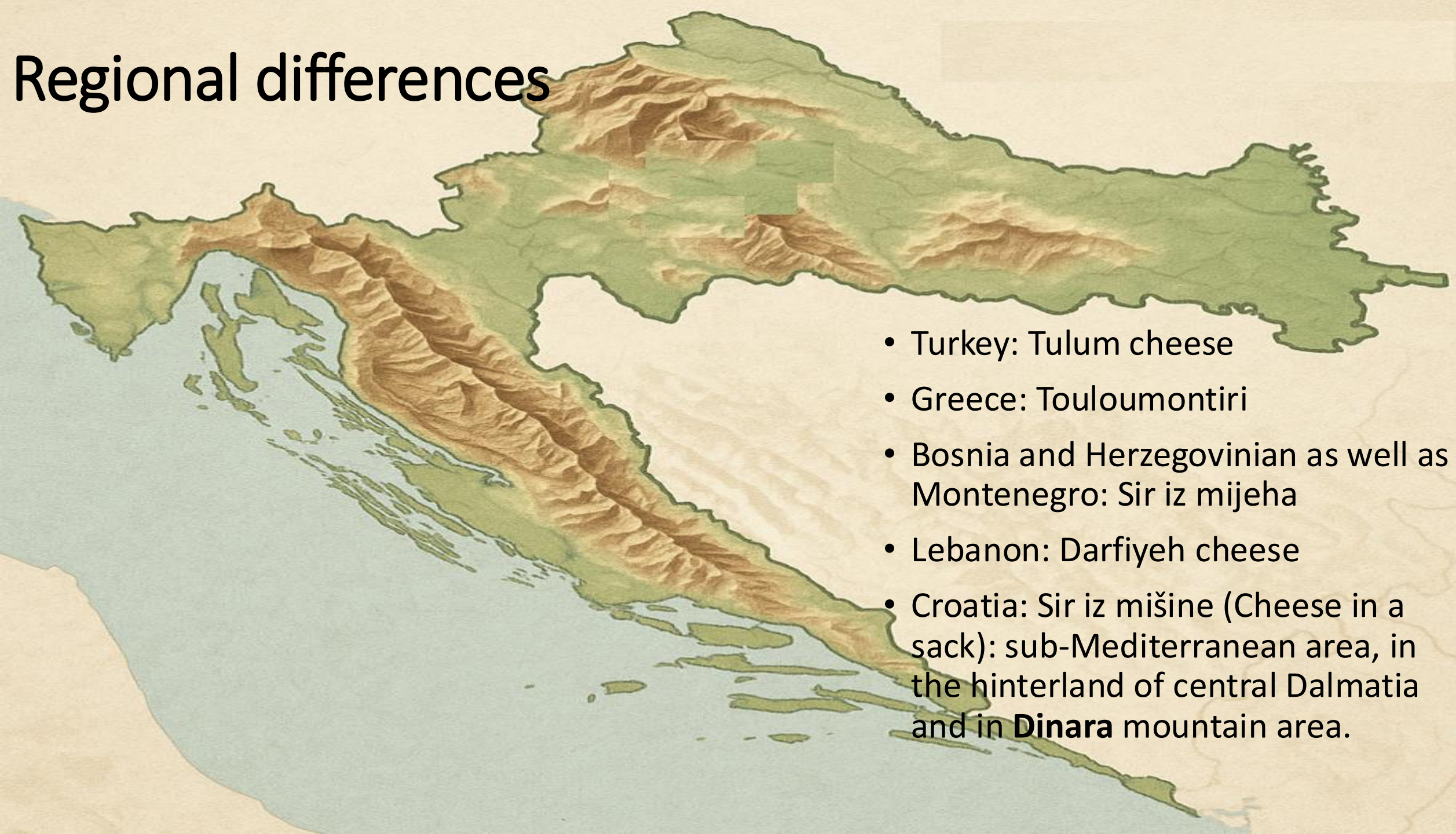


Cheese in a sack



- Ripened in bags prepared from sheep's and goat's wholeskin.
- Undoubtedly **the oldest cheese** in the world.

Regional differences



- Turkey: Tulum cheese
- Greece: Touloumontiri
- Bosnia and Herzegovinian as well as Montenegro: Sir iz mijeha
- Lebanon: Darfiyeh cheese
- Croatia: Sir iz mišine (Cheese in a sack): sub-Mediterranean area, in the hinterland of central Dalmatia and in **Dinara** mountain area.

Human and sheep mobility

- Vegetation progress from lowland to mountainous rangelands.
- Flocks graze there for 4 to 6 months in order to obtain sheep's nutritional requirements.
- Prevention of afforestation and desertification.

