



CUCINARE NELLA PREISTORIA

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Cheese origins: archaeology and interesting facts from the ancient world

As we mentioned last week, not everyone can consume **milk**.

Many adults — and in some instances even some children — cannot digest lactose well because they **lack lactase**, the enzyme that breaks it down.

The real breakthrough therefore came with the transformation of **milk** into derivative products — sour milk, yogurt, butter, cheese, and ricotta — which significantly reduced the lactose content, making it easier to digest and ensuring better preservation at the same time. In this way, even those who could not drink fresh milk could still enjoy a nice piece of **cheese**!

By studying cheese, we can understand key aspects of our **ancestors' diet** and culture. The availability of milk and dairy products was a major step forward in human history, both because of the **nutrients and calories**—and therefore energy—they provided, and because they could be stored, giving people extra supplies in their pantries.

It is impossible to establish with any certainty where cheese production originated, but it probably came about by chance: someone transported milk in sacks made from **animal stomachs** and the **natural rennet** present in those organs did the rest... causing the milk to curdle.

Classical records show how important dairy farming was in the ancient world.

In the **Odyssey** (IX, 218-246), Homer describes **Polyphemus'** cave as a proper production facility, equipped with specific tools for milk processing: milking pails, whey jugs, woven baskets for collecting curds, and racks for aging cheese. Polyphemus milks his sheep and goats **twice a day**: the fresh milk is drunk, but the excess is used to make cheese. It is therefore clear that cheese-making was an integral part of animal resource management and **daily nutrition**.

Similarly, in his treatise *De re rustica*, **Columella** (1st century AD) provides technical details on **milk coagulation** processes, emphasizing that this could be achieved not only through animal rennet, but also through plant extracts, such as thistle flower or fig latex.

From an archaeological point of view, however, finding cheese remains is extremely rare, given its high perishability. When this does happen, the results are extraordinary! In the **Xiaohe** cemetery in northwestern **China**, archaeologists found traces of a fermented dairy product on **Bronze Age mummies** (3,300 to 3,600 years old). Genetic analysis (DNA) revealed that it was not cheese, as initially assumed, but kefir, a drink made from fermented cow's and goat's milk.

Another meaningful discovery comes from **Egypt**: in the tomb of **Ptahmes**, a high-ranking official who lived about **3,200 years ago in Saqqara**, the oldest known remnants of cheese were found, made from a mixture of sheep, goat, and cow milk. Later analysis even revealed the presence of **brucellosis bacteria**, indicating that this disease was already widespread in ancient **Egypt**.

In Europe, evidence of cheese production dates back around **7,000 years**: traces of soft cheese and yogurt have been found at the **Dalmatian** sites of **Pokrovnik** and **Danilo Bitinj**. **In Italy**, however, the only direct evidence is a charred piece of cheese found in a **Lombard village** near Brescia.

Archaeological evidence from the **Bronze Age** shows intensive sheep and goat farming, not only for meat but also for milk production. Given its rapid perishability, it is plausible that much of it was transformed into other products, including cheese, a food that guaranteed longer preservation and easier transport.

Material culture supports this hypothesis through the discovery of numerous ceramic artifacts, including large containers, ladles, and above all small perforated vessels (interpreted as strainers), whose morphology is consistent with their use in separating whey from curds.

These interpretations are now confirmed by chemical analyses of organic residues (lipids and proteins) preserved on ceramic surfaces. Techniques such as gas chromatography-mass spectrometry (GC-MS) and proteomics have made it possible to identify specific markers of milk fats on ceramic artifacts, thus directly documenting dairy production as early as prehistoric times.

After all, **turning milk into cheese wasn't just a way to preserve food**, but also a cultural and biological adaptation that let people who couldn't digest lactose make the most of this valuable resource.



Preisto-ricetta

A prehistoric cheese made with vegetable rennet!

Ingredients

*Fresh whole milk (but the result will be
better if you use raw milk)
(if you use pasteurized milk, you can add
a jar of plain whole yogurt to restore the
milk's strength)
Vegetable rennet (about 1 ml of rennet per
1 liter of milk)
-Salt*

The raw milk is heated to 37-38 degrees in a clay pot, rennet is added, and it is left to rest for an hour covered with a clean cloth. Then the curd is "broken up" into pieces, separating it from the whey, and slowly transferred to a strainer.

Press it gently, leave it to drain, and after a few hours... salt both sides.

After 24 hours, if it's hot, store it in the fridge, and you'll have your prehistoric fresh cheese, ready to enjoy!



Curiosita'

Did you know that in **Sardinia** you can visit several ethnographic museums dedicated to rural life, with fascinating exhibitions on cheese making and other typical products of the pastoral tradition?

In these unique spaces, you can admire equipment and tools that look like they came straight from archaeological excavations!

Among the must-see attractions, I would recommend the **Museum of Pastoral and Rural Life (MUBI)** in Bitti, Nuoro.

Would you like to learn more about this topic?

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