

## عنوان مقاله:

The Effect of Oral L-arginine Supplementation on Blood Pressure in Patients with Metabolic Syndrome: A Randomized Clinical Trial

## محل انتشار:

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## نویسندگان:

Davood Bahrami - *Department of Nutrition, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran*

Hassan Mozaffari-Khosravi - *Department of Nutrition, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran*

## خلاصه مقاله:

**Objective:** Hypertension is a common component of metabolic syndrome (MetS). Some studies showed that L-arginine reduced the blood pressure (BP). Therefore this study was designed to evaluate the effect of L-arginine supplementation on BP in MetS. **Materials and Methods:** In this randomized, double-blind, placebo-controlled trials, 60 patients with MetS were randomly divided into two groups: the L-arginine-supplemented group (AG), who received 5 gr of L-arginine daily and placebo group (PG). Systolic blood pressure (SBP), diastolic blood pressure (DBP), mean arterial pressure (MAP), pulse pressure (PP) were measured before and after the intervention and compared. **Results:** At the end of the study in the AG significant reductions were observed in the SBP, DBP and MAP (P-value: 0.001). The comparison of changes in variables between the AG and PG indicated that in the AG, patients had a significantly greater decrease in the SBP ( $-11.25 \pm 10.93$  vs.  $-2.67 \pm 6.15$  mmHg; P-value: 0.001), DBP ( $-5.71 \pm 7.16$  vs.  $-1.25 \pm 7.02$  mmHg; p-value: 0.02) and MAP ( $-7.55 \pm 5.61$  vs.  $-1.72 \pm 5.16$  mmHg, P-value: 0.001). The PP decreased in both groups but a significant decrease compared with baseline in the AG was observed ( $-5.53 \pm 13.83$  vs.  $-1.42 \pm 9.21$  mmHg; P-value: 0.19). **Conclusion:** The findings of the present study showed that 5 gr/d L-arginine supplementation for 12 weeks in MetS resulted in significant decrease in the SBP, DBP and MAP but had no significant effect on the PP.

## کلمات کلیدی:

Metabolic syndrome, L-arginine, Blood pressure

## لینک ثابت مقاله در پایگاه سیویلیکا:

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