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Effects of *Pleurotus eryngii* on Lipid Patterns and Enzyme Activities in Rats Fed Cholesterol Diets

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The effects of *Pleurotus (P.) eryngii* on weight gain, serum and hepatic lipids levels, and enzyme activities were investigated in growing male rats fed the cholesterol diets. The rats were given four different types of diet for 5 weeks, respectively: a normal diet, a control diet (15% lard + 0.5% cholesterol), a 3% or 5% of *P. eryngii* diet (control diet +3% or 5% of *P. eryngii* powder). The body weight gains and liver weight of the rats fed 3% and 5% *P. eryngii* diets were significantly lower than those of the rats fed the control diet. The levels of hepatic cholesterol and triglyceride, and serum total cholesterol, LDL-cholesterol, and atherogenic index ratios were significantly lower in the rats fed the *P. eryngii* diets compared to those fed the control diet. The HDL-cholesterol/total-cholesterol ratios was significantly higher in the rats fed the *P. eryngii* diets compared to those fed the control diet. There were no differences in the activities of glutamic oxaloacetic transaminase, glutamic pyruvic transaminase and alkaline phosphatase in the serum among the experimental groups. These results showed that the *P. eryngii* powder feeding decreased the total cholesterol, LDL-cholesterol and atherogenic index, and increased the HDL-cholesterol/total-cholesterol ratio in serum of the rats.