

Chickpeas



Did You Know

- The name chickpea comes from their similarity of appearance to a chick. Can you find its beak?
- The chickpea plant produces small white, pink, or violet-colored flowers. Their pods are small, round, and hairy. Each pod contains 1-3 chickpeas.
- Not all chickpeas are beige when dried. Some chickpeas are red, green, or black.
- Chickpeas have been grown and consumed by civilizations all around the world for over 7,000 years.



Source: *The Visual Food Encyclopedia*

Source: "10 Interesting Chickpea Facts" Happy Snack Company

Source: *January Garbanzo Beans/ Chickpeas,*

Iowa Department of Public Health

<https://idph.iowa.gov/inn/pick-a-better-snack>

Source: *Make Room for Legumes Factsheet,*

Georgia Organics <https://georgiaorganics.org/for-schools/makeroomforlegumes>

Source: NASS

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 dried or sprayed with a desiccant, which is a chemical that dries out the plants. Next, a combine 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 and flour.

Source: *The Visual Food Encyclopedia*

Source: *Types of Chickpeas, Berkley Wellness*

<http://www.berkeleywellness.com/healthy-eating/food/article/types-chickpeas>

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.

1. 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.
2. Cook soaked chickpeas: add soaked and drained 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.

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.

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 like cumin. 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 beans should sound like rocks when rolling around the pan.

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.

Source: Montana State University Extension

<https://nutrition.msuextension.org/>

Source: *The Visual Food Encyclopedia*

Source: *Pulses: The Heart of Healthy Food, Northern Pulse Growers Association* <http://www.northernpulse.com/uploads%5Cresources%5C659%5Cfood-service-industry-guide.pdf>

Activity

Chickpea Sort and Count

Source: Developed by Christine Lux, Ed.D. Curriculum & Teaching and Early Childhood Education

Montana Early Learning Standards

2.1–Fine Motor Skills

4.1–Curiosity

4.3–Persistence and Attentiveness

4.10–Number Sense and Operations

4.12–Data Analysis

Description

Children will use fine motor and data analysis skills to sort and count different chickpea varieties, using color and size as sorting categories.

Supplies

- Two or three varieties of chickpeas (or other legumes) in contrasting color and size
- Tweezers
- Spoons
- Three bowls
- Placemat or small tray



Directions

1. Gather the children at the meeting rug to demonstrate the lesson.
2. Pour one variety of chickpea into one bowl, explaining the name and type of chickpea. Ask children questions about the chickpeas. *What color are these chickpeas? Are they soft or hard? How do you know?*
3. Pour another variety of chickpea into the other bowl, explaining the name and type of chickpea. Ask the children to compare the chickpeas in this bowl to the chickpeas in the other bowl. Ask children questions about the chickpeas. *Are these chickpeas the same? How are they the same? What's different about them?*
4. Demonstrate to the children how to tweeze or spoon chickpeas one at a time from each bowl into the third bowl. Move 3 – 5 chickpeas from each bowl into the “counting bowl.”
5. Pour the chickpeas from the “counting bowl” onto the placemat or tray.
6. Show the children how to count the chickpeas in the placemat or tray by touching each chickpea with the tip of your finger.
7. Notice how many chickpeas there are *all together*, and also compare the types of chickpeas. Ask the children questions about the chickpeas. *Are there more (beige, black, yellow, red, green) chickpeas?* Guide the children toward making comparative statements about the quantity of chickpeas. *There are more _____ than _____.*

Extend the Fun

Growing a Chickpea

Source: *Make Room for Legumes, Georgia Organics*

<https://georgiaorganics.org/for-schools/makeroomforlegumes>

Directions

- Pass out a dried chickpea to each child. Encourage children to feel the seed and ask, “how does it feel?” Explain that *seeds have a hard outer shell called a seed coat. Inside the seed is a tiny plant surrounded by special plant food to help the seed grow.* Direct children to find the small ‘beak’ on the chickpea or the ‘hole’ on the side of the bean;



this is where the seed will sprout. Explain, *we usually grow plants in soil, but that means we can't see the seed sprout because it's underground. We are going to try growing the seeds in a plastic bag so we can watch them sprout.*

- Demonstrate 'planting' the chickpea by gathering a paper towel, cup of water, and sealable plastic bag. First, fold the paper towel into quarters and gently dip it into water. The paper towel should not be dripping, so wring it out if needed then place it in the plastic bag. Lay the chickpea on top of the paper towel. Place bag in a warm spot, like a windowsill. To make it easy to see, you can tape the bag to the window.
- Ask children what they think is going to happen to their chickpea seed? Discuss how the chickpeas are going to germinate and ask students to make a prediction of what that will look like in a day, a week, and a month. Record predictions and encourage the children to observe and draw what the chickpea looks like each day. As seeds grow larger, they can be transplanted into a pot with soil. Even if you don't plant them in a garden to create fully productive plants, you can continue to grow the plant in a pot so students can get an idea of what the process looks like over time.

