



The Hearth Fire Series #81

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SPILLING THE BEANS ON BEANS!

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SPILLING THE BEANS ON BEANS!

BEANS, BEANS THE MUSICAL, MAGICAL, MEDICINAL FOOD

Just a reminder, this is considered a nursery rhyme and a playground ditty.

"Beans, Beans, The Musical Fruit" is a playground saying and children's song about the capacity for beans to contribute to flatulence. The basis of the song (and bean/fart humor in general) is the high amount of oligosaccharides present in beans. Bacteria in the large intestine digest these sugars, producing carbon dioxide, hydrogen, and methane. These gases are expelled from the body as flatulence. [Wikipedia](#)

The magic and medicinal quality of beans is the extraordinary value of beans to a healthy diet and food sustainability.

BEANS BY ANOTHER NAME

Legume, Pulse and Pod

Legume is the umbrella name for Beans, Peas, Lentils, Pulse, and Pod. Pulses include beans, lentils, and peas. For example, a pea pod is a legume, but the pea inside the pod is a pulse. A bean is a seed of the Fabaceae family.

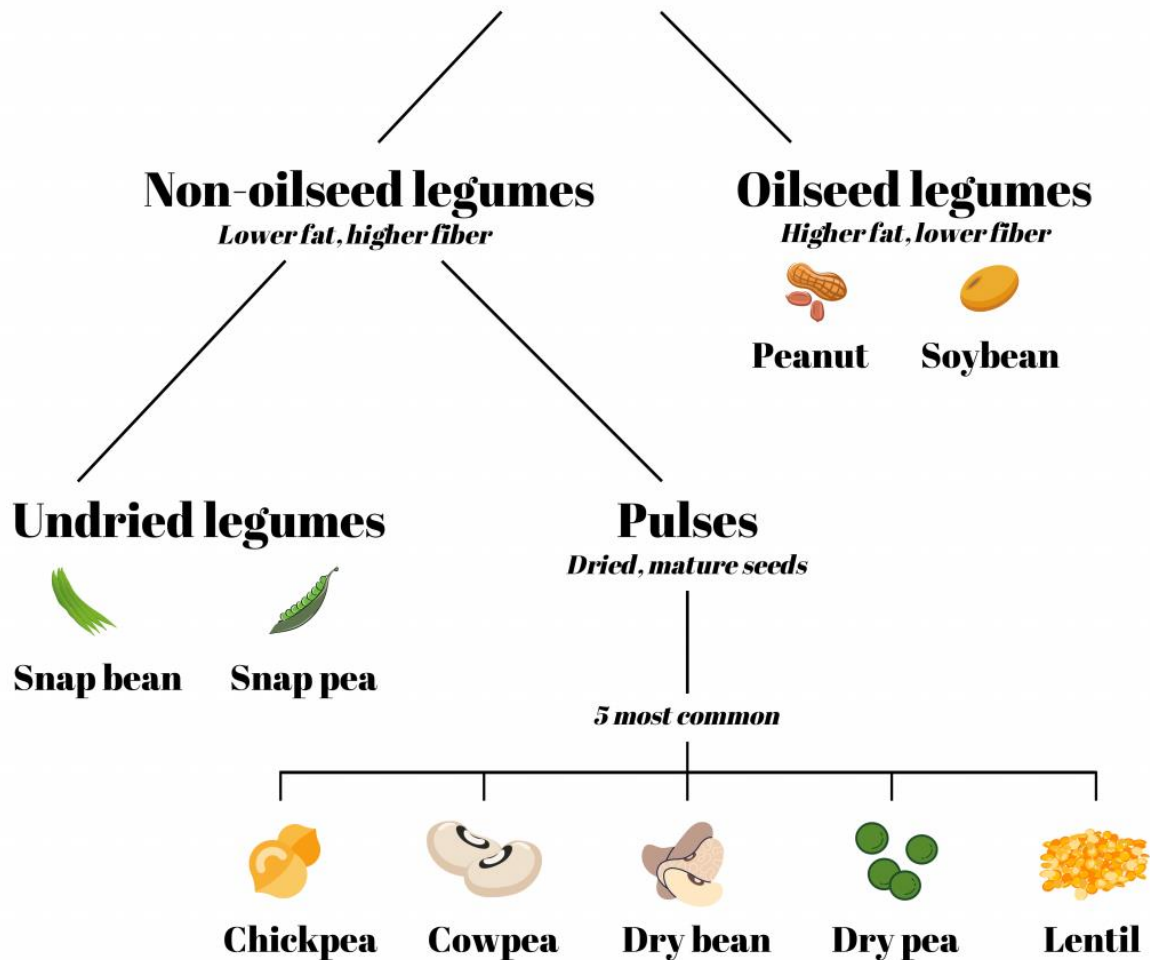
According to Bean Trust, it is estimated there are more than 40,000 varieties of common beans in the world, while there are about 400 different types of dried beans. Many bean varieties never reach the market because they are consumed where they are grown. What these legumes are called depends on what country or what part of the world they are eaten.

