

Budget-Friendly **E**asy **A**daptable **N**utritious **S**imply Delicious

Interesting Facts

- Member of the Legume Family – Legumes are plants whose seeds dry in the seed pod. Other members of the family include lentils, peas, peanuts, and soybeans.
- Beans vary in size, color, and flavor. They have a consistent kidney or oval shape, which distinguishes them from other legumes such as peas, which are round, and lentils, which are flat and disk-like. Beans that have specks lose the specks after cooking.
- Midwest Region is the largest producer of dry beans in the US. North Dakota produces the most beans of any state almost 40%. More than 1.9 million acres in the U.S. were planted with dry beans.
- Brazil is the largest producer of beans in the world and the United States is number 6.
- There are 13,000 known bean varieties worldwide.
- Top 5 Beans Grown in the US: Pinto beans, Navy beans, Black beans, Red kidney beans (light and dark), Great Northern beans

Pinto beans:

American farmers grow 3 times as many pintos as any other bean – this is the most consumed bean by the American consumer, almost 50 % of all beans eaten. Pinto beans are medium sized, oval-shaped beans with mottled beige and brown skin. Pinto beans lose their mottled appearance when cooked. Pinto beans are used to make refried beans.

Navy beans:

They have more fiber than any other bean, 10 grams per ½ cup serving, which is 40% of the Daily Value. Navy beans are small, oval-shaped beans with white skin. They have a delicate flavor. These white beans were named Navy beans because of their inclusion in the U.S. Naval diet during the second half of the 19th Century.

Black beans:

They are medium-size, oval-shaped beans with matte black skin. They are known for their sweet, distinctive flavor, and have a soft texture.

Red Kidney beans:

Kidney beans got their name because they resemble the shape of kidneys.

Dark red kidney beans are large, kidney-shaped beans with a deep, glossy red skin.

Light Red Kidney beans are large, kidney-shaped beans with light red/pink glossy skin.

They both have a firm texture, and they hold up well in soups or other dishes that cook for a long time.

Great Northern beans:

They are medium-size, oval-shaped beans with thin white skin. They have a mild, delicate flavor. They can be used in place of navy and cannellini beans.

Cranberry beans:

They are medium-size, oval-shaped beans with mottled tan and red skin. They are also called Roman beans. Cranberry beans are known for their creamy texture with a flavor similar to chestnuts. The red specks disappear when these beans are cooked.

Small Red beans:

They are small, oval-shaped beans with red skin. They have a more delicate flavor and softer texture compared to kidney beans. They can be used in place of kidney beans.

Garbanzo beans are known as the chickpea, used to make hummus.

Nutrition Facts

- A ½ cup serving of cooked beans contains, on average, 115 calories, 8 grams of protein, less than half a gram of fat, 21 grams of carbohydrate, and 8 grams of fiber. If cooked without any added salt, a ½ cup serving of cooked beans contains, on average, less than 2 milligrams of sodium.
- All beans are excellent sources of protein, fiber, and good sources of manganese, magnesium, iron, zinc, and potassium. They are also a source of folate, a B vitamin that reduces the risk of neural tube defects in infants. They are fat free and cholesterol free.
- Beans provide the nutrition of a vegetable and the protein needed for a healthy diet. My Plate classifies beans in the Vegetable Group and Protein Food Group.
- Serving size of beans:
1 cup cooked beans = 1 cup cooked vegetables ¼ cup cooked beans = 1 ounce equivalent

Health Benefits

- Studies show a diet rich in beans helps reduce the risk of heart disease. People who eat beans four or more times per week have a 22% lower risk of coronary heart disease.
- Beans are low glycemic index foods that can aid in managing diabetes. The complex carbohydrates contained in beans help to control blood sugar levels. Numerous studies have shown that people who regularly eat beans have an easier time managing their blood sugar levels.
- Frequent bean consumption has been associated with reduced risk of developing colorectal cancer. Colorectal cancer is the second most common cause of cancer death in the U.S. Research suggests that one-quarter to one-third of colorectal cancers could be prevented by changing diet and lifestyle.
- People who eat beans tend to eat less meat (a food linked to colon cancer) - Beans are an excellent source of fiber, which may dilute potential carcinogens as well as speed transit time through the gut, limiting the amount of time that the intestinal wall is exposed to carcinogens.
- Bean consumption is associated with lower body weight and smaller waist circumference. Beans are good sources of vegetable protein and fiber, which increase satiety, reduce hunger, and help control appetite.

- Beans are a good source of nutrients often lacking in the diets of people with celiac disease.
- Beans have been identified as an excellent meat replacement for those choosing to follow a vegetarian or vegan diet.
- Beans are a gluten free food.

