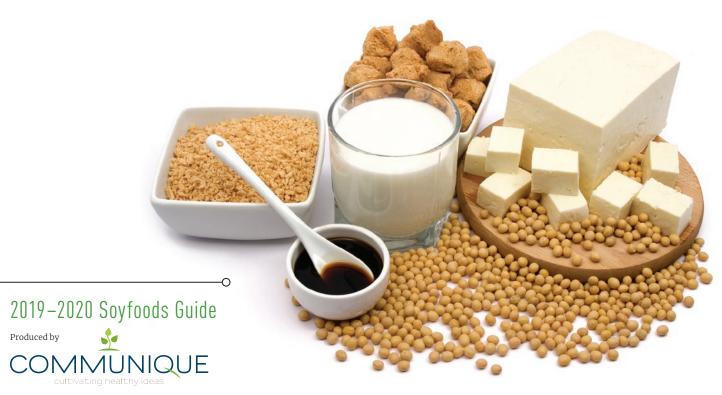
# Soyfoods Guide



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## Want to Lose Weight? Skip the Fad, Stick to the Facts

Weight loss and weight management are hot topics. News headlines routinely peddle the "diet du jour" as a key in weight management. Gluten-free, paleo, and low-carbohydrate diets have been some of the biggest trends in recent media. While news continues to draw attention to diet trends, research has focused on understanding the best diets to support healthy weight.

Protein–rich foods are thought to be beneficial for weight loss. Consuming a high–protein diet is believed to help weight loss efforts by increasing feelings of fullness, which can result in decreased consumption of total calories. <sup>1,2</sup> Consuming high–quality protein while trying to lose body fat is also important in order to avoid muscle loss. <sup>3</sup> Soyfoods provide higher quality plant protein than other plant foods. <sup>4,5</sup> With options that include soymilk, tofu, tempeh, and textured vegetable protein, soyfoods offer a versatile and tasty way to consume more protein.

Research has also compared low-fat and low-carbohydrate diets in weight loss. A recent study of 600 obese men and women followed either a low-fat or a low-carbohydrate diet. The researchers wanted to understand which of these diets, if either, was more effective for weight loss. It is important to note that there were diet counselors that instructed the participants on how to include lots of vegetables and whole foods in their diets while also avoiding sugar, refined flour, and trans fats.

After 12 months on the diet, the average weight lost was 13 pounds in each diet group. Over the course of the year, most participants gradually became less strict with their diets, so weight loss amounts were modest. Regardless of the diet, both groups had decreased the amount of total calories they ate by about 400–600 calories per day. In other words, both diets were similarly effective and both diets helped the participants lose weight. Results showed that consuming a healthy diet—either low-fat or low-carbohydrate—can result in a small reduction in calories and result in weight loss.

Whether the diet focus is high-quality protein, low-fat or low-carbohydrate foods, soyfoods offer a variety of healthful options that can easily support dietary efforts. Soy is low in fat, cholesterol free, and provides high-quality plant protein. Weight loss trends may come and go, but soyfoods can easily be part of healthful diets that encourage healthy weight.

Source: The Soy Nutrition Institute

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## Reasons

## Soy May $\mathcal{Boost}$ Your Health

1

## May lower risk of heart disease

Soyfoods may offer protection against heart disease, as they are lower in saturated fat and high in polyunsaturated fats. Soy protein lowers circulating LDL-cholesterol (LDL-C) levels.<sup>1</sup>



## Provides complete, high-quality protein

Soyfoods provide high-quality protein and are generally lower in saturated fat. Soy is referred to as a "complete" plant-based protein because it contains all nine essential amino acids in the necessary amounts. 5-6

2

#### May lower blood pressure

Multiple components of soybeans may have blood-pressure lowering effects. For example, digestion of soy protein may produce small chains of amino acids, the building blocks of protein, that lower blood pressure. And compounds in soybeans called isoflavones, appear to boost the activity of enzymes that increase the production of nitric oxide, a molecule which widens blood vessels and reduces blood pressure.<sup>2</sup>



## May aid with weight management

Soy protein as part of a healthy lifestyle can help with weight management and reduction of excess abdominal weight.<sup>7-8</sup>

3

## May improve cognitive function

The addition of fermented foods, including fermented soyfoods, may improve cognitive function for those with mental health conditions.<sup>3</sup>



#### May lower risk of breast cancer

Epidemiologic studies assessing adult soy intake continue to show that soy consumption may be associated with at least a modest reduction in the risk of breast cancer. (Note: There is evidence indicating that to derive this benefit, soy consumption must occur during childhood and/or adolescence.) 10-12



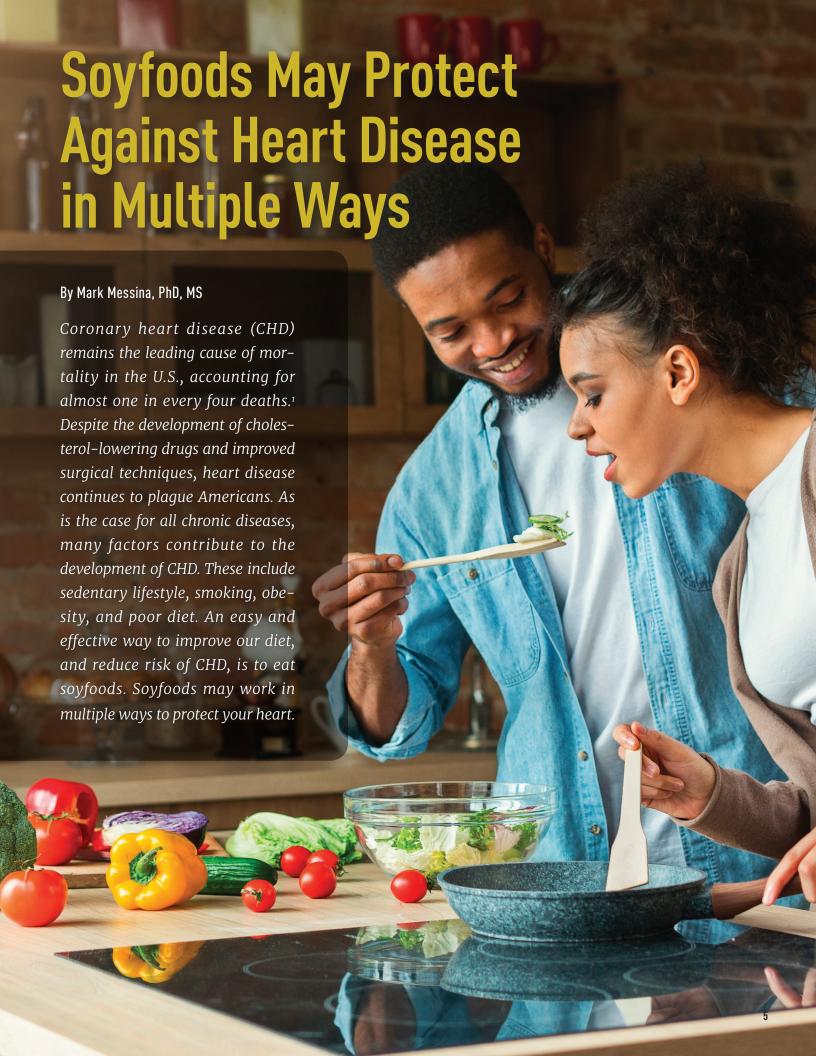
## May protect against prostate cancer

Soy consumption may be protective against prostate cancer risk. Overall, total soyfood intake was associated with a 29% reduction in risk.<sup>4</sup>



#### May improve skin health

Evidence suggests soy isoflavones may increase collagen synthesis and reduce wrinkles.<sup>13</sup>



"Soybean oil not only provides polyunsaturated fat, but it also provides both essential fatty acids: the omega-6 fatty acid and the omega-3 fatty acid."

"Soy protein was granted a health claim for lowering risk of CHD based on the ability of soy protein to lower cholesterol." The connection between diet and CHD has been known for decades. As early as the 1960s, scientists noted a link between elevated blood cholesterol levels and CHD and a link between saturated fat and elevated cholesterol. Saturated fat is found predominately in animal foods. In contrast to saturated fat, polyunsaturated fat (the kind found predominantly in plant foods) lowers blood cholesterol levels.

One of the best sources of polyunsaturated fat is soybean oil, which is commonly labeled as vegetable oil. Over 60 percent of the total fat in soybean oil is polyunsaturated. About 30 percent is monounsaturated, a type of fat that also lowers blood cholesterol levels. Clinical research first demonstrating the ability of soybean oil to lower blood LDL-cholesterol (the harmful type of cholesterol) dates back 25 years. The evidence that soybean oil lowers LDL-cholesterol is so convincing that in 2017, the U.S. Food and Drug Administration (FDA) approved a health claim for soybean oil and CHD.

