



CholiGEM™

Choline Supplementation for Dairy Cows

CholiGEM™ is one of the most concentrated rumen-protected choline supplements on the market today. It is designed for dairy farmers who recognize the value of enhancing lactating dairy cow liver health during the critical transition period. It addresses fatty liver and ketosis, which reduces the chance of the most common health disorders, therefore helping to maximize profitability.

What is choline and why is it fed?


Choline is an essential nutrient for dairy cows that has multiple functions for optimal milk production, reproduction, and health — especially during the transition period. Choline can enhance liver health during this phase to improve its metabolic functions, reducing the risk of fatty liver, ketosis, and metabolic disorders that compromise production and overall animal health.

Unprotected choline quickly degrades in the rumen, so it must be supplemented in a rumen-protected form, typically as choline chloride with a protective coating — like CholiGEM™.

How is CholiGEM™ different?

CholiGEM is an **enhanced form of rumen-protected choline** that promotes optimal transition health and lactating performance in dairy cows. With its **uniform particle size and specific gravity**, CholiGEM™ is designed to reduce rumen transit time and provide a highly bioavailable source of choline at the intestinal level. It stands out from other choline supplements because it:

- is one of the **most concentrated** encapsulated forms on the market today, containing 60% choline chloride compared to the industry average of 25% to 28%.
- has **superior bioavailability**.¹
- can create **more space in diet formulation**, making it an effective tool in achieving optimal dairy production.
- may contribute to a **greener footprint**² by maintaining optimal transition cow health and having a lower inclusion rate.



CholiGEM™ is one of today's most concentrated rumen-protected choline chloride supplements for transition cow health.

Benefits of CholiGEM™



Improved liver function and fat metabolism³



Optimized energy status⁴



Improved lactation performance³



Improved health and immunity^{3,4}

Encapsulation technology

For more than 30 years, Kemin has invested in technology that's revolutionized encapsulation, improving the way animal nutrition products are manufactured.

Utilized in CholiGEM, our proprietary GEM technology protects choline from rumen degradation and allows for its targeted release directly into the small intestine.

Kemin proprietary rumen-protected encapsulation technologies:

- Protect high concentration of core nutrient(s).
- Provide durability and improved handling.
- Reduce rumen-retention time for maximum intestinal release.

GEM pan-coating encapsulation



CholiGEM
feeding guide

15 g/hd/d
for 21 days pre-calving

30 g/hd/d
for 21 days post-calving



kemin.com/choligem-us

REFERENCES

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2. A comparative life cycle assessment study of CholiGEM™ and CholiPEARL™, TL-24-21638.
3. Marques, T. C., et al. 2024. Effect of rumen-protected choline on dairy cows' metabolism, immunity, lactation performance, and vaginal discharge microbiome. *Journal of Dairy Science*. 107 (5): 2864-2882.
4. CholiGEM™ improves milk production, health, and reproduction of Holsteins on commercial dairy farm, TL-13142.