

Glycated haemoglobin and blood pressure-lowering effect of cinnamon in multi-ethnic Type 2 diabetic patients in the UK: a randomized, placebo-controlled, double-blind clinical trial.

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Abstract

AIMS: To determine the blood glucose lowering effect of cinnamon on HbA1c, blood pressure and lipid profiles in people with type 2 diabetes.

METHODS: 58 type 2 diabetic patients (25 males and 33 females), aged 54.9 ± 9.8 , treated only with hypoglycemic agents and with an HbA1c more than 7% were randomly assigned to receive either 2g of cinnamon or placebo daily for 12 weeks.

RESULTS: After intervention, the mean HbA1c was significantly decreased ($P < 0.005$) in the cinnamon group (8.22% to 7.86%) compared with placebo group (8.55% to 8.68%). Mean systolic and diastolic blood pressures (SBP and DBP) were also significantly reduced ($P < 0.001$) after 12 weeks in the cinnamon group (SBP: 132.6 to 129.2 mmHg and DBP: 85.2 to 80.2 mmHg) compared with the placebo group (SBP: 134.5 to 134.9 mmHg and DBP: 86.8 to 86.1 mmHg). A significant reduction in fasting plasma glucose (FPG), waist circumference and body mass index (BMI) was observed at week 12 compared to baseline in the cinnamon group, however, the changes were not significant when compared to placebo group. There were no significant differences in serum lipid profiles of total cholesterol, triglycerides, HDL and LDL cholesterol neither between nor within the groups.

CONCLUSIONS: Intake of 2g of cinnamon for 12 weeks significantly reduces the HbA1c, SBP and DBP among poorly controlled type 2 diabetes patients. Cinnamon supplementation could be considered as an additional dietary supplement option to regulate blood glucose and blood pressure levels along with conventional medications to treat type 2 diabetes mellitus.

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