

## Beans Help Mitigate Effect of Drought on High Food Bills

By Alice Henneman, MS, RD

The most severe and extensive drought in at least 25 years is seriously affecting United States agriculture, with impacts on the crop and livestock sectors and with the potential to affect food prices at the retail level.<sup>1</sup>

About 80 percent of agricultural land is experiencing drought.<sup>1</sup> The result is a projected rise in food prices both directly from foods made from crops and indirectly due to the rise in prices of animal feed from crops, such as field corn, which affects the cost of food products from animals. View the most recent U.S. Drought Monitor Map, which is updated periodically, at <http://droughtmonitor.unl.edu/>.<sup>2</sup>

*About 80% of agricultural land is experiencing drought.*

While dry beans were not severely affected, field corn was especially hard-hit by the drought and a rise in prices has already occurred.<sup>1</sup> Field corn differs from sweet corn, which is grown primarily for human consumption. Field corn is the predominant type of corn grown in the United States and is used for feeding animals; producing ethanol; in cereal products for humans; and in other processed foods for human consumption, such as starch, oil, and sweeteners.

Historically, if the farm price of corn increases 50 percent, then retail food prices, as measured by the Bureau of Labor Statistics in the Consumer Price Index, increase by 0.5 to 1 percent, according to the U.S. Department of Agriculture (USDA) Economic Research Service.<sup>1</sup> Retail food inflation has averaged 2.5 to 3 percent yearly for the past 20 years in the United States. But most of the 2012 drought impact is expected to be realized in 2013.<sup>3</sup> The USDA projects that next year food price inflation is expected to be between 3 and 4 percent, with the increases centralized in animal products—eggs, meat, and dairy.<sup>1</sup>

Continued on pg. 2

## RDs: Connect with The Bean Institute via Social Media

### Tweets, Pins, and Likes

The Bean Institute recently made its debut on Facebook, Twitter, and Pinterest. After receiving feedback from you in our *Dry Bean Quarterly* reader survey, we got the message: you want to connect with us online. Now you can!

Through these social media sites, we'll share dry bean recipes, research findings, and health benefits. We encourage you to connect and converse with us. You can also use the information we share to communicate with your clients and patients by either referring them to our sites or sharing the information we post through your social media accounts.



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(Photo courtesy of USDA on flickr. Dave Kosling, photographer)



Much U.S. farm land is experiencing drought (left). However, this year's dry bean crop was largely unaffected (right) and could help mitigate projected high food costs.



Complete references and a glossary of terms can be found at: [www.beaninstitute.com](http://www.beaninstitute.com)

The earliest impacts are most likely to be seen in beef, pork, and poultry prices.<sup>1</sup> It will likely take 10 to 12 months for the full effect in corn prices for packaged and processed foods (cereal, corn flour, etc.) to move through to retail food prices.<sup>4</sup>

## Do the Math

There are ways to decrease your grocery bill when animal sources of protein increase in price, including:

- Choosing less expensive forms of animal protein
- Combining lesser amounts of animal protein foods with plant protein foods
- Serving plant sources of protein for some meals.

A good value for the money, dry beans can help stretch a budget when served alone or in combination with animal protein foods. A typical 15-ounce can of beans contains 3.5 half-cup servings, according to the Nutrition Facts label on the can. A survey of prices on the internet shows a cost range from about \$1.00 per 15-ounce can to about \$2.75 per can, depending on the brand and type of bean.

Doing the math, this means that a half cup serving of beans can cost from 29 cents to 79 cents, depending on the brand and the type of bean (cost of the can of beans divided by 3.5).

## Dry Beans as a Protein Food

Dry beans are unique in that they may be counted toward either the USDA MyPlate dietary recommendations for vegetables or for protein foods.<sup>4</sup> The USDA states:

“These foods (beans) are excellent sources of plant protein, and also provide other nutrients such as iron and zinc. They are similar to meats, poultry, and fish in their contribution of these nutrients. Therefore, they are considered part of the Protein Foods Group.