Bean Economics

- Beans are a great way to stretch the family food budget. Beans tend to cost much less than eggs or meat as a source of animal protein.
- Beans are available in two forms in U.S. supermarkets, as canned beans or dry beans, which are typically sold in one-pound bags.
- Most U.S households buy canned beans because they are so convenient. A 2006 Nielsen study found that 80% of all U.S. households reported buying canned beans in the past year compared to only 23% of U.S. households that reported buying beans in bags in their dry form.
- Canned beans are very easy to use – More expensive but still economical and very convenient. Rinse the beans with water before adding to recipes as this will reduce the sodium content. This reduces the sodium by 40%.
- Storage of beans: Canned beans should be stored in cool cabinets, away from appliances that produce heat. It's best to use canned beans within one year of purchase. Dry beans should be stored in airtight containers, and used within one year of purchase. The longer you keep dry beans, the more moisture they lose. This means that older dry beans take longer to soak and cook compared to “younger” dry beans.

Cooking Tips

Cooking with beans in their dry form requires **four** steps:

1. **Sorting** - Cleaning the beans is easy. Just place the beans in a shallow layer in a pie plate, baking sheet, or bar pan. Pick out and discard any foreign objects like leaves, small stones or twigs as well as any broken beans.
2. **Rinsing** - Because dry beans are not washed before packaging, you need to rinse them to remove dust. Simply place the beans in a colander or strainer and rinse them under cold, running water.
3. **Soaking** - It's important to soak your beans before cooking them. Soaking has two major benefits: It reduces the cooking time and it breaks down the Oligosaccharides (all-uh-go-SACK-are-rides) which are the compounds in beans that cause gas. Oligosaccharides leach into the soaking liquid; if you drain off that liquid you are dramatically reducing the amount of oligosaccharides in the cooked beans, but you are not losing valuable nutrients or flavor. It is a myth to soak beans with baking soda in order to minimize gas. Baking soda actually destroys the B vitamins. Soaking also improves the texture of the beans. Beans will double or triple in size, depending on which soaking method you use, so it's important to use a large enough pot when soaking beans.

- There are three soaking methods you can use: Hot Soak Method, Traditional Soak Method, and Quick Soak Method. The Hot Soak Method is the recommended method because it reduces cooking time and gas-producing compounds the most and it produces consistently tender beans.
- No matter what soaking method you choose, be sure to discard any beans that float to the surface of the water. They likely have air pockets that will hold dirt.

The Hot Soak Method

1. Place beans in a large pot and add 10 cups of water for every 2 cups of beans.
2. Heat to boiling and boil for an additional 2 to 3 minutes.
3. Remove beans from heat, cover and let stand for 4 to 24 hours.
4. Drain beans and discard soak water.
5. Rinse beans with fresh, cool water.

The Traditional Soak Method

1. Pour cold water over beans to cover.
2. Soak beans for 8 hours or overnight.
3. Drain beans and discard soak water (NOTE: Cold water starts but does not complete the rehydration process so the beans will appear wrinkled after soaking. They will fully rehydrate during cooking.)
4. Rinse beans with fresh, cool water.

The Quick Soak Method (fastest)

1. Place beans in a large pot and add 6 cups of water for every 2 cups of beans.
2. Bring to boil and boil for an additional 2 to 3 minutes.
3. Remove beans from heat, cover, and let stand for 1 hour.
4. Drain beans and discard soak water.
5. Rinse beans with fresh, cool water

4. **Cooking** - You can prevent your beans from foaming and boiling over by adding a tablespoon of vegetable oil to the water. Beans generally take 30 minutes to 2 hours to cook, depending on the variety. If beans are not tender after the specified cooking time, the reason could be altitude, hard water, or the age of the beans. Keep cooking until the beans become soft and tender.

- Drain beans immediately after they reach the desired tenderness to halt the cooking process and prevent over-cooking.
- Wait to add acidic ingredients like molasses, tomatoes, chili sauce, catsup, vinegar, or wine, until the beans are fully cooked. Acidic ingredients keep beans from softening.
- Onions may be added at any time during the cooking process. For stronger flavor, add them during the last half-hour of cooking.
- Herbs and spices like oregano, parsley, thyme, and garlic may be added at any time during cooking.

Great resource: <http://www.northarvestbean.org> - go to consumer info and follow links also there is a link to download request for free materials which would be very helpful with the program.

www.beaninstitute.org – Beans101 –Power Point - also nice handouts on this site.

www.foodandhealth.com