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RumINSIGHT

RumINSIGHT, a new and innovative tool from the makers of KetoMonitor, measures the fatty acid composition of milk. Fatty acids are the building blocks of milk fat, providing insights into certain areas of cow performance like rumen health and function and the overall health of a cow.

With this new tool you and your nutritionist can effectively monitor your herd in multiple ways to tailor rations and other management areas to maximize butterfat leaving the farm – which means more dollars added to your bottom line.

WHAT ARE FATTY ACIDS?

There are three primary types of fatty acids that make up milk fat: de novo, preformed, and mixed – each providing specific insights about cow performance as it relates to the production of milk fat.

DE NOVO

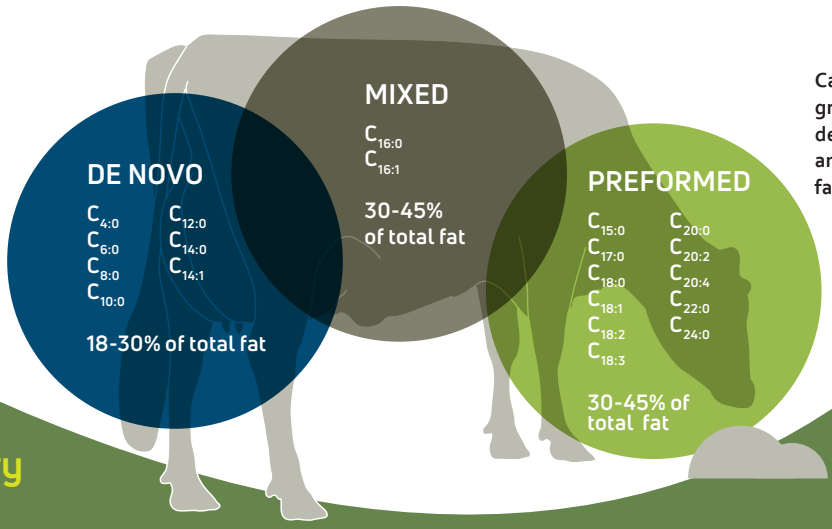
Originating from volatile fatty acids in the rumen that are transported to the udder for synthesis into milk fatty acids, these are the greatest driver of bulk tank butterfat – indicating strong rumen health and function

PREFORMED

As the name implies, these fatty acids are formed prior to reaching the milk, coming directly from the diet or can be mobilized off body fat reserves

MIXED

These fatty acids originate from the diet or are synthesized within the cow



Carbon chain groupings for de novo, mixed and preformed fatty acids

At the heart of your dairy

ruminsight.vas.com

RumINSIGHT

WHY MONITOR AND APPLY FATTY ACID DATA ON MY FARM?

- The fatty acid composition of milk serves as a barometer and warning system for the herd – before visible effects are displayed
  - An impending drop in components may show up in fatty acid profiles before the bulk tank
  - A decrease in energy density and subsequent weight loss in cows due to ration changes may appear through fatty acid data before visual detection of body condition loss
- Maintain greater control over the delivery of precisely formulated and economic rations. Feeding trials, forage changes and management protocol changes can all be examined with better indication of true performance within the cow by comparing changes in de novo and preformed fatty acid concentrations
- Leverage the combination of fatty acid profiles of individual cows to determine the effects of ration changes meant to influence rumen fermentation or components at a pen or herd level

Individual fatty acid data points layered in a variety of ways for meaningful ways for easier nutrition and cow management decisions:

By compiling data on a herd level, you'll be able to examine historical trends within your herd, and compare your herd's performance to other herds within our database.

Gain insight into how growing first lactation animals are performing compared to the most productive animals in the herd – the mature third and greater lacation animals.

Days in Milk (DIM) can give perspective at crucial times in the cow's life, allowing you and your nutritionist to better answer questions around fresh cow performance and lactation starts, as well as how pre-dry off cows are being set up to perform in subsequent lactations.

The most valuable data can be found when analyzing pen/group performance – giving you the power to fine-tune individual rations based on pen population and results. Pen/group data allows for more informed trials of feed additives and ration changes when utilizing with a comparison group.

