
MEGALAC
ARM & HAMMER ANIMAL NUTRITION
Fuel up for the win.
GETTING
IT DONE
ANIMALS FIRST.
PRODUCTIVITY ALWAYS.

OVERVIEW

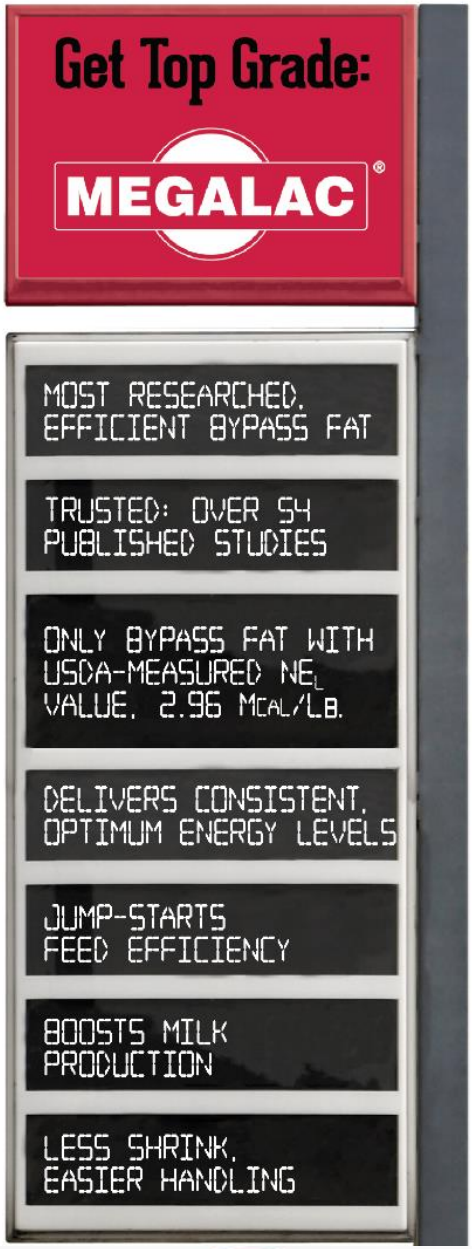
- The MEGALAC® Advantage
- The Race to Consistency
- Particle Size Matters
- Take the Bypass to Success
- Increased Milk & Efficiency
- Go For a Consistent Win
- Fuel Up: Recommended Feeding Rates

THE MEGALAC ADVANTAGE

- First bypass fat and most efficient energy source on the market†
- Delivers concentrated energy directly to the small intestine for optimal absorption
- The industry standard since 1986

†Rabiee AR, Breinhild K, Scott W, Golder HM, Block E, Lean IJ. Effect of fat additions to diets of dairy cattle on milk production and components: A meta-analysis and meta-regression. *J Dairy Sci* 2012:95:3225.

MEGALAC®


Get Top Grade:
MEGALAC®
MOST RESEARCHED, EFFICIENT BYPASS FAT
TRUSTED: OVER 54 PUBLISHED STUDIES
ONLY BYPASS FAT WITH USDA-MEASURED NE_L VALUE, 2.96 MCAL/LB.
DELIVERS CONSISTENT, OPTIMUM ENERGY LEVELS
JUMP-STARTS FEED EFFICIENCY
BOOSTS MILK PRODUCTION
LESS SHRINK, EASIER HANDLING

Why cows need supplemental fat.
Supplemental fat supports milk production, helps cows retain body condition and improves reproductive performance. Plus, fats contain 2.25 times more energy than starches and digestible fiber.

