Higher Omega-3 Fatty Acid Levels Correlated with Reduced Telomere Shortening Rate

Researchers at the University of California reveal in a recent issue of the Journal of the American Medical Association that heart disease patients who have higher levels of omega-3 fatty acids experience a lower rate of reduction in telomere length over time.* Telomeres, which are protective DNA sequences at the ends of chromosomes, shorten with the age of the cell, and their length is a marker of biological aging.

The investigation enrolled 608 men and women recruited from the Heart and Soul Study. Patients whose levels of EPA and DHA were among the top 25% of participants had the slowest rate of telomere shortening over the 5-year follow-up period, while those whose levels were lowest had rates that were the fastest.

“These findings raise the possibility that omega-3 fatty acids may protect against cellular aging in patients with coronary heart disease,” the authors conclude.

Editor’s note: Daily fish oil capsules are a convenient and safe way to ensure optimal omega-3 fatty acid intake.

—Dayna Dye

Reference

Jogging Builds Brain Cells

Scientists reporting in the Proceedings of the National Academy of Sciences have recently concluded that running has a positive impact on the hippocampus, which is the section of the brain responsible for learning and memory. Their findings are based on studies that show that adult mice that voluntarily used running wheels increased the number of their brain cells and performed better at spatial learning tests than non-exercising mice.*

Until recently, neuroscientists were under the impression that we do not grow new brain cells after birth. However, recent mice experiments have repeatedly shown that running boosts the number of new brain cells in the hippocampus. In this particular study, two groups of mice, one of which had unlimited access to a running wheel throughout, were put through post-exercise memory tests. After training sessions, the mice in the exercising group scored almost twice as high as the other mice in a repeated memory test for a sugar reward. The sedentary mice got steadily worse at the test.

This evidence confirms what other studies have begun to show, which is that exercise triggers significant physiological and structural changes in the brain that can improve cognitive function and help prevent mental decline.

—Jon Finkel

Reference

Calcium and Vitamin D Supplementation Reduces Fracture Risk Regardless of Age, Gender
The January 16, 2010 issue of the *British Medical Journal* reported the results of a review of seven clinical trials which found that supplementing daily with both calcium and vitamin D helps prevent bone fractures among men and women of all ages.*

An international team of scientists pooled data from 68,517 subjects for their analysis of randomized trials involving vitamin D supplementation. The combination vitamin D with calcium reduced overall fracture risk by 8%, and hip fracture risk by 16% compared to the risk experienced by those who did not receive the nutrients. Vitamin D supplementation alone in daily doses of 10 or 20 micrograms was not associated with significant benefits.

“Interestingly, this combination of supplements benefits both women and men of all ages, which is not something we fully expected to find,” noted Dr. John Robbins, who coauthored the article.

Editor’s note: The combination of calcium with vitamin D, such as are contained in Life Extension’s Calcium Citrate with Vitamin D and Bone Restore products, has long been recognized by Life Extension as necessary for bone maintenance during all of life’s stages.

—Dayna Dye

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**Reference**


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**Green Tea May Block Lung Cancer**

A recent front-page news article on the British Broadcasting Corporation’s news web site claims that green tea may block lung cancer.* The article cited several cancer experts who spoke about a few specific studies that point to green tea’s cancer stopping effects. In particular, several lab studies have shown that extracts from green tea, called polyphenols, can stop cancer cells from growing.

The link between green tea being a beneficial weapon against cancer originated with the discovery that rates of many cancers are much lower in Asia, where green tea is a widely consumed drink, than other parts of the world.

Dr. I-Hsin Lin, of Shan Medical University found that among smokers and non-smokers, people who did not drink green tea were more than five times as likely to get lung cancer as those who drank at least one cup a day.

—Jon Finkel

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**Reference**

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