

عنوان مقاله:

Effects of Whey Protein Concentrate on Glycemic Status, Lipid Profile and Blood Pressure in Overweight/obese Women with Type ۲ Diabetes Mellitus: A Randomized Placebo Controlled Clinical Trial

محل انتشار:

همایش بین المللی غذای طیب (سال: 1401)

تعداد صفحات اصل مقاله: 22

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خلاصه مقاله:

Objectives: Due to the insufficient data on the metabolic consequences of long-term whey protein (WP) consumption, in this trial we aimed to examine the effects of WP, as fortified bread, on glycemic status, lipid profile and blood pressure in overweight/obese women with type ۲ diabetes mellitus (T2DM). **Methods:** In a ۱۲-week double-blind placebo-controlled randomized clinical trial, ۴۸ overweight/obese women with T2DM were randomly allocated into either WP (bread fortified by ۲۰ g WP concentrate) or placebo (unfortified bread) group. At pre- and post-intervention phase, physical activity, blood pressure, serum levels of glucose, insulin, glycosylated hemoglobin A1C (HbA1C), and lipid profile as well as dietary intakes were assessed. The homeostatic model assessment for insulin resistance (HOMA-IR) was used for estimation of insulin resistance. **Results:** Thirty five patients completed the trial. At the endpoint, there were no significant between-group differences for the assessed glycemic parameters ($p > 0.05$), except HbA1C, which was higher in the WP group after adjusting for the confounders and baseline values ($p < 0.05$). Fasting blood glucose was significantly increased in WP group ($p < 0.05$). There was a significant increase in HOMA-IR and serum level of insulin in both WP and placebo groups ($p < 0.05$). There were no significant within- or between- group changes for lipid profile and blood pressure of the patients ($p > 0.05$). **Conclusion:** Three month consumption of the WPC fortified bread, has no effects on lipid profile and blood pressure. It may cause some undesirable changes in some glycemic indices among overweight/obese women with T2DM.

کلمات کلیدی:

Whey Proteins, Diabetes Mellitus, Lipids, Blood Pressure

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