MEGALAC®

CONSISTENTLY BETTER RESULTS

- Meta-analysis† compared supplementing lactating rations with various fat sources compared to feeding no supplemental fat.
- MEGALAC outperformed all others in milk volume, fat yield and feed efficiency

Different Fat. Different Results.*

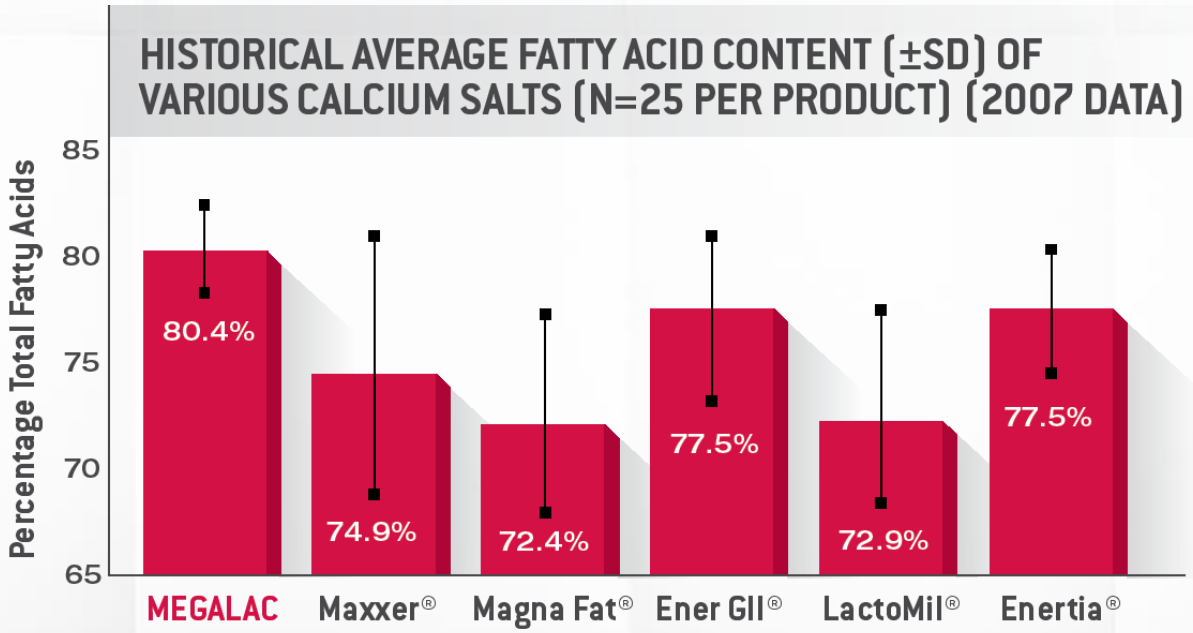
Fat Source	DMI (lb./d)	Milk Volume (lb./d)	Fat (%)	Protein (%)	Fat (lb./d)	Protein (lb./d)	Feed Efficiency
Overall	-1.93	2.31	-0.04	-0.08	0.06	NSD	↑
MEGALAC	-1.41	3.41	0.10	-0.05	0.18	NSD	↑
Tallow	-2.34	NSD	NSD	-0.09	NSD	NSD	↑
Fatty Acid Prills	NSD	NSD	NSD	NSD	NSD	NSD	NSD
Oilseeds	-1.22	NSD	-0.10	-0.10	0.10	NSD	NSD
Other Ca Salts	-4.64	2.02	-0.47	-0.18	-0.29	NSD	↓

NSD = No Significant Difference.
*Parameters with directional arrows and average response values are significantly different from control treatments of no fat supplementation ($P<0.10$).

†Rabiee AR, Breinhild K, Scott W, Golder HM, Block E, Lean IJ. Effect of fat additions to diets of dairy cattle on milk production and components: A meta-analysis and meta-regression. *J Dairy Sci* 2012:95:3225.

THE RACE TO CONSISTENCY

- MEGALAC supplies the uniform fatty acid content cows need
- Analysis of 150 field samples showed MEGALAC had the high level of total fatty acids with the lowest degree of variation



† Data on file, 2007.