Optional Extension:

- As seeds grow larger, they can be transplanted into a pot with soil. Even if you don't plant them in a garden to create fully productive plants, you can continue to grow the plant in a pot so students can get an idea of what the process looks like over time.
- Children can act out each stage of a plant life cycle to encourage movement.

Source: *Make Room for Legumes, Georgia Organics*
<https://georgiaorganics.org/for-schools/makeroomforlegumes>

MELS 4.1–Curiosity

MELS 4.15–Scientific Thinking

Sing a Song: Can You Plant a Bean?

Source: *Dance n' Beats* <https://youtu.be/LCKEdDEr82k>

Can you plant a bean,
Watch it grow up big and green?
Can you water the seed,
and pull out the weeds?
Can you shine like the sun,
and pick pods one by one?
Workin' is done,
Now let's eat that bean!

(Repeat 5 Times, Faster Each Time!)

MELS 4.8–Music



Recipes

Roasted Munching Chickpeas

Great crunchy snack packed with protein.

Developed by: *MSU Extension Nutrition Education Program*

Servings

6

Ingredients

1 cup and 2 Tbsp Dry chickpeas

1/4 Tbsp Olive oil

1/4 tsp Salt

1/4 tsp Cumin

1/4 tsp Paprika

1/4 tsp Garlic powder

Preparation

1. To cook chickpeas ahead of time: using a colander, rinse dry chickpeas with running water. Add chickpeas to a medium-large bowl and add 3 1/2 cups of water. 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 3 1/2 cups of water. 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.
2. Drain the chickpeas, shaking off as much water as possible.
3. Preheat oven to 375°F.
4. Line a baking sheet with parchment paper and pour the chickpeas onto the sheet, making sure they are spread out.
5. Pat dry with a paper towel.
6. 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 they are well roasted.
7. Mix dry seasonings into a large bowl.
8. As soon as the chickpeas are done baking, pour into large bowl, add olive oil.
9. Shake the bowl so all the chickpeas are coated with oil.
10. Pour chickpeas into the bowl with the seasonings.
11. Shake the bowl so all the chickpeas are coated with seasonings.
12. Serve immediately at room temperature, or store in a covered container.

Bistro Chickpea Salad Sandwich

A new twist on the classic sandwich.

Source: *Idaho Grown Legumes Cookbook*

Servings

6

Ingredients

- 3/4 cup Celery, *chopped*
- 1/3 cup Green peppers, *chopped*
- 1/3 cup Green onions, *chopped*
- 1 1/2 cups Dried chickpeas
- 1/3 cup Mayonaise, *reduced calorie*
- 1 Tbsp Sweet pickle relish
- 1/2 Tbsp Dijon mustard
- 12 slices Whole grain-rich bread, *at least 1 oz equivalent each slice*
- 1/4 lb Spinach



Preparation

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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.
5. Mix well.
6. Assemble sandwiches by placing 3/4 cup chickpea mixture onto slice of bread, top with 1/4 cup spinach and add second slice of bread. Serve chilled.

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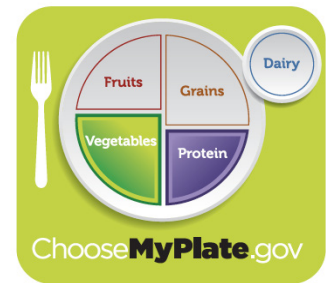
One Little Bean, by Cecil Kim
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The Flying Garbanzos, by Barney Saltzberg
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Nutrition Information

Chickpeas are a nutrient powerhouse. They are an excellent source of potassium, iron, vitamin B-6, and magnesium. Magnesium can help prevent migraines, ensure strong bones, regulate blood pressure, and manage blood sugar. Like other legumes, chickpeas 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 child nutrition programs as they credit as either a vegetable-legume (beans and peas subgroup) or a meat alternate and are an affordable protein.



Source: *CACFP Crediting Information* https://www.cacfp.org/files/9914/4240/2457/CACFP_creditinghandbook.pdf
Source: *National Nutrient Database, USDA* ndb.nal.usda.gov
Source: *Magnesium, National Institutes of Health* <https://ods.od.nih.gov/factsheets/magnesium-consumer>

Dig Deeper

For sources and photo credits along with more recipes, lessons, quick activities, resources, and guides, visit: mtharvestofthemonth.org.

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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: mtharvestofthemonth.org.

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