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*B vitamins have been shown to decrease blood homocysteine levels. This study looks at the corresponding effects they may have on cardiovascular health.*

## B VITAMIN SUPPLEMENTATION AND CARDIOVASCULAR HEALTH

High homocysteine (Hcy) levels in the blood are often an indicator of low vitamin B12 and folate. Hcy can, however, be lowered by supplementation of certain B vitamins. Hcy has also been shown to be directly associated with cardiovascular risk. In a study published in the *American Journal of Clinical Nutrition*, researchers sought to connect the two endpoints, and analyze the relationship between B vitamin supplementation and cardiovascular risk.

The researchers collected and analyzed data from 19 studies, which consisted of a total of 47,921 participants. Blood Hcy levels were decreased in the B vitamin treatment group of all 19 studies. There was slightly positive trend (not statistically significant) related to the B supplemented groups and the risk of several cardiovascular diseases analyzed. However, supplementation with B vitamins had a significant protective effect on the risk of stroke (decreased by 12%).

This study shows that B vitamins are effective in reducing Hcy levels and the risk of stroke. While not statistically significant, this study did show a small reduction in the risk of coronary heart disease, which has been shown in other studies to be decreased by 11% when Hcy levels were lowered.

*Huang T, Chen Y, Yang B, et al. Meta-analysis of B vitamin supplementation on plasma homocysteine, cardiovascular and all-cause mortality. Clinical nutrition (Edinburgh, Scotland). 2012:1-7.*