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Camel Milk; an adjunct superfood for diabetes cases

Defects in insulin secretion by the pancreas and due to the cells may not respond properly to insulin, hyperglycemia or diabetes will be occurred and cause to the failure in the eyes, heart, kidneys and liver function. Nowadays, researchers looking for natural adjunct treatments to control diabetes. Camel milk is having anti-diabetic activity possibly because of insulin like protein (about 52 units/liter), that covered by fat micelles and can be an effective alternative for insulin to treat type 1 and 2 and gestational diabetes. It is proved that camel milk is safe and effective in improving long-term glycemic in the human patients and animal's models. In one study, daily consumption of 500 mL raw camel milk for 16 week in type 1 diabetic patients (average age 20 years) decreased daily insulin dose and blood sugar. Also raw camel milk in type 1 diabetic cases for 52 week and 3 months caused to significant reduction in HbA1c, mean blood glucose and 30% reduction in required insulin dose. Type 2 diabetics cases consumed 500 mL pasteurized camel milk for two months, that mean insulin concentration was significantly increased by the camel milk, but fasting blood sugar, lipid profile, blood pressure and insulin resistance did not influence. Therefore, according to the studies, raw camel milk in type 1 diabetes patients caused to increase insulin secretion, reduce required insulin and insulin resistance. Camel milk has immune-modulatory effects on the pancreas β-cells. Camel milk influences insulin secretion via the proper activity of the pancreatic cells and insulin receptors. Also this special milk improves diabetes complications such as dysfunction in the kidney and liver function and diabetic wounds. In general, although according to the clinical trials, the raw camel milk by 500 mL/day improved risk factors in diabetic patients.But it appears that more scientific studies are needed to confirm the effectiveness of processing's methods of camel milk on diabetes cases.

Keywords: Camel Milk; Diabetes, Insulin like protein

Biography

Taherah Mohammadabadi has been as a researcher at Australia; she has attended and presented her works in different conferences in some countries. She has been as supervisor for 11 phD students and more than 25 Msc students and also guided more than 45 Msc and phd thesis. She has over 200 published publications, conferences presentations, and scientific projects; many presentations in international workshops and webinars, also 6 books. She is member of the editorial board and reviewer of some international and national Journals.
Field: Dairy and Animal Products, Milk Quality, Camel Milk and Health Complications, Food Technology, Herbalist