

Cinnamon supplementation improved Blood pressure in type 2 diabetic patients: A systematic review and meta-analysis of randomized controlled trials

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Hypertension is known as an important risk factor for cardiovascular diseases (CVD) and metabolic syndrome. Also some studies suggested a consumption of herbal medicine for improving them. The present systematic review and meta-analysis aimed to assess the efficacy of cinnamon supplementation on the improvement of blood pressure in type 2 diabetic patients. Systematic search was done in several online databases (PubMed, Embase, Scopus and Web of Sciences) to identify randomized controlled trials investigating the effect of cinnamon supplementation on systolic blood pressure (SBP) or diastolic blood pressure (DBP) for all potential publication up to 29 November 2019. Weighted mean difference (WMD) and 95% confidence interval (CI) were calculate to find the effect of cinnamon on the arms of this study. Potential publication bias was assessed using funnel plots and Egger weighted regression test. After excluding nonrelated records, 5 full-text articles included in this meta-analysis. Pooled results of the present meta-analysis on 332 participants indicated a significant reduction in SBP (WMD = -0.691, 95% CI = [-1.199, -0.182], $P = 0.008$) and DBP (WMD = -1.193, 95% CI = [-1.457, -0.930], $P < 0.0001$) following cinnamon administration. Also, no publication bias was found. The results of the present study suggested cinnamon for improving the blood pressure in type 2 diabetic patients.

Biography

Jalali is an Iranian nutritionist, which receive honorary doctorate as health education at the age of 20 years old and also has a traditional medicine certificate from Shiraz University of Medical Sciences with score 100. He is a member of Nutrition Research Center of Shiraz, Iran. He is specifically working on functional foods and nutraceuticals that can improve various metabolic disorders, and has obtained significant outcomes regarding important biomarkers. He also eminence in the field of meta-analysis studies.

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