



### **Chili pepper ingredient may fight fat**

DABGU, South Korea (UPI) — Researchers in South Korea say chili peppers contain an ingredient—capsaicin—that may cause weight loss and fight fat.

Jong Won Yun and colleagues at Daegu University in South Korea say laboratory studies suggest capsaicin, which produces the “hot” in hot peppers, triggers proteins that help fight obesity by decreasing calorie intake, shrinking fat tissue and lowering fat levels in the blood. However, they say, it is not known exactly how capsaicin might trigger such beneficial effects.

The report, published in the *American Cancer Society's Journal of Proteome Research*, reports capsaicin-treated rats lost eight percent of their body weight and showed changes in levels of at least 20 key proteins found in fat.

“These changes provide valuable new molecular insights into the mechanism of the antiobesity effects of capsaicin,” the scientists said in a statement.

The researchers studied how thermogenesis and lipid metabolism-related proteins were markedly altered on the molecular level by capsaicin by comparing 5-week-old rats fed high-fat diets with or without capsaicin.



### **Protein could battle Alzheimer's disease**

NEW YORK (UPI) — U.S. researchers say they are looking at a new approach to treating Alzheimer's disease with a protein thought to extend lifespan in laboratory animals.

Scientists at the Massachusetts Institute of Technology said that in mice prone to developing Alzheimer's, activating a protein called sirtuin suppressed the disease and destroying the protein made the disease much worse, *The New York Times* reported.

The finding raises the hope that Alzheimer's, and possibly other neurodegenerative diseases like Parkinson's and Huntington's, could be treated with drugs that activate sirtuin, researchers say.

“We think it is a scientifically compelling story that ties the sirtuins to the biology of Alzheimer's disease,” said Dr. Dennis J. Selkoe, an Alzheimer's expert at Harvard Medical School who was not a part of the study.

Drugs that activate sirtuin already exist, including resveratrol, a minor ingredient of red wine and other foods.

One drug company, Sirtris, is in preclinical trials with sirtuin-activating drugs.

“We think it has very significant potential in neurodegenerative diseases,” Sirtris Chief Executive Officer George P. Vlasuk said.

### **Study: Lots of sitting can kill you**

WASHINGTON (UPI) — It's not just how little physical activity a person gets, it's how much time spent sitting that increases the risk

*It's not just how much physical activity a person gets, it's how much time spent sitting that increases the risk of death.*

of death, U.S. researchers say.

Researchers at the American Cancer Society say time spent sitting was independently associated with total mortality, regardless of physical activity level.

Study leader Alpa Patel and colleagues analyzed survey responses from 53,440 men and 69,776 women who had no history of cancer, heart attack, stroke or emphysema/other lung disease enrolled in the American Cancer Society's Cancer Prevention II study in 1992.

The study finds women who said they spent six hours per day sitting during leisure time were 37 percent more likely to die during the time period studied—1993 to 2006—than those who sat fewer than three hours a day, while men who sat more than six hours a day were 18 percent more likely to die than those who sat fewer than three hours per day.

In addition, the study says women and men who both sat more during their leisure time and were less physically active were 94 percent and 48 percent more likely, respectively, to die compared with those who reported sitting the least and being most active.

The findings are published in the *American Journal of Epidemiology*.