

A summary of camel milk benefits around the world



Here's what doctors all around the world are saying about camel milk

Camel Milk in the USA

- Camel milk is closer to human milk than any other milk.
- It is often easily digested by lactose-intolerant individuals.
- It is rich in healthy vitamins and minerals, especially B vitamins, vitamin C and iron.
- The lactoferrin in camel milk has antibacterial, antiviral and anti-tumor properties.
- It contains disease-fighting immunoglobulins which are small in size, allowing penetration of antigens and boosting the effectiveness of the immune system.
- It is a rich source of insulin. Containing approximately 52 units of insulin in each liter of camel milk, making it a great treatment option for Type 1 or Type 2 diabetics as well as Gestational Diabetes.

Camel milk has traditionally been used to treat diabetes. Camel milk contains high levels of insulin or an insulin-like protein which pass through the stomach without being destroyed. The stomach's acidity would normally destroy insulin - this is why developing 'oral insulin' is such a challenge. A month-long study in people with Type 1 diabetes suggested that drinking almost a pint of camel milk daily improved blood glucose levels, greatly reducing the need for insulin. If diabetes is not adequately controlled the patient has a significantly higher risk of developing complications, such as hypoglycemia, ketoacidosis, and nonketotic hyperosmolar coma. Longer term complications could be cardiovascular disease, retinal damage, chronic kidney failure, nerve damage, poor healing of wounds, gangrene on the feet which may lead to amputation, and erectile dysfunction.

- It lacks beta casein and other common allergens found in cow milk and contains immune system components that might benefit children allergic to milk and other foods.
- It improves the quality of life for people with autoimmune disorders. Helping the immune system respond properly and no longer attacking a person's own body tissues.
- Camel milk is a good source of protein and referred to as whole food. It has enough nutrients to sustain life and is often given to babies suffering from malnutrition.
- Compared to cow, buffalo and ewe milk fat, camel milk fat has fewer short-chained fatty acids and high concentrations of volatile acids especially linoleic & polyunsaturated acids, increasing brain health and overall wellness.

Camel milk is a rich source of proteins with potential antimicrobial and protective activities; these proteins are not found in cow milk or found only in minor amount, moreover, camel milk is used in some parts of the world as a cure for certain diseases. Camel milk is a whole food meaning it has enough nutrients to sustain a person through the day.

In many countries, camel milk is given to babies suffering from malnutrition. Compared to cow, buffalo, and ewe milk fat, camel milk fat contains less short-chained fatty acids, but the same long-chained fatty acids can be found. Some researchers claim that the value of camel milk is to be found in the high

concentrations of volatile acids and, especially, linoleic acid and the polyunsaturated acids, which are essential for human nutrition.

Nutrition in camel milk:

•Lactose •Lanolin •Protein •Calcium •Carbohydrate •Sugars, natural & added
•Fiber •Ash •Lactic acid •Sp. Gravity •Fat •Cholesterol Vitamins •Vitamin A
•Vitamin B2 •Vitamin E •Vitamin C Minerals •Sodium •Potassium •Iron
•Phosphorus •Magnesium

The nutritional fact of camel milk:

Camel milk is low in lactose compared with cows' milk. However, levels of potassium, magnesium, iron, copper, manganese, sodium and zinc are higher than in cows' milk. •Cholesterol in camel milk is lower than cow or goat milk. •Camel milk is 3 times higher in vitamin C than cow's milk and 10 times higher in iron. •It is also high in unsaturated fatty acids and B vitamins but less in vitamin A and B2. •The fat content in camel's milk is similar to that of cow's milk. •Camel milk is rich potassium, iron, and minerals such as sodium and magnesium.

Health benefits of camel milk:

'Insulin' of the future: Camel milk has a high concentration of insulin that has a positive effect on the immunity. It does not thicken easily in an acidic environment. Diabetics in Somalia, Kenya and the USA who recognize the value of Camel milk are using Camel milk therapy to control their Diabetes.

