

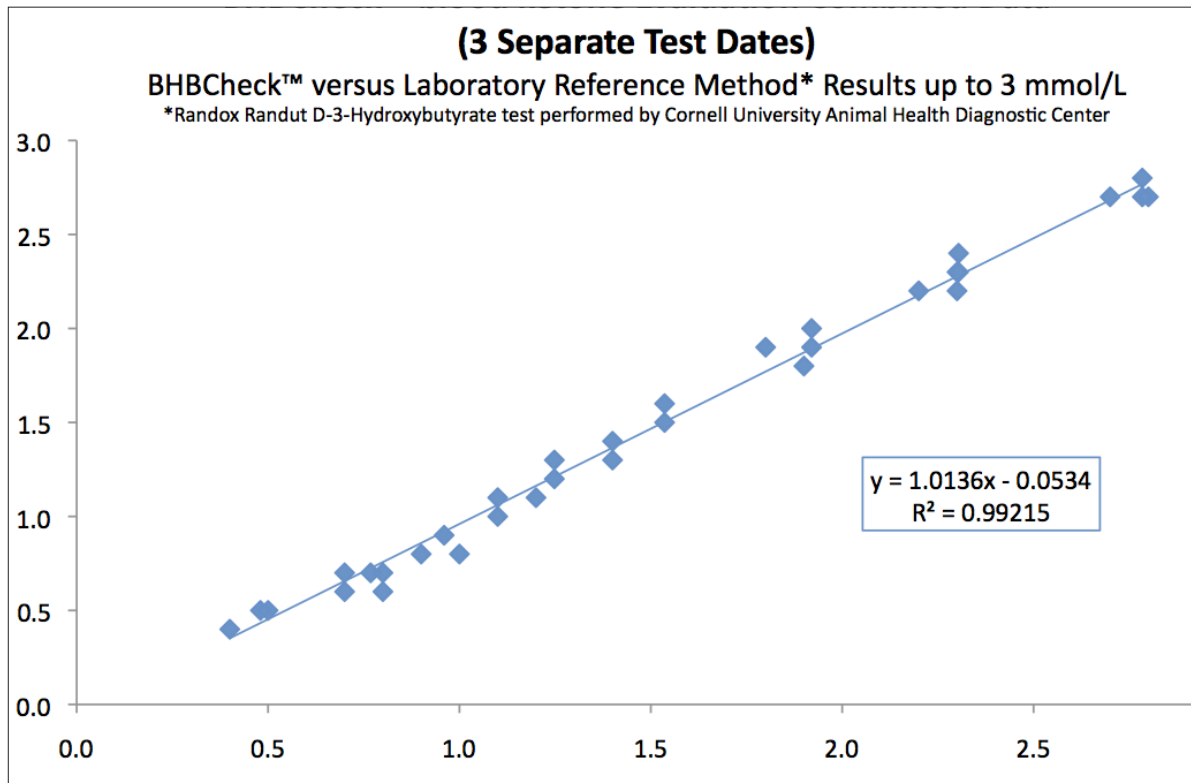
The BHBCheckTM blood ketone test is a new, hand-held instrument developed for on-farm detection of sub-clinical ketosis in dairy cows.

SAMPLE PREPARATION:

Heparinized bovine whole blood samples were purchased from Biological Specialty Corporation (Colmar, PA). The samples were split into aliquots, and each aliquot was spiked to a targeted level of BHB. Each spiked whole blood aliquot was split and a portion of each sample was tested on the cow-side test system. The other portion was centrifuged to separate the red blood cells from plasma for evaluation at an independent reference laboratory (Animal Health Diagnostic Center (AHDC) at Cornell University). The staff at AHDC used the Randox Ranbut D-3-Hydroxybutyrate test on a Mod P Roche – Hitachi to determine the concentration of BHBA in each of the samples.

