



What LYS:MET ratios should we be looking for in each model?

Under practical situations it is difficult to formulate to the optimal % of metabolizable Lysine (LYS) and metabolizable methionine (MET) as recommended by Whitehouse et al. (2009). In practice, the levels than can be achieved are **closer to 97%** of the optimal. The table below gives the practical target formulation levels for LYS and MET for each model

		Milk Protein %		Milk Protein Yield		Practical Formulation Guidelines	
		Target Formulation Levels*	LYS:MET Ratio	Target Formulation Levels*	LYS:MET Ratio	LYS & MET as % of MP	LYS:MET Ratio
NRC	Lys	6.60	2.97	6.89	2.82	6.74	2.89
	Met	2.22		2.44		2.33	
CPM V.3	Lys	7.24	2.90	7.28	3.00	7.26	2.95
	Met	2.49		2.43		2.46	
CNCPS v.6	Lys	6.48	2.78	6.54	2.92	6.51	2.85
	Met	2.33		2.24		2.28	

*97 % of Optimal

There are additional benefits when diets are balanced to optimize milk protein. When LYS and MET are provided in optimal balance, we also improve the efficiency nitrogen utilization. In fact, by concentrating the levels of LYS and MET in metabolizable protein (MP), total MP and crude protein can be reduced. It is not only good for the cow; It is also good for the environment. In the next Tech Note, I will discuss new parameters that can be monitored to track and improve nitrogen utilization.

Have Questions?

Please [contact me](#) if you have any questions or would like more information. I will personally respond to all emails.



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