



# ARM & HAMMER ANIMAL NUTRITION

Maximize MP for a win-win



**ANIMALS FIRST.**  
PRODUCTIVITY ALWAYS.

# OVERVIEW

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- The FERMENTEN™ Advantage
- MP: More Miles to the Gallon
- More Milk, Greater Efficiency
- Get Heifers Going Sooner
- Maximize MP, Maximize Value
- Fuel Up: Recommended Feeding Rates

# THE FERMENTEN ADVANTAGE

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- Delivers peptides, amino acids and nucleotides, the building blocks of metabolizable protein (MP)
- More MP means:
  - Cows milk more
  - Heifers reach breeding size faster
  - Greater lifetime productivity
  - Herd profitability increases



# WELCOME TO FERMENTEN

PROVIDES BUILDING BLOCKS  
FOR THE ANIMAL'S MP NEEDS



MORE PROTEIN TRANSLATES  
TO MORE MILK



BIGGER HEIFERS SOONER—ALLOWING  
FOR EARLIER BREEDING



REDUCED REARING COST AND GREATER  
LIFETIME PROFITABILITY



IMPROVES FEED EFFICIENCY  
AND PRODUCTION PERFORMANCE  
IN LACTATING COWS



CONSISTENT QUALITY AND  
ESSENTIAL NUTRIENTS FOR FULL VALUE  
AND REPEATABLE RESULTS



**FERMENTEN**<sup>™</sup>

RUMEN  
BACTERIAL  
PROTEIN

+

RUMEN  
BYPASS  
PROTEIN

=

METABOLIZABLE  
PROTEIN AND  
AMINO ACIDS

# MORE MILES TO THE GALLON

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- FERMENTEN delivers the amino acid building blocks for greater MP
  - Aids in nutrient utilization
  - Boosts production
  - Improves feed efficiency



## ROAD TIP

For the safe and consistent route to more MP choose FERMENTEN, which contains no animal byproducts.



**ROAD  
TIP**

MP is the ideal form of protein that is digested postruminally and supplies essential amino acids to the cow.

# GREATER MILK. GREATER EFFICIENCY.

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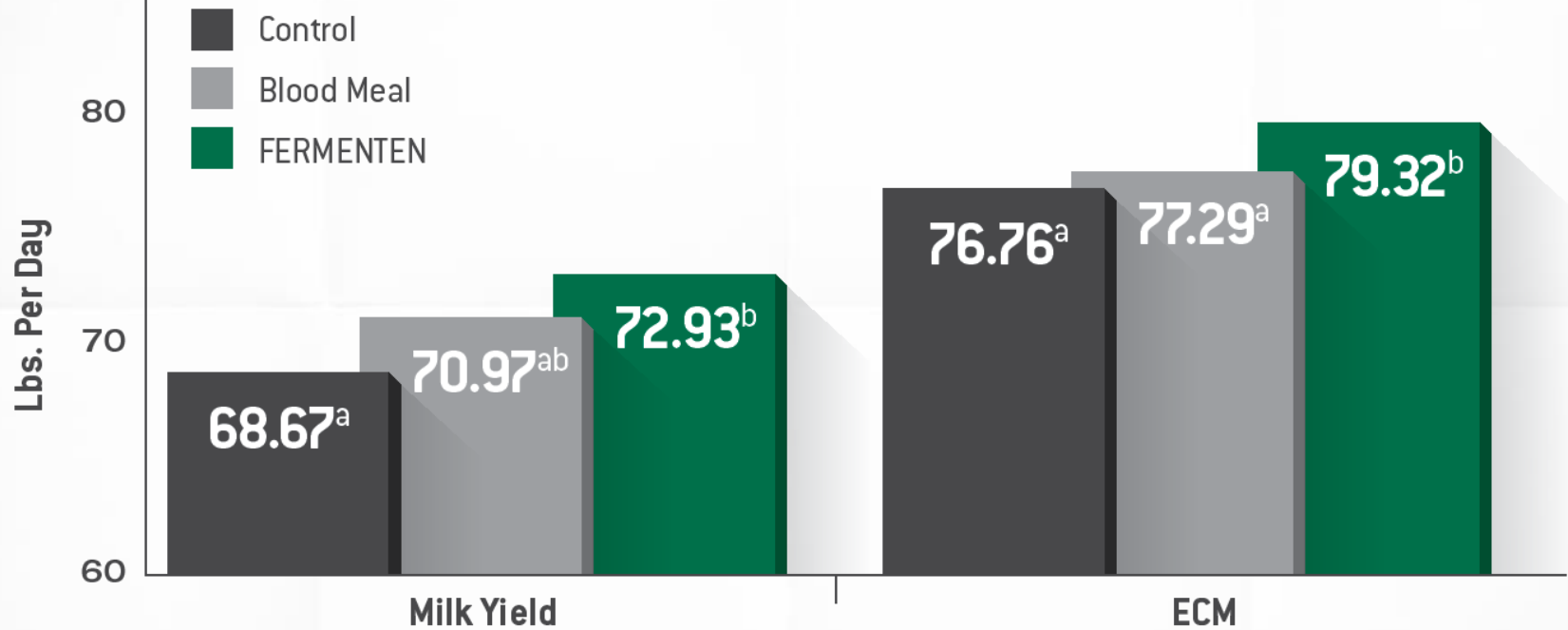
- 2012 research<sup>†</sup> found cows fed FERMENTEN—when compared to control and blood meal diets—showed improvements in:
  - Milk yield
  - Energy-corrected milk (ECM)
  - Feed efficiency