MEGALAC®

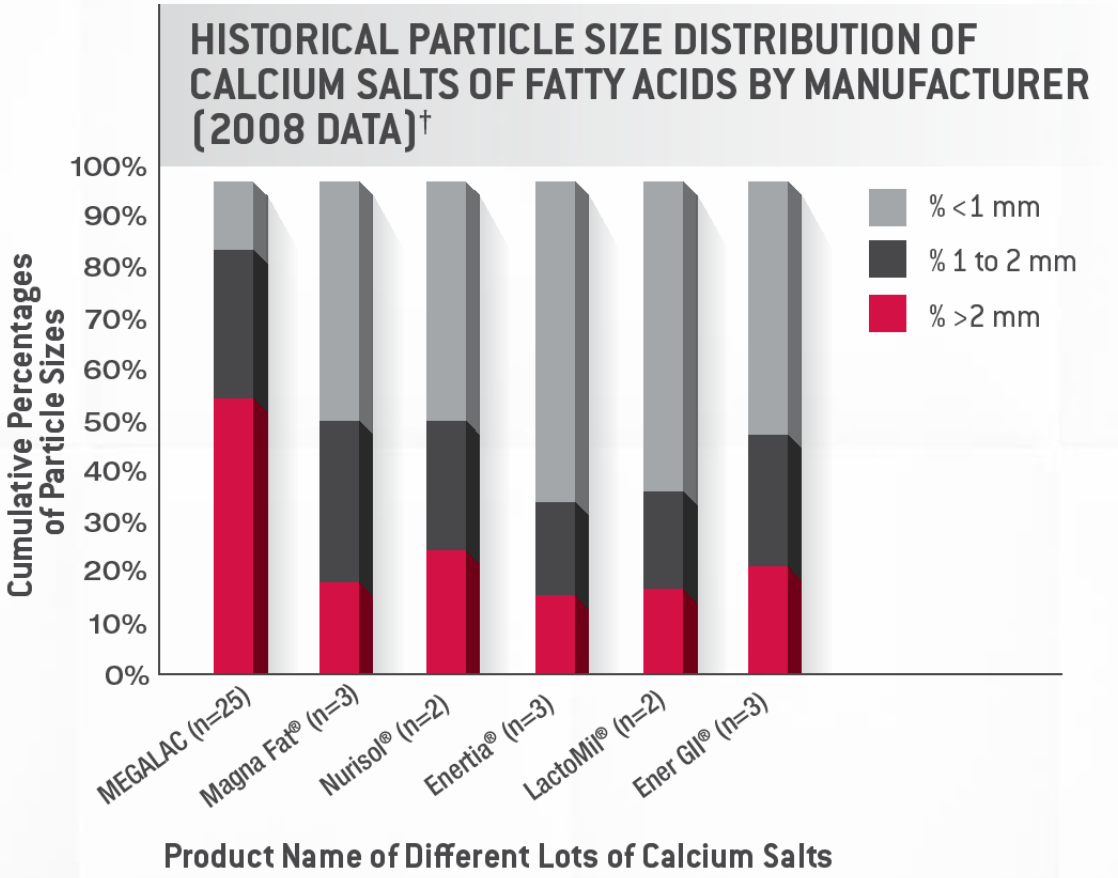
PARTICLE SIZE MATTERS

- Not all commercial Calcium Salts are created equal and particle size is an important reason why
- Larger particles perform better because they don't break down (biohydrogenate) in the rumen †‡
- MEGALAC delivers consistently larger particle size, which means more of the original unsaturated fatty acids reach the small intestine for use by the cow

† Data on file, 2008.

‡ Block E, Evans E, Sniffen C, Clark N. Effects of Particle Size of Fatty Acids on Biohydrogenation and Disappearance of Essential Fatty Acids *In Sacco*. Paper presented at: ADSA-ASAS Joint Annual Meeting: July 7-11, 2008; Indianapolis, Indiana.