Soybean oil provides both essential fatty acids: the omega-6 fatty acid (linoleic acid) and the omega-3 fatty acid (alpha-linolenic acid). Alpha-linolenic acid may help to reduce CHD independent of its effect on blood cholesterol. Of course, soybeans and soyfoods like tofu, edamame, soynuts and soymilk provide the same heart-healthy fat found in soybean oil.

In recent years there have been challenges to the notion that saturated fat increases heart disease risk. Critics cite population studies that fail to find a relationship between saturated fat intake and CHD. While these studies do exist, there appears to be a pretty straightforward explanation for their inability to find a link between saturated fat and CHD, and that is, simply lowering the saturated fat content of your diet isn't enough to lower CHD risk.

Research from Harvard University involving nearly 130,000 men and women who were followed for up to 30 years has shown that the type of carbohydrate that replaces saturated fat in the diet will determine whether risk is reduced. For example, when 5 percent of the calories from saturated fat are replaced with an equal number of calories from refined carbohydrate, such as refined grains and sugars, risk slightly increases. In contrast, replacing saturated fat with carbohydrate from whole grains reduces risk by nine percent. However, the most effective way to reduce risk is to replace saturated fat with healthy fat. Replacing saturated fat with monounsaturated fat lowered risk by 15 percent and replacing it with polyunsaturated lowered risk by 25 percent.

The healthy fat provided by soybeans isn't the only way that soyfoods can protect against heart disease. The protein in soybeans also contributes. The first study showing soy protein directly lowered blood cholesterol levels was published in 1967.8 Nearly 30 years later, a landmark paper published in the *New England Journal of Medicine*, one of the premier medical journals in the world, statistically analyzed all the cholesterol-lowering studies involving soy protein.9 Four years later, after conducting its own review of the scientific literature, the FDA concurred.10 Soy protein was granted a health claim for lowering risk of CHD based on the ability of soy protein to lower cholesterol. More recent analyses have consistently supported the efficacy of soy protein.11-14

Soy protein lowers LDL-cholesterol by about 4 percent. Over time, each 1 percent reduction in LDL-cholesterol is thought to reduce risk of CHD by 1 to 2 percent. <sup>15,16</sup> So, in theory, adding soy protein to the diet could lower risk by 4 to 8 percent. However, remember that soyfoods also provide healthy fat.

David Jenkins and colleagues from the University of Toronto estimated that if an amount of soyfoods providing about 25 grams of protein (about three servings) replaced a similar amount of protein from commonly-consumed sources of protein in Western diets (which tend to be high in saturated fat) blood cholesterol would be reduced by about 8 percent. This reduction, which would be because of the effect of both the protein and fat, could reduce CHD by as much as 16 percent.

Finally, there are numerous other ways in which soyfoods might reduce risk of CHD although the evidence in support of these proposed benefits is much more speculative. For example, soy protein may modestly lower blood pressure<sup>17</sup> and the isoflavones in soybeans may directly improve the health of the arteries.<sup>18</sup> Isoflavones are naturally-occurring compounds found in uniquely-rich amounts in soyfoods.

Years of research attest to the coronary benefits of soyfoods, but soyfoods should be thought of as just one part of an overall heart-healthy diet. Consuming a diet that is low in saturated fat, includes soyfoods, foods high in soluble fiber (found in beans, oats and other plant foods), nuts, fruits and vegetables and phytosterols can lower blood cholesterol levels by as much as 30 percent. This diet also lowers blood pressure. Fortunately, soyfoods are easy to incorporate into the diet. Try to consume two to three servings per day.

References available on page 30

## High Oleic Oil Health Claim

In November 2018, the U.S. Food and Drug Administration authorized the approval of a health claim for high oleic oils. Suggested language for the claim is "Supportive but not conclusive scientific evidence suggests that daily consumption of about 1½ tablespoons (20 grams) of oils containing high levels of oleic acid, may reduce the risk of coronary heart disease. To achieve this possible benefit, oleic acid-containing oils should replace fats and oils higher in saturated fat and not increase the total number of calories you eat in a day."

Oleic acid is a monounsaturated fat. It is the primary fatty acid in olive oil and in recently developed high oleic soybean oils. These oils were developed largely in in response to the needs of the food industry to replace trans fatty acids.

The health claim was based on the result of the seven studies which found that oils high in oleic acid lower blood cholesterol levels.<sup>1-7</sup> The first study showing high oleic soybean oil—which is comprised of >70% oleic acid—lowered cholesterol was published in 2006.<sup>8</sup>

#### **ABOUT THE AUTHOR**

Mark Messina, PhD, MS is the executive director of the Soy Nutrition Institute, president of Nutrition Matters, Inc., a nutrition consulting company, and an adjunct professor in the School of Public Health at Loma Linda University. He has published more than 100 peer-reviewed articles on soyfoods and soybean components. Messina is the editorial chairperson for *The Soy Connection* newsletter and has been since its inception.

## Prepare with Ease and People Please

#### **Edamame Corn Salad On Lettuce**

#### **Edamame Corn Relish Ingredients**

1 - 16 oz. bag frozen sweet corn

1 - 16 oz. bag frozen shelled edamame

1/4 red onion, diced

2 Roma tomatoes, diced

1 medium cucumber, peeled and diced

2 teaspoons garlic, minced

Salt and pepper, to taste

#### Red Wine Vinaigrette Ingredients

3 cloves garlic, minced

1 teaspoon dried oregano

1 each shallot

1 teaspoon dried basil

1/2 cup red wine vinegar

1 teaspoon salt

1 teaspoon black pepper

1/2 cup soybean (vegetable) oil

#### **Lettuce Mix Ingredients**

4 cups chopped romaine

4 cups chopped iceberg

#### **Directions**

- 1. Preheat oven to 400°F.
- 2. On a baking sheet add sweet corn and edamame, place on oven for 10–12 mintues or until corn starts to brown. Remove from oven, cool.
- 3. In a large mixing bowl add edamame, corn, red onion, tomatoes, cucumber, and garlic, mix well. In a small mixing bowl add red wine vinegar, vegetable oil, salt, and pepper, mix together.
- 4. Add to corn mixture, toss to mix. Set aside.

#### For the Vinaigrette

- In a small mixing bowl add garlic, oregano, shallot, basil, red wine vinegar, salt and pepper.
- 2. With a hand-held mixer-immersion blender, puree all ingredients. Slowly drizzle in oil while mixing to emulsify dressing.

#### To Serve

In a large bowl add lettuce, toss to mix. Add dressing, toss to mix. Evenly divide on plates. Top with edamame corn relish evenly divided between plates. Serve immediately.

Makes 8 servings

#### **Nutritional Information**

Calories 133; Total Fat 14 g (2.1 g sat fat); Cholesterol 0 mg; Sodium 5 mg; Total Carbs 5.2 g; Protein 1.2 g; Fiber 1 g

Modified from The Soyfoods Council, The Soyfoods Council.com



## **Dark Chocolate Soynut Butter Protein Balls**

#### **Ingredients**

1 cup soynut butter

3/4 cup honey

2 cups quick oats

1 cup dark chocolate chips

1 cup milled flaxseed

1 cup vanilla soy protein powder

#### **Nutritional Information**

Calories 147; Protein 5.5 g; Fat 6.6 g (1.4 g sat fat); Carbohydrates 18.8 g; Fiber 2.4 g; Sodium 44 mg

#### **Directions**

- In a mixing bowl combine soynut butter and honey.
- 2. Add remaining ingredients one at a time until evenly combined.
- 3. Form 1" balls by pressing about 1 tablespoon of the mixture together.
- 4. Store in refrigerator for up to 2 weeks.

Makes 30 balls



#### **Roasted Balsamic Sweet Potatoes and Tofu**

#### **Ingredients**

1/2 cup balsamic vinegar

1 tablespoon brown sugar

3 sweet potatoes, peeled and chopped

1 package firm or extra firm tofu

#### Directions

- 1. Preheat oven to 400°F.
- 2. Remove tofu from package and pat dry.
- 3. Cut into 3/4 inch cubes.
- 4. Cook vinegar and sugar in non-reactive saucepan over low heat until slightly thickened. Place potatoes and tofu in a large bowl and coat with vinegar mixture.
- 5. Gently mix, making sure to coat everything evenly.
- 6. Spread potatoes and tofu onto a baking sheet in a single layer.
- 7. Bake in preheated oven for 40 minutes, flipping halfway through.



