**Inflammation Reduced in Those with Higher Vitamin D Levels**

Research conducted by Catherine Peterson and Mary Heffernan at the University of Missouri's Department of Nutritional Sciences has correlated low vitamin D levels with an increase in a marker of inflammation.*

The study included 69 healthy women classified as being high or low in vitamin D based on ultraviolet-B exposure. Not surprisingly, mean serum 25-hydroxyvitamin D levels were significantly greater in those with increased sun exposure compared with those in the low D group. Dr. Peterson found that the inflammatory marker tumor necrosis factor-alpha averaged 0.79 picograms per milliliter (pg/mL) in the high vitamin D group and 1.22 pg/mL among those categorized as low in the vitamin. Higher serum 25-hydroxyvitamin D levels were also correlated with lower TNF-alpha levels.

The discovery could help explain the protective association found for vitamin D against inflammatory diseases such as heart disease and rheumatoid arthritis.

—Dayna Dye

* *J Inflamm.* 2008 July 24;5:10.

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**Obesity Linked to Less Brain Tissue in Elderly**

A new study published online in *Human Brain Mapping* reports that elderly individuals who were obese or overweight had significantly less brain tissue than individuals of normal weight.¹

The study, led by Paul Thompson, a University of California Los Angeles neuroscientist, reviewed the brain images of 94 people in their 70s who had participated in an earlier study looking at cardiovascular health and cognition. They were followed for five years, and it was discovered that clinically obese people had 8% less brain tissue, while simply overweight people had 4% less brain tissue compared to normal-weight humans.

“The brains of obese people looked 16 years older than their healthy counterparts, while those of overweight people looked 8 years older,” Thompson said. “This is the first study to show physical evidence in the brain that connects overweight and obesity and cognitive decline.”²

—Jon Finkel


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**Broccoli May Protect Arteries**

A study funded by the British Heart Foundation charity and conducted by researchers at Imperial College London on mice has found evidence that a chemical in broccoli could protect arteries from clogging.*

In the report published in the journal *Arteriosclerosis, Thrombosis and Vascular Biology*, the research team found that a compound called sulforaphane, which occurs naturally in broccoli, had the ability to switch on a protective protein, called Nrf2, that is inactive in parts of the arteries that are vulnerable to clogging.

“What our study showed was that sulforaphane can protect those regions by switching on the Nrf2,” Paul Evans of the National Heart and Lung Institute at Imperial College said about the report. While the research was conducted using purified sulforaphane, not actual broccoli, Evans said the next step is to test the effect of the chemical as it is found naturally in vegetables.

—Jon Finkel

* *Arterioscler Thromb Vasc Biol.* 2009 Sep 3.

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