

**Potatoes** are rich in complex carbohydrates and classified as a starchy vegetable on [www.MyPlate.gov](http://www.MyPlate.gov). Potatoes are available in a variety different shapes, sizes and colors.

Potatoes were first cultivated in South America more than 7,000 years ago. They were introduced to Europe in the 1500s by Spanish explorers and introduced to the New World by English settlers in the 1600s. Potatoes became popular due to their vitamin C content because eating potatoes helped prevent and treat scurvy. Potatoes are used all over the world in many different forms.

**Julie Garden-Robinson**, Ph.D., R.D., L.R.D.  
NDSU Extension Food and Nutrition Specialist  
**Jenna Sufka**, Dietetic Intern – NDSU Extension  
**Asunta Thompson**, Ph.D., Associate Professor and Potato Breeder

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Funding for this project was made possible by the U.S. Department of Agriculture's Agricultural Marketing Service through grant 21SCBPN1069. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the USDA.

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**For more information, see [www.ag.ndsu.edu/food](http://www.ag.ndsu.edu/food)**

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## Ways to use potatoes:

- **Chipping:** Chipping is simply making chips from potatoes. White skinned potatoes are best for this method because of their starchy texture and low sugar content, making the potatoes crisp nicely. The potatoes are rinsed, dried then fried in oil or baked.

- **Baking /roasting:** Potatoes are often baked whole, adding fillings, toppings or condiments afterwards.

Cubing and wedging are common forms for roasting potatoes. Typically, a side dish, using seasonings to make recipes like breakfast potatoes, potato wedges or American fries is common. Depending on preference, roasting any type of potato will work. If you prefer the potato to be fluffy on the inside and crispy on the outside, use a starchier, high dry matter potato like a russet or white potato. If you prefer both the inside and the outside to be soft and fluffy, a potato with more moisture, like a red-skinned potato, is recommended.

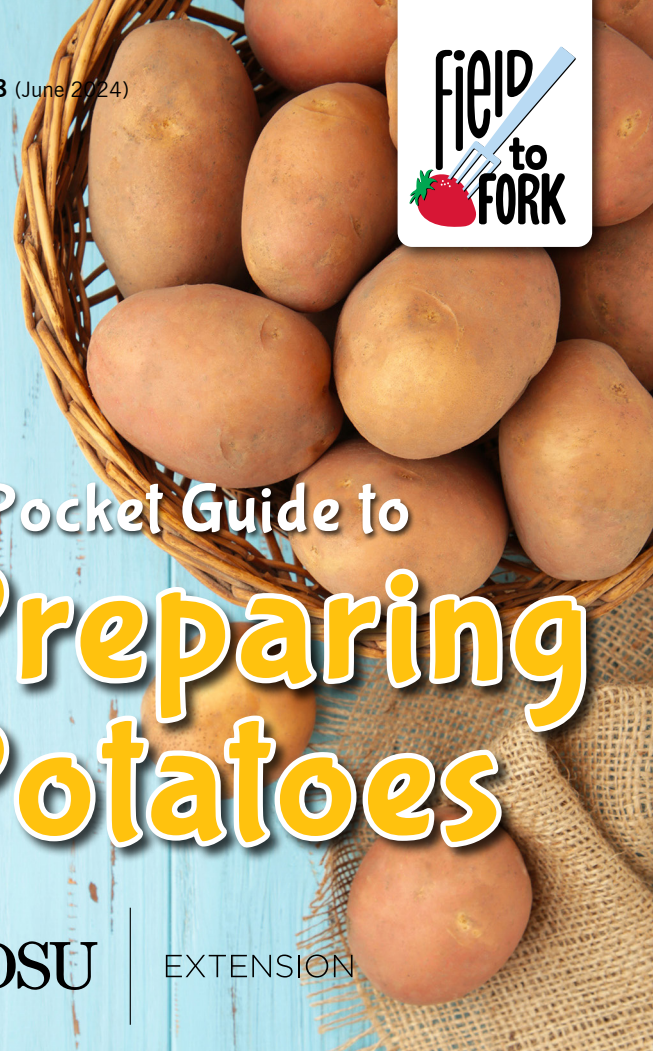
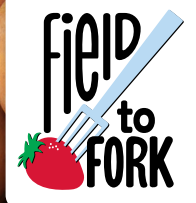


