

December 21st, 2011

A study of over 36,000 adult women showed that higher intakes of dietary antioxidants may reduce the risk of stroke, likely by lowering oxidative stress and inflammation.

HIGH DIETARY ANTIOXIDANT INTAKES MAY REDUCE RISK OF STROKE IN WOMEN

Previous research has shown that a diet high in antioxidant rich foods is related to a lower level of oxidative stress and a reduction in inflammation. New research published in the journal *Stroke* examined the association between total antioxidant capacity (TAC) and the incidence of stroke among women with a history of cardiovascular disease (CVD) and those who were free of CVD at the beginning of the study. TAC takes into account all dietary antioxidants and the synergistic effects between them.

The study included over 36,000 women, aged 49 – 83 years, from the Swedish Mammography Cohort. At the outset, 31,035 were free of CVD, and 5,680 had a history of CVD. Food frequency questionnaires were used to analyze the diet. ORAC (oxygen radical absorbance capacity) values were used to calculate dietary TAC.

During 12 years of follow-up 1,322 stroke cases (988 cerebral infarctions, 226 hemorrhagic strokes, and 108 unspecified strokes) had occurred among CVD-free women. Among women with a history of CVD, 1,007 stroke cases were reported (796 cerebral infarctions, 100 hemorrhagic strokes, and 111 unspecified strokes). Among women who were free of CVD at baseline, there was a 17% reduced incidence of total stroke in the women with the highest TAC when compared to the lowest TAC. Comparing the highest versus lowest TAC in women with CVD history, there was a 10% reduction in total stroke. However, in this group the risk of hemorrhagic stroke was reduced by 45% in the women with higher total antioxidant intake.

The results of this study suggest that dietary TAC is inversely related to total stroke risk among CVD-free women and, more specifically, risk of hemorrhagic stroke among women with prior CVD history.

Susanne Rautiainen, MSc et al. Total Antioxidant Capacity of Diet and Risk of Stroke: A Population-Based Prospective Cohort of Women (Stroke. 2012;43:00-00.) STROKEAHA.111.635557 Published online before print December 1, 2011, doi: 10.1161/STROKEAHA.111.635557.