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## Effects of Pyungwi-san on the production of inflammatory cytokines in LPS-treated rats

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Pyungwi-san (PWS), Traditional Korean Medicine, has been used for the treatment of gastrointestinal diseases such as acute gastritis, gastric atony, anorexia, abdominal distension. PWS composed with 6 herbs, *Atractylodis Rhizoma*, *Citri unshius Pericarpium*, *Glycyrrhizae Radix et Rhizoma*, *Magnoliae Cortex*, *Zingiberis Rhizoma*, and *Zizyphi Fructus*. In this study, we tested that the anti-inflammatory effects of PWS, which was standardized by 7 components; glycyrrizic acid, rutin, liquiritin, isoliquiritin apioside, hesperidin, atractylenolide III, and honokiol from HPLC finger print analysis. PWS was administrated from 218 mg/kg to 3,270 mg/kg orally and then LPS (5mg/kg) was injected intraperitoneally to each rats after 1 hour. Animals were sacrificed after 5 hours to measure inflammatory cytokines in plasma by ELISA. LPS induced the production of inflammatory cytokines such as TNF- $\alpha$ , IL-1, IL-6, and PGE2 in plasma. However, PWS inhibited the production of TNF- $\alpha$ , IL-1, IL-6, and PGE2 following dose-dependence. Pretreatment of PWS prevented the inflammatory response in the HCl/ethanol-induced gastric mucosal injury rat model, too. These results indicate that this standardized-PWS exerts potent anti-inflammatory activity against the acute gastritis by LPS and HCl/ethanol.

### Biography

Sung-Eun Jeong has completed her PhD from Department of Pharmacy, Wonkwang University in 1994. He has published more than 10 papers in reputed journals and has been serving as an Editorial Board Member of repute. He worked in pharmaceutical company related Traditional Korean Medicine as a General Manager for 20 years. Currently, he is the Executive Manager in the Department of Traditional Korean Medicine Promotion of the Upper Institute. He is leading the Traditional Korean Medicine Standardization Working Group, investigating the pharmacologic and pharmacokinetic mechanisms of Traditional Korean Medicine.

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