The Effect of Supplementing Dairy Cows with a Hydrolyzed Yeast Product (Progut® Rumen) on Milk Production and Somatic Cell Scores

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OBJECTIVE

To determine if Progut® Rumen supplementation has an effect on milk production, milk composition and somatic cell scores (SCS) in dairy cows.

MATERIALS AND METHODS

- 248 Holstein-Friesian dairy cows (Control = 127, Progut = 121) in a commercial herd (Average milk yield = 9,800kg).
- Balanced for parity, DIM, BCS, pre-experimental milk yield and composition.
- Cow was considered as the experimental unit due to individual feeding (10g/cow/day) in the parlour during the AM milking.
- Basal diet consisted of ad-libitum zero-grazed grass and/or silage, plus an 18% crude protein concentrate fed at a rate of 0.45 kg/litre of milk produced over a base milk yield of 24 litres.
- Trial was carried out over two seasons (10 week and 8 week periods).
- Milk yield, composition and SCC was recorded weekly.

RESULTS

- Dataset was divided in three ways for the analysis; the entire dataset, including all cows with an average daily milk yield (ADMY) > 24kg, and finally all cows with an ADMY > 30kg.
- Data were analyzed with a repeated measures mixed model with the appropriate covariance structure determined by Bayesian Information Criterion.
- The fixed effects included treatment, season, parity (1 to ≥5), and week and the interactions between treatment and parity, and treatment and week with a random effect included for cow within treatment and season.

CONCLUSION

- Progut® Rumen improved milk yield and SCC in the:
  - Entire dataset
  - ADMY > 24kg dataset
  - ADMY > 30kg dataset.

- Progut® Rumen tended to improve protein yield in the:
  - ADMY > 30kg dataset.

- Progut® Rumen improved lactose yield in the:
  - Entire dataset
  - ADMY >24kg dataset.