

# One-year effects of myo-inositol supplementation in postmenopausal women with metabolic syndrome

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## ABSTRACT

**Objective** To evaluate the 12-month effect of myo-inositol treatment on some biochemical parameters of women affected by metabolic syndrome.

**Methods** Eighty outpatient postmenopausal women, affected by metabolic syndrome, were enrolled in a 12-month study. All women were treated with a low-energy diet, and then they were randomly assigned to myo-inositol 2 g b.i.d. ( $n = 40$ ) or placebo ( $n = 40$ ). All the women were evaluated for serum glucose, insulin, HOMA-IR (Homeostasis Model Assessment-Insulin Resistance), triglycerides, total and high density lipoprotein cholesterol, body mass index (BMI), waist circumference and blood pressure at baseline and after 12 months of treatment.

**Results** With the exception of BMI and waist circumference, after 12 months of treatment, all the parameters studied showed a significant improvement in the myo-inositol group compared to the control group. At the end of the study, in the myo-inositol group, the number of women without metabolic syndrome was eight (20%) whereas, in the control group, only one woman no longer had the metabolic syndrome after 12 months of diet.

**Conclusions** Myo-inositol might be considered one of the insulin-sensitizing substances in the treatment of metabolic syndrome.