Vitamin E can reduce blood pressure in mild hypertensives.

Int J Vitam Nutr Res Int J Vitam Nutr Res 2002 Oct;72(5):309-14 <u>Maryam Boshtam, Morteza Rafiei, Kamran Sadeghi, Nizal Sarraf-Zadegan</u>

This triple-blind placebo-controlled clinical trial was performed to determine the effects of the antioxidant vitamin E on blood pressure and heart rate in patients with mild hypertension. A total of 70 new mild hypertensive subjects (systolic blood pressure, SBP: 140-160 mmHg; diastolic blood pressure, DBP: 90-100 mmHg) without secondary hypertension were selected from among people referred to the Hypertension Unit of Isfahan Cardiovascular Research Center and divided randomly into two groups of drug (DG) and placebo (PG). All subjects were aged from 20 to 60 years old, without any other cardiovascular risk factors. The drug group received vitamin E tablets (200 IU/day) and the placebo group received placebo only for 27 weeks. At the beginning and the end of the study, the blood vitamin E level was measured fluorimetrically in all subjects according to the Hansen and Warwick method [14, 15]. Blood pressure and heart rate were measured at the beginning, during, and at the end of the study. Blood pressure was measured by a physician using one random zero mercury sphygmomanometer. Personal information and dietary habits of subjects were collected by separate questionnaire. At the end of the study, it was found that the vitamin E supplement had caused a remarkable decrease in SBP (-24% in DG versus -1.6% in PG) and a less remarkable decrease in DBP (-12.5% in DG versus -6.2% in PG) (p < 0.05). The change in heart rate was -4.3% in DG, and -14.0% in PG (p < 0.05). It is concluded that a vitamin E supplement of 200 IU/day can be effective in mild hypertensive patients in the long term, probably due to nitric oxide, and improve their blood pressure status. Therefore, vitamin E supplement could be recommended to such patients.