

Technical Bulletin:

Effects of YMCP Vitall® supplementation on rumination time post freshening in a commercial dairy in Tennessee

Introduction

Fresh cows have multifaceted nutrient requirements post freshening, and often dry matter intake (DMI) is insufficient to satisfy these requirements (Goff, J. P. 2001). Periparturient cows are confronted with challenges associated with parturition, environmental changes, and drastic dietary changes which further challenge adequate DMI (DeVries, et al., 2014). The objective of this study was to determine the effect of YMCP Vitall® (TechMix, Stewart MN) administered post-partum on rumination time through the transition period.

Material and methods

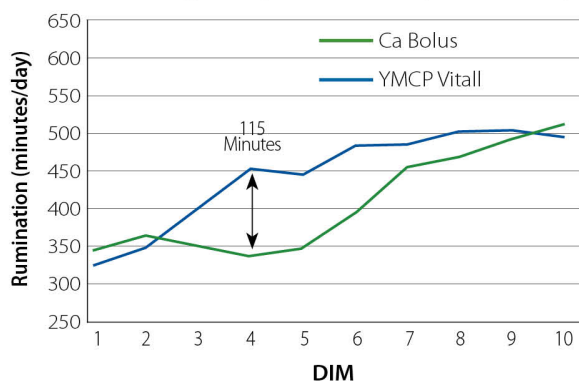
During August 2017 on a commercial dairy located in Tennessee (USA), 91 Holstein primiparous and multiparous cows were enrolled into one of two treatments over a period of approximately 21 days, a control group (n=48) receiving no oral supplement post freshening in primiparous and a calcium-only bolus in multiparous cows; and a treatment group that received one dose (220 grams) of YMCP Vitall® immediately following parturition and second dose (220 grams) 12-24 hours later (n=43). Daily rumination time were then retrospectively analyzed using SCR rumination health monitoring Hi-Tag neck collars (SCR Engineers, Netanya, Israel).

Results

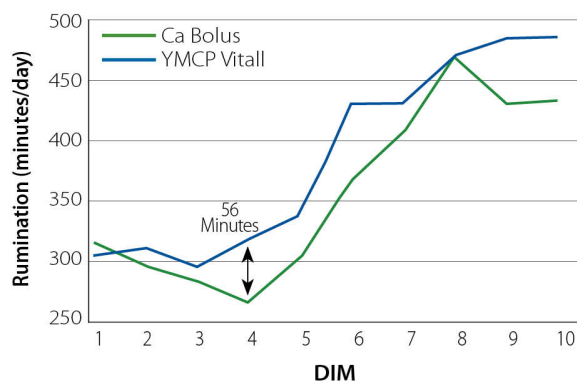
Cows supplemented with YMCP Vitall showed a 115 and 56 minute benefit by day 3 in the lactations 2 and 3 respectively, versus the control cows.

Effects of YMCP Vitall Supplementation

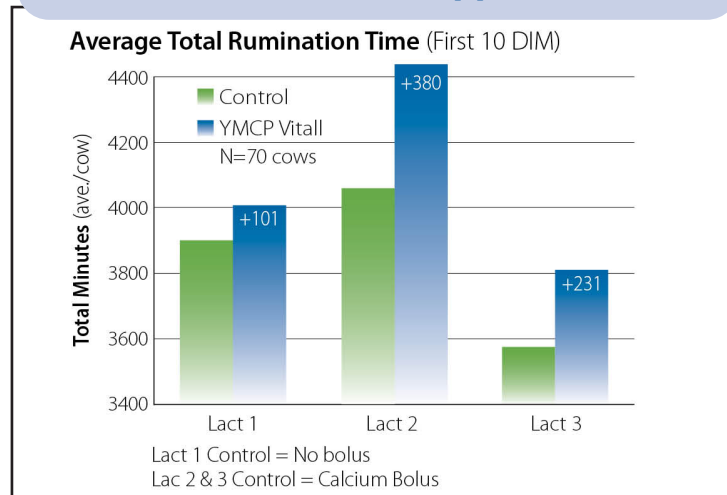
Effect on Average Daily Rumination (2nd lactation)



Effect on Average Daily Rumination (3rd lactation)



Effects of YMCP Vitall Supplementation



Total daily average rumination time over the first 10 days showed significant benefit to the YMCP Vitall supplemented cows. Of significance, it should also be noted the benefit that the 1st lactation heifers saw versus the control group which received no bolus.

Conclusion

Rumination time is widely accepted as a good proxy for dry matter intake. A rule of thumb is that if we can increase average rumination time by 20 minutes, we are having a positive benefit. YMCP Vitall supplementation increase rumination time against calcium-only boluses and no postpartum nutrient supplementation.

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