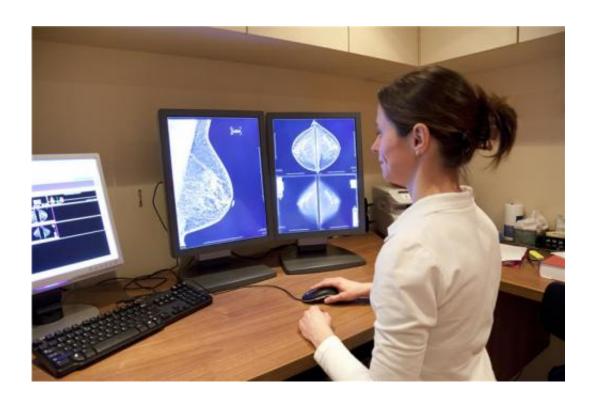


Would a diabetes drug also protect against breast cancer?

May 28 2014



One of the most commonly used medications to control diabetes may also have positive effects against cancer cell proliferation, as show in research done at the Center for Research and Advanced Studies (CINVESTAV) in Mexico.

The study led by José Eduardo Pérez Salazar examines the protective



effects of metformin in the role of growth and migration of cancer cells in the body (metastasis), especially those related to breast cancer.

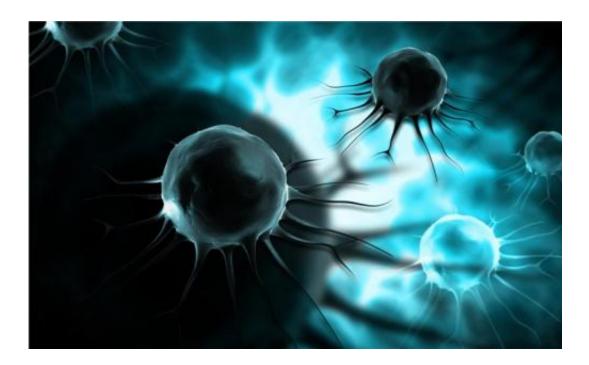
Research in the Department of Cell Biology also analyzes the effects of oleic and linoleic acids (found in edible oils) as a kind of catalyst for the cancer cells to spread in the body.

According to Perez Salazar, it was found that cancer cells get "addicted to insulin", so in the case of overweight women with diabetes who have no control over the disease, the risk of developing breast cancer and metastasis increases.

"High insulin levels in the body are related indirectly to the formation of malignant breast tumors, but only in the case of women, in the case of men this cancer develops primarily by heredity "said the expert from the National System of Researchers.

He also explained that in Mexico there is a higher prevalence of the disease characterized by insulin resistance than for the lack of production of this hormone by the organism, meaning that the prevalence of breast cancer in women living with diabetes is higher.





However, it has been seen that women who take metformin to control insulin levels have a protective factor against <u>breast cancer</u>. "The drug prevents insulin resistance in the body, so that it is properly metabolized and cannot be acquired by <u>cancer cells</u>, which then spread across the body" said Perez Salazar.

"In people with <u>insulin resistance</u>, their body produces more of this hormone, which is not used and brings consequences due to the high levels of it. Metformin is what makes the receivers work better, avoiding the high levels of the hormone and this is what protecting against cancer," said the researcher.

The work done so far is based on laboratory tests using cellular tissue, but the research group at Cinvestav joined with the Juarez Hospital of Mexico City, plans to conduct tests with human tissue obtained by



biopsies, therefore having greater certainty about the results.

Provided by Investigación y Desarrollo

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