

# Dry Beans

Michigan is the second largest dry bean producer in the United States. Dry beans are a low-fat protein source full of fiber, vitamins and minerals. Michigan farmers are the top producers of black beans, cranberry beans and small red beans.

# cultivatemichigan.org

# Dry Beans Guide



Pictured here: cranberry beans

*W*ichigan dry beans are a versatile,

affordable, and protein-packed ingredient for main dishes, sides, starters and snacks throughout the year. Consider using Michigan dry beans as a salad bar topping, in soups or chili, pureed into a hummus or bean dip, as a side vegetable, or as a meat alternative.

This Michigan Dry Bean Toolkit provides resources to help make it easier for institutions to find and use this versatile food. Then, use our Cultivate Michigan Dry Bean marketing materials (including posters and a window decal) to promote your efforts with staff members, eaters and in your community.

Find marketing materials and recipes for dry beans at www.cultivatemichigan.org

(Updated in August 2022)



**Fact:** Michigan is the second largest dry bean producer in the United States.

- **Fact:** Michigan farmers are the top producers of black beans, cranberry beans and small red beans.
- **Fact:** More than 40% of Michigan dry beans are grown in Huron County, making it one of the top dry bean-producing counties in the country.



**Nutrition Tip:** Dry beans are a low-fat protein source full of fiber, vitamins and minerals.

- **Nutrition Tip:** Rehydrating dry beans helps to control the level of added salt.
- **Safe Handling:** Dry beans packaged in polyethylene food-grade bags have a one-year shelf life.
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- **Fact:** Dry beans will expand 2.5 to 3 times their original size during cooking.
- **Safe Handling:** If not using immediately, dry beans and their cooking liquid should be cooled in shallow pans in the refrigerator and then held at 41°F.





### Find shelf-stable Michigan dry beans year round

Michigan dry beans are planted in May and June and harvested in the fall. Bean plants are left in the field until the shelled beans fully mature and dry out completely, which is typically between late August and October. Growers harvest the beans and send them to a processor to be cleaned and scanned for foreign material that may have been picked up during the harvesting process. Metal detectors and magnets are used to find and remove any metal, while electric scanning devices and machines remove stones and other foreign objects. Though this process removes the majority of unwanted material, it is still important to visually scan dry beans prior to cooking. Small bean-sized stones may go unnoticed during mechanical processing.

Dry beans are either packaged in their dry form or rehydrated and canned in a commercial canning facility. Both of these packaging techniques produce a shelf-stable product allowing Michigan dry beans to be available for institutions to purchase all year.

### Dry packaged or canned dry beans?

Dry beans can be purchased in their dry form in polyethylene food-grade packages or rehydrated in cans. Institutions may consider a variety of factors when choosing between packaging types, such as time, labor, cost, transparency and customer preferences.

Dry packaged beans are a good choice for institutions looking for the lowest sodium option. Rehydrating and cooking dry beans in your kitchen offers complete control over the amount of added sodium, thereby allowing you to achieve lower sodium content than what's found in regular or lowsodium canned beans. The sodium content of canned beans can also be lowered by rinsing the beans.

Institutions may be able to achieve cost savings by switching from canned dry beans to dry packaged beans for their recipes. Additionally, by eliminating the steps of opening, cleaning and recycling cans, institutions can also achieve labor savings. Although the overall process for using dry beans is longer because it requires soaking and cooking time, staff members do not need to actively tend to the beans during this process and their time may be used for other tasks.

In some cases, dry packaged beans can offer greater transparency of the product origin. After harvest, most beans go to a facility for processing where they are combined with beans from other farms. Depending on the processor, these beans may or may not be from Michigan. Canned beans go through additional processing, often at a third facility where they are rehydrated and canned. During the rehydration process, there is another opportunity for the beans to be combined with beans not grown in Michigan. If you want to be sure you are sourcing 100% Michigan-grown beans, communicate this to your chosen vendor or distributor when purchasing.



