Vet's Corner: BHBA Testing (for Subclinical Ketosis) Update

Seven years ago, our practice began to send serum samples to a University lab to test groups of fresh cows for subclinical ketosis. As noted in a recent Farm Report, an affordable convenient cowside test is now commonly used. The cost of the Ketone test strips are less than the cost of laboratory testing, the results are known immediately, and we have confidence in the accuracy of the hand held test.

The most common use of the test in our practice is during the initial and follow up visits of a transition cow problem investigation. If the farm walk-around uncovers concern that subclinical ketosis could be predisposing cows to DA, Metritis and other metabolic disease; the BHBA meter is used to confirm the diagnosis. Twelve cows that are 5-25 days in milk and appear to be in normal health are placed in headlocks and blood is drawn from the tail vein with a 1 ml TB syringe (sorry, the lancet provided for use on human finger tips doesn't work on cow hide.) If only one cow tests high, the investigation proceeds to determine nutritional, management, and nutritional causes of ketosis. The problem is not considered to be solved until a subsequent group of cows test negative after going through an improved management program.

A new use of the blood test has been to help with accurate diagnosis of Fatty Liver Syndrome which can complicate Displaced Abomasum cases. Veterinary clinicians have learned to use the BHBA test before doing surgery to help producers decide if a cow is a good candidate for the surgery. Some cows test so high that a slow recovery can be predicted and the producer can anticipate an extended treatment period or decide to send a cow with a poor prognosis to slaughter.

A potential use of BHBA blood testing could be in problem herds that are in the process of correcting diet or management of transition cows. For herds, where sick cows turn up in the high production herd shortly after movement from the fresh pen; some producers are testing every cow before she makes the move and only graduate normal BHBA testing cows from the fresh pen to the high production group. This would only be used in addition to management improvement and not a permanent task.

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