ZPM in the Transition Period Improves Postpartum Cow Performance and Metabolic Responses

Study Objective

Evaluate the effects of supplementing Zn, Mn, Cu, and Co from Zinpro Performance Minerals® (ZPM) during the peripartal period (−30 through 30 DIM) on cow health and performance.

Animals

44 multiparous Holstein cows

Treatments

Control: daily bolus of 40, 20, 5, and 1 mg of Zn, Mn, Cu, and Co/kg DM from sulfate sources

ZPM: daily bolus of 40, 20, and 5 mg Zn, Mn, and Cu/kg DM from Availa®Zn, Availa®Mn, and Availa®Cu and 1 mg Co/kg DM from COPRO®

Study Duration

Pre-calving period (d -110 to -31): All cows were offered a common diet supplemented entirely with sulfate sources of trace minerals

Transition period (d -30 to 30 DIM): cows were fed a common diet with 35, 45, and 6 mg Zn, Mn, and Cu/kg DM from sulfate sources and one of two daily oral mineral bolus treatments

Location

University of Illinois, IL, USA

Results Summary

Feeding ZPM to dairy cows from 30 d pre-partum through 30 d post-partum:

✓ Increased DMI and milk components
✓ Improved metabolic status and immune function

Feeding ZPM lowers cost/45 kg milk production by 8%

ZPM Increased Milk Yield, kg/d

ZPM Improved Liver Function

ZPM Lowered Blood Ketones, mmol/L

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