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• 英文關鍵字	Telemedicine, Distance learning, Weight-loss program, Body mass index (BMI)
• 中文摘要	目前國內醫療院所普遍開設減肥門診/體重控制班/運動減重班，而現行減重計畫，計畫參與者須在院方指定的時間到院，經由門診–飲食營養諮詢課程–有氧運動課程之系列性的行程實施配合，來執行此減重計畫；遠距醫療是藉助無時空限制的通信與資訊科技，來交換相隔兩地之病患的醫療臨床資料及專家意見，以克服空間及時間的障礙。本研究融合減重計畫中節食計畫、體能活動計劃以及行爲療法之概念；應用遠距醫療的概念，以及遠距學習計劃的設計與實施，配合減重計畫的療程，希望能夠證明網路減重班的成效，並藉此了解設置網路減重班的架構及限制條件。幫助網路學習者甚或一般民眾達到控制體重的成效，進而維持健康的身體及生活。系統之建置主要在於架設網路減重班相關之軟硬體，主要有以下功能 (1)學員聯絡簿 (2)學員體重記錄 (3)日常飲食記錄 (4)體重趨勢圖 (5)運動耗能記錄 (6)飲食趨勢圖 (7)減重目標設定 (8)生理量測記錄 (9)視訊會議 (10)營養衛教。實驗評估部分主要針對受測因子包含體重、身體質量指數 (BMI)、體脂肪率、腰圍、臀圍等五項進行比較。在經過三個月的實驗期並蒐集相關之數據後，發現網路減重班的確能夠達到成效，而相關系統的設置均利用現行的資訊技術及視訊會議軟體，建置成本及技術門檻均屬相當普及的層次，有利於未來之改善及推展；進一步分析結果顯示實驗組與對照組在受測因子的部份，實驗組除了體脂肪、對照組除了臀圍外，其餘各數值都達到有意義的改變；而對照組減重效果大致優於實驗組。歸納結論，實驗組因爲透過無空間、時間限制的網路，互動性比起對照組高；但缺乏醫院監督的效果，持續性較對照組低。
• 英文摘要	Most of the hospitals now have established anti-fat related out-patient diagnosis or programs in helping people to overcome obesity. For current practice patient enrolled in the program need to go to hospital at a specific timeframe to join the program for health review, diet consulting, or exercise training. With the realization of concepts of telemedicine together with distance learning, it could be more convenient for patients to participate in the programs without

usual limitations of time and place availability. In this study, we implemented a system using current off-the-shelf information technologies of software and hardware, to set up a virtual classroom on the Internet for a weight-loss program. This system includes the following functions (1) e-mail system for communication (2) weight recording (3) diet recording (4) analysis for weight records (5) exercise data recording (6) analysis for diet records (7) the evaluation for weight reduction recorded by physicians (8) other physiological data recording (9) video conference for real-time delivery fo weight reduction program (10) on ? Vline knowledge sharing for weight reduction. In order to evaluate this system, volunteers of this experiment were divided into two groups, virtual class and traditional class, without any baseline differences in body weight, BMI, body fat %, waist circumference, and hip circumference. After a 3-month weight-loss program, data had been collected for comparison between the 2 groups. The results, however, showed that the weight-loss program of the virtual class is acceptable and effective; improvements of the participants are slower than those of the traditional class. Members in virtual class had better interactions with the medical stuffs due to the features brought out by telemedicine and distance learning. On the other hand, inconsistency of enrollments were noted because of unavailability of direct monitoring, which was the key successful factor for a weight-loss program, either in a virtual or a traditional class.