探討桑葚萃取物對抗發炎活性之影響

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摘要

發炎為身體組織受損所產生之反應機制，過度發炎可能引發關節炎、腸道炎及氣喘等慢性發炎疾病，已有文獻指出桑葚果實萃取物具抗糖尿病、抗氧化、抗肥胖及抗發炎等潛力，且桑葉萃取物中槲皮素、山奈酚及蘆丁等黃酮類化合物具抗發炎與抗氧化活性，故本文探討桑葚萃取物之抗氧化與抗發炎活性，並以動物模式評估體內抗發炎活性。結果顯示桑葚萃取物可減少 reactive oxygen species (ROS) 產生、清除 2,2-diphenyl-1-picrylhydrazyl (DPPH) 及 2,2′-azino-bis (3-ethylbenzothiazoline-6-sulfonic acid) (ABTS) 自由基、並提升 ferric reducing antioxidant power (FRAP)。且桑葚萃取物可降低脂多醣 (lipopolysaccharide) 誘導 RAW 264.7 巨噬細胞之 tumor necrosis factor-α (TNF-α) 與 interleukin-6 (IL-6) 產生，並抑制 inducible nitric oxide synthase (iNOS) 與 cyclooxygenase-2 (COX-2) 之 mRNA 與蛋白表現量。此外，桑葉萃取物以 30% 乙醇經離子交換樹脂分離之桑葉類黃酮具最佳體外抗氧化與抗發炎活性，並對葡聚醣硫酸鈉 (dextran sodium sulfate) 誘導小鼠潰瘍性結腸炎 (ulcerative colitis) 具保護作用，可抑制發炎路徑活化，減緩結腸炎症狀表現。綜上所述，桑葚萃取物具抗氧化活性、抑制發炎反應及緩解結腸炎症狀之潛力。

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