#### **Nutritional Information**

Calories 115; Total Fat 1 g (.2 g sat fat); Cholesterol o mg; Sodium 58 mg; Total Carbs 22.5 g; Protein 3.4 g; Fiber 3.1 g

The Soyfoods Council, TheSoyfoodsCouncil.com

## Prepare with Ease and People Please

## **Pan-Seared Soy Kabob**

#### **Ingredients**

4 cups soy crumbles (soaked in warm water)

1/2 cup red onion

2 tablespoons ginger

2 tablespoons garlic

1/4 cup cilantro

1/4 cup mint

1 tablespoon cumin

1 tablespoon coriander powder

1 tablespoon red chili powder

2 tablespoons lemon juice

Soybean flour (for binding)

Salt and pepper, to taste

Soybean (vegetable) oil

#### **Directions**

- 1. Mix all ingredients together in large bowl.
- 2. Divide mixture into 12 patties.
- 3. Add small amount of soybean (vegetable) oil to pan and sear patties.

Makes 6 servings

#### **Nutritional Information**

Calories 278; Total Fat 5.3 g (0.1 g sat fat); Cholesterol 0 mg; Sodium 18 mg; Total Carbs 12 g; Protein 32.3 g; Fiber 14.7 g

Developed by Chef Vidish Pednekar, Four Seasons Hotel Toronto.



## From the Tractor Seat to the Kitchen Table

#### By Whitney Kinne

Knowledge, precision, hard work, and a talented team are just a few ingredients found within the farm families growing soybeans across the United States. LaVell and Andy Winsor's family exhibit these traits on their family farm, just 10 miles outside of Topeka, Kansas.

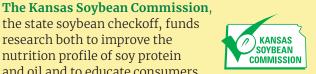
LaVell plays a valuable role on the team, personally and professionally. In her professional role as a farm financial analyst, she consults with other farm families and sees their heart for growing food, including soybeans.

"They have such a great appreciation for mother nature and the seasons and the cycle of things," LaVell said. "They are down-to-earth and have great values."

She finds many similarities between her family and the others she meets.

"Over 95% of farms are family farms," LaVell said. "They're just like my family, making the decisions and trying to do the best we can while balancing out our livelihood and commitments. [We are] trying to do a good job with the farms we're trusted to farm, [to make] them better every single year."

the state soybean checkoff, funds research both to improve the nutrition profile of soy protein and oil and to educate consumers



and the food industry about the benefits of soy.

#### Contact us at:

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LaVell is right. This legacy of family members working together to grow soybeans is a common thread among farms across the country. Three states north is another woman working on her family's rural North Dakota farm. Christie Jaeger and her husband, Gerald, grow soybeans near Esmond, North Dakota.

Christie is proud to deliver soyfoods to tables across the globe.

"A lot of that soy has been raised on family farms," Christie said. "We're out there doing the work. I want people to understand there is care and intent. It's not just a business. It is land that we're growing on that has been in the family for three generations."

#### **Safely Growing with Innovation**

The Jaegers have transitioned responsibility from one generation to the next when Christie's father-in-law retired from the farm, and they anticipate the future help of their oldest son, 19-year-old Seth who is attending Bismarck State College studying farm and ranch management. "He graduated from high school and wants to come home to farm," Christie said. "He's enjoying learning more about the aspects of farming in [the college] setting. Of course, he helps us in the summers and will move back to farm with us."

This investment in further education shows the value placed on knowledge and talent development for the family farm team. Likewise, these farm families are utilizing research and science to remain current with management practices that will sustain their ability to grow healthy and quality soybeans for food consumption. One example of this knowledge and precision is found in modern farming equipment, which allows farmers to utilize fewer resources, such as chemicals and fuel.

"The bigger equipment and the technology work for us to produce more on our farm, but to also produce it safely," Christie said. "It saves fuel. We aren't driving over our fields as often. It prevents erosion and holds water in our fields. It helps us raise crops and keeps the integrity in our land."

The Winsors started using GPS programs on their farm in the mid-1990s. Today they have iPads with software that tracks the individual seed from planting to harvest.

"Celebrate the diversity of food! Soy itself is a wonderful choice. The diversity of food we have should be celebrated."

"It is amazing to me how precise it has become," LaVell said. "Our friends that occasionally ride in the combine or tractor are amazed to see that there are several monitors in the cab."

#### **Opening the Farm Gate**

LaVell has friends near and far who have visited the farm to learn more about it. One friend who lives in Baltimore intentionally visited their farm during spring planting season so she could ride along in the tractor. She wanted to see how soybeans are grown, and while she was there she helped load the seed boxes and rode along to see all the pieces that went into the process.

LaVell's desire to share her family's farming story ignited as she read inaccurate claims being made in the media about farms like hers.



"I've sat at literally hundreds of farm kitchen tables throughout my career and those are not my experiences. It was important to me to figure out a way to communicate about agriculture and answer any questions or share my experiences," she said.

While LaVell and Christie have never met, they have a bond. Both women volunteer to share the story of their farms through an organization called CommonGround. In North Dakota, CommonGround hosts an annual event called "Banquet in a Field." Nearly 100 guests are hosted on the farm to socialize, enjoy a gourmet meal, and see the soybeans in the field. The evening puts a focus on the wide range of food grown in North Dakota.

"Celebrate the diversity of food!" Christie said. "Soy itself is a wonderful choice. The diversity of food we have should be celebrated."

#### Connecting through Food

When it comes to food, both women rely on simplicity in their kitchen duties.

"I'm about easy, because we're busy and outside," Christie said. "I like things that don't take a lot of attention."

The Winsors have two sons, so dinner is an important part of their schedule.

"My younger son is eight and he's in third grade. He's all boy and busy, busy. He loves to play sports," LaVell said.

Between basketball practice and 4-H meetings, LaVell says she has to be prepared for quick and easy family dinners. She uses the cook once, dine twice method of doubling the recipe during meal preparation, so she has a second meal in the freezer for busy nights.

"I trust all the food that I buy," Christie said. "We eat what we like and I trust the food system and farmers. I don't always have the choices people in bigger towns

North Dakota

Soybean Council

The Jaeger family on their Esmond, North Dakota farm.

have, so I'm very comfortable feeding my family what I can find in my local store."

Christie lightheartedly acknowledged she must travel 90 miles to reach the nearest Target store. She shares her small town with two of her former high school classmates. Christie says having good girlfriends is an added bonus when living in a rural setting.

"We get together for walks in the country in the summer," Christie said. "We are good about creating fun for ourselves. Even just as we get together and visit at each other's kitchen table."

While the kitchen table of a Midwestern farm family might seem like thousands of miles away, LaVell, Christie and other farm women are closer than you think and are eager to answer questions about soyfoods and farm life. Connect with a farmer, find answers to your questions about how food is raised, and see for yourself at find-ourcommonground.com.

North Dakota Soybean Council 4852 Rocking Horse Circle S. Fargo, ND 58104

701-566-9300 www.ndsoybean.org

- > Facebook.com/NDSoybeanCouncil
- > Twitter.com/NDSoybean
- > Instagram.com/NDSoybean
- > Pinterest.com/NDSoybean
- > Youtube.com/NDSoybeanCouncil

#### ABOUT THE AUTHOR

Whitney Kinne is a journalism graduate from the University of Missouri. She lives in mid-Missouri with her husband, and their two young children. Whitney's passion for food developed as a young girl, while she spent hours learning to cook in her beloved Grandma Pat's farmhouse kitchen. Decades later, Whitney is still moved by the rich traditions and strong sentiments connected to food production, preparation, and fellowship surrounding mealtime.

## **Creamy Miso Slaw with Sesame Encrusted Ahi Tuna**

#### **Dressing Ingredients**

1 - 12.3 oz. box silken tofu, cubed

3/4 cup ponzu sauce

3 tablespoons white miso

2 tablespoons garlic chili paste

2 tablespoons water

1 tablespoon soy sauce

1 teaspoon sesame oil

1 teaspoon fresh ginger, minced

2 garlic cloves, minced

Salt to taste

#### **Slaw Ingredients**

1 head Napa cabbage, finely shredded

1/4 head red cabbage, finely shredded

6 scallions, cut on bias

1 red pepper, julienned

1/2 bunch cilantro, minced

1/2 bag shredded carrots, cut in half

#### **Tuna Ingredients**

1/4 cup black sesame seed

1/2 cup white sesame seeds

4 - 6 oz. Ahi tuna steaks, 1 inch thick

Kosher salt and freshly ground black pepper 2 tablespoons soybean (vegetable) oil

Makes 4 servings

#### **Nutritional Information**

Calories 424; Total Fat 22.4 g (2 g sat fat); Cholesterol 13 mg; Sodium 2065 mg; Total Carbs 35.3 g; Protein 24 g; Fiber 8.9 g



#### **Directions for Dressing**

- 1. In a blender, add cubed tofu.
- In a large mixing bowl, add ponzu, miso, garlic chili paste, water, soy sauce, sesame oil, ginger, and garlic; mix with a spoon to combine ingredients.
- 3. Add mixture to blender.
- 4. Blend until well combined.
- 5. In a mesh strainer set over a bowl, pour dressing to strain.
- 6. Season with salt to taste.