- **Frying:** Potatoes may be chopped, cut or sliced before frying in a deep fryer or an air fryer. Russet potatoes with high dry matter and white-skinned potatoes with a mealy texture are best for frying.
- **Mashing:** Mashed potatoes are widely used in or paired with recipes and can also be a way to get extra carbohydrates in the diet if harder foods need to be avoided due to a medical condition or procedure. Potatoes may be peeled or the skin may be left in place before cooking and mashing. To make mashed potatoes, add milk, cream and/or butter, plus your choice of seasonings to add flavor and enhance the texture.
- **Boiling:** Depending on size, potatoes may be washed and placed in boiling water. However, if the potato is large, cutting it into pieces will promote even cooking. Leaving the skin in place acts as a “blanket” for the potato, protecting it from absorbing excess water. Simmer covered potatoes for around 10-15 minutes, or until potatoes are tender to your liking.
- **Canning or Freezing:** When canning potatoes, use pressure canning since they have low acidity. Freezing potatoes requires extra steps to prevent browning. See the food preservation information at [www.ag.ndsu.edu/food](http://www.ag.ndsu.edu/food) to learn how to can and freeze.




# A Pocket Guide to Preparing Potatoes

NDSU | EXTENSION

FN2238 (June 2024)



## Selected Potatoes and Their Uses

Color	Cultivar	Description	Uses
 Red	<ul style="list-style-type: none"> <li>• Dakota Jewel</li> <li>• Red Pontiac</li> <li>• Dakota Rose</li> <li>• Red Norland</li> <li>• Viking</li> </ul>	<ul style="list-style-type: none"> <li>• Lower starch content</li> <li>• Sweet in flavor</li> <li>• Round with white flesh</li> </ul>	<ul style="list-style-type: none"> <li>• Boiling for salads, soups or stews</li> <li>• Mashed or roasted</li> </ul>
 Russet	<ul style="list-style-type: none"> <li>• Russet Burbank</li> <li>• Dakota Russet</li> <li>• Russet Norkotah</li> <li>• Goldrush</li> </ul>	<ul style="list-style-type: none"> <li>• Longer oval shape</li> <li>• Brown netted skin</li> <li>• Less sweet</li> <li>• High and low starch content</li> <li>• Dual purpose—greater dry matter, low in sugar</li> <li>• Russet Norkotah—lower dry matter</li> </ul>	<ul style="list-style-type: none"> <li>Often used in: <ul style="list-style-type: none"> <li>• French fries</li> <li>• Frozen processed foods</li> <li>• Roasting</li> <li>• American fries</li> <li>• Baking</li> </ul> </li> </ul>
 White or Yellow	<ul style="list-style-type: none"> <li>• Yukon Gold</li> <li>• Dakota Pearl</li> <li>• Kennebec</li> </ul>	<ul style="list-style-type: none"> <li>• High and low starch content</li> <li>• Yellow skin and flesh (Yukon)</li> <li>• White flesh and skin (Dakota Pearl and Kennebec)</li> <li>• Round shape</li> </ul>	<ul style="list-style-type: none"> <li>Those with a mealy texture are often used in: <ul style="list-style-type: none"> <li>• Chipping</li> <li>• Frying</li> <li>• Roasting</li> </ul> </li> <li>Those with a waxy texture are often used in: <ul style="list-style-type: none"> <li>• Boiling</li> <li>• Roasting</li> <li>• Mashing</li> </ul> </li> </ul>

## Nutrients

**Carbohydrate:** Potatoes are rich in complex carbohydrate and are categorized as a starchy vegetable. A 5-ounce potato has 28 grams of carbohydrates.

**Vitamin C:** Potatoes are rich in vitamin C. This is an antioxidant that aids in cell protection and cell health.

Nutrition Facts	
1 serving per container	
<b>Serving size 5 ounces (140g)</b>	
Amount per serving	
<b>Calories</b>	<b>120</b>
% Daily Value*	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 5mg	<b>0%</b>
<b>Total Carbohydrate</b> 28g	<b>10%</b>
Dietary Fiber 3g	<b>9%</b>
Total Sugars 1g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 3g	
Vitamin D 0mcg	0%
Calcium 10mg	0%
Iron 0mg	0%
Potassium 530mg	10%

\* 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.

