

# CHARISMATIC UPSHOT OF CAMEL'S MILK AGAINST HARMFUL DISEASES

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## ABSTRACT

Idea of drinking camel milk in breakfast with cereals it seems to be strange for all. Camel milk is closet to breast milk. Our bodies thrive on it. It's also posses more iron and vitamin C than cow's milk. It's not only available in Pakistan but in all over the world. Camel milk possesses unique characteristics and benefits. According to a new research scientist have found that it has tenfold the amount of antibacterial and antiviral properties, contains an insulin resemble with protein that survives in the Gastrointestinal Tract and may comfort people with certain forms of diabetes & also contain powerful immune-system component. Camel milk found to have more GABA which is beneficial for brain to function properly. Camel's milk has noteworthy role against harmful diseases. It is packed with proteins. Protein in camel milk rapidly heals wounds in diabetic patient. It also prevents liver damages from the carbon tetrachloride. Camel milk is also used in the treatment of diarrhea.

Key word: Camel Milk, Diabetes, Autism, Immune, Allergies, Lymes, GABA, Carbon Tetrachloride.

#### INTRODUCTION:

Camel milk supposed to have many advantages, various research claim that of has anti-microbial activity as well as protective activities and it is rich source of protein. Malnourished babies and different patients are traditionally given camel milk in many countries especially in North Africa and Arab and North African. Indian research center investigate that it is beneficial especially for diabetic patient. Same as many countries done research on camel milk( one of them conclude that it is benefical for kids with allergy especially food allergies, others studies shows that it is used in many disease like diabetes, many skin problem and tuberculosis), US taking keen interest in research regarding camel milk benefit for human. According to some investigator the importance of it is hide in polyunsaturated acids and volatile acid, this all are crucial for nutrition of human. Camel is the desert animal which is commonly mode of transportation. Camel milk is the almost same as obtain from a breast milk. But it is also the source of nutritious milk and in latter days, camel's milk has been undergone to several researches. However, mostly population may not have been too familiar with it. But this milk has many advantage for the body and have a better nutrient content that is known as a 'super food' [1]. Camel milk has been dominant in almost all Arab countries, it tastes slightly sour than other milk and is often formed as cheese. It is lower in fat almost 50% than cow's milk. Camel milk enclose a high proportion of unsaturated fatty acids, which are healthful for the body since they, among other profits, help lowering the cholesterol which leads to healthy cardio-vascular functioning. It contains Vitamin C i.e.immune boostingvitamin in high amount; almost 3 to 5 times higher rather than in cow milk. There are no recognized allergies to camel milk. From different studies it has found that camel's milk can also reduce hyper-tension when taken in the form of Laban, acting to inhibit the ACE enzyme that is responsible for the hyper-tension. Researcher found a component of camel's milk which is known as Lactoferrin which block the growth to colon cancer cells. [2] Lactoferrin has antioxidant properties and also prevents DNA damage associated with cancer development by binding with iron. Lactoferrin also keeps the milk fresh for longer and means bacteria cannot multiple quickly like in cow milk [1]. As cheese is not form from camel milk so this is beneficial for diabetic patient. [2] Many studies are conducted to observe the benefit of camel's milk in diabetic condition. It consists of insulin like molecule entity mimic interaction of insulin with its receptor. Article offer the certain possibility;

 Camel Milk contain insulin which have some special characteristic like it is helpful for easier absorption into circulation rather than insulin that are found from other origin or cause resistance

- ii) Insulin found in camel milk is closed in nano-particles (lipid vesicles) that make possible its passage through the stomach and entry into the circulation;
- Other substance found in camel milk make camel milk antidiabetic.