*Beans are similar to meat, poultry, and fish in their contribution of iron and zinc.*

“Many people consider beans and peas as vegetarian alternatives for meat. However, they are also considered part of the Vegetable Group because they are excellent sources of dietary fiber and nutrients, such as folate and potassium. These nutrients, which are often low in the diet of many Americans, are also found in other vegetables.”<sup>4</sup>

The USDA reminds us, however, that we cannot count dry beans toward dietary recommendations for both food groups at the same time.

In general, one ounce of meat, poultry, or fish, or ¼ cup of cooked beans, can be considered as a “1-ounce equivalent” from the Protein Foods Group.<sup>6</sup> Persons consuming 2,000 calories per day need approximately 5½ “one-ounce equivalents” daily.<sup>5</sup> Thus, as an example, Protein Food Group needs for a day at this calorie level could be met by:


- 3½ ounces of chicken (3.5 one-ounce equivalents) and
- ½ cup refried beans (2 one-ounce equivalents)

## Enjoying Beans in Meals

Beans are good team players as well as good solo performers when served as sources of protein.

Beans “play well” with meats and poultry. Check out the recipes included in the recipe section of this *Dry Bean Quarterly* newsletter for “Mexican Skillet Rice” (made with either ground beef or ground turkey and pinto beans) and a kicked-up pork and beans recipe (made with pork chops and black beans). Also, beans may be the main ingredient in a variety of baked dishes, soups, and salads, such as in the recipe for “Three Bean Baked Beans.” (See page 4 of this issue of DBQ for this recipe.)

## The Bottom Line

Whether food prices are high or low, keeping some canned dry beans or packages of dry beans on pantry shelves makes good sense for your pocketbook, your health, and your taste buds. 

## References

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6. USDA. What Counts as an Ounce Equivalent in the Protein Foods Group? Retrieved November 4, 2011, from <http://www.choosemyplate.gov/food-groups/protein-foods-counts.html>

## About the Author

Alice Henneman, MS, RD, an educator with University of Nebraska–Lincoln Extension, has spent her career helping people develop healthier and more economical eating habits. Most recently, she helped develop, coordinate, and is the main contributor to the food.unl.edu Web site, which receives close to 1.5 million hits annually.

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## Smart Choice Recipe #1

Recipe courtesy of National Pork Board. For more information about pork, visit [PorkBeInspired.com](http://PorkBeInspired.com)

### Mexicali Pork Chops with Black Beans

For a way different type of pork and beans, I enjoy this recipe. It's easy to make and tastes great. You can leave the cilantro out or substitute parsley, if you like. ~Alice Henneman

#### Ingredients

- 4 boneless pork chops, ¾-inch thick
- 1 (15-ounce) can black beans, rinsed and drained
- 1 cup salsa, or picante sauce
- 1 (4-ounce) can chopped green chiles, undrained
- 1 tablespoon cilantro, chopped
- 2 teaspoons chili powder
- ¼ teaspoon pepper
- Vegetable oil
- Sour cream (optional)

#### Preparation

In a medium bowl combine black beans, salsa, chiles, cilantro, chili powder and pepper. Set aside. Heat a large skillet over medium-high heat. Brush chops lightly with oil and brown 1–2 minutes on each side; remove chops. Add bean mixture to skillet; bring to boiling. Return chops to skillet; cover tightly and cook over low heat for 5–6 minutes or until internal temperature on a thermometer reads 145 degrees F., followed by a 3-minute rest time. Serve chops with bean mixture, and with sour cream, if desired.