MEGALAC®

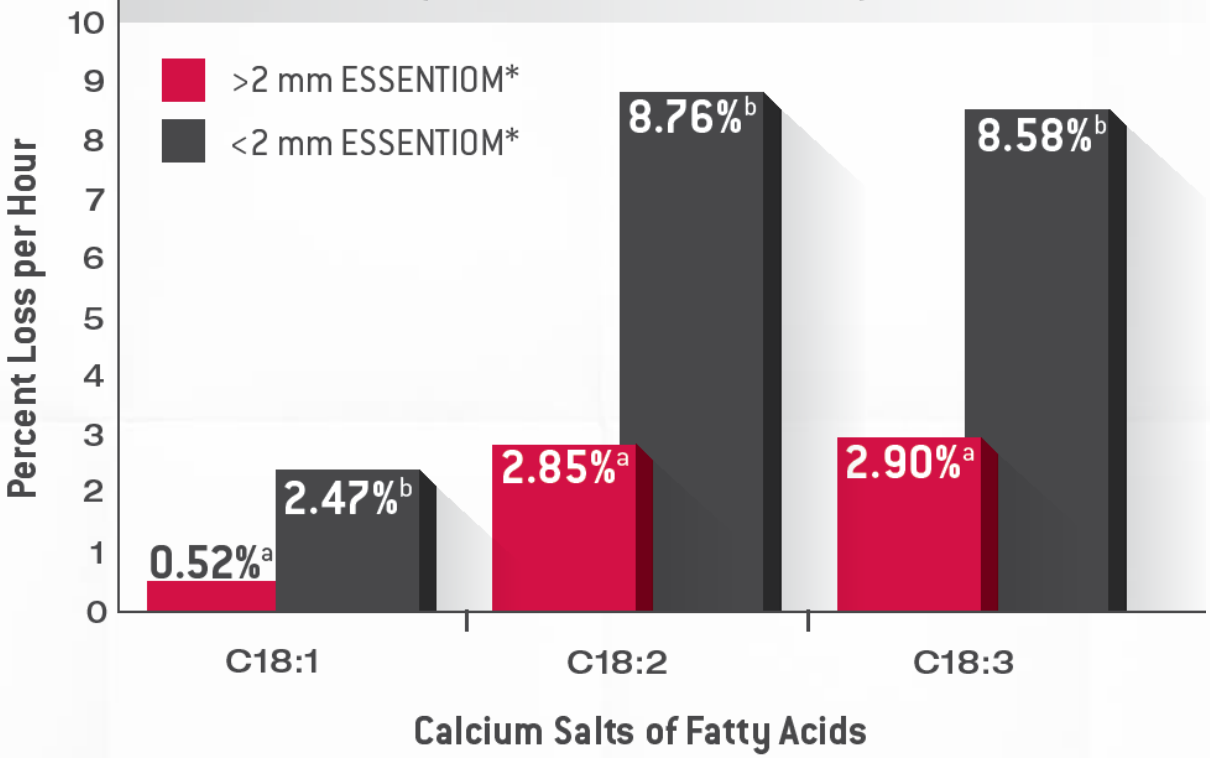


* Data on file, 2008.

† Data on File, 2008.

MEGALAC®

RATE OF DISAPPEARANCE OF FATTY ACIDS (BIOHYDROGENATION)†



[a,b] Indicate significant difference $P<0.01$

* MEGALAC and ESSENTIOM™ contain the same bypass fat properties and particle size composition.

† Block E, Evans E, Sniffen C, Clark N. Effects of Particle Size of Fatty Acids on Biohydrogenation and Disappearance of Essential Fatty Acids *In Sacco*. Paper presented at: ADSA-ASAS Joint Annual Meeting: July 7-11, 2008; Indianapolis, Indiana.

MEGALAC®

Size matters: bigger particles, more usable energy.
Smaller Calcium Salt particles dissolve faster and are known to reduce fat-corrected milk production.

