Introducing …

KetoMonitor™

Measure Ketosis Prevalence in Your Herd

A convenient, cost-effective way to monitor ketosis using monthly DHI test-day milk samples.

Developed by UW-Madison Department of Dairy Science and School of Veterinary Medicine

Brought to you exclusively by AgSource

Is Ketosis Robbing You of Profits?

Research shows that ketosis (clinical and subclinical) affects 40 to 60% of dairy cows at an average cost of $289 per case. Cows with ketosis produce less milk, are less likely to conceive at first service, are more likely to develop a displaced abomasum, and are more likely to be culled from the herd. Ketosis is a costly disease, but it can be managed if monitored.

Most ketosis detection involves testing individual fresh cows weekly using a blood sample and a Precision Xtra® meter. While milk fat to protein ratios have been used to indicate ketosis problems at the herd level, they are only weakly correlated to blood beta-hydroxybutyrate (BHBA) concentrations on an individual cow basis. The KetoMonitor is unique because it is based on a set of regression models that predict blood BHBA concentration using a DHI milk sample, component data and individual DHI cow data. KetoMonitor estimates ketosis prevalence in the herd on the day of milk test with a high degree of accuracy (91%).

Onset of Ketosis Differs

Ketosis onset is most common between five and nine days in milk (DIM) and prevalence is greater in cows than in first-calf heifers. Given these differences, models were developed specifically for both first-calf heifers and cows. Research and preliminary sampling validated that factors affecting the onset of ketosis also differ among dairy breeds. As a result, a separate KetoMonitor model has been developed specifically for Jerseys, with assistance from the AJCC Research Foundation of the American Jersey Cattle Association.

The KetoMonitor Report:

- Estimates herd ketosis prevalence on the day of milk test
- Guides management and nutrition decisions
- Alerts you when blood testing protocols should be employed
- Flags changes that have had an impact on transition cow health

The ketosis prevalence reported is a snapshot taken on test day. Typically, the incidence, or the actual number of fresh cows with ketosis, is 2 to 2.5 times the prevalence levels found on the report.

A Multi-Tool Approach to Managing Ketosis

KetoMonitor can be used to evaluate monthly ketosis prevalence and can identify when blood testing should be done. When prevalence is between 7 and 25%, research shows the expense of blood testing every fresh cow twice is justified. However, when herd prevalence levels fall below 7%, time and money spent on blood testing can be saved. If herd prevalence levels exceed 25%, it is most economical to consider blanket treatment. The economics and practicality of blood testing are different across farms, but the KetoMonitor can play a valuable role in any detection protocol by providing monthly prevalence indicators. The KetoMonitor report tracks levels over a period of 12 months, allowing producers to recognize the impact of seasonal, forage and nutrition, and management changes. Combined with the Transition Cow Index® from the AgSource Fresh Cow Summary, it provides a comprehensive means to monitor and manage transition cows.

