

Change from hand milking to machine milking affects the milk yield and behavior of Jersey cross-bred cows

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Sudden changes in routine practices may result in behavioral changes and even reduce the milk production of milking cows as it causes stress to the cows. Objective of the present study was to reveal the effects of changing milking method from full hand milking (HM) to machine milking (MM) on cow behavior and milk yield. Randomly selected seven Jersey cross-bred cows at second lactation were used in the study. Data were first collected following hand milking and after one week adaptation period same animals were used to collect the data under machine milking. Milk yield (morning) and the behavioral bouts, namely aggressiveness (AG), wagging tail (WT), urination, excretion, bellowing (BL), kicking (KI), in pain (IP), licking the calf, eating and drinking were recorded. Behavior study was done by following an ethogram. Behavioral data were obtained continuously covering morning milking time and frequencies of attending each behavior were recorded. Mean milk yield was significantly ($p < 0.05$) higher in cows under HM (4891 ± 186 mL/day; SE) compared to MM (2838 ± 186 mL/day; SE) in DMRT procedure. Expression of behaviors such as AG (23%), WT (4%), BL (24%), IP (53%) and KI (17%) was significantly higher ($p < 0.05$) under MM compared to the same behaviors under HM (21%, 3.1%, 18%, 42%, and 16%, respectively). It is concluded that sudden shift of HM to MM reduce the milk yield and increases the expression of stress behaviors in Jersey cross-bred dairy cows.

Keywords: Behavior, cow milk, hand milking, machine milking

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