# DAIRY HERD
## NETWORK

# Study examines precision ration monitoring

Kim Schoonmaker, Contributing Editor | Updated: March 26, 2012

"New and affordable technology is available that allows dairy producers to improve the accuracy and precision of feeding," says Noah Litherland, assistant professor of dairy nutrition at the University of Minnesota. "Precision dairy nutrition is a systems concept that allows producers to account for daily variation that occurs on farms."

There are five main components in a precision dairy nutrition system:

1. Harvest
2. Modeling cow requirements
3. Feeding management
4. Milk nutrient output
5. Waste nutrient output

Recently, Litherland and colleagues examined the accuracy of a new precision feeding technology that scans individual ingredients using near-infrared reflectance (NIR) and adjusts dry matter while the ration is being mixed. They compared this technology to weekly adjustment of ingredient dry matter using oven drying (control).

According to results reported at the 2012 Midwest meeting of the American Dairy Science Association in Des Moines, Iowa, the NIR technology, also known as Intelligent Ration Monitoring or IRM, was just as effective at maintaining TMR consistency as traditional oven-drying methods.

There were no differences in TMR dry matter, starch, crude protein, acid detergent fiber and neutral detergent fiber between the two treatment groups. There also were no differences in dry matter intake, fat-corrected milk, milk fat percent and yield, and feed efficiency. However, milk protein was higher for the IRM treatment.

The conclusion was that cows fed the IRM-adjusted ration performed as well as those fed a ration adjusted using traditional oven-drying methods.

**Find this article at:**

http://www.dairyherd.com/e-newsletters/dairy-daily/Study-examines-precision-ration-monitoring--144313185.html