CLOSE THE CALCIUM GAP WITH A SMARTER SOURCE OF VITAMIN D

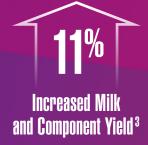


25-Hydroxyvitamin D₃

Maintaining proper calcium status in your dairy cows is critical during the transition period to prevent hypocalcemia and other costly consequences of low blood calcium. Hy•D, a unique source of vitamin D₃, complements a negative DCAD diet to help close the calcium gap and support overall herd health and performance.



Hy•D° helps support calcium homeostasis through a unique source of
 vitamin D₃ called 25-hydroxyvitamin D₃ (25-OH D₃). Studies have demonstrated that the addition
 of 3 mg of Hy•D° along with a basal level of vitamin D₃ from cholecalciferol (minimum of 20,000 IU)
 can lead to significant herd health and production advantages.



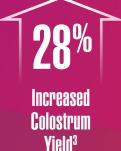
12% increase in energy corrected milk (ECM)



Decreased Disease Incidences⁴

Retained placenta decreased from 30% to 0%

Metritis decreased from 40% to 15%

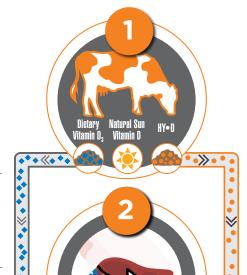


¹ Ellenberger, Newlander and Jones. 1931. Proc. Amer. Soc Anim Prod. Pg 120. ² NRC, 2001. Nutrient Requirements of Dairy Cattle, 7th Rev. Ed. Wash D.C. ³ Martinez et al., 2018. J. Dairy Sci. 101:2544. ⁴ Martinez et al., 2018. J. Dairy Sci. 101:2563.





Feeding Hy•D° increases the available pool of 25-OH D₃, leading to a better vitamin D status and more efficient absorption of calcium.



The Liver -

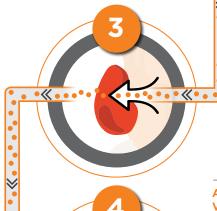
When vitamin D is fed, it must first be absorbed and then presented to the liver in order to be converted to 25-OH D₃.

The Kidney -

When required, as in times of low blood calcium status, the kidney converts 25-OH D_3 into the active form of vitamin D_3 , called 1,25-dihydroxyvitamin D_3 . One of the primary modes of action of 1,25-dihydroxyvitamin D_3 in the transition cow is to increase the absorption of dietary calcium to help maintain normal blood calcium concentrations.

Hy•D Bypasses the Liver —

Alternatively, when Hy•D is fed, it bypasses the animal's liver to ensure the direct availability of 25-OH D₃. The liver can act like a bottleneck and inhibit the conversion of D₃ to 25-OH D₃, particularly during periods of high metabolic activity, such as the transition period.





Research has demonstrated that higher blood concentrations of 25-OH D₃ during the transition period help support calcium homeostasis, increase some aspects of immune cell function, increase milk yield^{1,3} and tend to improve reproductive performance.²





¹ Phibro Animal Health 2020.

² Martinez et al., 2018. J. Dairy Sci. 101:2563.

³ Martinez et al., 2018. J. Dairy Sci. 101:2544.