

# FRESH

U.S. POTATO REFERENCE GUIDE





## INTRODUCTION

### **U.S. TABLE-STOCK POTATOES: QUALITY, CONSISTENCY, VARIETY**

There's a reason the United States is one of the world's major potato-producing countries, growing more than 20 million metric tons annually.

In fact, there are many reasons—including favorable soil, ideal growing conditions, plentiful water and an industry committed both to advancing research and technology and to sustaining the traditions that made U.S. potato growers so world-renowned in the first place.

The result: U.S. potatoes display a level of quality, consistency and variety that none can match.

### **BUILDING ON NATURE'S BOUNTY**

U.S. potatoes' outstanding quality starts with exceptional seeds, all of which pass the U.S.'s strict seed certification system. Nature plays a role, too, giving major potato-growing regions the long, warm days and cool nights that ensure maximum productivity and consistent, flavorful potatoes with minimal defects. And the cold, hard winters keep pests and diseases at bay.

### **TO YOUR HEALTH**

Did you know potatoes are a nutrient-dense complex carbohydrate? In fact, potatoes are an excellent source of vitamin C (30% of the DV), which is more than the vitamin C content of one medium tomato (27% DV) or a sweet potato (20% DV).<sup>1,2</sup> Skin-on potatoes are a good source of potassium and have more potassium than a medium-sized banana.<sup>3</sup> Potatoes contain a variety of additional essential vitamins and minerals including the minerals potassium, magnesium, and iron.<sup>4</sup> Potatoes are also a good source of vitamin B6 (>12% of the U.S. daily value per serving) and a



dietary source (>2% of the U.S. daily value) of folate, riboflavin, and thiamin.<sup>5</sup> One medium potato with skin contributes 2 grams of fiber, or 7% of the DV per serving and contains 3 grams of protein. Potatoes are only 110 calories, contain no fat, cholesterol or sodium, and are naturally gluten free.

### **ROOTED IN TRADITION**

Because the United States potato industry is largely a family affair, U.S. potato growers draw from generations of in-the-field experience to cultivate a premium product. Reflecting this strong tradition dating back to the early 1900s, U.S. potato growers take pride in the special care with which they tend their crops.

### **TECHNOLOGICAL EDGE**

U.S. potato growers also follow the data when growing premium potatoes. Soil conditions, water content, weather patterns and the plant's nutritional needs all undergo precise monitoring so that growers can adapt rapidly to changing circumstances. After harvest, U.S. potatoes are stored in carefully designed facilities with just the right temperature, lighting, humidity and ventilation to preserve their quality.

### **TRUSTED AND VERIFIED**

All U.S. potatoes are inspected and sorted for maximum quality and consistency. The pick of the crop is sized and graded using standards of quality established by the United States Department of Agriculture (USDA). The upshot: a high-quality potato that buyers can count on for consistency and value.

### **THE CHOICE IS YOURS**

U.S. potatoes are grown across the country in regions where unique microclimates support a range of potato varieties. From beloved varieties like the russet to distinctive purples, U.S. growers maintain an exciting mix. And thanks to research programs that continue to improve existing varieties and evaluate new ones, that mix is set to grow.

### **GROWING INNOVATION: THE OPTIONS AND OPPORTUNITIES OF U.S. TABLE-STOCK POTATOES**

U.S. potato growers cultivate a broad selection of more than 100 table-stock varieties. Each fits into one of seven potato categories: russet, red, white, yellow, blue-purple, fingerling and petite. Gradations in size, texture, color and flavor pack the potato toolkit with even more versatile choices, as do multiple potato grades and flexible packaging options. It all makes potatoes the perfect base for a whole new crop of nutritious, contemporary recipe ideas and promotions.

The following pages introduce you to the major types of U.S. potatoes, their characteristics and varieties.

### **MAKING SENSE OF COMMON POTATO TERMS**

How do waxy and floury potatoes differ? And what's a "new" potato?

Waxy potatoes display a creamy, firm texture when cooked, thanks to their low starch and high water content. Waxy potatoes also keep their shape when cooked, making them ideal for boiling, steaming and roasting.

Floury potatoes are low in water content; and by the time of harvest, most of their sugar has converted to starch. This leads to a dry, fluffy cooked texture accentuated by baking and mashing. Floury potatoes also fry well, as low sugar levels mean less excessive browning.

"New potatoes" is a term often used to market round red potatoes, and in this case, "new" technically refers to any type of potato that is harvested before reaching full size.

