




Search

Christie and Bobby Baskin's 20 Year Kidnapping Case Closed

**Michael Phelps Suspended Over Marijuana Flap**



**Leon Panetta Says No More Extraordinary Rendition**



**Ruth Bader Ginsburg Has Surgery for Pancreatic Cancer**



## Extra virgin olive oil helps to combat breast cancer

Researchers of the Catalanian 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 lines.

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 polyphenols 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 Catalanian 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.

By Universidad de Granada

### 75 Hotels in Granada

Book your hotel in Granada online. Find your hotel on a city map!  
[www.booking.com/Granada-Hotels](http://www.booking.com/Granada-Hotels)

### Robotic prostate surgery

Minimally invasive robotic surgery Saint Joseph's Hospital in Atlanta.  
[www.StJosephsAtlanta.org/](http://www.StJosephsAtlanta.org/)

### Granada Center Granada

Great offers for Granada Book online now.  
[www.Hotels.com](http://www.Hotels.com)

Ads by Google

### Similar News Stories

1. [New technique helps to predict breast cancer chemotherapy outcome](#)
2. [Breastfeeding May Prevent Breast Cancer](#)
3. [Role for the protein FAK in breast cancer](#)
4. [New protein that triggers breast cancer identified](#)
5. [Unraveling structure of key breast cancer target enzyme](#)

ADS BY BRASH



### View Related News

[breast cancer](#)

[breast cancer treatment](#)

[olive oil](#)

Receive HULIQ News in Email:

Subscribe



Subscribe in a reader

### Today's Top News Stories >>

#### Breast Cancer Nutrition

Learn how living healthy can reduce your risk for Breast Cancer return  
[www.Femara.com](http://www.Femara.com)

#### Solar Stock Pick - EVSO

Solar Power Your Portfolio. Green Energy Stock Investment  
[www.EvolutionSolar.com](http://www.EvolutionSolar.com)

#### Latest Cancer Strategies

Learn About Comprehensive Alternative Treatments for Cancer  
[www.issels.com](http://www.issels.com)

#### Lung Herb Remedies

Powerful Herbal Remedy To Clear Airways, Remove Mucus & Tone Lungs  
[www.NaturallyDirect.net](http://www.NaturallyDirect.net)