

# Fiber

Over the years we have been in the deer nutrition industry, there have been many people (people trying to sell feed using a negative approach based on no science) make the comment that fiber is filler in a feed product. Honestly I have also heard many biologists say this. They also say a deer has “plenty of fiber in the wild”. I hear this and cannot believe that a biologist would make this statement. Yes, deer have plenty of fiber in the wild. A very, very poor quality fiber that is a last resort for them to eat 10 months out of the year. Only during green-up in spring is the fiber decent quality.

What fiber does for a deer (and any other ruminant) is provide a mat of fiber that exists in their rumen and allows for digestion to be balanced and to help maintain the pH of their rumen. In a very rudimentary way to describe it, it's like a digestive aid for their first stomach – the rumen. If fiber quality is low or even the quantity is low, the deer becomes stressed. Stress causes protein intake to decrease and acts negatively to their bodies just like stress takes a toll on us humans.

Given that a deer doesn't have access to good fiber for 10 months out of the year, why in the world would a good feed developer not want to put quality fiber in their feed? That's why nutritionists understand completely the need to balance a ruminant feed. That balance includes fiber, energy, and protein. Deer are not captive animals so some common sense is needed to look at protein levels and energy levels differently than cattle or goats but fiber is pretty much the same given that too much fiber can affect a deer negatively but the flexibility is easier with deer given that supplemental feed is usually not being overfed with deer that are natural browsers. Total fiber content levels up to around 30% are perfectly fine if the fiber quality measured as Neutral Detergent Fiber (NDF) is below 50%.

NDF is very much like Un-Degraded Protein (RUP) when looking at protein quality – hopefully you have read or will read the link for Protein Quality on the Feed Specs page. Like RUP, NDF is simply a measure of the % of the total fiber that is high quality. However, as NDF lowers the quality goes up whereas RUP is higher as the % goes up. Cotton fiber runs about 28%, Alfalfa hay runs about 40%, early spring green-up runs about 50%, bahia/Bermuda and other native grasses run about 70%, and woody browse fiber is worse than 70%. Finished feeds can run very low in NDF but usually the fiber content is low in those situations so you get no benefit. In our Monster formula, the fiber content runs about 20% with an NDF less than 40%. That is a very good combination.

And last but certainly not least is fiber length. The longer the fiber the better for ruminants. Unfortunately most feed mills hammer mill their fiber ingredients which decreases fiber length. Some of our AB 21% fiber ingredients are hammer milled where our Monster 28% fiber ingredients are not. I don't know of another feed besides Monster 28% that is not hammer milled.

In summary, don't let someone fool you into thinking fiber is a waste. It's very important to how effective a feed is and provides your deer something they desperately need 80% of the year.

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