



Questions & Answers About Soy Foods

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Soy is a plant native to Asia and has been a staple in the Asian diet for more than 5,000 years. Large-scale soybean cultivation did not start in the U.S. until around World War II. Today, the Midwestern U.S. produces about half of the world's supply of soybeans.

The popular bean is found in a wide variety of food products, from tofu to infant formula, as well as nonfood products such as shampoo, diesel fuel and cosmetics. This publication provides background on types of soy food products, as well as health benefits associated with them.

What are some soy products we can find in many grocery stores?

This is a partial list of soy foods and ingredients, and you might be familiar with many of these. Which of these have you tasted or seen on a food package label?

Edamame (soybeans): refers to soybeans that are harvested when still green and sweet. They are high in fiber and protein and have no cholesterol, contrary to meat products. Edamame can be found shelled or unshelled, frozen or fresh, and take little preparation. Simply boiling or roasting the beans for 15 minutes can create a tasty main or side dish to any meal.

Hydrolyzed vegetable protein (HVP): the protein from vegetables, typically soybeans. It is used as a flavor enhancer in items such as soups, sauces, flavoring blends, canned and frozen vegetables, meats and poultry.

Lecithin: a product extracted from soybean oil. It commonly is used as an emulsifier in high-fat products and to promote stabilization, anti-oxidation, crystallization and spatter control.

Miso: fermented soybean product that typically is mixed with rice to result in a thick paste used for sauces, spreads and soups.

Soy Food Equivalents

½ cup soybeans = ½ cup vegetables or
2 ounces protein

½ cup cubed firm tofu = 2 ounces protein

1 cup soy milk = 1 cup dairy

Tamari: gluten-free soy sauce.

Tofu: soft, creamy product made from curdling soymilk. Tofu is a naturally bland, high-quality protein that easily takes on the flavor of the food with which it is cooked. Tofu comes in different forms: soft, firm and silken. Soft tofu is best used in blending recipes such as in a smoothie. Firm tofu is great for holding its shape, such as in grilling or in a stir-fry. Silken tofu is used in creamier recipes, such as for replacing sour cream in a dip. Rich in protein, B-vitamins and calcium and low in sodium, tofu offers an alternative to meat products.

Soymilk: a fluid produced from soaking and straining soybeans. It can be found in shelf-stable liquid or shelf-stable dry powder form, or refrigerated in the dairy case at your grocery store. Plain, unsweetened soy milk is an excellent alternative to cows' milk and offers high-quality protein and B-vitamins. Soymilk is used to create a variety of products including soy cheese and soy ice cream.

Soynuts: whole roasted soybeans with various flavorings.

Soy protein isolates (or isolated soy protein): refined product designed to get the most protein out of the soybean. Soy protein isolates are 92 percent protein and are highly digestible.

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Soy sauce: created from soybeans through a fermentation process. It is used widely in Asian and other cuisine. Despite the salty taste, soy sauce actually is lower in sodium than traditional table salt when equal weights of the two items are compared.

Soybean oil: derived from the natural oil found in whole soybeans. Oil sold in grocery stores under the name “vegetable oil” usually is 100 percent soybean oil or a blend of soybean oil and other oils. Soybean oil is rich in polyunsaturated fats and naturally cholesterol-free.

Tempeh: an Indonesian-derived food that combines and ferments soybeans with a grain such as rice to create a tender, chunky soybean cake. The cakes have a smoky, nutty flavor and serve a variety of uses, including in grilling or as an addition to soups and casseroles.

Why do nutrition labels sometimes say “Contains Soy” in the ingredient statement?

Soy foods are among the common food allergens, so any soy-containing items must include the allergen statement “Contains Soy.” Symptoms of soy allergy may range from mild to severe. Mild symptoms include hives, itching and swelling, nausea or vomiting. On very rare occasion, severe symptoms, including life-threatening anaphylactic shock, may occur. If you suspect a soy allergy, be sure to visit with your health-care provider for further testing.

How can I prepare and use soy foods on my menu?

Soy foods can be used in a wide variety of ways. Try tofu in smoothies, breakfast burritos, stir-fry, desserts or tacos. Try edamame (available in the frozen food section) in a salad, or enjoy soynuts as a snack. See <http://thesoyfoodscouncil.com/> for a variety of recipes.



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Are soy foods healthful?

Soy foods are naturally cholesterol-free and rich in several nutrients, especially protein and fiber. Protein is essential in building and repairing tissue in the body. Soybeans contain soluble and insoluble fiber. In addition to an overall healthful diet, diets high in soluble fiber may help reduce cholesterol, and diets high in insoluble fiber help with regularity.

Soy is rich in B vitamins, which are necessary for producing energy from the foods we eat. Soy also provides phosphorus and iron. Phosphorus is necessary for cellular growth and production. Iron is crucial for the production of red blood cells and hemoglobin.

Nutrition Information of Common Soy-based Foods

	Tofu, firm (1/2 cup)	Soybeans (1/2 cup)	Soy milk, plain (1 cup)
Calories	88	155	108
Fat (g)	5	8	4
Protein (g)	10	15	6
Cholesterol (mg)	0	0	0
Fiber (g)	1	5	0
Sodium (mg)	15	1	115

Soy foods can carry a health claim if the food meets certain guidelines. The Food and Drug Administration has authorized the use of a health claim on the association between soy protein and the reduced risk of coronary heart disease (CHD).

Specifically, the claim needs to state that “soy protein” is the beneficial part that can reduce CHD.

“25 grams of soy protein per day, as a part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease”

- Food and Drug Administration