



Effect of beta glucans on leukocyte counts in feedyard cattle

A total of 867 head of 665 lb steers and heifers were split into control and treatment groups in 4 replications in two large commercial feedyard in southwest Kansas.

All cattle received the standard incoming vaccination and processing protocol employed by the feedyard and were penned by treatment and control groups. Both treatment and control groups were fed the normal receiving ration and stepped up during the trial according to the feedyard's standard operating procedure. In addition to the regular ration the treatment groups received 1.5 grams per head per day PreVent as a top dress.

On day ten during a standard reprocessing event whole blood was collected in EDTA tubes from 15 head of control and 15 head of treatment cattle. Complete blood counts were conducted at the Cornell University Diagnostic lab. In each replication the PreVent treatment groups had statistically significant improvements with an 10% increase in Total White Blood Cells ($P < 0.01$), a 6% increase in Lymphocytes ($p < 0.05$), and a 41% increase in Monocytes ($p < 0.001$).

There was a numerical difference in morbidity / pull rate between the treatment and control groups. In the control group 11% (48 hd) of cattle were pulled once and 5% (22 hd) pulled twice while 4% (18 hd) of cattle in the PreVent treatment group were pulled once and 0.3% (1 hd) were pulled twice.

In summary, PreVent treatment appears to improve white blood cell counts in received cattle.

