

Vegetable of the Month: Beans

From the royal tombs of ancient Egypt to the Old Testament cultivation, preparation, and consumption of beans are recognized. In some Eastern cultures, legumes were a basic dietary staple that can be traced back more than 20,000 years. The lima and pinto bean were cultivated for the first time in the very earliest Mexican and Peruvian civilizations more than 5,000 years ago, being popular in both the Aztec and Inca cultures.

The United States is by far the world leader in dry bean production. Each year, U.S. farmers plant from 1.5 to 1.7 million acres of edible dry beans. And while Americans are the chief consumers of these beans, 40 percent are shipped to international markets in more than 100 different countries around the globe.

How do beans fit into your healthy diet? Beans are often thought of as a side dish; however, they make excellent meat-free entrees. You don't have to be vegetarian to reap the benefits of legumes—start slowly, eating beans instead of meat twice a week.

Before eating legumes, there are few things to know:

- Dried Beans are not complete proteins
- Beans alone are not complete proteins, but combined with a grain are as complete as a meal. So it is important to eat beans with other grain products.
- Legumes may cause intestinal discomfort
You can minimize this effect by changing the soaking water several times when you prepare dried beans, or switching to canned beans. When canned, some of the gas-producing substances are eliminated. Be sure to rinse the beans well to wash off excess salt. Another option is **Beano™**, which contains an enzyme that breaks down gas-producing substances in the beans.
- Eating legumes means, drinking more fluids - As you include more beans into your meals, it's important to drink adequate fluids and exercise regularly so that your gastrointestinal system can handle the increased dietary fiber.

Varieties

So, which bean to choose from? There are hundreds of varieties of beans. Try one of these:

- **Adzuki Beans** are small, with a vivid red color, solid flavor and texture. Originally from Asia, its name means "little bean" in Japanese. Its red colouring - red being the most important colour in Eastern celebrations - means that it is greatly used in festive or special meals.
- **Large Lima Beans** are large and flat with a greenish-white color. They have a buttery flavor and creamy texture. This bean is named after Lima, Peru, and is extremely popular in the Americas, both in its natural state and dried.
- **Pink Beans** have beautiful pink color and is very popular in the countries of the Caribbean. Pink beans are of medium size (similar to the Great Northern and the Pinto) and have a refined texture and delicate flavor.
- **Green Baby Lima Beans** come from Peru and are very popular in the Americas. The baby variety is much loved in Japan for making desserts from bean paste known as "an." These are medium-sized flat beans with a greenish white color, buttery flavor, and creamy texture.
- **Small Red Beans** are particularly popular in the Caribbean region, where they are normally eaten with rice. Dark red in color, small red beans are also smoother in taste and texture than the dark red kidney bean.
- **Dark Red Kidney Beans** are large and kidney-shaped with a deep glossy red color. They have a solid flavor and texture. These beans are produced mainly in the northern U.S.A. and owes its popularity in America and Europe to its large size, bright color and solid texture.
- **Black Beans** are sweet tasting with an almost mushroom-like flavor and soft floury texture. These beans are medium sized, oval, with a matt black color. They are the most popular beans in the Costa Rica and Cuba.
- **Light Red Kidney Beans** have a solid texture and flavor. They are characterized by their large, kidney-shape with a pink color. This bean is popular in the Caribbean region as well as in Portugal and Spain for its similarity to the canela bean.
- **Navy Beans** are small, white and oval with a refined texture and delicate flavor. These are the beans used for the famous Boston and English baked beans. Because their skin and fine texture do not break up on cooking. These beans were named for their part of the U.S. Navy diet during the second half of the 19th Century.
- **Cranberry Beans** are known for their creamy texture with a flavor similar to chestnuts. Cranberry beans are rounded with red specks, which disappear on cooking. These beans are a favorite in northern Italy and Spain. You can find them fresh in their pods in Autumn. They also freeze well.
- **Black-eyed Beans** have a scented aroma, creamy texture and distinctive flavor. These beans are characterized by their kidney shaped, white skin with a small black eye and very fine wrinkles. Originally from Africa, it is one of the most widely dispersed beans in the world. Black-eyed peas are really a type of pea, which gives it its distinctive flavor and rapid cooking potential, with no pre-soaking needed.
- **Pinto Beans** are the most widely produced bean in the United States and is one of the most popular in the Americas. It also contains the most fiber of all beans. Characteristically known by their medium size oval shape, with speckled reddish brown over a pale pink base and solid texture and flavor.
- **Great Northern Beans** are a North American bean, which is popular in France for making cassoulet (a white bean casserole) and in the whole Mediterranean where many beans of a similar appearance are cultivated. These beans have a delicate flavor, thin skin, and are flat, kidney shaped, medium-sized white beans.

