EVALUATION OF TEAT CONDITION AND UDDER HEALTH OF DAIRY DROMEDARY CAMEL (Camelus dromedarius) under intensive Saudi Arabian condition.

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A total of 10 multiparous dromedary camels under intensive condition in mid stage of lactation were used to evaluate test condition and udder health under high stocking rate in intensive unit for 10 weeks. All camels were milked twice a day (06:00 and 16:00) by a portable milking machine with medium milk pulse and electronic pulsator. The milking machine was set at 50 kPa, 60 pulsations, and 60:40 pulsation ratio. At the start of experiment all camels were diagnosed free of mastitis and individual milk yield was measured during every a.m. and p.m. milking (Lascopter®). Front and rear test length was measured before and after each milking. Teat condition was classified for teat texture (soft and firm) by manual palpation and for teat color (normal and red) by visual assessment before and after milking. Milk samples were collected from udder of each camel at every milking and milk samples (100 ml) were collected weekly from udder of each camel in two periods: a.m. and p.m. Udder health were performed by camel mastitis test (CMT) and bacteriology during the experimental period. No subclinical mastitis was detected in any of the udders during the experimental period as indicated by the CMT (+1) and bacteriology (calmeff® and total flora 30979:396 u/ml) test. On average, milk yield (kg/day) and fat, protein, lactose and total solids contents were 6.25 ± 1.05; 3.87a ± 0.62; 3.14a ± 0.45; 4.10 ± 0.65 and 11.10 ± 1.15 respectively. The observed high fat and protein ratio (+1) indicated a complete milk fat and firm-normal were 80 and 20%, respectively. In conclusion, milking camels at 50 kPa and 60 pulsations/min gave satisfactory milk performance without affecting negatively teat condition and udder health in dairy dromedary camels at least for the duration of our observations. Further studies need to confirm these results over all the lactation.

Keywords: Dromedary, milk quality, teat texture and color, subclinical mastitis.

Comparing the October 2021 data of the total lactate in camel milk with the lactate content of cow milk, the latter has a beneficial effect in health for the regulation of the milk protein digestion and calcium absorption. However, lactate has two stereoisomers (D-lactate and L-lactate) and D-lactate is the major stereoisomer (Levine et al., 2007). In the diet, D-form is not easily metabolized by the body, whereas L-lactate has a significant effect on health, especially on young babies. The present study gives some preliminary results regarding the content of the D- and L-lactate in cow and camel milk. Twenty dromedary camel milk samples and 3 cow milk samples from Kazakhstan were analyzed for lactate and lactate stereoisomers composition, and the lactate content had an effect on milk composition. The content of total lactate in camel milk was comparable to cow milk (1.82 ± 0.29 g/l), but the quantity of L-lactate was 10 times more in camel milk compared to cow milk - 2.21% of the total lactate vs 0.02% in cow milk and camel milk respectively. Further studies are necessary to understand the role of the microflora present in each specific milk.

Keywords: camel milk, cow milk, lactate, stereoisomer.
АВУАРИЯСЫҚ ЖАГДАЙДЫҢ ТҮҮЛЕПЕРДІ МАШАНИМЕН САУУ КЕЗІНДІЖЕ ИШІНДЕРІНІҢ ЖАРАНГЫ

Барлығы қытайдан 10-ден түүндерден тақта окувалық өртісінде қаркыны жатады, эмдемен шаңырак жағдайда ишіндердін әртіне 10-ден айтып қозғалды. Вакуумда машиналық сауалыққа салынады. Бұл шаңырак қозғалдылығының пайда болуын дәл екіншілік хемокиндердің қолданылуы қазақша жағдайға қарсы сақталады.

Ключевые слова: дренированы, мясо, армянские, выживаемость, овцы, суксинанский.