Listen better with RumINSIGHT. Call your VAS representative to get started today.
888.225.6753

A convenient, cost-effective way to monitor ketosis using milk samples.

KetoMonitor®

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

Brought to you exclusively by VAS

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 was developed specifically for Jerseys.

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 VAS Fresh Cow Summary, it provides a compre-hensive means to monitor and manage transition cows.

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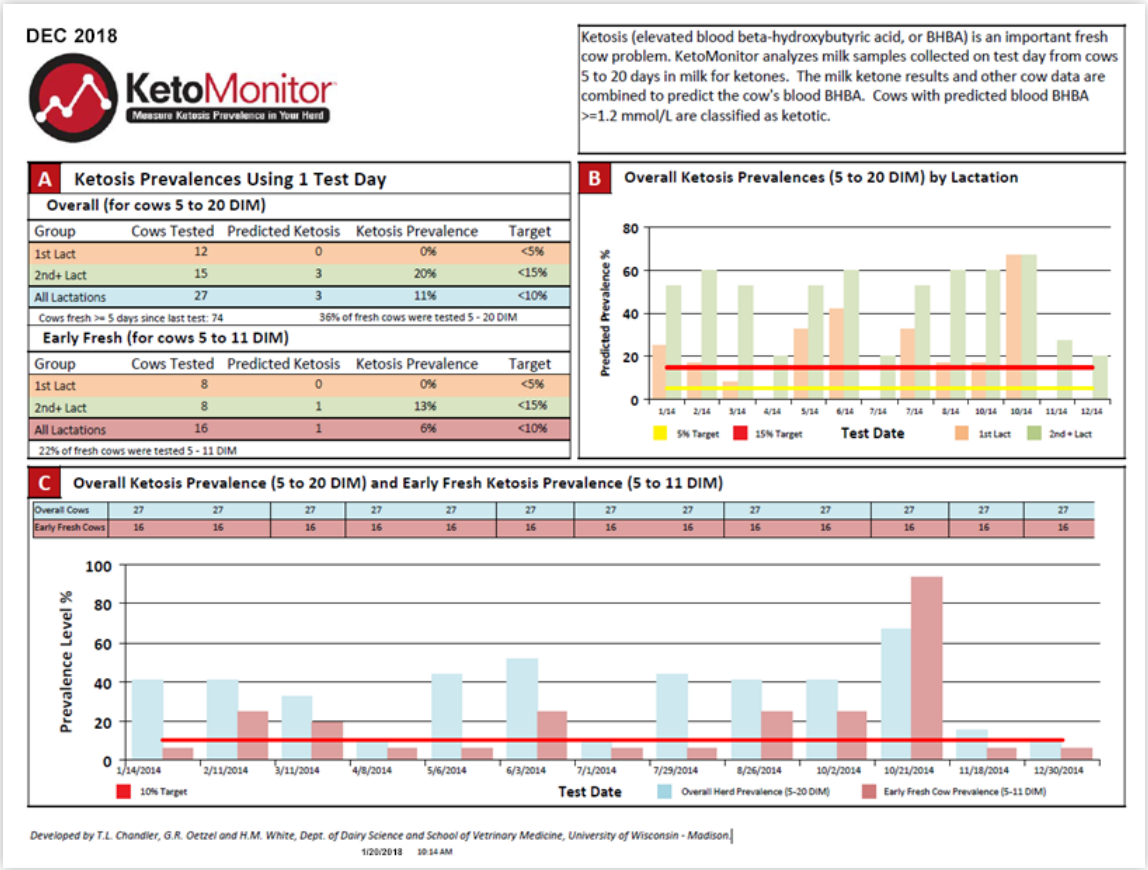

The KetoMonitor™ Report

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.

KetoMonitor™ is not intended to identify individual cows for treatment, however the model is remarkably strong for cows tested during the early fresh period (5 to 11 DIM). Cows predicted to have ketosis within that range likely need immediate attention and are listed on the back side of the report along with their pen, lactation number, DIM, days dry and age at first calving, if available.

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.

To enroll in KetoMonitor™, contact an VAS representative, or call 1.800.236.4995. VAS members and customers who access their results via MyAgSource will find the KetoMonitor™ report there, as well as on the VAS platform.

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