<sup>†</sup> Block E, Evans E, Clark N. New Solutions Can Replace Blood Meal as Amino Acid Source. Arm & Hammer Animal Nutrition Research Bulletin. Data on file.

**FERMENTEN**<sup>™</sup>



## MILK YIELD AND ECM

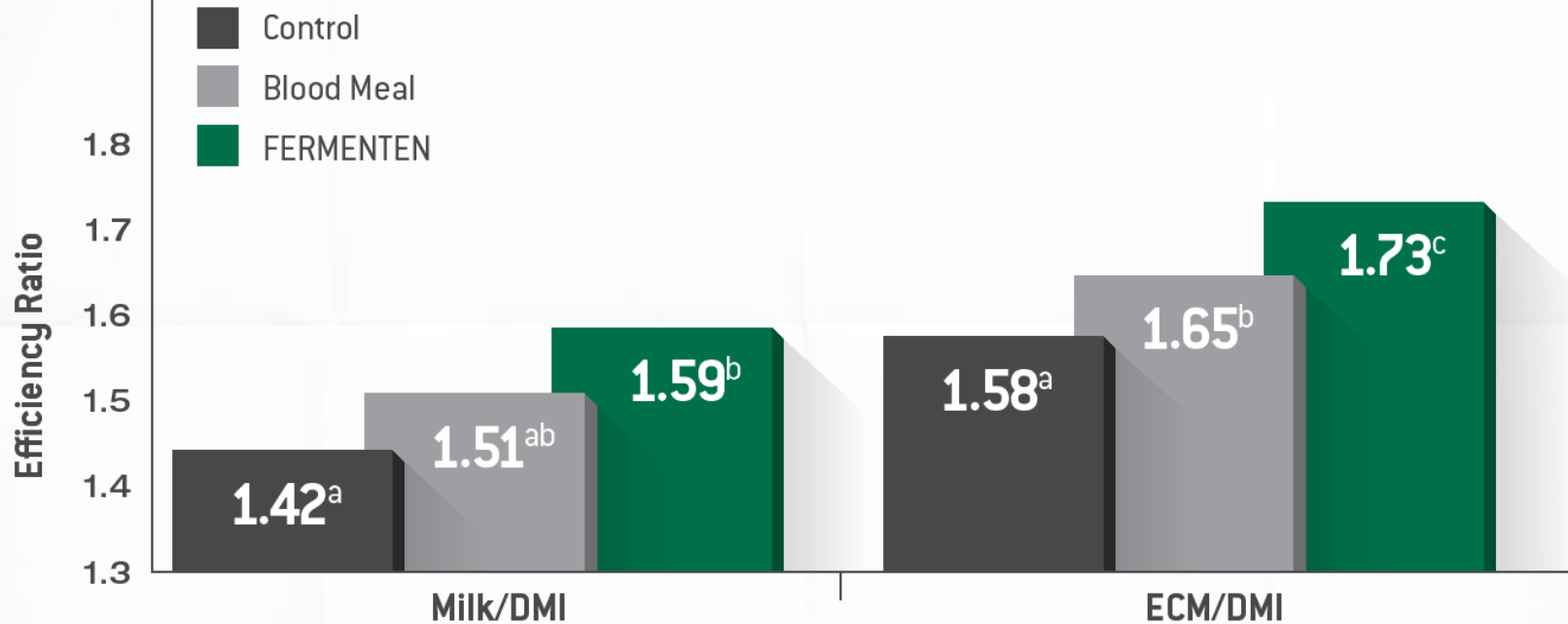


a, b, ab Indicates significant difference ( $P < 0.05$ )

