

Legumes—Dry Beans and Peas

Getting the Most Nutrition for Your Money

By Jenna Anding*

egumes, or peas and beans, are a great source of folate. A 1/2-cup serving of cooked pinto beans has more than one-third of the suggested dietary amount of this vitamin.

Legumes, except for soybeans, are very low in fat. All legumes are very low in sodium and are cholesterol free.

Legumes can be classified in two ways on the U.S. Department of Agriculture Food Guide Pyramid. A 1/2-cup serving of cooked legumes is equal to one serving from the vegetable group or 1 ounce of meat.

Legumes are loaded with fiber! For example, a 1/2-cup serving of lentils has almost 8 grams of fiber. Part of the fiber is soluble fiber, which can help some people lower their blood cholesterol levels (high blood cholesterol levels can increase your risk of getting heart disease). Adults should try to eat at least 25 grams of dietary fiber a day.

Legumes also are packed with protein and minerals, including iron, magnesium, phosphorus and potassium.

Legumes are economical to purchase. You can stretch your food dollar by including beans as a part of your family's meals. A 1/2-cup serving of cooked dry beans costs as little as 5 cents!

Preparing Dry Legumes

ow that you know that legumes are nutritious and economical, it's time to learn how to prepare them. Don't worry if you have never cooked legumes—it's easy. All you have to do is follow these step-by-step instructions:

1. Pick the type of legume that you want to cook. This can be black bean, blacked-eyed pea, garbanzo, great northern, lima, pinto, lentil, kidney or other beans or peas.

- 2. Wash your hands with soap and warm water.
- 3. Place a colander in a clean kitchen sink; place the dry legumes into the colander.
- 4. Rinse the legumes thoroughly with running water. Sort out any broken or defective legumes as well as any pebbles or other foreign items that may be present. It can help to spread the legumes on a clean flat surface such as a cookie sheet or countertop while sorting. Rinse the legumes again.
- 5. Place the sorted and rinsed legumes in a large pot. Add 3 to 5 cups of water for

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every cup of dried legumes. Allow the legumes to soak (see Soaking Tips below). After soaking, drain and replace with fresh water. Lentils and split peas do not need to be soaked before they are cooked.

6. Bring the legumes to a boil, then reduce heat and cook for the recommended amount of time (see chart on pages 4 and 5) or until tender. Add water as needed. Season to taste and serve!

Safety Tip: Never leave a stove unattended when it is in use.

Seasoning Legumes

t is best not to add salt to legumes while they are cooking. This makes the legumes tough. If you must add salt, wait until the legumes have almost finished cooking.

Adding acidic foods to legumes while cooking will prevent them from absorbing water and cooking properly. Acidic foods include tomatoes, vinegar and citrus juices. Wait until the legumes are almost cooked before adding anything acidic.

Seasonings such as garlic, onions and herbs can be added at any time while beans or peas are cooking.

Storing Uncooked Dry Legumes

o keep the quality of dry legumes at its best, store at a temperature no higher than 70 degrees F. Higher storage temperatures will reduce the quality faster. Be aware that the plastic bags that legumes are packed in may not be totally insect proof. To prevent insects from getting into the packages, it is best to keep the dry legumes in an airtight container, especially if they are going to be stored for a while. Dry beans are best when used within 12 months after they have been purchased. Legumes that are stored in more humid conditions should be used sooner.

Storing Cooked Legumes

nce cooked, legumes can be frozen or refrigerated. To freeze, simply place the cooked legumes in an airtight, moisture-proof container. For best quality, use the frozen legumes within 6 months. Many people like to prepare large batches of legumes and then store in smaller containers for use. This saves time later since the legumes are already cooked. To thaw, place the container of frozen legumes in the refrigerator the day before they are needed. Or, for faster thawing, defrost in the microwave.

Soaking Tips

Soaking is an important step in the preparation of many legumes. Soaking legumes causes them to soften and absorb water. This reduces the amount of time needed for them to cook. Some people believe that soaking helps reduce the amount of the gas-forming substances commonly found in beans and other legumes.

