PROOF OF FEATURES AND BENEFITS OF LysiGEM™

WHAT ARE LYSINE'S SPECIFIC ROLES IN RUMINANT NUTRITION?

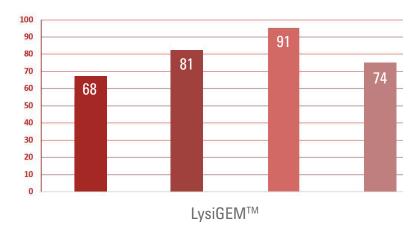
- ✓ Positive R.O.I and net income in field conditions
- ✓ Improve Milk production and Milk protein synthesis
- ✓ Increase Milk casein production maximizing the Dairy Industry profitability enhancing its cheese efficiency (less kilograms of milk needed to produce one kilogram of cheese)
- Better health status and immunometabolism, clear positive effect during heat stress period and better reproductive performance

- ✓ Lysine is important for proper growth, helping to absorb and conserve calcium with a specific role in the collagen formation and connective tissue
- Precursor in the mammary gland for non-essential amino acids
- Precursor of Carnitine (the transport vehicle to carry long chain fatty acids into the mitochondria for ß-Oxidation)

WHY SHOULD IT BE LysiGEM? - PROOF OF FEATURES

- Highly bioavailable lysine for diary cows and highly concentrated product
- ✓ The special technical protection, and the ideal size and specific gravity of LysiGEM results in an elevated level of rumen escape, providing high intestinal Lysie content ready to be absorbed and available by the animal
- ✓ Specific gravity higher than 1.02 g/cm³ treshold to ensure low rumen retention time
- Particle sizes lower than 2.0 mm ensuring a rapid exit into the abomasium
- Free flowing product that is resistant to physical damage in typical feed processing, mixing and pelleting

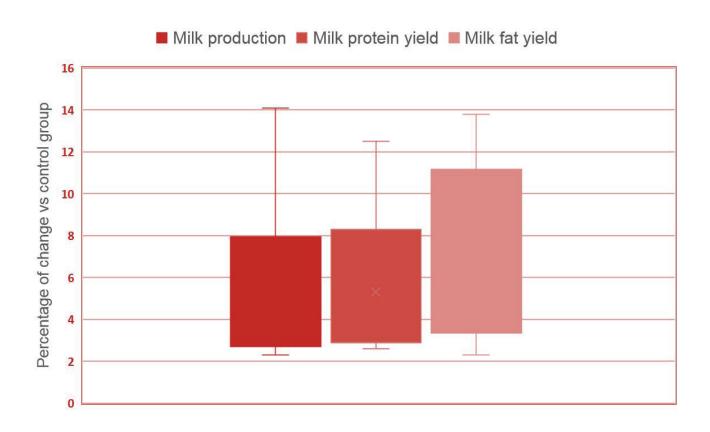
Fig. 1: Rumen protected rate and percentage of intestinal bioavailability of LysiGEM



- % Lysine HCl
- % Bypass = % of total Lysine that bypass the rumen
- % Intestinal availability = % of the bypassed lysine that is available for absorption by the small intestine
- % MP Lysine = % of total lysine absorbed and utilized by the cow

BENEFITS OF LysiGEM

- Greater flexibility in balancing rations to amino acid specifications and a great tool for soybean meal replacement in cow diets
- ✓ Positive effect on milk protein and fat synthesis
- ✓ Improved efficiency of metabolizing protein





HEALTH SUPPORT



FERTILITY IMPROVEMENT



BETTER ON FARM PRODUCTIVE PERFORMANCE



DAIRY INDUSTRY PROFITABILITY



LESS ENVIRONMENTAL NITROGEN EXCRETION



