

EFFECT OF FEEDING AMAFERM®, OR AMAFERM AND YEAST CULTURE PLUS MINERAL AND VITAMIN SUPPLEMENT (VITAFERM®), ON THE PERFORMANCE OF HOLSTEIN COWS DURING A COMPLETE LACTATION

R. O. Kellems, A. Lagerstedt, and M. V. Wallentine

Feeding AMAFERM improved milk yield and FCM with the greatest benefit to late lactation cows.

SUMMARY

DOSE OF AMAFERM USED

3 g per head, per day

In this full lactation trial, feeding 3 g/h/d AMAFERM increased milk yield and 3.5% FCM yield, during the latter stage of the trial (week 18 through the end), compared to the Control and the VitaFerm® (2g AMAFERM) treatment. When FCM yield adjusted by pre-trial production was evaluated based on days in milk (DIM) at the start of the trial, AMAFERM supplementation had the greatest effect on early lactation cows. Subsequent higher milk yield in the latter stage of the trial was a result of improved milk persistency.

VALUE

AMAFERM can increase milk production throughout DIM – especially during late lactation – without increasing intake or having adverse effects on reproduction.

PROTOCOL

Type of Animals/Experimental Units

- High-producing dairy cows



PROTOCOL (CONTINUED)

Number of Animals/Experimental Units

- 150 total, 50 in each treatment

Trial Design

- Randomized complete block design

Treatments

1. Control
2. 3 g/h/d AMAFERM
3. 90 g/h/d VitaFerm (includes 2 g/h/d of AMAFERM)

Diet Information (General)

- Ration 1 fed for the first 83 days (kg/d, as-fed): alfalfa silage 24.9, corn earlage 7.3, rolled barley 5.4, whole cottonseed 2.8, ground corn 0.9, CP-Mineral-Vitamin 1.7
- Ration 2 fed during the remaining 170 days (kg/d, as-fed): alfalfa silage 22.2, corn silage 8.2, rolled barley 7.9, whole cottonseed 1.8, ground corn 0.9, CP-Mineral-Vitamin 1.5

Data Collection

- DMI, milk yield, milk components, BW change, BCS, rectal temperature, days to first heat, number of services per conception

DISCUSSION OF RESULTS

- There was no difference in feed intake among the treatments ($P > 0.05$) and the average feed consumption for the entire trial period was 21.3, 21.3 and 21.2 kg/d for the Control, AMAFERM and VitaFerm treatments, respectively
- Milk yield was only numerically increased by feeding AMAFERM, when averaged across the entire trial (26.0, 27.7 and 26.6 kg/d for Control, AMAFERM and VitaFerm, respectively). However, when looking at week 18 through the end of the trial, milk yield was higher for AMAFERM (24.5 kg/d) than for VitaFerm (23.0 kg/d) or the Control (22.2 kg/d)
- Although milk fat concentration for the entire trial was similar among the three treatments (3.73, 3.68 and 3.72% for Control, AMAFERM and VitaFerm, respectively), 3.5% FCM yield was higher for AMAFERM-fed cows than the Control or VitaFerm cows, from week 18 through the end of the trial (34.1, 33.4 and 33.2), respectively



DISCUSSION OF RESULTS (CONTINUED)

- FCM yield, adjusted for pre-trial production, was evaluated based on DIM at the beginning of the trial. Results showed that most FCM yield responses to AMAFERM were either in early or late stages of lactation
- There was no treatment effect on any of the reproductive performance characteristics analyzed in this study

BIOZYME INCORPORATED

6010 Stockyards Expy | St. Joseph, MO 64504 USA

Tel: 816-238-3326 | Fax: 816-238-7549

support@biozymeinc.com | www.biozymeinc.com

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