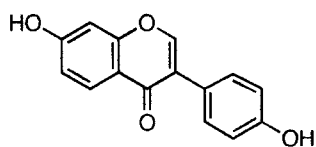


Phytotherapy Research, 13, 163-165 (1999).

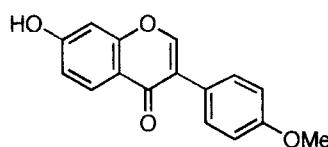
Inhibitory Effects of Isoflavones on Lipid Peroxidation by Oxygen Species

Shizuo Toda,¹ and Yoshiaki Shirataki (白瀧 義明)²

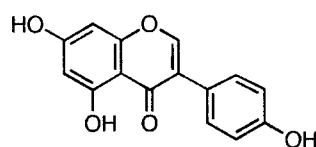
Abstract: Possible inhibitory effects were investigated for four isoflavones, biochanin A, daidzein, formononetin and genistein on lipid peroxidation by reactive oxygen species. Biochanin A, formononetin and genistein inhibited lecithin peroxidation which was induced by hydroxy radical generation, by interaction of haemoglobin and hydrogen peroxide. Daidzein and formononetin inhibited lecithin peroxidation which was induced by superoxide anion generation by xanthine-xanthine oxidase. These results demonstrated that the differences in antioxidant activities of isoflavones are dependent on the relation between their chemical structures and reactive oxygen species.



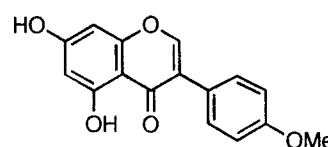
daidzein



formononetin



genistein



biochanin A

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