A double-blind placebo-controlled clinical trial compares the cholesterol-lowering effects of two different soy protein preparations in hypercholesterolemic subjects.

Abstract:

BACKGROUND: Soy protein is effective in lowering plasma cholesterol, LDL cholesterol and triglyceride concentrations. It has not been conclusively answered, whether and to what extent other soy constituents may also contribute to this effect. OBJECTIVE: To investigate the change in blood lipid levels after application of two soy-based supplements containing soy protein either without (SuproSoy) or with (Abacor) soy fiber and phospholipids in a randomized placebo-controlled triple-armed study. METHODS: 121 hypercholesterolemic adults (66 females, 55 males) were recruited and randomly assigned to one of three treatments. Over 8 weeks they received daily either 25 g soy protein (as a component of the supplements Abacor or SuproSoy) or 25 g milk protein (as a component of placebo). Serum lipids were measured at baseline and after 4, 6 and 8 weeks. RESULTS: After 8 weeks of supplementation total cholesterol levels were reduced by 8.0 +/- 9.6% (Abacor) and 3.4 +/- 8.3% (SuproSoy); LDL cholesterol levels by 9.7 +/- 11.7% (Abacor) and 5.4 +/- 11.6% (SuproSoy); and Apolipoprotein B levels by 6.9 +/- 14.6% (Abacor) and 4.0 +/- 12.4% (SuproSoy). Serum levels of HDL cholesterol and triglycerides remained unchanged. CONCLUSIONS: A preparation combining isolated soy protein with
soy fibers and phospholipids showed twice the lipid-lowering effect of a preparation containing isolated soy protein alone. Therefore, such soy-based supplements can be useful in reducing the cardiovascular risk.