An easy way to soak beans is by following the quick soak method. Place the sorted and rinsed legumes, along with the recommended amount of water, in a large pot. Bring the legumes to a boil and allow them to boil for approximately 2 minutes. Remove the legumes from the heat, cover and let stand for about 2 hours. Drain the liquid and replace with fresh water.

Legumes that are refrigerated should be stored in a plastic or glass container and used in 4 to 5 days. Add a couple of tablespoons of water to the legumes when reheating. Reheat legumes quickly until boiling or steaming hot (165 degrees F).

Frequently Asked Questions

- Q: Every time I prepare legumes, it seems that I end up cooking more than I need. How do you decide the amount of dry legumes to prepare?
- **A:** Most dry beans will triple in size when cooked. Peas and lentils typically double in size when cooked. If you are not sure how much you need to cook, here is an easy guide.

1 pound of dry beans = about 2 cups of dry beans = about 6 cups of cooked beans

1 cup of dry beans = 3 cups of cooked beans

1/2 pound of uncooked split peas = 1 cup of uncooked split peas = 2 cups cooked peas

A serving of cooked legumes is 1/2 cup according to the U.S. Department of Agriculture Food Guide Pyramid. If your family usually eats larger portions, consider this in calculating how many servings your family needs. For example, a family of four wants to eat pinto beans with their meal. A serving size for them is about 1 cup. Instead of preparing 1 cup of dry beans, this family would need to prepare 1 1/3 cups of dry beans to make four, 1-cup portions of cooked beans.

Note: If you cook more than you need for one meal, you can always freeze the cooked legumes in an airtight and moisture-proof container. The next time you need cooked legumes, all you have to do is thaw and reheat.

- Q: How can a person reduce the amount of gas-forming compounds commonly found in legumes?
- A: Our bodies always produce a certain amount of gas when we eat high-fiber foods, but this is not a problem for people who include fiber in their diet on a regular basis. However, if you usually get very little fiber in your diet and then all of a sudden eat a very large bowl of beans, you may experience some unpleasant side effects including gas, bloating and abdominal pain. To reduce these problems, follow these suggestions.
 - 1. Eat beans and other legumes in small portions and increase the intake of legumes and other high fiber foods in your diet slowly. This gives your body a chance to adapt to this healthy change in your diet.
 - 2. Discard the water that was used to soak legumes. While you will lose some water-soluble vitamins, throwing away the soak water may help reduce some of the gas-causing compounds.
 - 3. If needed, there are some over-the-counter tablets and liquid products that you can take to help reduce the amount of gas your body makes when high fiber foods are eaten. One such product is called Beano[®].

Safety Tip

Always store leftover or prepared foods in shallow covered containers, no more than 3 inches deep. This helps foods cool more quickly and safely. Never place a large pot of cooked beans in the refrigerator or freezer. They may not cool fast enough to prevent food poisoning. Store prepared foods within 2 hours of cooking.

4. Remember that when increasing your fiber intake, it is recommended that you also increase your intake of water to avoid constipation.

Q: How can I season the legumes that I prepare for my family without adding a lot of salt and fat?

A: Herbs and spices, such as black pepper, onion, cumin, cayenne, basil, marjoram, oregano and thyme, can be added to legumes. Jalapeno peppers, chili powder and diced tomatoes with green chilies are popular choices with pinto beans, but should be added near the end of the cooking process. Lima beans can be spiced with oregano, sage, savory and tarragon. Allspice, coriander and curry powder add a unique flavor to black beans. Because salt added to beans while they cook makes them tough, leave out the salt

when cooking and let family members salt their beans according to their own tastes.

Q: What are some other ways to include legumes in my diet?