Block E, Evans E, Clark N. New Solutions Can Replace Blood Meal as Amino Acid Source. Arm & Hammer Animal Nutrition Research Bulletin. Data on file.



## EFFICIENCY OF MILK AND ECM



a, b, ab, c Indicates significant difference ( $P < 0.05$ )

Block E, Evans E, Clark N. New Solutions Can Replace Blood Meal as Amino Acid Source. Arm & Hammer Animal Nutrition Research Bulletin. Data on file.





**ROAD  
TIP**

Diets formulated with  
**FERMENTEN** deliver the same  
or better efficiency as a diet  
formulated with blood meal<sup>†‡</sup>

† Block E, Evans E, Clark N. New Solutions Can Replace Blood Meal as Amino Acid Source. Arm & Hammer Animal Nutrition Research Bulletin. Data on file.

‡ Trial conducted at University of Delaware. Data on file.



# GET HEIFERS GOING SOONER

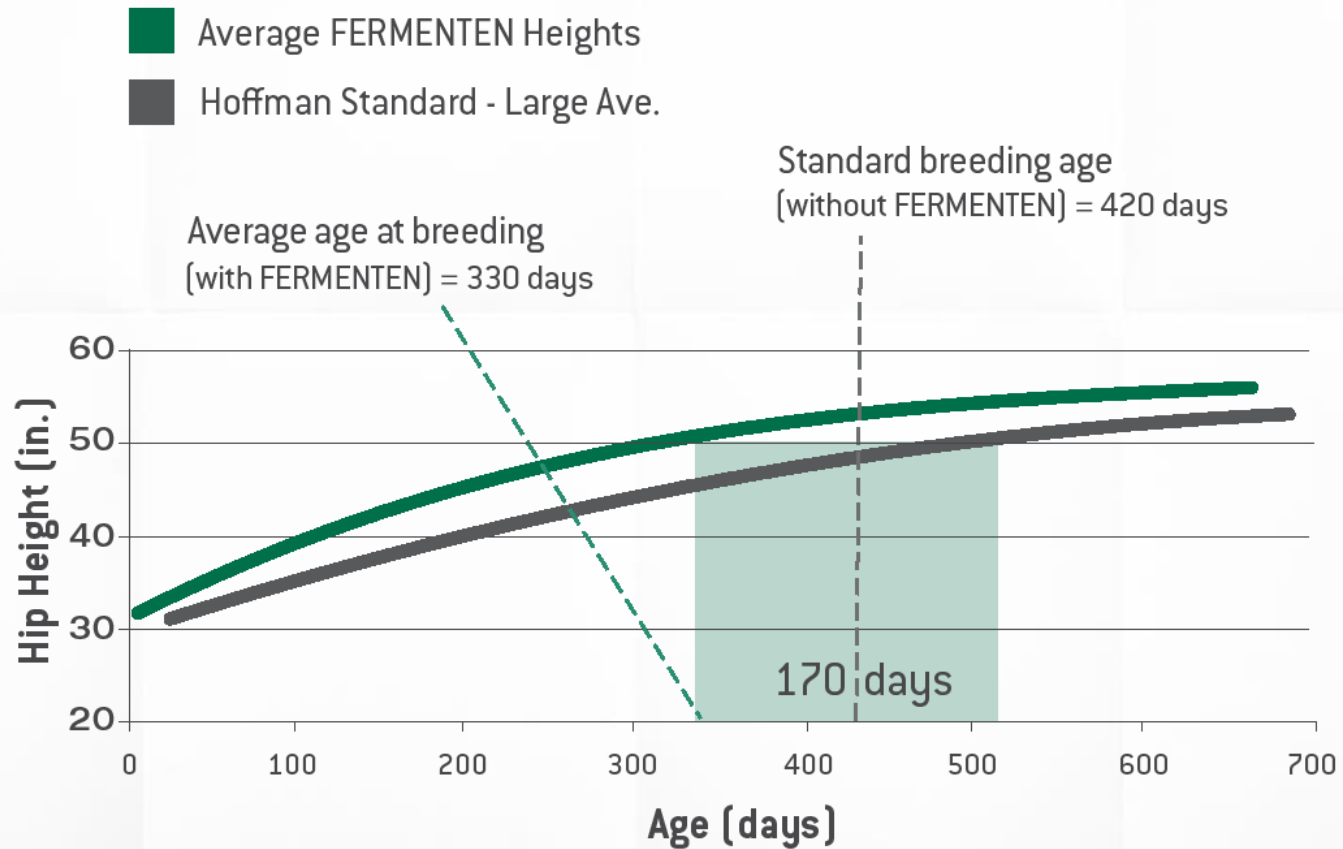
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- A large on-farm trial<sup>†</sup> in north central U.S. fed FERMENTEN to 2,200 heifers from weaning to calving at a rate of 3% of ration dry matter
- Heifers fed FERMENTEN:
  - Reached breeding height 170 days sooner than heifers not fed FERMENTEN and 90 days sooner than the Hoffman Standard
  - Achieved breeding weight 60 days sooner than the Hoffman Standard

