Original Paper

Effect of ten-week aerobic training with flax seed supplementation on blood lipids profile and C-reactive protein in obese women

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Abstract

Background and Objective: Flax seed has been shown to play a role in the prevention and treatment of dislipidemia and inflammation, which may enhance the benefits of training. This study was done to determine the effect of 10 weeks of aerobic training with flax seed supplementation on blood lipids profile and C-reactive protein in obese women.

Methods: In this clinical trail study, 45 obese middle-age women were randomly divided into 3 groups. Aerobic training program was performed 50-60 min/d, 3d/wk, for 10 weeks. Subjects in aerobic training with flax seed supplementation were received 6-9 garms, daily of flax seed. Body composition and metabolic parameters were assessed before and after the training period.

Results: Flax seed supplementation significantly improved triglyceride, HDL-cholesterol TC/HDL, body weight, body mass index, waist circumference and fat mass ($P<0.05$). Flax seed supplementation in combination with aerobic training significantly improved adiposity indices body weight,body mass index, waist circumference , fat mass, triglyceride, HDL- cholesterol, LDL- cholesterol, LDL/HDL and TC/HDL ($P<0.05$).

Conclusion: Flax seed is safe and effective for improvement of cardiometabolic health in obse women and combination of flax seed can enhance beneficial effect of training over a ten-week period.

Keywords: Aerobic training, Flax seed, C-reactive protein, Lipids profile, Body mass index

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