



Beans—Powerful Nutrition for a Gluten-Free Diet

© Carol Fenster, Ph.D.—author of *Gluten-Free 101*, www.savorypalate.com

When it comes to key nutrients and fiber, beans are real winners. Beans can be especially important in gluten-free diets because wheat-based products—like bread, pasta, baked goods, and cereals—must be avoided on a gluten-free diet, even though they contribute a large portion of the nutrients and fiber in the typical American diet.



What is Gluten?

Gluten is a protein found in wheat and wheat-related grains including barley, rye, spelt, kamut, and triticale. According to the National Institutes of Health (NIH), one in every 100 Americans has celiac disease, an autoimmune condition in which gluten inhibits the body's ability to absorb nutrients from food. The only treatment is a lifelong, gluten-free diet. In addition, people with allergies or intolerances to gluten must also avoid this naturally occurring ingredient.

Benefits of Beans in a Gluten-Free Diet

Beans are important for people on a gluten-free diet because they can't rely on whole grain sources of wheat, barley, rye, or spelt to meet their recommended intake of 25-38 grams of fiber per day.

Did You Know?

The U.S. Dietary Guidelines recommend adults consume 3 cups of beans per week. That's about one serving per day.

According to the Beans for Health Alliance, beans are a good choice because they are:

- **Nutritious.** A low-fat fiber-rich source of carbohydrates and B vitamins
- **Inexpensive.** Cost just pennies a serving
- **Widely available.** Available at any food store
- **Tasty.** Add flavor, texture and complement other foods

Nutrient Comparison of Bean Flours to White Rice Flour (Per ¼ cup)

	Garbanzo/Fava Bean*	White Bean*	Pinto Bean**	Navy Bean**	White Rice***
Protein (g)	6	7	7	7	2
Fiber (g)	6	8	6	6	1
Iron (mg)	1.8	2.7	2.7	2.7	0.2

Source: *Bob's Red Mill **Heartland Ingredients *** USDA

Easy Ways to Add Beans to a Gluten-Free Diet

Whole beans:

- Make hummus by mashing whole garbanzo beans (chick peas); add herbs and spices.
- Make soup from navy, black, or cannellini beans.
- Top rice pilaf with whole garbanzo beans.
- Add black beans or pinto beans to Southwestern dishes and salsas.
- Toss black beans or pinto beans into Southwestern salads.
- Dress cannellini beans with basil pesto, capers, and sliced green onions for a salad.
- Extend meat dishes like hamburger patties and meatloaf with mashed beans.
- Boost nutritional content of brownies, cakes, and cookies with mashed beans.

Bean flour:

- Bake with flours from these beans: navy, garbanzo, white, or fava (see back page)
- Try bean pasta made with bean flours
- Use ready-made bean flour blends

Baking with Bean Flours

Compared to the rice flour typically used in gluten-free baking, bean flours' higher protein and beneficial carbohydrates make delicious baked goods such as cakes, cookies, and breads. Bean flour performs especially well when mixed with other flours, as in the following versatile flour blend.

Carol's Gluten-Free Flour Blend

Adapted with permission from *Gluten-Free 101: Easy, Basic Dishes without Wheat* by Carol Fenster, PhD (Savory Palate, 2004).

Store this flour blend in an airtight container in a dark, dry place.

1 ½ cups sorghum flour
1 ½ cups potato starch or cornstarch
1 cup tapioca flour
½ cup white bean flour, garbanzo/fava bean flour, or navy bean flour*

Makes 4 ½ cups. Store in dark, dry place.

**From Authentic Foods, Bob's Red Mill, or Heartland Ingredients*

Carol's Gluten-Free Bean Flour Pizza Crust

Adapted with permission from *Gluten-Free 101: Easy, Basic Dishes without Wheat* by Carol Fenster, PhD (Savory Palate, 2004).

This pizza recipe showcases the wonderful flavor, texture, and appeal of bean flour.

1 Tbsp. dry yeast
¾ cup warm milk (110°F)
½ tsp. sugar
⅔ cup garbanzo/fava bean flour
½ cup tapioca flour
1 Tbsp. olive oil
2 tsp. xanthan gum
1 tsp. unflavored gelatin powder
1 tsp. Italian seasoning
1 tsp. cider vinegar
½ tsp. salt



1. Preheat oven to 425°F. Dissolve yeast and sugar in warm milk for five minutes. In food processor, blend all ingredients, including yeast mixture, until ball forms. Dough will be soft.
2. Put mixture into greased 12-inch nonstick pizza pan. Liberally sprinkle white rice flour onto dough; then press dough to the edge of the pan with your hands, continuing to sprinkle dough with flour to prevent sticking. Make edges thicker to contain toppings.
3. Bake crust 10 minutes. Remove from oven. Add your favorite sauce and toppings to crust. Bake another 20-25 minutes or until top is nicely browned. Serves 6, 1 slice each.

Where can bean flours be purchased?

Find bean flours at any natural food store, some traditional grocery stores, and online at gluten-free vendors such as www.glutensolutions.com, www.glutenfreemall.com, www.glutenfreepantry.com. Manufacturers of bean flours and bean-based foods and mixes include Authentic Foods (www.authenticfoods.com), Bob's Red Mill (www.bobsredmill.com), Ener-G Foods (www.ener-g.com), and Heartland Ingredients (www.heartlandsfinest.com).

Want more ideas on using beans in the gluten-free diet?

Gluten-Free 101 by Carol Fenster, PhD (Savory Palate, 2004)

Wheat-Free Recipes & Menus by Carol Fenster, PhD (Avery, Penguin Group, 2004)

Cooking Free by Carol Fenster, PhD (Avery, Penguin Group, 2005)

Gluten-Free Diet by Shelley Case, RD (Case Nutrition Consulting, 2005)

For more information on the many health benefits of beans, go to www.beansforhealth.com.