


Welcome class, introduce self.


Today we will be learning about beans and playing a bingo game.

Beans are convenient, versatile and inexpensive. They add nutrition to almost any dish.

Does anyone know how many bean varieties are available worldwide? (more than 13,000)

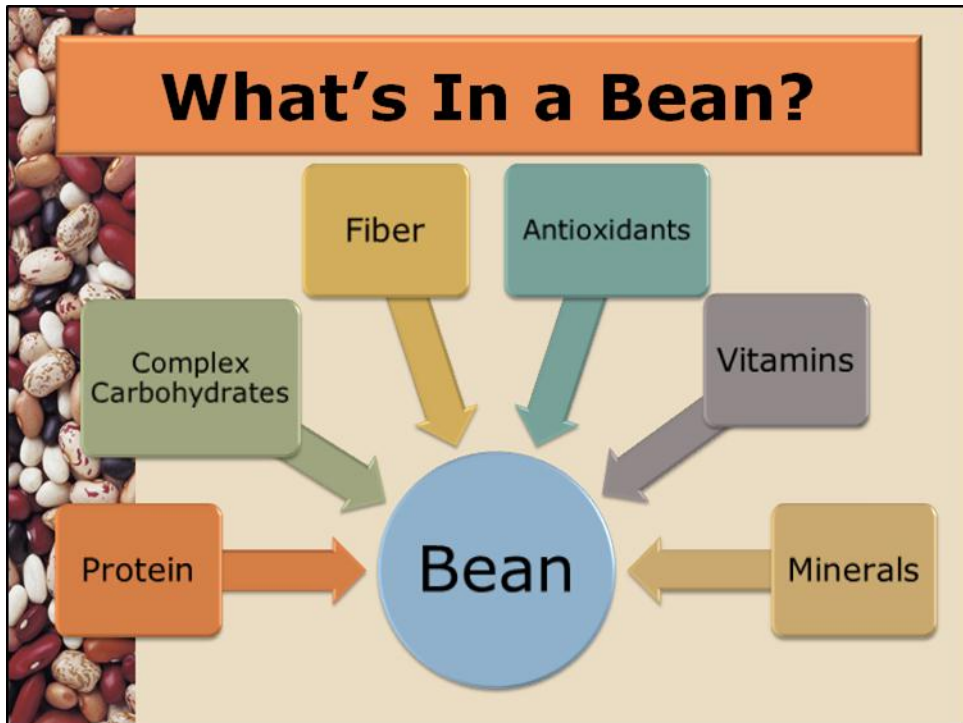


Quick Facts



- Member of the legume family
- Midwest region is the largest producer of dry beans in the U.S.
- Provide a wide range of health benefits

- Beans are members of the legume family along with lentils, split peas, soybeans and peanuts. A legume is a plant whose seeds split when fully ripened.
- There are more than 13,000 known bean varieties worldwide.
- The upper Midwest is the largest producer of dry beans in the United States with North Dakota leading the way as the one of the leading producers.
- Beans are packed with nutrients, including vitamins and minerals that provide a wide range of health benefits.
- *Name That Bean! activity



- Beans are composed of protein, complex carbohydrates, fiber, antioxidants and important vitamins such as folate, and minerals such as manganese, potassium, iron, phosphorus, copper and magnesium. All of these nutrients play important roles in keeping us healthy.

- Beans are generally low in fat and cholesterol-free, making them a great addition to any diet.

How much fiber is in $\frac{1}{2}$ cup of cooked beans?

4
grams

6
grams

8
grams

Let's test your knowledge. How much fiber is in $\frac{1}{2}$ cup of cooked beans?

On average $\frac{1}{2}$ cup cooked beans contains 8 grams of fiber. The current fiber recommendation for adults is 25-30 grams per day so this is about 32% of the daily recommendation.

Bean variety per 1/2 cup, cooked	Calories	Fat (g)	Protein (g)	Carbs (g)	Fiber (g)	Iron (mg)	Pot (mg)	Sodium (mg)	Folate (mcg)
Black	114	0.5	8	21	8	2	306	1	128
Great Northern	104	0.4	7	19	6	2	346	2	90
Dark Red Kidney	109	0.2	8	19	8	2	335	4	65
Navy	127	0.6	8	24	9	2	354	0	127
Pinto	123	0.5	8	22	8	2	373	1	147
Data courtesy of the U.S. Department of Agriculture National Nutrient Database for Standard Reference									

This chart shows the nutrient breakdown of some common bean varieties.