- **Garbanzo Beans** or chickpeas are the most widely consumed legume in the world. Originating in the Middle East, they have a firm texture with a flavor somewhere between chestnuts and walnuts. Garbanzo beans are usually pale yellow in color. In India there are red, black, and brown chickpeas.
- **Soybeans** The delicious, slightly nutty flavored soybean has been cultivated in China for over 13,000 years but the good "news" about soy's culinary versatility and exceptional health benefits is a relatively recent phenomenon in the West. Different varieties of this truly amazing legume are available throughout the year. The soybean is the most widely grown and utilized legume in the world and one of the most well researched, health-promoting foods available today. Like other beans, soybeans grow in pods, featuring edible seeds. While we most often think of them as being green, the seeds can also be yellow, brown or black. Dried soybeans are generally available in prepackaged containers as well as bulk bins. Just as with any other food that you may purchase in the bulk section, make sure that the bins containing the soybeans are covered and that the store has a good product turnover so as to ensure its maximal freshness. Whether purchasing soybeans in bulk or in a packaged container, make sure that there is no evidence of moisture or insect damage, and that the beans are whole and not cracked. Canned soybeans can be found in many markets. Unlike canned vegetables, which have lost much of their nutritional value, there is little difference in the nutritional value of canned soybeans and those you cook yourself. Canning lowers vegetables' nutritional value since they are best lightly cooked for a short period of time, while their canning process requires a long cooking time at high temperatures. On the other hand, beans require a long time to cook whether they are canned or you cook them yourself. Therefore, if enjoying canned beans is more convenient for you, by all means go ahead and enjoy them. We would suggest looking for those that do not contain extra salt or additives. *Edamame*(fresh soybeans) should be deep green in color with firm, unbruised pods. Edamame can be found in many supermarkets as well as in natural foods stores and Asian markets. It is usually available in the frozen food section, although during its peak season you can find it the produce aisle of many natural food stores and Asian markets. Some stores offer precooked edamame in their refrigerated display cases. Store dried soybeans in an airtight container in a cool, dry and dark place where they will keep for up to 12 months. If you purchase soybeans at different times, store them separately since they may feature varying stages of dryness and therefore will require different cooking times. Cooked soybeans will keep fresh in the refrigerator for about three days if placed in a covered container. Fresh edamame should be stored in the refrigerator and eaten within two days. Frozen edamame will keep fresh for a few months.

Preparation

With so many bean varieties to choose from, you'll now need to learn how to cook them. There are two steps to cooking beans: soaking and cooking. Soaking beans allows the dried beans to absorb water, which begins to dissolve the starches that cause intestinal discomfort. While beans are soaking they are also double to tripling in their size. Cooking the beans makes them edible and digestible.

Soaking Beans

- Blackeyes are a little different...
The soaking/cooking method is applicable for most of the beans mentioned. However, recent experimentation has shown there is a better way for cooking blackeyes. Rather than soaking blackeyes, cover the beans with sufficient water and boil for 3 to 4 minutes. Discard water and cook in beef, chicken, or vegetable broth. If your recipe calls for other ingredients, add them to the broth and beans mixture just as if you were cooking with plain water. Cooking time is about 45 minutes. Try it. Even long-term blackeye fans might prefer this cooking method.
Note: Lentils, split peas and black-eyed peas do not need to be soaked. Pick through the beans, discarding any discolored or shriveled beans or any foreign matter. Rinse well.
- There are four ways to soak beans, depending on how far in advance you plan and how much time you have, you can decide which method of soaking will work best for you.
 1. **Traditional Slow Soak:** In a stockpot, cover 1 pound dried beans with 10 cups water. Cover and refrigerate 6-8 hours or overnight. Drain and rinse the beans.
 2. **Hot Soak:** In a stockpot, bring 10 cups water to a boil. Add 1 pound dried beans and return to a boil. Remove from the heat; cover tightly and set aside at room temperature 2-3 hours. Drain and rinse the beans.
 3. **Quick Soak:** In a stockpot, bring 10 cups water to a boil. Add 1 pound dried beans and return to a boil; let boil 2-3 minutes. Cover and set aside at room temperature 1 hour. Drain and rinse the beans.
 4. **Gas-Free Soak:** In a stockpot, place 1 pound of beans in 10 or more cups of boiling water; boil for 2-3 minutes, cover and set aside overnight. The next day approximately 75 to 90 percent of the indigestible sugars will have dissolved into the soaking water. Drain, and then rinse the beans thoroughly before cooking them.
- Tips for Preparing Soybeans:
Before washing dried soybeans, spread them out on a dark colored plate or cooking surface to check for and remove small stones, debris or damaged beans. After this process, place the beans in a strainer and rinse them thoroughly under cool running water. To shorten their cooking time and make them easier to digest, dried soybeans should be presoaked. There are two basic methods for presoaking. For each, start by placing the beans in a saucepan and adding two to three cups of water per cup of beans. The first method is to boil the beans for two minutes, take pan off the heat, cover and allow to stand for two hours. The alternative method is to simply soak the beans in water for eight hours or overnight, placing pan in the refrigerator so that the beans will not ferment. Before cooking the beans, regardless of method, drain the soaking liquid and rinse the beans with clean water. To cook soybeans, you can either cook them on the stovetop or use a pressure cooker. For the stovetop method, add three cups of fresh water or broth for each cup of dried beans. The liquid should be about one to two inches above the top of the beans. Bring the beans to a boil and then reduce to a simmer,

