

Donkey Milk

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Donkey milk (or **ass milk/jenny milk**) is the milk given by the domesticated donkeys (*Equus asinus*).



➤ History:

It's a (very) old trend

The use of asinine milk by humans for alimentary and cosmetic purposes has been popular since **Egyptian antiquity**. There are also records of its popularity in ancient **Rome**, and it was used medicinally in France up to the 20th century. **The Greeks** considered it to be an excellent remedy.

In other words, using donkey milk is not unprecedented.

Gross composition

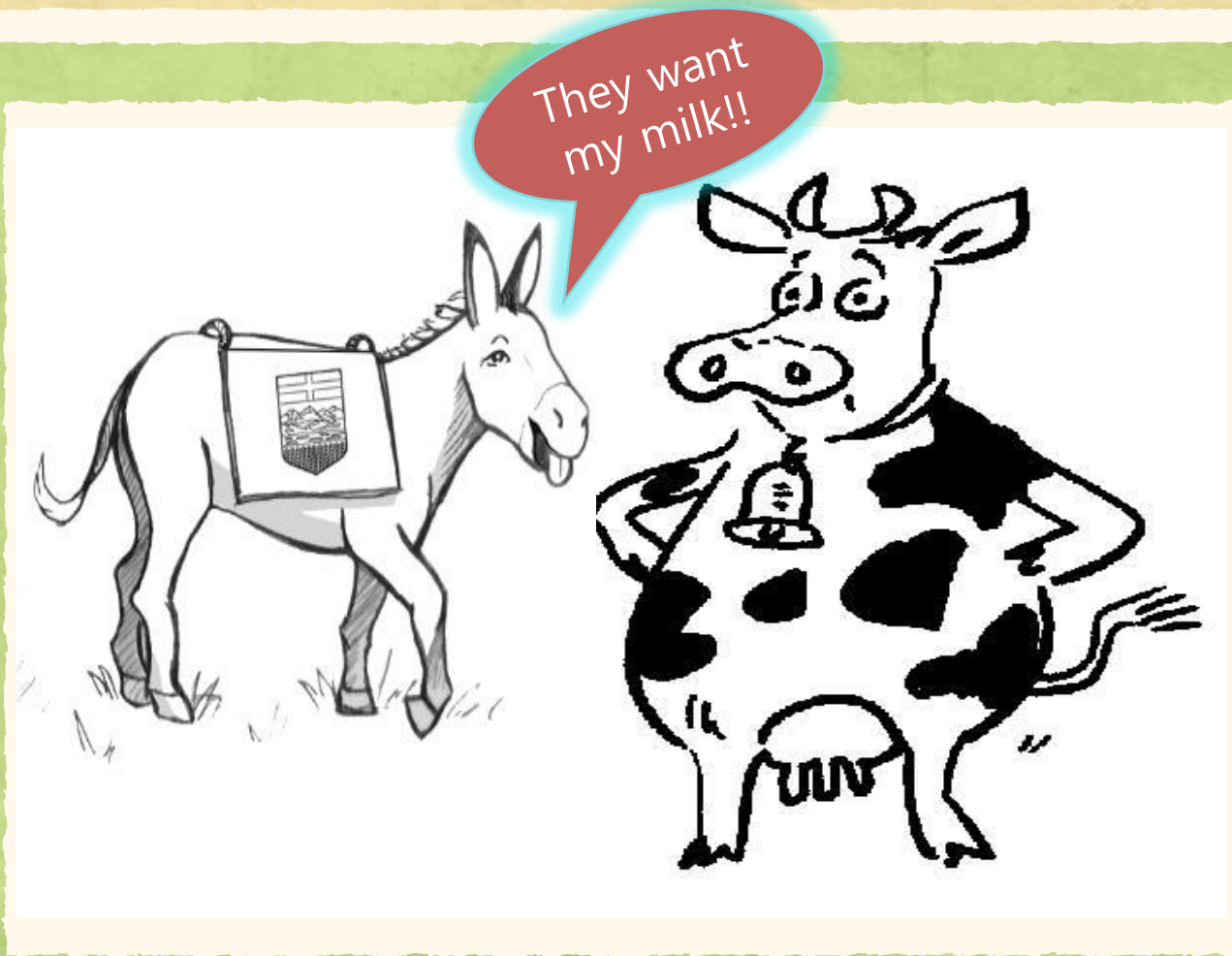
➤ Donkey's milk is rich in:

