Mushrooms as a functional food mediator in Preventing and ameliorating diabetes

Pathirage Kamal Perera¹, Yunman Li²*

¹Department of Materia medica and Pharmacology, Institute of Indigenous Medicine, University of Colombo, Rajagiriya, Sri Lanka.
²Department of Physiology, China Pharmaceutical University, Mailbox 207 Tongjiaxiang 24, Nanjing, Jiangsu, 210009, P. R. China.

Correspondence Yunman Li, Department of Physiology and Pharmacology, China Pharmaceutical University, Mailbox 207 Tongjiaxiang 24, Nanjing, Jiangsu, 210009, P. R. China

Submission date: March 23, 2011; Acceptance date: April 23, 2011; Publication date: April 25, 2011

Abstract
Diabetes is a major health problem predisposing to markedly increased complications. Despite the numerous preventative strategies and armories of medication, the management of diabetes remains grossly unsatisfactory. Diabetes is emerging as a pandemic. Therefore it is important to identify novel nutraceuticals or drugs for curing or preventing diabetes, which have fewer side effects. The present paper reviewed scientific information on mushrooms with regards to its anti-diabetic active compounds and/or pharmacological test results, which are commonly used as functional foods and ingredients used in the traditional medical system and which have demonstrated experimental or/and clinical anti-diabetic effectiveness. These functional foods might have a big potential for the prevention or cure of diabetes more than in other plant species. However, still scientific or clinical studies are not sufficient for hypoglycemic effect for mushrooms use as ‘official’ drug. Therefore, it is proposed that a close attention be paid to carry out further research of functional mushrooms for preventive and curative measures for diabetes and its complications.

Keywords: Diabetes, Mushrooms, Functional foods, Hypoglycemic, and Nutraceuticals