Camel Milk based beauty products:

Camel milk is a natural source of Alpha-Hydroxide acids which are known to chubby the skin and smoothes fine lines. Camel Milk soap provides a most deluxe bath experience. Products from Camel milk are already hitting the shelves of shops such as soaps and yogurts.

Other benefits:

•Camel milk is supposed a precautionary in ulcers. •Regular intake of camel milk helps to control blood sugar levels. •Camel milk helps in reducing coronary heart disease. •Camel milk also benefits in infection, tuberculosis, gastroenteritis, etcetera and cancer. Immunoglobulin is the substance in the camel milk that contributes to immunity against infection. •Camel milk is also supposed to be a new Viagra. •Camel's milk cures severe food allergies and rehabilitates the immune system in children. •Camel's milk has a number of antibodies that are compatible with human ones and very small molecules that can easily enter the bloodstream by the intestines.

Camel Milk in Israel

- Ten times more iron than cow's milk
- Three to five times more vitamin C than cow's milk
- Rich in B vitamins
- High in immunoglobulins
- High in protein
- Minerals
- Low in fat - 1.8-2% fat compared to 3.5-4% in cow's milk
- Low in cholesterol
- Anti-bacterial
- Anti-viral
- Anti-inflammatory
- Six types of fatty acid including lanolin acid
- As mammals secrete milk according to their environment milk of each species is different.
- Camels ruminate but are not ruminants dont look at camels as big cows.
- Camel milk can be frozen and thawed without losing its properties.
- Camel milk does not clot, not when in contact with acid or stomach enzymes so passes quickly into the intestines.

Fat:

Camel milk has a low % fat, between 2-3%. The amount of milk produced and the lack of drinking water can affect the fat%. The fat is completely homogenized and consists mainly of polyunsaturated fatty acids, Omegas.

Lactose:

The milk sugar, lactose can easily be drunk because there is no intolerance to camel milk lactose. Proteins: Camel milk does not contain the allergens that are in cow milk, -casein or lactoglobulin; there is insulin, which is readily absorbed into the blood; protective proteins which include powerful antibacterial, antiviral and antifungal properties. Most important is that camel milk contains highly potent immunoglobulins (Igs) which are so small that they pass all tissues that human Igs cannot pass. Therefore, the Igs in camel milk readily passes into the blood and into tissues where they are required.

Vitamins and electrolytes:

Camel milk is rich in vitamins, especially vitamin C, which is important in tissue repair and is important in the absorption of calcium and iron. The uptake and deposit of calcium is important for the infant and women after menopause.

Camel milk has properties close to mothers milk and has the benefit of helping the development of the immune system and the skeleton.

On the camel milk page, it is mentioned that camel milk does not “clot” so passes rapidly through the stomach. This is valuable when considering how camel milk is active against diseases.

For instance, insulin is normally broken down in the stomach, but not in camel milk. In that link, it is also mentioned that there are no allergens in camel milk while there are protective proteins. These facts are also very important when medical problems of bacterial and viral origin are considered and the immune system is an issue.

In fact, the special immune system of camels is being used by the Homeland security of the USA to make biosensors to biological warfare substances.

Although camel milk is known for thousands of years as treatments for diseases it is difficult for modern medicine to accept camel milk as a viable treatment. It should be considered as a comparative alternative medicine (CAM) but the demand is for clinical trials. This is unfortunate as the demand for pasteurization destroys most of the efficacy of the milk. There is a way to use other methods for getting hygienic milk.

The regulation for pasteurization is also ridiculous when it is known that pasteurized cow milk still contains a potent bacteria - *Mycobacterium avium paratuberculosis* (MAP). In August 2011 Holland became another country confirming that up to 50% of cow milk in the Dutch milk industry is infected by MAP. As it is highly probable that the MAP leads to Crohn's disease at least the pasteurization temperatures and time must be changed.

On the other hand, camel milk cures Crohn's disease by the protective proteins reaching the MAP that is present in the in the intestinal tissue and rehabilitating the immune system.

Crohn's disease is not primarily an autoimmune disease but a bacterial infection associated with drinking cow milk.

Another disease of epidemic proportions is autism. Autism is not a disease of the brain but an autoimmune disease that primarily affects the intestines. A powerful opioid is formed by two milk proteins, caseins, the allergens, mentioned in the link of "milk".

