

# All About Beans, Nutrition, Health Benefits, Preparation and Use in Menus (FN1643 Reviewed Feb 2019)

## Preparing Dry Beans

Dry beans offer nutrition, health and economic benefits. However, you need to follow certain steps to ensure dry beans are cooked properly. The four basic steps are 1) clean, 2) rinse, 3) soak and 4) cook. The first two steps simply involve removing any broken beans or foreign objects from beans, and then rinsing them in a colander under cold running water.

## Comparing Soaking Methods

The three different soaking methods vary in the amount of time required for adequate soaking. The “hot soak” method typically is recommended because it reduces cooking time and gas-producing compounds the most while consistently yielding tender beans.

Traditional Soak	Hot Soak (preferred)	Quick Soak
1. Pour cold water over beans to cover.	1. Place beans in a large pot and add 10 cups of water for every 2 cups of beans.	1. Place beans in a large pot and add 6 cups of water for every 2 cups of beans.
2. Soak beans for eight hours or overnight.	2. Heat to boiling and boil for an additional two to three minutes.	2. Bring to boil and boil for an additional two to three minutes.
3. Drain beans and discard soak water.	3. Remove beans from heat, cover and let stand for four to 24 hours.	3. Remove beans from heat, cover and let stand for one hour.
4. Rinse beans with fresh, cool water.	4. Drain beans and discard soak water.	4. Drain beans and discard soak water.
	5. Rinse beans with fresh, cool water.	5. Rinse beans with fresh, cool water.
Advantages: No boiling required; reduces gas-producing compounds with long soak	Advantages: Reduces cooking time and gas-producing compounds; consistently yields tender beans	Advantages: Much faster soaking time, requiring less planning
Disadvantages: Long soaking time, requiring planning ahead of time	Disadvantages: Long soaking time, requiring some planning	Disadvantages: Fermentation may take place if left in hot water for too long; potential loss of some folate

## 4 Steps to Soaking Dry Beans

1. First, inspect the dry beans, removing any broken beans or foreign materials.
2. Rinse thoroughly in cold water.
3. Next, use the preferred “hot soak” method: Add 10 cups of cold water to the pot for each pound (2 cups) of beans prepared. Bring the water to a boil and boil for one to three minutes. Cover the pot. Let stand. A four-hour soak is ideal.
4. Finally, drain and rinse soaked beans. Cook and use in recipes.

## 2 cups of dry beans = 4 to 5 cups of cooked beans

### Top 10 Tips for Cooking Dry Beans

1. To cook soaked beans, add fresh, cold water to fully cover beans, plus 1 to 2 tablespoons of oil, if you wish. Adding oil prevents foaming and boiling over. Foam also can be skimmed off during cooking. Simmer the beans until they are tender.
2. Cook only one kind of bean at a time if possible. Different types and ages of beans have different cooking times, so avoid cooking different types of beans together at the same time.
3. Maintain water at a gentle simmer (not rapid boil) during cooking to prevent split skins.
4. **Do not add baking soda to beans at any time. This will make the beans more tender but destroys the B vitamin thiamine and also may impact the flavor negatively.**

5. Stir beans occasionally to prevent sticking during cooking.
6. Keep beans covered with water during the cooking process. Add cold water periodically during cooking to ensure beans are covered.
7. Check beans for doneness before eating. When cooked properly, beans should be tender but not mushy. Skins still should be intact, but the bean can be mashed easily between two fingers or with a fork.
8. Drain beans immediately after they have reached desired texture to prevent overcooking.
9. To add flavor after beans have finished cooking, try adding a drizzle of extra virgin olive oil immediately before serving rather than adding high-fat ingredients (such as bacon) during cooking.
10. To cook beans quickly, try a pressure cooker, following the manufacturer's instructions. This allows beans to cook in half the time and eliminates the need for soaking. However, this does not give the beans much time to absorb flavors from other ingredients. Therefore, use a pressure cooker when beans are needed quickly or to be used as a part of another flavorful dish.

### Beans, Beans: Gas-reducing Tips

Consumption of nutrient-rich beans could decrease the risk for several chronic diseases; however, some people may be hesitant to increase beans in their diet due to the fear of intestinal gas and stomach discomfort, including increased flatulence. Certain nondigestible carbohydrates, termed oligosaccharides, are responsible. Some researchers have reported that flatulence associated with bean intake may be exaggerated, and individuals vary in their response to increased fiber intake [57]. Researchers suggest discarding the soaking and cooking water to remove some of these nondigestible carbohydrates [58].

#### Try these tips to reduce the occurrence of intestinal gas when eating beans:

- **Increase beans in your diet slowly.** For example, you may start by eating 2 to 4 tablespoons of beans per day, and gradually increase each day.
- **Drink more water each day as you eat more beans** (or other fiber-containing foods).
- **Use the hot soak method when preparing dry beans.** The longer beans soak, the more you will reduce the amounts of the gas-producing compounds.
- **Change the water several times** when soaking dry beans, and discard this water when soaking is completed. Many of the gas-causing carbohydrates are released into this soaking water.
- **Rinse canned beans without sauce** (such as kidney, navy, Great Northern) before eating or using in recipes.
- **Consider using a gas-reducing enzyme tablet.** These tablets are available over the counter in many pharmacies.

### Flavor-boosting Tips

Beans tend to absorb the flavors of the ingredients with which they are cooked. . Follow these tips when adding each of these ingredients to beans to make them delicious and nutritious:

- **Acid:** Adding sources of acid is a great way to increase the depth of flavor in bean dishes. Add foods such as lemon juice, vinegar, tomatoes, chili sauce, ketchup, molasses or wine after beans have been cooked fully. These acidic foods can prevent beans from becoming tender and lengthen cooking time if they are added too soon.
- **Onions:** Adding onions also can increase the depth of flavor in beans. Add onions any time during the cooking process, but for a stronger onion flavor, add during the last 30 minutes of cooking.
- **Herbs and spices:** Add oregano, thyme, garlic, parsley or any other herbs/spices any time during cooking. However, keep in mind that flavors of herbs and spices tend to diminish the longer they are cooked.
- **Salt:** Add when the beans are almost tender because salt tends to toughen beans. Remember to use minimal amounts of salt to limit the sodium content of beans.

### Decreasing Sodium in Canned Beans

Canned vegetables, including canned beans, contain higher amounts of sodium than their fresh or less-processed counterparts. However, these beans retain all of the valuable nutrients as dried. Simply drain and rinse them before consuming or adding to recipes. Researchers reported that draining canned beans reduces sodium content by 36 percent, while draining and rinsing canned beans reduces the sodium content by 41 percent [61].

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