- The British Mange Out is translated to mean a type of garden pea picked very young, so young that the pod is still flat, and the peas have barely developed.
- In US English, it is known as snow pea or sugar pea. A sugar snap pea is more fully developed and rounder, but the pod can still be eaten.
- Lima beans are sometimes called butter beans, especially in the south and the United Kingdom.
- Peanuts are considered a legume because they come in a pod also known as a Ground Nuts, hog peanut, or potato bean and was used by Indigenous peoples.
- Most of the peanut consumption in the United States occurs in the form of peanut butter although a substantial portion of the crop is used for hog feed.
- Then there are Oilseed Legume – Soybean and Peanut.

Coffee beans, Cocoa Beans, Vanilla Beans. Jumping Beans and Jellybeans, Human Beings are Not Legumes.

BEANS BY ANOTHER NAME

9 Major Legumes



According to Mayo Clinic – Bean, Peas and Lentils are all legumes and are among the most versatile and nutritious foods available. Legumes are typically low in fat and high in fiber, folate, potassium, iron, and magnesium. Beans and other legumes can be a healthy substitute for meat, which has more fat and cholesterol.

IT CAN BE CONFUSING -

Pulse, Pod, Runner bean, French bean, Green beans, Wax beans, String beans, Soybean, Mung bean, Kidney bean, Fava bean, Black bean, Lima bean, Lupin, Broad beans, Mange-Out (Sugar Snap Peas) plus hundreds or thousands of other beans.

Green Bean / Runner Beans, String Bean/ Snap Beans/ Pole Beans/ Bush Beans. What is the difference between green beans, runner beans, etc.? the answer is simple. They come from different species of plants. **(Runner beans (*phaseolus coccineus*) and green beans (*phaseolus vulgaris*) are completely different plants)**. But if you ask the difference between green beans, bobby beans, French beans, haricot verts, Kenyan beans... not to mention purple green and yellow green bean all becomes a bit more complicated. Those are all types of green beans. In this presentation we will **NOT** go into the details or depth of the Latin Description, Kingdom, Class, Genus, Species etc.

HISTORY OF BEANS

Early History or Old-World History

It has been discovered that cultivated beans have been found in the tombs of ancient Greeks and Egyptians. Legumes were found in what is now northern Israel and carbon-dated to about 10,000 years ago. Favas were a major staple of the Mediterranean diet and widely grown, even before grains. An ancient crop of other Legumes were Chickpeas and Lentils were commonly grown. Through travel and trade, these legumes gradually spread into India, northern Africa, Spain, and the rest of Europe.

New World History or Common Bean

The common bean is native to the Americas, where it was a staple of the Indigenous people of Mesoamerica and the Andes. This vining plant with twisted pods and small seeds is the mother of all modern beans — snap beans, soup beans, dry beans, and shell beans - can still be found growing wild in parts of Mexico.

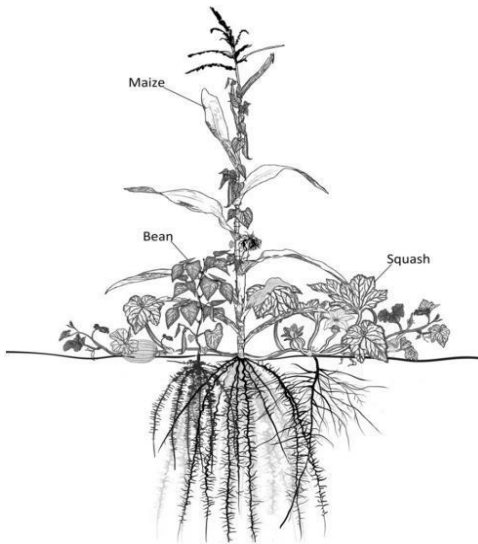
The oldest cultivar of the common bean was found in Peru and dated to about 8,000 years ago. Three other types of beans have also been domesticated: Lima beans domesticated near Lima, Peru about 5,300 years ago; runner beans in Mexico 2,200 years ago; and tepary beans. According to Native Seeds/SEARCH, the tepary bean has been cultivated for about 5,000 years in the Sonoran Desert of northwestern Mexico and the southwestern United States.



