

CHESTNUT

Nutrition & Recipes

Eating Missouri-grown chestnuts is a win-win-win for your health, our environment, and our state's family farmers.

Chestnuts are a nutritious, versatile local food with many uses in the kitchen. They break from the norm of typical tree nuts because they are 50 percent moisture with a starchy, potato-like quality. They have the highest amount of vitamin C of any tree nut, making them an excellent snack during cold and flu season.

From centuries-old culinary traditions to modern-day innovations, there are many ways to enjoy chestnuts. Traditionally, chestnuts are enjoyed roasted or in soups. Today, chestnuts are becoming increasingly recognized as low-carb alternatives to rice, pasta, and potatoes; and chestnut flour is a novel, gluten-free ingredient for baking.

Chestnuts grow exceptionally well in our Missouri climate. As a perennial tree crop, they can store carbon from the atmosphere, improve soil health, reduce nutrient runoff and erosion, and enhance wildlife habitat, helping to conserve resources while producing healthy food for communities across the Midwest.



Chestnut trees can live for more than 150 years. With more than 100 chestnut farms in Missouri today, this sustainable tree crop has the potential to feed Missourians for generations.

Center for Agroforestry
University of Missouri

Nutritional Information

Chestnuts are prized in many parts of the world for their nutritional benefits as well as their positive impacts on the landscape. They have a similar nutrient profile to corn and brown rice with the potential to provide locally-grown staple calories to communities across the country.

- Unlike most nuts, chestnuts are **low in fat and high in essential fatty acids**, making them ideal for weight management and heart health.
- The **high fiber** content in chestnuts supports digestive health, promotes satiety, and helps regulate blood sugar levels.
- Chestnuts provide significant amounts of **vitamin C**, which boosts immunity and aids in skin health.
- Chestnut flour is a **gluten-free** alternative for people with celiac disease or gluten sensitivity.
- Chestnuts offer slow-releasing energy through **complex carbohydrates**, making them great for sustaining energy without blood sugar spikes.
- Chestnuts are rich in **antioxidants** like vitamin C and polyphenols, which protect against oxidative stress and inflammation.

Nutrition Facts

Nuts, Chestnuts, Chinese, Roasted
Serving size100 grams (100g)

Amount Per Serving	
Calories	**239**
	% Daily Value*
Total Fat 1g	**2%**
Saturated Fat 0g	**1%**
Trans Fat 0g	
Polyunsaturated Fat 0g	
Monounsaturated Fat 0.5g	
Cholesterol 0mg	**0%**
Sodium 4mg	**0%**
Total Carbohydrate 52g	**19%**
Dietary Fiber (per old FDA rule) 10g	**40%**
Dietary Fiber 10g	**36%**
Total Sugars 20g	
Includes 0g Added Sugars	**0%**
Sugar Alcohol 0g	
Protein 4g	
Vitamin D 0mcg	0%
Calcium 20mg	1%
Iron 1.5mg	8%
Potassium 480mg	10%
Vitamin A 0mcg	0%
Vitamin C 38mg	43%
Vitamin E -mg	-%
Vitamin K -mcg	-%
Thiamin 0.2mg	12%
Riboflavin 0.1mg	7%
Niacin 1.5mg	9%
Vitamin B6 0.4mg	26%
Folate 70mcg DFE	18%
Vitamin B12 0mcg	0%
Pantothenic Acid 0.6mg	12%
Phosphorus 100mg	8%
Magnesium 90mg	21%
Zinc 0.9mg	8%
Selenium -mcg	-%
Copper 0.4mg	43%
Manganese 1.7mg	74%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Source: Nutritional information for chestnuts. FoodData Central, U.S. Department of Agriculture.

