FORAGE DIGESTIBILITY INFLUENCES BOTTOM LINE

Digestibility of feedstuffs determines the energy intake for cows. Increasing in vitro NDF digestibility by one percentage point boosted feed intake by 0.37 pound and increased fat-correct milk production by 0.55 pound, according to research from Michigan State University.

Factors that influence digestibility include hybrid selection, environment (day length, temperature, soil moisture), and harvest management (maturity). Forages harvested too mature often have poor digestibility. This reduces intake and provides insufficient energy to support desired milk production. Ration deficiencies must be offset by other ingredients. Feedstuffs with high digestibility, such as beet pulp or soy hulls, may substitute for part of the ration forage content to increase diet digestibility.

The two most common methods used to measure digestibility are in vitro and in situ. In vitro digestibility measures are determined in a controlled laboratory setting. In situ digestibility measures are determined by incubating samples in an actual animal and provide values generated under conditions that most closely resemble commercial conditions. Both methods are commercially available to the industry and provide valuable insight for ration formulation.

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