

INCREDIBLE EDIBLE IDAHO

IDAHO BEAN NUTRITION FACTS

- DRY BEANS CAN BE COUNTED IN THE VEGETABLE GROUP OR IN THE MEAT GROUP BECAUSE OF THEIR HIGH NUTRIENT CONTENT.
- DRY BEANS ARE EXCELLENT SOURCES OF PLANT PROTEIN, AND ALSO PROVIDE OTHER NUTRIENTS SUCH AS IRON AND ZINC.
- DRY BEANS ARE EXCELLENT SOURCES OF DIETARY FIBER AND NUTRIENTS SUCH AS FOLATE THAT ARE LOW IN DIETS OF MANY AMERICANS.
- BEANS ARE HIGH IN COMPLEX CARBOHYDRATES.
- ¼ CUP OF COOKED DRY BEANS COUNTS AS ONE OUNCE IN THE MEATS AND BEANS GROUP.

IDAHO BEAN FACTS

- 1** IDAHO PRODUCES OVER 160 MILLION POUNDS OF DRY BEANS A YEAR.
- 2** MOST OF IDAHO'S DRY BEAN PRODUCTION COMES FROM THE SOUTH CENTRAL REGION OF IDAHO.
- 3** IDAHO BEAN FARMERS GROW 6 MAJOR VARIETIES OF BEANS: PINTO, GARBANZO, NAVY, SMALL RED, GREAT NORTHERN, AND PINK BEANS.
- 4** IDAHO IS RANKED IN THE TOP 5 IN THE NATION IN DRY BEAN PRODUCTION, WITH A CROP VALUE OF OVER \$30 MILLION PER YEAR.



IDAHO BEAN ROLL-UPS

INGREDIENTS

- 1 can (approximately 14 oz. size) of Idaho beans (any kind)
- 1 teaspoon chili powder
- 2 T. chopped onions (optional)
- 1/2 cup shredded cheese
- 1 pkg. tortillas

PREPARATION

1. Smash beans.
2. Mix beans, chili powder, onion, and cheese until well blended.
3. Spread 1-2 tablespoons of mixture on a tortilla; covering the surface to the outer edges.
4. Roll up the tortilla.
5. Slice the rolled tortilla into 1 inch pieces.

Should make enough for a class of 20-24.

Bean Nutrition

Jack knows that beans can be an important part of school foodservice meals because they fit with current dietary guidelines and because of their versatility and varieties.

Beans provide a wealth of important nutrients for only a few calories, and with no cholesterol and almost no fat.

Protein. A ½ cup serving of beans provides about 7 grams of protein. This protein can be made complete with the addition of rice, grains (wheat, corn, etc.) or a

Complex carbohydrates. Beans are valued as an important, versatile and inexpensive source of complex carbohydrates. These carbohydrates digest more slowly than simple carbohydrates such as juices, candy and sweets, which means they provide energy and satisfaction longer.

Fiber. Beans provide mostly soluble fiber—the type which can help lower blood cholesterol levels and thus reduce heart attacks.

Beans contribution to school lunch requirement (Grades 4-12)

½ cup cooked beans =
1 meat alternative
OR
¾ cup cooked beans =
2 vegetable servings

small of amount of animal protein included in the same meal or other meals on the same day.

Nutrition Facts

Red Kidney Beans Serving size ½ cup

Amount per serving
Calories 108

Calories from fat 4.5

% Daily Value by age

	4-6	7-10	11-14
Calories	6%	6%	5%
Total Fat 0.5 g	1%	1%	1%
Saturated Fat 0.1 g	0%	0%	0%
Carbohydrates	8%	7%	5%
Cholesterol 0	0%	0%	0%
Sodium	0%	0%	0%
Protein 7.64g	35%	27%	17%
Dietary Fiber 6.89g	38%	35%	32%
Vitamin C	2%	2%	2%
Calcium	3%	3%	2%
Iron	26%	26%	17%
Folate 114.4mcg	153%	114%	76%
B6	10%	8%	8%
Thiamin	16%	14%	13%
Phosphorous	16%	16%	10%
Niacin	4%	4%	4%
Riboflavin	5%	4%	4%
Magnesium	33%	23%	14%
Potassium	23%	18%	12%
Selenium	6%	4%	3%

