

# MILK UREA NITROGEN TESTING

Eastern Laboratory Services (ELS) strives to provide the most accurate, timely and cost-effective dairy testing services in the industry. ELS makes testing easy and convenient.



## What is MUN?

Milk urea nitrogen (MUN) is a natural waste product of protein metabolism and a means to eliminate excess protein in a cow's diet

## What is the source?

- Metabolized and excess protein is converted to urea
- Urea is released into blood - blood urea nitrogen (BUN)
- Urea diffuses into other body fluids, including milk-milk urea nitrogen (MUN)
- Concentration in milk is approximate to that of blood
- Milk provides easily obtained samples to estimate blood levels

## Benefits of Testing

- Saving on feed costs by eliminating underutilized protein in the ration (monitor feeding efficiency)
- Reducing nitrogen loading in soil and ground water
- Improving reproductive efficiency

## How to test

Samples are generally taken from at least 10 cows to determine an average MUN value. A tank sample may be used. However, a better indicator of average MUN levels is the average of several bulk tank samples.

## Interpreting test results

- Average of individual cows or bulk tank should be between 10 and 16 mg/dl. (mg/dl. equals one thousandths of a gram in one tenth of a liter of milk)
- Average bulk tank MUN will be higher for herds with higher rolling herd average (RHA) and lower RHA at low end (see chart below)
- Samples taken just before feeding will naturally result in lower values
- Consult with your herd nutritionist or veterinarian to obtain an interpretation of your MUN test results; one or more factors may be involved

