

【P3-1】**The antidiabetic Effect of extract of Mycelia of Agaricus in streptozotocin-induced diabetic rats**

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Diabetes mellitus is one of the most common chronic degenerative diseases worldwide. About four million Koreans are diagnosed with diabetes mellitus. To control blood glucose levels as close to normal and to prevent of diabetic complication are major goals of diabetic treatment. The purpose of this study is to examine antidiabetic effect of extract of Mycelia of Agaricus(Agaricus M, HK Biotech) in streptozotocin-induced diabetic rat. STZ-induced diabetic rats(BW 227.1±9.5g) were divided into two groups and offered basal diet (AIN-93M semipurified diet) or AIN-93 semipurified diet supplemented with 5% freeze-dried Agaricus M. for 8wk. Body weight and food intake of Agaricusits M. group were not significantly different from those of control group. Fasting plasma glucose level of Agaricus M. group(295.7±14.4mg/dL) was significantly lower than those of the control group(341.6±1.4mg/dL, P<0.05). Blood glycated hemoglobin of Agaricus M. group(6.2±0.3%) tended to be low compared with the control group(6.9±0.4%). Plasma triglyceride and cholesterol levels of Agaricus M. group tended to decrease compared with the control group. Plasma GOT(161.0±7.6U/L) and GPT(162.7±16.7 U/L) activities of Agaricusits M. group were significantly lower than those of the control group((161.0±7.6U/L, 137.6±10.2 U/L, P<0.05). Thus we concluded that feeding of Agaricus M. is beneficial to control hyperglycemia and improve liver function in animal model of diabetes.