DEPARTMENT OF DAIRY SCIENCE
University of Wisconsin-Madison

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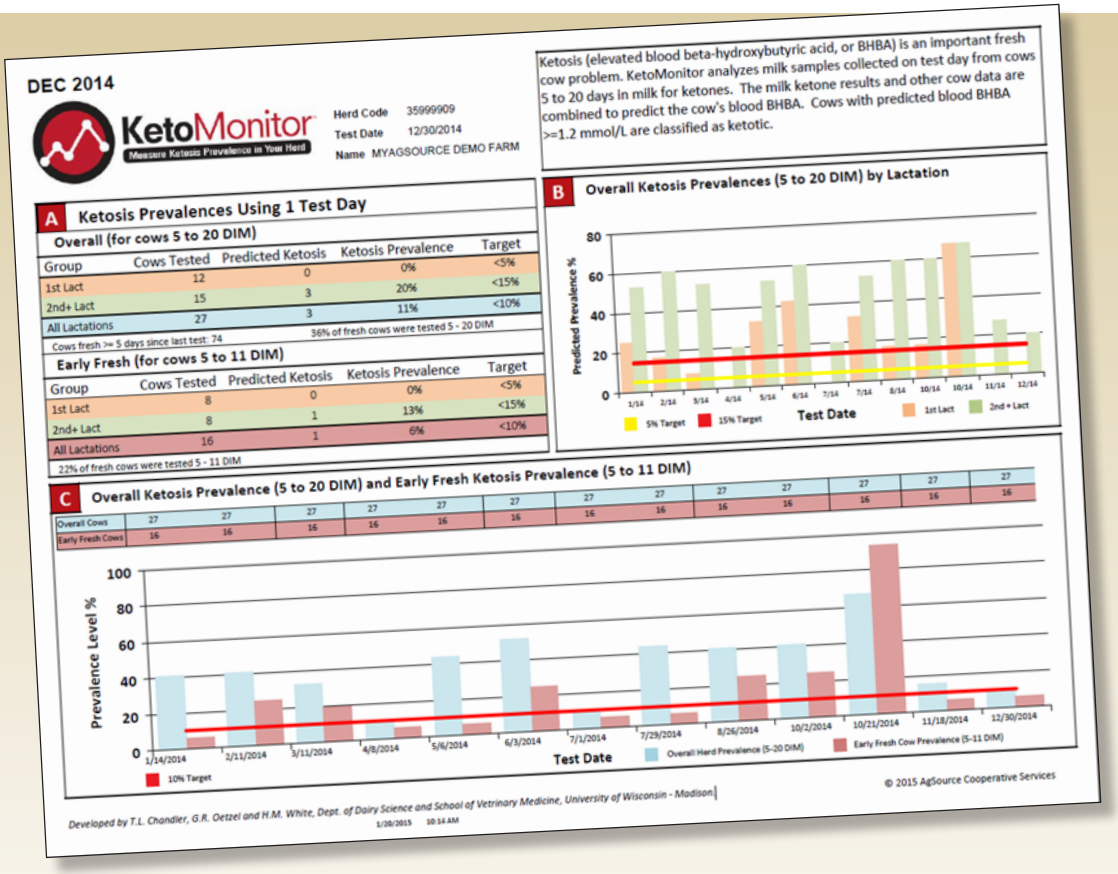

The KetoMonitor Report

The KetoMonitor report is quick and easy to read. As mentioned, ketosis behaves differently by age and breed, so prevalence thresholds differ for first calf heifers (<5%), cows (<15%) and overall (<10%), therefore, KetoMonitor charts and graphs the information for both age groups and the herd's overall prevalences separately. In addition, graphs illustrate current test-day information and compare it to the previous 12 months to help spot trends.

Cows predicted to have ketosis on the current test day, and likely in need of immediate attention, are listed on the back side of the report. If available, their pen, lactation number, DIM, days dry and age at first calving are also recorded. Cows tested during the early fresh period, 5 to 11 DIM, are highlighted in light blue. Those 12 days to 20 days fresh are listed below them. The report also lists all cows due to calve within 90 days that were flagged positive for ketosis in a prior lactation, allowing them to be monitored more closely at calving.

The KetoMonitor report recognizes different herd sizes. Herds with, on average, more the 20 cows freshening each month will be summarized using fresh cows for a single test day. Herds freshening, on average, 10-20 cows per month will use cows fresh reported spanning two test days, and herds with less than 10 cows fresh each month will be summarized using fresh cows reported spanning three test days.

Similar to the milk pregnancy and Johne's report, the KetoMonitor report is mailed separately from the test day report package.

Summary

Ketosis is a costly, but manageable disease. KetoMonitor provides an effective way to monitor herd level prevalence. It offers a new approach to herd level testing and can be used in conjunction with blood testing. KetoMonitor provides an economical option for farms that don't always need to do blood testing, or don't have the labor to do blood testing.

How Do I Enroll on KetoMonitor?

Contact your local DHI manager or call AgSource Customer Service at **800-236-4995** to enroll. AgSource members who access their DHI information and reports online via MyAgSource™ will find the KetoMonitor report included at no additional charge.

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