# TTNDFD

## TOTAL TRACT NEUTRAL DETERGENT FIBER DIGESTIBILITY Developed by the

University of Wisconsin-Madison

### FIBER DIGESTION VALUE

### ONE NUMBER. LIMITLESS APPLICATIONS.

The TTNDFD value on a Dynamic NDFD Forage Analysis report opens doors to evaluate forages easily and understand feedstuff fiber digestion at the cow level. A research-validated\* digestion model, TTNDFD equips you with an accurate forage digestion value benchmark and the ability to predict forage performance to save money and time while watching your herds succeed. TTNDFD expands your nutrition skill set with applications to optimize performance and efficiency on-farm - reaping benefits for your consulting herds. Here are a few ways nutritionists are using this tool:

#### COMPARE ACROSS FORAGES

Compare TTNDFD across all on-farm forages, on the same scale, to determine which forage will yield the greatest performance.

Incorporate TTNDFD into pricing and valuing forage to more accurately reflect quality.

#### MAXIMIZE ON-FARM FORAGES

Measure TTNDFD at harvest, then sort and allocate forages to cattle groups based on TTNDFD value.

- Feed high TTNDFD-valued forages to transition, fresh, and highperforming cows, where forage quality is a limiting factor.
- Allocate low TTNDFD-valued forages to heifers and dry cows, where rumen fill and lower quality are warranted.

Benchmark your current crops using TTNDFD to assess management and seed (genetic) improvements for future years, ensuring progress.



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#### COMPLETE THE FIBER STORY

Understand complex fiber digestibility at the cow level through the simplicity of the TTNDFD model value.

Garner insights from four different pieces of information built into one TTNDFD metric: 24, 30, and 48h NDFD (Neutral Detergent Fiber Digestibility\*\*) along with a uNDF (undigested NDF) measure ultimately provide four times the value of historic NDFD values

- Fiber digestibility is more variable than any other diet nutrient component.
  - While uNDF is used to help nutritionists understand performance, this measure only reveals part of the fiber story as the NDF digestion speed or rate (NDF kd) is equally important.
  - TTNDFD incorporates both digestion speed (NDF kd) and uNDF.

Consider strategies to improve diet forage and ration fiber digestion when forced to feed forage exhibiting a low TTNDFD value.

\* Lopes et al., 2015. J. Dairy Sci. 98:574-585.

\*\* Determined with a patented technique. Described by Goeser et al., 2009. J. Dairy Sci. 92:3842-3848.

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### FIBER DIGESTION VALUE

#### PREDICT NEW-CROP FORAGE PERFORMANCE

Utilize TTNDFD to forecast how forage will perform before feeding.

Improve the scope of what the cows will have to say by utilizing TTNDFD to predict their response.

Predict and minimize - or even eliminate - animal performance losses before they occur, by understanding how old-crop and new-crop forage TTNDFD values relate to each other.

#### GAIN EFFICIENCY AND PROFITABILITY OPPORTUNITIES

Save time and effort with an easy number to gauge quality and avert performance losses.

Level herd performance over time by utilizing the TTNDFD value to predict and then avoid significant swings in animal performance.

Avoid overfeeding expensive, purchased feeds by striving for high TTNDFD-valued forages.

Feed higher TTNDFD forages, and more of them, to help your herds yield more milk.

Optimize milk production with the ability to fine tune the ration using TTNDFD to identify and benchmark quality forage changes over time.

• A forage TTNDFD value change of 2-3 points equates to 1 lb. of milk when the forage comprises roughly 50 lbs. in the diet.

RRL Dynamic Package = \$4 increased cost over traditional analysis

Typical consultants sample every 2 weeks, per farm (for example, consider 100-cow dairy)

2 samples each of hay, small grain silage or haylage, and corn silage are pulled

At 6 samples or \$24 per month, this breaks down to less than a penny per cow, per day, to incorporate TTNDFD into your consulting portfolio!



Request a Dynamic Package for your next forage sample and try TTNDFD today! Contact Rock River Laboratory to learn more: 920-261-0446 | office@rockriverlab.com

PREDICT WITH CONFIDENCE