Anti-obesity and hyperlipidemic effects of
Cordycepin rice from Vietnamese brown rice in diet-induced obese mice

Obesity increases dyslipidemia, cardiovascular disease, insulin resistance, glucose metabolism disorders, osteoarthritis and some cancers. However, little research concerning the lipid-lowering and anti-obesity functions of Cordycepin rice has been researched. The present study discloses the cordycepin rice from Vietnamese brown rice was cultured *Cordyceps Militaris* and a processing method. The method has the advantages of short culture period, high production efficiency and low cost. The yellow colour of the cordycepin rice is deepened, and has good mouth feel. Importantly, the cordycepin rice was investigated the effects on serum lipid levels in diet-induced obese mice and the potential health benefits of Cordycepin rice. Cordycepin rice suppressed the HFD (high fat diet)-induced body weight and decreased adipose tissue weight. Cordycepin rice decreased the levels of TG (triglyceride), TC (total cholesterol) and LDL-C (low-density lipoprotein) and increased the serum level of HDL-C (high-density lipoprotein) compared with the mice in the hyperlipidemia model groups. Moreover, Cordycepin rice was also effective at improving the lipid profile. Our results demonstrated that Cordycepin rice has anti-obesity properties through inhibition of an HFD on body weight, adipose tissue weight, and serum lipid profiles.

Keyworks: Cordycepin rice, rice, *Cordyceps militaris*, anti-obesity, hyperlipidemia, mice.