Coenzyme Q10 May Help Protect Against Alzheimer Disease

By Greg Arnold, DC, CSCS, April 25, 2006, abstracted from Coenzyme Q10 modulates cognitive impairment against intracerebroventricular injection of streptozotocin in rats" printed online in Behavioural Brain Research

Link – [http://www.nowfoods.com/HealthLibrary/HealthArticles/WeeklyNewsletter/M083337.htm](http://www.nowfoods.com/HealthLibrary/HealthArticles/WeeklyNewsletter/M083337.htm)

First identified in 1957, Coenzyme Q10 is also known as “ubiquinone” because it is found everywhere in the body. The highest amounts are in the heart, liver, kidneys, and pancreas and the lowest amounts are in the lungs. The first applications for CoQ10 came in the 1961 when it was found that cancer patients were deficient in the enzyme.¹

But research has also shown it to be a tremendously versatile supplement for a number of other conditions including heart disease² and migraines³. Interest in CoQ10’s ability to sustain health continues to grow, since CoQ10 levels can decrease in the body by as much as 83% as we age⁴, increasing cell damage⁵, causing premature aging and increasing the risk of disease.⁶

CoQ10 also possesses the ability to help decrease inflammation⁷. It is the anti-inflammatory properties of CoQ10 that led a new study⁸ to conclude that CoQ10 may help in the treatment of Alzheimer Disease (AD). This disease affects 4.5 million Americans, is expected to hit 16 million by 2050⁹ and costs our healthcare system $100 billion each year.¹⁰

In the study, four groups of ten rats each were given either placebo, 10 mg per kg of body weight of CoQ10 in corn oil each day, an injection of streptozotocin (STZ) to induce brain damage, or both CoQ10 and the STZ injection for three weeks. The researchers then had the rats complete maze tests and measured levels of an enzyme known to be depleted in AD patients.

Researchers found that the time to finish the maze was “significantly prolonged” in the STZ group not taking CoQ10 while also showing “a poorer learning performance” compared to the other three groups. In addition to finding “significantly [higher]” oxidative damage in the STZ group not taking CoQ10, this group also had a significant decrease in the enzyme that is depleted in the brain of AD patients.

Although this was an animal study and CoQ10 was given in very high amounts, researchers still concluded that “the study demonstrates that CoQ10 may have a therapeutic importance in the treatment of Alzheimer’s type dementia.”

In addition to taking CoQ10, there are a number of other ways to help protect against AD, including the Indian spice Turmeric¹¹, green tea¹² and increasing fruit consumption, especially apples.¹³

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Reference:
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