

土肉桂萃出物對於細胞增生與黑色素生成之探討

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摘要

黑色素是人體皮膚顏色的主要色素。它由表皮基底層的黑色素細胞所分泌。在陽光曝曬下，黃褐斑或其他色素沉著疾病可能會過度產生黑色素。酪氨酸酶(Tyrosinase)是一種含銅的氧化酵素，是黑色素細胞合成黑色素的關鍵催化酵素。錫蘭肉桂被指出能抑制酪氨酸酶(Tyrosinase)的活性。本研究採用土肉桂萃出物做為抑制酪氨酸酶(Tyrosinase)的活性進行研究。實驗採用不同的化學類型的三個來源，桂皮醛-桂皮乙酸酯型(G2)，混合型(P3)和台北市農會待測品種(TFA)。在沒有減少細胞生長發育或細胞死亡下，添加20ng/ml的乙醇萃出物，G2和P3的萃出物加入細胞培養液能夠抑制24~25%的B16-F10細胞的酪氨酸酶(Tyrosinase)的活性。酪氨酸酶(Tyrosinase)的mRNA表現量亦受到萃出物的抑制；土肉桂萃出物亦有保護細胞減少紫外線傷害的功能。紫外線暴露之前或之後，添加土肉桂萃出物，能使細胞存活於紫外線曝曬。研究結果顯示，三種土肉桂萃出物皆能減少黑色素積聚以及減少紫外線造成的細胞死亡。結果似乎意味著，土肉桂是在保護和抑制黑色素的皮膚護理的一個很好的候選天然物。

關鍵詞：土肉桂、酪氨酸酶(Tyrosinase)、黑色素、美白

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