



*A highly digestible  
concentrated protein  
source rich in lysine,  
histidine and total EAA*



Science based. Research driven.®

### Targeted feeding

Dairy cows fed high crude protein diets often rely on RDP to fuel microbial growth. However, excess RDP can lead to nitrogen waste and inefficient feed use. Feeding targeted digestible amino acids, like lysine and histidine, improves nitrogen utilization, ensuring more nitrogen is available for milk protein synthesis and other metabolic functions.

### The value of histidine

Histidine is an essential amino acid that plays a critical role in milk protein synthesis, metabolism, and cow health. While often overlooked in ration formulation, histidine is frequently limiting in low crude protein diets. A recent meta-analysis of 22 studies reported that supplemental histidine significantly enhances milk yield, milk true protein yield, and feed efficiency, particularly in MP deficient diets. The effects of histidine were 3.9 times greater in MP deficient diets, making it a valuable nutritional option during periods of MP deficiency, such as the immediate postpartum period.

Beyond production, histidine supports red blood cell production and aids in replenishing iron stores, two key biological processes markedly significant for fresh cows experiencing blood loss at calving. EscAAlate is formulated to provide more digestible histidine per pound of DM compared to market commodity blood meal.

### Benefits of EscAAlate

- Consistent high quality digestible amino acids load after load
- Provides 60% more digestible histidine, 30% more Lysine, and 41% more EAA than average quality blood meal
- Promotes efficient milk protein synthesis
- Valuable nutritional package under MP deficient conditions such as during the immediate postpartum period

#### Citations

Räisänen et al., 2023. *J. Dairy Sci.* 106:6216-6231.

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**Animal Nutrition**