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**Milk ejection occurrence before teat cup attachment on milkability of ewes**

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The dairy ewes are attached without any udder pre-stimulation so milk ejection in most of ewes is induced by milking machine as compared to cows. The aim of work was to study the effect of milk ejection before cluster attachment on milkability and milk composition in two groups of ewes differed by milk flow pattern during control milking. After three pre-experimental control milking 22 dairy ewes of two breeds Tsigaj (TS, n=11, 5 with one - 1P and 6 with two milk emissions - 2P) and Improved Valachian (IV, n=11, 6 with 1P and 5 with 2P) with healthy udders were selected from flock of 400 dairy ewes. The animals were divided in a two groups, each with 11 sheep (6 TS, 5 IV, and with the same ratio of 1P / 2P). Milk flow data were recorded during three consecutive evening milkings. During the first milking the first group was treated by 5 UI i.m. of oxytocin and the second group by physiological saline 60 s before milking. During third milking the procedure was changed. Milk flow was recorded using electronic jars collecting the full milk at milking. After OT treatment milk flow curves changed: from 11 ewes in 2P group had 8 ewes 1P and 3 ewes still had 2P; 11 ewes in 1P group had 9 ewes 1P, 1 ewe PL and 1 ewe hadn't milk flow after OT treatment. Ewes with 1P significantly increase the milk yield ( $0.192 \pm 0.06$  l vs.  $0.241 \pm 0.07$  l) and fat content ( $17.02 \pm 4.95$  g vs.  $22.91 \pm 7.97$  g) as compare with group of ewes with 2P where differences were not found. OT treatment reduced milking time in 2P from  $54.55 \pm 24.46$  s to  $27.00 \pm 11.66$  s ( $P < 0.05$ ), but no effect was found out in 1P group. In conclusion, we don't expect alveolar milk ejection in ewes with only 1P milk flow, because the milkability parameters and fat content were clearly changed after treatment by OT, and therefore during milk recording the milk flow pattern could significantly influence the results.

**Formic acid inactivation of caprine arthritis encephalitis virus in colostrum**

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Caprine Arthritis-Encephalitis Virus (CAEV) is a lentivirus which causes in goats goats. The primary route of CAEV transmission in goats is from dam to kid through ingestion of infected colostrum/milk. Traditionally, prevention of CAEV transmission for eradication protocols include removal of kids prior to consumption of colostrum, and the administration of heat inactivated colostrum or feeding colostrum replacers and segregation. Formic Acid (FA) historically has been used in dairy calves for room temperature stabilization of milk and for its antimicrobial properties without detrimental effects on passive transfer of essential immunological or nutritional components of colostrum. The objective of this study was to evaluate the utility of FA to inactivate CAEV in colostrum. Cell free colostrum was spiked with CAEV ( $10^5$ TCID<sub>50</sub>) then treated with varying amounts of FA (10% w/vol) to acidify colostrum to pH of 3, 4, 4.5, and 5, for 15 or 30 minutes. pH was returned to 7 with NaOH (5N). Residual viral particles (TCID<sub>50</sub>) was enumerated utilizing the virus titration assay. Acidification of CAEV spiked colostrum to a pH of 3 and 4 after a 15 and 30 min resulted in a 99.99% of reduction of infectious virus particles, Acidification of spiked colostrum to a pH 4.5 and 5 did not significantly reduce the virus infectivity. presented differences with the non-acidified colostrum. Preliminary results demonstrate that acidification of Colostrum spiked with CAEV to a pH of 4 or results in effective in inactivation of CAEV.