

Until now, your ability to balance amino acids was severely restricted. Introducing MEGAMINE-L.[®]

Now you can break free from everything that keeps you from optimizing essential amino acid levels. MEGAMINE-L[®] Rumen Bypass Lysine helps you deliver high-quality, consistent lysine — every time.

YOU CAN COUNT ON MEGAMINE-L TO:

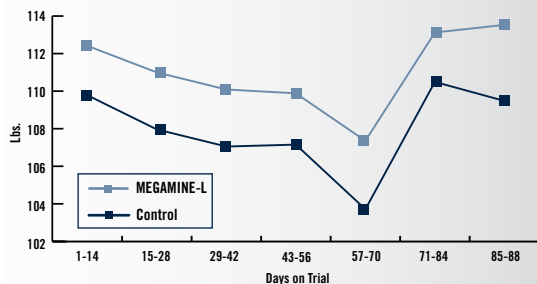
- Increase milk and/or component production
- Reduce dietary protein needs
- Improve feed efficiency
- Reduce nitrogen output
- Provide more flexibility to feed alternative protein sources, feedstuffs and ingredients
- Improve Income Over Feed Cost



ON-FARM TRIAL DEMONSTRATES MEGAMINE-L EFFECTIVENESS

On-farm research¹ took place at a 3,200-cow Midwest dairy. The trial included 800 fresh cows in a 2-group study (400 cows per group) over 88 days. All 800 animals were in these groups for the duration of the trial.

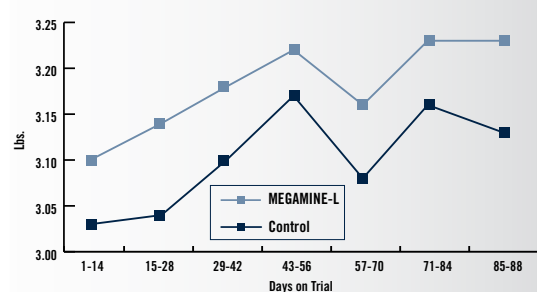
FIGURE 1 Increased Milk Production[†]



Improved milk production by 2.97 lbs. per cow per day

- Treatment group averaged 110.71 lbs.
- Control group averaged 107.74 lbs. † $P < 0.05$

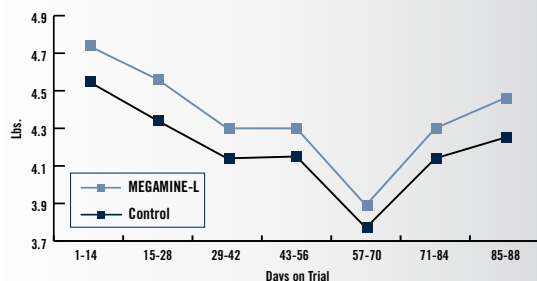
FIGURE 3 Improved Protein Production[†]



Increased milk protein by 0.08 lbs. per cow per day

- Treatment group averaged 3.17 lbs.
- Control group averaged 3.09 lbs. † $P < 0.05$

FIGURE 2 Improved Milk Fat Yield[†]



Boosted milk fat by 0.18 lbs. per cow per day

- Treatment group averaged 4.36 lbs.
- Control group averaged 4.18 lbs. † $P < 0.05$

- The control diet was balanced for 110 lbs. of milk at 3.6% fat and 3% protein
 - -32g/d metabolizable protein (MP) balance
 - Methionine at 2.4% of MP and lysine at 6.66% of MP
- Treatment diet was the same except 0.35 lbs. of fat were replaced with an average of 0.35 lbs. of MEGAMINE-L to bring lysine to 7.25% of MP.

Lysine Without Limits™

IT'S TIME TO BREAK FREE

MEGAMINE-L® delivers Lysine Without Limits™. Unlike blood meal and other commodity lysine sources, the unique formulation of MEGAMINE-L allows consistent levels of lysine to reach the small intestine.

INCONSISTENCY HAS ITS PRICE

Based on 265 blood meal samples,² one pound of blood meal delivered highly variable levels of intestinal lysine, ranging from 3.4 grams to 41.9 grams per pound. Blood meal and other commodity lysine sources are simply no substitute for a high-quality, consistent bypass lysine.

CONSISTENCY PAYS BIG DIVIDENDS

MEGAMINE-L consistently delivers intestinal lysine levels of **33.4 grams per pound³**. And since MEGAMINE-L can also increase nutrient utilization, you get the additional economic benefits of improved feed efficiency and decreased nitrogen output.

THE FINANCIAL BENEFITS OF FEEDING MEGAMINE-L

The on-farm trial¹ confirms the financial benefits that can be realized by feeding MEGAMINE-L.



TABLE 1 Production Levels for MEGAMINE-L and Control Groups

	Control	MEGAMINE-L	The MEGAMINE-L Difference
	Cow/Day		1,000-cow Herd/ 305-day lactation
Milk Production	107.74 lbs.	110.71 lbs.	905,850 lbs.
Fat Production	3.88%	3.93%	
Protein Production	2.87%	2.87%	
Fat, \$/cwt ⁴ (fat % * fat price)	\$5.99	\$6.07	
Protein, \$/cwt ⁴ (protein % * protein price)	\$8.25	\$8.25	
Other Solid Pricing ⁴	\$1.18	\$1.18	
Milk Price/cwt ⁴ (fat + protein + other)	\$15.42	\$15.50	
Milk Income ((\$/cwt)/100 * milk production)	\$16.62	\$17.16	
Additional Income with MEGAMINE-L		+\$0.54	\$164,700.00

TABLE 2 Improved IOFC

	Additional Income	MEGAMINE-L Cost	Increased IOFC Potential
Cow/Day	+\$0.54	(\$0.23)	+\$0.31
1,000-cow Herd/305-day lactation	\$164,700.00	(\$70,150.00)	\$94,550.00



For more information on the liberating advantages of feeding MEGAMINE-L, contact your nutritionist or ARM & HAMMER® representative, visit AHDairy.com or call 800-526-3563.

¹ Midwest on-farm trial, 2009. Data on file.

² Boucher SE. Challenges of Predicting Metabolizable Lysine Content of Ingredients, in *Proceedings*. Cornell Nutrition Conference for Feed Manufacturers 2009.16-27.

³ One pound of MEGAMINE-L with 46% metabolizable lysine, based on the Latin-square trial data on file.

⁴ Source: www.milkpay.com

