



CUCINARE NELLA PREISTORIA

by
Florencia Inés Debandi

The long journey of milk. From prehistory to our tables

Today we will talk about a food that we all know... and that has been with us since childhood: **milk**. A universal symbol of nourishment, abundance, and motherhood. But there is a surprising detail: did you know that humans are not naturally predisposed to **digest** milk as adults?

As children, we produce an enzyme called lactase, which allows us to digest breast milk. However, as we grow up, many people lose this ability. Today, only in some parts of the world people do not produce lactase. On the contrary, back in time most individuals lost the production of this enzyme as they grew up (*lactase persistence*). In short: for long periods of prehistory, drinking milk as an adult was almost **impossible!**

So why so many people in Europe today are able to stomach it?

The issue of **milk consumption** in prehistoric times and the so-called persistence of lactase has for decades guided scientific debate on the exploitation of domestic animals, going beyond the primary use of meat to consider products such as milk, wool, and labor. **Sherratt** (1981) attributed a central role to milking. Consuming milk meant a four or five times increase in protein intake compared to meat alone and allowed for more stable exploitation of flocks and herds. However, he considered it plausible that dairy practices were already established in European Neolithic times, but believed it was only from the 4th millennium BC that they became systematic and intensive, thus marking the beginning of the Secondary Products Revolution.

It is now recognized that since the early **Neolithic period** (9th-8th millennium BC in the Near East, 6th millennium BC in Europe), animal husbandry was also aimed at milk production. Processed and transformed milk was a key feature of prehistoric economies, affecting both dietary practices and the processes of domestication and social organization.

How can we possibly know it? This is where archaeology comes into play.

Scholars have various techniques for reconstructing prehistoric eating habits. For example, by analyzing **human remains**, it is possible to look for traces of diseases linked to milk consumption, such as brucellosis; or by studying **dental calculus**, where proteins such as beta-lactoglobulin can be found: unequivocal proof of dairy consumption!

Archaeozoology also comes to our aid: through the bone remains of domestic animals, it is possible to understand how livestock was managed. The age of death of the animals allows us to make slaughter curves, which suggest whether they were exploited more for meat... or for milk. If there is evidence of a high number of calves or lambs slaughtered during the lactation phase, the data is interpreted as a choice to exploit cows and sheep to produce milk for human consumption, certainly not for the minimal amount of meat.

In northern Italy during the Bronze Age, analyses suggest that milk production was indeed abundant.

Large quantities of animal bones from the main domestic species are found in settlements: oxen, goats, sheep, and pigs. Analysis of these bones allows us to reflect on the role and importance that different domestic resources had in the local economy, both in terms of productivity and costs as well as in terms of their impact on land management. By projecting the data, it is possible to obtain the estimated number of animals living in a settlement at any given time and, through simulation, to hypothesize the productive capacity of the animals. Using these methods, it can be inferred that milk production in this phase of Italian protohistory was decidedly abundant.

Another exceptional source of study is represented by the discovery of actual organic **macro-remains** inside the ceramics. Through the application of chemical analysis techniques, it is possible to define the function of a particular vessel with greater precision. Some types of pottery, such as strainers, have been linked to the production of dairy products, as ricotta cheese. However, only the analysis of organic residues can confirm or disconfirm they were linked to this type of food processing.

The oldest discovery of pottery with traces of dairy products belongs to the site of Sabi Abyad (northern Mesopotamia), dated to approximately 6400-6300 BC.

Among the tools found at Bronze Age pile dwelling sites are **wooden whisks**, used to whisk or stir liquids. They could have been used to make butter or to break up curds in cheese production. Just think, some similar objects were still in use until a few decades ago!

From a functional point of view, a very unusual container is the so-called "**vaso a listello interno**", a ceramic kitchen container characterized by the presence of an internal lath just below the rim. It could serve as a support for a lid and, thanks to ropes or other elements, the pot could be closed. Furthermore, due to the discovery of conical pots with several holes, it has been suggested that these vessels were used for boiling milk. When boiled, the milk foam reached the top of the central perforated opening and then spilled down the sides of the lid to be recovered through the small holes inside the pot itself. This can be supported by looking at some modern containers that were used in the same way until a few decades ago!



Preisto-ricetta

Today we will offer you a simple, tasty recipe that is deeply rooted in rural tradition. With a little imagination, we can trace this dish back to the Bronze Age: dried chestnuts with milk,

A simple dish but rich in energy, ideal for cold winter days.

There are only a few ingredients, and they are readily available to everyone:

Ingredients

*one liter of milk,
400 grams of dried chestnuts, already peeled
one teaspoon of honey, to add an extra touch
of sweetness*

The preparation is really simple!

Pour the milk into a clay pot—or a modern pot if you prefer—add the chestnuts and a teaspoon of honey.

Cook slowly for about an hour, stirring occasionally.

In the end, you will have a hot, fragrant dish with an old-fashioned flavor.

Serve it in plates or bowls, perhaps with a little extra honey on top... and your journey through time is ready to begin!



Curiosita'

When discussing nutrition in **protohistory**, we cannot ignore the case study of the Similaun Man, who was preserved, covered by snow and ice, for over 5,000 years. In-depth analyses carried out by scholars have revealed several interesting facts about ancient nutrition. In fact, they have shown that he did not have the lactase enzyme, reflecting what may have been a widespread situation among the populations of northern **Italy** in the fourth millennium BC.

Today, you can admire this stunning evidence of the past at the South Tyrol Museum of Archaeology in Bolzano.

A tour that I really recommend you not to miss!

Would you like to learn more about this topic?

Debandi, F., Maini, E. 2021. Costi e benefici degli animali. Metodi per le stime produttive e gestione dell'allevamento nell'età del Bronzo: il caso del villaggio di via Ordere a Solarolo (RA) in *IpoTESI di Preistoria*, 14 (1), 75–122.

Debandi F. 2021, Sistemi di gestione economica e alimentazione nelle comunità dell'età del Bronzo con particolare riferimento all'Italia settentrionale, Bononia University Press, Collana DiSci, Bologna.

Quercia A., 2008. I residui organici nella ceramica. Stato degli studi e prospettive di ricerca, in *Uomini, piante e animali nella dimensione del sacro*, pp. 209-216

Rosenstock E., Ebert J., Scheibner A. 2021. Cultured milk. Fermented Dairy Foods along the Southwest Asian-European Neolithic Trajectory, in *Current Anthropology* n.62/24.

Vigne J-D., Helmer D. 2007. Was milk a “secondary product” in the Old World Neolithisation process? Its role in the domestication of cattle, sheep and goats, in *Anthropozoologica* n.42/2, pp.9-40.