

Vet's Corner: Regular Bulk Tank MUN Testing

Last month, a local milk buying cooperative invited my partner, Stephen Wadsworth, and I to participate in a discussion about providing routine bulk tank MUN testing in milk quality reports. Since the Coop's purchase of a Delta Lactoscope, the MUN test can be added onto the present array of milk solids and quality milk tests. Cornell research estimates routine monitoring of MUN has a financial reward of 10 to 1, when added to monthly DHIA reports. So this coop intends to improve the profitability of all patrons willing to use the new information.

MUN testing has lost some of its popularity recently, but still remains a valuable tool for Veterinarians and feed company reps. Even though it is reasonably priced, MUN testing has been perceived as an unnecessary added cost and is usually used sporadically for support of the diagnosis of suspected nutritional problems.

Due to the individual cow's variability in MUN results, it is best to test a group of cows and interpret on the basis of the group's average instead of individual cow results. In the case of the proposed bulk tank test, each farm will establish a baseline level over a 4-6 month period and keep an eye on deviation from the baseline. This will change the perception of the test from the current support role to an early indicator of problems.

Deviation of MUN test can be responsible for some common problems that can have a large effect on the profitability of a dairy farm:

1. **Poor Conception Rate** is a major problem that Veterinarians associate with a high MUN over 16 mg/dl. If 21 day preg rates drop into single digits, over feeding of rumen soluble protein as indicated by a high MUN is one of our first rule-outs.
2. **Low Milk Protein** financial compensation can result from underfeeding crude protein. A low MUN test (under 11mg/dl) in association with low milk protein can lead to making the proper ration adjustment.
3. Over feeding expensive protein supplements or underfeeding inexpensive energy sources can be indicated by a high MUN test. Knowledge of high MUN can lead to creating a **lower cost ration** that will maintain production and components.

Kent E Henderson, DVM
Northwest Veterinary Associates, Inc.
hugamoo@comcast.net