



Maximize efficiency with metabolizable protein.



At ARM & HAMMER™ we think big on a microscopic level to deliver safe feed and food solutions that drive business forward. We're your #ScienceHearted, local-and-global, animal and food production team.

Volatility is costing you.

The unknowns in the protein commodity market are a gamble. With pricing and quality fluctuating all the time, you're losing out on the stability and consistency of a reliable protein source in your ration.

SOYBEAN MEAL MONTHLY PRICE — US DOLLARS PER METRIC TON/CHICAGO BOARD OF TRADE SOYBEAN VOLATILITY INDEX (\$SIV)¹ 520.78 499.02 477.26 455.50 433.74 411.98 390.22 368.46 346.69 324.93

Nov 2015 May 2016 Nov 2016 May 2017 Nov 2017 May 2018 Nov 2018 May 2019 Nov 2019 May 2020 Nov 2020

What if you could supply a consistent source of metabolizable protein (MP)?

per Metric Ton

303.13



FEWER NON-PRODUCTIVE DAYS.

What if your heifers could achieve first calving by 21 months, followed by a successful lactation?



MORE MILK, MORE EFFICIENTLY.

What if you could improve milk yield, energy-corrected milk (ECM) and feed efficiency?



PROTEIN THAT COUNTS.

What if you could provide 8% more MP to the small intestine with the same level of dietary protein?

Only FERMENTEN™:

- Reduces crude protein degradation in the rumen, delivering more MP and better nitrogen utilization than other protein sources
- ✓ Supports milk and component production while supporting dry matter intake (DMI)
- Consistently delivers quality and essential nutrients for repeatable results again and again

Helping nutrients reach their full potential.





RUMEN Bypass Protein



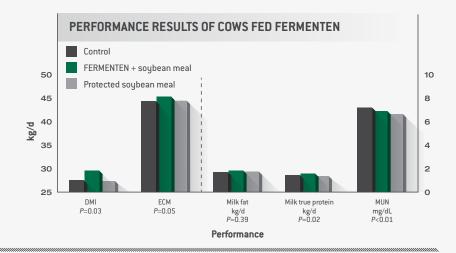
METABOLIZABLE
PROTEIN AND
AMINO ACIDS

Improved protein status delivers:

- Greater feed intake
- Improved feed efficiency
- · Higher milk and component production

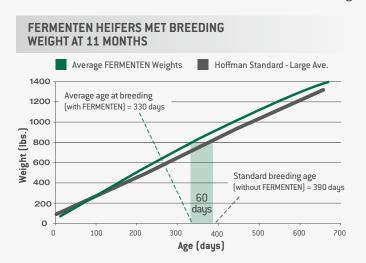
The proof is in the research.

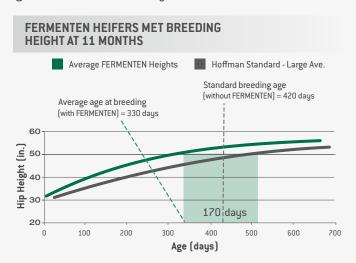
Research showed cows fed FERMENTEN exhibited an improvement in DMI, milk protein, fat yield and ECM.²



From birth to breeding.

An on-farm trial³ fed FERMENTEN to 2,200 heifers from weaning to calving at a rate of 3% of ration dry matter.





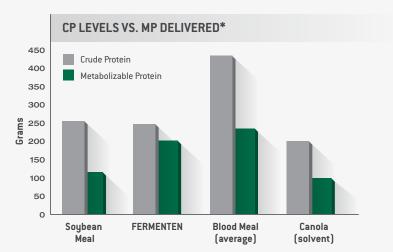
Heifers fed FERMENTEN reached breeding height approximately 170 days sooner than heifers not fed FERMENTEN and 90 days sooner than the Hoffman Standard.⁴

Breeding weight was reached approximately 60 days sooner than the Hoffman Standard.

Maximize MP: make sure you're getting the best value.

Feeding similar levels of crude protein (CP) delivers vastly different MP levels, which can lead to unnecessary overfeeding protein.

FERMENTEN drives MP production to deliver the best value.



^{*} Values based on the increase in MP predicted in CPM Dairy (v5.0) by adding one pound of each supplement to a high-producing cow's diet.

Recommended feeding rates.

For feeding rates and considerations, work with your nutritionist to review ration MP estimates and account for increased bacterial protein production from FERMENTEN.™ Feed FERMENTEN as a primary protein source at a rate of 3% of total ration dry matter. Typical inclusion rates based on current and historical use:





We're #ScienceHearted and we're here for you.

We're ever-curious farm kids turned nutritional innovators, microbial pioneers and food safety game changers. We use scientific research to unlock the power of nature to create products that focus on you, your animals and worldwide food security. To learn more about FERMENTEN ask your nutritionist, veterinarian or ARM & HAMMER™ representative or visit AHfoodchain.com.

- 1 Soybean Meal Monthly Price US Dollars per Metric Ton, Nov. 2015 Nov. 2020. Chicago Board of Trade/CME Group. Accessed December 23, 2020.
- 2 Fessenden SW, Ross DA, Block E, Van Amburgh ME. Effects of soybean meal, Fermenten, or expeller soybean meal on milk performance and intake in lactating dairy cattle. J Anim Sci 2016;94 (Suppl. 5):777-778.
- 3 Corbett WJ. Brown Dairy Heifer Growth Study. Data on file.
- 4 Hoffman P. University of Wisconsin Cooperative Extension Service.