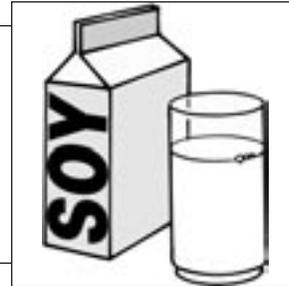


Nutrition Tidbit of the Week:  
**Soy and  
heart disease**



Have you noticed a new claim on some foods containing soy? The label says, “May Reduce the Risk of Heart Disease”. You may be surprised because most of the publicity on soy has focused on its use for post-menopausal women. Soybeans contain natural estrogens called isoflavones. Menopause is a time of decreasing estrogen. Soy has been promoted (except for women who have breast cancer) as a way to lessen the symptoms of menopause. Research is still ongoing to define if soy deserves the menopause claim. In the meantime, there is adequate evidence on the positive influence of soy on heart disease for the Food and Drug Administration (FDA) to approve the “may reduce the risk of heart disease” health claim on labels of soy products.

How big a change in cholesterol levels can you expect to see with soy? Most research documents approximately 40 grams of soy protein a day can lower levels of LDL (bad cholesterol) by about 13 percent and raise levels of HDL (good) cholesterol by about 2 percent.

Does that mean an occasional swig of soymilk is all you need? No such luck. To consume 40 grams of soy protein a day, you have to be a regular user of soy products. If in one day, you ate four ounces of tofu (8-13 grams of soy protein) AND a soy burger (around 18 grams) you still are not to 40 grams. You have to add another 12 grams of soy protein to meet the level of soy consumed EVERY DAY by the people in the research studies that reduced LDL cholesterol by 13 percent. Add 8-12 ounces of soymilk a day and you will reach the goal of forty grams.

Don't give up. While you may not get the 13 percent reduction demonstrated in studies using 40 grams, smaller amounts of soy still have positive effects. The disclaimer on the claim "May Reduce the Risk of Heart Disease" says, "25 grams of soy protein a day, as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease."

What about getting your family to try soy beverages? I just have to be realistic and tell you that drinking straight soymilk is an "acquired" taste. Since I am trying to "acquire" the taste myself, I am experimenting. I recently received samples in the mail of a soy protein "weight-loss" beverage. It was designed to be a meal substitute but you can use it as a snack. Each serving of the chocolate drink supplies 15 grams of soy protein. It would be a way to get at least half of the 25 grams into your diet. Now the challenge ... To get my kids to try it.

I started by trying to mix the soy chocolate powder in cold water with a wire whip and quickly switched to the suggestions of using a blender (but at least I burned off a few calories trying to get all the lumps out!). At that point I tasted it and started adding ice, hoping to disguise that distinct taste of soy. My daughter arrived and even though she is a chocoholic (and this was quite chocolatey), ice just wasn't going to do it. Two scoops of ice cream later I had an acceptable way to get her to drink soy. Well, at least it is a start, but since it was real ice cream I just cancelled out any possible heart benefit.

I know I am going to get many letters (especially from the soy association) if I don't address other ways to get soy in the diet. Even though this is supposed to be a "tidbit", I want to acknowledge that regular tofu is very versatile in cooking and since it has almost no flavor, it is supposed to be easy to disguise in various dishes. I say, "supposed to be" only because I get caught at least half the time. I admit, this is probably because my kids are extremely suspicious of having a nutritionist for a mom. They are always looking for the bran in the brownies and the tofu in the casseroles (and they are usually right).

What is the moral of this story? Start gradually and perhaps leave the bran out of the brownies.

Anyway, if you don't have suspicious kids, it does actually work to incorporate tofu into dishes like stir-fry, casseroles and lasagna. It is easier to start when children are young, particularly when they are at the stage of liking very mild flavored food. If you find tofu is not a big hit, try toasted soy nuts. They are crunchy and an easy snack food. For more ways to get soy in the diet, read "How to discover the joy of soy" at <http://www.healthandage.com/Home/gm=2!gsq=soy!gid2=1086>.

## Answers to your food & nutrition questions.



**Question:** A San Mateo, California reader writes: I really like reading your nutrition food letter this time. The hair analysis was interesting specifically because we are furnished with so much misleading information it is good to be able to eliminate some of this “junk food” about nutrition.

