

Update on Colostral Supplements

Results of the National Dairy Heifer Evaluation Project conducted by the USDA in 1991-1992 show that appropriate management of colostrum feeding (volume fed and timing) was the single most important means of decreasing calf death loss. Calves with higher serum immunoglobulins were much less likely to succumb to infectious disease. Serum immunoglobulin in the newborn calf is provided by passive transfer of immunoglobulins from dam to newborn calf via colostrum.

Commercial suppliers have sought to develop products labeled as colostrum-supplements which they market to prevent diseases in newborn calves. Feeding these colostrum supplements to newborn calves is better than withholding colostrum; however, the more relevant concern is a comparison between feeding colostrum supplements and farm colostrum. Drs Garry, Adams, Cattell and Dinsmore at CSU recently published the results of such a study. Holstein calves were fed two 2 qt meals of colostrum or 1 of 3 colostrum-supplements within 12 hours of age. Calves fed natural colostrum had higher serum IgG concentrations, more efficient absorption of colostrum IgG, and fewer episodes of disease during the first 30 days of life compared with calves fed colostrum-supplement products. Although the colostrum products contained more immunoglobulin than was reported on the label and were fed at volumes that were 3 to 4 times that of the manufacturer's recommendations, they were far inferior to natural colostrum for achieving passive transfer and disease protection.

Dr Ragan Adams, CSU-VTH.