*These medium- to large-sized potatoes are oblong or slightly flattened and oval. They have a light to medium russet-brown, netted skin and white to pale yellow flesh. Their texture is floury, dry, light and fluffy, while their hearty skin is flavorful when cooked. Expect a mild, earthy flavor and medium sugar content.*

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## RUSSET POTATOES

### **RECOMMENDED USES**

Russets are the potato of choice for baking and frying with a finished product that is crispy on the outside and fluffy on the inside. They also make heavenly mashed potatoes—light and fluffy. Their flavor and fluffy texture when baked go well with all kinds of toppings, from traditional sour cream and chives to bold Mediterranean and Latin seasonings. Cut them into planks or wedges to make hearty oven-roasted fries.

*Major varieties: Burbank, Norkotah, Ranger, Goldrush and Centennial*





*Yellow potatoes range from marble-sized to large and are round or oblong in shape. With a light tan to golden skin and yellow to golden flesh, these potatoes have a slightly waxy, velvety and moist texture. Yellow potatoes have a subtly sweet, rich and buttery flavor and a medium sugar content.*

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## YELLOW POTATOES

### **RECOMMENDED USES**

Yellow potatoes have grown exceedingly popular with consumers and chefs thanks to their sumptuous, buttery flavor and creamy texture. Grilling gives them a crispy skin that enhances those qualities while also creating a slightly sweet, caramelized flavor. The creamy texture and golden color of yellow potatoes mean you can use less or no butter for lighter, nutritious dishes, and their naturally smooth texture lends itself well to lighter versions of baked, roasted or mashed potatoes. Simmer yellow potatoes until fully cooked, then drain, chill, and gently smash into flat disks. Brown these in oil or clarified butter and serve as a side or appetizer topped with sour cream and chives or other garnishes.

*Major varieties: Yukon Gold, Yellow Finn, Agata, Santina and Bintje*



*These small to medium, round or slightly oblong potatoes have a smooth, thin red skin and white flesh. With their waxy, moist, smooth and creamy texture, red potatoes are subtly sweet in flavor and boast a medium sugar content.*

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## RED POTATOES

### **RECOMMENDED USES**

Because of their waxy texture, red potatoes stay firm throughout cooking, whether roasted or stewed. Their thin yet vivid red skin adds appealing color and texture to sides and salads. Reds are frequently used to make tender yet firm potato salad and to add pizzazz to soups and stews. They are also delicious mashed or roasted.

*Major varieties: Chieftain, Norland, Red La Soda, Pontiac and Ruby*

*White potatoes are small to medium in size and have a round to long shape with white or tan skin and white flesh. These are medium-starch potatoes with a slightly creamy, dense texture and thin, delicate skin. White potatoes have a subtly sweet and mild flavor and low sugar content.*

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## WHITE POTATOES

### **RECOMMENDED USES**

White potatoes hold their shape well after cooking. Their delicate, thin skins add just the right amount of texture to velvety mashed potatoes without the need for peeling. Grilling whites brings out a more full-bodied flavor. White potatoes are also good for frying. To create signature potato salads, just toss cooked white potatoes with dressings and ingredients borrowed from other salads: Caesar dressing and grated Parmesan, or ranch dressing, chopped egg and bacon crumbles.

*Major varieties: White Rose, Cascade, Superior, Kennebec and Cobbler*





*Purple-blue potatoes are small to medium with shapes ranging from oblong to fingerling. These potatoes have a deep purple, blue or slightly red skin with blue, purple lavender, pink, red or white flesh. That flesh is characteristically moist and firm, and the potatoes' flavor is earthy and nutty. Their sugar content is low.*

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## PURPLE-BLUE POTATOES

### **RECOMMENDED USES**

Most purple-blue potatoes' flesh is moist and firm and retains its shape while adding eye-catching color and luscious taste to salads. Their purple hue is preserved best by microwaving, but steaming and baking also complement purple-blue potatoes. Because of their mild yet distinctly nutty flavor, purple-blue potatoes naturally pair well with green salad flavors. Combine them with white and red potatoes in salads or roasted medleys to make all three colors pop.

*Major varieties: Purple Peruvian, Purple Majesty and Adirondack Blue*





*Fingerling potatoes are 2 to 4 inches long and, as their name suggests, are finger-shaped or oblong. Their skin comes in red, orange, purple and white varieties, and their flesh can run from red and purple to yellow and white—sometimes streaked with veins of color. These potatoes have a firm, waxy texture and their flavor is buttery, nutty and earthy with a medium sugar content.*

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## FINGERLING POTATOES

### **RECOMMENDED USES**

Fingerlings' color and shape are a welcome visual addition to any dish. Pan-frying and roasting enhance their robust taste and showcase their wonderful nutty or buttery flavors. Consider fingerlings as a change-of-pace foundation for a unique potato salad. Split fingerlings lengthwise and oven-roast to serve as a small-plate or side-dish alternative to fries, enjoyed with a flavored dipping sauce like spicy ketchup, romesco or Sriracha mayo.