I have a question: If I am considering learning to like soymilk (as a substitute for Lactaid milk) will I be getting enough calcium? This is assuming that drinking milk in coffee and on cereal is a major source of calcium. Does the estrogen benefits of soymilk for women (age 48) balance the loss of calcium?

**Answer:** Soymilk isn’t technically “milk” like cow’s milk. It just has a milky appearance. It is prepared by soaking soybeans in water, grinding the moistened beans and then filtering to remove the particles.

Soybeans are not naturally a good source of calcium but most commercial soymilks are fortified to levels very similar to that found in milk. The key is to look for the term “fortified” and to read the label.

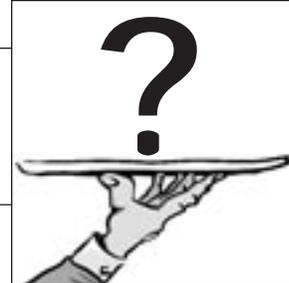
Soymilk usually contains water, and homogenized soybeans, but other ingredients, including sweetening agents may be added to increase taste. Most soymilk states that it is fortified with calcium and vitamins A, D and B12 to make it nutritionally more like regular milk. Eight ounces of regular cow’s milk has about 300 mg of calcium. Thus, for soy milk to be equivalent to cow’s milk in calcium, the label should indicate 30% to 35% of the daily value for calcium.

In terms of the estrogen benefits of soy, they are still much less powerful than the estrogen provided by hormone replacement therapy (HRT) often prescribed for women as they go through menopause. Thus, soy is not a substitute for those women who have discussed the controversies with their doctor and concluded that they need hormone replacement therapy. For

those women not on hormone replacement therapy or those who do not consume much calcium, we cannot conclude that calcium losses of menopause can be overcome with soymilk. Every little bit of calcium, however, helps reduce the impact of losses. So if consuming fortified soymilk helps you get the recommended 1200 milligrams of calcium suggested for the post-menopausal woman, go for it. The only caveat is for women who have had estrogen sensitive breast cancer. For these women, excessive soy intake is cautioned until more research is done. If soy has estrogen-like substances, these substances may also fuel the growth of an estrogen-sensitive breast cancer.

*Dr. Irene*

# What's for Dinner?



Here's a recipe for Vegetable Lasagna adapted from the Soy Association. More recipes can be found at [www.soyfoods.com](http://www.soyfoods.com) and [www.soyinfo.com](http://www.soyinfo.com).

## Vegetarian Lasagna

### Ingredients

1 tablespoon soy oil	1 10-ounce package frozen chopped spinach, defrosted and drained
1 8-ounce package uncooked lasagna noodles	1 egg
8 green onions, chopped or 1/2 chopped small onion	(If spaghetti sauce was low sodium, add 1/2 teaspoon salt)
1 cup sliced fresh mushrooms	1/4 teaspoon pepper
1 48-ounce jar spaghetti sauce	1/2 teaspoon garlic powder
1/2 package (10.5-ounce) low-fat firm silken tofu	1/2 teaspoon oregano
	1 8-ounce package fat-free or low fat shredded Mozzarella cheese

### Directions

Preheat oven to 350° F. Spray 9x13-inch baking pan with non-stick vegetable oil. Sauté green onions and mushrooms in soy oil. Add spaghetti sauce. Set aside. Combine tofu, spinach, egg and seasonings, and mix well. In baking dish, begin with bottom layer of spaghetti sauce mixture, followed by uncooked noodles, tofu mixture, noodles, and top with remaining sauce. Cover pan of lasagna with aluminum foil. Bake for 45 minutes. Remove foil and top with cheese. Bake, uncovered, an additional 15 minutes. Allow to stand 10 minutes before serving.

*Option: layer one 16-ounce package of frozen vegetable medley between layers of lasagna noodles or sauté 1 1/2 cups fresh vegetable combination.*

**Yield:** 8-10 servings

### Nutrition information:

Approximate nutrition per serving (10 ounces): calories, 280; protein, 19 g; carbohydrate, 40 g; fat, 6 – 9 g (3-5 g. saturated fat)