

A s t a x a n t h i n M a y P r e v e n t D e m e n t i a

Source: *British Journal of Nutrition*

Dementias are disorders with symptoms of memory loss and a decrease in cognition and the ability to reason. Dementia, sometimes called "senility," is not a part of the normal aging process, and shows that some other disease may be present. Dementia affects a person's ability to be successful in carrying out their activities of daily living. Accurate diagnosis of the disease that is present is necessary for treating the dementia properly.

Astaxanthin belongs to a group of compounds called carotenoids. While b-carotene is a vitamin A precursor, astaxanthin cannot be converted to vitamin A. In laboratory studies, astaxanthin has been reported to be typically at least 10 times more potent as an antioxidant than the other standard carotenoids such as canthaxanthin, b-carotene, lutein, lycopene, tunaxanthin and zeaxanthin. Astaxanthin provides the rich pink color observed in various aquatic species including salmon, crabs, lobster, shrimp and even some nonaquatic species such as the flamingo (whose diet includes some astaxanthin-producing organisms).

A study published in the *British Journal of Nutrition* investigated the effect of astaxanthin on phospholipid hydroperoxides, which are known to accumulate abnormally in the red blood cells of people with dementia. The study included 30 healthy volunteers between the ages of 50 and 69 years who were randomly assigned to receive either 6 mg or 12 mg of astaxanthin or 0 mg placebo per day for 12 weeks. The results revealed that after 12 weeks of treatment, levels of phospholipid hydroperoxides were significantly lower in erythrocytes following astaxanthin supplementation with reductions in the order of about 40 and 50 percent in the 6 and 12 mg groups, respectively, compared with no significant change in the placebo group. These findings suggest that supplementation with astaxanthin improved erythrocyte antioxidant status and decreased phospholipid hydroperoxides levels, which may help prevent dementia.¹

1 Nakagawa K, Kiko T, Miyazawa T, et al. Antioxidant effect of astaxanthin on phospholipid peroxidation in human erythrocytes. *Br J Nutr.* Jan2011:1-9.