Public Abstract

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Title:POTENTIAL DIAGNOSTIC METHODS AND NUTRITIONAL CHANGES TO COMBAT BOVINE RESPIRATORY DISEASE IN RECEIVING CATTLE

Bovine respiratory disease (BRD) accounts for up to 70% of health disruptions and \$500 million in associated medical costs and production losses, thus receiving considerable attention from cattle health personnel in production and research alike. Experiments were conducted in 2 studies to investigate aspects of nutrition and animal health in receiving cattle. Blood chemistry and immune components of sick and healthy cattle, along with feed intake, growth, and feed efficiency were evaluated for methods potentially useful in BRD diagnosis or offsetting performance losses. Intake, blood chemistry analysis, and immune proteins known as acute phase proteins provided patterns with possible complementarity for more accurate objective BRD diagnosis. Feed efficiency was improved by supplementing amino acids to exceed nutrient requirements. Utilizing these findings could provide incremental improvements in the current stalemate against BRD, improving both beef industry profitability and animal welfare.