<sup>†</sup> Corbett, WJ. Bown Dairy Heifer Growth Study. Data on file.

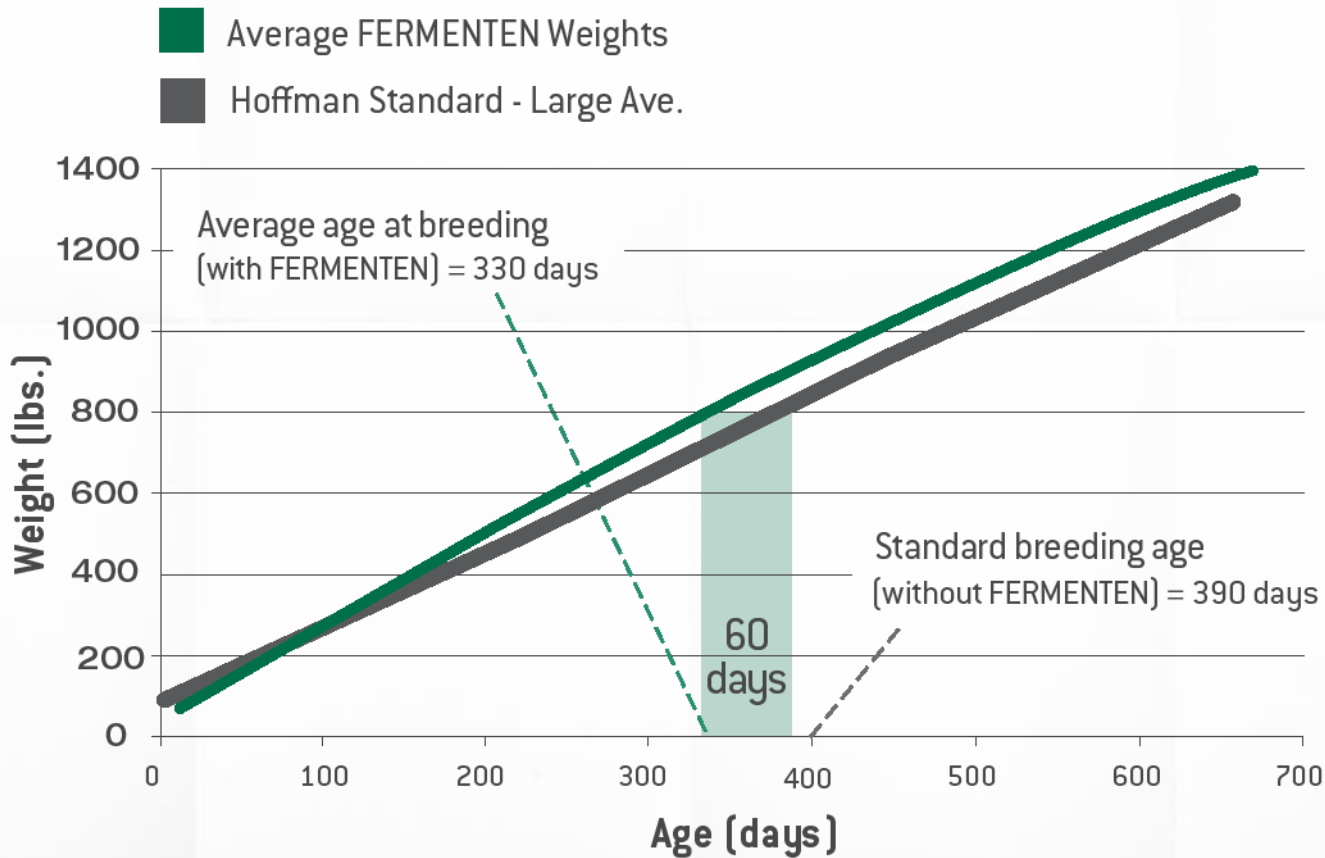


## FERMENTEN HEIFERS MET BREEDING HEIGHT AT 11 MONTHS





## FERMENTEN HEIFERS MET BREEDING