INGREDIENTS: Boiled potato with skin.

**Potassium:** Both the skin and the potato flesh have a large amount of potassium. Potassium aids in cell formation and health and regulation of the heart. It also helps with metabolism of carbohydrates and protein.

**B vitamins:** Niacin, thiamin and vitamin B6 are three B vitamins found in potatoes. These all help with cell growth and cell function throughout the body.

## Preparing Potatoes

Fresh potatoes may carry soil on the outside because they grow underground. Clean potatoes carefully to remove the soil from the potato's surface.

**Wash:** To make cleaning easier, soak potatoes in cold water for 10-15 minutes to loosen the soil on the surface. After potatoes have soaked, use a vegetable brush to remove the loose dirt. Rinse with cool, running water.

**Trim:** This step is not always needed, but most potatoes will have a few sprouts following storage. Removing the sprouts will make the preparation process easier. Use a small paring knife to remove sprouts. You also may need to rinse the potato again.

**Prepare:** Potatoes may be prepared in various ways, with or without the skin. Although some recipes call for peeling, many nutrients are in or directly below the potato skin. Potassium is found in abundance in the potato skin and helps our bodies carry nutrients through cells as well as aids in nerve and heart health.



## Greening or Sprouting Potatoes

Potato skins may appear green if they are exposed to sunlight during growth or storage. The green comes from the chlorophyll that is produced when there is sunlight exposure. To prevent this from occurring, check for coloring before purchasing potatoes and store them in a cool, dark area away from light exposure.

When growing potatoes, make sure the mound or hill of soil that is created is built up enough for the potatoes to grow. Although chlorophyll is harmless and tasteless, solanine, a toxic substance, can form when exposed to light. Small amounts of solanine consumption are not harmful.

When potatoes begin sprouting, they are still edible. Remove and discard the sprouts before preparing. To avoid quick sprouting, store in a cool, dark place.

**Don't store potatoes in the refrigerator.** Stored potatoes last the longest in a cool, dark place. When stored in the refrigerator, however, the starch of the potato can turn into sugar. The sugar can speed the browning process during cooking.





## Knoephla Soup



- ¼ c. butter, unsalted
- 6 c. baking potatoes (about 3 large), peeled and cubed
- ½ c. onion (about 1 small onion), diced
- ¾ c. celery, diced
- ¾ c. carrot, diced
- ½ tsp. pepper (or to taste)
- 3 c. whole milk
- 6 c. chicken broth, lower sodium

- Knoephla Dumplings**
- ¾ c. whole wheat flour (or all-purpose flour)
- ¾ c. all-purpose flour
- 7 Tbsp. whole milk (or more as needed)
- 1 egg
- 2 tsp. dill weed
- 2 tsp. parsley
- ½ tsp. ground black pepper (or to taste)
- ½ tsp. salt

In large skillet, melt butter over medium heat. Sauté potatoes, onion, celery, carrot, and pepper until vegetables are tender, about 20 minutes. Stir 3 cups milk into potato mixture and heat until almost boiling, about 5 minutes. Remove skillet from heat. In a separate pot, bring chicken broth to a boil.

### To make Knoephla Dumplings

Combine whole wheat and all-purpose flour, 7 tablespoons milk, egg, dill, parsley, pepper and salt. Add more milk a tablespoon at a time until dough is stiff. Roll dough into ½-inch thick ropes. Cut ropes into ¼-inch pieces with a knife or kitchen shears. Drop pieces into boiling broth. Cover pot and reduce heat to simmer until knoephla dumplings begin to float, about 10 minutes. Stir potato mixture into broth and knoephla dumplings. Simmer until potatoes are tender.

Makes 10 (1 cup) servings. Each serving had 260 calories, 8 g fat, 9 g protein, 39 g carbohydrate, 3 g fiber and 480 mg sodium.

