



Keeping animals drinking, eating & producing.™

Technical Bulletin: Effects of YMCP Vitall® supplementation in a Jersey 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 evaluate the effects an oral bolus supplement, YMCP Vitall®, (TechMix, Stewart MN) on fresh cow milk production as well as health and incidence of metabolic disease.

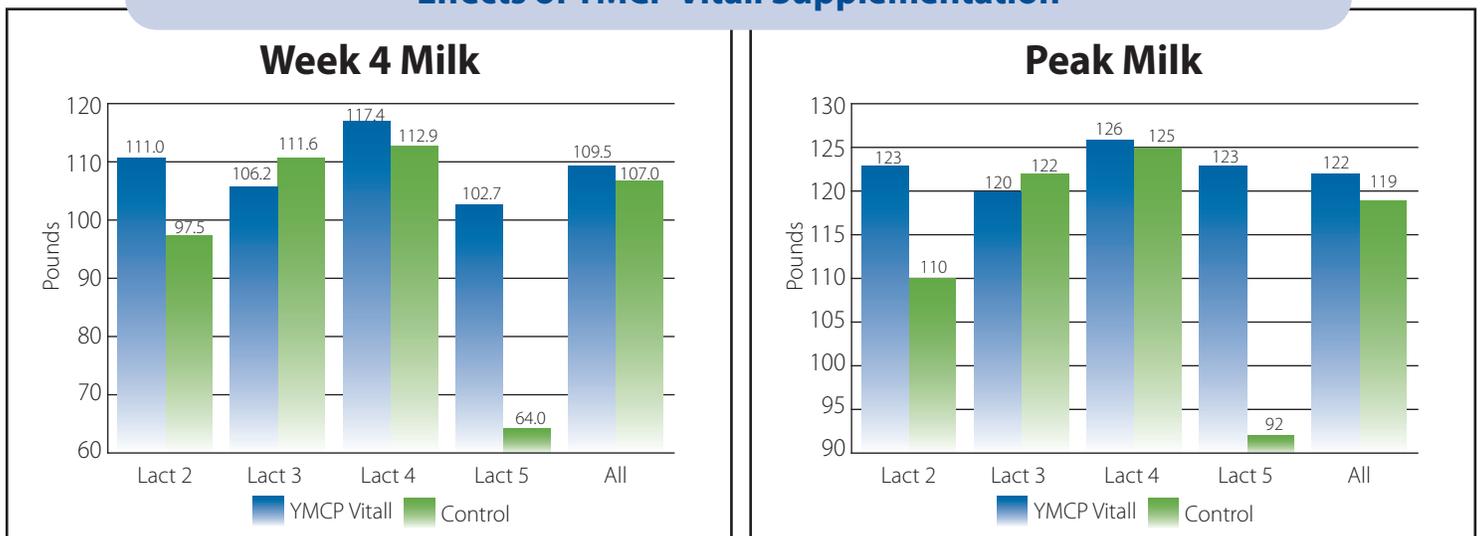
Material and methods

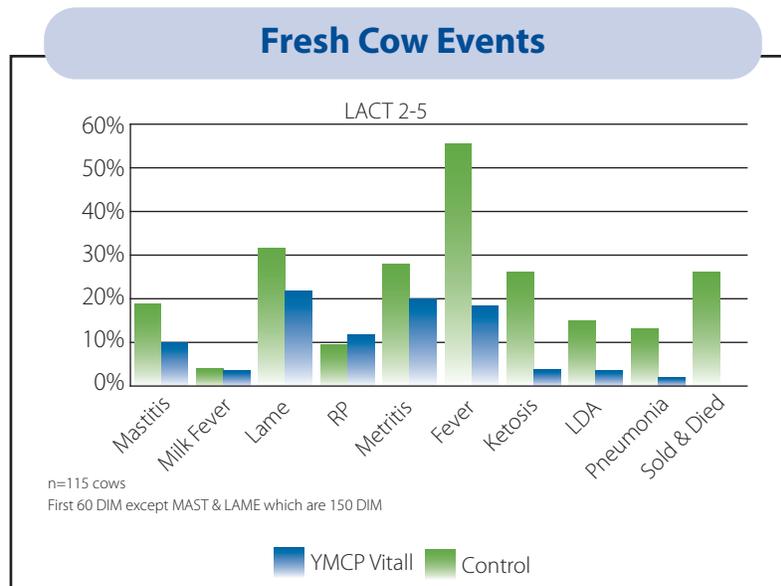
During October 10th to November 15th, 2017 on a large commercial dairy (1400 head) located in Tennessee (USA), 115 multiparous Jersey cows were enrolled into one of two treatments over a period of 36 days, a control group (n=55) receiving no oral supplement post freshening and a treatment group that received one dose (220 grams) of YMCP Vitall immediately following parturition and second dose (220 grams) 12-24 hours later (n=60). Milk production and health parameters were then retrospectively analyzed to 150 DIM using DairyComp 305, (Valley Ag Software, Tulare, Ca).

