Meet the Examiners



College Admissions Examiner



Study Tips Examiner



Science Geek Examiner

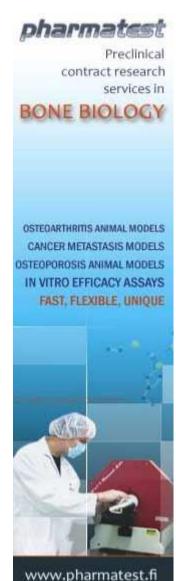


Sports Education Examiner



Education Improvement Examiner

See all Examiners »



www.pharmatest.fi

Extra virgin olive oil helps to combat breast cancer

February 6, 1:23 PM by Trina Hoaks, Science Examiner

Add a Comment

« Previous

Next »

In a press release issued yesterday by the Universidad de Granada, it was reported that "Spanish scientists confirmed that extra virgin olive oil helps to combat breast cancer."

The press release follows:

Researchers of the Catalonian Institute of Oncology (Spain) and the University of Granada (Spain) have discovered that extra virgin olive oil may help to combat breast cancer, according to a paper published in the last issue of the renowned scientific journal BMC Cancer. The scientists have confirmed the bioactivity of polyphenols (this is, natural antioxidants) present in olive oil in breast cancer cell

The study has proved the anti-HER2 effect of fractions of phenolic compounds directly extracted of extra virgin olive oil in breast cancer cell lines. They have used solid-phase extraction methods of semi-preparative liquid chromatography to isolate fractions of commercial oils and, later, separation techniques (capillary electrophoresis and liquid chromatography connected to mass spectrometry) to check the purity and composition of the fractions.

Such fractions were tested in their anti-cancer capacity both against positive HER2 and negative HER2 breast cancers, using in Vitro models and evaluating the effect of polyphenolic fractions in the expression and activation of HER2 oncoprotein through ELISA specific methods for HER2. Fractions containing polyphonels such as hydroxitirosol, tirosol, elenolic acid, lignans, pinoresinol and acetopinoresinol, and secoiridoids, diacetox oleuropein aglycone, ligustrosid aglycone and oleuropein aglycone were able to induce important tumoricid effects in a range of micromolar and in a selective way against HER2 oncogene.

Proved potentiality

Therefore, this study confirms the potentiality of polyphenols to inhibit HER2 activity and to promote its degradation. Such results, together with the fact that humans have consumed secoiridoids and lignans safely for a long time through oil and olive oil consumption, endorse the fact that such phytochemicals could be an excellent and safe basis for the design of new antiHER2 compounds.

This work has been carried out by Javier A. Menéndez, coordinator of the Translational Research Unit of the Catalonian Institute of Oncology (ICO) in Girona, and by doctors Alberto Fernández Gutiérrez -in charge of the "Research Group of Analytic, Environmental, Biochemical and Food Control"and Antonio Segura Carretero, member of such group.

This Research Group of the Department of Analytical Chemistry of the University of Granada (Spain) has developed other interesting research works in the characterization of polyphenolic profiles of an important number of plants and metabolomic studies of extracts with proved bioactivity through the use of advanced separation techniques.

Topics: Medical Research

ShareThis	Subscrib	e 🔊 Feed	
« Previous			Next
Comments			
Name:			
Email Address:			
Comments:			
Post			

More from Science Examiner

Anti-HIV gel shows promise in large-scale study in

February 9, 11:25 PM

Add a Comment

An investigational vaginal gel intended to prevent HIV infection in women has demonstrated encouraging signs of success in a clinical trial conducted in Africa and the United States. Findings of the recently concluded study, funded by the National Institute... Read More Topics: HIV/AIDS

Drug discovery short-circuits cancer growth

February 9, 8:46 PM

Add a Comment A new drug that blocks cancer's main source of growth has been created in the lab and proven effective in mice, scientists are reporting. It is

Trina Hoaks

Science Examiner



Trina believes that the importance of science is too often overlooked. Driven by her desire to understand the world around her, she is always looking for the answers she believes only science can provide.

More Articles	Topics
Anti-HIV gel shows pr women	romise in large-scale study in
Drug discovery short-	-circuits cancer growth
Alaska's Redoubt volc	cano may be ready to blow
Antarctic worm makes climate change?	s antifreeze - what has it to do with
Women who drink lots kidney disease	s of soda at higher risk for early

Advertisement

Search this Examiner's Articles

Examiner Feeds

These websites were picked by the Science Examiner as useful resources.

View: All Sources

TierneyLab: Conan O'Brien on Boron The New York Times Science News - 16 hrs ago

Kuwait appoints fifth oil minister in three years (AFP)

yahoo - 22 hrs ago

Britain set for more snow (AFP)

yahoo - 23 hrs ago

30 mummies found in newly discovered tomb in Egypt (AP)

yahoo - 23 hrs ago

How Electronic Medical Records Can Be Used To Test Drug Efficacy

Science Daily Magazine - 1 day ago

Books

- The Origin Of Species: 150th Anniversary Edition by Charles Darwin
- Darwin's Dangerous Idea: Evolution and the Meanings of Life by Daniel Dennet
- On the Origin of Species: The Illustrated Edition by Charles Darwin
- The Reluctant Mr. Darwin: An Intimate Portrait of Charles Darwin and the Making of His Theory of Evolution (Great Discoveries) by David Quammen
- Hot, Flat, and Crowded: Why We Need a Green Revolution--and How It Can Renew America by Thomas L. Friedman
- Why Evolution Is True by Jerry A. Coyne

National Examiners

Peggy Kraus Disease Prevention Examiner **Most Recent Article**

10/02/2009 11:51 2 de 3