

# Hy•D® Supports High Milk Yields

*Across four studies over the past five years, research continues to show that feeding Hy•D®, as a source of calcidol (25(OH)D<sub>3</sub>), to prepartum dairy cows leads to an increase in energy-corrected milk (ECM) yield.*

## New Study Demonstrates Continued Performance

The four studies show a 6.4 lb average increase in ECM yield for cows fed 3 mg of calcidol during the prepartum period.<sup>1-4</sup>

NEW STUDY

**+9.7**

LB ECM/DAY

89.1 vs 79.4 lb  
ECM/day

2018 Journal of  
Dairy Science<sup>1</sup>

**+6.8**

LB ECM/DAY

71.4 vs 64.6 lb  
ECM/day

2022 Journal of  
Dairy Science<sup>2</sup>

**+5.3**

LB ECM/DAY

88.0 vs 82.7 lb  
ECM/day

2023 Journal of  
Dairy Science<sup>3</sup>

**+3.9**

LB ECM/DAY

125.0 vs 121.1 lb  
ECM/day

2023 Journal of  
Animal Science<sup>4</sup>

**Hy•D does it again!**

Read the findings from our most recent study on the following page.



<sup>1</sup> Martinez et. al., 2018. J. Dairy Sci. 101:2544.

<sup>2</sup> Silva et. al., 2022. J. Dairy Sci. 105:5796.

<sup>3</sup> Poindexter et. al., 2023. J. Dairy Sci. 106:974.

<sup>4</sup> Holub et al., 2023. ASAS Annual Meeting. Abstract #508084.



# Hy•D®



DAIRY



## HY•D DOES IT AGAIN

### *New Study Confirms Performance Benefits\**

#### Trial Objective

The objective of this study was to evaluate the effect of dietary supplementation of calcidol during the pre- and postpartum periods on early lactation milk yield and composition.

#### Experimental Design and Treatments

Holstein cows (n = 100) that finished their first or greater lactation were enrolled in a randomized block design with a 2x2 factorial arrangement of treatments (n = 25 cows per treatment group). Prepartum treatments were 0 or 3 mg of calcidol per cow daily from 28 days before expected calving date until day of calving. Postpartum treatments were 0 or 1.5 mg of calcidol per cow daily from calving until 63 days after calving. Treatments were top-dressed at feed delivery using a cornmeal carrier. The calcidol source was Phibro Hy•D®100. The rations also provided a basal amount of cholecalciferol fed to NASEM 2021 recommendations for cows prepartum (30 IU Vit D<sub>3</sub>/kg BW) and in lactation (40 IU Vit D<sub>3</sub>/kg BW). Dry cows were fed individually and group housed in a bedded pack. Lactating cows were fed individually and group housed in a free stall, milked three times per day and milk sampled six times per week.

In addition, the basal prepartum diet was formulated to be a fully acidogenic, high dietary calcium diet using Animate® nutritional specialty product as the predominant source of anions, targeting a urine pH range from 5.5 to 6.0.

#### Results

Feeding 3 mg of calcidol prepartum resulted in cows producing significantly more ECM (125.0 lb/day) than non-supplemented cows (121.1 lb/day) over the 63-day study period. Postpartum treatment did not affect any measure of milk yield (yield or component-corrected milk). Providing additional vitamin D<sub>3</sub> in the form of calcidol to late gestation cows improved lactational performance by increasing the yield of component-corrected milk.

#### Summary

This trial demonstrated the beneficial effects of feeding 3 mg of calcidol prepartum on ECM yield. Results from this study support previous findings by Martinez et. al., 2018, Silva et. al., 2022 and Poindexter et. al., 2023, who demonstrated that feeding 3 mg of calcidol prepartum **resulted in cows producing 9.7, 6.8 and 5.3 lb/day more ECM, respectively, than cows not supplemented with calcidol.**

**Talk to your dairy advisor.**

*Learn more about the benefits of Hy•D and how it can fit into your ration.*

**PAHC.COM/HYD | (217) 257-8116**



\*Holub et al., 2023. ASAS Annual Meeting. Abstract #508084.

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