MEGALAC®

TAKE THE BYPASS TO SUCCESS

- MEGALAC is more than 85% digestible in the small intestine when included in the diet at 3% of ration dry matter†
  - Published digestibility values are not available for all Calcium Salt products

Digestibility = getting the most from your investment.
The bypass properties and larger particle size of MEGALAC make it easier to reach and be absorbed in the small intestine.

† Sanchez WK. Energy Barrier Breaker Research Summary. Church & Dwight Co., In., 2001. Page 10, Table 1 and Figure 5.

INCREASED MILK & EFFICIENCY

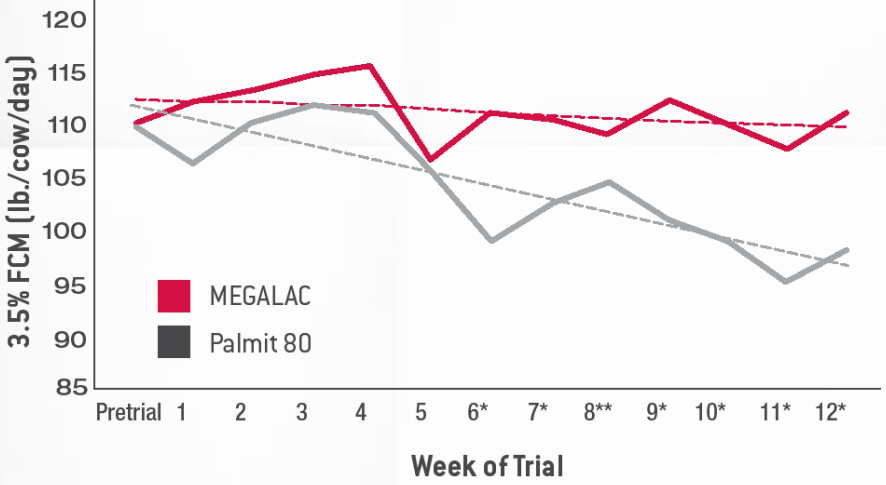
- A trial† evaluated the performance of cows fed a diet supplemented with MEGALAC or Palmit 80®, a fatty acid prill containing high levels of palmitic acid (C16:0)
- Over the 12-week study, cows fed MEGALAC produced:
  - 10.5 lbs. more fat-corrected milk (FCM)
  - 7.4 lbs. more milk

† Block E, Kung I, Merrill C. Production performance parameters of early lactation diary cows fed a diet supplemented with MEGALAC or a fatty acid prill containing high levels of palmitic acid. *J Anim Sci* Vol. 91, E-Suppl. 2/*J Dairy Sci* Vol. 96, E-Suppl.

