

A letter to the editor : Some observations on milk composition of morning and evening summer milks of Holstein Friesian cows.

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There are references to indicate that there is no significant difference in milk composition between morning and evening milks of Sudanese cows (Khalifa, 1966). Similar data with Holstein-Friesian cows, specialized dairy breed exotic to Sudan were not recorded.

This communication is an attempt to record observations on differences in composition between morning and evening milks of Holstein-Friesian cows.

The work involved 280 first calvers in their first month of lactation, the observations were conducted over six weeks during the summer period 15th April to 15th June 1993. The mean daily maximum, minimum and mean temperature during the period were 42 °C, 28 °C and 35 °C respectively. During the period **Meal daily** milk yield declined from 21.3 litres in week one to 16.0 litres in week six.

The following observations were recorded:

Milk	B.F. %	Protein %	Lactose %	Ash %	T.S. %	
Morning	3.2	4.4		3.2	0.6	11.4
Evening	3.3	4.1		3.6	0.6	11.6
SE of mean	0.16	0.14		0.16	0.10	0.21
Significance of difference	NS	NS		NS	NS	NS

The evening milks were richer in butter fat (B.F.) and in lactose than the morning milks which were richer in protein. Similar results were reported (El Gariar et al., 1981; Donald et al., 1985), and this may be attributed to lower evening yields of milk see (Donald et al., 1985). However, the differences between the morning and evening milks in the composition attributes studied were not significant ($P > 0.05$).

The authors are aware of the limitation of the work and more work need to be done with due consideration to length of observation, period between milkings and number of cows involved.

References

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