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Effect of lactoferrin on growth of Holstein calves in the middle of Iraq

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ABSTRACT:

The objectives of this study was to study the effect of lactoferrin (0, 3, and 6 g LF/day) added to colostrum and milk on the body weight and body measurements (wither height, body length, heart girth and body barrel) in 18 Holstein calves from the first day of birth to 60 days of age. The results showed that they were highly significant (P<0.01) in the average body weight of calves aged 30 and 60 days, for the calves fed 6 and 3 g of lactoferrin compared with the control calves (0 g of LF). The average weight gain was also affected (30 days old, and 30 to 60 days and from birth to 60 days) significantly (P<0.01) with the different lactoferrin levels. Achieved calves were fed with 6 g of lactoferrin and the next level calves were fed with 3 g of Lactoferrin and received best results with increased weight than the control calves. There seen a significant difference (P<0.05) in each of the wither height and body length in calves aged 30 and high significant (P<0.01) in 60 days depending on the treatment with lactoferrin, calves of the third treatments (6 g of LF) and the second (3 g of LF) highest rate of wither height and body length are compared with the control calves (0 g LF). The heart girth was also significantly affected (P<0.05) at the age of 30 days and high morale at 60 days, in both the ages results favoured the calves. In the two treatments *viz*., third (6 g of LF) and second (3 g of LF) compared with the control calves (0 g of LF), the variance in the body barrel was significantly higher at 30 and 60 days for calves fed on lactoferrin at 3 and 6 g/day. The study summarized that addition of lactoferrin protein in calves fed in early ages after birth had better performance in growth and dimensions of the body.

Keywords:

Lactoferrin, Calves, weight, Body measurements.

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