

Donkeys Milk – Elixir of Life

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Milk is a valuable commodity which plays vital role in livelihood of humans. Since time immemorial it considered as “amrith” due its importance as source of sustenance and nutrition. Mother’s milk is the only source of food for infants in the first months of their life and are exclusively dependent on it, but when the mother’s milk is not available it is essential to find a suitable alternative. Cow milk based substitutes are considered as alternative for human milk; however cow milk protein allergy is very common in infants. So people are searching for alternative to cow’s milk. On other context, in the present world of modernization people seek towards new tasty foods and want change in food habits and the pandemic has made people more interested in foods that benefit their immunity, metabolism and mental state. So why not use donkey’s milk which is known since ancient times for its therapeutic and nutritional properties and also due to its nutritional similarities with human milk it has been reported as alternative for cow’s milk to children with cow milk protein allergy.

History

Going back to the history, ancients described donkey milk as elixir of long life. Ancient Greek physician Hippocrates was first to write the medicinal properties of donkey milk. He prescribed it for variety of ailments, including liver problems, infectious diseases, fevers, nose bleeds, poisoning, joint pains, and wounds. Romans also considered donkey milk as common remedy for all ailments. The secret behind the beauty of Egyptian ancient queen, Cleopatra (60 – 39 BC) was that she bathed every day in a steady stream of milk supplied by 700 asses to preserve the youth of her skin.

Properties of Donkeys milk

Nutrients and palatability: Donkey milk has high volume of vitamin B1, vitamin B2, vitamin C, vitamin E, magnesium, calcium, phosphorous, zinc,

potassium and sodium. More calories and minerals are present in it. Donkey milk has less allergic properties and is more digestible as its protein that is caseins are similar in nature with that of human’s milk. It also contains immune enhancing proteins like lysozyme and lactoferrin. Unlike the sheep and goat milk, which can lead to cross-reactivity between their proteins and cow milk proteins, donkey milk is tolerable and has more digestibility. Due to its high lactose content, donkey milk has good palatability.

Ayurvedic medicine: It is described as good ayurvedic medicine for new born suffering from asthma, a cure-all for a variety of ailments, and tuberculosis. It’s considered to be a hypoallergic milk for infants and cures skin diseases for infants.

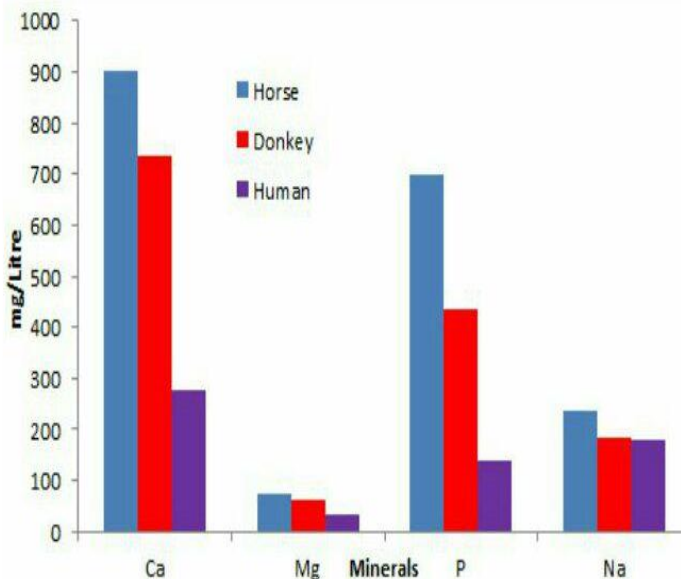
Probiotic: It is rich in calcium and is a good ingredient for probiotic and healing foods and believed to prevent intestinal infections. Studies have reported that donkeys milk lowers cholesterol and triglycerides which are responsible for atherosclerosis.

Anti ageing: Donkey milk is considered as an anti-ageing skin tonic as it is known to erase facial wrinkles, make the skin more delicate, maintain the whiteness and is a powerful tonic capable of rejuvenating the skin. It increases firmness and fights ageing as it is rich in essential fatty acids Omega 3,6 and high level of vitamins and amino peptides. Its property of rich in ceramide and phospholipid intensifies hydration. Optimal ration between lipid and moisture in donkeys milk prevents troubles of oily skin. Lactose richness in Donkeys milk helps in cell revitalization which gives excellent skin brightening quality.

Non allergic: Donkey milk is the closest known milk to human breast milk with high lactose ratios and low-fat content. It is also rich in vitamins, contains anti-bacterial agents, reported to be 200 times more active than in cow’s milk, and anti-allergens,

which are believed to be responsible for alleviating psoriasis, eczema, asthma, and bronchitis.

Comparison of Donkeys milk with Human and Mare



Availability

Donkey milk is costly due to its limited availability, as donkeys produce about a litre (500ml/day) of milk per animal per day. They can only be milked for 6 months after producing a foal and has only 2 teats. The Mammary gland of ass has low capacity and they produce milk only when foal is close by. The donkey's milk is called "white gold".

Donkey's milk is available in two types of milk; raw donkey milk and donkey milk long pasteurized and lyophilized (freeze dried) to preserve the biological quality.

Products

Cheese: it is called pule and is one of the world's costliest cheeses. This cheese is made from Balkan donkey milk.

Koumiss: it is Mongolians national drink and made from fermented mare's milk. There is saying in ancient tradition that its Kumis cures "40 diseases".

Donkey milk is constituent of some moisturizing creams, organic cosmetics and health drinks.

Conclusion

Donkey milk is referred as "elixir of life due to its medicinal and nutritional properties. Donkey milk can be used to replace human milk as it is close to that of human but the amount should be limited as it can asphyxiation in infants. Donkey milk presents a fascinating option in the field of nutrition and health, with its potential to offer unique benefits to those seeking alternatives to traditional dairy products. As donkeys' milk is becoming thriving business, why not rear donkeys.

Table 1. Composition of nutrients in milk of Donkey, Mare, Human and Cow

Composition	Donkey	Mare	Human	Cow
pH	7.0-7.2	7.18	7.0-7.5	6.6-6.8
Protein g/100g	1.5-1.8	1.5-2.8	0.9-1.7	3.1-3.8
Fat g/100g	0.3-1.8	0.5-2.0	3.5-4.0	3.5-3.9
Lactose g/100g	5.8-7.4	5.8-7.0	6.3-7.0	4.4-4.9
Total solids (TS) g/100g	8.8-11.7	9.3-11.6	11.7-12.9	12.5-13.0
Casein, Nitrogen (CN) g/100g	0.64-1.03	0.94-1.2	0.32-0.42	2.46-2.80
Whey protein g/100g	0.49-0.80	0.74-0.91	0.68-0.83	0.55-0.70
NPN g/100g	0.18-0.41	0.17-0.35	0.26-0.32	0.1-0.19
