

All about Soy

How does soy prevent diseases?

Soybeans have fiber and produce substances called phytochemicals. Phytochemicals are special compounds produced by plants which may help prevent disease. One group of phytochemicals found in soy is called phytoestrogens. These chemicals, along with the fiber found in soy, can help reduce LDL or “bad” cholesterol thereby decreasing the risk of heart disease. Other chemicals in soy may help prevent certain types of cancer. Soy may also help lower the risk of osteoporosis by helping the body retain calcium.

Is soy protein special?

Yes, soybeans are the only common plant food that contains all of the essential amino acids in the amounts needed for human health. Soybeans are considered “complete proteins.”

Is replacing some of the animal protein that I eat with soy protein good for me?

Absolutely! Animal protein, which includes foods like meat, poultry, milk, cheese, and eggs, has saturated fat and cholesterol, whereas protein from vegetable sources like soy does not contain any saturated fat or cholesterol. By substituting animal protein with soy foods, you can gain some of the benefits that soy has to offer, and you can also lower the amount of calories and fat that you consume each day.

How much soy should I eat each day?

The Food and Drug Administration recommends that you eat 25-50 grams of soy each day if you would like to lower your cholesterol and receive the other benefits that soy has to offer.

Where can I get 25 to 50 grams of soy each day?

Soybean Oil	Soybean oil is the natural oil taken from whole soybeans. Soybean oil is often marketed as “vegetable oil.” Read the nutrition label to insure its purity. Soybean oil is often used to make margarines and shortenings.
Soymilk	Soymilk is the rich creamy milk of whole soybeans. It is a great source of protein and iron and it can be used like cow’s milk. Look for calcium and vitamin D fortified milk. Soymilk is available in vanilla and chocolate flavors. (7-10 grams per 1 cup serving)
Soynuts	Soynuts make quick and easy snacks. Soynuts come in different flavors like barbeque and honey roasted. (13 grams per 1/3 cup serving)
Soynut Butter	Soynut butter is made from roasted soybeans and soybean oil and has a slightly nutty flavor. It can be used in a variety of ways like peanut butter and it comes in regular and chocolate flavors. (3 grams per 1 T)
Soy Beverages	Soy beverages are made from soymilk or isolated soy protein and are found in a dry powder form or come ready to drink. (6.6 grams per 1 cup serving)
Soy Cheese	Soy cheese is made from soymilk and can be used in many different ways like regular cheese. (5.5 grams per slice)
Soy Flour	Soy flour comes from ground roasted soybeans. It may be used in any recipe that calls for flour, but it usually needs to be mixed with regular flour because it contains no gluten. Check the baking instructions on the package before replacing regular flour with soy flour. (30-41 grams per 1 cup flour)
Soy Frozen Desserts	Soy frozen desserts are made from soymilk or soy yogurt and can be found in a variety of flavors like regular ice cream or frozen yogurt. (3 grams per ½ cup serving)
Soy Yogurt	Soy yogurt is made from soymilk and can be found in a variety of flavors like regular yogurt. (4 grams per 6 oz.)
Miso	Miso is soybean and rice paste used to flavor soups, sauces, dressing, marinades and pates. (4.1 grams per 2 T serving)
Natto	Natto is fermented, cooked soybeans and is used in many recipes as a topping for rice or vegetables. It can be found in Asian and health food stores. (15.5 grams per ½ cup serving).
Tempeh	Tempeh is a tender and rich soybean cake and is popular in Indonesia. Tempeh is usually marinated or grilled and added to soups, casseroles or chili. (15.8 grams per ½ cup serving)
Tofu	Tofu comes in regular and silken forms. It has a creamy texture and it takes on flavors of the foods that it is cooked with. Tofu can be used in place of meat in certain recipes like tacos or lasagna, or it may be used in things like smoothies in its silken form.

Where can I get 25 to 50 grams of soy each day? (cont.)

TSP	Textured Soy Protein (TSP) is soy flour that is sold as granules or cubes. TSP is usually packaged in products to replace meat or chicken. Soy burgers, soy sausages, soy crumbles, and soy deli meats made by companies like Boca [®] , Morningstar Farms [®] , Gardenburger [®] , etc. are all examples of TSP. (9-12 grams per serving).
Yuba	Yuba is dried soybeans made into thin-layered sheets. It is found in Asian food stores.

Soy food products can be found in most grocery stores in the produce and refrigerated sections as well as in the health foods section. They are also available at specialty health food stores.

Some great soy recipes

Crunchy Apple Bars

1 cup crunch cereal
(Grape Nuts or Perky's Nutty Grains & Soy)
1 cup soy milk
1 cup unbleached flour
1 tsp. baking powder
1/2 tsp. ground cinnamon
1/2 cup brown sugar
2 egg whites
1 large apple, peeled and chopped
1/3 cup butter or margarine

- Preheat oven to 350 degrees.
- Grease an 8-by-8in square pan with butter, margarine, or non-stick baking spray, or line it with parchment paper.
- In a large bowl, mix the dry ingredients, combine with the milk and set aside.
- In a separate bowl, combine the butter and the brown sugar and beat until creamy.
- Add the egg whites and beat until combined.
- Stir dry ingredients into the egg mixture and add the diced apple.
- Pour into the prepared pan and bake for 30 minutes.

Tacos with a Twist

1 package textured soy protein crumbles such as Boca[®]
meatless ground burger
2 TBSP salsa or a packet of taco seasoning
Salt and pepper to taste
1 cup lettuce
1 tomato
1/2 small yellow onion
Flour or corn tortillas
Unsweetened plain yogurt

- Empty the packet of textured soy protein into a non-stick frying pan.
- If using taco seasoning packet prepare as the seasoning packet specifies. Alternatively season with salsa, salt, and pepper.
- Chop the tomato, onion, and lettuce, while the taco filling is heating up.
- Spread 1 teaspoon of unsweetened yogurt onto a tortilla.
- Place the taco filling in the tortilla and the sprinkle with chopped vegetables.

Additional resources on soy

National Soybean Research Laboratory Web site at: www.nsrl.uiuc.edu

Illinois Center for Soy Foods Web site at: www.soyfoodsillinois.uiuc.edu

The American Dietetic Association Web site at: www.eatright.org

The United States Soy Foods Directory Web site at: www.soyfoods.com

The American Heart Association Web site at: www.americanheart.org

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.uiuc.edu>