

中文題目：普通食物次要成份對人類癌細胞之化療預防效應

英文題目：**Chemopreventive Effects of Minor Dietary Constituents in Common Foods on Human Cancer Cells**

作者：王志鴻* 林繼謨* 程兆明**

服務單位：花蓮 濟醫學中心內科* 中國醫藥大學北港附設醫院醫學研究部/中國醫藥大學北港附設醫院內科/中國醫藥大學醫學系**

Background and Purpose: Epidemiological evidence has suggested that vegetables and fruits may have a role in cancer prevention. The aim of the present study was to examine the anti-proliferative activity of ten related pure compounds from common vegetables and fruits.

Methods and Results: Studies were conducted on a series of carcinoma cells derived from eight human organs. The results show that linalool possessed the strongest activity against nine carcinoma cells, and that baicalein and luteolin also exhibited a broad spectrum of anti-proliferative activities. Among them, linalool showed the strongest activity against carcinoma of the cervix (IC_{50} : 0.37 μ g/ml), stomach (IC_{50} : 14.1 μ g/ml), skin (IC_{50} : 14.9 μ g/ml), lung (IC_{50} : 21.5 μ g/ml) and bone (IC_{50} : 21.7 μ g/ml). As for the flavonoids, luteolin exhibited the strongest activity against carcinoma of the stomach (IC_{50} : 7.1 μ g/ml), cervix (IC_{50} : 7.7 μ g/ml), lung (IC_{50} : 11.7 μ g/ml) and bladder (IC_{50} : 19.5 μ g/ml), whereas baicalein possessed the strongest anti-proliferative activity against carcinoma of the cervix (IC_{50} : 9.8 μ g/ml), stomach (IC_{50} : 16.1 μ g/ml) and skin (IC_{50} : 19.5 μ g/ml).

Conclusions: The present study indicates that linalool possessed the strongest activity against a broad spectrum of carcinoma cells, especially cervical carcinoma cells, suggesting that linalool and flavonoids are partially responsible for the cancer prevention of common vegetables and fruits.