### A variety for every taste and use!

Michigan farmers produce 12 market classes of dry beans. Black beans and navy beans are the most commonly grown beans in Michigan. The table below shows the dry bean classes grown in Michigan and their common uses.

Market Class	Common Uses	Common Names/Varieties
Black	Soups, Caribbean and Latin American dishes	Turtle
Cranberry	Italian dishes	Borlotti, Roman
Small Red	Desserts, soups, salads, mixed grain dishes Adzuki	
Navy	Baked beans, soups, salads, purees White pea bean	
Light Red Kidney	Chili, soups, salads, red beans and rice n/a	
Dark Red Kidney	Chili, soups, salads, red beans and rice n/a	
White Kidney	White chili, salads Cannellini	
Great Northern	White chili, soups, salads, dips n/a	
Pink	Chili, stew, rice and beans Chili bean	
Pinto	Chili, refried beans n/a	
Soldier	Baked beans, soups, stews Red eye bean	
Yellow Eye	Baked beans, soups, pork and beans Butterscotch calypso, Stueben yellow bean	

### Canned bean to dry bean conversion

As an example, the chart below shows a conversion between dry and canned beans for black (turtle) beans. While conversions are similar for other bean varieties, they may differ slightly. To see USDA yield tables for beans and legumes, including several varieties grown in Michigan, visit the USDA Food Buying Guide at https://foodbuyingguide.fns.usda.gov/files/Reports/ USDA FBG Section1 MeatsAndMeatAlternates YieldTable.pdf

Item	Purchase unit	Servings per purchase unit	Serving size	Units needed for 100 servings	Additional information
Dry	1 pound	18.30	1/4 cup cooked beans	5.5	1 lb dry beans = 2 1/4 cups
Dry	1 pound	12.20	3/8 cup cooked beans	8.2	1 lb dry beans = 2 1/4 cups
Dry, canned	No. 10 can (110 oz.)	27.8	1/4 cup heated, drained beans	3.6	1 No. 10 can = about 6 7/8 cups
Dry, canned	No. 10 can (110 oz.)	18.5	3/8 cup heated, drained beans	5.5	1 No. 10 can = about 6 7/8 cups
Dry, canned	No. 300 can (15 1/2 oz.)	5.91	¼ cup heated, drained beans	17.0	1 No. 300 can = about 1 3/8 cups
Dry, canned	No. 300 can (15 1/2 oz.)	3.94	3/8 cup heated, drained beans	25.4	1 No. 300 can = about 1 3/8 cups



# **Resources for Farm to Institution Support**

Michigan Farm to Institution Network www.mifarmtoinstitution.org

MSU Center for Regional Food Systems www.foodsystems.msu.edu

Michigan State University Extension Locate your local MSU Extension office. www.msue.msu.edu

## **Resources for Linking with Local Farmers**

The majority of Michigan dry bean growers sell their beans directly to cooperatives or processors. This can make it difficult for them to work one-on-one with a local school, hospital or university. Below is a list of statewide and regional resources to help you connect with local Michigan farmers who may be able to supply you directly with dry beans!

#### **Michigan Bean Commission**

Locate farmers markets, family farms, community supported agriculture (CSA) and other sources of sustainably produced food. www.michiganbean.org

#### **Local Harvest**

Locate farmers markets, family farms, community supported agriculture (CSA) and other sources of sustainably produced food. www.localharvest.org

#### Michigan MarketMaker

This interactive mapping system links producers and consumers in Michigan. https://mi.foodmarketmaker.com

#### **Taste the Local Difference**

This resource connects buyers and consumers in Michigan to local food and farms, restaurants and businesses. www.localdifference.org



#### Michigan Food Hub Learning and Innovation Network

Food hubs are centrally located facilities that aggregate, store, process, distribute and/or market locally or regionally produced food.

https://www.canr.msu.edu/michigan\_food\_hub\_learning\_and\_innovation\_network/

#### **Michigan Farmers Market Association**

Find the locations of farmers markets across the state. mifma.org/find-a-farmers-market