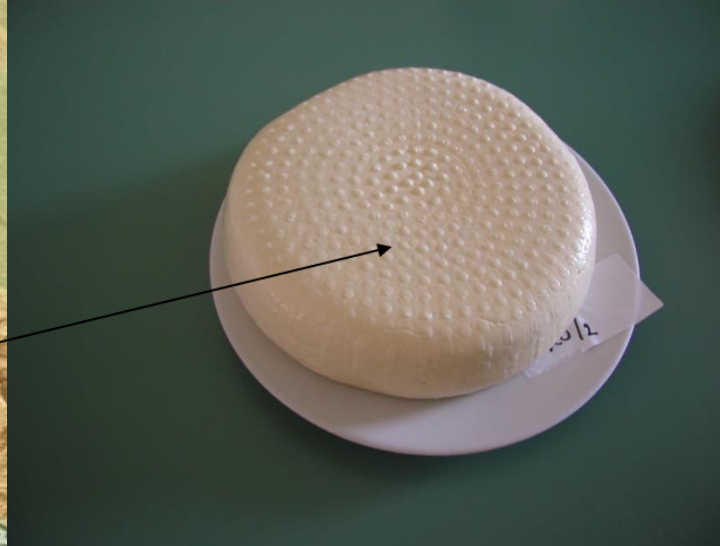


Skuta (whey cheese)



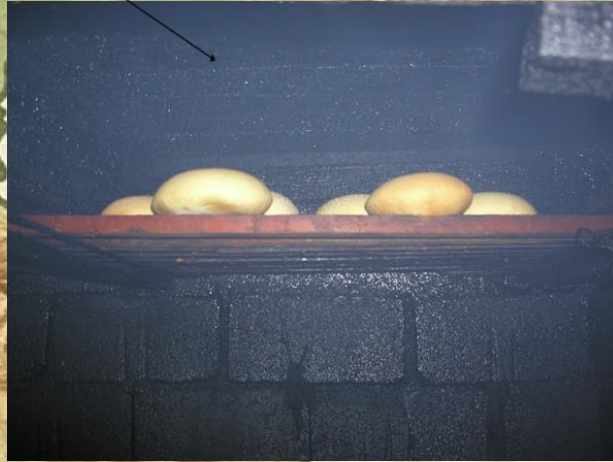
- It is obtained by heat coagulation of whey protein that remains after the removal of the curd.
- Smooth and creamy texture with the typical flavor of ewe's milk.

Škripavac cheese (PGI)



- Deep-rooted
- Many cheeses are produced to withstand **long transportation** from village to city.
- Škripavac cheese (soft variety), historically was produced from sheep milk for immediate domestic consumption in mountainous areas of Croatia.
- Remote area **difficult for transportation**, short summers and long winters with a lot of snow.

Tounj smoked cheese



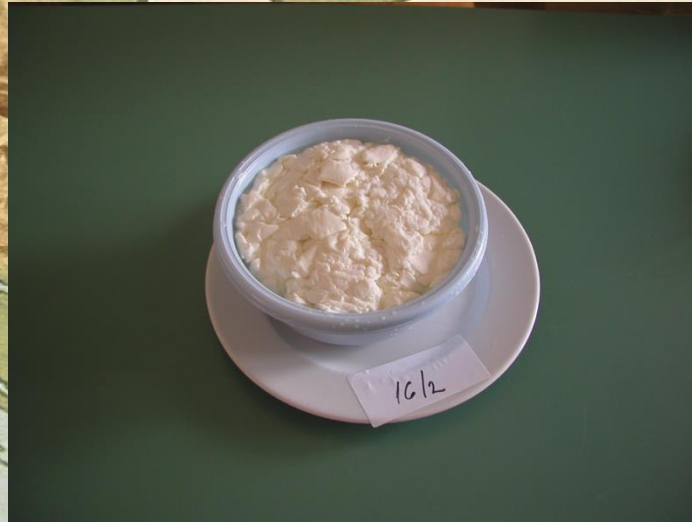
- Semihard, full-fat, smoked.
- Shaped like a loaf of bread.
- It was brought to Vienna for emperor of the Ausrto-Hungarian Empire.
- Smoked by dense and cold smoke in traditional smoking chamber using fruit trees.

Preveli (Dry Cheese)



- Semihard, full-fat.
- Shaped like a loaf of bread.
- Lactic dried cheese.
- Salting and drying fresh sour cheese to extend its shelf life.
- Acid, fresh and salty taste and laminate texture.

Svježi sir (fresh Zagreb cheese)



- Fresh, whole, raw cow's milk is fermented
- Non-starter lactic acid bacteria create coagulum which is covered with sour cream.
- Coagulum is drained.
- Crumbly, soft and fine texture.
- Aroma is evident, full, sour and pleasant.

Cooked cheese



- Produced by cooking of milk and adding vinegar.
- Milky pleasant taste modestly salted.
- Smoking procedure similar like Tounj cheese.

Cone-shaped cheeses



- Group of lactic cheeses.
- Flavored with dried red papper and salt.
- Shaped into cones and dried above the oven for up to 7 days.

Instead of the conclusion



- Protect the tradition
- Milk collection
- Increasing of income
- Depopulation of rural areas:
 - islands and mountains areas
- Market - domestic and touristic

