



## **Comparison between Mediterranean, Low Fat and Balanced Diet on Blood cholesterol in Obese Women**

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**Abstract: Back ground:** The link between diet and human health has been known since long time. Over the last 50 years, the effect of specific dietary patterns and foods which have higher nutritional dense on the human health and well-being of persons has been studded with ecologic, observational, case control studies, prospective cohorts, and randomized clinical trials. These studies ensure that nutrition and nutritional factors play strong roles in the prevention/development of chronic diseases, such as Dyslipidemia, obesity and cardiovascular disease as well as mortality.**Purpose:** The Purpose of current study is to determine the most effective diet model (restricted Mediterranean diet, restricted low fat diet, or restricted balanced diet) combined with endurance training exercise in management of blood total cholesterol (TC). **Subjects:** 60 obese women with age of 20-40 years. Their body mass indexes (BMI) were ranged from 30-34.99 kg/m<sup>2</sup> they were randomly divided into three groups (A, B and C) each group included 20 subjects. **Methods:** (group A) included those on restricted Mediterranean diet (1200 cal /day, daily) and endurance training exercise (moderate intensity, three times / week), (group B) included those on restricted low fat diet (1200 cal /day, daily) and endurance training exercise (moderate intensity, three times / week) and (group C) included those on restricted balanced diet (1200 cal /day, daily) and endurance training exercise (moderate intensity, three times / week). The biochemical changes in serum TC was measured at the beginning of the study and after 12 weeks. **Results:**The results of the current study showed that there were significant improvement in TC in the three groups but restricted Mediterranean diet combined with endurance training exercise was more powerful, favorable and effective in controlling TC abnormality ( the percentages of improvement were: group A -- 13.14 % (P=0.0001), group B --12.79 % (P =0.0001) and group C --7.86 % (P =0.0001).**Conclusion:** this study stated that Mediterranean diet with endurance training exercise, low fat diet with endurance training exercise and balanced diet with endurance

training exercise have great and clear effect on TC in obese women but Mediterranean diet with endurance training exercise have the highest and the most powerful effect.

**Key words** :( restricted calorie diet, Mediterranean diet, Low Fat diet, Balanced diet, total Cholesterol, obesity).

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