

## ABSTRACT

### EFFECT OF SELENIZED-YEAST ON HEALTH OF PERIPARTURIENT DAIRY COWS

The objective of this study was to compare the effect of source of selenium supplementation on periparturient dairy cows. Four hundred and twenty Holstein cows from a commercial dairy herd were assigned to two groups: organic selenium from selenized yeast (Se-yeast) and sodium selenite. Cows were supplemented with 4 mg of Se per head per day in the close-up diet and 6 mg of Se per head per day during the fresh period. Treated cows were supplemented with Se-yeast while control cows received sodium selenite. First service conception rates were noticeably different ( $P = 0.10$ ), at 33.3% versus 25.6% for the Se-yeast and sodium selenite groups, respectively. Health parameters which included mastitis, retained placenta, and somatic cell counts were similar between the two groups. Milk selenium concentrations at 21 days in milk were higher ( $P < 0.01$ ) for the cows receiving the Se-yeast as compared to sodium selenite at 71.73 versus 59.14  $\mu\text{g/L}$ , respectively. Feeding organic selenium as Se-yeast did not influence health in dairy cows. However, it did result in increased concentration of selenium in milk and improved first service conception rate.

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