



# Why feed methionine throughout lactation?

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As for any essential nutrient, the methionine needs of dairy cows continues throughout lactation and also the dry period in preparation for the onset of the next lactation. Research recognized the benefits of methionine supplementation to the production of milk and milk components more than four decades ago. More recently, research revealed the benefits of methionine to health status and reproductive performance. Now methionine is recognized as an essential amino acid, key to the optimum functioning of a multitude of metabolic pathways in the dairy cow, to ensure her well-being and longevity in the dairy herd.

## Guidelines for amino acid balancing during lactation

- Begin amino acid balancing at least three weeks before calving to enhance dry matter intake and milk performance postpartum, reduce metabolic disorders, and improve reproductive performance.
- By setting the cow up right in the transition period, enriching diets with methionine will bear dividends throughout lactation. Gains in milk component yield generated prior to peak lactation will hold through the rest of lactation. As milk yields decline in later lactation, the gain in component yield will be seen as a further increase in milk component percent.
- Do not forget that the rumen needs its methionine too, particularly in the analogue form (HMTBa). Feed at 0.1% of dry matter intake to optimize rumen function and mitigate milkfat depression. Feeding the “Winning Combination” of supplementary metabolizable methionine plus rumen available HMTBa can be additive and can magnify the effects on milk and milk components.



## Guidelines for amino acid balancing during lactation (cont'd)

- From 100-200 days of lactation, continue amino acid balancing to maintain elevated levels of milk components and minimize embryonic deaths. Ration protein levels can be reduced strategically, to avoid overfeeding of protein and needless nitrogen excretion.
- During the last third of lactation, amino acid balancing can allow the feeding of very low protein rations to continue maximizing nitrogen efficiency and maintain milk performance.

Balancing the essential amino acid levels in dairy rations have been well proven as an effective nutritional tool at all stages of lactation.



Amino Acid Balancing.  
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