

Total Tract NDF Digestibility (TTNDFD) Guidelines

Eastern, Midwestern, and Western US Forages

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Forage	Goal	Average	Low
Alfalfa	> 50%	42.8 %	< 35 %
Corn Silage	> 48 %	41.2 %	< 35 %
Grasses	> 50 %	45.1 %	< 35 %
Small Grain Silage	> 48 %	43.5 %	< 35 %

Notes: Developed by Prof. David Combs, Univ. of WI - Madison, Dairy Science Dept. Validated by three Journal of Dairy Science articles (references below). Licensed by the Univ. of WI - Madison.

Rock River Laboratory standardized *in vitro* rumen NDF digestion measures (Goeser et al., 2009) for 24, 30, and 48h NDFD and uNDF240 values are used within the TTNDFD prediction.

Rock River Laboratory guidelines were set from population statistics from 4+ years of data with n= >350,000 samples analyzed. Goal and minimums represent 85th and 15th percentiles, respectively.

References

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Lopes, F., D.E. Cook, D.K. Combs. 2015. Validation of an *in vitro* model for predicting rumen and total-tract fiber digestibility in dairy cows fed corn silages with different *in vitro* neutral detergent fiber digestibilities at 2 levels of dry matter intake. J Dairy Sci 98:574-585.

Lopes, F., K. Ruh, and D.K. Combs. 2015. Validation of an approach to predict total-tract fiber digestibility using a standardized *in vitro* technique for different diets fed to high-producing dairy cows. J Dairy Sci. 98:2596-2602.

Lopes, F., D.E. Cook, D.K. Combs. 2015. Effects of varying dietary ratios of corn silage to alfalfa silage on digestion of neutral detergent fiber in lactating dairy cows. J Dairy Sci.