• 計畫中文名稱	營養狀態與中風風險性的相關性研究		
• 計畫英文名稱	A Study on Association between Nutritional Status and Risk of Stroke		
• 系統編號	PG9308-0381	• 研究性質	應用研究
• 計畫編號	DOH93-TD-F-113-045-(2)	• 研究方式	委託研究
• 主管機關	行政院衛生署	• 研究期間	9308 ~ 9407
• 執行機構	台北醫學大學公共衛生學系		
• 年度	93 年	• 研究經費	1200 千元
• 研究領域	公共衛生學		
• 研究人員	邱弘毅,趙振瑞		
• 中文關鍵字	中風；危險族群；人體測量；營養生化值；飲食攝取量		
• 英文關鍵字	stroke；risk group；anthropometric measurements；biochemical values；dietary intake		
• 中文摘要	根據衛生署民國九十一年之統計資料顯示：中風在台灣是十大死因第二位，腦血管疾病僅次於癌症，爲台灣地區十大死亡原因之第二位，同時中風也是老年人口長期慢性失能的主要因素之一，對於國家經濟的衝擊相當大，因此中風儼然成爲國內研究的重點疾病之一。依據流行病學調查結果顯示：飲食攝取與中風盛行率息息相關，尤其是一些影響血壓、血脂肪之營養素與抗氧化營養素或植物化學物質(phytochemicals)。 本研究目的爲以營養評估(nutritional assessment)觀點，分別就(1)人體測量、(2)營養生化值、(3)飲食攝取量來評估低、中、高中風危險族群的營養狀態，比較不同之中風危險族群其營養狀態之差異，以及進一步可分析不同之中風發病危險性與熱量、營養素攝取、人體測量值及營養生化值之相關性。本研究擬配合台北醫學大學文山區中風防治中心先驅性計畫已建立之居民追蹤世代，收集經由中風危險因子篩選問卷結果所篩選之低、中、高中風風險族群 168 人(包含中低風險群 112 人，高中風風險群 56 人)之人體測量資料，包括身高、體重、身體質量指數(body mass index)、腰臀圍比(waist-to-hip ratio)、身體組成(含除脂體重、體脂肪重、體脂肪率、細胞內外液含量、身體總水重、肌肉重、軀幹手腳體液分布)，並取其血液分析營養狀態相關生化值，包括白蛋白(albumin)、運鐵蛋白(transferrin)、總膽固醇(total cholesterol; TC)、低密度脂蛋白膽固醇(low density lipoprotein-cholesterol; LDL-C)、高密度脂蛋白膽固醇(high density lipoprotein-cholesterol; HDL-C)、三酸甘油酯(triacylglycerol; TG)、總淋巴細胞數(total lymphocyte count; TLC)，另收集三天飲食紀錄(3-d food record)，以營養成分分析軟體計算其熱量與營養素(含醣類、蛋白質、脂肪、膽固醇、飽和脂肪酸(saturated fatty acids; SFA)、單元不飽和脂肪酸(monounsaturated fatty acids; MUFA)、多元不飽和脂肪酸(polyunsaturated fatty acids; PUFA)、粗纖維、膳食纖維、維生素 A、維生素 C、維生素 E、葉酸、維生素 B12、鈉、鉀、鈣、鎂、鐵、鋅)攝取量，並計算三大營養素攝取量之熱量百分比與 PUFA/MUFA/SFA 值。此研究結果除可瞭解營養狀態在中風風險性所扮演的角色，更可以作爲日後政府衛生機關擬定中風防治之營養政策的參考，亦可以作爲政府衛生機關、醫療機		

	構及學校對民眾、病人及學生正確有效宣導中風防治營養衛教之參考。
• 英文摘要	The statistical data reported by the Department of Health, Executive Yuan, Taiwan, ROC showed that stroke was the second leading cause of death in 2002. Cerebrovascular disease, following cancer, is the second leading cause of death in Taiwan. Additionally, stroke is one of the major causes for chronic dysfunction in the elderly, which impacts largely on national economy. Therefore, stroke is one of the most important research issues. The results of epidemiological investigation showed that dietary intake was closely related to the prevalence of stroke, especially the nutrients affecting blood pressure or blood lipids, antioxidants, or phytochemicals. The purposes of this study are to evaluate the nutritional status of the populations with low, median, and high stroke risk, including anthropometric, biochemical, and dietary assessments, compare the differences among different populations, and further analyze the relationship between the risk for stroke and energy intake, nutrient intake, anthropometric measurements, or biochemical data, in the aspect of nutritional assessment. The study will collect anthropometric measurements (height, body weight, body mass index, waist-to-hip ratio, body composition ？HHV fat-free mass, body fat mass, body fat percentage, intracellular and extracellular fluid, total body water, muscle mass, body fluid distribution in the trunk and extreme), blood biochemical values (albumin, transferrin, total cholesterol, low density lipoprotein-cholesterol, high density lipoprotein-cholesterol, triacylglycerol, total lymphocyte count), and 3-day food record to calculate energy and nutrient intake (carbohydrate, protein, fat, cholesterol, saturated fatty acids (SFA), monounsaturated fatty acids (MUFA), polyunsaturated fatty acids (PUFA), crude fiber, dietary fiber, vitamin A, C, E, folate, vitamin B12, sodium, potassium, calcium, magnesium, iron, zinc) and PUFA/MUFA//SFA ratio by food composition analysis software from a total of 168 subjects with low, median, or high stroke risk (112 with low and median stroke risk, and 56 with high stroke risk) screened by stroke risk questionnaire from the cohort study established by the pilot study of the Wenshan District Stroke Control Center, Taipei Medical University. From the results of the study, the role of the nutritional status in stroke risk can be clearly understood, which can further provide the guidelines for the nutritional policy established by health organizations of the government, and for the nutritional education to the public, patients, and students from health organizations of the government, medical organizations, and schools in preventing and controlling stroke efficiently.