

Chickpeas



Did You Know

- Chickpeas, also called garbanzo beans, have been enjoyed as a nutritious food source for 7,000 years. The name chickpea comes from their similarity of appearance to a chick's beak.
- Like other legumes, chickpeas have root nodules that fix nitrogen, which helps to improve the soil. This bushy plant varies in height from 8 inches to 3 feet and grows best in dry climates. Each pod contains 1-3 chickpeas.
- Montana's production of chickpeas is growing. In 2016, Montana farmers harvested 254,000 acres of chickpeas.



Gardening & Agriculture

Since only 1-3 chickpeas are in each pod with several pods on each plant, chickpeas are not often found in home gardens. Montana farmers plant chickpeas in the spring (in May). Once the pods are mature in late summer (August – September), the plants are either swathed (cut down) and then allowed to dry or they are sprayed with a desiccant, which is a chemical that dries out the plants. A combine then drives through the field, harvesting and threshing the plants. Threshing is the process of separating the chickpea seeds that we eat from the rest of the plant. The chickpeas are transported and further sorted to remove unwanted plant material and debris, like small rocks, that are picked up during harvesting.

Selection

Most chickpeas are beige in color, but this can vary to include black, red, yellow, and green. Kabuli (larger and most common in the U.S.) and desi (smaller) are the main varieties of chickpeas grown. Chickpeas are available as whole chickpeas, either cooked and canned or dry and uncooked, as well as in processed forms such as pasta, flour, etc. If selecting canned chickpeas, choose low-sodium chickpeas, or rinse regular canned chickpeas thoroughly to remove some of the sodium.



Storage

Store chickpeas in airtight containers in a cool, dry place for up to a year. Cooked chickpeas may be refrigerated up to 5 days or frozen for up to 3 months.

Cooking

Cooking dried chickpeas. Cooking your own chickpeas is easy with a little planning! One cup of dried chickpeas is equivalent to 2 cups (11.6 oz) cooked chickpeas. First, soak dry chickpeas using one of two methods: A) **Overnight soak:** Cover a pot of water and chickpeas. Place in the refrigerator and soak overnight. B) **Quick soak:** Bring chickpeas to a boil. Reduce heat and simmer for 2-3 minutes. Remove from heat and cover the pot to allow the chickpeas to soak for 1 hour until the chickpeas expand to 2-3 times their dry size. Second, cook soaked chickpeas: add soaked chickpeas to water (1 cup chickpeas per 3 cups water). Bring to a boil and simmer for 45-60 minutes or until tender. When chickpeas can be mashed by a fork, they are done. Pour through a colander to remove excess water.

— Continued on page 4 —

Roasted Munching Chickpeas

HACCP Process: _____ 1 – No Cook 2 – Cook & Same Day Serve _____ 3 – Cook, Cool, Reheat, Serve _____ 4 – SOP Controlled

Ingredients	25 Servings	50 Servings	Directions
Dry chickpeas	4 2/3 cups	9 1/3 cups	<ol style="list-style-type: none"> To cook chickpeas ahead of time: Using a colander, rinse dry chickpeas with running water. Add chickpeas to a medium-large bowl and add water (25 servings: 14 cups, 50 servings: 1 3/4 gal). Cover bowl and leave chickpeas to soak for about 16 hours. After soaking, drain off chickpea water and add chickpeas to a large pot along with twice as much water as chickpeas. Bring to a boil on the stovetop and reduce to a strong simmer for 1 1/2 - 2 hours. Taste test a couple chickpeas to check if they are done. Chickpeas should no longer be mealy, but not yet mushy either. Drain the chickpeas, shaking off as much water as possible. Preheat oven to 375°F. Line a baking sheet with parchment paper and pour the chickpeas onto the sheet, making sure they are spread out. Pat dry with a paper towel. Bake for 30 minutes total. Halfway through baking time, shake the pan so the chickpeas turn over. The peas should sound like rocks rolling when well roasted. Mix dry seasonings into a large bowl. As soon as the chickpeas are done baking, pour into large bowl, add olive oil. Shake the bowl so all the chickpeas are coated with oil. Pour chickpeas into the bowl with the seasonings. Shake the bowl so all the chickpeas are coated with seasonings. Serve immediately at room temperature, or store in a covered container.
Olive oil	1 Tbsp 3/4 tsp	3 Tbsp	
Salt	1 tsp	2 tsp	
Cumin	1 tsp	2 tsp	
Paprika	1 tsp	2 tsp	
Garlic powder	1 tsp	2 tsp	

