In a British study of over 20,000 adults, those with the highest plasma vitamin C levels had a significantly lower risk of stroke when compared to adults with lower levels.

Higher plasma vitamin C concentrations predict lower risk of stroke

To date, clinical trials have not shown significant benefit of vitamin C supplementation in reducing stroke risk, but they have not examined the relation between plasma vitamin C concentrations and stroke risk in a general population.

A recent study published in the American Journal of Clinical Nutrition examined the relation between baseline plasma vitamin C concentrations and risk of incident stroke in a British population of over 20,000 adult men and women. The participants completed a health questionnaire and attended a clinic during 1993–1997. After an average follow-up time of 9.5 years, the participants in the top fourth of plasma vitamin C levels had a 42% lower risk of stroke compared to those with the lowest levels. These results were independent of age, sex, smoking, BMI, blood pressure, cholesterol, physical activity, diabetes, social class, alcohol consumption, and any supplement use.

Plasma vitamin C concentrations, therefore, may act as an indicator of lifestyle or other factors associated with reduced stroke risk and may be helpful in determining those at high risk of stroke.