

## Herbal formula shows breast health potential

By Stephen Daniells, 18-Jan-2011

Related topics: Phytochemicals, plant extracts, Cancer risk reduction, Research

**A dietary herbal supplement containing lignans and indole-3-carbinol may reduce the risk of breast cancer by reducing free estrogen levels, suggest results from a randomized control trial.**

A combination of HMR lignan, indole-3-carbinol, calcium glucarate, milk thistle, *Schisandra chinensis* and stinging nettle was associated with increased hydroxylation of the female hormone estrogen, which in turn is linked to a reduction in the risk of hormone-sensitive breast cancer, according to findings published in *Breast Cancer*.

Hormone-sensitive estrogen-receptor (ER) positive and progesterone-receptor (PR) positive tumors are said to be the most common type diagnosed among breast cancer patients in the US. These tumors are stimulated to grow by the female hormones estrogen and progesterone.

*"In pre-menopausal women, consumption of a specific mixture of indole-3-carbinol and HMR lignan increased the mean urinary concentration of the estrogen metabolite [2-hydroxyestrone (2-OHE)] and the mean urinary ratio of 2-OHE [to another another estrogen metabolite 16alpha-hydroxyestrone (16alpha-OHE1)], and this may reduce breast cancer risk,"* report scientists from Nutrasource Diagnostics and Hackensack University Medical Center.

*"In postmenopausal women, consumption of a specific mixture of indole-3-carbinol and HMR lignan increased the mean urinary concentration of the estrogen metabolite 2-OHE, and this may reduce breast cancer risk. However, the evidence for this is weaker than for premenopausal women because the 2-OHE:16alpha-OHE ratio did not increase significantly in this group."*

The supplements were provided by Fem Med (Toronto, Canada) and the company funded the study.

### Study details

The researchers recruited 47 pre-menopausal (average age 37, average BMI 27.2 kg/m<sup>2</sup>) and 49 post-menopausal women (average age 56.5, average BMI 27.5 kg/m<sup>2</sup>) and randomly assigned to receive either the herbal supplement or placebo for 28 days.

Results showed an increase in urine levels of 2-OHE, as well as in the 2:16alpha-OHE ratio for the herbal group, compared with placebo. An increase in 2-OHE was also observed in post-menopausal women receiving the herbal supplement, but the 2:16alpha-OHE ratio did not increase.

*"Supplementation with a mixture of indole-3-carbinol and HMR lignan in women significantly increased estrogen C-2 hydroxylation,"* report the researchers. *"This may constitute a mechanism for the reduction of breast cancer risk as well as risk for other estrogen-related cancers.*

*"Further studies with higher numbers of subjects are indicated,"* they added.

Source: *Breast Cancer*

Volume 4, Pages 85-95, doi: 10.4137/BCBCR.S6505

*"Effects of A Breast-Health Herbal Formula Supplement on Estrogen Metabolism in Pre- and Post-Menopausal Women not Taking Hormonal Contraceptives or Supplements: A Randomized Controlled Trial"*

Authors: M. Laidlaw, C.A. Cockerline, D.W. Sepkovic

The full paper is available [here](#).

**Copyright** - Unless otherwise stated all contents of this web site are © 2011 - William Reed Business Media SAS - All Rights Reserved - For permission to reproduce any contents of this web site, please email our Syndication department [copyright@wrwm.com](mailto:copyright@wrwm.com) - Full details for the use of materials on this site can be found in the Terms & Conditions