Results

A 2.5 lb (1.134 kg) advantage in week 4 milk production was observed for cows that received YMCP Vitall. This milk production was further demonstrated at peak milk, with control cows yielding 3 lb (1.361 kg) less than the YMCP Vitall treatment. Cows supplemented with YMCP Vitall were observed to have lower incidence of mastitis, milk fever, metritis, ketosis, lameness, left displaced abomasum. Zero YMCP Vitall cows were sold or died in during the first 60 DIM compared to 14 (23%) in the control group. Although we expected a reduction in removals (sold and died) with YMCP Vitall, we feel the results expressed here are beyond what should be expected.

Effects of YMCP Vitall Supplementation





Conclusion

In summary, YMCP Vitall improved milk production in multiparous cows and reduced the incidence of metabolic disease as well as associated health events, ultimately leading to significantly less 60-day removals.

Bibliography

- Chaucheyras-Durand, F., N. D. Walker, and A. Bach. 2008. Effects of active dry yeasts on the rumen microbial ecosystem: Past, present and future. *Anim. Feed Sci. and Tech.* 145(1-4):5-26. www.sciencedirect.com/science/article/pii/S0377840107002787
- DeGaris, P. J., and I. J. Lean. 2007. Milk fever in dairy cows: A review of pathophysiology and control principles. *Vet. J.* 176(1):58-96. www.sciencedirect.com/science/article/pii/S1090023307004261
- DeVries, T. J., and E. Chevaux. 2014. Modification of the feeding behavior of dairy cows through live yeast supplementation. *J. Dairy Sci.* 97(10):6499-510. www.ncbi.nlm.nih.gov/pubmed/25108867
- Goff, J. P. 2001. Managing the transition/fresh cow. Proceedings for the 5th Western Dairy Management Conference. Pages 99-106. <http://wdmc.org/2001/WDMC2001p099-106.pdf>
- Oetzel, G. R. 2012. Effect of oral calcium bolus supplementation on early-lactation health and milk yield in commercial dairy herds. *J. Dairy Sci.* 95(2):7051-7065. [www.journalofdairyscience.org/article/S0022-0302\(12\)00722-9/fulltext](http://www.journalofdairyscience.org/article/S0022-0302(12)00722-9/fulltext)
- Rossow, H. A., T. Riordan, and A. Riordan. 2017. Effects of additional of a live yeast product on dairy cattle performance. *J. Applied Anim. Res.* www.tandfonline.com/doi/full/10.1080/09712119.2017.1281810
- Nutrient requirements of dairy cattle. www.nap.edu/catalog/9825/nutrient-requirements-of-dairy-cattle-seventh-revised-edition-2001
- Wohlt, J. E., T. T. Corcione, and P. K. Zajac. 1998. Effect of yeast on feed intake and performance of cows fed diets based on corn silage during early lactation. *J. Dairy Sci.* 81(5):1345-1352. [www.journalofdairyscience.org/article/S0022-0302\(98\)75697-8/pdf](http://www.journalofdairyscience.org/article/S0022-0302(98)75697-8/pdf)

