

Vegetable of the Month

Dried Beans

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<http://www.fruitsandveggiesmatter.gov/month/beans.html>

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.

Dried beans or legumes are an inexpensive and healthy way to include into your 5 A Day diet. A serving (1/3 cup of cooked beans) contains around 80 calories, no cholesterol, lots of complex carbohydrates, and little fat. In addition, beans are a good source of B vitamins, potassium, and fiber, which promotes digestive health and relieves constipation. Eating beans may help prevent colon cancer, and reduce blood cholesterol (a leading cause of heart disease).

How do beans fit into your 5 A Day? 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 grain products like these dishes that already contain these combinations. For example beans and rice, a bean burrito, split pea soup and corn bread, and a peanut butter sandwich.

***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.

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Bean 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. It has 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 legumes 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.

Nutrient Profile for Cooked Dry Beans

1 Cup Cooked Beans	Baby Lima	Black	Blackeye	Cranberry	Garbanzo (Chickpeas)	Great Northern	Large Lima	Navy	Pink	Pinto
Calories	230	228	200	240	270	210	218	260	252	230
Carbohydrates	42g	40g	36g	44g	46g	38g	40g	48g	48g	44g
Protein	14g	16g	14g	16g	14g	14g	14g	16g	16g	14g
Dietary Fiber	12g	8g	12g	10g	6g	10g	12g	10g	8g	12g
Folate	274mcg	256mcg	358mcg	366mcg	282mcg	182mcg	156mcg	256mcg	284mcg	290mcg
Calcium	52mg	48mg	42mg	90mg	80mg	122mg	32mg	128mg	88mg	82mg
Iron	4mg	4mg	4mg	4mg	4mg	4mg	4mg	4mg	4mg	4mg
Fat	1g	1g	1g	1g	4g	1g	1g	1g	1g	1g
% Calories from Fat	6%	8%	10%	6%	28%	6%	6%	8%	6%	6%
Sodium	6mg	1mg	6mg	1mg	10mg	4mg	4mg	2mg	4mg	4mg

Chart courtesy of American Dry Bean Board*

Soaking Beans

[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.

*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.

*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.

*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.

*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.

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

Cooking Beans

1. 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.
2. 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.
3. 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 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.

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

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

[Soaking, cooking, tips, and times provided by California Dry Bean Board.]

Make Beans Part of Your 5 A Day Plan

- Sprinkle cumin onto beans while cooking and serve with rice and a salad for a quick complete meal.
- Be sure to serve beans with vitamin C rich vegetables to help iron from the beans be better absorbed.
- Don't limit beans to just entrée dishes or soups, use them for dips, in salads, and dessert!
- Substitute beans for a meatless meal 1 to 2 times a week.

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Recipes

Three Bean Soup

Makes 12 servings (Each serving equals two 5 A Day servings)[Source: Produce for Better Health]

- 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
- 1 1/2 tsp garlic, chopped
- 1 can (6 oz) tomato paste
- 1 Tbsp Dijon mustard
- 1/2 tsp pepper
- 1/2 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 261, protein 14g, fat 1g, percent calories from fat 2%, cholesterol 0mg, carbohydrates 49g, fiber 10g, sodium 438mg

New Orleans Red Beans

Makes 8 servings Each serving equals one 5 A Day serving [Source: Produce for Better Health]

- 1 lb dry red beans
- 2 quarts water
- 1 1/2 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 1 1/2 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 160, protein 8g, fat 1g, percent calories from fat 5%, cholesterol 0mg, carbohydrates 30g, fiber 11g, sodium 14mg

Vegetarian Black Bean Tacos with Chipotle Chile Salsa

Makes 4 servings (2 tacos each) Each serving equals three 5 A Day servings [Source: Frieda's, Inc.]

Chipotle Chili Salsa:

1 1/2 cup diced tomatoes
1/2 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
1/2 cup shredded low fat Monterey Jack or cheddar cheese
1 cup diced tomatoes
1 1/2 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 562, protein 29g, fat 7g, percent calories from fat 11%, cholesterol 21mg, carbohydrates 96g, fiber 17g, sodium 304mg

Candied Orange Beans

Makes 6 servings Each serving equals One and one half 5 A Day servings [Source: Produce for Better Health]

2 Tbsp butter
1/4 cup honey
1 tsp grated orange rind
4 cups lima beans (large, cooked), 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. Flavor with spices.

Nutritional analysis per serving: calories 150, protein 5g, fat 3g, percent calories from fat 15%, cholesterol 2mg, carbohydrates 26g, fiber 4g, sodium 30mg

Black Beans with Corn and Tomatoes

Makes 4 servings

Each serving equals two 5 A Day servings

[Source: National Cancer Institute]

1 15-ounce can low-sodium, no fat added black beans
1 cup cut tomatoes, fresh or canned
1 tsp fresh parsley, chopped
1/2 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 260, protein 10g, fat 2g, percent calories from fat 7%, carbohydrates 50 g, cholesterol 0mg, fiber 8g, sodium 430mg

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