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The 6TH Conference Of ISOCARD
Saudi Arabia 2023

King Faisal University

The Proceeding of 6th Conference of the International Society of Camelid Research and Development

ISOCARD-2023

"The Role of Camel in Food Security and Economic Development"

الجمعية الطبية البيطرية السعودية
Saudi Veterinaray Medical Society

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	Scientific Sessions, Sunday, 12nd March 2023			
03:50-04:10	Apparent digestibility of major minerals in camels (Camelus dromedarius) Seddik Mabrouk Mouldi * , Saifi Ali, Dbara Mohamed, Jarray Naceur, Hammadi Mohamed And Khorchani Touhami	Importance of liner design and milking machine settings for optimal milking performance and welfare in camels S. Kaskous	Investigation of endemic and imported camel diseases in Libya Fouziyah Alghanay	Effect of preslaughter stress simultaneously induced by high loading density, thermo-hygrometric parameters and waiting period on the status of oxidative stress indices and vitamin D in liver and kidney in the Arabian camel El Khasmi Mohammed* , Moussahil Abderrahim, Farh Mohamed, Iddar Abdelghani
04:10-04:30	Fractionation of pepsin-hydrolyzed camel and cow lactoferrin : Investigation of antibacterial activity Jrad Zeineb, El-Hatmi Halima, Adt Isabelle, Degraeve Pascal, Oulahal Nadia and Khorchani Touhami	Quantitative determination of D and L lactates in raw and fermented camel milk in Kazakhstan Zauresh Bilal, Assem Issayeva, Shynar Akhmetsadykova, Gaukhar Konuspayeva, Helene Tormo	Isolation and molecular identification of E. coli on 157:H7 in dromedary camels Ali kadhim Altaee, Afaf Abdulrahman Yousif	Protective Effect of Black Cumin Oil Against the Heat-Induced Oxidative Stress in Camel Meat FARH Mohamed, Moussahil Abderrahim, IDDAR Abdelghani and El KHASMI Mohammed
04:30-04:50	Pharmacokinetic of tetracycline antibiotic in camel milk F. Amutova, Z. Bilal, A. Akhatzhanova, A. Issayeva, N.Akhmetsadykov, S.Akhmetsadykova, G.Konuspayeva	Use of artichoke (Cynara scolymus) flower extract as a substitute To rennet in the manufacture of camel milk cheese Imen Fguiri, Moufida atigui, Amel sboui, samira arroum, Mohamed Dbara, Mohamed Hammadi, Touhami Khorchani	The non-DNA sequence variations of experimentally camel-derived Trichinella spiralis in domestic cats Hussein Mohamed Omar	A comparative study of the mineral status of camels in El Oued region: gender, age, and season effects Titaouine Mohammed

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Scientific Sessions	(MONDAY, 13rd March 2023)			
04:00-04:15	Phenotypic and genotypic characterization of Kazakhstani Bactrian camels Akhmetsadykova Sh., E.Shertay, G. Konuspayeva, A. Torekhanov, K. Dossybayev, A. Kantay, E. Talzhanov, N. Alibayev, B. Faye.	Assessment the variation factors of milk production and composition of camels in Kazakhstan Shertai E., G.Konuspayeva, B. Faye, Baisaparov A., Sh. Akhmetsadykova.	Induction of Estrus and Ovulation in Dromedary Camels (Camelus Dromedarius) in Sudan. Ashwag E. Musaad*, Husna M. Elbasheir, Duriya F. and Salih O. Adam	Developing the Knowledge Between the Field/Specialist and the Future Veterinarian/ Medical Students" Noura Abdelmajeed Alzarooni Abudhabi
04:15-04:30	Influence of oversized follicles on Behavior, hormonal concentrations and fertility of camels (Camelus dromedarius) M.M. Waheed, I.M. Ghoneim, M.M. Hasseeb, F.M. Al-Muhasen	Comparative Study between Nisin extracted From Camel, Caw and Goat Milk Suzan Aziz Awla, and Hanan Mohawia Ibrahim	Impact Of Glycine Betaine On Cooled Camel Semen Quality And Fertility Rate Zeidan, A.E. B. ; *A.M.Amer ; Dalia,S.A.Al-Tahan and Liza A. Abdel-Rafaa	Towards a genomic future for camels in pakistan; enhancing camel potentials using new approaches Masroor Ellahi Babar, Tanveer Hussain, Qurat ul Ain Ali Hira
04:30-04:45	Prediction of gestational age in dromedary camels Ahmed Ali,* , Refaat Derar Derar, Fahd A. Al-Sobyil, Omar El-Tookhy	A novel camel yoghurt process using camel gelatin as a texturizing agent Imen Fguiri*, Salma Bessalah, Amel Sboui, Samira Arroum, Mohamed Dbara1, Mohamed Hammadi, Touhami Khorchani	Use of hormones and Ultrasonic for assessment of ovarian activity and uterine condition of she camels (Camelus dromedaries) during early pregnancy stages (non-breeding season) Nesreen Abd alrasoul	Reproduction Practices of Camel Wrestling Culture in Turkey Devrim ERTÜRK; Süleyman ŞANLI

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Pharmacokinetic of Tetracycline Antibiotic in Camel Milk

F. Amutova,* Z. Bilal, A. Akhatzhanova, A. Issayeva, N. Akhmetsadykov, S. Akhmetsadykova, G. Konuspayeva

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AIM:

The aim of this work was to study pharmacokinetic of tetracycline antibiotic in camel milk after intramuscular administration.