#### **Directions for Slaw**

- 1. In a large salad bowl, combine all ingredients.
- 2. Add  $1-1\frac{1}{2}$  cups of dressing. Mix well.

#### **Directions for Tuna**

- In a shallow dish, combine the two types of sesame seeds, stir to mix.
- 2. On a large plate, season the tuna with salt and pepper.
- 3. Dredge in sesame seeds, coat tuna evenly.
- 4. In a nonstick pan, over medium heat, warm the oil until smoking.
- 5. Arrange tuna in the pan.
- 6. Cook until the white sesame seeds start to turn golden underneath.
- 7. Carefully turn the tuna over.
- 8. Cook for about 1 minute.
- 9. Transfer the tuna to a cutting board.
- 10. Cut into 1/4 inch thick slices.

The Soyfoods Council, The Soyfoods Council.com

### **Edamame with Cranberries, Feta, and Basil**

#### **Ingredients**

1 - 16 oz. bag frozen shelled edamame 1/2 cup dried cranberries 1/4 cup fresh basil leaves, cut into thin strips 2 tablespoons soybean (vegetable) oil 1/8 teaspoon freshly ground black pepper 1/2 cup crumbled feta cheese

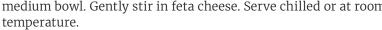
#### **Nutritional Information**

Calories 188; Total Fat 13.3 g (4.1 g sat fat); Cholesterol 17 mg; Sodium 215 mg; Total Carbs 10.1 g; Protein 7.8 g; Fiber 2 g

The Soyfoods Council, The Soyfoods Council.com

#### Directions

- Cook edamame in boiling salted water for 5 minutes. Drain and rinse under cold water to stop cooking. Pat dry.
- 2. Toss edamame, cranberries, basil, soybean (vegetable) oil, and pepper together in a





Makes 4 servings

#### **Buffalo Chicken Pasta Salad**

#### **Ingredients**

8 oz. boneless chicken breast, medium diced

8 oz. firm tofu, medium diced

6 oz. buttermilk

3 oz. hot sauce

2 tablespoons brown sugar

1 oz. lemon juice

2 cup corn starch

3 cups bowtie pasta, cooked

4 oz. mayonnaise

4 oz. hot sauce

½ red onion, julienne

1 each celery stalk, finely julienne

1 tablespoon parsley, finely chopped

1 teaspoon cayenne pepper

Salt and pepper to taste

#### **Nutritional Information**

Calories 581; Total Fat 15.5 g (7.3 g sat fat); Cholesterol 73 mg; Sodium 1815 mg; Total Carbs 83.7 g; Protein 29.3 g; Fiber 1.4 g

The Soyfoods Council, The Soyfoods Council.com

#### **Directions**

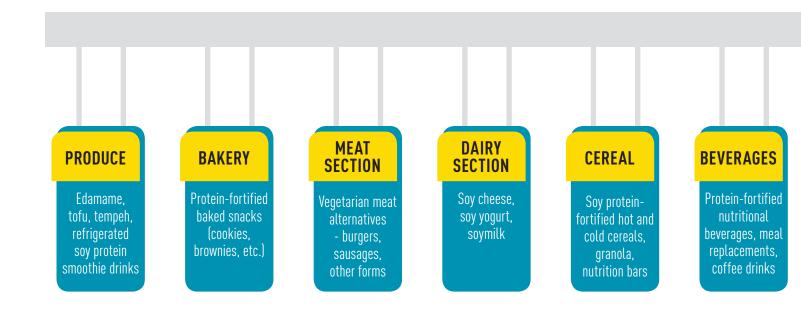
- Marinate the chicken and tofu for about one hour or overnight in the buttermilk, hot sauce, brown sugar, and lemon juice.
- Remove the chicken and tofu from the marinade and drain well.
- Dredge the chicken and tofu separately in the cornstarch.
- 4. Fry separately in 350°F fryer, or heat in a skillet on medium heat with a small amount of soybean oil, until golden brown.
- 5. Mix the pasta with the chicken, tofu, mayonnaise, hot sauce, red onion, celery, and parsley.
- 6. Season to taste.

Makes 3 servings



## Soy in the Supermarket

Eating soy every day is easier than you think with the plethora of great-tasting soy products on the market.





#### **DuPont Nutrition and Health**

DuPont Nutrition & Health® offers innovative soy solutions and ingredients for food and nutritional products all around the world. DuPont<sup>TM</sup> Danisco® soy protein is a high-quality, complete, plant-based protein that can be found in a variety of products including beverages, cereals, dairy and meat alternatives, snacks, baked goods and nutrition bars. Look for Mori-nu® and Morningstar Farms® at your supermarket.

#### **PHARMACY DESSERTS** MISC Nondairy frozen Soy protein-Soynuts, soy dessert, pastry fortified bars protein-fortified fillings and protein pasta and soups powders, weight management, pediatric and adult nutritional supplements

## Meal and Snack Ideas

#### **Breakfast**

- Try a soy protein-fortified breakfast cereal or granola with soymilk
- Swap regular sausage with a meatless sausage patty or have a combination of sausage crumbles and soy crumbles
- Create a fruit and yogurt parfait layering soy yogurt with fresh fruit and granola
- Whip up a soy protein smoothie with 1 cup soymilk, frozen fruit, and a scoop of soy protein powder
- Swirl a tablespoon of soynut butter or soy protein powder into your oatmeal to boost the protein

#### Lunch

- Enjoy a glass of soymilk or a soy protein beverage
- Substitute regular deli meats with meatless deli slices
- Make a grilled cheese sandwich with soy cheese
- Trade regular peanut butter for soynut butter
- Have a soy veggie burger or "hotdog" in lieu of a traditional burger or hotdog
- Roasted soynuts or steamed edamame
- Soynut butter on whole grain crackers

#### **Snacks**

- Always have in your desk, or in your bag, a soy protein nutrition bar to stave off hunger in between meals
- Look for nutrient rich bars that have at least 6 grams of protein, contain a good source of fiber, and are low in fat and sugar
- Roasted soynuts or steamed edamame
- Soynut butter on whole grain crackers
- A glass of soymilk or a soy protein beverage
- After exercise, choose a protein recovery beverage that includes soy protein

#### Dinner

- Grill tofu and skewer it with roasted vegetables for easy kabobs
- Substitute soy veggie crumbles in place of ground beef in chili or lasagna, or toss into marinara sauce for a protein boost, or do half ground beef and half soy veggie crumbles
- Cube tempeh and toss in soybean (vegetable) oil, soy sauce, and garlic powder. Roast in a 450 degree oven for about 15 minutes. Toss tempeh into your favorite salad

## **Delicious Vegetable Soup with Black Soybeans**

#### **Ingredients**

2 tablespoons soybean (vegetable) oil

1 cup chopped onions

2 cups diced celery

2 cups diced carrots

3 cups peeled, diced butternut squash

1 tablespoon minced garlic

26 oz. can tomatoes (or use high-speed blender to blend fresh tomatoes)

1 - 15 oz. can black soybeans, rinsed and drained

8 cups stock, chicken or vegetable

1 bay leaf

5 oz. bag fresh baby spinach

3 tablespoons store bought pesto

Salt and pepper to taste



#### **Directions**

- Program pressure cooker to sauté. Add oil, heat. Add onions, sauté. Add celery, carrots, squash and garlic. Stir for 5 minutes. Add tomatoes, beans, stock and bay leaf.
- 2. Cover and program pressure cooker to slow cooker, high setting; cook until vegetables are tender.
- 3. Remove bay leaf.
- 4. Add spinach and pesto, heat until spinach is wilted.
- 5. Season to taste with salt and pepper.
- 6. Serve with crackers or crusty bread.

Makes 6 servings

#### **Nutritional Information**

Calories 220; Total Fat 10.8 g (1.9 g sat fat); Cholesterol 2 mg; Sodium 1412 mg; Total Carbs 26.3 g; Protein 8.7 g; Fiber 8.4 g

#### **Notes**

Add 1 cup texture vegetable protein (will look like meat crumbles) or 1 - 12.3 oz. box silken tofu (adds creaminess) for added protein.

