

[P2-7]**Antidiabetic Effect of Extracts of Mycelia of Agaricus in db/db mice**Min-Jung Kang¹, Jung-In Kim¹, Tae-Jin Seo¹, Jong-Ok Kim², and Yeong-Lae Ha³*¹School of Food Science, Inje University, Kimhae, ²HK biotech. Co., Ltd, ³College of agriculture Gyeongsang National University, Jinju, Korea*

The prevalence of diabetes mellitus among Koreans is about 9%. Hyperglycemia and dislipidemia are the major risk factors of cardiovascular diseases, the most common diabetic complications. The effects of chronic feeding of extract of Mycelia of Agaricus (Agaricus M, HK Biotech) on glycemic control and blood lipid profile were measured in animal model of type 2 diabetes mellitus, db/db mice. Four week-old db/db mice (n=16) were fed AIN-93G semipurified diet or diet containing 10% freeze-dried Agaricus M. for 6wk. Body weight and food intake of Agaricus M. group were not significantly different from those of the control group. Fasting plasma glucose and insulin levels of Agaricus M. group were significantly lower than those of the control group ($P < 0.05$). Blood glycated hemoglobin and plasma triglyceride levels of Agaricus M. group tended to decrease compared with the control group. Plasma cholesterol level of Agaricus M. group was significantly lower than the control group. Thus we could conclude that feeding of Agaricus M. is beneficial in controlling hyperglycemia and dislipidemia and preventing cardiovascular complications of diabetes mellitus.