

Cooking with Food Storage Ingredients: Dry Beans

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http://extension.usu.edu/files/publications/publication/FN_503.pdf

Varieties of Beans

There are many different beans in the legume family. They store well, cost little, and provide a punch for the nutrition dollar. While the following is a partial list of legumes and a suggested cooking hint, beans may be interchanged in most recipes. Often names are interchanged.

Baby Lima – milk flavored. Serve as a vegetable or in casseroles.

Light Red Kidney- Excellent in any recipe calling for cooked beans.

Black-eye Peas – Dry form of the popular pea. Cook with pork or chicken.

Navy – Medium-sized white pea bean. Great for baked beans and soup.

Dark Red Kidney – Colorful salad bean mainly sold in canned form.

Pink – Great barbecue style or cooked with other spicy seasonings.

Turtle or Black Bean – A favorite in southern Mexico and Caribbean. Great with rice.

Garbanzo or Chick Peas – Nut-like flavor. Ideal for salads and appetizers.

Pinto- Popular in chili, refried beans, and other Mexican dishes.

Great Northern – Larger than small white or navy beans. Good for baking.

Red- Dark red, pea-shaped. Use in any colored bean recipe.

Large Limas- Rich, buttery flavor. Cook with smoked meat or cheese.

Small White – Firm texture holds up under long slow baking.

Anasazi or Ancient Ones – Cooks in about half the time, sweeter flavor, mealier, less gas.

Bean Nutrition

A serving of beans and legumes is considered to be 1 cup cooked. Legumes are considered high in fiber, low in fat, and a good source of protein, carbohydrates, folate, and many trace minerals. They are also low cost, thus providing good nutrition for reasonable money.

Food Safety

Dry legumes must be cooked completely before eating. For this reason it is not recommended to grind dry beans and then simply mix with hot water to make instant refried beans.

Gas

Gas is an undesirable side effect of eating legumes. The body lacks enzymes to digest some sugars in the beans. Since the sugars are not digested, they ferment in the digestive tract creating gas. Following are a few ways to help alleviate undesirable gas:

1. Soak beans a minimum of 3 hours (8-12 hours is better); change soaking and cooking water 2-3 times.
2. Sprout beans – soak beans 2-3 days, changing water 3-4 times, until beans begin to sprout. Add the lacking enzyme to the diet in the form of tablets or liquid; one commercial product is called “Beano®.”

Soaking Beans

1. Quick Soak Method: hot soaking helps dissolve some of the gas-causing substances. Cover beans with twice as much water as beans, bring to a boil, boil 2 minutes, remove from heat and allow to soak at least 1 hour or up to 4 hours. Discard soaking liquid.
2. Traditional Overnight Soak: Cover with twice as much water as beans and soak 8-18 hours in cool place, discard soaking water.
3. Do not salt soaking liquid. It will toughen the bean.
4. It is not necessary to soak split peas and lentils.

Cooking Legumes

1. Beans will double to triple in size during soaking and cooking. In other words, 1 cup dry beans will produce 2-3 cups of cooked beans.
2. The slower the beans are cooked the easier they are to digest. Slow cooker cooking on low for 6-10 hours is perfect.
3. If adding water to cooking beans is necessary, bring water to a boil before adding. Adding cold water to boiling beans will toughen beans and slow down cooking process.

Softening Old Beans

The older the bean the tougher it is and less digestible. Following are a few tips to soften old beans.

1. Cook and freeze. The freezing moisture in the bean helps to rupture the cell wall and create a more palatable product.
2. Pressure cook. Follow manufacturer's directions for using pressure cooker. Increase cooking time as needed to produce a desired texture.
3. Pressure-can beans. This method makes a readily usable product as well as softens beans. Follow USDA canning instructions below for pressuring.

Increasing Consumption of Beans

You should eat beans about 2-3 times a week. (2½ to 3 cups per week)

1. Plan menus.
2. Puree cooked beans and add to baked goods (bread, cake, cookies, etc.). Substitute pureed beans for shortening or margarine, straight across. (equal amounts)
3. Prepare convenience foods such as home canned dry beans or cook and freeze for later use.
4. Add whole mashed beans to meatloaves, soups, stews, casseroles (in small amounts to begin with, then increase as desired, and as allowed by family taste preference.)

Taken from: Food Storage Cooking School- Low and Hendricks, USU Extension, Salt Lake County, 1/99. Copies may be made for individual and non-profit use.