***Major varieties:** mostly sold as fingerlings comprising various specific varieties. Check with your supplier to find out which fingerling varieties are available*

*These small bite-sized potatoes are actually a USDA grade standard based upon size—both “C-size” potatoes and smaller specimens often referred to as pearls or marble size. They have the same skin and flesh color as their larger-sized cousins, and the same shape, texture and sugar content. Their flavor profile is similar but more concentrated, given that it’s packed into a smaller potato.*

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## PETITE POTATOES

### **RECOMMENDED USES**

Roast a combination of colors for an attractive side. Their concentrated flavor and quicker cooking time make them a smart choice for potato salads. Or simply toss in olive oil, rosemary, salt and pepper to make colorful, delicious and fun roasted potatoes. They save prep time because they can be prepared and served whole, without slicing or chopping.

*Major varieties: check with your supplier to find out which petite varieties are available*



# U.S. POTATO SIZES AND GRADES

GRADES OF POTATOES	CHARACTERISTICS	FREE FROM	SIZE
U.S. No. 1	<p>Similar varietal characteristics, except when designated as a mixed or specialty pack.</p> <ul style="list-style-type: none"> <li>• Firm</li> <li>• Fairly clean</li> <li>• Fairly well shaped</li> </ul>	<ol style="list-style-type: none"> <li>1. Freezing</li> <li>2. Blackheart</li> <li>3. Late blight, southern bacterial wilt and ring rot</li> <li>4. Soft rot and wet breakdown</li> <li>5. Damage by any other cause</li> </ol>	<p>Not less than 1-7/8 inches in diameter, unless otherwise specified in connection with the grade.</p>
U.S. Commercial	<p>Similar varietal characteristics, except when designated as a mixed or specialty pack.</p> <ul style="list-style-type: none"> <li>• Firm</li> <li>• Fairly clean</li> <li>• Fairly well shaped</li> </ul>	<p>Serious damage caused by:</p> <ol style="list-style-type: none"> <li>1. Dirt or other foreign matter</li> <li>2. Russet scab</li> <li>3. Rhizoctonia</li> </ol>	<p>Not less than 1-7/8 inches in diameter, unless otherwise specified in connection with the grade.</p>
U.S. No. 2	<p>Similar varietal characteristics, except when designated as a mixed or specialty pack. Not seriously misshapen.</p>	<ol style="list-style-type: none"> <li>1. Freezing</li> <li>2. Blackheart</li> <li>3. Late blight, southern bacterial wilt and ring rot</li> <li>4. Soft rot and wet breakdown</li> <li>5. Serious damage by any other cause</li> </ol>	<p>Not less than 1-1/2 inches in diameter, unless otherwise specified in connection with the grade.</p>



# Who Uses U.S. Fresh Potatoes?

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*The potato is one of mankind's most beloved foods. Cultivated for millennia, it enjoys pride of place in culinary traditions across the globe. And yet nobody grows the potato better than U.S. farmers. So, the answer to the question "Who uses U.S. potatoes?" is simple: the whole world uses them. In restaurants or at retail, in foodservice and the food industry, or at family meals, U.S. potatoes are always close at hand.*

## **RETAIL CONSUMERS**

Repeat purchases prove it: consumers love potatoes. When fresh, they're convenient to choose and buy, as they come in a variety of pack sizes. And they're the basis for a wealth of recipes that people love.

## **FOOD MANUFACTURERS**

Fresh U.S. potatoes are indispensable ingredients in prepared meals and sides, soups and stews and the growing category of fresh-made ready meals sold at retail and in takeout.

## **FOODSERVICE INDUSTRY**

U.S. Potatoes offer unmatched value and versatility to commercial and noncommercial foodservice operators, and are a favorite of chefs and consumers alike.

## TAKE CARE: HOW TO HANDLE AND STORE FRESH U.S. TABLE-STOCK POTATOES

U.S. table-stock potatoes are living foods! They continue to undergo metabolic processes after harvest, making proper handling and storage critical to quality. Familiarize yourself with these best practices to keep potatoes in prime condition from the point of purchase onward. And remember: careful treatment can slow potato metabolism, but it can't stop it.