Choosing Fresh Chestnuts

- **Look for firmness:** Choose chestnuts that are hard and feel heavy for their size, indicating freshness.
- **Check the shell:** Look for shells without cracks or blemishes. Some varieties have naturally fuzzy shells, while others are shiny and smooth. Avoid any nuts with holes or insect damage.
- **Listen for a rattle:** Shake the chestnut; if you hear a rattle inside, it may be dried out and not fresh.
- **Smell test**: Fresh chestnuts should have a pleasant, earthy smell. Avoid those with a musty or sour odor.

Storing Fresh Chestnuts

- **Keep them cool:** Chestnuts are much higher in water and carbohydrates than other tree nuts, making them more susceptible to mold. Immediately store chestnuts in a cool, dark place (ideally around 33-34°F).
- **Use a ventilated container:** Use a mesh or paper bag to allow air circulation. If using a plastic bag, keep it open or poke holes in the sides.
- **Check regularly:** Inspect stored chestnuts periodically for mold or sprouting, removing any affected nuts immediately.
- **Freezing:** Scored chestnuts can be frozen in shell for longer storage.
- **Drying option:** After removing the shell, chestnut kernels can be dried/dehydrated to less than eight percent moisture and rehydrated, like beans, to preserve the nuts for long term storage.

IMPORTANT: Score your chestnuts before cooking!

Gather your tools: You'll need a sharp knife or a special chestnut scoring knife with a curved, pointed blade and a cutting board.

Position the chestnut: Hold the chestnut firmly with the flat side of the nut down on the cutting board.

Score the shell: On the rounded side of the chestnut, carefully make a single, shallow slit from edge-to-edge. It's best to try to avoid cutting beyond the shell into the nut meat, but this is just an aesthetic consideration and will have no bearing on flavor. Alternatively, when scoring a high volume of chestnuts, some home chefs prefer to use a sharp kitchen knife to cut deeply through the shell into the nut instead of doing the delicate work of a shallow score from edge-to-edge.

Prepare for cooking: Proceed to roast, boil, steam, or microwave the scored chestnuts as desired.

Peel while still warm: Once cooked, if you were successful with your scoring technique, the chestnuts will pop open, making it easy to remove the meat for eating or use in recipes. It's easiest to peel chestnuts while they're still warm.

Chestnut Cooking Methods & Recipes

Microwaved chestnuts: Place scored chestnuts in a microwave-safe bowl with a splash of water. Cover with a wet paper towel and microwave on high 2-5 minutes until chestnuts pop out of their shells. Peel while still warm.

Fire-roasted chestnuts: A chestnut roasting pan is the best method for grilling chestnuts over an open fire or grill. It has large perforations which allow for significant flame contact, enhancing the roasted, smoky flavor. Stir frequently while cooking for 15-25 minutes. After roasting, peel the shell away from the meat and enjoy!

Steamed chestnuts: Place scored chestnuts in a collapsible steaming basket in a pan with about a ½ inch of water. Bring water to a boil and steam chestnuts until the meats pop out of the shell and chestnuts are desired consistency.

Oven-roasted chestnuts: Preheat oven to 250°F. Place scored nuts in a single layer on a roasting pan with a little water on the bottom of the pan. Roast 20-30 minutes.

Pressure cooked chestnuts: Place desired quantity of chestnuts in your pressure cooker. Add ~1 cup of water. Cook high pressure for 2-3 minutes, slightly longer for softer nuts. Do a quick release after cooking.

For savory chestnuts, prepare with a drizzle of good olive oil and a sprinkle of salt. For sweeter chestnuts, drizzle with honey or maple syrup and salt.

PRO TIP: In grocery stores, chestnuts are often displayed as if they were potatoes or citrus. In reality, chestnuts require refrigeration to maintain freshness due to their high moisture content. Chestnuts are still a novelty product in the U.S. (even to seasoned produce buyers), so if you see unrefrigerated chestnuts displayed at your local store, try kindly educating your store's produce director about proper storage or send them this document for additional information!