Home Canned Dry Beans or Peas

For more information on canning beans or other foods, see the *USDA Complete Guide to Home Canning* available at this website:

http://www.uga.edu/nchfp/publications/publications_usda.html

Use any variety of mature dry beans. Approximately 1¼ cups (dry measure) will be needed per quart. (Or, 5 pounds will produce 7 quart jars, 3¼ pounds will be needed for 9 pint jars.)

1. Wash and sort beans.
2. Hydrate by (1) Placing beans in a large pan and covering with water. Soak 12-18 hours in a cool place. Drain water; or (2) to quickly hydrate beans, you may cover sorted and washed beans with boiling water in a saucepan. Boil 2 minutes, remove from heat, soak 1 hour and drain.
3. Cover beans soaked by either method with fresh water. Boil 30 minutes. Add ½ tsp. of salt per pint or 1 tsp. per quart to the jar, if desired. Fill jars with beans and cooking liquid, leaving 1 inch head space.
4. Adjust lids and bands and process in pressure canner 90 minutes for quarts or 75 minutes for pints at: 13 pounds of pressure for 4,000-6,000 feet elevations, 14 pounds of pressure for 6,000-8,000 feet elevations (if pressure canner has a weight only, process at 15 pounds of pressure.)

It is suggested that any home pressure canned foods be boiled for 10 minutes before tasting.

Cooked Beans

1 cup dried beans

Water for soaking

3 cups water

Sort and soak beans. In a medium saucepan, combine drained soaked beans, water. Bring to a boil; reduce heat. Cover and simmer until beans are tender.

Bean Cooking Times

Beans (Soaked)	In a Saucepan	In a Pressure Cooker at 15 Pounds Pressure
Black Beans	1 to 1½ hours	5 to 8 minutes
Garbanzo Beans	1 to 1½ hours	5 to 7 minutes
Great Northern Beans	1 to 1½ hours	5 to 7 minutes
Lima Beans, Large	45 to 60 minutes	Not recommended
Lima Beans, Baby	1 hour	Not recommended
Pea Beans	1 to 1½ hours	5 to 8 minutes

Small White Beans	1 to 1½ hours	5 to 8 minutes
Pink Beans	1 to 1½ hours	6 to 8 minutes
Pinto Beans	1 to 1½ hours	5 to 7 minutes
Red Beans	1 to 1½ hours	6 to 8 minutes
Red Kidney Beans	1 to 1½ hours	5 to 8 minutes
Soybeans	3 hours	12 to 15 minutes

Hints:

1. Rinse all beans and legumes in cold water. Remove all dirt, rocks, or bad beans.
2. Add ⅛ tsp. baking soda and 1 Tbsp. cooking oil to each cup of beans while soaking. This will shorten the cooking time and decrease foaming.
3. Add meat, onions, celery, and herbs during cooking to add more flavor. Add tomatoes, catsup, vinegar and other acid foods after the beans are tender. The acid prevents softening of the beans.
4. Cooked beans freeze well and will keep up to 6 months in the freezer.

Bean Recipes

Fiesta Casserole

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| 2 cups drained, cooked pinto beans, <u>or</u> | 1 (4 oz.) can diced or chopped green chilies |
| 1 (15 oz.) can pinto beans drained (or kidney or black beans) | ¼ tsp. garlic powder |
| ½ lb. ground beef | ½ tsp. ground cumin |
| ½ cup chopped onion | 1 tsp. chili powder |
| 1 tsp. salt | ½ tsp. dried leaf oregano |
| ¼ tsp. pepper | 1 (8 oz.) can tomato sauce |
| 1 (15 oz.) can tomatoes, un-drained, diced | 6 corn tortillas |
| 1 (15 oz.) can Mexican stewed tomatoes | 2 cups shredded cheddar cheese |

Prepare pinto beans. In large skillet, sauté onions in 1 tsp. margarine until partially cooked. Add ground beef. Brown with onion until thoroughly cooked. Add salt, pepper and beans; stir. In medium saucepan, combine tomatoes, green chilies, garlic powder, cumin, chili powder, oregano, and tomato sauce. Bring to boil; reduce heat. Cover and simmer 10 minutes. Preheat oven to 350° F. Spray 2 qt. rectangular baking pan with cooking spray. Spread thin layer of sauce on bottom of baking pan. Top with 3 cut-up tortillas. Spread half of bean-beef mixture over tortillas. Pour half sauce over to cover. Sprinkle with half of cheese. Repeat layers with remaining ingredients, reserving some cheese for top. Bake 30 minutes. Sprinkle remaining cheese on casserole for last 5 minutes of baking. Cut into rectangles. Makes 4 to 6 servings.

