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## Protective Effects of Panax Ginseng Extracts Against the TCDD-Induced Biochemical Toxicities in Rat

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To achieve a better understanding of protective effects of water extracts of Panax ginseng against TCDD-induced toxicities, we monitored physiological and clinical changes in rat for 4 weeks after administration of each Panax ginseng extracts or TCDD, and co-administration of the two materials. For this study, 120 male Sprague-Dawley (SD) rats weighing 190-210 g each (8 week-old) were divided into four groups: TCDD-treated, co-treated group with TCDD and ginseng extract, ginseng extract-treated, and control group. Panax ginseng extracts attenuated the TCDD-induced body weight loss. The extracts also decreased the TCDD-induced AST and ALT activities to control levels after 16 days of TCDD administration. Panax ginseng extracts also have the strong properties of attenuation for triglycerides, HDL-, LDL-cholesterol contents increased by TCDD administration. These results suggest that Panax ginseng extracts may possess the protective effect against TCDD-induced biochemical toxicities in rats. [Supported by a grant from the Korea Research Foundation (KRF2003-005-100075)]

Keyword: Panax ginseng, cholesterol, triglycerides, TCDD, ALT, AST