Data is courtesy of the U.S. Department of Agriculture National Nutrient Database for Standard Reference.

Other bean varieties include the cranberry bean, pink bean and the small red bean.

MyPlate Recommendations

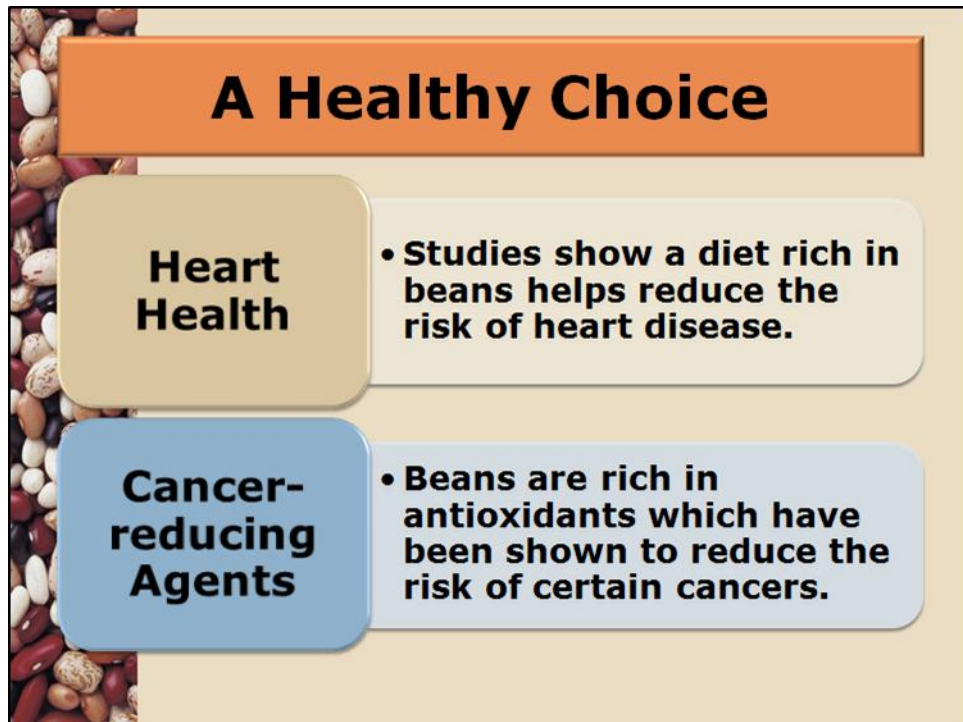


**1 cup cooked beans
=
1 cup vegetables**



**1/4 cup cooked
beans =
1 ounce equivalent**

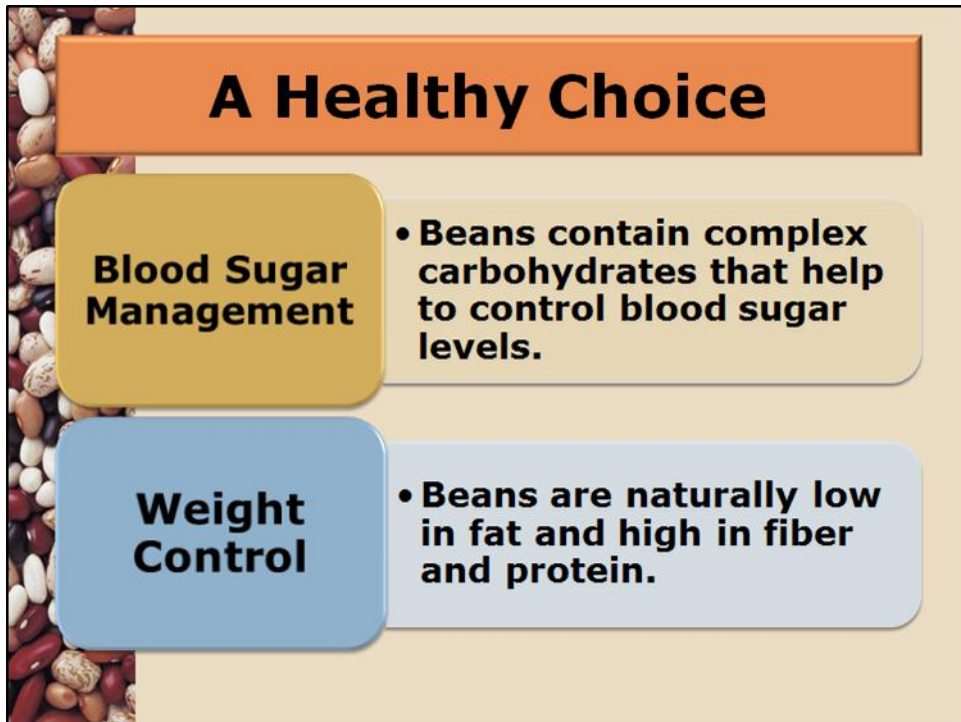
- MyPlate classifies beans under two groups: the Vegetable Group and the Protein Foods Group. Generally those that are meat eaters count beans toward the vegetable group and those such as vegetarians count them toward their protein total because they are a great source of protein.
- Serving sizes for each group are measured differently. The Vegetable Group is measured in cups, and the Protein Group is measured in ounce equivalents.
- Recommendation for each group vary from individual to individual so visit www.choosemyplate.gov to learn more about what's right for you.



