

## 摘要

學號：M10218031

研究計劃：柚皮素在葡聚糖硫酸鈉 (DSS) 大腸炎小鼠模型的影響

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研究生：馬氏歡

指導教授：黃卓治 教授

### 摘要內容:

柚皮素是一種黃烷酮，被認為對人體健康有作用的生物活性物，被用來作為傳統的抗炎劑已有幾個世紀。然而，柚皮素在腸道炎症的分子機制尚不清楚為止。本研究調查，柚皮素對葡聚糖硫酸鈉誘導小鼠結腸炎的 IBD 模型的保護作用的分子基礎。柚皮素之餵食，每天每小鼠的劑量分別為 10，50 和 100 毫克/公斤。飲用水含 3% 葡聚糖硫酸鈉 (DSS) 7 天誘導的小鼠中發現結腸炎。DSS 處理造成了嚴重的結腸損傷和炎症，其表現為體重損失，提高疾病程度和大腸縮短。飼養柚皮素可衰減疾病程度和結腸縮短，抑制增加細胞激素的表達。這些結果表明，柚皮素可抑制 DSS 引發的炎症。

**關鍵詞：**柚皮素，結腸炎，炎症性腸病，潰瘍性結腸炎，克羅恩氏。

## Abstract

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Tzou – Chi Huang, Ph.D

### The Contents of Abstract in This Thesis:

Naringenin is a flavanone, a type of flavonoid, that is considered to have a bioactive effect on human health, has been used as a traditional anti-inflammatory agent for centuries. However, the molecular mechanism of naringenin in intestinal inflammation remains unknown so far. The present study investigated a molecular basis for the protective effect of naringenin in dextran sulfate sodium-induced murine colitis models of IBD. The doses of naringenin per day per mice were 10, 50, and 100 mg/kg respectively. Colitis was induced by administration of 3% dextran sulfate sodium (DSS) in drinking water for 7 days. DSS administration caused severe colon damage and inflammation, as showed by body weight loss, increased clinical sores, and the colon shortening. Feeding naringenin attenuated the increased Disease Activity Index (DAI) and colon shortening and tended to suppress the increased cytokine expression. These findings indicated that naringenin inhibit the DSS -mediated inflammation.

**Keywords:** Naringenin, Colitis, Inflammatory bowel disease, Ulcerative colitis, Crohn's disease.

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