



## **Effect of Focused Ultrasound on Abdominal Fat During Menopause**

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**Abstract:** Egypt, and the countries of the Middle East in general, are typical of many middle income developing countries that have experienced a rapid rise in the prevalence of obesity. Data from the Demographic and Health Surveys show that in 1992, mothers with young children had a mean body mass index (BMI) of 26.9. By 2005, this had risen to a mean (BMI) OF 30.1 with nearly half of Egyptian women of reproductive age classified as obese. Clearly, Egypt is facing extraordinary changes in the prevalence of overweight and obesity in a comparatively short period of time. Obesity has long been recognized to be an important cause of type II diabetes mellitus, hypertension, and dyslipidemia the adverse metabolic effects of excess body fat are known to accelerate atherogenesis and increase the risk of coronary heart disease, stroke, and early death. The relationship of obesity to cancer has received less attention than its cardiovascular effects. Overweight women are known to have increased risk of endometrial cancer and breast cancer after menopause. The aim of this study was to Investigate the effect of focused ultrasound on the abdominal fat thickness during post-menopausal period. Thirty volunteer overweight menopausal women, their ages range from 45 to 60 years old enrolled in the study were randomly assigned into 2 groups: control, and study. HDL, LDL, TG and TC concentration was measured for all participants pre- and post-treatment period. There was a significant difference between the two groups in the HDL, LDL, TG and TC concentrations after treatment. But there was no significant difference between the two groups regarding the HDL, LDL, TG and TC concentrations before treatment. We suggest additional focused ultrasound is a necessary adjunct to exercise to decrease abdominal fat thickness during post-menopausal period.

**Key words :** HDL, LDL, TC, TG.