WEIGHT AT 11 MONTHS



**FERMENTEN**™



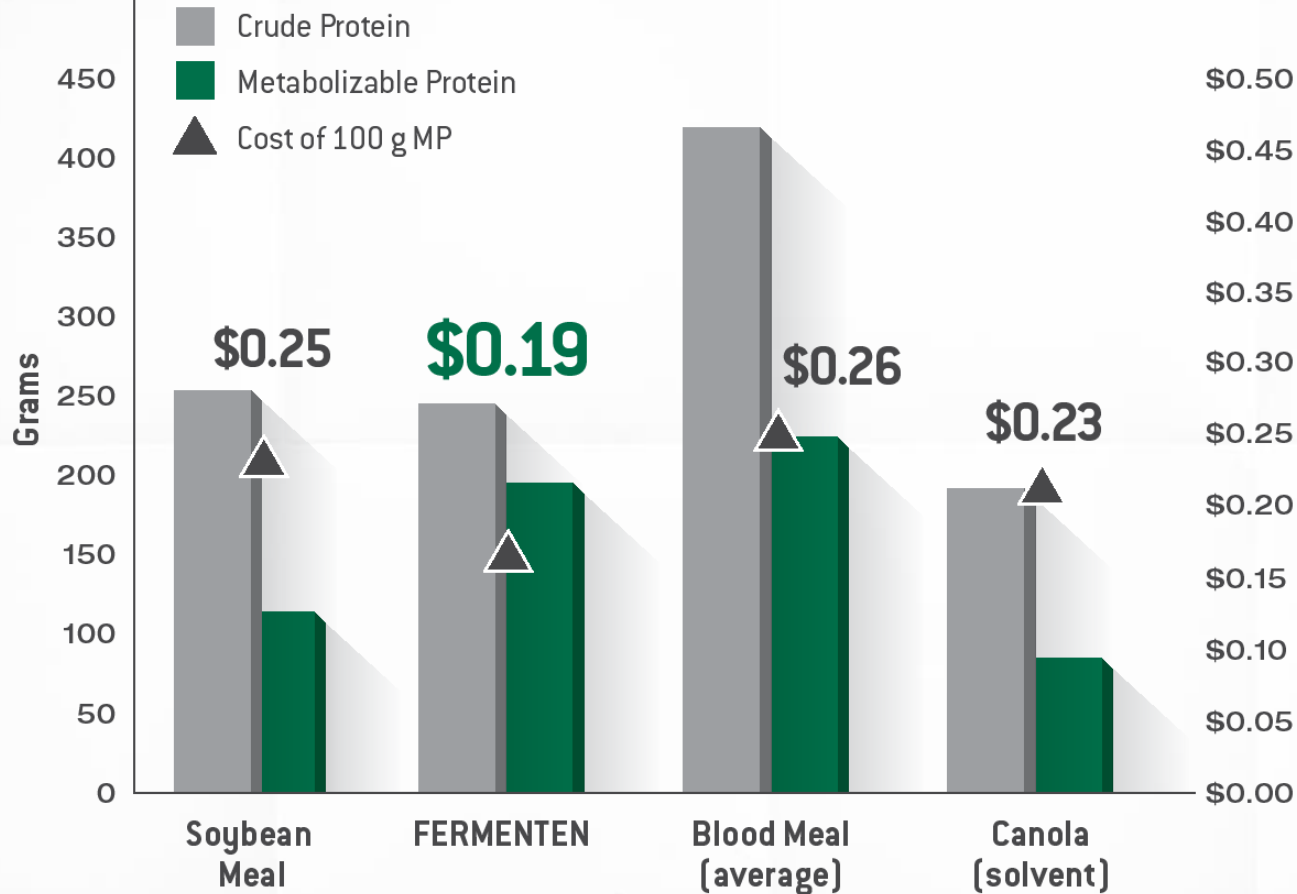
Producers can meet heifer weight and height goals by delivering the high-quality, efficient source of MP found in FERMENTEN.

