



## Plant-Powered Beet Burger

By Dylan Sabuco

**Prep Time** 15 / **Cook Time** 7 / **Serves** 4 - 6

### Fun-Da-Mentals Kitchen Skills

**measure:** to calculate the specific amount of an ingredient required using a measuring tool (like measuring cups or spoons).

**mix:** to thoroughly combine two or more ingredients until uniform in texture.

**sauté:** to cook or brown food in a pan containing a small quantity of butter, oil, or other fat.

**shape:** to form food into a specific shape by hand or with a cutting tool—examples are cutting cookie dough into shapes with cookie cutters, forming bread dough into a roll or crescent shape, and rolling ground meat into a meatball.

### Equipment

- Skillet
- Can opener
- Large bowl
- Blender (or pitcher/liquid measuring cup + immersion blender)
- Dry measuring cups
- Measuring spoons
- Wooden spoon
- Cutting board
- Heat-resistant spatula

### Ingredients

## Plant-Powered Beet Burger

- 1/2 8-oz can sliced beets, drained (not pickled beets)
- 1 15-oz can black beans, drained **\*\***(for LEGUME ALLERGY sub 1 C mushrooms, chopped)**\*\***
- 1 C panko bread crumbs **\*\***(for GLUTEN ALLERGY sub gluten-free/nut-free bread crumbs)**\*\***
- 1/4 C all-purpose flour **\*\***(for GLUTEN ALLERGY sub gluten-free/nut-free flour)**\*\***
- 12 small buns **\*\***(for GLUTEN ALLERGY sub gluten-free/nut-free buns)**\*\***
- 1 tsp garlic powder
- 1 tsp paprika **\*\***(for NIGHTSHADE ALLERGY sub 1 tsp onion powder)**\*\***
- 1 tsp salt
- 1/2 tsp ground black pepper
- 2 tsp nutritional yeast, optional for a meatier taste
- 3 T vegetable oil + more if needed **\*\***
- Optional toppings:
- lettuce
- tomato **\*\***(Omit for NIGHTSHADE ALLERGY)**\*\***
- onion (red, yellow, or green)
- ketchup
- mustard

## Food Allergen Substitutions

### Plant-Powered Beet Burger

**Legume:** Substitute mushrooms for black beans.

**Gluten/Wheat:** Substitute gluten-free/nut-free bread crumbs for panko. Substitute gluten-free/nut-free flour. Substitute gluten-free/nut-free buns.

**Nightshade:** Substitute onion powder for paprika. Omit optional tomato topping.

**Soy:** Substitute canola oil or other nut-free high-smoking point oil for vegetable oil.

## Instructions

### Plant-Powered Beet Burger

## intro

Our Plant-Powered Beet Burger is inspired by the wave of "Impossible" burgers that took the world by storm. Our meatless burger is made of beets, beans, and grain, which happen to be some of a cow's favorite foods.

## mash + measure

Start off by draining **1 can of beets** (you'll use half) and **1 can of black beans**. Then, pour the drained beans into a large bowl and start mashing. You want the beans to be mashed into a paste with a few whole beans left. Measure and add **1 cup panko bread crumbs, 1/4 cup flour, 1 teaspoon garlic powder, 1 teaspoon paprika, 1 teaspoon salt, 1/2 teaspoon black pepper, and 2 teaspoons nutritional yeast** if using. Stir to combine.

## blend + stir

In a blender (or pitcher/liquid measuring cup for use with an immersion blender), blend **1/2 can drained beets**. The mixture should be smooth with a few lumps. Add a small drizzle of oil if you are having difficulties blending. Stir the blended beets into the bean mixture.

## roll + shape

Next, the kids will be shaping the beet burger patties. Give each child roughly 3 tablespoons of the beet and bean mixture. Have them roll it into a ball. If it is sticky, they can add a sprinkle of flour or panko. Once rolled into a ball, simply smooch the dough into a flattened disc.

