

Why balance the levels of amino acids in dairy rations?

Why lysine?

The first two limiting amino acids are lysine and methionine. Dairy cows require lysine, an essential amino acid for milk production. Dairy cows do not synthesize lysine so a variety of feed ingredients are fed to meet the lysine requirement of high-producing dairy cows.

Unfortunately, lysine in these feed ingredients is broken down by rumen bacteria and other microorganisms, making it difficult to precisely predict the amount of lysine reaching the small intestine for absorption. As a result, the lysine available to the cow, and thus the amount of lysine that the cow can effectively use for milk production, are often at levels below the cow's requirement.

AjiPro®-L

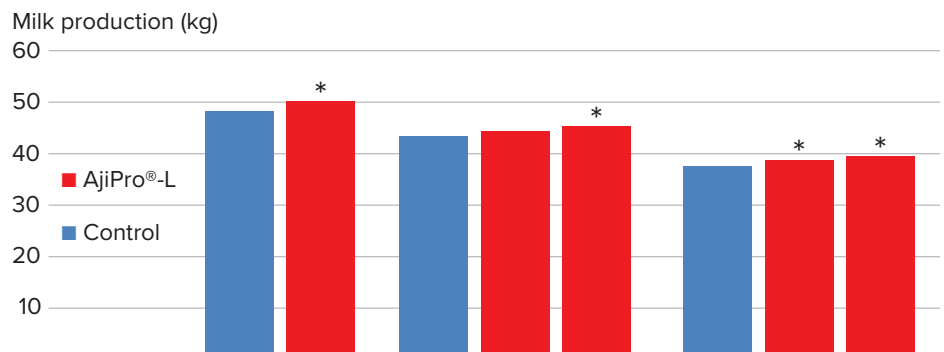
AjiPro®-L sets the standard for supplemental rumen protected lysine. It is a highly bypassable, digestible and available source of L-Lysine for the high-producing dairy cow. When properly formulated into a ration, AjiPro®-L delivers a predictable amount of lysine for absorption by the cow and improves the overall balance of amino acids in the diet.

Amino Acid Balancing helps:

- Optimize milk production
- Improve income over feed cost by minimizing the use of expensive, high-protein ingredients
- Decrease nitrogen excretion by the dairy cow

AjiPro®-L is a cost-effective source of rumen protected lysine with a high level of protection and consistency.

Summary of lactation studies conducted using AjiPro®-L



	2010 trial		2011 trial #1			2011 trial #2		
	Control	95 gram	Control	75 gram	150 gram	Control	100 gram	200 gram
Number of cows	170	170	7	8	8	22	22	21
Week in lactation	11–18 weeks		5–8 weeks			0–4 weeks		
Metabolizable lysine	6.12	6.6	5.75	6.15	6.55	6.65	7.3	7.95
Milk (kg)	48	50	43.2	44.6	45.7	37.1	38.5	39.2
Protein (kg)	1.35	1.43	1.18	1.22	1.24	1.17	1.2	1.21
Fat (kg)	1.72	1.82	1.66	1.84	1.73	1.73	1.89	1.91

2010 trial: Robinson et al., Anim. Feed Sci. Tech. 168: 30-41, 2011.
 2011 trial #1: Nocek and Shinzato, J. Dairy Science, Vol. 93, E-suppl. 1: 235, 2010.
 2011 trial #2: Nocek et al., J. Dairy Science, Vol. 93, E-suppl. 1: 737, 2011.
 *p < 0.05

Learn about AjiPro®-L at www.AjiPro-L.com and contact technical representatives for more information.

Technical Representative
AjiProTech@ajijusa.com

Sales Representative
AjiProSales@ajijusa.com

8430 W Bryn Mawr #650 • Chicago, IL, USA 60631-3421 • 1-833-AJIPROL