partially covering the pot. If any foam develops, simply skim it off during the simmering process. Soybeans generally take about one to one and one-half hours to become tender using this method. They can also be cooked in a pressure cooker where they take about 40 minutes to prepare. Regardless of cooking method, do not add any seasonings that are salty or acidic until after the beans have been cooked since adding them earlier will make the beans tough and greatly increase the cooking time.

Bean Math

- One 15-ounce can of beans = one and one-half cups cooked beans, drained.
- One pound dry beans = six cups cooked beans, drained.
- One pound dry beans = two cups dry beans.
- One cup dry beans = three cups cooked beans, drained.

Cooking Beans

- Return the soaked, rinsed beans to the stockpot. Cover the beans with 3 times their volume of water. Add herbs or spices (not salt), as desired.
- Bring to a boil; reduce the heat and simmer gently, uncovered, stirring occasionally, until tender (the time will depend on the type of bean, but start checking after 45-60 minutes). Boiling beans will break the skins and leave you with a mushy meal. Add more water if the beans are not covered.
- When the beans are tender, drain and use in recipes; or for later use, immerse them in cold water until cool, then drain well and freeze in 1- to 2-cup packages. One pound of dried beans will yield about 5 or 6 cups cooked beans.

Pressure Cooking

This is one of the quickest ways to cook beans. After you've soaked 1/2 pound of beans, place them in a 4-quart pressure cooker with 4 cups water. Cook at 15 pounds pressure following the manufacturer's directions for the type of legume you are cooking.

- Bean Cooking Times
- Baby Lima Beans 1 Hour
- Blackeyes 3/4 to 1 Hour
- Dark Red Kidneys 1 to 1-1/2 Hours
- Garbanzos 1 to 1-1/2 Hours
- Large Limas 3/4 to 1 Hour
- Light Red Kidneys 1 to 1-1/2 Hours
- Pink Beans 1 to 1-1/2 Hours
- Small Whites 1 to 1-1/2 Hours

Bean Cooking Tips

- Do not add salt or acidic ingredients, like vinegar, tomatoes or juice, this will slow the cooking process. Instead, add these ingredients when the beans are just tender.
- Cooking times vary with the types of beans used but also may vary with their age.
- Beans are done when they can be easily mashed between two fingers or with a fork. Always test a few beans in case they have not cooked evenly

Recipes

Three Bean Soup

Serves 12

Source: Produce for Better Health

Ingredients

1 can (28 oz) tomatoes, cut up, low sodium
3 cup water
1 tsp chili powder
1 can (15 oz) kidney beans, drained
1 can (15 oz) black eyed peas, drained
1 can (15 oz) garbanzo beans, drained
1 can (15 oz) whole kernel corn, drained
1 cup carrots, chopped
1 onion, medium, chopped
1½ tsp garlic, chopped
1 can (6 oz) tomato paste
1 Tbsp Dijon mustard
½ tsp pepper
½ tsp cumin, ground
1 tsp oregano, dried
1 tsp basil, dried
1 cup zucchini or celery, chopped

Combine first 13 ingredients. Bring to a boil. Reduce heat and simmer, covered for 10 minutes. Stir in vegetables and simmer, covered for 10 minutes more.

Nutritional analysis per serving: Calories 172, Protein 9g, Fat 1g, Calories From Fat 7%, Cholesterol 0mg, Carbohydrates 31g, Fiber 8g, Sodium 365mg.

