Soy Foods for Menopause

By Jan Gerdes, BSc, RD

Compared to North American women, Asian women have fewer heart attacks, a lower incidence of breast cancer, and fewer hip fractures. They also experience fewer hot flashes and other menopausal symptoms. Why do menopausal Asian women enjoy better health than their North American counterparts? Studies suggest it may have something to do with the Asian women's diet, which is rich in soy-based foods. There is not enough research yet to be sure that this high soy consumption is what makes the difference. Soy could just be an indicator of something else that alters risk, such as lower bodyweight, a lower calorie diet, or a diet that includes less meat or more vegetables. Although the evidence for soy is preliminary, it is encouraging, and there are a lot of reasons to include more soy foods in your diet – for example:

- Most soy foods are an excellent source of protein that compares to meat in its high quality.
- Soy foods contain a healthy type of fat (mainly polyunsaturated with omega-3 fatty acids) and no cholesterol.
- Most soy foods are high in fiber. Exceptions to this are tofu and soymilk, which have much of the fiber removed in processing.
- Soy foods contain an array of vitamins and minerals.
- Soy foods contain isoflavones, which have been shown to lower blood cholesterol. Isoflavones may also protect bone, possess anticancer activity, and relieve menopausal symptoms.

Soy protein and isoflavones are the ingredients in soy foods with the greatest potential benefit for menopausal women. Isoflavones are similar in chemical structure to estrogen (estradiol). They are weak estrogens, which explains their beneficial effects for menopausal women. However, it's important to remember that not all soy foods contain the same amount of protein or isoflavones. Soy sauce and soy oil, for example, contain neither protein nor isoflavones.

Supplement makers are jumping to conclusions about soy and creating a "soy craze," developing and marketing a whole range of products that feature soy. It is now a key ingredient in many snack bars, protein powders, and pills.

But the supplement industry is not very well regulated, which means that these products may not contain the amount of active ingredient that they claim. Some of them may contain very high levels of isoflavones. This is alarming, because research has not yet identified the effects of high doses of isoflavones, and very high doses may be toxic or have other harmful effects. On the other end of the scale, the supplements may contain less soy protein or isoflavones than they claim. In fact, some soy supplements or foods made from soy protein concentrate may not contain any isoflavones, because these may be destroyed by the alcohol wash used in processing.

For menopausal women, the best source of soy protein and isoflavones is soy foods rather than supplements. There are any number of soy foods that can be added to your diet, including soybeans, soynuts, soy flour, soymilk, tofu, soy yogurt, soy pudding, soy protein powder, and meat analogs made with soy protein, such as tofu wieners, burgers, etc.

To reap the potential benefits of soy foods, menopausal women need between 30 - 50 grams of soy protein per day (with 30-90mg of isoflavones). That is approximately the amount of soy protein and isoflavones contained in the following:

- 100 200g of firm or extra firm tofu (extra firm, firm, and medium firm have much more protein than soft or dessert tofu)
- 150 200g or tempeh
- 1/2 -1 cup of cooked soybeans (these are available either dried, canned, or frozen)

- 1/2 cup low fat or defatted soy flour, or 3/4 cup full fat soy flour
- 2 4 cups of soy milk
- 2 4 cups of soy yogurt
- 2 4 cups of soy pudding
- $\frac{1}{4}$ $\frac{1}{2}$ cup soynuts
- 50 60 grams of protein powder (Check the soy protein and isoflavone content on the label, since this varies by brand. Use sufficient powder to give you 30 – 40 grams of soy protein and 30 - 90 mg of isoflavones).