MEGALAC®

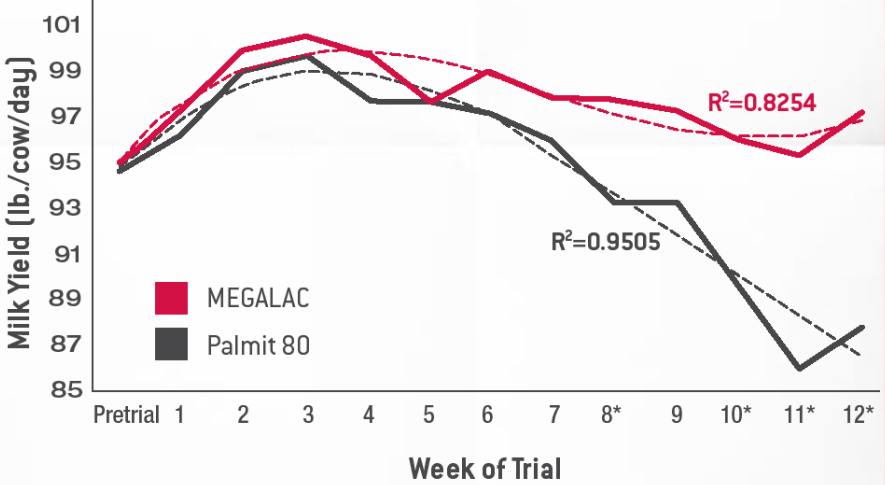
12-WEEK TRIAL RESULTS

INCREASED FCM WITH MEGALAC



* $P<0.05$

INCREASED MILK YIELD WITH MEGALAC



* $P<0.05$

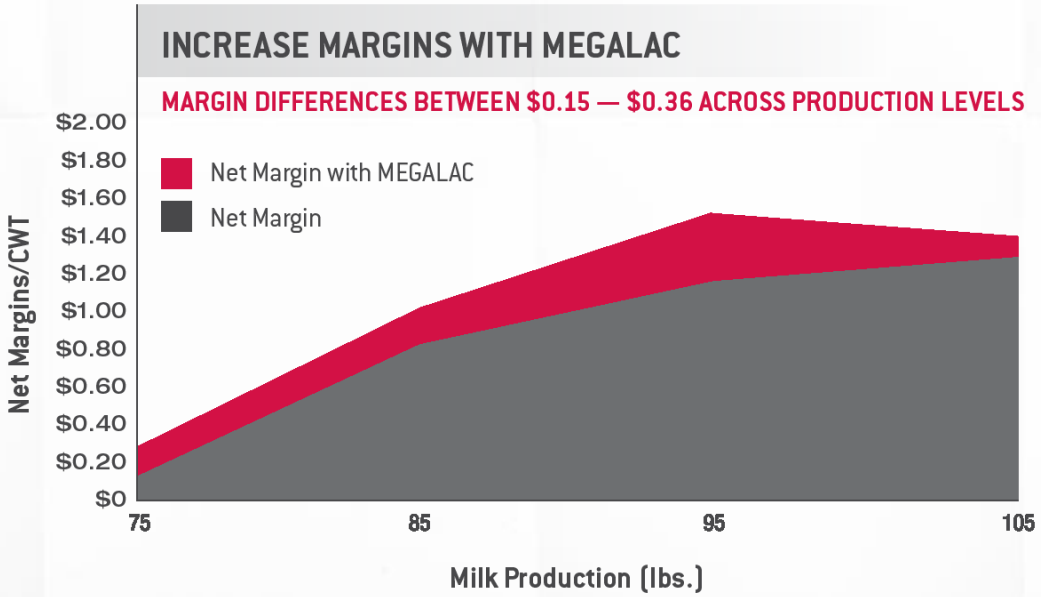
MEGALAC®

Choose reliable feed suppliers. Considerable impurities can still remain in a product that lower the fatty acid and energy content. Also, rendered or processed fats can be highly variable in quality, so be sure to choose a consistent, reliable, proven fat source like MEGALAC.

MEGALAC®

GO FOR A CONSISTENT WIN

- MEGALAC is a solid investment that contributes to bottom-line profits by delivering improved margins, regardless of milk price



