

224. The Effect of milking frequency on milk production and milk secretion in Tinerfeña goats

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24 third lactation goats belonging to Tinerfeña breed (Canary Islands, Spain) were allocated into two herds (n= 12 each) taking in account the previous milking frequency used during their first and second lactation (once, X1 vs. twice daily, X2), in order to perform two experiments. The first trial lasted 5 weeks. During the first one each goat was milked according to its frequency; either once or twice a day. In the second all the goats were milked twice daily; the third three times a day; the fourth twice daily again and the fifth once a day. Daily milk production was estimated as a mean of three consecutive days each week. In the second experiment the same goats, continuing with their original milking frequency, were milked in the morning and one hour later were injected with *atosiban*®, an oxytocine receptor inhibitor, and then milking was repeated. Afterwards the goats received 2 U.I. of exogenous oxytocine and immediately were milked yet again. The next day the procedure was repeated but, just after the morning milking the goats were injected with the same doses of oxytocine one hour before receiving *atosiban*®. Finally, 8 hours later the procedure was repeated without the previous oxytocine injection.

No significant differences were found due to herd effect in the first experiment. The records, ranged from 3404 vs. 3067 ml in the third week to 2645 vs. 2606 ml in last week (X2 and X1, respectively), were ever higher in X2 group.

The rate of secretion was the same in both groups (250 ml/hour) and no significant differences were found for the parameters studied in the second experiment, suggesting that in these goats the effect of milking frequency on milk production and milk secretion was low