- **A:** To increase the consumption of legumes (beans and peas), try the following.
 - 1. Add chickpeas or kidney beans to your favorite salad.
 - 2. Serve casseroles made with lima beans or black-eyed peas as a main dish.
 - Add navy beans, black beans, split peas or lentils to your favorite soups or stews.
 - 4. Serve legumes with rice, noodles or bread.
 - 5. Add legumes to meat dishes to stretch your food dollar.

Getting To Know Some Commonly Used Legumes

Legume	What does it look like?	Key nutrients*	Approximate cooking time (after soaking)	Uses
Black bean (also called turtle bean)	Small in size, oval shape, black color	Fiber, protein, thiamin, folate, potassium, iron, manganese, copper, phosphorus	1 to 1 1/2 hours	Used often in soups or served with rice.
Black-eyed pea (cowpeas)	Medium sized, oval shaped, cream colored with a black "eye"	Protein, fiber, thiamin, folate, magnesium, manganese	1/2 to 1 hour	Great side dish!
Garbanzo (chickpea)	Medium in size, beige color, nutty flavor and firm texture	Fiber, protein, folate, iron, manganese, phosphorus, copper	1 hour to 1 1/2 hours	Used in salads and Mexican dishes. Also used to make hummus, a popular Middle Eastern dish.
Great northern	Large, oval shaped, white colored bean copper	Fiber, protein, folate, magnesium, phosphorus,	1 hour to 1 1/2 hours	Use in soups and stews.
Baby lima	Small, flat beans with a creamy white color	Fiber, protein, folate, potassium, iron, magnesium, manganese, phosphorus	1 hour	Serve as a side dish or add to soups and other mixed dishes.

Getting To Know Some Commonly Used Legumes (continued)

Legume	What does it look like?	Key nutrients*	Approximate cooking time (after soaking)	Uses
Large lima	Large, flat beans with a creamy white color	Fiber, protein, folate, phosphorus, potassium, iron, magnesium, manganese, copper	1 hour to 1 1/2 hours	Serve as a side dish or add to soups and other mixed dishes.
Navy	Small white beans, oval shape	Fiber, protein, thiamin, folate phosphorus, magnesium, iron, copper, manganese	1 1/2 to 2 hours	Used most often in pork and beans and baked beans. Great addition to soups and stews.
Pink	Small in size, pale pink in color. Has a rich meaty flavor.	Fiber, protein, folate, thiamin, niacin, magnesium, potassium, manganese	1 hour	Often used in chili. These are related to the kidney bean and will turn reddishbrown in color when cooked.
Pinto	Medium sized bean, brown in color with light brown specks	Fiber, protein, thiamin, folate, iron, potassium, magnesium, manganese	1 1/2 to 2 hours	Used most often in refried beans, great side dish with barbecue and fajitas!
Lentils	Small and flat, Chilean or regular lentils are brown in color, Red Chief variety is reddish-orange in color	Fiber, protein, folate, potassium, phosphorus, iron, manganese	Follow package instructions. No soaking needed!	Add to soups, stews and salads.
Light red kidney	Large kidney-shaped bean, red in color	Protein, fiber, folate, iron, magnesium, phosphorus, potassium, manganese	1 1/2 to 2 hours	Used most often in chili. Popular in salads and with rice.
Small red	Dark red in color, similar in shape to the kidney bean only smaller	Fiber, protein, folate, phosphorus, manganese	1 1/2 to 2 hours	Use in soups, salads, chili and Creole dishes.
Soy bean	Small in size, light tan or yellow in color	Protein, fiber, folate, potassium, phosphorus, magnesium, iron, manganese, copper	3 hours	May be used in some cold salads. Used to make tofu, soy milk, meat substitutes and other soy-based products.
Split peas	Small in size, green or yellow in color	Protein, fiber, folate, phosphorus, potassium and manganese	Follow package instructions. No soaking needed!	Use in soups and stews.

^{*}Key Nutrients: A serving (approximately 1/2 cup of cooked beans) provides at least 10 percent of the recommended Daily Value, based on a 2,000-calorie diet.

References and Resources

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