Therefore, withdrawing cow milk from a child's diet will stop the symptoms of the opioid on the brain but it takes the camel milk to both prevent the symptoms and cure the autoimmune disease.

Camel milk contains caseins but not those that are harmful to the person.

There are many other diseases, including certain cancers, preventing side effects to chemotherapy, including low hemoglobin concentrations, which are being cured.

Many physicians are showing interest in camel milk and suggesting to patients to try camel milk. In the near future, some case reports will be published.

Weill mentions in the chapter on camels in his book that camel milk was given to people to treat all diseases and poverty. He published his remarks in New York in 1863.

The specific activity of Camel Milk

Camel milk is considered to have medicinal benefits that can assist in the treatment of various illness due to its high vitamin and mineral content and immunoglobulin content.

- BACTERICIDE
- VIRICIDE
- FUNGICIDE

Camel Milk in Europe

- Camel milk can be easily digested by lactose-intolerant individuals.
- The lactoferrin in camel's milk has antibacterial and antiviral properties. It also has anti-tumor properties (Ueda et al., 1957).
- Camel milk has an apparent positive effect on breast cancer (Eiseler et al., 1998).
- Camel milk has three times the amount of vitamin C than cow's milk.
- Camel milk has been used for centuries to treat liver disease, and studies have been performed for hepatitis and liver cancer with promising results.
- Camel milk is rich in B vitamins and iron.
- The immunoglobulins in camel milk have been shown to protect against types of cancer (Fage et al., 2005).
- Camel milk has been used to aid in the treatment of the following illnesses:
 - Autism (Shabo and Yagil et al., 2005)
 - Milk allergies (Shabo et al., 2005)

- Tuberculosis (Agarwal et al., 2005)
- Crohn's Disease (Shabo et al., 2005, 2006; Donechenko, 1975)

Camel Milk in the Middle East

- Low in fat 1.8% to 2% fat in camel milk as opposed to 4% to 4.5% in cow milk
- ½ liter a day of camel milk represents the recommended daily requirement of vitamin C.
- High in natural vitamin C - 5x higher than occurs in cow milk
- Contains unsaturated fatty acids - which are healthy fats - with a higher percentage than exists in cow milk
- Reduces cholesterol to aid healthy cardio-vascular functioning
- Boosts overall immune system
- Milk alternative for people with lactose intolerances - in particular, Asians and Indians - as they lack the enzyme lactase, which degrades lactose.
- Natural pro-biotic - to assist healthy bacteria within the gut.
- Pregnancy - low fat, but calcium-rich, therefore ideal for pregnant women to promote healthy growth of the embryo
- Osteoporosis - calcium intake is required to guard against osteoporosis. Often women are too diet-conscious to follow a sufficiently rich diet to guard against this disease, but camel milk provides a low-fat alternative.
- Has a proven positive effect on sufferers of Diabetes 2 - studies in India show that camel milk reduces the need for insulin injections and tablets.
- Research currently in progress on positive benefits to patients with hepatitis, auto-immune disease, crone's disease, and rheumatism
- Excellent digestibility due to camel milk not curdling in acidic environments such as the stomach.

Comparison with other Nutritional foods:

A single cup or 250ml of camel milk contains:

- As much protein as a grade A large egg.
- More thiamine, riboflavin, and niacin than a slice of 100% whole wheat bread
- Half the cholesterol of 100g of fish
- Less fat than ¼ lb. of lean ground beef
- As much calcium as 7 medium sardines with their bones
- Almost as much potassium as a banana.
- Close to 2/4 the vitamin A in 12 cups of cooked broccoli

Camel milk composition and essential nutrients in a glass of milk (250ml)

Energy - 150 cal

Protein - 7.5g

Fat - 8.6 g

Carbohydrate - 10.5g

Plus these percentages of the daily value (RDA)

Vitamin A - 8%

Vitamin B1 (Thiamin) 8%

Vitamin B2 (Riboflavin) 25%

Vitamin B3 - 10%

Beauty

- Contains lanolin and other moisturizing properties providing a calming and soothing effect on the skin.
- Research shows that camel milk has beneficial properties in treating psoriasis patients, by both ingestion and topical application
- Naturally occurring anti-aging properties - elastin, vitamin C and linoleic acid - can be used topically in creams, soaps, and baths.
- Good for healthy bones, nails, hair, teeth, and skin - due to calcium, vitamins and minerals
- Bedouins traditionally used camel fat and milk to protect themselves from the sun.

