

Soy isoflavone supplementation in postmenopausal women. Effects on plasma lipids, antioxidant enzyme activities and bone density

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Abstract

OBJECTIVE: To investigate isoflavone supplementation on plasma lipids, erythrocyte antioxidant enzyme activities and bone mineral density in postmenopausal women. **STUDY DESIGN:** Thirty-seven postmenopausal women were given 150 mg/d of isoflavone supplements twice daily for six months. Blood was sampled before and after supplementation, at three and six months. **RESULTS:** There were no significant differences in plasma total cholesterol, high-density lipoprotein cholesterol, low-density lipoprotein cholesterol, triglyceride concentrations or erythrocyte antioxidant enzyme activities after three and six months of supplementation when compared with the baseline. No significant changes were noted in calcaneus bone mineral density after supplementing isoflavones for six months. **CONCLUSION:** The antioxidant effect of isoflavones in normal postmenopausal women is not obvious, and supplementation with isoflavone alone may not have a hypocholesterolemic effect. Since the duration of this study was too short with respect to bone density, longer studies are needed to clarify the bone-sparing effect of isoflavone supplementation.