

## Effects of myo-inositol supplementation in postmenopausal women with metabolic syndrome: a perspective, randomized, placebo-controlled study

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### Abstract

**Objective:** The aim of this study was to evaluate whether myo-inositol, an insulin-sensitizing substance, may improve some features of metabolic syndrome in postmenopausal women.

**Methods:** Eighty postmenopausal women affected by the metabolic syndrome were enrolled prospectively in the study and treated with diet plus supplementation of myo-inositol (2 g BID plus diet: intervention group) or with diet plus placebo (control group) for 6 months. They were evaluated at baseline and after 6 months for insulin resistance (homeostasis model assessment ratio [HOMA] insulin resistance), lipid profile, and blood pressure.

**Results:** Myo-inositol plus diet improved systolic and diastolic blood pressure, HOMA index, cholesterol, and triglyceride serum levels with highly significant differences, compared with the groups treated only with diet and placebo. In the group treated with myo-inositol, a decrease in diastolic blood pressure (-11%), HOMA index (-75%), and serum triglycerides (-20%) and an improvement in high-density lipoprotein cholesterol (22%) were shown.

**Conclusions:** Supplementation with myo-inositol may be considered a reliable option in the treatment of metabolic syndrome in postmenopausal women.