Areas of common bean domestication

1. Mesoamerican
2. Andine Area Wikipedia

Native American developed something call the Three Sisters or the Trinity. Bean being the second sister between squash and corn. These Sisters contained complex carbohydrates, essential fatty acids, and all three amino acids needed for good health. (Division of Agriculture University of Arkansas).



The Three Sisters also benefited each other. Beans contributed nitrogen to the soil and the corn stalk was used as a pole for the beans to climb. Squash would shade the ground, preserving moisture and inhibiting weeds. USDA.

THE MAGICAL BEAN

BENEFITS AND CAUTION:

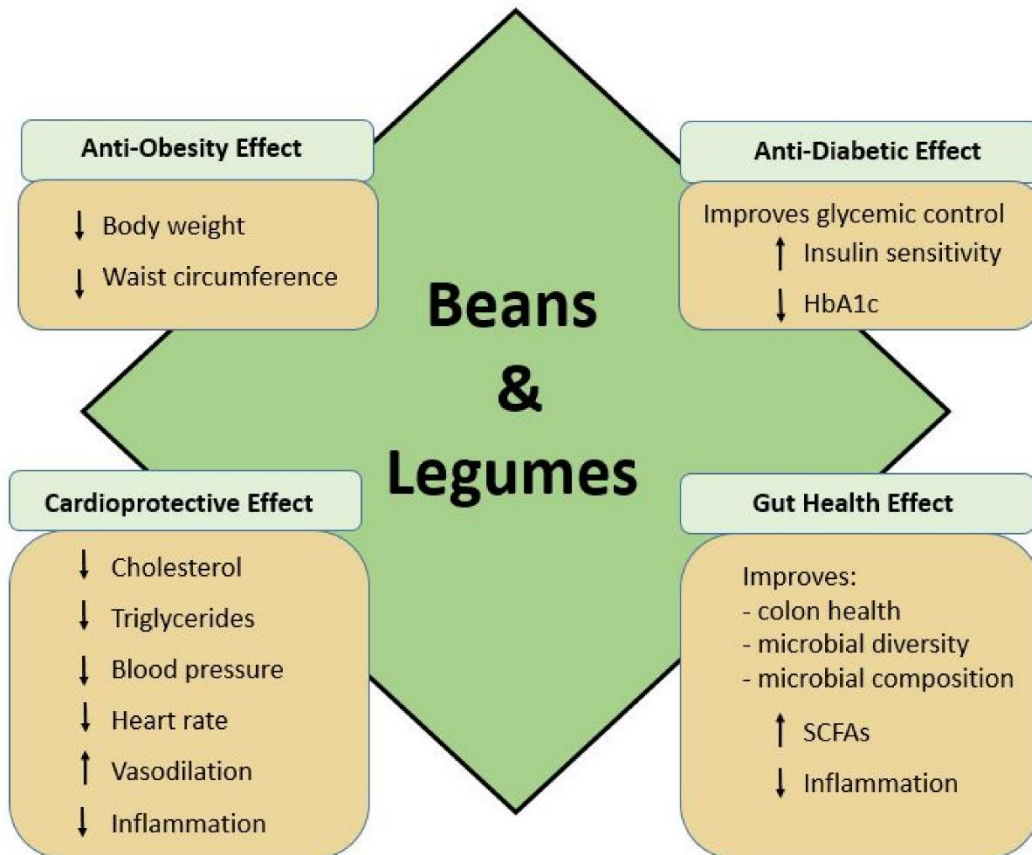
Benefits of Beans (Legumes)

- Beans are considered a whole food. Nutritional – Contains Antioxidants – Affordable.
- Beans combined with grain becomes a complete food. (contains all the necessary nutrients).
- Good for the planet – Low Carbon Footprint -- Drought Resistant.
- Converts nitrogen from the air into a usable form back into the soil.

Cautions of Beans

- Uncooked beans are toxic. The beans from a can have been fully cooked. It is recommended dry beans be boiled for 30 minutes at a temperature of 212 degrees. Since slow cookers do not reach that temperature, it is recommended to soak beans overnight and boil them for 30 minutes.
- Some individuals are allergic to beans. It is well known that allergies to peanuts is a big concern. Since peanuts are legumes, it makes sense that other legumes may cause an issue.

THE MEDICINAL BEAN



BEANS ARE GOOD FOR YOU: Full of Fiber, Protein, Antioxidants, Minerals, Vitamins.