Wheat and Bean Chili

1 cup uncooked dry beans	1 large (46 oz.) can tomato juice
1 cup uncooked wheat	1 (15 oz.) can Mexican-flavored stewed tomatoes*
1 quart water	1 tsp. chili powder
1 onion, chopped	Salt and paprika to taste
1 lb. ground beef	2 tsp. brown sugar
1 clove garlic	½ tsp. cumin
2 tsp. canola or olive oil	

Cook wheat and beans together in one quart of water (may be soaked overnight before cooking). Cook until almost tender. In separate pan, sauté meat, onions and garlic in canola or olive oil. Drain. Add to beans. Add other ingredients. Simmer for 1 hour. Season to taste.

*Fresh tomatoes may be added in place of canned stewed tomatoes. Use about 8 skinned tomatoes. Adjust spices for flavor.

Minestrone Soup

½ lb sausage or hamburger	1 can garbanzo beans (about 2 cups)
2 cans (14 – 15 oz each) diced tomatoes	Oregano
1 small can tomato sauce	Parsley
1 small yellow onion	Sage
1 can corn	Salt & Pepper
1 can green beans	Water
1 can kidney beans (about 2 cups)	

Brown sausage or hamburger on the stove. When browned, put in crock pot along with diced tomatoes and onion. Let stand for a few hours, or all day, cooking on low or medium heat. One hour before serving, add in drained corn, green beans, kidney beans and garbanzo beans. Add spices, salt and pepper to taste. Add water to the consistency you like.

Taco Soup

1 lb. lean ground beef	1 can kidney beans
1 onion, chopped	1 can black beans
1 can (28-oz.) tomatoes, crushed	1 can corn, drained
1 can (8 oz.) tomato sauce	1 pkg. taco seasoning mix

In a large saucepan, sauté ground beef and onion; drain fat. Add tomatoes, tomato sauce, drained kidney beans, corn and seasoning mix. Simmer 15 minutes. Garnish with grated cheese, sour cream, diced green onions, sliced black olives, salsa guacamole or tortilla chips. Yield 4-6 servings.

Old Fashioned Split Pea Soup

1 lb. green split peas	1 cup chopped celery	1 cup chopped onion
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1 garlic clove, minced	1 medium potato, peeled,	8 cups water
2 Tbsp. canola oil		2 chicken bouillon cubes
1 (1 lb.) meaty ham shank,	diced	1 bay leaf
cut in 3 or 4 pieces	¼ tsp. pepper	½ cup milk

Sort and rinse peas. In heavy 4 quart pot, sauté celery, onion, and garlic in oil until onion is tender but not browned. Add rinsed peas, ham shank pieces, potato, pepper, water, bouillon cubes and bay leaf. Bring to boil; reduce heat. Cover and simmer until peas are very tender, about 45 minutes. Remove and discard bay leaf. Remove ham shank pieces. Cut meat from bones and discard bones. Dice meat; set aside. Puree soup in blender or food processor and return to pot. Stir in diced meat and milk. Cook over medium heat 10 minutes, stirring frequently. Serve steaming hot in large soup bowls. Makes 6 to 8 servings.

Six Bean Barbecued Beans

8 slices bacon, diced, and browned until crisp	2 cans pork and beans
½ lb. ground beef, browned and drained	1½ cups ketchup
1 chopped onion, sauté and add to beef	½ cup brown sugar
1 can kidney beans	1 tsp. hickory smoke flavor
1 can pinto beans	1 tsp. salt
1 can Great Northern beans	1 tsp. vinegar
1 can butter (Lima) beans	1 tsp. prepared mustard
1 can navy beans	Other seasonings, to taste

Place all ingredients in a 5-6 quart slow cooker. Cook on low 4-6 hours.

Quick and Easy Bean Pot

½ lb. bacon, fried until crisp, then crumbled	1 cup tomato catsup
1 onion, chopped	¼ cup brown sugar
½ lb. ground beef	1 tsp. Worcestershire sauce
4 (16 oz.) cans pork and beans	

Sauté onion in bacon drippings until tender. Add ground beef. Fry until ground beef is cooked through. Add remaining ingredients. Simmer in large heavy pan on stove for at least one hour or simmer in a slow cooker for 2-3 hours. You may add seasoning salt, chili powder, or other spices to your taste.