Now we will briefly discuss the health benefits that beans bring to the table.

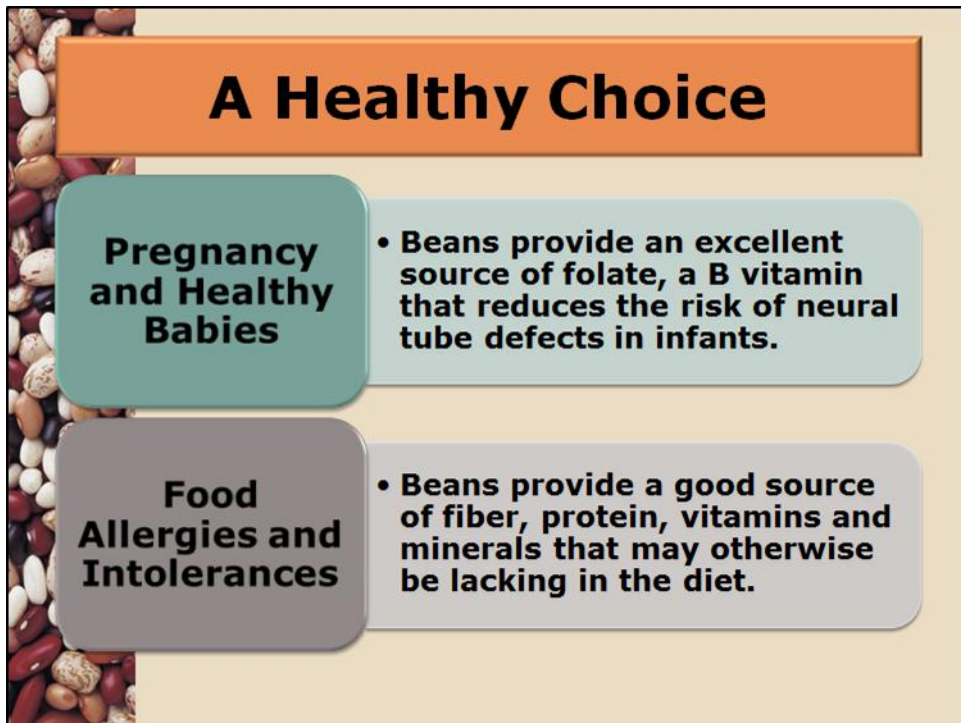
- Beans added to the diet can reduce your risk for heart disease because they are naturally low in fat, contain no trans fat and saturated fat (the bad fats), and are cholesterol-free.

- Beans are packed with antioxidants and phytochemicals (natural plant chemicals) which have been shown to reduce the risk of certain cancers such as colon cancer. Did you know that the small red bean is one of the most antioxidant-rich foods on the planet?



•Beans contain complex carbohydrates which are digested slowly by the body. This helps to control blood sugar levels which is especially important for individuals with diabetes.

•Beans are a great source of lean protein and fiber. Fiber helps the stomach to feel full faster and longer and the protein is important for building muscle mass. This makes beans an excellent choice for people who want to watch their weight or lose weight.



