



## Effects of Inner Part of Walnut on Serum Triglyceride and HDL Cholesterol Level in Hypertriglyceridemic Subjects

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### Abstract:

**Introduction:** To determine the serum Triglyceride and HDL cholesterol level resulting from consumption of inner part of Persian walnut (*Juglans regia* L.) in Iran. This is the soft shell that separates cotyledon into four sections.

**Materials and Methods:** Eighty male and female subjects with high serum Triglyceride level between 200 to 499 mg/dl (2.26 to 5.64 mmol/L) were selected for this randomized placebo controlled clinical trial study. After matching for sex they were separated into two groups. Group A consumed capsules which contained 300 mg of inner part of walnut daily and group B received capsules containing 300 mg starch as placebo (control group). The duration of intervention was six weeks. Dietary intake of total energy, carbohydrate, fiber, total lipid, MUFA, PUFA, SFA and cholesterol was calculated through 24 h recall. It was done for each participant three times during study period.

After 12 hour overnight fasting serum triglyceride, non HDL cholesterol, LDL cholesterol and HDL cholesterol were checked prior to and six week after the beginning of the study.

**Results:** In group A serum triglyceride level showed a decrease of 18% from the baseline and HDL cholesterol was increased by 10% ( $p=0.01$ ,  $p=0.02$ ). No statistically significant change in other measured parameters was observed in the control group.

**Conclusion:** Inner part of walnut can decrease serum Triglyceride and increase HDL cholesterol level in patients with hypertriglyceridemia.

**Keywords:** Triglyceride, Walnut, HDL, Traditional medicine.

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