ENVIRONMENTAL FACTOR	POTENTIAL PROBLEM	WHAT TO DO
Temperature	When the temperature's too high, potato metabolism increases; when it's too low, it exacerbates bruising and internal discoloration and converts starches to sugars, which can cause potatoes to darken when fried. Further, variable temperatures can trigger sprouting.	Proper temperature is the most important storage management tool. Temperatures between 7.2°C and 10°C (45°F and 50°F) are ideal for most potato types.
Humidity	Low humidity levels lead to excessive shrinkage and shriveling. By contrast, too much humidity causes disease problems.	Maintain relative humidity around 95% in potato storage areas. If using humidifiers, prevent water droplets from forming or dripping onto potatoes. If humidification isn't available, simply wet the storage floor—but don't wet the potatoes.  Maintain proper ventilation, too. Store potatoes on a pallet to encourage air circulation and limit spoilage by allowing the potatoes to respire. Make sure to leave room for airflow between pallets and walls, too.
Light	Excessive light turns potatoes green and gives them a bitter taste.	Turn off storage lights and minimize exposure to all other lighting. And minimize the time that potatoes spend in loading areas and other uncontrolled environments.
Sanitation	Improper sanitation can accelerate disease development. Allowing a moisture film to form on potatoes can lead to rot.	Clean and sanitize all potato-handling equipment. Thoroughly dry washed potatoes before repacking.
Handling	Rough handling at any link in the supply chain can cause serious quality problems.	To minimize bruising, keep temperatures above 10°C (50°F) before handling. Avoid dropping or bruising potatoes—a fall of even a few inches causes bruising.



## **Trusted Tips from Growers Who Know**

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**When it comes to keeping potatoes in tip-top shape, the collective wisdom of U.S. potato growers could fill a library. In the interest of space, we've consolidated their know-how into this page of helpful hints and news you can use.**





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## **TIPS FOR IMPORTERS**

- Don't load cool rooms beyond their capacity.
- Keep potatoes away from apples, pears, garlic or onions to avoid flavor transfer.
- Store potatoes in the dark, as exposure to light causes greening.
- Use a first-in, first-out inventory management system.
- Move freshly dug potatoes to retail more rapidly than storage potatoes.
- Make sure any temperature changes are gradual.

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## **TIPS FOR FOODSERVICE OPERATORS**

- Use a first-in, first-out inventory management system.
- Don't refrigerate potatoes; store them in a cool, dark and dry area with good ventilation.
- At ideal temperatures, potatoes store for several weeks; otherwise, use within one week.
- Keep potatoes away from apples, pears, garlic or onions to avoid flavor transfer.
- Store potatoes in the dark, as exposure to light causes greening.
- Sprouted potatoes are edible once the sprout is removed.
- Wash potatoes carefully and scrub the skin gently with a vegetable brush before cooking.
- Show some skin: skin-on potatoes are easier to prepare and more healthful.
- Cut potatoes can be stored in cold water before cooking to prevent discoloration.
- To prevent the loss of some water-soluble nutrients, don't soak longer than two hours.
- Don't leave cooked or mayonnaise-based potato dishes at room temperature longer than two hours or one hour in hot weather.

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## **TIPS FOR RETAILERS**

### **IN THE WAREHOUSE:**

- Leave potatoes in shipping boxes and on pallets at proper humidity and temperature until display.
- Make sure any temperature changes are gradual.
- Keep potatoes away from apples, pears, garlic or onions to avoid flavor transfer.
- Store potatoes in the dark, as exposure to light causes greening.
- Typical shelf life is 30 days; keep freshly dug potatoes no longer than 10 days.
- The ideal storage temperature is between 7.2° C and 10° C.

### **IN THE STORE:**

- To limit light exposure, cover the potato section during off hours.
- Use canopies or awnings to prolong shelf life.
- Maintain a sanitary display area.
- Don't mist potatoes.
- Rotate stock daily.
- Storage in a chiller or refrigerator is not recommended, as they are too cold.

# Potatoes USA: Your Resource for U.S. Potatoes

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**Potatoes USA is the marketing organization representing the 2,500 commercial potato growers operating in the United States. In addition to fresh table-stock potatoes, we promote four other categories of potatoes and potato products: dehydrated potatoes, fresh chipping potatoes, seed potatoes and frozen potato products.**



Whether you're seeking ideas, information, tools or inspiration, Potatoes USA can provide support to enhance your sales:

- Educational and training materials
- On-site and technical training
- Point-of-sale materials
- Individualized seminars
- Promotional support
- Recipe and formula development assistance
- Product samples

Contact your local Potatoes USA representative office to find out about services available in your market. We're also happy to put you in touch with exporters of U.S. potatoes and potato products. And to answer your potato questions and fuel your imagination, visit [PotatoesUSA.com](http://PotatoesUSA.com) any time, day or night.



For more information about table-stock exporters and suppliers, visit:

<http://potatoesusa.com/contact/us-potato-exporters-suppliers/table-stock-exporters-and-suppliers>

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