

NUTRITION HORIZON

Grape Ingredient Resveratrol Increases Beneficial Fat Hormone

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1/10/2011 --- Resveratrol, a compound in grapes, displays antioxidant and other positive properties. In a study published this week, researchers at the UT Health Science Center San Antonio describe a novel way in which resveratrol exerts these beneficial health effects.

Resveratrol stimulates the expression of adiponectin, a hormone derived from cells that manufacture and store fat, the team found. Adiponectin has a wide range of beneficial effects on obesity-related medical complications, said senior author Feng Liu, Ph.D., professor of pharmacology and member of the Barshop Institute of Longevity and Aging Studies at the Health Science Center.

Both adiponectin and resveratrol display anti-obesity, anti-insulin resistance and anti-aging properties.

"Results from these studies should be of interest to those who are obese, diabetic and growing older," Dr. Liu said. "The findings should also provide important information on the development of novel therapeutic drugs for the treatment of these diseases."

The researchers confirmed the finding in cells and animal models. The study is in the Jan. 7 issue of the Journal of Biological Chemistry.

Previous studies

In July 2009 in the journal Nature, the Barshop Institute and collaborators reported that the compound rapamycin extended life in mice. Rapamycin, like resveratrol, is under scrutiny for its beneficial health effects.

In 2010, Dr. Liu and colleagues announced that resveratrol inhibits activity of the mammalian target of rapamycin (mTOR). This discovery was included in the prestigious Faculty of 1000 (F1000), a service that identifies and evaluates the most important articles in biology and medical research publications. The selection process involves a peer-nominated global "faculty" of the world's leading scientists and clinicians who rate the best of the articles they read and explain their importance.