

P13

### The Correlativity of LPS and *Houttuynia cordata* Thunb Mixture Extract to Lipid Metabolism

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This study was designed to investigate the effects of *Houttuynia cordata* Thunb mixture extract on the lipid metabolism in the lipopolysaccharide (LPS)-induced liver damage of rats. LPS-treatment increased the levels of total-lipid, LDL-cholesterol, triglyceride (TG) and malondialdehyde (MDA). But *Houttuynia cordata* Thunb mixture extract (HM) pretreatment decreased the levels of total lipid, LDL-cholesterol, TG and MDA. Also LPS-treatment decreased total cholesterol and HDL-cholesterol, but HM-pretreatment increased both of them. These results demonstrated that HM-pretreatment had the preventive effects against the dysfunction of lipid metabolism in the LPS-induced liver damage of rats.

**Key words:** *Houttuynia cordata* Thunb, lipid metabolism, MDA, cholesterol

P14

### The Effect of *Schizandra chinensis* Baillon on Lipid Metabolism in Lipopolysaccharide-induced Oxidative Stress

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LPS induces the synthesis of several inflammatory cytokine, chemokine, NO and inflammation in the liver of rats. The purpose of this study was to investigate the preventive effects of *Schizandra chinensis* Baillon (SCB) in lipid metabolism. SCB 100 mg/kg concentration was intraperitoneally administered into rats at dose of 1.5 ml/kg for 20 days. On the day 21, 1.5 ml/kg of LPS was injected 4 hours before anesthetization. We examined the lipid-related functions by measuring the levels of triglyceride (TG), total cholesterol (TC), total lipid (TL), high-density lipoprotein cholesterol (HDL-C) in serum and malondialdehyde (MDA) in liver tissue. The results showed that LPS treatment increased the values of TG, TC, TL and MDA, decreasing that of HDL-C. But RCM pretreatment decreased the high values of TG, TC, TL and MDA to the low values and increased the low value of HDL-C to the high value. These results suggested that RCM could be used as the potential candidate for the lipid metabolism natural supplement.

**Key words:** *Schizandra chinensis* Baillon, lipidperoxidation, cholesterol, lipid metabolism