



Meta-Analysis [Diabetes Res Clin Pract.](#) 2019 Oct;156:107815.

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Efficacy and safety of cinnamon in type 2 diabetes mellitus and pre-diabetes patients: A meta-analysis and meta-regression

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Abstract

..... Cinnamon has been used as a dietary component and in the management of diabetes mellitus. This study systematically reviewed and synthesized evidence on the efficacy of cinnamon for the treatment of type 2 diabetes mellitus (T2DM) and pre-diabetes patients.

..... Databases of Web of Sciences, the Cochrane library, PubMed, CINAHL and SCOPUS were searched. Stata version 13 (College Station, Texas 77845 USA) and RevMan var. 5.3 software were used for meta-analysis. Heterogeneity was assessed using Chi-square and I^2 tests.

..... Sixteen randomized controlled studies were included in the meta-analysis. Cinnamon significantly reduced fasting blood glucose (FBG) and homeostatic model assessment for insulin resistance (HOMA-IR) level compared to placebo with weighted mean difference (WMD) of -0.545 (95% CI: -0.910, -0.18) mmol/L, $I^2 = 83.6\%$ and -0.714(-1.388, -0.04), $I^2 = 84.4\%$ respectively. There was no significant change in weighted mean difference of glycosylated hemoglobin A1C (HbA1c) % and lipid profiles (mmol/L). Meta-regression did not show any factor significantly affecting the treatment response.

..... Cinnamon reduced FBG and HOMA-IR, level in T2DM and pre-diabetes patients compared to placebo. High heterogeneity observed among included studies warrants further clinical trials after standardization of cinnamon formulation.

..... Blood sugar level; Diabetes mellitus; Efficacy; Herbal therapy; Systematic review.

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