

• 系統編號	RG9702-0256		
• 計畫中文名稱	建立保健食品之預防大腸癌功能評估方法		
• 計畫英文名稱	--		
• 主管機關	行政院衛生署	• 計畫編號	DOH96-TD-F-113-024
• 執行機構	台北醫學大學保健營養學系		
• 本期期間	9603 ~ 9702		
• 報告頁數	55 頁	• 使用語言	中文
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• 中文關鍵字	保健食品；大腸癌；預防；評估方法		
• 英文關鍵字	--		
• 中文摘要	<p>大腸癌是和膳食關係最密切的癌症，許多膳食因子可調節大腸癌的形成，透過膳食預防大腸癌為合理可行的方向。研究顯示目前已有數百種食品或其成分具有預防大腸癌的潛力，是研發保健食品的良好原料。自從我國健康食品管理法實施以來，衛生署陸續公告多種健康食品的保健功能評估方法，但迄今尚無預防癌症的相關保健功能評估方法。本研究之目的為建立保健食品預防大腸癌功能的完整評估方法及判定標準，並實際以不同食品探討此評估方法的可行性及應用性。首先蒐集大腸癌研究之相關文獻，比較其實驗條件與實驗結果，經整理分析後初擬保健食品預防大腸癌功效的完整評估方法及判定標準，並選擇糙米及發酵乳此兩種具有預防大腸癌潛力的食品作為實驗樣品，探討此方法用於評估不同種類食品預防大腸癌功效之可行性及應用性。研究結果顯示化學誘發動物模式適合作為評估食品預防大腸癌功效之實驗模式，在此模式下糙米可降低大腸癌前期病變—缺乏黏液素病灶的發生率，但無法抑制大腸癌前期病變—異常腺窩病灶。發酵乳可抑制異常腺窩病灶，且呈現劑量反應。本研究成果可提供學界完善的大腸癌研究模式，並可作為衛生署制定保健食品預防大腸癌功能評估方法的依據。</p>		
• 英文摘要	<p>Colorectal cancer is the form of cancer most closely associated with diet. Dietary factors play a role in colorectal carcinogenesis, and thus it may be possible to prevent the occurrence of this cancer by dietary modification. Hundreds of dietary agents have been tested against colorectal cancer, and these agents are highly interesting for developed as health food. The Department of Health has promulgated several assessment methods of health food on health care effects; however, there is not any assessment method for the preventive effect of health food on cancer. This study was designed to establish an assessment method of health food on prevention of</p>		

colorectal cancer and to evaluate the application of this method. First, we collected references about colorectal cancer studies, compared their experimental designs and results, and established an assessment method of health food on prevention of colorectal cancer. Second, we investigated the preventive effect of brown rice and fermented milk on colorectal cancer using this method to evaluate its application. The results showed that the chemically induced animal model is a good model for studies on the preventive effect of food against colorectal cancer. Brown rice reduced the incidence of mucin-depleted foci, a preneoplastic lesion, but did not inhibit aberrant crypt foci (ACF), another preneoplastic lesion. Fermented milk inhibited ACF in a dose-response. This study will contribute to provide an animal model for colorectal cancer studies and to establish a referential assessment method of health food on prevention of colorectal cancer.