Fact finders determined that taking camel milk significantly reduced the dose of insulin which is required to maintain long-term glycemic. According to lead researcher, fresh milk and 500 ml of raw daily improves diabetics due to protein which is like insulin is absorbed rapidly and does not coagulate. Another researcher stated that insulin remains the most efficient treatment for diabetes, unless it is not an option [3] [4]. Practical studies is also published, mice that are diabetic are selected for study there were divided in 2 group one receive camel milk while others not and it is concluded that group which receive milk show protein that rapid healing and closure in wounds. Inflammatory compound and fewer free radicals are also seen in the groups that are receiving the camel milk. Few people believe that camel's milk might be helpful for people with autism, so an article published in the 2005 observed the effects of camel's milk instead of cow milk consumption, on autistic people. Scientistidentified that after a 15-year-old boy participant drank camel milk for 30 days, her autism symptoms disappeared. A 4-yearold female also recovered after 40 days of drinking the milk. In another study, several autistic 21-year-olds drank camel milk for 2 weeks and were observed to be less and quieter self-destructive. Through this studies the people thought seems to be positive. It's is effective in the treatment of autism [3]. Camel milk contain immune system component that might be benefits for the allergic to milk and other foods in children. In December 2005 a study had publish, which determined that the effects of camel's milk on children that are allergic with food and milk and were observed that all children were fully recovered from their allergies with no adverse effect. Diseasefighting immunoglobulin's, it is believed that camel's milk also paly its key role in reducing allergic symptoms; however, scientific research is needed to prove the effectiveness of it in treating allergies [5]. The potent immune-system components in camel's milk.help to fight with diseases. Camel's milk contains the small size of the immunoglobulin's, or antibodies, enablestoo easy targeting and penetration antigens, for destruction by the immune system. People are suffering from autoimmune system disorders, such as multiple sclerosis and Crohn's disease, which attack their own body tissues. For autoimmune disorders, traditional treatments were suppressing

the immune system; camel milk is helpful in these disorders by boosting it. It can heal or even control autoimmune disorders, but insufficient scientific cluepresent that prove its effectiveness in the treatment of autoimmune diseases. From one study that was held on Lyme disease patients after taking camel's milk patient sees decrease in arthralgia improve sleep patterns, gut issues improve, rashes disappear and as "brain fog" lifts the ability to think clearly improves. Lyme patients are treated with antibiotics, that kill many of the good gut floras, and the camel milk helps in keeping it in balance. [3] [4] GABA is vital to brain to perform the function properly. Research in University of California (Irvine) conducted and the analyzer analyze that goat milk and camel milk have relatively high GABA as compare to cow milk. But it's not enough camel milk is relatively more bioavailable. So it slightly clarifies that why citizens feel breezier after taking camels milk. It is more desirable to consider camel milk in diet. A study declared in October 2013 in journal of BMC Complementary and Alternative Medicine, rats fed a high fat, high cholesterol diet that caused fatty liver disease benefitted greatly from camel milk added to their diet. The camel milk increased the good HDL-cholesterol, prevented the fatty liver, showed antioxidant properties as well and reduced insulin resistance. Pharmacologist from King Saud University, enthusiastic on their finding, they ran an electrophoresis panel on camel milk. They detected more than 200 distinctive proteins. Few of proteins were immunoglobulin's which is helpful for immune system to perform function better and others are  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ peptides whose function is unknown. They were suspecting that in future many of them can possibly use as nutraceuticals. Liver poison that is Carbon tetrachloride it also increases the liver enzymes and some different lab test. In study it is concluded that mice that consume camel milk, liver was safe. Means that increase consumption of camel milk, leads to more protection. Traditional camel milk is used for the treatment of diarrhea although its active ingredient is not known. But in study they introduce a new look on two gastrointestinal diseases, with concomitantthe involvement of immunological, which have attained epidemic proportions and which react to it. Different people understand that it is beneficial against diabetic, infection and also autism. Almost all are scientifically approved. Same as people belief camel milk has anti infection property so study is conducted on mice. A powerful evidence is found that survival was recognized in the mice enrich with camel milk. Means that Camel milk is an exemplary nutrient and due to its some definite properties, specifically antiinfectious action. By the help of these short communication and articles we could generate awareness in our main society. [6-14]

### RESULT AND DISCUSSION:

People century ago used to drink milk without knowing the benefits and their activity as they use it as a home remedy but now different studies are conducted that proved the remedy is due to certain types of component in camel's milk which is responsible for this the activity. Camel's milk is used all over the world, although it is not the first choice for the persons because of the taste but it has many beneficial effects against the harmful disease like diabetes, autism, immune, allergy, Lyme and also prevent liver damage. Camel's milk has antiviral, antibacterial and antifungal properties too, with this many more studies should have to be conducted under this domain in order to get more benefits, subsequently more patient cure from the attack of pathogens and different diseases and we could able to make a healthy life style by consuming natural products in our daily life.