Chestnut & Parsnip Hummus

- 1½ cup chestnut meats
- 1½ cup cubed parsnips
- 1 clove garlic
- ¼ cup fresh lemon juice
- 4 Tbsp. butter, melted
- ¼ cup olive oil
- 2 tsp. cumin
- 2 Tbsp. tahini
- 2 Tbsp. fresh parsley, chopped

(1) Score chestnuts and steam in a steamer basket with ½ cup of water in the bottom until nut meats start to separate from the shell. Softer chestnuts are best for this recipe. Peel while still warm. **(2)** Boil or steam parsnips until tender (about 10 minutes). Drain in a colander, reserving 1 tablespoon of the cooking liquid. **(3)** Transfer the chestnut meats and parsnips to the bowl of a food processor. Puree along with the reserved cooking liquid, garlic, lemon, butter, olive oil, cumin and tahini until smooth and creamy, about 3 minutes. **(4)** Season with salt and pepper. Transfer to a bowl and cool to room temperature. Just before serving, garnish with chopped parsley. Good for 3-4 days in the fridge.

Candied Chestnuts

- 2 pounds chestnuts, peeled
- 2½ cups water
- 2 pounds sugar
- 1 teaspoon vanilla extract

(1) Microwave scored chestnuts with a splash of water for 2-5 minutes until shells split open; peel while warm. **(2)** Make sugar syrup with a 1:1 ratio of water to sugar. Heat water, add in sugar, and stir until dissolved. Add vanilla. **(3)** Add peeled chestnuts to syrup, making sure chestnuts are fully covered. Simmer on low for 20 minutes. Let chestnuts cool and soak in syrup for 12 to 18 hours. **(4)** After the rest period, return chestnuts to stove and heat until boiling for about two minutes, then turn off heat to cool and soak. Repeat this step 3-4 times, with 12-18 hours of soaking in between. **(5)** When all syrup is absorbed, chestnuts are candied and ready to eat. If you prefer harder chestnut candy, bake candied nuts at 250°F on a parchment lined baking sheet for 30 minutes or until nuts are firm and dry. Store in an airtight container. Enjoy!









Growing Gold in Missouri

Chestnut and winter wheat alley cropping system at Cedar Hill Farms in Marshall, Mo.

Chinese chestnut (*Castanea mollissima*) is gaining traction as a promising tree nut crop in the Midwest and Eastern U.S., with cultivation expanding rapidly. Between 2017 and 2022, chestnut farms across the country grew by 79 percent, and over 1,500 orchards reached nut-bearing age. In Missouri alone, the acreage devoted to chestnuts more than doubled in that time. As a perennial crop, chestnuts offer numerous environmental benefits, including carbon sequestration, improved soil health, reduced nutrient runoff, and enhanced wildlife habitat.

In Missouri, chestnuts are hardy and adaptable, thriving in our climate and well-drained soils. Unlike the American chestnut, which was largely wiped out by chestnut blight, Chinese chestnuts are naturally resistant to this devastating disease, making them a reliable and sustainable crop choice for the region. Once established, chestnut trees are also relatively drought-tolerant, further reducing water and labor requirements.

From an economic standpoint, Chinese chestnuts present a valuable market opportunity. Our grafted chestnut cultivar recommendations have helped establish baseline revenue approximations of $10-$28k per acre for Missouri growers. When integrated into agroforestry systems, chestnuts provide diversified ecological and economic benefits for farms and communities. With proper management, they can yield high-quality nuts for decades, offering long-term profitability for Missouri's family farmers for generations.

The Mizzou Center for Agroforestry is studying and developing chestnut and other tree nuts to grow a sustainable Midwest tree nut industry to support profitable family farms and healthy communities. Agroforestry systems that incorporate tree crops like chestnuts can offer solutions to some of the greatest challenges faced today, like buffering farms against extreme weather, boosting food security, promoting biodiversity, and stimulating regional economies.

AGROFORESTRY: A form of regenerative agriculture that integrates trees with other crops and/or livestock for economic and ecological benefits.

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