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P96. Use of extruded rye wholemeal for selected lactobacilli multiplication and its influence on dairy cows rumen fluid parameters, milk yield and composition

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The use of live bacterial cultures in the animal industry, whether to improve resistance to specific pathogens or to non-specifically enhance animal health, improves production parameters (Kenny *et al.*, 2011). Different lactic acid bacteria (LAB) strains belonging to similar species have different properties and so effects/benefits can be different from one strain to another within the same species (Fukushima *et al.*, 2011).

The aim of this study was to investigate the influence of *Lactobacillus sakei* multiplied in extruded rye substrate on dairy cows rumen fluid parameters, milk yield and milk composition.

Extruded rye wholemeal (moisture content 8.6%) produced by a single-screw extruder (Ustukių malūnas Ltd, Lithuania) was used as the fermentation medium for LAB multiplication. The fermented extruded rye (65 % moisture content) has been prepared by using 30 kg of extruded rye whole meal flour and 45 L of water. LAB cell suspension (600 mL) containing about 1011cfu/mL was added, followed by fermentation for 24 h at 30°C temperature. The final cfu/g in the fermented product was on average 109 cfu/g.

The experiment was performed in the winter at the farm of Black & White Holstein dairy cattle. Trial and control groups received identical diets, however the trial group received also 100g of fermented rye flour (containing 109 cfu/g of LAB) per head of the supplement (daily, during 65 days).

Results showed, that ruminant pH, total and individual FFA, total N and NH₃-N, D(-) lactate, reduction activity of bacteria, glucose fermentation reaction, protozoa number, TLC and TCE in trial group had no significant difference (P>0.05) from those characteristics in control group and in trial group at the beginning of the experiment, but L(+) lactate and TCM were different. At the end of the experiment L(+) lactate in trial group decreased by 0.28 mmol/L (P<0.05). Though this parameter decreased in the control group (data were not statistically significant (P>0.05)). Total count of aerobic and facultative anaerobic microorganisms in the trial group increased by 1.25 log cfu/mL (P<0.05) in compare with the trial group at the beginning of the experiment and 0.64 log cfu/mL (P>0.05) in compare with the control group. At the end of the experiment, milk fat, protein, lactose yield and milk urea content in the trial group did not differ significantly compared to the control group (P>0.05).

We conclude that LAB supplementation may not be beneficial for dairy cows, as positive effect on the activity of the ruminant fermentation and microorganisms of rumen fluid, on the milk yield and milk composition was not observed.

Keywords: lactic acid bacteria, dairy cows, ruminant parameters, milk yield, milk composition

P97. Italian

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Italian consumers' perceptions in terms of higher price concentration of essential content of mineral absorption is higher analysis assumes nutritional value. Hi mellitus, cardiovascular milling) level, price, modeling technique by a limited number constructed based option from a small such as extrinsic attributes choices that represent The aim of the work through a questionnaire Respondents were supermarkets in Ap variable, our data represents a first attempt possibility to make a Through interviews different characteristics strategy was adopted the survey corresponds shelves of the retail Questionnaires were the second was about procedure were brief The results suggest that the absence of Policy implications should not be labeled confidence towards

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