# MAXIMIZE MP, MAXIMIZE VALUE

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- Feeding similar levels of crude protein (CP) delivers vastly different MP levels, which can lead to overfeeding protein
- FERMENTEN drives MP production to deliver the best value

## CP LEVELS VS. MP DELIVERED\*



\* 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. Assumed prices/ton of soybean meal, FERMENTEN, blood meal and canola were \$500, \$650, \$1,000 and \$375, respectively.



**ROAD  
TIP**

**Want comparative pricing  
for your herd?**

We've got an app for that.  
Contact your ARM & HAMMER™  
representative for details.



# Take the shortcut to bigger profits.

## FERMENTEN Boosts Milk and Improves Feed Efficiency

	Control	FERMENTEN	The FERMENTEN Difference
	Cow/Day		1,000-cow herd/305-day lactation
Milk Production (lbs.) <sup>†</sup>	68.67	72.93	873,300.00
Milk Fat (%) <sup>†</sup>	4.43	4.2	
Milk Protein (%) <sup>†</sup>	3.22	3.22	
Dry Matter Intake (lbs.) <sup>†</sup>	49.23	46.43	(854,000)
Feed Efficiency (Milk Production/DMI) <sup>†</sup>	1.39	1.57	
Milk Income (fat + protein + other) <sup>a</sup>	\$18.09	\$18.87	\$237,900
Ration Costs <sup>b</sup>	\$5.91	\$5.57	(\$103,700)
FERMENTEN Cost <sup>c</sup>		\$0.49	\$149,450
IOFC	\$12.18	\$12.81	
<b>ADDITIONAL IOFC WITH FERMENTEN</b>		<b>\$0.63</b>	<b>\$192,150</b>

a Used milkpay.com, Midwest Order

b Assumes cost of \$0.12/lb.

c Assumes cost of \$0.35/lb. FERMENTEN cost; feeding rate of 3% of DM





**FERMENTEN** helped improve feed efficiency from 1.39 to 1.57, resulting in additional \$191 IOFC per cow per year.



\*Based on continuous culture fermenter studies. \*\*Based on a controlled study with 45 cows over 3 months.

**FERMENTEN**™

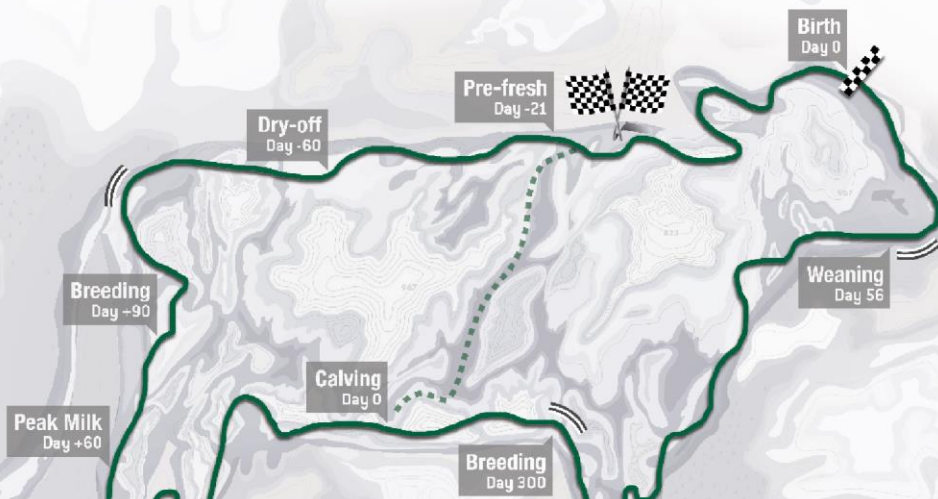
# FUEL UP: RECOMMENDED FEEDING RATES

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- 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.

