

Original Paper

Comparison of the effect of low-glycemic index versus low-fat diet on body fat and waist-hip ratio in obese women

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Abstract

Background and Objective: In recent years, the efficacy of low-fat diet has been questioned. One potential adverse effect of reduced dietary fat is a compensatory increase in the consumption of high glycemic index carbohydrate, principally refined starchy foods and concentrated sugar. Such foods other can be rapidly digested or transformed into glucose, causing a large increase in post-prandial blood glucose and insulin level. Review studies have generally found an inverse association between glycemic index and satiety. The aim of this study was to determine the effect of low-glycemic index diet versus low-fat diet on the body weight, body mass index, the percent of body fat mass and waist-hip ratio of obese women.

Materials and Methods: In this randomized controlled trial study, 46 obese women with BMI>27 and 18-55 year old randomly divided into low-glycemic index and low-fat diet groups during the course of study and after 6-weeks, body mas index, body fat mass and waist-hip ratio were measured. Data analyzed with t student, t paired student tests.

Results: Body weight, BMI, waist - hip ratio, and Triceps skinfold, biceps skinfold, subscapular skinfold, abdominal skinfold decreased significantly in both diet groups. After 6-weeks significant difference was not observed in percent of body fat mass between two dietary groups.

Conclusion: This study showed that both low-glycemic index and low-fat diets can equally be effective in body fat, BMI and waist - hip ratio.

Keywords: Obesity, Glycemic index, Body fat, Low-calory diet, Low-Fat diet, Waist - hip ratio

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