Well Being

- A traditional and healthy staple diet of the Bedouins until the mid 20th century was camel milk and dates. This provided them with all the proteins, vitamins and carbohydrates required to face the harsh desert life.
- No known allergies to camel milk, as opposed to common infant allergies and lactose-intolerance of adults to cow milk
- Camel milk is closest in composition to human milk, therefore more beneficial for mothers to give babies and infants.
- More beneficial for pregnant women to use, because of low fat, calcium, and naturally occurring additional vitamins and minerals.
- Can also drink as much as you like without feeling bloated due to excellent digestibility of camel milk - does not curdle in the stomach
- Psychological benefit - feel good factor about taking care of your body and drinking a product rich in calcium, vitamins, and minerals
- Easy to include in family's daily diet - camel milk can be substituted in cooking and baking wherever cow milk has been used, with more benefits to the health of the whole family
- Clean and natural tasting, not as distinctive as goat milk.

Camel Milk in Africa

Health Effects

Camel milk is rich in non-saturated fatty acids, iron, Vitamins B and C. Especially in Africa and Asia it is greatly valued for its health benefits. It is a valuable alternative for those persons suffering from allergy against cow milk. Camel milk also contains lactose but is a non-allergic organic product.

Proven beneficial effects

There is clear evidence that regular camel milk consumption contributes to optimum diabetes management. Camel milk has positive effects in controlling high blood pressure and helps in the management of Arteriosclerosis and Osteoporosis. Research has demonstrated the presence of potent anti-bacterial

and anti-viral factors in camel milk. Clinical trials showed that recovery from infectious disease (e.g. Tuberculosis) was significantly faster in patients consuming camel milk regularly.

Research on diabetes

An insulin-like protein has been detected in camel milk (Beg, 1986). Clinical trials in human diabetes type 1 have shown that the daily consumption of 0.5 litre camel milk reduces the need for insulin medication by an average of 30% (Agrawal, 2005314kb). In addition, comparative physiological studies carried out in Israel (Zagorski, 199859kb) and Germany (El-Mahdi, 1997) demonstrated the anti-diabetic properties of camel milk.

Camel's milk is a great anti-inflammatory value, contributing powerfully to suppress inflammatory processes in the human body and treatment of many diseases.

- Camel milk contains immunoglobulins/antibodies, which contribute to strengthening our immune system.
- It seems that the camel milk antibodies dominant contribution to suppressing inflammatory processes involved in the disease.
- The result: in many cases, improved (often dramatically) symptoms and disease status.

Camel milk in China

Supplying life nutrition Protein: Protein is an important nutrient camel milk, camel milk in the dry matter in an amount of 3.55% -4.47%, including casein and whey protein, followed by are some of the non-protein nitrogen substances, such as the free acid (taurine), nucleotides, B vitamins and synthetic precursors of these substances, such as whey acid.

Milk protein digestion and absorption rate are generally 97% -98%, is a complete protein. Camel milk contains 8 essential amino acids, the right proportion, and higher than the amino acid content in milk. Protein can provide nutrition to the body, the Executive protection, responsible for mechanical transport, control of metabolic processes, transport oxygen, defense, viruses,

transmit genetic information.

Camel milk containing or containing a small amount of β -LG globular protein that is not easy to be digested is the body of milk allergens, so those who are allergic to cow's milk, camel milk may be a good substitute. In addition, the protection of camel milk is rich in protein, which can be used to explain why the camel milk in hot climates and without low-temperature storage conditions, can be stored for several days without deterioration; in some countries can also be used to treat camel milk adjuvant treatment of gastric ulcer and diarrhea and infectious diseases such as liver disease, provide a theoretical basis.