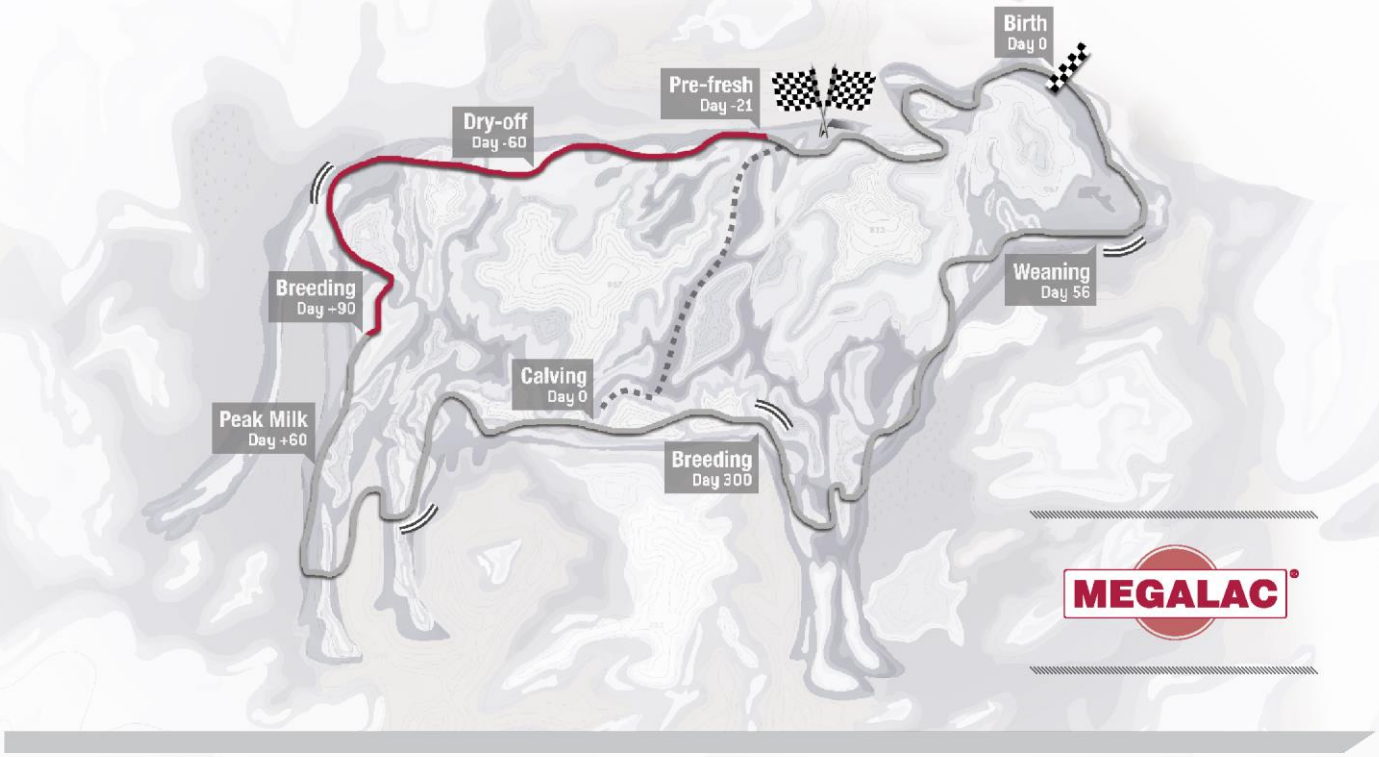
Assumptions: Milk price of $15/cwt; ration costs were determined using CNCPS model optimizations and ingredient prices on September 16, 2015; additional daily production costs were input at $7.00, $7.00, $7.25 and $5.50, respectively across production levels

MEGALAC®

FUEL UP: RECOMMENDED FEEDING RATES

- Feed MEGALAC at a rate of 1% — 2% ration dry matter to meet the energy requirements of high-producing cows
- Feeding rates will depend on the stage of lactation and production levels

