The effect of restricted diet with olive oil versus fish oil combined with endurance exercise on dyslipidemic females

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Obesity is a medical condition in which excess body fat has accumulated to the extent that it may have a negative effect on health, leading to reduced life expectancy and/or increased health problems. Lifestyle behaviors, including diet and exercise, are the cornerstone of weight control.

The purpose: To compare between the effect of restricted calorie diet containing olive oil or containing fish oil combined with endurance training exercise on lipid profile in obese female.

Subjects: Sixty obese females aged 20-40 years are included in the present study. Their Body Mass Index (BMI) ranged from (30:34.99). They were randomly divided into three groups (A, B and C) each group included twenty subjects.

Methods: Group (A) included those on restricted calorie diet (1200 cal/day daily) containing olive oil (40.5 ml/day three times a week) and a program of endurance training exercise (moderate intensity 3 times/week), group (B) included those on restricted calorie diet containing fish oil (in form of 204 gram mackerel fish to supply the patient with 3.6 gram omega-3/day three times a week ) and a program of endurance training exercise as group (A) and group (C) included those on restricted calorie diet and endurance training exercise only. The biochemical changes in serum total cholesterol (TC), Triglyceride (TG), Low Density Lipoproteins cholesterol (LDL-C) and High Density Lipoprotein cholesterol (HDLC-C) were measured at the beginning of the study and after twelve weeks.

Results: Results showed a significant improvement in both lipid profile and weight in the three groups. Dyslipidemic females showed significant improvement in lipid profile of restricted calorie diet combined with exercise more than exercise alone where there was a challenge between group A and Group B in all measured items. Weight was significantly reduced in all groups but group C demonstrated a greater reduction compared with other groups.

Conclusion: Restricted calorie diet with olive oil and fish oil, combined with endurance exercise had shown significant improvement in the blood lipid profile and body weight in obese subjects.

Biography
Samy Abd Elsamad Nasef is the Dean of Faculty of Physical Therapy, Pharos University, Alexandria. He is a PhD holder (1993) (channel emission between Cairo University and Indian University, USA). He is an Associate Editor of the Journal of Advanced Research, Cairo University and has published more than 30 papers in conferences and Journal of Physical Therapy, Cairo University.

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