



Dairy

Study Proves That Goat Milk Can Be Considered As Functional Food

by University of Granada

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The research group AGR 206 at the University of Granada Department of Physiology and Institute of Nutrition and Food Technology "Jose Matáix", coordinated by professor Margarita Sánchez Campos, have proven that goat milk has nutritional characteristics beneficial to health.

The regular consumption of goat milk by individuals with iron deficiency anemia improves their recovery, since it enhances the nutritional use of iron and enhances the regeneration of hemoglobin; this means that this type of milk minimizes calcium and iron interactions. Conversely, this type of milk protects DNA stability, even in cases of iron overload caused by prolonged treatments with this mineral to treat anemia.

University of Granada researchers have found that goat milk has many nutrients -as casein- that make it similar to human milk. Goat milk contains less casein alpha 1 -as human milk-, which is responsible for most allergies to cow milk. Therefore, goat milk is hypoallergenic. "For this reason, in some countries it is used as the basis for the development of infant formula in place of cow milk", University of Granada researchers point out.

Additionally, another beneficial aspect of goat milk is that it contains a significant amount of oligosaccharides. Goat milk has more oligosaccharides with a composition similar to that of human milk. These compounds reach the large intestine undigested and act as prebiotics, i.e they help develop probiotic flora that competes with pathogenic bacterial flora, making it disappear.

Less lactose

Similarly, goat milk contains a lower proportion of lactose than cow milk -about 1% less- and, as it is easier to digest, individuals with intolerance to this milk sugar can tolerate goat milk".

The essential difference between the composition of cow and goat milk stems from the nature of their fat content: it is not only the small size of goat milk's blood cells, but rather the profile of its fatty acids. Goat milk contains more essential fatty acids (linoleic and arachidonic) than cow milk. Both belong to omega-6 series. Similarly, goat milk has 30-35% medium-chain fatty acids (C6-C14) MCT, while cow milk has only 15-20%. These fatty acids are a quick source of energy and are not stored as body fat. In addition, goat milk's fat reduces total cholesterol levels and maintains adequate levels of triglycerides and transaminases (GOT and GPT). This makes it a food of choice for the prevention of heart diseases.

As regards their mineral composition, University of Granada researchers point out that goat milk is rich in calcium and phosphorus "it is highly bioavailable and favors their deposition in the organic matrix of bone, leading to an improvement in bone formation parameters". It also has more zinc and selenium, which are essential micronutrients contributing to the antioxidant defense and for the prevention of neurodegenerative diseases.

For all these reasons, researchers consider that "goat milk can be considered natural functional food, and its regular consumption should be promoted among the population in general, specially among those with allergy or intolerance to cow milk, malabsorption, high cholesterol levels, anemia, osteoporosis or prolonged treatments with iron supplements".

Source: University of Granada