

Nutrition and Brain Support: Part 1

Antioxidants Reduce Alzheimer's disease, and Dementia Risk

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Free radicals are strongly linked to the development of dementia and Alzheimer's disease. As the brain uses at least 20% of body's oxygen, at any give moment, brain cells are thereby exposed to significant levels of oxygen free radicals. Over a lifetime these free radicals can cause enough corrosive damage to brain cells (in a similar fashion as oxygen in the air will rust out your car over time) to interfere with their normal function and to contribute to their death if the damage is severe enough. Researchers have shown that many brain and nerve degenerative diseases involve free radical damage. There is convincing evidence to show that Alzheimer's disease and age-related cognitive decline (senile dementia) are strongly linked to free radical damage. Moreover, evidence is accumulating to demonstrate that individuals, who take antioxidant supplements at protective dosages, have a much lower risk of developing these conditions as they age.

In the Chicago Health in Aging Project, the average annual decline in cognitive score was 34% less in those with the highest Vitamin E intake (mean of 299 I.U./day) compared with those in the lowest intake group (6.7 I.U./day.) A weak association was also seen for Vitamin C. This study included 6,000 persons aged 62-102, who were followed for three consecutive years. In 1998 MC Morris and fellow researchers showed that among a group of 633 persons, 65 years and older, none of the vitamin E or vitamin C supplement users developed Alzheimer's disease during the 4.3 year follow up study.

In the Alzheimer's Disease Co-operative Study, Alzheimer's patients with moderately advanced disease were treated with 2,000 I.U. Vitamin E/day or a placebo. The results indicated that Vitamin E supplementation was able to significantly slow the functional deterioration of the brain in these patients, delaying the need for nursing home placement and retarding the progression of the disease. (Grundman, M., 2000). Laboratory studies reveal that Vitamin E inhibits free radical damage to brain cells induced by the Abeta-protein, which is a hallmark feature in Alzheimer's disease (Butterfield, D.A., et al, 1999).

Previous studies have shown that supplementation with vitamin E was effective in slowing the progression of Parkinson's disease Alzheimer's disease and helps to control tardive dyskinesia (a condition involving involuntary repetitive movements of the face and head brought on by certain drugs that affect brain function) (Vatassery GT et al. 1999).

Overall there is substantial clinical and experimental data to suggest that the use of a daily antioxidant-enriched, multiple vitamin and mineral supplement offers

significant protection against age-related cognitive decline and Alzheimer's disease, brought on by cumulative free radical damage to brain cells.

Antioxidants and Alzheimer's Disease and Dementia

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