
North American Menopause Society.

Collaborators (37)

Abstract

OBJECTIVES:
If and to what extent soy protein, soy isoflavones, and their metabolites, including S(--)-equol, have beneficial effects on women's health is currently unclear. The North American Menopause Society (NAMS)/Utian Translational Science Symposium on Soy and Soy Isoflavones convened October 9-10, 2010, to clarify basic and clinical research findings as they relate to the risk and benefits of soy products for peri- and postmenopausal women.

METHODS:
A working group of faculty and panelists composed of clinical and research experts in the fields of women's health and botanicals met during a 2-day translational symposium to cover the latest evidence-based science on isoflavones as they affect menopausal symptoms, breast and endometrial cancer, atherosclerosis, bone loss, and cognition. Full descriptions of the bioavailability and pharmacokinetics of isoflavones were also presented. Subspecialty groups then broke off with the goal of translating the information into a report for general medical practice and identifying further research areas. All faculty and panelists reviewed the final report, which was then approved by the NAMS Board of Trustees.
RESULTS:

From the hundreds of studies reviewed in this report, there are mixed results of the effects on midlife women. Soy-based isoflavones are modestly effective in relieving menopausal symptoms; supplements providing higher proportions of genistein or increased in $S(-)$-equol may provide more benefits. Soy food consumption is associated with lower risk of breast and endometrial cancer in observational studies. The efficacy of isoflavones on bone has not been proven, and the clinical picture of whether soy has cardiovascular benefits is still evolving. Preliminary findings on cognitive benefit from isoflavone therapy support a "critical window" hypothesis wherein younger postmenopausal women derive more than older women.

CONCLUSIONS:

Several areas for further research have been identified on soy and midlife women. More clinical studies are needed that compare outcomes among women whose intestinal bacteria have the ability to convert daidzein to equol (equol producers) with those that lack that ability (equol nonproducers) in order to determine if equol producers derive greater benefits from soy supplementation. Larger studies are needed in younger postmenopausal women, and more research is needed to understand the modes of use of soy isoflavone supplements in women. The interrelations of other dietary components on soy isoflavones consumed as a part of diet or by supplement on equol production also require further study, as do potential interactions with prescription and over-the-counter medications. And finally, greater standardization and documentation of clinical trial data of soy are needed.

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