Regularly testing and treating your cows for subclinical ketosis can help you reduce losses associated with the disease, which can affect your bottom line. University of Guelph researchers recently compared the economic benefits of milk, urine and blood tests to detect and treat subclinical ketosis. Without proper diagnosis and treatment, subclinical cows are at risk of developing other diseases, which can affect your herd’s health and profitability.

“Farmers and veterinarians are keen about preventing and treating disease on farms. In addition, they care about the welfare and well-being of animals on the farm,” says Khaled Gohary, University of Guelph graduate student. Gohary and Ontario Veterinary College researchers conducted the study.

“We want to make them aware of the costs of this disease and how much it can impact the productivity and performance of a herd,” he says.

Subclinical ketosis, unlike clinical ketosis, has no visible symptoms such as decreased appetite, weight loss and firm, dry manure. A producer can lose an estimated $340 of revenue per cow with subclinical ketosis, says Gohary. If the disease is not diagnosed and treated early cows have a higher risk of developing displaced abomasum, metritis, retained placenta and clinical ketosis. Diagnostic tests can help, says Gohary.

Three tests commonly used in the field to detect subclinical ketosis in cows are Ketostix, a urine strip test, Keto-Test, a milk strip test, and a blood test using a handheld meter called Precision Xtra. These tests have different sensitivities and specificities, says Gohary. Their ability to classify sick and normal cows varies. Precision Xtra is the most accurate at testing cows positive or negative for subclinical ketosis, he says.

Producers received a $10 return for every dollar spent using Precision Xtra or Keto-Test to diagnose subclinical ketosis, and then treat cows with propylene glycol, says Gohary. Using Ketostix yielded a $6 return, he adds.

Since Precision Xtra detects more cases of subclinical ketosis in cows, fewer cows will be incorrectly classified as normal. Therefore, producers can minimize the costs of treating non-subclinical ketotic cows, he says.

Precision Xtra is also a more objective test because it uses a handheld meter to measure blood ketone levels and requires no further interpretation, says Gohary. Ketostix and Keto-Test use the strip’s colour to diagnose the disease, which can be interpreted subjectively.

Gohary says there should be more emphasis on prevention, early detection and monitoring programs to reduce and treat subclinical ketosis as soon as possible. Gohary encourages producers, with the help of their herd veterinarian, to design a subclinical ketosis monitoring and prevention program that specifically meets their goals and fits their farm-specific settings. Tests such as Precision Xtra or Keto-test may have the highest return on investment, but may not be practical to use in your current set-up, he adds.

“When farmers implement prevention programs, it will mean decreased disease incidence, fewer animal losses and increased profitability, says Gohary.”

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