



Multispecies Multistrain Probiotic Effects on Calves Development and Health

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ABSTRACT

Experiment was designed to assess alimentary security or any beneficial effect on calve of a multispecies multistrain probiotic (MMP). An experiment with 36 calves, two day old, was conducted to assess the influence of probiotic on growth and health indicators. The treatment period was extended to 45 d. Group 1 received one daily dose of MMP (1.1×10^9 CFU per calf) during 20 d. Group 2 was the untreated control. On a weekly basis, every calf in each group was weighed to determine weight gain. Forty five days after the beginning of the experiment, blood samples were obtained from seven animals from Group 1 and six from Group 2, and peripheral blood neutrophils separated in order to determine metabolic and microbicidal activity. There was a significant increase in H_2O_2 production and NBT reduction test in MMP treated calves. The MMP not only lacks adverse effects when supplied as food additive, but showed health benefits. The prevention of infection and the highly significant increase of phagocytic activity in peripheral blood leukocytes seen in calves strongly suggest an efficient connection between the MMP and the immune system.

KEYWORDS

Probiotic; Growth; Health; Immunology; Calves

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