Source: ESHA

Canned/Cooked Dry Beans Quantities by Grade/Age

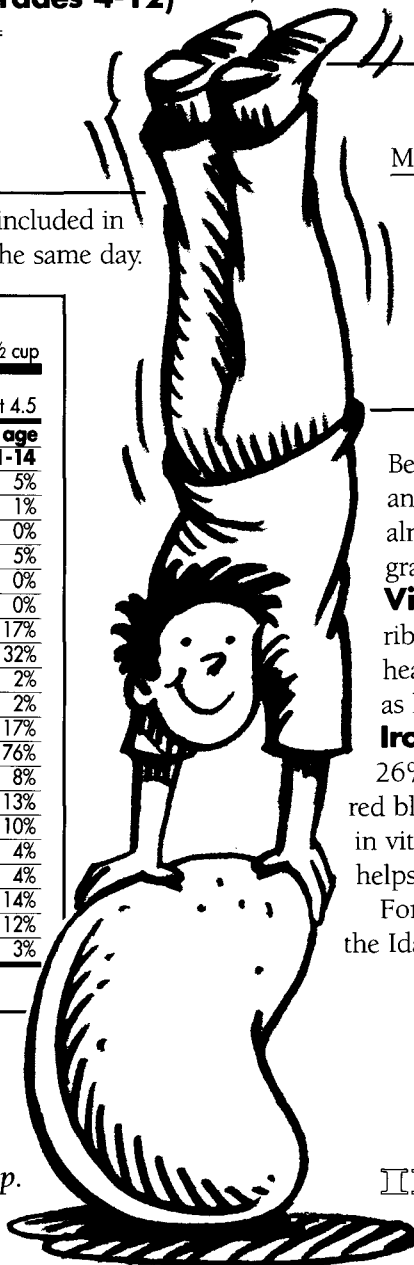
Minimum Quantities	Grades
¼ cup	Preschool (ages 1-2)
⅜ cup	Preschool (ages 3-4)
⅜ cup	Grades K-3
½ cup	Grades 4-12
Recommended Quantities	
¾ cup	Grades 7-12

Bean fiber can also help prevent colon cancer and strokes. One-half cup of beans provides almost 7 grams of fiber, a third of the 20 to 25 grams recommended for daily consumption.

Vitamins. The B-vitamin family (thiamin, riboflavin, B6 and B12) is important for a healthy digestive and nervous system as well as healthy skin, eyes and blood.

Iron. A ½ cup serving of beans adds 17% - 26% of iron, which is important for building red blood cells. Combining beans with a food high in vitamin C, such as tomatoes or citrus fruits, helps the body absorb the iron in the beans.

For more nutrition information, please write the Idaho Bean Commission at the address below.



Jack knows beans help you feel tip-top.

IDAHO *Bean Commission*

Idaho Bean Commission • P.O. Box 2556, Boise, ID 83707-2556 • (208) 334-3520

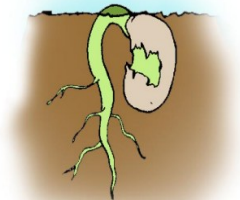
The Life Cycle of a Bean Plant

Beans are one of the easiest plants to grow and provide a great opportunity to see how seeds develop into seedlings and food-bearing plants. Follow these easy directions to grow your own bean plant.

Step One

Fill a small clear plastic cup about 2/3 full with potting soil. Place 2 bean seeds in the soil. Push bean seeds firmly into soil and cover with another inch of soil. Add enough water to moisten the soil, but do not over-water. Look in the cup – you should not see water filling the cup, but should be able to see that the soil is moist.

A bean seed is covered by a hard outer skin or shell. When water is added to the seed, it swells, and the skin bursts beginning the germination process.

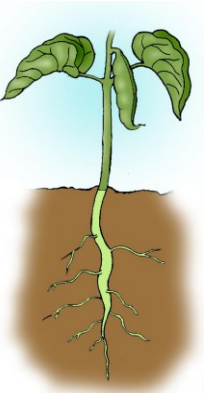
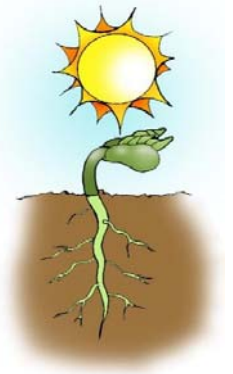


Step Two

In 2-3 days the root will begin to emerge from the bean seed. The root allows the plant to take up water and nutrients from the soil. Add just enough water to keep soil moist, but do not over-water.

Step Three

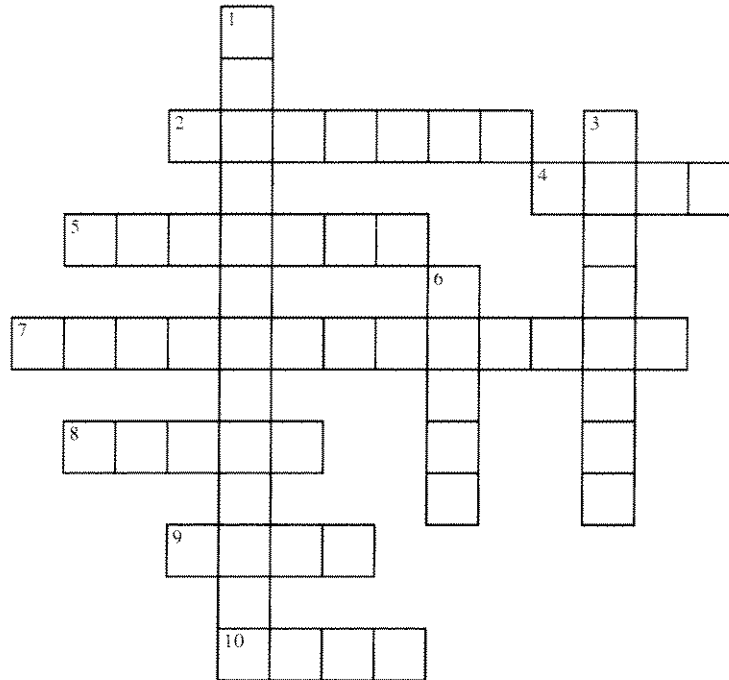
As the roots continue to develop, the stem will start to appear. First just the neck of the stem will be visible above the ground, and then the seedling will actually pop through the soil. The bean seed may still be visible at the top of the seedling. The plant actually uses the bean seed for food during this growth stage. The seedling will grow towards the sun or light source.



