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Reference

\* J Agric Food Chem. 2010 Jan 4.

## 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

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Reference

\* J Am Med Assoc. 2010 Jan 20;303(3).

## 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

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Reference

\* Proc Natl Acad Sci U S A. 2010 Jan 19.

## Calcium and Vitamin D Supplementation Reduces Fracture Risk Regardless of Age, Gender

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