Stored energy fat: milk lipids are a source of energy is fat-soluble vitamins solvent, providing essential fatty acids. The phospholipid composition of milk fat and certain long-chain polyunsaturated fatty acids with a variety of physiological functions, some of the human body can be used as a precursor of physiologically active substances.

Camel milk fat content of 5.65% -6.39%. Triacylglycerol fat important lipids account for 96% of all lipids, but also a small amount of diacylglycerol, monoacylglycerol, cholesterol, cholesterol esters, free fatty acids, and phospholipids. With milk, goat milk compared to camel milk contains high long-chain polyunsaturated fatty acids, such high levels of long-chain polyunsaturated fatty acids in human nutrition is beneficial. In addition, compared with the milk, camel milk fat globule diameter is a smaller and more uniform size, so easier to digest camel milk, more suitable for the elderly, children and disease drink.

Participate in various activities of carbohydrates: Camel milk is mainly carbohydrate lactose, lactose is unique to mammals milk carbohydrates, other foods contain lactose content of 4.24% -4.71%. Lactose is the main function for the body to supply energy, growth, and development of children and adults, metabolism, tissue synthesis, maintain normal body temperature and physical exercise, labor job requires a lot of heat, especially in children for the decomposition of sugar digestion and absorption than Adults strong, mainly because of the baby at birth, the body contains a lot of lactase, then gradually decreased. Therefore, if the body does not drink milk will cause long-term lack of lactase in the digestive tract, then it will lead to milk lactose

intolerant. Lactose is the baby's body organs, nerves, limbs, muscle development and activities of power. Another effect of lactose in the process of calcium metabolism in children can promote the absorption of calcium. The sweetness comes from milk lactose, lactose, and other sugars but low compared to the sweetness of the eclipse so it will not cause children.

Regulate body functions of vitamins: vitamin for maintaining the body's normal physiological function and has an important role in regulating a variety of functions. The human body can not synthesize their own vitamin, essential dietary intake. Camel milk contains almost all known vitamins, such as vitamin A, vitamin E, vitamin B1, vitamin B2, vitamin B6, vitamin B12, vitamin C, vitamin D, niacin, pantothenic acid. Vitamin A, promotes normal growth and reproduction, maintenance of epithelial tissue with normal vision. Vitamin C has an anti-scurvy function. Camel milk in the vitamin C content is much higher than milk, for life, lack of vegetables and fruits in arid areas of the world is very important. Vitamin D, can regulate and metabolic bone tissue calcification in osteoblast activity, so the child's growth and development process of vitamin D on bone formation play a very important role. 500mL camel milk per day of vitamin D to meet the body's needs. Vitamin E, have antioxidant, anti-aging functions.

Essential minerals to sustain life: The human body is an organic being, in all life activities, the need for the involvement of a variety of substances, the type and quantity of these substances and the elemental composition of the Earth's surface are basically the same. These elements other than carbon, hydrogen and oxygen in the form of organic matter, the remaining collectively minerals (salts). Currently, the human body can be measured more than 20 kinds of inorganic salts.

The minerals in our body weight about 5%, calcium accounts for about 2% of body weight. Most of the body's calcium distribution in the bones and teeth, accounting for about 99%, and the remaining 1% distributed in the blood, interstitial fluid and soft tissue.

Camel milk is rich in calcium, and calcium, phosphorus, potassium, sodium and chloride content of the right proportion, is conducive to the absorption of various minerals

Camel milk is relatively unfamiliar to most people, but in many countries and regions which are considered irreplaceable nutrition. Camel milk in the Arab countries is a widely consumed food; in Russia, Kazakhstan, the doctor will recommend it as a prescription for frail patients; in India, camel milk is used to recover edema, jaundice, spleen diseases, tuberculosis, asthma, anemia, and hemorrhoids; In Africa, AIDS has been suggested to drink camel milk, in order to enhance the body's resistance. Kenya a camel dairy company is working with the Institute of Medicine, to study camel milk in the prevention of diabetes and coronary heart disease on the role.