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**Anti-Inflammatory Activity of Kahweol and Cafestol in Mouse Air Pouch Model**

Kyung Sik Jung, Ji Young Kim, Young Pil Hwang, Jae Ho Choi, and Hye Gwang Jeong  
*Department of Pharmacy, Research Center for Proteineous Materials, Chosun University,  
Kwangju 501759, Korea.*

Recent studies have shown the chemoprotective effects of kahweol and cafestol, which are coffee-specific diterpenes. This study investigated the effects of kahweol and cafestol on the inflammatory response induced by carrageenan in the mice. The mice were treated with vehicle, kahweol, or cafestol at a dose of 5 - 10 mg/kg one hour before carrageenan challenge. After carrageenan challenge, the air pouches were removed and analyzed. The volume, protein amounts, and cell count in the exudation obtained from the kahweol, or cafestol-treated mice were significantly reduced compared to those from vehicle-treated animals. The contents of prostaglandin E<sub>2</sub>, TNF- $\alpha$  and the mRNA for cyclooxygenase-2 were also suppressed in these animals. The histological examination displayed the suppression of the inflammatory response in the pouch tissue from kahweol, or cafestol-treated mice.

**Keyword:** kahweol, cafestol, anti-inflammation, mouse air pouch