

Soybean component reduces menopause effects

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Soy aglycons of isoflavone (SAI), a group of soybean constituent chemicals, have been shown to promote health in a rat model of the menopause. The research, described in BioMed Central's open access journal *Nutrition & Metabolism*, shows how dietary supplementation with SAI lowers cholesterol, increases the anti-oxidative properties of the liver and prevents degeneration of the vaginal lining.

Robin Chiou led a team of researchers from National Chiayi University, Taiwan, who studied the effects of the dietary supplement on a group of female rats that had undergone ovary removal. He said, "These ovariectomized animals are a good model for study of the menopause as the loss of oestrogen from the ovaries mimics the natural reduction in oestrogen seen in menopausal women. SAI itself has weak oestrogenic properties and we've shown here that menopause-related syndromes can be prevented or improved by dietary supplementation with the compounds it contains".

In comparison to control animals, the authors found that the ovariectomized rats fed a diet enriched with SAI showed increased liver antioxidative activities and improved lipid profiles. Levels of harmful LDL cholesterol were reduced, while beneficial HDL cholesterol was increased. According to Chiou, "It is generally agreed that the higher HDL and the lower LDL concentrations are of benefit in chemoprevention of cardiovascular diseases. Our findings support the indication that soybean consumption may prevent coronary heart disease".



The authors hope that dietary soy supplementation may provide an alternative to hormone replacement therapy (HRT), which has been linked to the development of uterus and breast cancers.

More information: Supplementary health benefits of soy aglycons of isoflavone by improvement of serum biochemical attributes, enhancement of liver antioxidative capacities and protection of vaginal epithelium of ovariectomized rats, Tu-Fa Lien, Yu-Lin Hsu, Dan-Yuan Lo and Robin Y.-Y. Chiou, *Nutrition & Metabolism* (in press), www.nutritionandmetabolism.com/

Source: BioMed Central (<u>news</u>: <u>web</u>)

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