Reduction of blood pressure with calcium supplementation in young adults

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Epidemiologic and animal studies have suggested an inverse relationship between calcium intake and BP. Furthermore, calcium intake seems to be inversely correlated with the incidence of eclampsia in pregnancy. In a randomized clinical trial, young adults were allocated to a calcium-supplemented group receiving 1 g/day of elemental calcium (15 men and 15 women) or a placebo group (14 women and 13 men) for a period of 22 weeks. The calcium-supplemented group showed a significant decrease in diastolic BP; this effect was stabilized after nine weeks in women and six weeks in men. The reduction in diastolic BP was 5.6% and 9% from the initial values for women and men, respectively. This study supports epidemiologic and animal evidence of the effect of calcium intake on BP and suggests the need for more research exploring the mechanisms involved in the observed effect.