Step Four

Leaves will begin to appear and any remaining part of the seed will fall off. The leaves now will begin to make food for the plant through photosynthesis. The plant will continue to grow toward the light – you can see this by moving the plant away from the window or light source and watch the stem begin to lean towards the light. Continue to keep the soil moist. In about 3 weeks, a bean pod will begin to appear. If you are growing green beans, the pod is what you will eat – although if you look closely inside the pod you will still see small bean seeds. If you are growing a dry bean variety, it is actually the bean seed inside of the pod that is actually eaten.

Dry Bean Crossword



ACROSS

- 2 Dry beans are produced in pods and belong to the family of plants called _____.
- 4 One half-cup serving of cooked dry beans contains large amounts of _____.
- 5 When beans and grains are served together in dishes like beans and rice they provide a complimentary _____ profile.
- 7 Beans are high in complex _____.
- 8 Favorite for refried beans and other Mexican & South American dishes. Beans turn solid pink when cooked.
- 9 Dry beans can be counted in the vegetable or _____ group.
- 10 Idaho bean farmers grow 6 major varieties of beans. These varieties include Pinto, Garbanzo, _____, Small Red, Great Northern, and Pink beans.

DOWN

- 1 A frequent choice for soups, casseroles, baked dishes & mixing with other varieties.
- 3 Peas and _____ are the only foods that appear in two different food groups in the USDA's My Pyramid!
- 6 Idaho's dry beans are enjoyed all around the world, and are shipped both _____ and processed.

IDAHO BEAN COMMISSION WORD SCRAMBLE

I	K	N	E	Y	B	E	G	E	D	S	T	A	K	E	H	I	D	E	S
B	D	B	W	C	W	N	B	A	E	S	R	V	T	G	I	D	A	D	B
E	N	A	H	L	R	A	E	K	R	T	A	E	S	B	C	H	I	L	I
A	A	D	H	C	B	A	K	E	D	B	E	A	N	S	K	N	N	G	A
B	E	A	N	O	N	V	N	I	M	I	A	T	D	Y	S	K	B	R	K
P	V	S	N	B	B	B	T	B	R	N	D	N	N	I	L	E	Y	E	E
I	Y	T	O	A	L	E	B	D	E	D	E	O	Z	A	T	Y	L	M	D
N	G	A	M	H	C	A	A	E	V	R	S	S	T	O	V	O	S	A	B
K	A	I	D	B	B	N	C	N	A	O	R	S	G	K	P	Y	U	I	K
O	L	R	B	K	R	B	A	K	S	V	N	Y	E	N	D	I	D	N	I
G	B	E	E	D	V	A	N	B	T	A	I	A	A	K	I	D	N	E	Y
R	A	L	A	W	D	G	I	E	E	M	R	E	N	N	E	R	E	T	D
E	N	N	D	H	E	G	E	B	S	A	B	E	A	N	E	R	Y	L	O
B	E	A	N	I	E	A	B	D	E	D	C	N	T	E	D	A	V	I	N
N	Y	T	E	T	G	R	E	A	T	N	O	R	T	H	E	R	N	A	E
O	C	N	R	E	G	B	A	A	D	I	K	N	M	G	E	E	A	M	Y
R	H	O	V	C	R	O	S	N	E	A	B	A	S	R	B	B	G	A	P
C	H	I	L	I	D	O	G	P	M	N	M	E	R	T	K	R	E	T	O
T	I	B	Y	H	T	T	N	I	V	O	A	M	A	O	A	E	S	S	V
H	L	L	B	I	N	Z	V	B	P	B	B	E	T	S	G	L	T	E	T

Find the following:

IDAHO BEANS ARE THE BEST	BEANBAG	BEANPOLE	LIMA
GREAT NORTHERN	BEANO	BEANIE	PINTO
BEANSTALK	BEANERY	BLACK	GARBANZO
CHILIDOG	KIDNEY	WHITE	PINK
CRANBERRY	NAVY	BAKED BEANS	