The Soyfoods Council, The Soyfoods Council.com

## Three Bean and Bell Pepper Chili with Chipotle Soy Sour Cream

#### **Chili Ingredients**

- 1 14 oz. can black beans
- 1 14 oz. can kidney beans
- 1 14 oz. can great northern beans
- 1 28 oz. can tomatoes
- 3 tablespoons soybean (vegetable) oil
- 1 large red onion, diced
- 8 oz. ground beef
- 8 oz. soy crumbles
- 1 each of: red, green, and yellow bell peppers, cored and finely diced
- 3 cloves garlic, chopped
- 2 teaspoons freshly ground cumin
- 2 bay leaves
- 2 teaspoons ancho chili powder
- 1 cup frozen corn kernels
- 1 tablespoon finely chopped fresh oregano
- 1 teaspoon apple cider vinegar
- 1 teaspoon brown sugar
- Salt to taste

#### **Chipotle Soy Sour Cream Ingredients**

- 1 12.03 oz. package firm tofu
- 3 tablespoons fresh lemon juice
- 3 tablespoon soybean (vegetable) oil
- 2 teaspoons cider vinegar

1/2 chipotle pepper seeded and chopped

Salt to taste

#### **Directions for Chili**

- 1. In a heavy 3-quart saucepan over medium heat, warm the oil. Add the onion and sauté 8 to 10 minutes until lightly browned.
- 2. Add the ground beef and soy crumbles, bell peppers, garlic, cumin, bay leaves, and chili powder and sauté for 10 minutes more. Lower the heat and stir occasionally to prevent sticking.
- 3. Add the beans with their liquid to the pot.
- 4. Dump the tomatoes with their juice into a bowl and crush. Add the tomatoes to the pot. Raise the heat and bring to a boil.
- 5. Lower the heat and stir in the corn kernels, oregano, vinegar, and brown sugar. Simmer uncovered for 30 minutes, or until the chili has thickened and you can't wait any longer.
- 6. Taste for seasoning. Add salt and additional brown sugar if desired.
- 7. Serve in bowls and top with chipotle soy sour cream.

#### **Directions for Chipotle Soy Sour Cream**

1. Combine all the ingredients except the salt in the work bowl of a food processor. Puree until smooth. Season with salt and serve.

Makes 5 servings

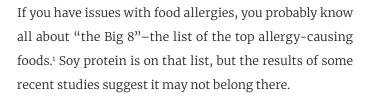
#### **Nutritional Information**

Calories 638; Total Fat 23.7 g (4.5 g sat fat); Cholesterol 40 mg; Sodium 1086 mg; Total Carbs 71.8 g; Protein 39.9 g; Fiber 20.6 g

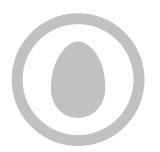


# **Soy Allergies?**They're Less Common Than You Think





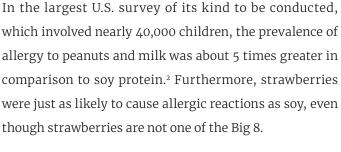




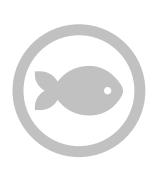
Foods on the Big 8 list must be labeled on all food products sold in this country. The reason, of course, is to make it easier for people allergic to these foods to avoid them. That's a good thing, but it is important to understand that the foods on that list are not created equal.











In a survey of near 5,000 adults, allergic reactions to cow milk were nearly 30 times more common than reactions to soy protein.<sup>3</sup> And reactions to peanuts and eggs were about 10 times more common than soy, which was at the bottom of the list. Furthermore, if you are allergic to peanuts, chances are you won't have a problem with soy, even though both foods are legumes. A recent study found that only 2 of 64 children who were allergic to peanuts also reacted to soy.<sup>4</sup>



Source: The Soy Nutrition Institute

#### **Air-Fried Tofu Treats**

#### **Ingredients**

1 lb. container of tofu cubes or extra firm tofu (cut into ½ inch cubes)

Sweet and spicy sauce (prepared)

Panko bread crumbs

#### Makes 4 servings

#### **Nutritional Information**

Calories 109; Total Fat 4.8 g (1 g sat fat); Cholesterol 0 mg; Sodium 96 mg; Total Carbs 8.6 g; Protein 9.7 g; Fiber 1 g

#### **Directions**

- 1. Preheat air fryer for 8 minutes at 350°F.
- 2. Drain tofu container, place tofu in colander, drain. When ready to prepare, press with fingers to squeeze more liquid out of tofu.
- Pour sauce into a bowl. Add tofu and mix with a spoon until completely covered.
- 4. Spoon cubes into bowl of panko crumbs; mix until coated. Using a spoon, transfer the cubes in to air fryer basket.
- 5. Air fry for 6 minutes, shaking half way, until lightly browned.
- 6. Serve immediately.

The Soyfoods Council, The Soyfoods Council.com

## **Easy Stuffed Shells for the Pressure Cooker**

#### **Ingredients**

18 large pasta shells

- 1 26 oz. jar of your favorite pasta sauce 1 egg
- 1 12.3 oz. package Silken soft tofu (mashed)
  2 cups shredded mozzarella cheese, divided
  3/4 cup grated Parmesan cheese, divided
  2 tablespoons chopped fresh parsley



The Soyfoods Council, The Soyfoods Council.com

#### **Directions**

- 1. Cook pasta shells according to package directions; drain.
- 2. In large bowl, beat egg or egg replacement. Stir in tofu, 1<sup>3</sup>/<sub>4</sub> cups mozzarella cheese, <sup>1</sup>/<sub>2</sub> cup Parmesan cheese, and the parsley.
- 3. Spray or lightly coat a 7-inch spring form pan or round oven-safe dish with oil.
- 4. Pour 1 cup of water in the pressure cooker. Place a trivet in the pot. Uncovered, select "sauté" and then use the "adjust" button to toggle to low.
- 5. To assemble the shells, spread 1 cup of the sauce in the pan or dish. Fill cooked shells with tofu/cheese mixture. Arrange filled shells in the pan or dish. Pour remaining sauce over shells. Top with remaining mozzarella and Parmesan. Cover with foil and place on the trivet in the pot.
- 6. Cover the pressure cooker, set the valve to "sealing" and select manual (default of high pressure) for 20 minutes. Allow for a natural release (release after 10 minutes).
- 7. Carefully remove the pan or dish from the pressure cooker, remove the foil (away from you to avoid the steam).
- 8. Serve immediately or place under a broiler for just a few minutes until brown.

Makes 6 servings

#### **Nutritional Information**

Calories 389; Total Fat 13.9 g (6.3 g sat fat); Cholesterol 55 mg; Sodium 34 mg; Total Carbs 44 g; Protein 21.7 g; Fiber 4.5 g

## **Types of Soyfoods**

#### **Green Vegetable Soybeans** (edamame)

These large soybeans are harvested when the beans are still green and sweet tasting and can be served as a snack or a main vegetable dish after boiling in slightly salted water for 15–20 minutes. They are a good source of protein and fiber and contain no cholesterol. Green soybeans are sold frozen in the pod and shelled.

**Edamame (1/2 cup):** Calories 94; Protein 9.23 g; Fat 4.06 g; Carbs 6.91 g; Fiber 4 g; Iron 1.76 mg; Calcium 49 mg; Magnesium 50 mg; Zinc 1.06 mg; Potassium 338 mg; B6 0.077 mg

#### **Meat Alternatives or Analogues**

Meat alternatives are typically frozen or refrigerated products, often made with soy protein ingredients, that resemble meat or meat-like products but are vegetarian or meat-free. These products can be made to resemble any meat species, such as pork, chicken, or beef.



Meat alternatives or analogues

**Soy burger (1 patty):** Calories 124; Protein 10.99 g; Fat 4.41 g; Carbs 9.99 g; Fiber 3.4 g; Iron 1.69 mg; Calcium 95 mg; Magnesium 39 mg; Zinc 0.88 mg; Potassium 233 mg; B2 0.171 mg; B6 0.212 mg



#### **Infant Formulas**

Soy-based infant formulas are similar to other infant formulas except that a soy protein isolate powder is used as a base. Carbohydrates, fats, vitamins and minerals are added to create a formula suitable for formula-fed infants. Numerous clinical studies have demonstrated soy infant formula supports healthy growth and development. The American Academy of Pediatrics says that for term infants whose nutritional needs are not being met from maternal breast milk or cows milk-based formulas, isolated soy protein based formulas are safe and effective alternatives to provide appropriate nutrition for normal growth and development.

**Soy infant formula (1 scoop):** Calories 44; Protein 1.18 g; Fat 2.37 g; Carbs 4.54 g; Fiber 0 g; Iron 0.79 mg; Calcium 39 mg; Magnesium 4 mg; Zinc 0.33 mg; Potassium 46 mg

#### **Natto**

Natto is made of fermented, cooked whole soybeans. Because the fermentation process breaks down the beans' complex proteins, natto is more easily digested than whole soybeans. It has a sticky, viscous coating with a cheesy texture. In Asian countries natto traditionally is served as a topping for rice, in miso soups, and is used with vegetables. Natto can be found in Asian and natural food stores.