ACCURACY:

To evaluate the accuracy of the BHBCheckTM blood ketone test, ten levels of BHB ranging from the native to approximately 3.0 mmol/L were created on three different test dates. The combined results of the BHBCheckTM versus the reference laboratory are illustrated in the graph below:



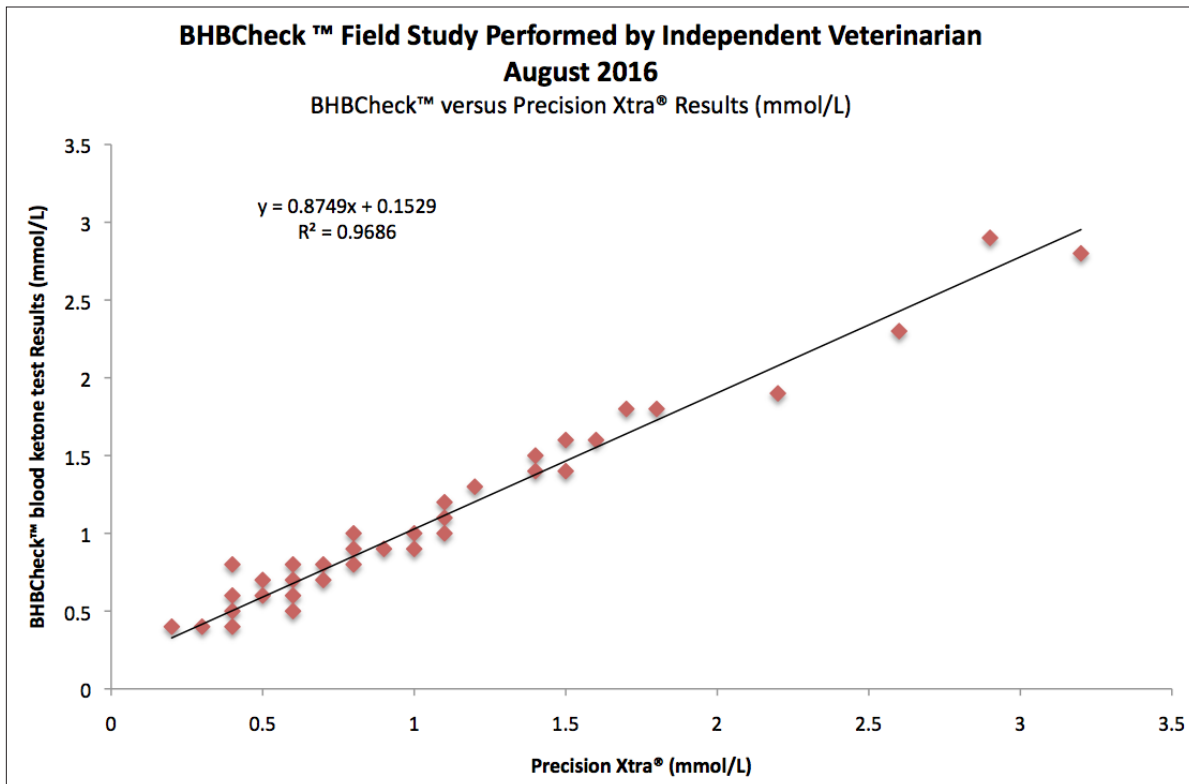
PRECISION:

The precision of the BHBCheck™ blood ketone test system was evaluated for repeatability at 1.2 mmol/L. A spiked bovine whole blood sample was tested with twenty BHBCheck™ blood ketone test strips (four on each of five distinct BHBCheck™ meters). A summary of the results is shown in the table below:

BHBCheck™ blood ketone test Precision Results 1.2 mmol/L	
n:	20
Average:	1.2
SD:	0.04
CV:	3.0%

FIELD DATA:

BHBCheck™ blood ketone test strips were provided to an independent veterinarian for evaluation. The results of the BHBCheck™ versus the Precision Xtra® are presented in the graph below:



Note: One outlier removed. Sample contained very high concentration of BHBA