### HISTORY, ETHNOLOGY, AND SOCIAL IMPORTANCE OF HORSE MILKING IN CENTRAL ASIA

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## INTRODUCTION

It is now known that horse milking can be traced back to the early domestication time of the Botai culture, in the north of Kazakhstan near 3500 y. B.C.
 Alan K. Outram *et al*, *Science* 323, 1332 (2009)

- Then after 1000 y. B.C the horse cultures spread in the steppian regions because horses are particularly adapted to these countries characterized by draught in the summer, very cold winters and where the vegetal primary production is sparse.
- Horses are very narrow grazers but are also able to browse ligneacae.
- Besides their ability to move, they can eat during 14 hours of a 24h day, which is a considerable advantage in these conditions.
- Their ability to depose and to mobilize fat makes them a kind of Camel of the cold desert (mountain, steppe and even taiga).

- It is therefore not surprising that they are used as the main tool of shepherds to farm this environment.
- The use of horses has also evolved becoming a formidable weapon with the development of the saddle (400 B.C) and that of the composite bow.

- Following the Scythians, today nations perpetuate this heritage in Central Asia and Asia.
- These are the Kazakhs, the Kirghizes, the Baschkirs, the Yakutes, the Kalmuks, the Bouriates, and the Mongols.

The Mongols are certainly the most emblematic of the common culture and we will consider them as an example to illustrate the place of horse milk in the core of the turco- mongol societies.





# Traditional Horse Milk Production

### Breeding in herds

- The principle is the extensive farming of natural ressources using the ability of local breeds in natural conditions to quickly establish and mobilize body reserves.
- In these conditions horse production costed arround the half of beef production and <sup>3</sup>/<sub>4</sub> of sheep production.
- Production of milk is considered adding value when meat is considered first by the administrative authorities.
- However for horses, milk is considered as the main product with working under the saddle for all turco-mongol people.

### White and grey feeding

- In summer during the lactation of their animals the Mongols eat white (milk products).
- □ In winter they eat grey (meat ever boilled).
- The most important white product is the Airag (mongol) also called Kumiss (turc)
- □ Airag is a fermented yogourt of horse milk.
- It has 3% alcohol and is considered as a beverage aswell as a feed, sometimes as a medicine
- For the Mongols Winter is defined by the absence of airag and summer by its abundance.

#### **Collecting milk**

One month after foaling mares and foals are catch in the morning and attached on a rope streched on the ground.

Some mares need their foal to be collected Some others deliver their milk whatever the foal The rest do not need any foal.

Because most of the milk is alveolar for four to five milking per day allows to collect nearly two liter/day/mare and 3 to 400 liters in a lactation without complementation.

Separation of mares and foals should not exeed 18h the day and they are left free in the evening to pasture.

### Making Airag

- The milk collected is immeditely transferred in a leather can constituted with two cow skins stitched, hairs inside.
- Horse milk is then mixed with the ferment
- A big agitator in wood invite every body comming in the yourte to malaxe the mixture.
- The leather can is in the yourte of the chief of the family on the left side when entering (south-West is the male side)
- Consumption is then made continuously, the fresh milk replacing what is drunk.

### Rituals (a)

- In summer airag is progressiveley becomming the main dish furnishing energy, proteins and vitamines
- Mean consumption for mens is reaching 10 liters per day. Some are proud to reach 25 liters per day (a sign of virility and to be a true Mongol)
- Children are initiated to this consumption very early, up to 8 or 9 month of age for being true mongols when adults.

### Rituals (b)

- When Airag (2-3%) is associated with hospitality rituals or gift to divinities it is considered as arkhi (16%) to be an alcohol.
- Arkhi com from the distilation of the fermented milk (tarag) of cattle and yack.
- In this case every body are drinking in the same cup furnished by the host despite the cup beyonds to the necessary weared every time by the mongols.

### Medicine

- Because horse milk is near the women milk, is the main supply in vitamins in the hyper protein diet of the nomads, is exempt of tuberculosis, it enjoy considerable confidence as probiotic to treat a lot of illness conected with stomach, liver, and lungs.
- The effect of clearing the skin, which is a sign of good heath, is considered as a proof of its beneficial effect.
- Therefore from the south of Oural to Uzumutchi in Inner Mongolia, based on Horse Milk, an active Care tourism is developped.

### CONCLUSION

- Since a very long time Horse milk consumption play a central role in defining identity and conviviality rituals of the Mongols.
- This can certainly be extended to all turco-mongol cultures, the so called Horse civilisations.
- How This tradition will evolve, is an other problem:
  Technically it has soon been shown that intensification is possible.

-Culturally, other products comming with the mondialisation are progressively concurrencing the traditional products.

However the cultural resistances to these changes are high particularly on the countryside.

### Thank you for your attention

