

Goat's Milk: A Natural Alternative for Milk Sensitive Patients

Editorial Staff

The advertisement asks, "Got milk?" But what kind of milk? Twenty years ago, most people who routinely had milk with their morning cereal used whole milk. Today, with the concern for fat in the diet, many people have switched to low-fat milk or skim milk, and a significant number of people are opting for lactose reduced or lactose free milk.

There are other alternatives: take goat's milk, for example. Patients with diarrhea, asthma, bloating and irritability may be suffering from the most common food allergy: cow's milk. Goat's milk is a natural alternative to cow's milk and can comfortably be consumed by many patients who suffer from cow milk allergies or sensitivity.

Although goat milk, like cow's milk and human milk, contains lactose, many people with lactose intolerance can drink goat milk. Why? It has been hypothesized that the reason lies in goat milk's superior digestibility. Goat milk is more completely and easily absorbed than cow's milk, leaving less undigested residue behind in the colon to quite literally ferment and cause the uncomfortable symptoms of lactose intolerance.

It may also be that the patient is not lactose intolerant at all, but instead is one of the 1-in-10 people who are allergic to the major protein of cow's milk ... alpha S1 casein protein. The symptoms are almost identical to those of lactose intolerance. Both goat milk and human milk lack this offending protein.

The digestibility of goat milk can be attributed to its casein curd, which is both softer and smaller than that produced by bovine milk. The smaller and softer the curd, the more easily accepted by the human digestive system.

Another significant difference between cow's milk and goat milk is found in the composition and structure of fat. The average size of goat milk fat globules is about two micrometers, as compared to 2 1/2 to 3 1/2 micrometers for cow's milk. These smaller sized fat globules provide a better dispersion and a more homogenous mixture of fat in the milk, another factor in making goat milk easier to digest.

Goat milk contains more of the essential fatty acids (linoleic and arachidonic acids) and a higher proportion of short-chain and medium-chain fatty acids than cow's milk. The fat in goat milk may be more readily digested and absorbed than cow milk because lipases attack ester linkages of such fatty acids more readily than those of longer chains. And, unlike cow's milk, goat milk does not contain agglutinin; as a result, the fat globules in goat milk do not cluster, which helps facilitate digestion and absorption.

Goat milk is a nutritious dairy option for many patients of different age groups and lifestyle needs. Young children and seniors can be especially sensitive to cow's milk and so can certain ethnic groups, including Asians, Hispanics, African Americans and Native Americans.

Goat milk is an excellent option for any patient who is cow milk or soy milk sensitive and is necessarily concerned about obtaining adequate calcium from a natural dietary source. Goat milk is also an excellent source of dietary calcium important in the prevention of high blood pressure, osteoporosis and other bone-related problems. For menopausal women, goat milk provides 13% more calcium than cow's milk and can be consumed comfortably even by those women with milk sensitivity.

While it is often recommended that children who have problems digesting cow's milk change to vegetable protein soy-based milk, that is not always the answer. An estimated 20%-50% of children with cow milk protein intolerance will react adversely to soy proteins. Goat milk is a natural milk that children like and can consume comfortably, even if they are sensitive to cow's milk and/or soy milk.

The nutrient composition of goat milk is quite different from cow's milk. In addition to containing 13% more calcium than cow's milk, goat milk also has 25% more vitamin B-6, 47% more vitamin A, 134% more potassium and 350% more niacin. Goat milk is also higher in chloride, copper and manganese and contains 27% more of the essential nutrient selenium. Goat milk contains none of the controversial Bovine Growth Hormone (BGH).

Goat milk is available nationwide in evaporated and powdered forms (supplemented with folic acid) and in fresh one-quart, refrigerated cartons (whole and 1% low fat), as well as aseptic quarts with an unopened 8-month shelf life.

Editor's note: Contact the National Goat Milk "hotline" at (800) 891-GOAT (4628) for more information.

References

Luke B, Keith LG. Calcium requirements and the diets of women and children. Journal of Reproductive Medicine.

Haenlein GFW. Role of goat milk in human nutrition. International Conference on Goats, University of Delaware.

Haenlein GFW, Ace D. Extension Goat Handbook. United States Department of Agriculture/USDA.

JULY 1998