Effects of fermented soy milk on the liver lipids underoxidative stress

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Abstract

AIM: To investigate the effects of fermented soy milkpowder on the antioxidative status and lipid metabolismin the livers of CCl4-injected rats.METHODS: Forty-five healthy male Sprague-Dawleyrats were randomly assigned to five groups accordingto five different diets: control (AIN-76), AIN-76+high-dose fermented soy milk powder, AIN-76+low-dosefermented soy milk powder, AIN-76+high-dose milkyogurt powder and AIN-76+low-dose milk yogurtpowder. The experiment lasted for 8 wk. After 4 wk, allthe rats received intraperitoneal administration of CCl4(0.2 mL/100 g body weight) every week. Total cholesterol(TC), triglyceride (TG), TBARS, ALP, and antioxidativeenzymes in the liver were evaluated.RESULTS: There was also no significant difference inTBARS and antioxidative enzymes in the liver. TC and TGin the groups fed with fermented soy milk powder weregenerally lower than those fed with casein powder.CONCLUSION: Consumption of fermented soy milkwas positive in lowering total cholesterol and TGaccumulation in the liver under CCl4-induced oxidativestress.