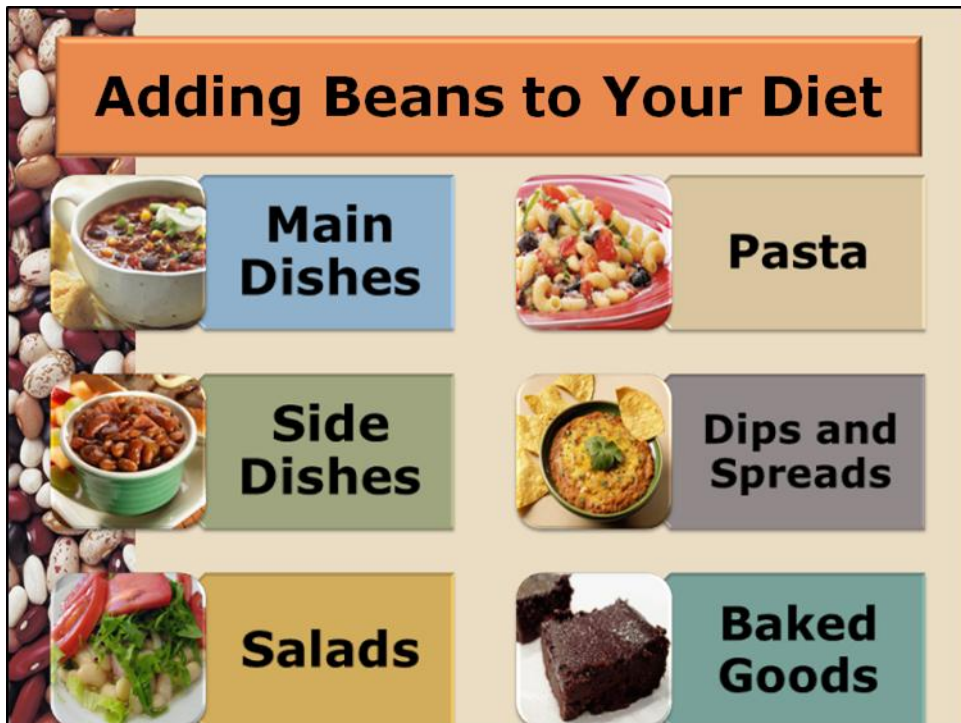
- Folate is a B Vitamin found in beans. Folate is the naturally occurring form of folic acid, a vitamin shown to significantly reduce risk of neural tube defects in infants.

- Can anyone tell me the daily recommended amount of folic acid?

- Pregnant women and women of child-bearing age should take 400 micrograms of folic acid each day.

- ½ cup serving of pinto beans has 147 micrograms of folate.

- Individuals with food allergies and intolerances such as those with celiac disease have a difficult time obtaining important nutrients needed each day. Beans provide a great source of fiber, protein, vitamins and minerals in the diet, which might otherwise be missing.



You can add beans to your diet in several ways. Experiment with adding different beans to your favorite dishes to find the best flavor. Remember to drink extra fluids to compensate for the added fiber intake.




Dry beans require soaking in water. The soaking rehydrates the beans and allows for even cooking. There are two different methods, the hot soak and the quick soak method

Preferred Hot Soak Method: Add 10 cups of cold water to a pot for each pound (2 cups) of beans you plan to cook. Bring the water to a boil and boil for one to three minutes. Cover the pot. Let stand. A four-hour soak is ideal. Finally, drain and rinse the soaked beans. Add fresh, cold water to fully cover beans.

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

If you do not have time to soak the dry beans, canned beans can be substituted. Be sure however to drain and rinse them to remove any unwanted sodium added during processing.

Cooking Tips



- Consider what type of dish is being made
- Take into account time constraints
- Do not add acidic ingredients until the very end

- Get to know your beans. They all have distinct flavors which if used correctly will enhance your dish.
- Be sure to take into account any time constraints for your meal. If there is not enough time to soak beans, substitute canned or frozen beans to speed up the process.
- Do not add acidic ingredients such as vinegar or tomatoes to the dish until the very end. Adding these too early can slow down the cooking process considerably.
- Beans are done cooking when they can be easily mashed with a fork.

Questions