## REFERENCES

- Camels and Camel Milk. Report Issued by FAO, United Nations. (1982)
- "The amazing characteristics of the camels". Camello Safari. Retrieved 26 November 2012.
- The Huffington Post; Camel Milk: The Biggest Hump in the Milk Industry; Phillipa Young; October 2010
- "International Journal of Human Development"; Research: Etiology of Autism and Camel Milk as Therapy; Y. Shabo, M.D. et al.; 2005
- Shabo, Y; Barzel, R; Margoulis, M; Yagil, R (2005). "Camel milk for food allergies in children". The Israel Medical Association journal: IMAJ 7 (12): 796–8. PMID 16382703.
- Naveed S, Sana A, Rehman H, Qamar F, Abbas SS, et al. (2015)
  Prevalence and Consequences of PHOBIAS, Survey Based Study

- in Karachi. J Bioequiv Availab 7: 140-143. doi:10.4172/jbb.1000228
- Safila Naveed, Fatima Qamar, Syeda Sarah Abbas, Sehrish Batool, Syed Hameez Jawed & Syeda Zainab. Accessibility of Altered Trade Names of Ranitidine in different standard by UV Spectrophotometric Technique. Journal of Biotechnology Biosafety. 3(2):209-213
- Abbas SS, Qamar F, Naveed S (2015) Pharmacy: A Dignified Profession but yet Deserted; A Dilemma for Pharmacy Profession and Future Pharmacist. J Bioequiv Availab 7: e65. doi:10.4172/ jbb.10000e65
- Naveed, S., Qamar, F., Abbas, S.S., Jawed, S.H., Raza, W., Khan, M. and Iqbal, B. (2015) Appraisal of Techniques, Investigation and Analysis of Vitamin (B7) Biotin. *Open Access Library Journal*, 2: e1894. http://dx.doi.org/10.4236/oalib.1101894
- 10. Dr. Syeda Sarah Abbas, Dr. Safila Naveed, Dr. Fatima Qamar, Zohra Barket Ali, Sehrish Kirn, Sania Zehra, Dr. Syed Hameez Jawed. "Multiple Sclerosis (MS) – Demyelinating Disorder; It's Overview, Indications, Etiology, Pathophysiology and Clinical Pharmacotherapy". World J Pharm Sci 2015; 3(10): 2029-2034
- Naveed, S., Abbas, S.S., Qamar, F., Ali, Z.B., Kiran, S. and Zehra, S. (2015) Textaphrenia; Turmoil for Adults. World Journal of Pharmaceutical and Life Sciences, 1, 70-72.
- Abbas, S.S., Naveed, S., Qamar, F., Zainab, S., Jawed, S.H., Kiran, S., Zehra, S. and Ali, Z.B. (2015) Autism Spectrum Disorder (ASD); A Threat To Social Communication. World Journal of Pharmaceutical and Life Sciences, 1, 203-205
- Naveed, S., Farooq, S., Abbas, S.S., Jawed, S.H., Qamar, F., Hussain, M.Y. and Ali, I. (2015) Contemporary Trends in Novel Ophthalmic Drug Delivery System: An Overview. *Open Access Library Journal*, 2, e1497.http://dx.doi.org/10.4236/oalib. 1101497
- 14. Dr. Syeda Sarah Abbas.PROVOKE PRACTICAL APPROACH AND RESEARCH CULTURE AMONGST 1ST PROFESSIONAL YEAR OF PHARMACY STUDENTS. wjpls, 2015, Vol. 1, Issue 3, 24-27