

## Development of a Computer Based, Nutrition and Fitness Programme and Its Effect on Nutritional Status and Fitness of Obese Adults

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**Abstract :** This study was conducted to develop a computer mediated programme for weight management and physical fitness and examining its efficacy in reducing weight and improving physical fitness in obese adults. A user friendly, computer based programme was developed to provide a simple, quick, easy and user-friendly method of assessing energy balance at individual level. The programme had four main sections viz. personal Profile, know about your weight, fitness and food exchange list. The computer programme was developed to provide facilities of creating individual profile, tracking meal and physical activities, suggesting nutritional and exercise requirements, planning calorie specific menus, keeping food diaries and revising the diet and exercise plans if needed. The programme was also providing information on obesity, underweight, physical fitness. An exhaustive food exchange list was also given in the programme to assist user to make right food choice decisions. The developed programme was evaluated by a panel of 15 experts comprising endocrinologists, nutritionists and diet counselors. Suggestions given by the experts were paned down and the entire programme was modified in light of suggestions given by the panel members and was reevaluated by the same panel of experts. For assessing the impact of the programme 22 obese subjects were selected purposively and randomly assigned to intervention group (n=12) and no information control group. (n=10). The programme group was asked to strictly follow the programme for one month. Significant reduction in the intake of energy, fat and carbohydrates was observed while intake of fruits, green leafy vegetables was increased. The programme was also found to be effective in reducing body weight, body fat percent and body fat mass whereas total body water and physical fitness scores improved significantly. There was no significant alteration observed in any parameters in the control group.

**Keywords :** body composition, body weight, computer programme, physical fitness

**Conference Title :** ICFSNHM 2016 : International Conference on Food Science, Nutritional Health and Medicine

**Conference Location :** Singapore, Singapore

**Conference Dates :** November 21-22, 2016