



**Direct
measurement
of digestibility**

Apparent Digestibility is a tool to measure total tract digestion of a ration fed to ruminant animals.

Dairyland Labs uses indigestible NDF (uNDFom) as an internal marker to estimate fecal output. Indigestible NDF passes through the digestive tract unaltered and unabsorbed; therefore, the same amount that is consumed should be excreted in the manure. The proportion of uNDF in the TMR and Feces is then used to calculate digestibility.

Apparent digestibility allows direct measurement of digestibility due to changes that are difficult to model and predict accurately including:

- Feed additives/supplements
- Particle size
- Passage rate
- Feed and nutrient interactions

Average/Expected Ranges and Interpretation Guide

Apparent Digestibility	Average	Expected Minimum	Expected Maximum	Goal	*Concern Level
NDF (%NDF)	44.4%	31.0%	57.8%	>50%	<35%
pdNDF (%pdNDF)	66.3%	49.5%	84.2%	>80%	<60%
Starch (%Starch)	96.9%	90.9%	99.9%	>98%	<94%
Organic Matter (%OM)	70.6%	59.7%	78.0%	>75%	<60%

*Worthy of comparing to expected outcome of quality of forages & feedstuffs being fed, or how diet is presented (particle size, slug feeding, potential sorting issues, etc.)

Pricing, Timing, and Analysis Included

Apparent Digestibility by NIR - \$61.00 (2 days in lab)

- Includes Dry Matter, uNDFom240, aNDFom, Starch, & Ash/Organic Matter analyses on TMR & Manure
- pdNDFom (potentially digestible NDF = aNDFom – uNDFom)
- Apparent Digestibility of NDF, pdNDF, starch, and organic matter

Apparent Digestibility by Chemistry - \$115.00 (10 days in lab)

- Includes Dry Matter, uNDFom120, aNDFom, Starch, & Ash/Organic Matter analyses on TMR & Manure
- pdNDFom (potentially digestible NDF = aNDFom – uNDFom)
- Apparent Digestibility of NDF, pdNDF, starch, and organic matter

