dhia

Scott Williams
Training Coordinator
Call *1-800-DHI-TEST*, fax *(814) 865-3294*
Web site http://www.dhia.psu.edu
Pennsylvania Dairy Herd Improvement Association
DHIA Service Center, Orchard Road, University Park, PA 16802

Dairyman To Dairyman

GEORGE CUDOC
PA DHIA
Consulting
Dairyman

Question: We track MUN on a monthly basis and have been very successful at maintaining a 12-13 mg/dl average. Suddenly our September MUN test dropped to less than nine. What factors could contribute to this?

Fall feeding and new crops make this a common scenario. Most producers who test monthly for MUN see the correlation between constant MUN values and their success in maintaining a constant diet fed to their cows.

There are numerous things that can happen within the cow's diet that spoil the plan. One is so simple that we often overlook it. Moisture changes within the forage part of the diet can change more than the dry matter intake. Make sure diets are adjusted for this change but also consider this thought: typical Pennsylvania forage is some sort of hay crop silage. There are tremendous variations in moisture levels as the hay crop is ensiled in trenches, tower silos, bags, and wraps. Typically protein tests can be similar regardless of moisture level but often the soluble or degradable portion of that protein changes with moisture content. Moisture levels lower than 50 percent and those higher than 60 percent, even though crude protein remains the same, can be quite different depending on what rumen bugs are available. As a rule of thumb, when moisture levels decrease the soluble or degradable portions also decrease. Wet forages also show higher soluble or degradable portions.

This farm was advised to look at changes concerning this part of the diet and indeed haylage has dropped from 65 percent to 50 percent moisture as feed from their bunk. Soluble protein levels of the wetter feed were 64 percent and on the dryer feed, 56 percent. This change resulted in less available protein for use by rumen bugs, less milk produced, and drastically reduced MUN values.

Sometimes changes occur in our cows and we can only react to them. This dietary change was not planned but nevertheless had a large impact on the cows. We can use this situation to build a plan for the future that allows us to anticipate performance changes triggered by feed changes. Simply put, if I had haylage that remains top quality but changes occur in the protein fractions and moisture content, I would do what is necessary to head off performance changes in the cows.

MUN, in this instance, not only gave us a diagnostic tool for today's production but we have found that by knowing what drives MUN in the diet can help us ward off potential negative trends in production. Do not be satisfied with acceptable MUN values but instead use constant testing and relate MUN with diet changes. By doing so, I believe the four-pound loss on 260 cows for an undetermined length of time could be avoided. Isn't the risk of losing $150 daily worth testing for and learning how to use MUN? I think it is. Use the tools available along with your farm advisors to help avoid a potential loss. Better yet, develop an aggressive attitude toward DHIA records and force yourself to act, not just react.

Average Farm Feed Costs for Handy Reference

To help farmers across the state to have handy reference of commodity input costs in their feeding operations for DHIA record sheets or to develop livestock feed cost data, here's last week's average costs of various ingredients as compiled from regional reports across the state of Pennsylvania.

Remember, these are averages, so you will need to adjust your figures up or down according to your location and the quality of your crop.

Corn, No.2y — 2.37 bu., 4.23 cwt.
Wheat, No.2 — 2.38 bu., 3.97 cwt.
Barley, No.3 — 1.62 bu., 3.46 cwt.
Oats, No.2 — 1.51 bu., 4.71 cwt.
Soybeans, No.1 — 4.41 bu., 7.36 cwt.
Ear Corn — 75.55 ton, 3.78 cwt.
Alfalfa Hay — 134.25 ton, 6.71 cwt.
Mixed Hay — 138.75 ton, 6.94 cwt.
Timothy Hay — 141.25 ton, 7.06 cwt.