Serving Size: 1/2 Cup | **Yield:** 25 or 50 servings

Oven Temperature & Baking Time	Temperature	Minutes
Conventional	375°F	30 min
Convection	325°F	30 min
Pan Size		

Nutrition Analysis

Calories (kcal)	115
Protein (g)	5.53
Carbohydrate (g)	18.00
Total Fat (g)	2.71
Saturated Fat (g)	0.29
Calories from Total Fat (%)	21.20%
Vitamin A (IU)	65.45
Vitamin C (mg)	0.09
Iron (mg)	0.85
Calcium (mg)	34.69
Sodium (mg)	262.33
Dietary Fiber (g)	4.96

Meal Component Fulfillment *(Based on Serving Size)*

1 Serving Provides:
2 oz meat alternate or 1/2 cup vegetables--beans/legumes subgroup

Notes

Source: MSU Extension Nutrition Education Program

Bistro Chickpea Salad Sandwich

HACCP Process: _____ 1 – No Cook 2 – Cook & Same Day Serve _____ 3 – Cook, Cool, Reheat, Serve _____ 4 – SOP Controlled

Ingredients	25 Servings	50 Servings	Directions
Celery, <i>chopped</i>	3 cups	6 cups	<ol style="list-style-type: none"> 1. Cook dried chickpeas: One cup of dried chickpeas is equivalent to two cups (11.6 oz) cooked chickpeas. First, soak dry chickpeas using one of two methods: A) Overnight soak: Cover a pot of water and chickpeas. Place in the refrigerator and soak overnight. B) Quick soak: Bring chickpeas to a boil. Reduce heat and simmer for 2-3 minutes. Remove from heat and cover the pot to allow the chickpeas to soak for 1 hour until the chickpeas expand to two to three times their dry size. Second, cook soaked chickpeas: Add soaked chickpeas to water (1 cup chickpeas per 3 cups water). Bring to a boil and simmer for 45-60 minutes, or until tender. When chickpeas can be mashed by a fork, they are done. Pour through a colander to remove excess water. 2. Chop celery, green peppers, and green onions. 3. In a bowl or mixer, add mayonnaise, relish, and mustard. 4. Stir in celery, green peppers, green onions, and chickpeas. Mix well. 5. Assemble sandwiches by placing 3/4 cup chickpea mixture onto slice of bread, top with 1/4 cup spinach, and add a second slice of bread. Serve chilled.
Green peppers, <i>chopped</i>	1 1/2 cups	3 cups	
Green onions, <i>chopped</i>	1 1/2 cups	3 cups	
Dried chickpeas	6 1/4 cups	12 1/2 cups	
Mayonaise, <i>reduced calorie</i>	1 1/2 cups	3 1/4 cups	
Sweet pickle relish	1/4 cup	1/2 cup	
Dijon mustard	2 Tbsp	4 Tbsp	
Whole grain-rich bread, <i>at least 1 oz equivalent each slice</i>	50 slices	100 slices	
Spinach	1 lb	2 lbs	

Serving Size: 1 Sandwich | **Yield:** 25 or 50 servings

Oven Temperature & Baking Time	Temperature	Minutes
Conventional		
Convection		
Pan Size		

Nutrition Analysis

Calories (kcal)	343
Protein (g)	11.83
Carbohydrate (g)	48.46
Total Fat (g)	11.36
Saturated Fat (g)	1.28
Calories from Total Fat (%)	29.79%
Vitamin A (IU)	1977.86
Vitamin C (mg)	18.14
Iron (mg)	3.25
Calcium (mg)	156.30
Sodium (mg)	601.90
Dietary Fiber (g)	8.30

Meal Component Fulfillment *(Based on Serving Size)*

1 Serving Provides:

Chickpeas can be credited as either meat alternate or vegetable, not both.

With chickpeas as meat alternate:

- 2 oz meat alternate
- 2 oz grain • 1/8 cup dark green vegetable subgroup
- 1/4 cup other vegetable subgroup

With chickpeas as vegetable:

- 2 oz grain
- 1/8 cup dark green vegetable subgroup
- 5/8 cup beans/legumes
- 1/4 cup other vegetable subgroup

Notes

Source: Idaho Grown Legumes Cookbook, Idaho State Department of Education

— Continued from page 1 —

Salad. Chill chickpeas after cooking. Combine with chopped vegetables, such as tomatoes and broccoli, then toss with a vinaigrette dressing. Add to cooked pasta or green salad.



Pan-fry. Cooked chickpeas can be used to make veggie burgers, falafel, or croquette.