**Natto (½ cup):** Calories 185; Protein 16.9 g; Fat 9.62 g; Carbs 11.1 g; Fiber 4.7 g; Iron 7.53 mg; Calcium 190 mg; Magnesium 101 mg; Zinc 2.65 mg; Potassium 638 mg; B6 0.114 mg

#### **Nondairy Soy Frozen Desserts**

Nondairy frozen desserts are made from soymilk or soy yogurt. Nondairy frozen desserts made from soy are enjoyed as an alternative to dairy ice cream.

**Soymilk nondairy frozen dessert (½ cup):** Calories 180; Protein 2 g; Fat 7 g; Carbs 31 g; Fiber 5 g; Iron 0.72 mg; Calcium 0 mg

Miso

Miso is a rich, salty condiment that characterizes the essence of Japanese cooking. The Japanese make miso soup and use it to flavor a variety of foods. A smooth paste, miso is made from soybeans and a grain such as rice, plus salt and a mold culture, and then aged in cedar vats for one to three years. Miso should be refrigerated. Use miso to flavor soups, sauces, dressings, marinades, and pâtés.

**Miso (2 tsp):** Calories 23; Protein 1.32; Fat 0.68 g; Carbs 3 g; Fiber 0.6 g; Iron 0.28 mg; Calcium 6 mg; Magnesium 5 mg; Zinc 0.29 mg; Potassium 24 mg; B6 0.023 mg

#### **Okara**

Okara is a pulp fiber byproduct of soymilk. It has less protein than whole soybeans, but the protein remaining is of high quality. Okara tastes similar to coconut and can be baked or added as fiber to granola and cookies. Okara also has been made into sausage.

**Okara (1 cup):** Calories 93; Protein 4.29 g; Fat 2.11 g; Carbs 14.92 g; Iron 1.59 mg; Calcium 98 mg; Magnesium 32 mg; Zinc 0.68 mg; Potassium 638 mg; B6 0.114 mg

#### Soy Beverages

Soy beverages can be made with soymilk or isolated soy protein. Flavorings or fruit juices may be added. They can be purchased ready to drink or in a dry-powder form to which liquid is added.

**Soy nondairy beverage (1 cup):** Calories 101; Protein 4.99 g; Fat 3.5 g; Carbs 10.99 g; Iron 0 mg; Calcium 24 mg; Potassium 686 mg

#### Soy Cheese

Soy cheese is made from soymilk. Its creamy texture makes it an easy substitute for most cheeses, sour cream, or cream cheese and can be found in a variety of flavors. Products made with soy cheese include soy pizza.

**Soy cheese curds (1 oz):** Calories 45; Protein 3.70 g; Fat 2.40 g; Carbs 2.04 g; Iron 1.66 mg; Calcium 56 mg; Magnesium 67 mg; Zinc 0.51 mg; Potassium 59 mg; B6 0.021 mg

#### Soy Flour

Soy flour is made from roasted soybeans ground into a fine powder. Soy flour, which is fifty percent protein, is also gluten-free so yeast-raised breads made with soy flour are dense in texture.

**Soy flour, defatted (½ cup):** Calories 172; Protein 27 g; Fat 0.64 g; Carbs 17.81 g; Fiber 9.2 g; Iron 4.85 mg; Calcium 127 mg; Magnesium 152 mg; Zinc 1.29 mg; Potassium 1252 mg; B6 0.301 mg

#### Soy Protein Ingredients

Soy protein ingredients include soy flour (~50% protein), soy protein concentrate (~70% protein), and soy protein isolate (~90% protein). These versatile ingredients are found in a wide range of foods, to boost the protein content or to deliver specific textural or functional properties in the application, and are available in powdered or textured formats. Soy protein isolates, in particular, are valued for their high protein quality and content and versatility in beverages, nutrition bars and other nutritional products.

**Soy protein concentrate (1 oz):** Calories 94; Protein 16.48 g; Fat 0.13 g; Carbs 8.76 g; Fiber 1.6 g; Iron 3.06 mg; Calcium 103 mg; Magnesium 89 mg; Zinc 1.25 mg; Potassium 624 mg; B2 0.040 mg; B6 0.038 mg; Folate 96 mg

Soy protein isolate (1 oz): Calories 96; Protein 22.88 g; Fat 0.96 g; Carbs 2.09 g; Fiber 1.6 g; Iron 4.11 mg; Calcium 50 mg; Magnesium 11 mg; Zinc 1.14 mg; Potassium 23 mg; B2 0.028 mg; B6 0.028 mg; Folate 50 mg

#### Soy Oil

Soybean oil, more commonly known as vegetable oil, has a heart-healthy fatty acid profile as it is comprised of almost 90% unsaturated fatty acids, about two-thirds of which is



Soy oil

linoleic acid. A trusted plant-based oil, soybean (vegetable) oil provides essential omega-3 fats, and builds flavor support to many cuisine favorites.

Soybean oil (1 Tbsp): Calories 140; Fat 13.60 g

#### Soy Sauce (tamari, shoyu, teriyaki)

Soy sauce is a dark-brown liquid made from soybeans that has undergone a fermenting process. Soy sauces have a salty taste, but are lower in sodium than traditional table salt. Specific types of soy sauce are shoyu, tamari, and teriyaki. Shoyu is a blend of soybeans and wheat. Tamari, which is gluten free, is made only from soybeans and is a byproduct of making miso. Teriyaki sauce can be thicker than other types of soy sauce and includes other ingredients such as sugar, vinegar, and spices.

**Soy sauce (1 Tbsp):** Calories 11; Protein 1.89 g; Fat 0.02 g; Carbs 1 g; Fiber 0.1 g; Iron 0.43 mg; Calcium 4 mg; Magnesium 7 mg; Zinc 0.08 mg; Potassium 38 mg; B2 0.027 mg; B6 0.036 mg; Folate 3 mg

#### **Soy Sprouts**

Although not as popular as mung bean sprouts or alfalfa sprouts, soy sprouts (also called soybean sprouts) provide high-quality protein and vitamin C.

Soy sprouts (½ cup): Calories 43; Protein 4.58 g; Fat 2.35 g; Carbs 3.35 g; Fiber 0.4 g; Iron 0.73 mg; Calcium 23 mg; Magnesium 25 mg; Zinc 0.41 mg; Potassium 169 mg; B6 0.062 mg; B12 0 mg; Folate 60 mg

#### Soy Yogurt

Soy yogurt is made from soymilk. Its creamy texture makes it an easy substitute for sour cream or cream cheese. Soy yogurt can be found in a variety of flavors in natural food stores.

**Soy yogurt, vanilla (1 container):** Calories 150; Protein 5 g; Fat 2.99 g; Carbs 25.01 g; Fiber 1 g; Iron 1.44 mg; Calcium 299 mg



Soymilk

#### **Soybeans**

As soybeans mature in the pod, they ripen into a hard, dry bean. Although most soybeans are yellow, there are also brown and black varieties. Whole soybeans (an excellent source of protein and dietary fiber) can be cooked and used in sauces, stews, and soups. Whole soybeans that have been soaked can be roasted for snacks. Dry whole soybeans should be cooked before eaten.

Soybeans, mature cooked, boiled, without salt (1 cup): Calories 298; Protein 28.62 g; Fat 15.43 g; Carbs 17.08 g; Fiber 10.3 g; Iron 8.84 mg; Calcium 175 mg; Magnesium 148 mg; Zinc 1.98 mg; Potassium 886 mg; B2 0.490 mg; B6 0.402 mg; Folate 93 mg

#### **Soynut Butter**

Made from roasted, whole soynuts, which are then crushed and blended with soybean (vegetable) oil and other ingredients, soynut butter has a slightly nutty taste and less fat than peanut butter.

**Soynut butter (1 Tbsp):** Calories 95; Protein 3.5 g; Fat 7 g; Carbs 5 g; Fiber 4 g; Iron 1.26 mg; Calcium 30.2 mg

#### Soynuts

Roasted soynuts are whole soybeans that have been soaked in water and then baked until browned. Soynuts can be found in a variety of flavors, including chocolate covered. High in protein and isoflavones, soynuts are similar in texture and flavor to peanuts.

**Soynuts (1 oz.):** Calories 140; Protein 10 g; Fat 7 g; Carbs 10 g; Fiber 5 g; Iron 1.08 mg; Calcium 40 mg; Vitamin C 1.2 mg; Vitamin A 100 IU

#### Soymilk

Soybeans soaked, ground fine, and strained produce a fluid called soymilk. Plain, fortified soymilk is an excellent source of high-quality protein and B vitamins. Soymilk is most commonly found in aseptic containers (nonrefrigerated, shelf stable), but also can be found in quart and half-gallon containers in the dairy case at the supermarket. Soymilk is also sold as a powder that must be mixed with water.