Bean Puree

1 cup dried large lima beans, Great Northern beans, or pinto beans
 Water for soaking
 3 cups water

In medium saucepan, combine drained soaked beans, 2½ cups water. Bring to boil; reduce heat.

Cover and simmer until beans are tender 1 to 1½ hours. Drain beans, reserving cooking liquid. Put 1 to 2 cups beans in blender with ¼ cup to ½ cup reserved cooking liquid. Blend on medium speed until smooth, stopping blender occasionally to scrape sides and stir puree up from bottom. Bean mixture should circulate slowly. Makes about 2 cups of puree.

Spicy Zucchini Bread

1 cup Bean Puree made with pinto beans	2 cup sifted flour
3 eggs	1 tsp. salt
1½ cup sugar	1 tsp. baking soda
½ cup canola oil	2½ tsp. baking powder
1½ cup shredded zucchini	2 tsp. ground cinnamon
1 tsp. vanilla	

Prepare bean puree (see page 28). Grease two 9x5 inch loaf pans. Preheat oven to 350° F. In large bowl, combine eggs, sugar and oil. Beat with electric mixer until smooth. Add zucchini, Bean Puree and vanilla. Sift together flour, salt, baking soda, baking powder, and cinnamon. Add to bean mixture. Stir until blended. Pour into greased pans. Bake 40 to 50 minutes or until wooden pick inserted in center comes out clean. Remove from pan. Cool on a rack. May be stored in an airtight plastic bag at room temperature or in the refrigerator.

Awesome Oatmeal Cookies

¾ cup white beans, mashed (or bean puree)	1 teaspoon vanilla
¾ cup brown sugar	3 cups oats
½ cup granulated sugar	1 cup whole wheat flour
1 egg	1 tsp. salt
	½ tsp. soda

Preheat oven to 350°. Beat mashed white beans, brown sugar, granulated sugar, egg, and vanilla until smooth and creamy. Combine remaining ingredients in a separate bowl and mix together. Add to bean and sugar mixture; mix well. Drop onto greased cookie sheets and bake at 350° F for 10 minutes. Cool on cookie sheet for 5 minutes then transfer to wire rack and cool completely.

Yield: approximately 36 cookies

Nuts, coconut, raisins, and/or chocolate chips may be added with dry ingredients.

Banana Bread

2 ripe bananas	1½ tsp. vanilla extract
2 eggs	1¾ cups flour (at least half of this should be whole wheat)
¼ cup mashed white beans (or bean puree)	1 tsp. baking soda
¼ cup Smart Balance® margarine (<u>or</u> more beans)	½ tsp. salt
1¼ cups white sugar	

Preheat oven to 300° F. Grease one 9x5 inch loaf pan. In medium bowl, mash bananas and stir in eggs until well blended; set aside. In large bowl, beat beans and Smart Balance together, and gradually add sugar. Stir in vanilla and banana mixture. Wisk together the flour, baking soda, and salt; blend into batter. Add walnuts if desired. Pour into pan. Bake for 1 hour 15 minutes (check after 50-60 minutes), or until toothpick inserted into center of loaf comes out clean.

Carrot Cake

4 eggs or equivalent egg substitute	2 cups all purpose flour
2 cups sugar	2 tsp. baking soda
2/3 cup white beans, pureed until smooth paste	2 tsp. cinnamon
1 tsp. vanilla	1 tsp. salt
1 (8 oz) can crushed pineapple, drained	1 cup walnuts, chopped (reserve 1-2 Tbsp. to sprinkle on top)
2 (14.5oz) cans sliced carrots, drained and mashed	

Prepare 9x13 inch pan with cooking spray and dust lightly with flour. Preheat oven to 375° F. Beat eggs thoroughly in large bowl. Add sugar and beat well. Beat in beans and vanilla. Add pineapple and carrots. Combine dry ingredients and stir gently into batter. Fold in walnuts. Pour into prepared pan. Bake 35 – 45 minutes or until sides pull away from pan and toothpick inserted in middle comes out clean. Cool completely before frosting.

Cream Cheese Frosting

1 (8 oz) package cream cheese, softened, (fat free or reduced fat)	1 tsp. vanilla
1 Tbsp. butter	3½ to 3¾ cups powdered sugar

Combine cream cheese and butter until smooth. Add vanilla and enough powdered sugar until mixture is of spreading consistency. Spread on cooled cake and sprinkle a few chopped walnuts on top. Cut into 24 pieces. Yield: 24 servings.

