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**J. D. Quigley, C. A. Jaynes-Kost, M. L. Miller and T. M. Anspach. 2001.
Evaluation of an oral immunoglobulin supplement for milk fed dairy calves.**

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Two experiments were conducted to evaluate the potential value of oral immunoglobulins as feed additives for milk-fed calves. In experiment 1, Holstein bull calves (n = 120) were purchased from area dairy farms and were fed calf milk replacer (CMR; 20% protein, 20% ether extract, non-medicated) for 42 d. Calves were fed Gammulin (G; APC Company, Inc.) or a placebo additive (P) for 15 d and a commercial calf starter (CS) from d 29. Total intake of G and P was 675 grams. Overall management and health of calves was excellent (total mortality = 0.8%) and calves were not stressed during the 56-d trial. Calves fed G tended to have lower fecal scores (-2.2%, $P < 0.30$), fewer scour days (-23%, $P < 0.07$), less use of electrolytes (-39%, $P < 0.10$) and antibiotics (-50%, $P < 0.16$). Reduction in percentage of calves with scours was 28% when G was fed compared to P. Calves fed G also tended ($P < 0.10$) have improved feed efficiency (459 vs. 422 g BW gain/kg DM intake) over the 56-d trial and improved BW gain from d 29 to 56 (665 vs. 589 g/d). In experiment 2, Holstein bull calves (n = 120) were purchased from area sale barns at approximately 5 d of age and were fed 454 g/d of CMR for 56 d. Commercial CS and water were offered for ad libitum consumption from d 1. Calves were fed G as in Experiment 1, but no P was fed. During the 56-d study, calves fed G had improved fecal scores (-6.1%, $P < 0.06$), fewer scour days (-42%, $P < 0.02$), and reduced use of antibiotics (-44%, $P < 0.02$). Intake of CMR, CS and water, BW gain and feed efficiency were unaffected. Changes in fecal scores and reductions in use of veterinary treatments were greatest during the first 15 d of the study. Mortality during the experiment was 10 calves, 7 of

which were not fed G. These data indicate that provision of oral immunoglobulins in milk-fed calves can reduce the severity of enteric infections during the first 3 to 4 wk of life.

Written by Dr. Jim Quigley (01 November 2000)
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