## Baked Potatoes

- 6 russet potatoes
- 1-2 tsp. melted butter
- Salt to taste

Preheat oven to 450 F. Line baking sheet with foil. Wash potatoes, making sure all dirt is removed. Using a fork or knife, poke potatoes on all sides. Place potatoes on the baking sheet. Bake for 25 minutes. Remove from oven. With a pastry brush, brush the potatoes with melted butter until completely coated on all sides. Sprinkle the potatoes with a pinch of salt on all sides. Place the potatoes back on the baking sheet reverse side up. Bake an additional 20 minutes. Using an oven mitt, gently squeeze a potato to check for doneness. It should be soft. If not done, continue baking in 5-minute increments until potatoes are soft to squeeze. Using a small paring knife, slice halfway through the potato lengthwise. Place desired toppings in and on the opening.

### Baked Potato Toppings

**Cheese:** mozzarella, cheddar, Mexican four cheese, cottage  
**Vegetables:** chives, avocado, broccoli, mushrooms, tomatoes, peppers, black olives, cilantro

**Meats:** bacon bits, pulled pork, ground beef, shredded chicken

Makes six potatoes. Each potato without toppings has 120 calories, 1.5 g fat, 3 g protein, 26 g carbohydrate, 2 g fiber and 10 mg sodium.

## Garlic Smashed Potatoes



- 1 lb. baby red potatoes (or use Yukon Gold or fingerling potatoes)
- Pinch of salt
- 4 Tbsp. butter, melted
- 2 cloves garlic, minced
- 1 tsp. fresh thyme leaves
- Freshly ground black pepper to taste
- ½ c. freshly grated Parmesan cheese

Preheat oven to 425 F. In a large pot, cover potatoes with water and add a pinch of salt. Bring water to a boil and simmer until potatoes are tender, about 15 minutes. Drain and let sit until cool enough to handle. On a large, rimmed baking sheet, toss potatoes with melted butter, minced garlic and thyme leaves. Using the bottom of a small drinking glass or mason jar, press down on potatoes to smash them into flat patties. Season with salt and pepper, then sprinkle with Parmesan. Bake until bottoms of potatoes are beginning to crisp and Parmesan is golden, about 25 minutes.

Makes six servings. Each serving has 160 calories, 10 g fat, 4 g protein, 15 g carbohydrate, 2 g fiber and 220 mg sodium.

## Vegetable Chowder

- 1 c. onion, diced
- 1 c. celery, diced
- ¼ c. butter or margarine
- 1 c. carrots, cubed or cut into buttons
- 4 large potatoes (Yukon Gold, Russet or Red), rinsed and cubed
- 4 chicken bouillon cubes
- 5 c. reduced-sodium chicken stock
- 1 (13-oz.) can evaporated milk
- 2 c. frozen corn, thawed and drained
- 12 strips bacon, cooked and crumbled
- Salt and pepper to taste

In a large pot over medium high heat, cook onion and celery in butter or margarine, stirring often until onion is translucent and beginning to brown. Add carrots, potatoes, bouillon cubes and stock. Bring to a boil, then reduce heat and simmer, stirring occasionally, to blend flavors. When vegetables are tender, add the evaporated milk, corn and bacon. Let simmer for a few minutes, then serve. Optional: sprinkle shredded cheddar cheese over the top.

Makes 14 servings. Each serving has 290 calories, 16 g fat, 9 g protein, 28 g carbohydrate, 3 g fiber and 490 mg sodium.

## Buffalo Potato Salad

- 1½ lbs. small red potatoes
- ¼ c. diced red bell pepper
- ¼ c. light mayonnaise
- 2 Tbsp. Greek yogurt
- 2-3 Tbsp. hot sauce
- 1 tsp. apple cider vinegar
- ¼ tsp. garlic powder
- ½ tsp. salt
- ⅙ tsp. ground black pepper
- 4 green onions, chopped

Wash potatoes and add them to a large pot with water. Boil for about 20 minutes until the potatoes are fork tender. Remove the potatoes from the water, allow to cool and cut potatoes into small pieces. Add red pepper and potatoes to large bowl. In a small bowl, mix mayonnaise, yogurt, hot sauce, apple cider vinegar and spices together. Add this mixture to potatoes and red peppers. Stir and add chopped green onions. Chill before serving.

Makes four servings. Each serving has 180 calories, 5 g fat, 4 g protein, 30 g carbohydrate, 3 g fiber and 610 mg sodium.