Pressure cook. Place desired amount of dried chickpeas in pressure cooker with three times the amount of water as beans. Close and lock lid in place. Pressure cook on high setting for 40 minutes if using dried chickpeas or 20 minutes for soaked chickpeas. Use a 10-minute natural release, then release any remaining pressure. Carefully open the lid. Drain off any remaining water prior to use or serving.

Puree. Place cooked and strained chickpeas in food processor and drizzle with olive oil, add seasonings if desired. Blend until smooth. Use the puree as a dip for vegetables, spread on sandwiches, or base for croquette.

Roast. Place cooked and strained chickpeas on a tray to dry for 1-2 hours, or pat dry with paper towels. Place beans in a bowl to drizzle with oil and low-sodium seasonings. Stir until chickpeas are coated. Spread on a baking sheet and roast at 400°F for 25-30 minutes or until lightly toasted. When done, the peas should sound like rocks when rolling around the pan.

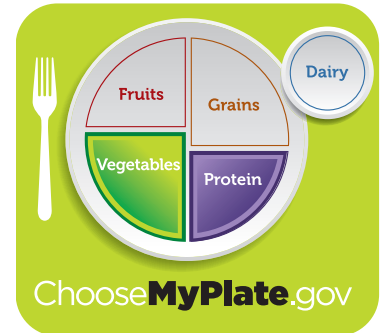
Risotto, Soups, Stews, or Stir-fry. Add cooked chickpeas for added nutrients.

Season. For added flavor, cook chickpeas in water, broth, or tomatoes. To enhance flavor, experiment with allspice, bay, chili powder, cloves, cumin, curry powder, garlic, ginger, nutmeg, oregano, rosemary, and thyme.

Preserve. For information on preserving chickpeas, look for Extension MontGuides on *Home Canning Pressures and Processing Time*. Visit www.msuxextension.org/nutrition and click on the food preservation link or contact your Extension Office.

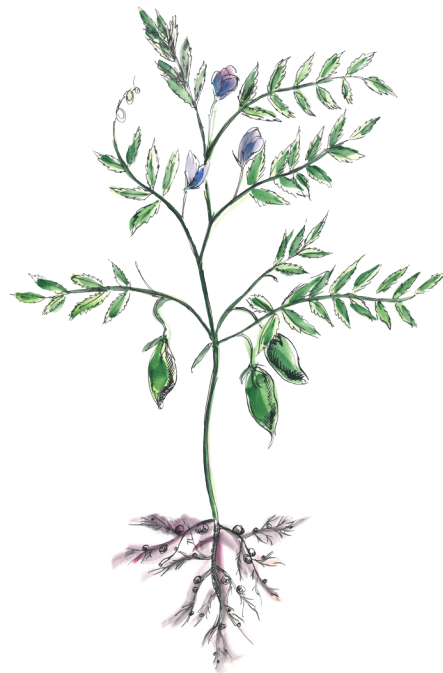
Nutrition Information

Chickpeas are a nutrient powerhouse. They are an excellent source of many nutrients including potassium, calcium, iron, vitamin B-6, and magnesium. Magnesium can help prevent migraines, ensure strong bones, regulate blood pressure, and manage blood sugar, among many other important functions in the body. Like other legumes, they provide protein and fiber. In 1 cup of chickpeas, there are 39 grams of protein! Fiber is important for a healthy digestive system, lowering cholesterol, and helping to manage weight. These gems are perfect for school nutrition programs as they credit as either a vegetable-legume or a meat alternate and are an affordable protein.



Dig Deeper

For sources and photo credits along with more recipes, lessons, quick activities, resources, and guides, visit: www.montana.edu/mtharvestofthemoth.



4 Montana Harvest of the Month: Chickpeas



The Montana Harvest of the Month program showcases Montana grown foods in Montana communities. This program is a collaboration between Montana Farm to School, Office of Public Instruction, Montana Team Nutrition Program, National Center for Appropriate Technology, Montana State University Extension, Gallatin Valley Farm to School, FoodCorps Montana, and Montana Department of Agriculture. More information and resources are available at: www.montana.edu/mtharvestofthemoth.

Funds were provided in part by USDA Team Nutrition Training grants, Northern Pulse Growers Association, Montana Department of Public Health and Human Services, Montana Pulse Crop Committee, Montana Specialty Crop Block Grant Program. USDA is an equal opportunity provider and employer. The Montana State University Extension Service is an ADA/EO/AA/Veteran's Preference Employer and Provider of Educational Outreach. This publication was supported by the Grants or Cooperative Agreements Numbers, 6 U58DP004818-03-01 & 5 U58DP004818-03-00, and funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the DPHHS.