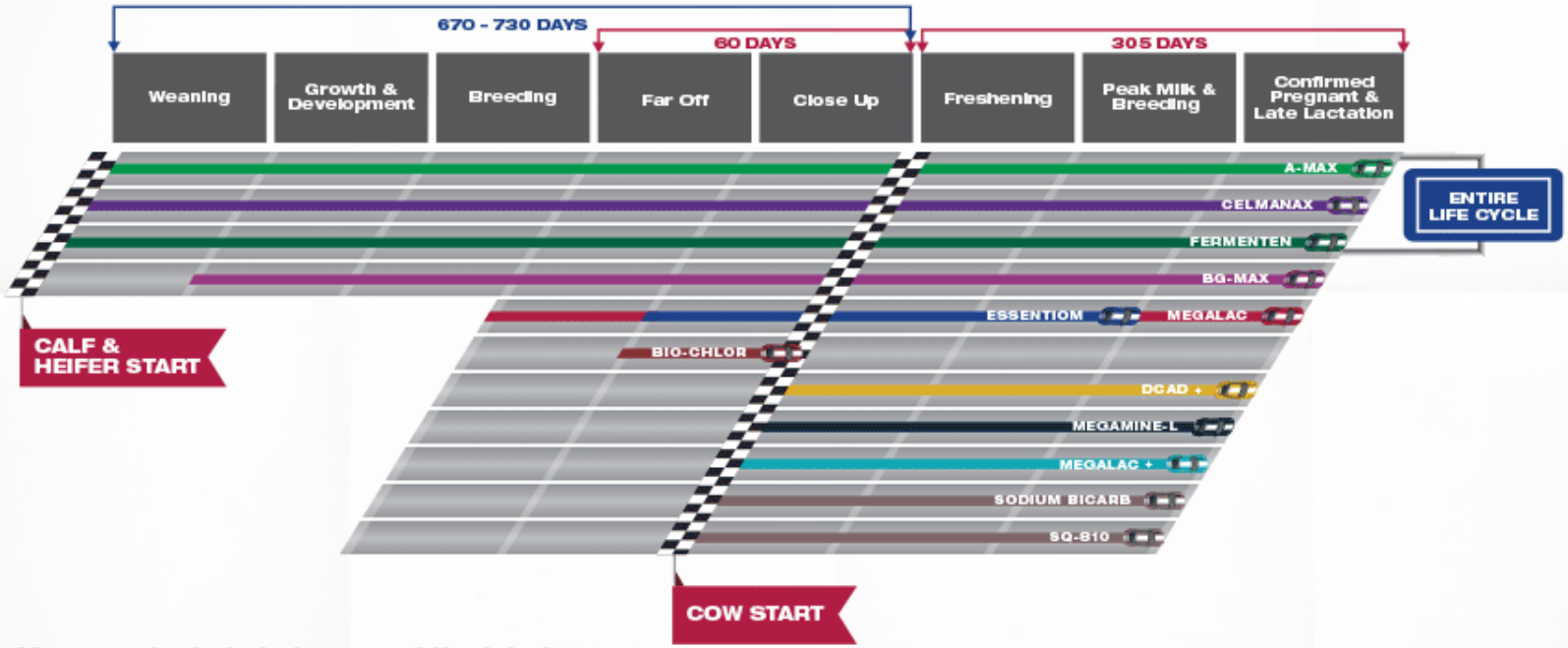
Navigate the life cycle journey with MEGALAC.



MEGALAC

Navigate the life cycle journey with MEGALAC.

MEGALAC®
+60/+90 Days to Day -21



More products to help you get the job done.

- **A-MAX™** — Entire life cycle
- **BG-MAX™** — Day 56 to Day 305
- **BIO-CHLOR™** — Day -21 to Day 0
- **CELMANAX™** — Entire life cycle
- **DCAD +™** — Day 0 to Day 305
- **ESSENTIOM™** — Day -21 to +60/+90 Days
- **FERMENTEN™** — Entire life cycle
- **MEGALAC +™** — Day 0 to Day 305
- **MEGAMINE-L™** — Day 0 to Day 305
- **SODIUM BICARB** — Day 0 to Day 305
- **SQ-810™** — Day 0 to Day 305

It's about **ANIMALS FIRST. PRODUCTIVITY ALWAYS.**
See more at AHanimalnutrition.com.

QUESTIONS?

To learn more about MEGALAC, your pit crew is standing by: contact your nutritionist, veterinarian or Arm & Hammer Animal Nutrition representative or fuel up at AHanimalnutrition.com.

MEGALAC®

Animal Nutrition

THANK YOU!

ANIMALS FIRST.
PRODUCTIVITY ALWAYS.