<b>Cows</b>	Up to 3% ration dry matter
<b>Heifers</b>	2 – 2.5% ration dry matter

## Navigate the life cycle journey with FERMENTEN.



**FERMENTEN™**

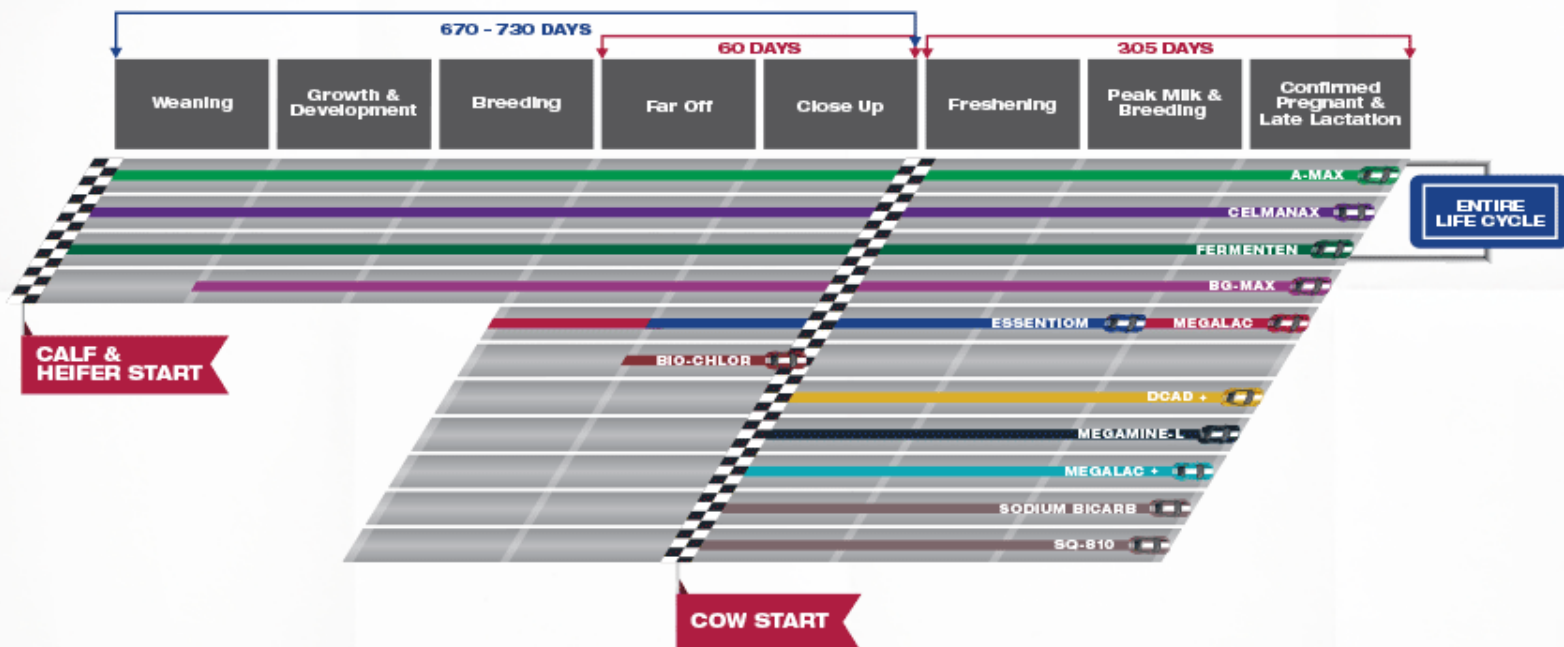
**FERMENTEN™**



# Navigate the life cycle journey with FERMENTEN.

**FERMENTEN™**

Entire life cycle



More products to help you get the job done.



It's about ANIMALS FIRST. PRODUCTIVITY ALWAYS.  
See more at [AAnimalNutrition.com](http://AAnimalNutrition.com)

# QUESTIONS?

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To learn more about FERMENTEN, your pit crew is standing by: contact your nutritionist, veterinarian or Arm & Hammer Animal Nutrition representative or fuel up at [AHanimalnutrition.com](http://AHanimalnutrition.com).

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**FERMENTEN**<sup>™</sup>

THANK YOU!

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