PEANUTS

- Native to eastern North America, this legume species is a perennial vine that produces both edible beans and large edible tubers. Native people used the uncooked seeds of groundnut as a substitute for pinto beans in bread. Seeds and roots were also ground into flour. Roots and tubers were also an extremely important food source.
- This South American native is a famous legume more often thought to be a true nut. Domestication occurred in Bolivia and Argentina. The Portuguese took the peanut or ground pea, as it is called in other parts of the world, to Africa where it is a major dietary item today.
- Peanut Butter - In 1895 peanut butter was first patented by John Harvey Kellogg, the cereal maker. Processed Peanut Butter first appeared at 1904 World's Fair in St. Louis. George Washington Carver known as the Plant Doctor made over 300 products from peanuts. But before 1895, the Inca's were grounding up peanuts into a paste and in 1884, the first actual patent was by a Canadian, Marcellus Gilmore Edison but he never produced or sold peanut butter.

Fun Facts

- According to Genesis 25, Jacob cooked up a pot of Lentil Stew which was so delicious Esau was willing to give up his birthright to Jacob.
- Benjamin Franklin wrote a book titled Fart Proudly.
- Henry Ford built a car from soybeans, mainly to help struggling farms. It was never manufactured.
- Broad beans have been in cultivation for 6,000 years in the Americas.
- There are over 4,000 cultivars of beans in the U.S. alone.
- Christopher Columbus observed Native Americans cultivating beans in the "three sisters' method" or "companion planting method":
 - Tribes would grow beans, corn, and squash together.
 - Corn was planted in a checkerboard pattern not in rows like today; beans were planted at the base of the corn stalk.
 - Corn stalks would serve as trellises for the beans and in turn the beans would fertilize the soil.
 - Squash was planted in the spaces between the corn plants and thus protected from the sun.
 - Animals were also deterred from eating the squash due to the dense corn and beans.

Hearth Fire Lesson

AGENDA

***TITLE:* SPILLING THE BEANS ON BEANS**

OPENING BLURB: BEANS – BEANS: THE MUSICAL AND/OR MAGICAL
AND /OR MEDICINAL FOOD!

OUTLINE:

1 minute **INTRODUCTION:**

Linda Hanberry, Program Coordinator
Peggy Martens, VP for Program

5 minutes **BONDING ACTIVITY: “SO NAME THOSE BEANS”**

Distribute a blank sheet of paper
Ask audience to fold it in half and then say:
“List every bean you can think of”

30 minutes **LESSON:**

The Musical Bean

Beans by Another Name

Continue the bonding exercise by asking audience
to name those beans that are not legumes. (use
about 5 minutes for this)

The History of Beans

The Magical Bean

The Medicinal Bean

Fun Facts

7 minutes **Quiz - Handout #1:**

Allow three minutes to answer the questions.
Go over the answers (answer sheet is in booklet)

13 minutes **Closing:**

Distribute handouts #3, 4, and 5
Finish up the time with sharing favorite or unusual uses for
beans

QUIZ - SPILLING THE BEANS

1. WHICH STATE IS THE LARGEST PRODUCER OF BEANS?
2. HOW LONG CAN DRIED BEANS LAST IF STORED PROPERLY IN A COOL, DRY, DARK PLACE?
3. WHICH BEAN IS ASSOCIATED WITH THE MOVIE, SILENCE OF THE LAMB?
4. HOW DO BEANS IMPROVE THE FERTILITY OF THE SOIL?
5. WHAT IS THE KEY INGREDIENT IN THE MIDDLE EAST DISH HUMMUS?
6. WHY SHOULD KIDNEY BEANS NEVER BE EATEN RAW?
7. WHICH DISH IS TRADITIONALLY EATEN ON NEW YEARS DAY IN THE SOUTH FOR GOOD LUCK?

SPILLING THE BEANS – quiz answers

1. WHICH STATE IS THE LARGEST PRODUCER OF BEANS?

North Dakota

2. HOW LONG CAN DRIED BEANS LAST IF STORED PROPERLY IN A COOL, DRY, DARK PLACE?

2-3 years

3. WHICH BEAN IS ASSOCIATED WITH THE MOVIE, SILENCE OF THE LAMB?

Fava Bean

4. HOW DO BEANS IMPROVE THE FERTILITY OF THE SOIL?

Bacteria in beans help to fix nitrogen in the soil.

5. WHAT IS THE KEY INGREDIENT IN THE MIDDLE EAST DISH HUMMUS?

Chickpeas

6. WHY SHOULD KIDNEY BEANS NEVER BE EATEN RAW?

They contain a naturally occurring toxin called Lectin.

