



# **Benefits of Camel Milk**

### Mulugeta Tesfaye\*

Ethiopian Meat and Dairy Industry Development Institute, Ethiopia

#### ISSN: 2576-8816



\*Corresponding author: Mulugeta Tesfaye, Ethiopian Meat and Dairy Industry Development Institute, Milk and Milk Products Processing Research Directorate, Ethiopia

Submission: 
☐ October 10, 2021

Published: ☐ October 21, 2021

Volume 9 - Issue 3

**How to cite this article:** Mulugeta Tesfaye. Benefits of Camel Milk. Res Med Eng Sci. 9(3). RMES.000715. 2021. DOI: 10.31031/RMES.2021.09.000715

Copyright@ Mulugeta Tesfaye, This article is distributed under the terms of the Creative Commons Attribution 4.0 International License, which permits unrestricted use and redistribution provided that the original author and source are credited.

#### **Abstract**

Camel milk is rich in many nutrients that are important for overall health. It has been shown to lower blood sugar and improve insulin sensitivity in people with both type 1 and type 2 diabetes. The milk contains insulin-like proteins, which may be responsible for its antidiabetic activity. The milk contains compounds that appear to fight various disease-causing organisms. The two main active components in camel milk are lactoferrin and immunoglobulins, proteins that may give camel milk its immune-boosting properties. Lactoferrin has antibacterial, antifungal, antiviral, anti-inflammatory, and antioxidant properties. Camel milk has been studied for its effects on behavioral conditions in children, and people suggest that it may aid those with autism. It's also studied for its effects on behavioral conditions in children, and people suggest that it may aid those with autism. The disadvantage of camel milk is more expensive, may not be pasteurized and may pose ethical concerns.

Keywords: Camel milk

#### Introduction

Camel milk is rich in many nutrients that are important for overall health. When it comes to calorie, protein, and carbohydrate content, camel milk is comparable to whole cow's milk. However, it's lower in saturated fat and offers more vitamin C, B vitamins, calcium, iron, and potassium. It's also a good source of healthy fats, such as long-chain fatty acids, linoleic acid, and unsaturated fatty acids, which may support brain and heart health. One-half cup (120ml) of camel milk contains the following nutrients: Calories: 50, Protein: 3grams, Fat: 3grams, Carbs: 5grams, Thiamine: 29% of the Daily Value (DV), Riboflavin: 8% of the DV, Calcium: 16% of the DV, Potassium: 6% of the DV, Phosphorus: 6% of the DV and Vitamin C: 5% of the DV Lactose intolerance is a common condition caused by a deficiency of lactase, the enzyme needed to digest the sugar in dairy known as lactose. It can cause bloating, diarrhea, and abdominal pain after consumption of dairy products. Camel milk contains less lactose than cow's milk, making it more tolerable for many people with lactose intolerance.

Camel milk has been used to treat diarrhea caused by rotavirus for hundreds of years. Research suggests that the milk contains antibodies that help treat this diarrheal disease, which is especially common in children. Camel milk has been shown to lower blood sugar and improve insulin sensitivity in people with both type 1 and type 2 diabetes. The milk contains insulin-like proteins, which may be responsible for its antidiabetic activity. Insulin is a hormone that helps regulate blood sugar levels. Studies indicate that camel milk provides the equivalent of 52 units of insulin per about 4 cups (1 liter). It's also high in zinc, which may help improve insulin sensitivity. Camel milk contains compounds that appear to fight various disease-causing organisms. The two main active components in camel milk are lactoferrin and immunoglobulins, proteins that may give camel milk its immune-boosting properties. Lactoferrin has antibacterial, antifungal, antiviral, anti-inflammatory, and antioxidant properties. It inhibits the growth of E. coli, K. pneumoniae, Clostridium, H.pylori, S. aureus, and C. albicans, organisms that can cause severe infections.

RMES.000715. 9(3).2021

Camel milk has been studied for its effects on behavioral conditions in children, and people suggest that it may aid those with autism. Most of the evidence is anecdotal, though a few small studies indicate potential benefits for improving autistic behaviors. An autism spectrum disorder is an umbrella term for several neurodevelopmental conditions that can impair social interactions and cause repetitive behaviors. Camel milk may benefit neurodegenerative diseases like Parkinson's and Alzheimer's, but only a few animal studies have investigated this potential. Camel milk can almost always replace other types of milk. It can be consumed plain or used in coffee, tea, smoothies, baked goods, sauces, soups, mac and cheese, and pancake and waffle batters. Camel milk products like soft cheese, yogurt, and butter are not widely available due to challenges in processing that are attributed to the composition of camel milk.

# **Disadvantage of Camel Milk**

- A. More expensive-Camel milk is significantly more expensive than cow's milk, for various reasons. Like all mammals, camels generally only produce milk after having given birth, and their pregnancies are 13 months long. This can place challenges on production time. In places where camel milk is gaining interest, demand is exceeding supply. Camels also produce far less milk than cows around 1.5 gallons (6 liters) per day, compared with 6 gallons (24 liters) for a typical domesticated dairy cow.
- B. May not be pasteurized- Traditionally, camel milk is consumed raw without heat treatments or pasteurization. Many health professionals do not recommend consuming raw milk in general due to the high risk of food poisoning. Moreover, organisms in raw milk may cause infections, kidney failure, and even death. This risk is especially concerning for high-risk populations, such as pregnant women, children, older adults, and those with compromised immune systems.

C. May pose ethical concerns- Camel milk has been consumed in many Eastern cultures throughout history but has only recently become a commercialized food trend in Western societies. This means that camels are being imported to areas in which they don't traditionally live, such as the United States, where camel dairy farms are being created to produce milk on a larger scale. Many people argue that humans don't need to drink milk from other mammals and that doing so exploits these animals, including cows, goats, and camels. Many camel farmers report that the animals are not well adapted to machine milking and that selective breeding is needed to boost their milk production and improve the ease of milking them. Therefore, some people avoid camel milk and other types of animal-based milk due to ethical concerns.

## **Summary**

Camel milk has a similar nutritional composition to whole cow's milk but provides less saturated fat, more unsaturated fat and higher amounts of several vitamins and minerals. It may be a better choice for people with lactose intolerance or cow's milk allergy. It may have antidiarrheal properties, may lower blood sugar, and improve insulin sensitivity, especially in people with type 1 and type 2 diabetes. It contains lactoferrin, immunoglobulin and camel whey protein, which may be responsible for its ability to fight organisms and boost immunity. It may aid certain behavioral and neurodevelopment conditions, such as autism, as well as neurodegenerative illnesses. Camel milk is fairly versatile and can replace other types of milk in most cases. However, it is difficult to make into cheese, yogurt, and butter. As a result, these products are not widely available. The milk is more expensive than other types of milk, as demand outweighs supply in most western countries. The milk carries a high risk of harmful organisms, as its most often sold raw, some consumers have ethical concerns.

For possible submissions Click below:

Submit Article