

Clinical Study Suggests Estrogen Levels And Breast Health Can Be Altered

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Researchers from Canada and the United States today told attendees of the Experimental Biology 2011 Scientific Meeting that they have uncovered a possible means of enabling women to favorably influence whether the estrogens in their bodies take a "beneficial path" or a "disease-potential" path.

The researchers tested a nutritional combination of indole-3 carbinol, milk thistle extract, calcium-D-glucarate, Schizandra chinensis fruit extract, stinging nettle, lignans extracted from the Norway spruce, and vitamin D (a combination available as femMED Breast Health, <http://www.femmed.com/>) on 47 pre-menopausal women and 49 post-menopausal women for 28 days. On day one and 28, they analyzed blood and urine samples. Researchers were pleasantly surprised to discover consumption of the femMED supplement significantly increased the mean urinary concentration of 2-OHE in pre- and post-menopausal women (by 110% and 88%, respectively), suggesting a risk-reducing effect. The Breast Health supplement was well-tolerated, and displayed no adverse side effects.

Dr. Cathleen London, MD said, "Although the trial was small it was well designed and well conducted. Importantly, we know that cruciferous vegetables, fish oil, and lignans from flax and nuts are all thought to support healthy metabolism of estrogens, but people do not eat enough fresh cruciferous vegetables in their diet, making nutritional supplementation a viable option. Although this is a preliminary study, it adds to our scientific knowledge about the role of estrogens and their metabolism in the breast health of pre-menopausal and post-menopausal women." Dr. London was not involved with this project.

Maggie Laidlaw, PhD, the lead investigator, said, "While additional studies are necessary, the results of this clinical trial in a relevant population of women show promise that there may be a proactive way to support healthy metabolism of estrogens through nutritional supplementation and, by extension, support breast health."

The double-blind, placebo-controlled clinical trial was recently published in *Breast Cancer: Basic and Clinical Research*. The study was conducted at Nutrasource Diagnostics, Inc. in Guelph, Ontario, Canada, with urine samples analyzed for of estrogens and OH metabolites at the Jurist Institute for Research, Hackensack University Medical Center in New Jersey. The study followed the strict protocols established by Health Canada and it was registered at ClinicalTrials.gov. femMED supplied financial support for the study, sample products and placebo pills. It had no control over the research, its results, or the final manuscript.

Background: What do Women Need to Know About Estrogen

For most women, breast cancer concerns rise as they get older and their natural supply of estrogens begins to diminish. Should they replenish estrogens through hormonal therapy? Estrogens are not something to always be feared.

Throughout our lives they play important roles in the health of our bones, heart, brain, hair, skin and other organs including the prostate gland in men.

What determines if estrogens will help or hurt your health? Some medical researchers are following a promising "fork in the road" hypothesis: examining the path estrogens take as they are

metabolized by different organs in our bodies (liver, kidneys, and even the breast). They believe that whether or not estrogens are healthful or harmful depends on the number of oxygen/hydrogen (OH) molecules that are attached to the estrogens in your body, through a 'routine' metabolic process called hydroxylation.

The "tagging" of estrogens with OH molecules at a certain position (C-16) may ultimately make them stick to your DNA with damaging, potentially carcinogenic results. Estrogens "tagged" with OH molecules at a different location (C-2) are believed to follow a path not associated with risk, or with health-protecting benefits.

Source

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