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研究生(中)	陳兆怡
研究生(英)	chen chao-yi
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(中)	
關鍵字 (英)	dietary supplement Echinacea Extract immunmodulation
摘要 (中)	<p>紫錐花萃取物 (Echinacea Extract, EE) 是被廣泛使用的植物藥草，1994 年美國膳食補充劑健康與教育法 (Dietary Supplements Health and Education Act，DSHEA) 明確的將草本植物列為營養補充劑；另外在植物藥草發達的德國，紫錐花萃取物是一普遍為醫師用於治療感冒的處方用藥，近年實驗亦證實紫錐花萃取物具免疫調節之能力。研究已知的紫錐花活性成份包括:類黃酮 (flavonoids)、多醣體(ploy- saccharides)、烷醯胺(alkylamide)、聚乙炔 (polyacetylenes)、以及如咖啡酸衍生物 (caffeic acid derivatives)等多酚化合物 (polyphenol)，其對免疫細胞的影響如:刺激白血球的吞噬作用、強化自然殺手細胞之毒殺能力、調節細胞激素之分泌、促進抗體生成之免疫調節功效和清除自由基之作用。至目前為止，紫錐花萃取物被視為具高度安全性的植物藥草，副作用並不常見且輕微。本篇論文將近年有關紫錐花萃取物的科學報告及醫學臨床實驗作系統之整理，期望本篇綜論對於想要開發具免疫調節功效之草本植物或是植物性化合物(phyto- chemicals) 為營養補充品之研發人員，亦或是從事營養諮詢的人員有所助益。</p>
摘要 (英)	<p>Echinacea extract (EE) is widely known to be used as herbal medicine. According to the Dietary Supplements Health and Education Act (DSHEA) in 1994, it clearly classified botanicals as dietary supplement. Also in Germany, a country known to be well-advanced in phytomedicine research, Echinacea has already been highly recommended by doctors to be used as a common prescription to treat cold. Furthermore, recent studies have proven Echinacea can function as an extracting tool to provide immune-modulating potency. Studies have also discovered the active components of Echinacea including flavonoids, polysaccharides, alkylamide, polyphenols, caffeic acid derivatives, ployphenol and so on, which play beneficial roles on regulating the immune system. Many documents supported that Echinacea can activate the phagocytotic activity of phagocytes, enhancing the cytotoxicity of NK cells, modulating the secreting pattern of cytokine, promote the production of antibodies and also on scavenging free radical. Today, Echinacea is considered as safest form of herbal medicines with only very minor side effect. This thesis will summarize the most recent scientific reports and clinical studies regarding Echinacea. The goal is to provide insights and benefit those who are interested in the further development in the area of herbal botanical and its effect on immunomodulating potency, researchers who are pursuing in the area of phytochemicals as nutrition supplement, dieticians, or nutrition consultants.</p>
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<p>參 考 文 獻</p>	<p>第九章 參考文獻 中華民國行政院衛生署 (2006) 健康食品之免疫調節功能評估方法。中華民國行政院衛生署 (2006) 保健食品分類。王聖予、陳建和 (2002) 免疫學，藝軒圖書，台北縣。林璧鳳、江伯倫 (2006) 基礎免疫學，藝軒圖書，台北縣。何士慶、蘇淑茵 (2005) 中草藥保健功能性食品之應用與開發，科技圖書，台北市。吳昌至 (2002) 雞冠與豬眼球中玻尿酸和膠原蛋白之抽取及純化。國立中興大學畜牧研究所碩士論文。食品工業發展研究所 (2005) 台灣保健食品產業概況。林資哲 (2003) 紫錐菊咖啡酸衍生物含量與抗氧化濃度分析。國立中興大學農藝研究所碩士論文。林璧鳳 (2003) 營養素對免疫力的影響，國家衛生研究院，台北市。趙克然、楊毅軍、曹道俊 (2003) 氧自由基與臨床，合記圖書，台北市。霍軍生、許中敏、魏峰 (2005) 功能性食品，中國輕工業出版社，北京市。張隆仁、陳榮五、張正英、邱建中 (2001) 保健植物紫錐花之栽培與利用。台中區農業專訊 35: 14-18。Parham Peter (2000) The immune system.Garland Publishing, Elsevier Science Ltds. Sandra CM (2004) Echinacea:the genus Echinacea,USA: CRC Press Comp. World Health Origanization (2005) World health statistics annual 2005. Amarowicz R,Pegg RB,Rahimi-Moghaddam P,Barl B and Weil JA (2004) Free-radical scavenging capacity and antioxidant activity of selected plant species from the Canadian prairies Food Chemistry 84: 551-562. Barrett B (2003) Medicinal properties of Echinacea : a critical review.Phytomedicine 10: 66-86. Bauer RA (1999) Chemistry,analysis and immunological investigations of Echinacea</p>

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