Hummus

2 tsp minced garlic (about 2 cloves)	4 tsp lemon juice
1 can garbanzo beans	½ tsp salt
4 tsp olive oil	

Puree all ingredients in a blender. Add liquid for consistency desired. Serve with pita bread or fresh veggies.

Easy Breezy Bean Salad

2 cups (or 1 can) kidney beans*	1 cup (or ½ can) other beans* (black beans, lima beans, etc.)
2 cups (or 1 can) garbanzo beans*	

½ of a red bell pepper, diced
¼ of a red onion, diced
1 ½ tsp olive oil

1 ½ tsp red wine vinegar
Salt and pepper to taste

Rinse beans and mix in a medium size mixing bowl. Dice red bell pepper and red onion and mix with beans. Pour olive oil and red wine vinegar over bean mixture, adding salt and pepper to taste. Let stand in refrigerator for a couple of hours, or over night, to chill and to allow flavors to mix in. Serve on lettuce leaves, with wheat thins or other chips or crackers, or eat as a side salad. Consider adding olives, wheat berries, soy beans, etc.

*Can be substituted for any other bean.

Black Beans and Rice

“The best black beans I have ever eaten.”

½ lbs bacon, cut into bite size pieces
½ lbs sausage (the horseshoe kind), cut into bite size pieces
1/2 onion, minced
2 cloves garlic, minced
4 Tbls olive oil
1 tsp cooking wine

1 cap-full of vinegar
4 cans black beans, half drained of their juices
Couple shakes of cumin
Couple shakes of oregano
1 Bay leaf

FIRST Start cooking 1/2 lbs of bacon in a fry pan until cooked to your liking. Drain 2/3 of the grease. Add to that: sausage, onion and garlic. Cook until sausage is cooked to your liking and everything is mixed well together. IN THE MEAN TIME In a large crock pot, pour in your olive oil, cooking wine, and vinegar. Add your bacon mixture and black beans, stir everything together. Add the cumin, oregano and bay leaf. Stir into bean mixture until the well blended and the bay leaf is somewhere on the bottom. Cook on low for 6-8 hours. Before you eat it, fish out the bay leaf and throw it away. Serve over rice and enjoy! Yield: lots and lots.

Rice and Black Beans #2

Quick and oh-so-tasty!

1 cup uncooked rice (preferably brown rice)
1 clove garlic
Tablespoon garlic
Thyme
Salt

½ polska kielbasa sausage
1 can (or 2 cups) black beans
½ cup water
1 chicken bullion cube

Cook one cup of rice with one clove of minced garlic, a tablespoon of butter, and sprinkles of thyme and salt.

Slice half of one polska sausage in thin slices, and heat in skillet or microwave. Once heated,

add one can drained and rinsed black beans, 1/2 cup water, and one chicken bullion cube. Simmer until consistency you'd like (I like it a little bit "mushy").

Serve beans/meat mixture over rice, with hot sauce, if desired. About 4 servings.

Black Bean and Corn Salsa

2 cans black beans (about 4 cups), rinsed and drained	1 small can sliced black olives, drained
1 can whole corn, drained	¼ cup cilantro, finely chopped or pureed* in blender
2 large tomatoes, chopped	2 Tbs. olive oil
1 avocado chopped	1 Tbs. red wine vinegar
½ small red onion, chopped	3-4 Tbs. lemon juice
2 fresh jalapeños, seeded and finely chopped	1 tsp. salt
	½ tsp. pepper

Mix olive oil, red wine vinegar, lemon juice, salt and pepper in a small bowl and set aside. Combine all other ingredients and pour liquid mixture over and stir. Chill or serve immediately. *To puree cilantro: add olive oil, red wine vinegar, lemon juice, salt, pepper, and cilantro to blender. Puree until mixed well. Note: this will make the cilantro really tiny.

Red Pepper and Garbanzo Bean Salad

Vinaigrette:	Salad:
1 Tbs olive oil	1 medium red bell pepper, sliced
2 Tbs lemon juice	1 cup cooked garbanzo beans
3 Tbs chicken bouillon	1 ½ cup celery, cut
1 Tbs Dijon mustard	1 small red or green onion, diced
Pepper and salt as wanted	½ medium cucumber, finely cut

In a small bowl, mix vinaigrette ingredients. In a large bowl, combine salad ingredients. Add the vinaigrette and stir. Cover and refrigerate between 30 minutes and 2 hours.

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