



Polyunsaturated fatty acids (PUFAs) might reduce hot flushes: an indication from two controlled trials on soy isoflavones alone and with a PUFA supplement

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Abstract

Objectives: To investigate the effect on hot flushes of a soy isoflavone extract alone (Study A) and with the addition of a supplement of polyunsaturated fatty acids, PUFAs (Study B).

Methods: Subjects were postmenopausal women (29 in Study A, 28 in Study B) with more than five troublesome hot flushes per day. Both studies were double-blind randomized placebo-controlled trials with cross-over design, of 24-week duration. After a 2-week observation period, they were randomized to receive two capsules per day providing 60 mg of isoflavones or placebo for 12 weeks; thereafter, women who had taken isoflavones were given placebo for a second 12-week period, and vice-versa. Women in the Study B were given also two capsules per day containing a PUFA supplement for the entire 24-week test period.

Results: Both studies showed the isoflavone extract to have no greater efficacy on hot flushes than the placebo. During the 24 weeks of the Study B there was a progressive and highly significant reduction in the number of hot flushes, independent of whether the women had begun with isoflavones or with placebo.

Conclusion: In these two trials the isoflavone extract did not show greater efficacy on the hot flushes than the placebo. The reduction of hot flushes observed in the Study B might be due to the PUFA supplement. PUFAs, particularly Omega (Ω) 3-fatty acids, could reduce hot flushes through their influence on neuronal membranes and/or the modulation of the neurotransmitter function and the serotonergic system. Studies specifically designed to document the action of PUFAs on hot flushes would be welcome.

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