**YIELD:** 4 servings **SERVING SIZE:** 1 pork chop, plus ½ cup of black bean mixture

**NUTRIENT INFORMATION PER SERVING:** Calories: 285; Protein: 30g; Fat: 10g; Sodium: 520mg; Cholesterol: 55mg; Saturated Fat: 2g; Carbohydrates: 24g; Fiber: 9g



Photo by Alice Henneman, MS, RD

## Smart Choice Recipe #2

Recipe and photo courtesy of the USA Rice Federation at [www.usarice.com](http://www.usarice.com)

### Mexican Skillet Rice (with beef or turkey and beans)

This recipe smells so wonderful when it is cooking and tastes just as good! If you make it in an iron skillet, it is very attractive served right from the pan on a buffet. And stays warm longer too!

*Note:* you can substitute parsley for cilantro as a garnish, if desired. ~Alice Henneman

#### Ingredients

- 1 pound lean ground beef or turkey
- 1 medium onion, chopped
- 2 tablespoons chili powder
- 1 teaspoon ground cumin
- ½ teaspoon salt
- 3 cups cooked brown rice
- 1 (16-ounce) can pinto beans, drained
- 2 (4-ounce) cans diced green chiles
- 1 tomato, seeded and chopped (optional)
- Shredded cheddar cheese (optional)
- Fresh cilantro for garnish (optional)

#### Preparation

In large skillet over medium-high heat, cook meat until brown, stirring to crumble; drain fat. Add onion, chili powder, cumin, and salt; cook until onion is tender. Stir in rice, beans, and chiles; cook until heated through. Top with tomato, cheese, and cilantro if desired.

**YIELD:** 8 servings **SERVING SIZE:** 1 cup

**NUTRIENT INFORMATION PER SERVING:** Calories: 301; Total Fat: 10g; Cholesterol: 65mg; Sodium: 436mg; Total Carbohydrate: 39g; Fiber: 6g; Protein: 22g





## Smart Choice Recipe #3

### Three Bean Baked Beans

Using three types of beans adds color and flavor to this baked bean dish.

#### Ingredients

- |  |  |
|--|--|
| 1 cup chopped sweet onion  | 1 tablespoon prepared mustard                              |
| 2 cloves garlic, finely chopped  | ¼ teaspoon ground black pepper                             |
| 2 tablespoons olive oil  | 2 (15-ounce) cans Great Northern beans, drained and rinsed |
| 1 can (14 ½-ounce) diced tomatoes (do not drain)   | 1 (15-ounce) can black beans, drained and rinsed           |
| 2 cans (4 ounces each) tomato sauce  | 1 (15-ounce) can kidney beans, drained and rinsed.         |
| ¼ cup firmly packed brown sugar (increase the amount of sugar to ½ cup for a sweeter recipe) | 1 bay leaf   |
| ¼ cup molasses   |  |

#### PREPARATION

1. Preheat oven to 350 degrees F.
2. Heat olive oil in a skillet over medium heat. Add onions and cook until tender, about 5 minutes. Watch and stir occasionally.
3. Add garlic to onions and cook until golden brown, about 30 seconds to 1 minute, stirring occasionally.
4. In a large bowl, mix together the diced tomatoes, tomato sauce, brown sugar, molasses, mustard, and black pepper.
5. Mix in beans and bay leaf.
6. Bake in a covered 3-quart baking dish for 60 to 70 minutes or until beans are heated throughout. A food thermometer inserted near the center of the beans should read 165 degrees F. Stir occasionally (about once every 20 minutes). Add a small amount of water if necessary. After this time, remove the cover and bake an additional 30 minutes.
7. Remove the bay leaf and serve.

*Recipe courtesy of Alice Henneman, MS, RD*



*Photo by Alice Henneman, MS, RD*

For a change of pace, the next time you make your favorite baked bean recipe, substitute equal amounts of other dry beans for some of the beans you typically use. This colorful 1/2 cup serving of Three Bean Baked Beans includes Great Northern beans, kidney beans, and black beans.

**YIELD:** 10 servings    **SERVING SIZE:** ¾ cup

**NUTRIENT INFORMATION PER SERVING:**

Calories: 258; Fat: 4g; Protein: 12g; Cholesterol: 0mg

More recipes available at  
[www.beaninstitute.com](http://www.beaninstitute.com)

