



SOY FOR HEALTHY BONES

Many women are fearful of developing cancer, but hip fractures are more common than cancer of the breast, cervix, and uterus combined. While calcium has stolen the spotlight, researchers have discovered that soy and other plant foods may also be a vital ingredient for healthy bones.

How does soy protect bones?

Several lines of evidence suggest that including soy in the diet may prevent bone loss and protect against bone fractures in older women.

Isoflavones are a class of phytonutrients found mainly in legumes (beans), especially soybeans. Eating soy protein with naturally occurring isoflavones (or swallowing the isoflavones from soy as supplements) has been shown to boost the activity of bone-building cells and slow bone breakdown. Some studies have found that soy improves the strength and quality of bones.

In a European two-year study, supplementing the daily diet of postmenopausal Danish women with two glasses of soy milk, which is naturally rich in isoflavones, protected them against lumbar spine bone loss. Another study from Italy showed that taking genistein (one of the isoflavones) for three years increased bone mineral density (BMD) by 8 percent and 9 percent at the spine and hip respectively, whereas taking a fake pill resulted in a decrease in BMD of 12 percent and 9

percent at these bone sites.

Although the evidence isn't yet conclusive, studies now link a higher soy food intake among postmenopausal Asian women with a 29 to 48 percent reduced risk of bone fracture.

How much should you have?

A dose of 80 to 90 milligrams of isoflavones per day, taken through foods or as a supplement, may be required for bone benefits. Depending on the level in soy food, this might translate to four or more servings. But benefits are seen with traditional Asian diets that provide slightly less (60 milligrams), especially if soy is consumed in the early stages of menopause.

The addition of soy to the diet may be particularly important for the large number of women now refusing to take hormone replacement therapy. Other lifestyle factors to consider include physical exercise; abstinence from smoking, alcohol, and caffeine; limiting the use of salt; and getting adequate calcium, vitamin D, vitamin K, and green vegetables.

Nutritionist Sue Radd is the award-winning author of *The Breakfast Book* and coauthor of *Eat To Live*, internationally acclaimed for showing how savvy eating can combat cancer and heart disease and improve well-being. See www.sueradd.com for more nutrition information.