ACUTE PHASE PROTEINS IN NATURALLY OCCURRING RESPIRATORY DISEASE OF FEEDLOT CATTLE: A NOVEL APPROACH TO DIAGNOSIS

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ABSTRACT

This study evaluated the concentrations of three acute phase proteins in naturally occurring respiratory disease of feedlot cattle as diagnosed by the Wisconsin calf health scoring chart. Seventy-seven beef calves were observed for signs of Bovine Respiratory Disease (BRD) during the first 28 days after arrival at the feedlot. Fourteen cases and pen matched healthy controls were selected based on the CHSC. BRD cases were defined as a score of ≥5, while controls were defined as a score ≤ 4. The mean CHSC score in cases was 6.9 which was significantly greater than the controls 2.8 (P < 0.01). Mean plasma LBP and Hpt concentrations were significantly greater in cases than controls (P < 0.01). Our study results show that measurement of Hpt and LBP could be useful in detecting respiratory disease in feedlot conditions. Transferrin concentrations between the two studied groups was not significantly different.