INTRODUCTION:

Camel milk are the primary source of food in 48 countries around the world (FAO 2022). However, no international standards for camel milk and its products have been established to date. In practice, many veterinary drugs (antibiotics) have requirements only for ruminants in their instructions for use, but camels are pseudo-ruminants. As a result, dosages and excretion periods do not match the drug instructions. Many practitioners administer individual drugs to camels, and some drugs are not specifically designed for camels. In this context, it is necessary to experimentally demonstrate the period of complete elimination of veterinary drugs via dairy camel milk, which has almost no data in the world of pharmacokinetics and pharmacodynamics. Based on the results, it will be possible to develop technologies to get organic camel milk, allowing producers to produce safe products for both the local and global markets. Therefore.

METHODS:

Five dromedary camels received a single intramuscular injection of oxytetracycline (0.1 mL/kg BW). After a specified period, milk samples were collected (30 minutes, 24 hours, 48 hours, 3 days, 7 days, 9 days, 14 days, 19 days, and 24 days), extracted and analysed by HPLC-MS/MS.

RESULTS:

After 24 hours of animal treatment, the oxytetracycline in camel milk reached its maximum concentration of 1.3±0.3 mg/kg. Seventh- and fourteenth-day antibiotic levels were 0.17±0.01 and 0.07±0.01 mg/kg, respectively. Even after 24 days, oxytetracycline in camel milk exceeded the European MRL threshold (>0.01 mg/kg).

CONCLUSION:

These results demonstrated that camel elimination of tetracycline antibiotic required more than 24 days and could last about 1 month for full removal from the camel body to produce a milk below MRL threshold.

KEYWORDS

Camel milk, Antibiotics, Pharmacokinetic

CITATION

Amutova F., Bilal Z., Akhatzhanova A., Issayeva A., Akhmetsadykov N., Akhmetsadykova S. and Konuspayeva G. (2023). Pharmacokinetic of tetracycline antibiotic in camel milk. In: *The 6th Conference of the International Society of Camelid Research and Development (ISOCARD)-2023 "The Role of Camel in Food Security and Economic Development"*, King Faisal University, Al Ahsa, Saudi Arabia, 12-16/03/2023.

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Quantitative Determination of D and L Iactates in Raw and Fermented Camel Milk in Kazakhstan

Zauresh Bilal [1,2*], Assem Issayeva [2], Shynar Akhmetsadykova[2,3], Gaukhar Konuspayeva[1,2] and Helene Tormo [4]

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[2] LLP "Research and Production Enterprise "Antigen", Department of physical and chemical research methods.
[3] LLP "Kazakh Research Institute for Livestock and Fodder Production", Department of horse and camel breeding.
[4] Université de Toulouse, INP El-Purpan, Toulouse, France.
[*] bilalzauresh@gmail.com

AIM:

Determination D and L lactates levels in the milk and shubat of various camel breeds from three regions of Kazakhstan to explain the ability of these dairy products to be digested in the organism without the manifestation of lactose-intolerant symptoms.

INTRODUCTION:

More research is needed to determine the easy digestibility of camel milk based products in people with lactose intolerance, especially since lactose intolerance is becoming more common among modern consumers.

According to preliminary studies, the total lactate content in camel milk is comparable to cow's milk, but the amount of L-lactate in camel milk is 100 times greater than in cow's milk. This is most likely one of the factors that contribute to its easy digestibility.

METHODS:

During the summer period, 15 camel milk and 6 shubat samples of dromedaries, Bactrians, and hybrids were collected from six farms in three different regions of Kazakhstan. An enzymological method based on the spectrophotometric measurement of NADH was used for quantitative analysis (test system NZYTECH, Portugal).

RESULTS:

The total lactic acid level in camel milk ranged from 0.1 to 0.7 g/l, while L-lactate content ranged from 0.08 to 0.6 g/l and D-lactate content ranged from 0.05 to 0.09 g/l. Shubat contained 2.6-2.8 g/l of lactic acid, with 1.8-1.9 g/l of L-lactate and 1.0-1.1 g/l of D-lactate.

CONCLUSION:

The content of lactic acid increased during fermentation process. The study results showed that the content of L lactate in raw camel milk and shubat is higher than D lactate. More research into this subject is required. All seasonal sampling is planned for seasonal correlation.

KEYWORDS

Camel milk, Shubat, D and L lactate, Spectrophotometric method, Lactose-intolerant

CITATION

Bilal, Z., Issayeva, A., Akhmetsadykova, S., Konuspayeva, G. and Helene Tormo, H. (2023). Quantitative determination of D and L lactates in raw and fermented camel milk in Kazakhstan. In: *The 6th Conference of the International Society of Camelid Research and Development (ISOCARD)-2023 "The Role of Camel in Food Security and Economic Development"*, King Faisal University, Al Ahsa, Saudi Arabia, 12-16/03/2023.

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