

Z404 The Effects of Tea Fungus/Kombucha Beverage on Growth, Serum Lipid and Protein Concentrations in Female Rats

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The effects of tea fungus/kombucha(TF) beverage on body weight gain, lipid and protein levels were studied in growing female rats. The rats(SD) were fed drinking water supplemented with 20 or 40% TF for 7 weeks. The body weight gain, hemoglobin concentration and hematocrit value of the 20 or 40% TF groups were similar to those of the control group. The levels of triglyceride, total cholesterol, total protein and albumin in serum of the 20 or 40% TF groups coincided with those of the control group. The level of HDL-cholesterol in the 20% TF group increased to compare that of the control group. The content of triglyceride in liver and atherogenic index of the 20% TF group were more decreased than those in the control group. The results indicated that 20% tea fungus/ kombucha beverage feeding increased the serum HDL-cholesterol, and decreased the atherogenic index, liver triglyceride and total lipid levels in female rats.

Z405 Effects of Neurotoxin 6-Aminonicotinamide on Levels of Metabolites and Enzymes in the Plasma of Japanese Quail

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The effects of 6-aminonicotinamide(6-AN) on the levels of metabolites and enzymes in Japanese quail plasma were investigated. The intraperitoneal administration of 6-AN caused a marked increase in concentrations of glucose, creatine, cholesterol and uric acid but concentrations of albumin, globulin and triglyceride were decreased. Activities of aspartate aminotransferase, alanine aminotransferase, lactate dehydrogenase, γ -glutamyltransferase and creatine phosphokinase were markedly enhanced whereas alkaline phosphatase activity was significantly reduced. The cellulose acetate electrophoretogram of plasma showed that prealbumin was newly synthesized in 6-AN treated group but not in pair-fed and control groups. The results suggested that 6-AN exerts profound effects on levels of some metabolites and some enzymes related to the generation of energy for the maintenance of the basal metabolism.