**Soymilk, plain, fortified (1 cup):** Calories 100; Protein 7.00 g; Fat 4.01 g; Carbs 7.99 g; Fiber 1 g; Iron 1.07 mg; Calcium 299 mg; Magnesium 39 mg; Zinc 0.61 mg; Potassium 299 mg

#### **Tempeh**

Tempeh, a traditional Indonesian food, is a chunky, tender soybean cake. Whole soybeans, sometimes mixed with another grain such as rice or millet, are fermented into a rich cake of soybeans with a smoky or nutty flavor. Tempeh can be marinated and grilled and added to soups, casseroles, or chili.

**Tempeh (½ cup):** Calories 159; Protein 16.84 g; Fat 8.96 g; Carbs 6.34 g; Iron 2.24 mg; Calcium 92 mg; Magnesium 67 mg; Zinc 0.95 mg; Potassium 342 mg; B6 0.178 mg

#### **Tofu and Tofu Products**

Tofu, also known as soybean curd, is a soft, cheese-like food made by curdling fresh, hot soymilk with a coagulant. Tofu is a bland product that easily absorbs the flavors of other ingredients with which it is cooked. Tofu provides high-quality protein and is low in sodium. Firm tofu is dense and solid and can be cubed and served in soups, stir fried, or grilled. Firm tofu is higher in protein,

fat, and calcium than other forms of tofu. Soft tofu is good for recipes that call for blended tofu. Silken tofu is a creamy product and can be used as a replacement for sour cream in many dip recipes.

**Silken tofu (1/5 block);** Calories 43; Protein 4.37 g; Fat 2.28 g; Carbs 1.27 g; Fiber 0.3 g; Iron 0.82 mg; Calcium 68 mg

**Extra firm tofu (1/5 block):** Calories 77; Protein 7.98 g; Fat 4.11 g; Carbs 2.05 g; Fiber 1 g; Iron 1.26 mg; Calcium 61 mg

#### **Whipped Toppings**

Soy-based whipped toppings are similar to other nondairy whipped toppings, except that hydrogenated soybean (vegetable) oil is used instead of other vegetable oils

Whipped soy topping (2 Tbsp.): Calories 10; Protein 0 g; Fat 0.5 g; Carbs 1 g; Iron 0 mg; Calcium 0 mg

#### Yuba

Yuba is made by lifting and drying the thin layer formed on the surface of cooling hot soymilk. Found in Asian food stores, it has a high-protein content and is commonly sold fresh, half-dried, and as dried bean curd sheets.



Tofu

## Resources











SoyConnection.com

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TheSoyNutritionInstitute.com









thesoyfoodscouncil.com

soygrowers.com

soyinfocenter.com

#### Internet Sites With More Soy Recipes, Cooking Tips, and Soyfoods Facts

All Recipes—AllRecipes.com	Silk products—Silk.com
Eating Well—EatingWell.com	Soy Foods Directory—Soyfoods.com/recipes
Epicurious—Epicurious.com	Soyfoods Association of North America—Soyfoods.org
Food Network—FoodNetwork.com	TheKitchn—Thekitchn.com
Genius Kitchen—Food.com	Yummly—Yummly.com

My Recipes—MyRecipes.com/soy-recipes

## State-by-State Roster of Soybean Organizations

#### Alabama

Alabama Soybean Producers alabamasoycorn.org

#### Arkansas

Arkansas Soybean Promotion Board themiraclebean.com

#### Delaware

Delaware Soybean Board desoybeans.org

#### **Eastern Region**

Eastern Region Soybean Board easternregionsoy.org

#### Georgia

Georgia Soybean Commodity Commission gasoybean@gmail.com

#### Illinois

Illinois Soybean Association ilsoy.org

#### Indiana

Indiana Soybean Alliance 8425 Keystone Crossing, Suite 200 Indianapolis, IN 46240 (317) 347-3620 indianasoybean.com



#### Iowa

The Soyfoods Council thesoyfoodscouncil.com

#### **Kansas**

Kansas Soybean Commission kansassoybeans.org



#### Kentucky

Kentucky Soybean Board kysoy.org

#### Louisiana

Louisiana Soybean and Grain Research and Promotion Board lsuagcenter.com

#### Maryland

Maryland Soybean Board mdsoy.com

#### Michigan

Michigan Soybean Promotion Committee michigansoybean.org

#### Minnesota

Minnesota Soybean Research and Promotion Council mnsoybean.org

#### Mississippi

Mississippi Soybean Promotion Board mssoy.org

#### Missouri

Missouri Soybean Merchandising Council mosoy.org

#### Nebraska

Nebraska Soybean Board nebraskasoybeans.org

#### New Jersey

New Jersey Soybean Board njsoybean.org

#### New York

New York Corn and Soybean Growers Association nycornsoy.org

#### North Carolina

North Carolina Soybean Producers Association, Inc. ncsoy.org

## Resources

#### North Dakota

North Dakota Soybean Council ndsoybean.org



#### Ohio

Ohio Soybean Council soyohio.org

#### Oklahoma

Oklahoma Soybean Board oksoy.org

#### Pennsylvania

Pennsylvania Soybean Board pasoybean.org

#### South Carolina

South Carolina Soybean Board scsoybeans.org

#### South Dakota

South Dakota Soybean Research and Promotion Council sdsoybean.org

#### Tennessee

Tennessee Soybean Promotion Council
Parks Wells, Executive Director
Gina Thompson, Communications Director
Marsha Dabney, Office Manager
100 Executive Drive
Jackson, TN 38305
(731) 668-2850
tnsoybeans.org

Follow Tennessee Soybean on Facebook and Twitter

#### **Texas**

Texas Soybean Board texassoybeans.org

#### Virginia

Virginia Soybean Board vasoybean.com

#### Western Region Soybean Board

#### Wisconsin

Wisconsin Soybean Marketing Board wisoybean.org



Layer soy yogurt with fresh fruit and granola for breakfast or a protein-packed snack.

## References

#### Want to Lose Weight? Skip the Fad, Stick to the Facts

Pg. 3

- 1. Astrup A. The satiating power of protein—a key to obesity prevention? Am J Clin Nutr. 2005;82(1):1-2.
- 2. Leidy HJ, Clifton PM, Astrup A, et al. The role of protein in weight loss and maintenance. Am J Clin Nutr. 2015;1011320S-9S.
- 3. Mitchell CJ, Milan AM, Mitchell SM, et al. The effects of dietary protein intake on appendicular lean mass and muscle function in elderly men: a 10-wk randomized controlled trial. *Am J Clin Nutr.* 2017;106(6):1375-83.
- 4. Cope MB, Erdman JW Jr, Allison DB. The potential role of soyfoods in weight and adiposity reduction: an evidence-based review. Obesity reviews: an official journal of the International Association for the Study of Obesity. 2008;9(3):219–35.
- 5. Hughes GJ, Ryan DJ, Mukherjea R, et al. Protein digestibility-corrected amino acid scores (PDCAAS) for soy protein isolates and concentrate: criteria for evaluation. *J Agric Food Chem.* 2011;59(23):12707–12.
- 6. Gardner CD, Trepanowski JF, Del Gobbo LC, et al. Effect of low-fat vs low-carbohydrate diet on 12-month weight loss in overweight adults and the association with genotype pattern or insulin secretion: the DIETFITS randomized clinical trial. *JAMA*. 2018;319(7):667-79.