#### Michigan Food and Farming Systems (MIFFS)

MIFFS connects beginning and historically underserved farmers to resource opportunities. www.miffs.org

#### Michigan Farm Bureau

Locate the local Michigan Farm Bureau office in your county. https://new.michfb.com/membership/county-farm-bureaus

#### **Michigan Agricultural and Commodity Organizations**

The Michigan Agricultural Commodity directory lists the locations of and contacts for the agricultural commodity organizations in Michigan https://www.michigan.gov/-/media/Project/Websites/mdard/documents/business-development/ commodity/mi commodity directory.pdf?rev=75cea05c8c274c43946150bfbc50ea96

#### Michigan Organic Food and Farming Alliance (MOFFA)

Visit this site to download the "Eating Organically Guide." www.moffa.net

#### **Certified Naturally Grown**

This site provides a current list of certified small-scale, direct-to-market farmers and beekeepers who use natural growing and harvesting methods in Michigan. https://certified.naturallygrown.org/producers/list/227/MI

> Cultivor ZZ/CHIGA

# **Dry Bean Recipes**

# **Basic Dry Bean Cooking Tips**



The following cooking tips apply to dry packaged beans. Canned dry beans are ready to use and do not require any additional cooking.

#### Sorting

The first step in cooking dry beans is to look for and remove any shriveled, broken or discolored beans and foreign material, such as small stones, that may have been missed by the processing facility. Examine dry beans one layer at a time by scooping the beans onto a dry metal pan. After sorting, beans should be thoroughly rinsed.

#### Soaking

After sorting and rinsing, rehydrate the dry beans by soaking them. The U.S. Dry Bean Council offers three different methods for soaking beans:

Hot Soak - reduces actual cooking time and produces consistently tender beans

- 1. Place beans in a pot and add 10 cups of water for every two cups of beans.
- 2. Heat to boiling and boil for two to three minutes.
- 3. Remove beans from heat, cover and let stand for four to 24 hours.
- 4. Drain beans, discard soak water and rinse with fresh, cool water.

#### **Traditional Soak**

- 1. Pour cold water over the beans to cover.
- 2. Soak beans for eight hours or overnight.
- 3. Drain beans, discard soak water and rinse with fresh, cool water. (Cold water starts the rehydration process slowly so beans will appear wrinkled after soaking.)

#### **Quick Soak**

- 1. Place beans in a large pot and add 10 cups of water for every two cups of beans.
- 2. Bring to boil and boil for two to three minutes.
- 3. Drain beans, discard soak water and rinse with fresh, cool water.



# **Dry Bean Recipes**

#### Cooking

To cook dry beans, cover soaked, drained beans with plenty of fresh water. Simmer until the beans can be gently mashed with a fork. Cooking can take anywhere from 30 minutes to two hours depending on the type of bean. Refer to the suggested cooking times on the next page. Drain beans immediately to prevent them from over-cooking in the hot water.

Market Class	Suggested Cooking Time	
Black	60-90 minutes	
Cranberry	45-60 minutes	
Small Red	60-90 minutes	
Navy	90-120 minutes	
Light Red Kidney	90-120 minutes	
Dark Red Kidney	90-120 minutes	
White Kidney	90-120 minutes	
Great Northern	45-60 minutes	
Pink	60 minutes	
Pinto	90-120 minutes	
Soldier	60-90 minutes	
Yellow Eye	90-120 minutes	

#### **Additional Tips**

Acidic ingredients can prevent beans from cooking correctly. If your recipe calls for an acid, such as tomato, lemon juice, vinegar, molasses or wine, avoid adding these ingredients until after the beans have been fully cooked.

For best results, stir beans occasionally and add warm water to keep the beans covered as they expand during cooking.

If not using immediately, dry beans and their cooking liquid should be cooled in shallow pans in the refrigerator and then held at 41°F.

Cooked dry beans have a tendency to dry out and change taste if left too long in a steam table. To avoid this, heat in batches for "just-in-time service."





**Regional Food Systems** 

# MICHIGAN STATE UNIVERSITY Extension

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