

ABSTRACTS
*** Author Presenting Paper**

123 Effects of health status, performance, and environmental change on feeding behavior of feedlot cattle. M. N. Streeter* and M. E. Branine, *Roche Animal Nutrition and Health, Parker, CO.*

Understanding feeding behavioral responses of feedlot cattle to health, management, and the environment continues to be a challenge for the cattle feeding industry. Many of the behavioral paradigms that influence management decisions are based on anecdotal experiences. Primarily because obtaining behavioral data without introduction of an artificial feeding environment or the high labor demanded by short-term observations of individual animals has limited research progress in this area. A technology recently has been developed that simultaneously monitors all cattle at the feed bunk or water trough in either a commercial or research environment. This system has been used to evaluate the impact of health status, animal performance level, feeding practices, and to a limited extent environmental change on feeding duration and frequency. Research suggests the variation noted in feeding duration and frequency for morbid cattle in commercial feedlot pens tends to be greater than that previously observed in research studies conducted using behavior monitoring techniques that alter social interaction. The concept that feeding management practices train cattle consuming high starch diets to develop eating patterns desirable for optimal ruminal stability and consequently performance does not appear to be supported by this research. Cattle consuming energy dense rations typically spend less than 60 minutes per day consuming feed. Research has indicated individuals with the poorest ADG appear to spend more time consuming feed than pen mates with the greatest ADG; with no apparent difference in feeding frequency. Feed consumption patterns do not appear to be altered by time of feed delivery, when feed is provided ad libitum once daily. Behavior data may become a valuable tool to identify poor performing cattle, train pen riders, alter management decisions and identifying morbid cattle earlier in the disease process thus improving treatment success and reducing medication cost.

Key Words: Feeding behavior, Feedlot cattle, Electronic monitoring