**Abstract / Resumo:**
The effects of once (X1) vs twice (X2) daily milking on milk yield, milk composition, somatic cell count (SCC), and udder morphology were studied in 30 dairy goats from three different breeds (10 Majorera 10 Tinerfeña and 10 Palmera) in middle lactation period. Each goat was milked X1 or X2 at 10 and 14 hours intervals (left or right mammary gland respectively), during 6 weeks. The udder morphology was evaluated (cisternal height, nipple height and distance between nipples). Milking frequency affected cisternal height, decreasing significantly in X1 and X2 in Majorera goats (4.10% vs 3.42%), Tinerfeña goats (11.82% vs 8.81%) and Palmera goats (6.96% vs 2.81%). The differences in morphological parameters were due to X1 animals had stored more milk after 24 hours than X2 goats after 14 hours. However, no significant differences were observed for nipple height and distance between nipples. X1 milk yield was lower than X2 by 8.73% in Majorera goats, 14.87% in Tinerfeña goats and 25.53% in Palmera goats. This wide variation in yield losses between the studied breeds under X1 management may be due to differences in level of production and individual udder morphological characteristics of each breed. Yields of fat, protein, lactose, total solids and solids non fat tended to be higher for X2 than for X1 in Majorera and Tinerfeña goats but significant differences were found only for Palmera breed. Milk somatic cell count did not differ between treatments (P= 0.182) which is important because it has become an important quality index in goat milk. In conclusion, milking frequency had effects on udder morphology without negative effects on milk quality.

**Effect of milking frequency and genotype on milk partitioning and milk quality**

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**Abstract / Resumo:**
30 dairy goats of three Canary breeds (Majorera, Tinerfeña and Palmera) in middle lactation period were milked to evaluate udder compartments (cisternal and alveolar), milk yield and milk composition of each milk fraction. Left mammary gland were milked once daily (X1) and right mammary gland twice daily (X2) at 10 and 14 hours intervals during 3 weeks. Before milking goats an intravenous injection of an inhibitor of oxytocin (Atosiban®) was administered to evaluate the cisternal milk yield. After cisternal milk removal, goats were intravenously injected with 2 IU of oxytocin, and then milked again in order to collect the milk contained in the alveoli. No significant differences were found in the percentage of cisternal and alveolar milk on total milk produced in X1 and X2. Nevertheless, the Majorera breed had higher average yields of cisternal milk (54.79 ml/h and 58.57 ml/h for X1 and X2, respectively), than Tinerfeña breed (50.63 ml/h and 57.88 ml/h for X1 and X2, respectively) and Palmera breed (42.22 ml/h and 52.73 ml/h for X1 and X2, respectively), and consequently those goats had a 13.55% and 20.58% more cisternal area than Tinerfeña and Palmera breed, respectively. Cisternal milk of X1 goats contained similar percentages of fat (3.70 vs 3.65%), protein (3.65% vs 3.56%), lactose (4.83% vs 4.85%), total solids (12.90% vs 12.76%) and solids non fat (9.19% vs 9.10%) than cisternal milk of X2 goats. However, alveolar milk of X1 goats contained higher percentages of fat (6.31% vs 5.43%) and total solids (15.27% vs 14.42%) than alveolar milk of X2 goats. Although, there were breed by frequency interactions in the cisternal milk yields (P= 0.032), no interactions for the

parameters of cisternal milk composition were found. In the alveolar milk, breed by frequency interactions were not found in the milk yield (P= 0.793) and milk composition. In sum, the milking frequency did not affect the percentage of cisternal and alveolar milk in Canary breed goats. Furthermore, the milking frequency has not negative effects on composition of cisternal and alveolar milk.

**Productive Status of Marwari Goat in Arid Zone of India**

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**Abstract / Resumo:**

Not available.

**Preliminary results of growth and carcass quality of goat kids fed whole cow's milk and an exogenous source of DHA.**

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**Abstract / Resumo:**

30 Majorera males and females newborn goat kids were randomly assigned to three groups according to different diets and sexes: goat milk (GM), whole cow's milk (WCM) and whole cow's milk plus Docohexanoic Acid (DHA-gold©, DHA) (WCM9). All animals were fed ad libitum during the experiment. Goat milk was taken from the bulk tank every day during the experiment and the dehydrated cow whole milk was rehydrated and used to feed WCM and WCM9 groups. For whole cow's milk diets, the dry matter was 16% w/w, being 9g the concentration used of DHA-gold©. Twice a week, animals were weighted and the group intakes measured in each fed. When goat kids reached 8 kg of body weight (BW), they were slaughtered following EU regulation. In order to study the carcass quality, pH and color (parameters "a" and "b") were measured at 0 and 24 hours by insertion into the longissimus muscle (at the 12/13th rib ) after slaughter as well as the conformation of the animals at 24h, when the carcasses were split down and frozen at -20° C for subsequent analysis. Growing periods were grouped from birth to 6 kg BW and from 6 kg to BW at slaughter, and the average daily gain (ADG) was calculated. During the first period, ADG were 134, 149 and 124 g/d for GM, WCM and WCM9, respectively, while in the second period the ADG were of 143, 176 and 133 g/d for GM, WCM and WCM9, respectively. Within the first period statistical differences were found between diets and sex. However no significant differences were found when sex effect was considered in the second period. Preliminary results show that there were not statistical differences in pH neither at 0 hours nor at 24 hours. Statistical differences in colour parameter "a" were found between treatments at 0 hours. However 24 hours later, differences in the color parameter "a" did not reach significance and the color parameter "b" differed significantly between sexes within the same and different treatments. No statistical differences were found in the carcass conformations neither the joints of the half carcass in connection with to the treatments. In conclusion, feeding goat kids with WCM is a good option to