Use of Straw Bedding for Calves Does Not Affect Dietary Studies

Addition of hay to calf starter diets reduced diet digestibility but use of straw bedding had no effect, according to a new article in Applied Animal Science

Philadelphia, PA, June 10, 2019 – Long straw bedding provides health and performance benefits to calves; however, some researchers prefer not to use straw bedding during research trials because it can be consumed by calves. Feeding hay with calf starters is common practice, but the hay can reduce digestibility of the calf’s diet. Scientists at the Nurture Research Center at Provimi recently studied the effects of straw bedding and feeding of hay on nutrient digestibility in calves less than two months old.

During the 56-day study, 16 calves were bedded on straw bedding or fabric-covered rubber mats. They were fed diets that did or did not contain hay to study the effects of bedding and hay consumption on diet digestibility. Diet digestibility was lower for calves offered low or moderate quality hay than for calves not fed hay, as expected. There was a negative relationship between dietary organic matter digestibility and hay intake, whether measured by weight or as a percentage of total dry matter intake; however, the use of straw bedding did not influence estimates of diet digestibility.

“Straw was high in indigestible acid insoluble fiber compared with hay or starter and, if consumed, should have influenced the concentrations of these nutrients in fecal dry matter, but it did not,” senior author Mark Hill said. “These results suggest that minimal bedding was consumed by the calves in this study.”

Applied Animal Science Editor-in-Chief David K. Beede said, “Young dairy calves are often kept in individual pens to monitor health and diet consumption. Calves also may be kept in pens with long straw bedding to promote warmth and cleanliness. If consumed in unexpectedly great amounts, the hay and (or) straw might affect total diet digestibility, growth, and health.”

“Use of long wheat straw as bedding did not alter estimates of digestion in calves consuming coarse, textured starter and fed hay or not fed hay, indicating that consumption of bedding was small,” Hill added. “Therefore, calves can be bedded with long-straw bedding for positive benefits on growth and health, and without compromising dietary digestibility.”

An article detailing the study appears in the June issue of Applied Animal Science.
NOTES FOR EDITORS


Full text of the article is available to credentialed journalists upon request; contact Brittany Morstatter at +1-217-356-3182 ext. 143 or arpas@assocho.org to obtain copies. To schedule an interview with the authors, please contact T. Mark Hill at +1-937-770-2400 or mhill@provimi-na.com.

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