## Breakfast Potatoes

- 1½ lbs. russet potatoes
- ½ red pepper, diced
- ½ green pepper, diced
- 2 Tbsp. butter, melted
- 2 Tbsp. oil, such as canola, sunflower or olive
- 1 tsp. minced garlic
- ½ tsp. garlic powder
- ½ tsp. onion powder
- ¼ tsp. paprika
- 1 Tbsp. Italian seasoning
- Salt and pepper to taste

Preheat oven to 400 F. Soak potatoes in cold water for 10 minutes to loosen dirt. Use a vegetable brush to remove excess dirt from potatoes. Dice potatoes into ½- to 1-inch pieces. Add butter, oil and spices to a bowl. Add potatoes. Stir to coat potatoes with mixture. Place coated potatoes on a sheet pan and bake 25 minutes at 400 F. While potatoes are in the oven, heat olive oil in a skillet. Add peppers, sautéing until soft. Combine with potatoes.

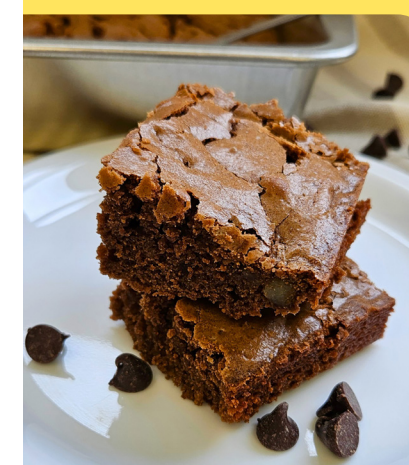
Optional additions: sautéed onions, shredded cheese of choice, chives, rosemary, thyme

Makes six servings. Without added salt, each serving has 160 calories, 8 g fat, 4 g protein, 23 g carbohydrate, 4 g fiber and 15 mg sodium.



## Potato Brownies

- 1⅔ c. sugar
- ¼ tsp. salt
- 1 c. flour
- 1 c. mashed potatoes
- 1 ½ c. semisweet chocolate chips
- ¾ c. butter or margarine
- 1 tsp. vanilla extract
- 4 eggs
- ½ tsp. baking powder
- Powdered sugar



Preheat oven to 350 F. In a saucepan, melt chocolate and butter/margarine on stove (or in a glass dish in the microwave). Cool slightly. Cream sugar, vanilla, salt and eggs. Add chocolate mixture and potatoes, flour and baking powder. Beat until creamy. Pour into a greased and floured 9-by13-inch cake pan. Bake at 350 F for around 30 minutes. Let cool. Sprinkle powdered sugar on top.

Makes 24 brownies. Each brownie has 200 calories, 10 g fat, 2 g protein, 26 g carbohydrate, 1 g fiber and 170 mg sodium.

## Broccoli and Cheddar Potato Tots

- 5 small red potatoes
- 1 Tbsp. all-purpose flour
- 1 tsp. garlic powder
- 1 tsp. onion powder
- 1 tsp. dried parsley
- ½ tsp. ground black pepper
- 1 c. fresh broccoli, chopped
- ¾ c. shredded cheddar cheese
- 3 Tbsp. olive oil

Line a baking sheet with parchment paper. Peel potatoes and place in a large pot, covered with water. Bring to a boil and let the potatoes boil for 5-7 minutes, until fork tender. Remove potatoes and let cool. Once cool, grate the potatoes in a large bowl and remove excess water.

Preheat oven to 350 F. Add flour, garlic powder, onion powder, parsley and black pepper to the bowl. Mix until a thick dough-like texture forms. Set aside.

In a food processor, chop broccoli into very small pieces. Add broccoli and cheese to the potato mixture and mix until evenly dispersed. Using your hands, mold heaping tablespoons of the mixture into a rectangular, tot-like shape and place on a plate.

Add olive oil to a large pan over medium-high heat. Add tots and cook for 5-6 minutes, until golden brown. Flip and cook for another 2-3 minutes until browned. Transfer tots to the parchment-lined baking sheet and bake in the preheated oven for 10 minutes.

Makes six servings. Each serving has 210 calories, 16 g fat, 6 g protein, 14 g carbohydrate, 1 g fiber and 280 mg sodium.

