

Hypocholesterolaemic effect of yoghurt containing Bifidobacterium pseudocatenulatum G4 or Bifidobacterium longum BB536

ABSTRACT

The effect of a yoghurt supplement containing Bifidobacterium pseudocatenulatum G4 or Bifidobacterium longum BB536 on plasma lipids, lipid peroxidation and the faecal excretion of bile acids was examined in rats fed a cholesterol-enriched diet. After 8 weeks, the rats in the positive control (PC) group who were fed the cholesterol-enriched diet showed significant increases in plasma total cholesterol (TC), low-density lipoprotein (LDL) cholesterol, and malondialdehyde (MDA). However, groups fed a cholesterol-enriched diet supplemented with yoghurt containing B. pseudocatenulatum G4 or B. longum BB536 had significantly lower plasma TC, LDL-C, very-low-density lipoprotein (VLDL) cholesterol, and MDA than had the PC group after 8 weeks of treatment. In addition, faecal excretion of bile acids was markedly increased in the rats fed the yoghurt containing B. pseudocatenulatum G4 or B. longum BB536 as compared to the PC and NC groups.

Keyword: Bifidobacteria; Yoghurt; Hypocholesterolaemic effect; Rats