Growth performance and fecal microflora of rats offered metabolites from lactic acid bacteria.

ABSTRACT

The objectives of this experiment were to study the effect of metabolites produced from lactic acid bacteria(LAB) on the growth performance, Enterobacteriaceae and LAB counts in the faeces, faecal pH and plasma cholesterol. A total of 30 female postweaning rats were randomly assigned to five groups of diet: basal diet + 100% drinking water (DW), basal diet + 90% DW + 10% ULA metabolite, basal diet + 80% DW + 20% UL4 metabolite, basal diet + 90% DW + 10% RW18 metabolite and basal diet + 80% DW + 20% RW18 metabolite for a period of four weeks. The metabolites affected only Enterobacteriaceae counts and faecal pH, which were lower than the control groups. In conclusion, addition of lactic acid bacterial metabolites in the drinking water had only antibacterial effect in rats.

Keyword: Rat; LAB organic acids; LAB; Enterobacteriaceae; Total plasma cholesterol concentration.