#### 8 Reasons Soy May Boost Your Health

Pg. 4

- Jenkins DJ, Mirrahimi A, Srichaikul K, et al. Soy protein reduces serum cholesterol by both intrinsic and food displacement mechanisms. J Nutr. 2010;140:2302S-11S.
- 2. Liu ZM, Ho SC, Chen YM, Woo J. Effects of soy protein and isoflavones on blood pressure and endothelial cytokines:a 6-month randomized controlled trial among postmenopausal women. *J Hypertens*. 2013; 31(2): 384–92.
- 3. Selhub EM, Logan AC, Bested AC, Fermented foods, microbiota, and mental health: ancient practice meets nutritional psychiatry. *Journal of Physiological Anthropology.* 2014, 33:2.
- 4. Applegate CC, Rowles JL, Ranard KM, et al. Soy consumption and the risk of prostate cancer: An updated systematic review and meta-analysis. *Nutrients*. 2018;10(1).
- 5. Rand WM, Pellett PL, Young VR. Meta-analysis of nitrogen balance studies for estimating protein requirements in healthy adults. *Am J Clin Nutr.* 2003;77(1):109-27.
- 6. Hughes GJ, Ryan DJ, Mukherjea R, Schasteen CS. Protein digestibility-corrected amino acid scores (PDCAAS) for soy protein isolates and concentrate: Criteria for evaluation. *J Agric Food Chem.* 2011;59:12707–12.
- 7. Cope MB, Erdman JW Jr, Allison DB. The potential role of soyfoods in weight and adiposity reduction: an evidence-based review. Obesity reviews: an official journal of the International Association for the Study of Obesity. 2008;9(3):219–35.
- 8. Hughes GJ, Ryan DJ, Mukherjea R, et al. Protein digestibility-corrected amino acid scores (PDCAAS) for soy protein isolates and concentrate: Criteria for evaluation. *J Agric Food Chem.* 2011;59(23):12707–12.
- 9. Zhao TT, Jin F, Li JG, et al. Dietary isoflavones or isoflavone-rich food intake and breast cancer risk: A meta-analysis of prospective cohort studies. *Clin Nutr.* 2019;38(1):136-45.
- 10. Lamartiniere CA, Zhao YX, Fritz WA. Genistein: mammary cancer chemoprevention, in vivo mechanisms of action, potential for toxicity and bioavailability in rats. *J Women's Cancer.* 2000;211–9.
- 11. Shu XO, Jin F, Dai Q, et al. Soyfood intake during adolescence and subsequent risk of breast cancer among Chinese women. Cancer Epidemiol Biomarkers Prev. 2001;10(5):483-8.
- 12. Wu AH, Yu MC, Tseng CC, et al. Dietary patterns and breast cancer risk in Asian American women. Am J Clin Nutr. 2009;89(4):1145-54.
- 13. Nagino T, Kaga C, Kano M, et al. Effects of fermented soymilk with Lactobacillus casei Shirota on skin condition and the gut microbiota: a randomised clinical pilot trial. *Beneficial Microbes*. 2017:1–10.

- 1. Benjamin EJ, Virani SS, Callaway CW, et al. Heart disease and stroke statistics-2018 update: A report from the American Heart Association. *Circulation*. 2018;137(12):e67-e492.
- 2. Keys A. A practical, palatable and prudent way of eating. J Med Assoc Ga. 1970;59(9):355-9.
- 3. Slavin M, Kenworthy W, Yu LL. Antioxidant properties, phytochemical composition, and antiproliferative activity of Maryland-grown soybeans with colored seed coats. *J Agric Food Chem.* 2009;57(23):11174–85.
- 4. Kris-Etherton PM, Derr J, Mitchell DC, et al. The role of fatty acid saturation on plasma lipids, lipoproteins, and apolipoproteins: I. Effects of whole food diets high in cocoa butter, olive oil, soybean oil, dairy butter, and milk chocolate on the plasma lipids of young men. Metabolism. 1993;42(1):121-9.
- 5. U.S. Food and Drug Administration. Soybean Oil and Reduced Risk of Coronary Heart Disease. July 31, 2017. https://www.fda.gov/downloads/Food/LabelingNutrition/UCM568508.pdf.
- 6. Abdelhamid AS, Brown TJ, Brainard JS, et al. Omega-3 fatty acids for the primary and secondary prevention of cardiovascular disease. The Cochrane database of systematic reviews. 2018;11CD003177.
- 7. Li Y, Hruby A, Bernstein AM, et al. Saturated fats compared with unsaturated fats and sources of carbohydrates in relation to risk of coronary heart disease: A prospective cohort study. *J Am Coll Cardiol*. 2015;66(14):1538–48.
- 8. Hodges RE, Krehl WA, Stone DB, et al. Dietary carbohydrates and low cholesterol diets: effects on serum lipids on man. *Am J Clin Nutr.* 1967;20(2):198–208.
- 9. Anderson JW, Johnstone BM, Cook-Newell ME. Meta-analysis of the effects of soy protein intake on serum lipids. *N Engl J Med.* 1995;333(5):276-82.
- 10. Food labeling: health claims; soy protein and coronary heart disease. Food and Drug Administration, HHS. Final rule. *Fed Regist.* 1999;64(206):57700–33.
- 11. Anderson JW, Bush HM. Soy protein effects on serum lipoproteins: A quality assessment and meta-analysis of randomized, controlled studies. *J Am Coll Nutr.* 2011;30(2):79-91.
- 12. Zhan S, Ho SC. Meta-analysis of the effects of soy protein containing isoflavones on the lipid profile. *Am J Clin Nutr.* 2005;81(2):397-408.
- 13. Jenkins DJ, Mirrahimi A, Srichaikul K, et al. Soy protein reduces serum cholesterol by both intrinsic and food displacement mechanisms. *J Nutr.* 2010;140(12):2302S-11S.
- 14. Harland JI, Haffner TA. Systematic review, meta-analysis and regression of randomised controlled trials reporting an association between an intake of circa 25 g soya protein per day and blood cholesterol. *Atherosclerosis*. 2008;200(1):13-27.
- 15. Gotto AM Jr, Grundy SM. Lowering LDL cholesterol: questions from recent meta-analyses and subset analyses of clinical trial DataIssues from the Interdisciplinary Council on Reducing the Risk for Coronary Heart Disease, ninth Council meeting. Circulation. 1999;99(8):E1-7.
- 16. Charland SL, Malone DC. Prediction of cardiovascular event risk reduction from lipid changes associated with high potency dyslipidemia therapy. *Curr Med Res Opin.* 2010;26(2):365–75.
- 17. Dong JY, Tong X, Wu ZW, et al. Effect of soya protein on blood pressure: a meta-analysis of randomised controlled trials. *Br J Nutr.* 2011;106(3):317–26.
- 18. Li SH, Liu XX, Bai YY, et al. Effect of oral isoflavone supplementation on vascular endothelial function in postmenopausal women: a meta-analysis of randomized placebo-controlled trials. *Am J Clin Nutr.* 2010;91(2):480-6.
- 19. Jenkins DJ, Kendall CW, Faulkner D, et al. A dietary portfolio approach to cholesterol reduction: combined effects of plant sterols, vegetable proteins, and viscous fibers in hypercholesterolemia. *Metabolism.* 2002;51(12):1596–604.
- 20. Jenkins DJ, Jones PJ, Frohlich J, et al. The effect of a dietary portfolio compared to a DASH-type diet on blood pressure. Nutrition, metabolism, and cardiovascular diseases: NMCD. 2015;25(12):1132–9.

- 1. Mattson FH, Grundy SM. Comparison of effects of dietary saturated, monounsaturated, and polyunsaturated fatty acids on plasma lipids and lipoproteins in man. *J Lipid Res.* 1985;26(2):194–202.
- 2. Mata P, Garrido JA, Ordovas JM, et al. Effect of dietary monounsaturated fatty acids on plasma lipoproteins and apolipoproteins in women. *Am J Clin Nutr.* 1992;56(1):77–83.
- 3. Lichtenstein AH, Ausman LM, Carrasco W, et al. Effects of canola, corn, and olive oils on fasting and postprandial plasma lipoproteins in humans as part of a National Cholesterol Education Program Step 2 diet. *Arterioscler Thromb.* 1993;13(10):1533–42.
- 4. Zock PL, de Vries JH, Katan MB. Impact of myristic acid versus palmitic acid on serum lipid and lipoprotein levels in healthy women and men. *Arterioscler Thromb.* 1994;14(4):567–75.
- 5. Choudhury N, Tan L, Truswell AS. Comparison of palmolein and olive oil: effects on plasma lipids and vitamin E in young adults. *Am J Clin Nutr.* 1995;61(5):1043-51.
- 6. Gillingham LG, Gustafson JA, Han SY, et al. High-oleic rapeseed (canola) and flaxseed oils modulate serum lipids and inflammatory biomarkers in hypercholesterolaemic subjects. *Br J Nutr.* 2011;105(3):417–27.
- 7. Kien CL, Bunn JY, Stevens R, et al. Dietary intake of palmitate and oleate has broad impact on systemic and tissue lipid profiles in humans. *Am J Clin Nutr.* 2014;99(3):436–45.
- 8. Lichtenstein AH, Matthan NR, Jalbert SM, et al. Novel soybean oils with different fatty acid profiles alter cardiovascular disease risk factors in moderately hyperlipidemic subjects. *Am J Clin Nutr.* 2006;84(3):497–504.

#### Soy Allergies? They're Less Common Than You Think

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- 1. Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA). Public Law 108-282, Title II.
- 2. Gupta RS, Springston EE, Warrier MR, et al. The prevalence, severity, and distribution of childhood food allergy in the United States. *Pediatrics*. 2011;128(1):e9-17.
- 3. Vierk KA, Koehler KM, Fein SB, et al. Prevalence of self-reported food allergy in American adults and use of food labels. *J Allergy Clin Immunol.* 2007;119(6):1504-10.
- 4. Patel N, Vazquez-Ortiz M, Lindsley S, et al. Low frequency of soya allergy in peanut-allergic children: relevance to allergen labelling on medicines. *Allergy*. 2018.



Make your stir fry sizzle by adding tofu as your protein source.

