

Z403      **Effect of Tea Fungus/Kombucha Beverage on Lipid Metabolism  
in Streptozotocin-Induced Diabetic Male Rats**

고진복  
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The effect of tea fungus/kombucha(TF) beverage on pancreas weights, serum glucose and lipid concentrations of both normal and diabetic male rats was studied. Diabetic groups were divided into D-control(TF free water), 20% TFD(20% TF in water), 40% TFD(40% TF in water), 20% TFSD(20% TF disinfection in water) and 40% TFSD(40% TF disinfection in water) according to the levels of TF beverage supplementation. In all diabetic groups, the concentration of triglyceride in serum was lower in 20% TFD and 20% TFSD groups than in that of D-control group. The levels of total cholesterol, LDL-cholesterol in serum and atherogenic index were significantly decreased in all(20 or 40%) TFD and TFSD groups, but HDL-cholesterol/total cholesterol ratio were more increased in all (20 or 40%) TFD and TFSD groups than in those of D-control group.

Z404      **Purification and Characterization of Ferritin from Sweet Potato  
Hornworm, *Agrius convolvuli* (Lepidoptera)**

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The isolation and purification of ferritin, iron transport and storage protein, from *Agrius convolvuli* haemolymph were accomplished by heat treatment at 75°C, KBr density gradient ultracentrifugation, and anion exchange column chromatography. Haemolymph ferritin of *A. convolvuli* was found to have M.W of 670 kDa, two subunits of 26 and 31 kDa, and pI value of 7.4. And electron microscopic examination of unstained pure haemolymph ferritin revealed many iron-rich cores, 7nm regular particles. The NH<sub>2</sub>-terminal amino acid sequences of subunit 26 and 31 kDa were DNX YQDVSLDXSQAXNXL(18) and TQXHVNPVNIQRDXVTMHXS(20), respectively, and were not similar to those of another animals except insect *H. cunea*. Ferritin contained relatively large amounts of Glu, Asp, Pro, Leu, Ala, and Gly, and small amounts of Tyr, His, and Arg. Haemolymph ferritin of *A. convolvuli* was distributed in several organs such as gut, fat body, Malphigian tubules, muscle, and trachea but not in integument.