

Rumen *in situ* Starch Digestion Guidelines for Dairy Cattle

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Note: The Goal corresponds to the top 15% of samples measured by Rock River Laboratory.

Feed	<i>in situ</i> Rumen Starch Digestion			
	Hours	Average	Goal	Low
Corn Silage	3	60 - 70	> 80	< 45
	7	70 - 80	> 85	< 60
	16	85 - 95	> 95	< 75
Ear Corn/Snaplage	3	60 - 70	> 75	< 45
	7	75 - 85	> 85	< 65
	16	85 - 95	> 95	< 85
High Moisture Corn	3	50 - 55	> 70	< 35
	7	65 - 70	> 80	< 55
	16	80 - 85	> 90	< 75
Dry Ground Corn	3	30 - 40	> 40	< 30
	7	50 - 60	> 65	< 45
	16	70 - 75	> 80	< 65
TMR	3	45 - 55	> 60	< 40
	7	60 - 70	> 75	< 50
	16	NA	NA	NA

Feed	Dynamic Starch k_d % Starch per h; Determined using 3 and 7h <i>in situ</i> SD		
	Average	Goal	Low
Corn Silage	20.0	> 25.0	< 12.5
Ear Corn/Snaplage	20.0	> 25.0	< 14.5
High Moisture Corn	15.5	> 22.0	< 12.0
Dry Ground Corn	12.0	> 15.0	< 8.5
TMR	15.0	> 20.0	< 10.0

Our Goals and benchmarks were developed using data from our database, data from Heuer (2014), as well as *in vivo* digestion data summarized by Goeser (2014).

References

Heuer, C.R. 2014. MS Thesis, University of Wisconsin – Madison.

Goeser, J.P. 2014. What do the cows have to say about NDF and starch digestion? Proc. 2014 Four State Dairy Nutrition and Management Conference. Dubuque, IA. pg. 47-55.



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