## sauté + flip

Heat **3 tablespoons of vegetable oil** in your skillet over medium heat. Sauté each beet burger for 5 minutes on the first side. Then, flip them over and cook for another 2 minutes, adding more oil if needed.

## serve + garnish

Slide each Beet Burger onto a bun and serve 'em up! Have each child pick the garnishes of their choice.

## Featured Ingredient: Beets!

Hi! I'm Beet!

"Hi! I'm a bit 'red' with embarrassment—I don't know your name, but you know mine—Beet! I'm a root vegetable with a beautiful, red color (some of my cousins are yellow). You may have seen me served either whole, quartered, sliced, julienned, shredded, or mashed. You can grow me in your garden or buy me fresh or canned in the store. Did you know that my pretty green leaves (or greens), with red stems, can also be eaten, and you can drink my juice, too?"

History

Around 800 BCE, an Assyrian text describes beets growing in the Hanging Gardens of Babylon, one of the wonders of the ancient world.

Modern beets are derived from their wild ancestors, sea beets, that grew along the coasts of Europe, southern Asia, and northern Africa. Beets from the time of the ancient Greeks and Romans were white and black rather than red!

The Romans used the leaves of beets as an herb and medicine. They also considered beet juice to be a love potion.

People have used beet juice as a natural red dye since the 16th century, and Victorians in England in the 19th century used it to dye their hair.

Sugar beets were first cultivated for their sugar in the middle of the 18th century in Germany and then in France in the early 19th century. The United States started growing sugar beets commercially in 1879 in California. Sugar beets have at least twice the amount of sugar as regular beets.

The world's heaviest beetroot weighed 52.88 pounds and was grown by a group of people in the United Kingdom in 2019. The longest beetroot was 28 feet, also produced in the UK, by Joe Atherton, in 2020.

## Anatomy & Etymology

A beet, or beetroot, is the edible taproot of the beet plant. The taproot is the dominant, central root of a plant. Beet leaves are also good to eat.

Beets are a member of the order of flowering plants called Caryophyllales, which includes bougainvillea, cacti, amaranth, carnations, spinach, chard, quinoa, and even Venus flytraps!

Red beets get their color from betalain, a natural pigment. Betalain comes from the Latin name for beet, *Beta vulgaris*, and it's also responsible for the red color of bougainvillea flowers.

The word "beet" is from the Old English "bete," from the Latin "beta."

## How to Pick, Buy, & Eat

Beets are ready to be picked about seven to eight weeks after planting. The beet or root will be golf ball size or larger. To harvest, grab the plant's leaves or greens, down by the root, and pull.

If you plan to cook the beet greens, cut them off from the root, wash them, and store them in a plastic bag in the fridge for one to two days. The beetroots will keep refrigerated for one to two weeks in a plastic bag.

Today there are several varieties of commercially-grown beets. The most common type in the United States is the Red Ace.

You can use beet juice to measure the PH level or acidity in a substance. When you add it to an acidic solution, it turns pink, but it turns yellow when you add it to an alkali.

To remove the inevitable pink stains from working with beets, rub your fingers with lemon juice and salt and wash with soap and water. There are several suggestions for removing fabric stains, but when rinsing,

it's best to use lukewarm or cold water rather than hot to avoid making the stains permanent.

You can boil, steam, roast, or pickle beets and add them to salads, soups, dips, sauces, sandwiches, and even desserts, like red velvet cake!

A soup made from beets, "borscht," originated in Ukraine in the late 17th or early 18th century and is considered a staple in Russian and Polish cuisine.

In Australia, they often put pickled beets on their hamburgers.

## Nutrition

Beets are loaded with manganese, potassium, iron, magnesium, many other minerals, and vitamins, especially folate. Folate is a B vitamin vital for the growth and function of cells in our body and helps DNA and RNA production.

Beets are a good source of betaine, which is associated with proper liver function and cellular reproduction, and it helps the body metabolize homocysteine, an amino acid.

One cup of beets contains less than 60 calories.