7. WHICH DISH IS TRADITIONALLY EATEN ON NEW YEARS DAY IN THE SOUTH FOR GOOD LUCK?

Blackeye peas



Top 10 Beans and Legumes Highest in Protein

50g of Protein = 100% of the Daily Value (%DV)

1 Boiled Soybeans (Edamame)



63% DV (31.3g)
per cup

296 calories

2 Lentils



36% DV (17.9g)
per cup

230 calories

3 Large White Beans



35% DV (17.4g)
per cup

249 calories

4 Cranberry (Borlotti) Beans



33% DV (16.5g)
per cup

241 calories

5 Split Peas



33% DV (16.3g)
per cup

231 calories

6 Pinto Beans



31% DV (15.4g)
per cup

245 calories

7 Kidney Beans



31% DV (15.3g)
per cup

225 calories

8 Black Beans (Frijoles Negros)



30% DV (15.2g)
per cup

227 calories

9 Navy (Haricot) Beans



30% DV (15g)
per cup

255 calories

10 Lima (Butter) Beans



29% DV (14.7g)
per cup

216 calories

Beans And Turnip Green Soup

- 1 large can of seasoned turnips
- 1 can of Navy Beans
- 1 can of Red Kidney Beans
- 1 can of Blackeye Peas (all beans rinsed)
- 1 can of Rotel Tomatoes
- 1 large chopped onion
- 1 pound of sausage, sauteed
- 2 cans chicken broth

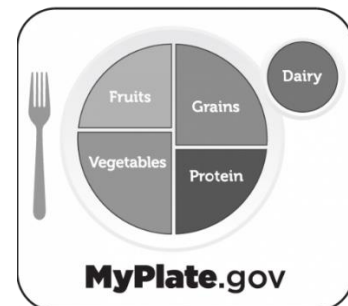
Cook for 5 hours in Slow Cooker on high or on stove top for 1 hour.

White Bean Chicken Chili

- 1 ¼ lbs. boneless, skinned Chicken Breast (2-3 chicken breast)
- 4 cups Chicken Stock
- 2 cans (15 oz) Cannellini Beans drained and rinsed
- 2 cans (4.5 oz) Green Chili
- 1 onion chopped finely
- 3 garlic minced
- 2 teaspoon ground cumin
- 1 teaspoon dried oregano
- 1/2 teaspoon salt
- 1/4 teaspoon Cayenne Pepper

In Insta Pot cook 30 min

- Have your soup with a sandwich. Add grains to complete your meal (or your Plate) by making a sandwich. Mash either cooked pinto beans, using broth to make smooth, or you can use black beans; spoon onto warm tortilla (flour is best) add grated cheddar/jack cheese, (options are salsa, cilantro, onion), turn bottom up just a small portion, and then roll (burrito). Or if you can't do gluten, use a warm corn tortilla, and top with lettuce and chopped tomato, you can add other toppings as desired (tostada).
- Add Dairy with a cheese sandwich or glass of milk.
- And Fruit
- NOW! - FOR DESSERT!





Black Bean Brownies

Serves: 16 – Serving Size: 1 square – Calories/Serving: 90

INGREDIENTS:

- 15 ounces Black Beans (canned) or (1 $\frac{3}{4}$ cups cooked and cooled)
- 3 Eggs
- 3 Tablespoons Canola Oil
- 1 teaspoon Vanilla Extract
- $\frac{1}{2}$ cup Brown Sugar (packed)
- $\frac{1}{3}$ cup Cocoa Powder
- $\frac{1}{2}$ cup Chocolate Chips (optional)
- $\frac{1}{2}$ cup Chopped Nuts (optional)

DIRECTIONS:

Preheat oven to 350 degrees. Coat a 9-inch baking pan with non-stick cooking spray.

Drain and rinse black beans.

Whisk together eggs, oil, and vanilla in a large bowl with a fork. Add beans and mash with fork until beans are barely visible (this can take 5 or more minutes of mashing). Stir in sugar and cocoa and blend with a rubber spatula until mixed. If using, stir in chocolate chips and/or nuts.

Pour batter into baking pan. Bake 25-30 minutes, until a knife inserted in the center of the Brownies, comes out clean. Let cool completely before cutting into 16 squares.

TIP: the beans might mash easier/faster if done separately and then add to egg mixture.

A potato masher might work better than a fork to mash the beans.

A food processor might work better to mash the beans.

Resources:

Mayo Clinic
Bean by Bean by Crescent Dragon Wagon
Wikipedia
The Bean Institute
Live Eat Learn
USDA
History of the Humble bean
My Food Data
Kansas State University – recipe
eatfresh.org



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