- ✓ Lactose
- ✓ Vitamins
- ✓ Essential fatty acids (examples: **Omega 3, Omega 6**)

Recent studies have shown that Donkey's milk is a natural food of animal origin whose characteristics, in relation to those of other animal species, are the closest to those of mother's milk.



It's nutritionally different from cow's milk..



Compared to other types of animal milk, the donkey variety is actually **closest to human breast milk**, based on its pH level and nutritional makeup.

Composition of donkey's milk compared with human and cow's milk

Composition (g/c)	Ass' Milk
Fat	10
Lactose	60
Total proteins	16



Human milk	Cow's milk
35	37
68	47
13	35



Production and farming

➤ Milking:

Donkey milk production differs greatly from that of conventional dairy species, especially in terms of milk supply which is much more limited. The equid mammary gland has **a low capacity (max 2.5 L)**.

A female gives between 0.5 and 1.3 liters of milk a day for about 6–7 months.



The resources and values of Donkey's milk

**Donkey's milk: a natural,
precious and safe foodstuff..**

- It likely tastes better than it sounds; many people say it's odorless and the texture resembles low-fat cow's milk
- Its sweet taste makes it more pleasant and well accepted
- Donkey's milk comes into its own as an extremely beneficial and important source of food, particularly for cases of multiple food allergies and poor absorption
- Casein content significantly lower than cows' milk; this promotes improved digestion reducing the allergenic potential in children with allergies to the proteins of traditional milks (cow, goat, ewe, soya, etc)



The resources and values of Donkey's milk



Therapeutic uses:

- An optimum Calcium/Phosphorous ratio for improved calcium assimilation, making donkey's milk the ideal food for promoting growth specially for children; and elderly people with osteoporosis problems. And In case of low immune defense system
- Natural substances in donkey milk have been shown to enhance immunity, which may be helpful for people with conditions like **asthma**
- Donkey milk might help prevent artery hardening, thanks to its ability to dilate blood vessels.
- A high lactose content providing an immediately available diets for athletes; amongst other benefits, lactose facilitates intestinal absorption of calcium

The resources and values of Donkey's milk

It's part of a big beauty trend too!

Donkey's milk presents a number of particularly interesting characteristics in cosmetology. It contains a lot of unsaturated fatty acids and a number of vitamins and Mineral salts:

- Essential fatty acids like omega 6 help the skin to absorb vitamins. They allow the skin to become elastic
- The vitamins enable it to have several anti-ageing and an anti-oxidant
- For skin regeneration, and reduction of skin lesions
- It prevents certain skin diseases and would represent an excellent healing substance (milk soap)
- Slowing down of the ageing process and speeds up the healing mechanisms



The resources and values of Donkey's milk



Examples of use of reconstituted donkey's milk in the daily diet:

- Donkey milk could be fermented into **yogurt**
- Cheese made from donkey milk (called **Pule**) costs a hefty \$1,000 per pound.
- Suitable **Breakfast** for adults for young people, athletes, pregnant women
- **White** coffee with biscuits and fruit
- **Milky** tea
- **Chocolate** or **vanilla** pudding

Microbiological quality of raw donkey milk

- It is known as natural antimicrobial agent acting directly on bacterial cell walls and its concentration results two times higher than human milk and variable during the different stages of donkey lactation.

- Possible reasons for low bacterial load and constant pH values could be on one side the presence of natural concentration of antimicrobial compounds like:

1. **Lysozyme:**

It's responsible for the low bacterial load and for having positive effects on raw milk storage.

2. **Lactoferrin**

Enzymes and immuno-protective substances (lysine, lactoferrin, lactadherin) which boost the immune system and reduce the risk of intestinal infection.