New Orleans Red Beans

Serves 8

Each serving equals 1/2 cup of fruit or vegetables

Source: Produce for Better Health

Ingredients

1 lb dry red beans

2 quarts water

1½ cups chopped onion

1 cup chopped celery

4 bay leaves

1 cup chopped sweet green pepper

3 Tbsp chopped garlic

3 Tbsp chopped parsley

2 tsp dried thyme, crushed

1 tsp black pepper

Pick through beans to remove bad beans; rinse thoroughly. In a 5-quart pot, combine beans, water, onion, celery, and bay leaves. Bring to boiling; reduce heat. Cover and cook over low heat for about 1½ hours or until beans are tender. Stir and mash beans against side of pan. Add green pepper, garlic, parsley, thyme, salt, and black pepper. Cook, uncovered, over low heat until creamy, about 30 minutes. Remove bay leaves. Serve over hot, cooked brown rice, if desired.

Nutritional analysis per serving: Calories 220, Protein 15g, Fat 0g, Calories From Fat 2%, Cholesterol 0mg, Carbohydrates 41g, Fiber 16g, Sodium 39mg.

Vegetarian Black Bean Tacos with Chipotle Chile Salsa

Serves 4 (2 tacos each)

Each serving equals 3/4 cup of fruit or vegetables

Source: Frieda's, Inc./ Official 5 A Day recipe

Ingredients

Chipotle Chili Salsa:

1½ cup diced tomatoes

½ cup chopped red or sweet onion

2 Tbsp lime juice

3 dried Chipotle chilies, reconstituted, drained and minced

2 Tbsp chopped fresh cilantro

Tacos:

11 ounces (uncooked weight) black beans

2 cloves garlic, minced

1 cup chopped zucchini or yellow summer squash

½ cup shredded low fat Monterey Jack or cheddar cheese

1 cup diced tomatoes

1½ cups shredded lettuce

8 tortillas warmed

For tacos: place black beans in a medium saucepan with water and cover. Stir in remaining minced Chipotle chiles and garlic. Cook beans according to package directions; drain. Meanwhile, stir together tomatoes, zucchini and bell pepper. Arrange warm black beans, tomato mixture, lettuce and cheese in separate serving bowls. For each serving, take two flour tortillas; sprinkle each with lettuce; Spoon on black beans, tomato zucchini mixture and cheese. Top with salsa and cilantro as desired.

For salsa: combine tomatoes, half the Chipotle chiles, onion, cilantro and lime juice in a medium bowl; set aside to allow flavors to blend (cover and chill if preparing more than 30 minutes ahead).

Nutritional analysis per serving: Calories 440, Protein 24g, Fat 5g, Calories From Fat 10%, Cholesterol 8mg, Carbohydrates 76g, Fiber 12g, Sodium 166mg.

Candied Orange Beans

6 servings

Each serving equals 3/4 cup of fruit or vegetables

Source: Produce for Better Health

Ingredients

2 Tbsp butter

¼ cup honey

1 tsp grated orange rind

4 cups cooked large lima beans, drained

Ginger, cinnamon or nutmeg to taste. In a large skillet, melt butter; stir in honey and orange peel. Add beans; cook and stir gently until glazed. Serve.

Nutritional analysis per serving: Calories 140, Protein 6g, Fat 1g, From Fat 7%, Cholesterol 5mg, Carbohydrates 26g, Fiber 5g, Sodium 40mg.

Black Beans with Corn and Tomatoes

Serves 4

Each serving equals 1 cup of fruit or vegetables

Source: National Cancer Institute

Ingredients

1 15-ounce can low-sodium, no fat added black beans

1 cup cut tomatoes, fresh or canned

1 tsp fresh parsley, chopped

½ tsp chili powder

1 cup frozen corn, thawed

1 clove garlic, pureed or roasted

1/8 tsp cayenne pepper or more to taste

Drain and rinse beans. In a bowl, combine beans, corn, tomatoes and garlic. Add parsley, pepper and chili powder. Combine and serve. Nutritional analysis per serving: Calories 111, Protein 6g, Fat 1g, Calories From Fat 4%, Cholesterol 0mg, Carbohydrates 27g, Fiber 7g, Sodium 233mg.

Soybean Serving Ideas:

- Replace some of the wheat flour in your favorite baked goods recipe with soybean flour and increase the protein content of your cookies, cakes, muffins and breads.
- Mix sprouted soybeans into salads or use as toppings for sandwiches.
- Frozen edamame is simple to prepare and makes a great snack or appetizer. Just add the soybean pods to slightly salted water and boil for approximately 10 minutes.
- Add soybeans to vegetable stews and soups.
- Use soymilk in place of cow's milk as a beverage and cereal topper.

<http://www.whfoods.com/eathealthy.php>

<http://www.5aday.gov/index.html>

<http://www.mypyramid.gov/>

<http://www.nutrition.gov/>

<http://www.fabulousfoods.com/features/features.html>

<http://magazines.ivillage.com/goodhousekeeping/archive/0,,284497,00.html>

<http://www.supermarketguru.com/>