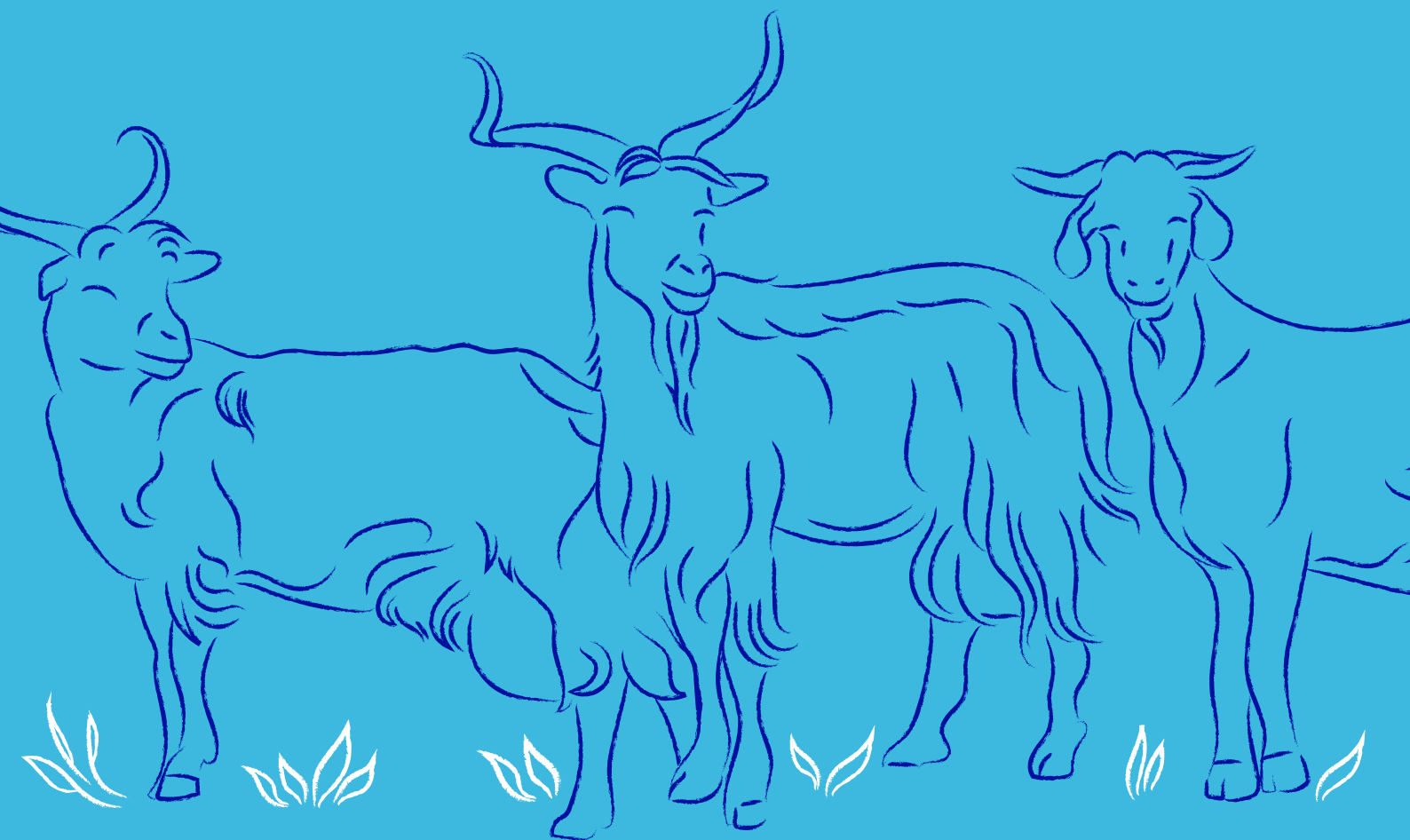


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Milking frequency and melatonin implants affect milk yield but not chemical composition during the dry-off period in pregnant dairy goats.

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This study aims to evaluate the use of different dry-off strategies based on melatonin implants and milking frequency on production parameters before the onset of the dry period. Thus, this study used 24 pregnant dairy Majorera dairy goats. On day -75 relative to expected parturition, goats were subcutaneously treated with a 1 mL of saline (SAL1/1 and SAL1/2 groups) or with a melatonin implant (MEL1/1 and MEL1/2 groups). From day -75 to -60 relative to expected parturition, animals were either milked every day (SAL1/1 and MEL1/1 groups) or every two days (SAL1/2 or MEL1/2 groups). During this period, milk yield was recorded and milk samples collected to determine protein, lactose, fat and total solids percentage. The data was analysed using the PROC MIXED procedure of SAS was used, and the significance was set as $p < 0.05$. The results showed faster milk yield reduction in those animals treated with the Melatonin implant compared to those receiving saline ($p < 0.001$). In addition, milk yield decreased faster in those animals milked once every two days than those milked once daily. Milk chemical composition (i.e., fat, protein and lactose) was not affected by either the melatonin administration or the milking frequency ($p > 0.05$). This study was funded by the project PID 2020-113056RA-I00/AEI/10.13039/501100011033.