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• 計畫英文名稱	Effect of β-Carotene and Vitamin E on Alcoholic Liver Diseases of Rats		
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• 中文關鍵字	酒精性肝病；β-胡蘿蔔素；維生素 E；自由基		
• 英文關鍵字	Alcoholic liver disease；β-carotene；Vitamin E；Free radical		

• 中文摘要

研究指出，因酗酒導致自由基過量生成與肝臟疾病的形成具有密切的關聯性。因此，理論上若是能夠利用抗氧化營養素減少因酒精攝取所產生的自由基，並藉以提高身體之抗氧化能力，則肝臟所受到的氧化性傷害也會減輕。基於此論點，本研究進行體外試驗，探討抗氧化營養素 β-胡蘿蔔和維生素 E 對於患有酒精性肝臟疾病大白鼠之初代肝細胞的生存能力以及抗氧化能力之改善效果。由體外實驗之結果顯示，β-胡蘿蔔素可以提高長期攝取酒精大白鼠之肝臟細胞之生存能力，並可提高麩胱甘@@還原@@及過氧化氫@等抗氧化酵素活性。

• 英文摘要

Numerous studies indicated that excessive alcohol intake induced the mass production of free radicals in the body, which had been considered to be associated with alcoholic liver diseases. It is hypothesized that antioxidant nutrient supplementation may lower the formation of free radicals produced from excessive alcohol intake by means of enhancing the antioxidant ability in the body. Based on the hypothesis, this study was to investigate the influences ofβ-carotene and vitamin E on the cell viability and antioxidant ability of the isolated liver parechymal cell of rats with alcoholic liver diseases. These results demonstrate that β-carotene can increase cell viability, glutathione reductase and catalase activities in cultured hepatocytes from rats with alcohol liver diseases.