

Chapter 11
Potatoes and Grains

Case Study *Want to Try?*

Summer is over, and fall is here, a season for warm dishes, hearty soups, and somewhat heavier fare. Chef Jean is in the process of adjusting his menu to reflect the change in temperature and appetite. He has decided to offer an increased variety of pasta dishes and focus on grains and potatoes as side selections.

Linda has noticed that even though diners are increasingly conscious of healthy choices, potatoes are a real comfort food, especially as the weather becomes cooler. She agrees that they need to offer a varied selection of potatoes and an interesting choice of grains. However, Linda would also like to see increased use of legumes.

Chef Jean and Linda are working together to find a variety of dishes that vary in heartiness. They plan to offer a different selection of side dishes at lunch and dinner, as well as some main course vegetarian options at both services.

As you read this chapter, think about the following questions:

1. What types of potatoes would work best at lunch and dinner?
2. What types of grains should be used? How can you encourage patrons to try new grain dishes?
3. How might you incorporate legumes into lunch and dinner selections?
4. How much variety can you offer without impacting your budget?

Stephanie Izard, Restaurateur

The Drunken Goat/Stephanie Izard, Inc.

Although I didn't know it at the time, by the age of ten I had already figured out what I wanted to be when I grew up. At home, my favorite activity was to play "restaurant," offering friends and family a menu that I created from scratch. I was influenced by my parent's global cooking and the gourmet club they hosted each month, and my love affair with food took off.



As I grew older, I enjoyed cooking, but somehow thought my career should be business related.

In pursuit of a nonfood career, I attended the University of Michigan. But, there was no denying my interest in food, so after earning my degree in sociology, I entertained the idea of culinary school. I graduated in 1998 and left Michigan, heading west where I went on to earn my culinary degree at the Scottsdale Culinary Institute.

My culinary career began with a stint as a line cook at the French-inspired Christopher's Fermier Brasserie. Two years later, I left Arizona and returned to the Midwest, thrusting myself into the culinary capital of the region, Chicago. I again worked as a line cook for my first job in the Windy City, this time at Jean Georges' restaurant, Vong's Thai Kitchen. I next moved to the position of roundsman at Shawn McClain's award-winning new American/Asian restaurant Spring, and afterward became sous chef at the critically acclaimed French bistro, La Tache.

In 2004, I took a tremendous risk and opened my own restaurant, Scylla. Three years later, Scylla was named one of the 10 finest small restaurants in the country by *Bon Appetit* magazine. Soon after that, I did an extremely difficult thing: in order to allow time for travel, and a chance to give serious thought to my next venture, I closed Scylla.

In the fall of 2007, when I returned from my travels, I received a call from the producers of Bravo's *Top Chef*; they wanted me. An avid fan of the show (although I had to record and watch the program on my own schedule due to the nature of the long hours of a restaurant chef), I entered the competition telling myself, about the food, to "just make it taste good," and about the drama, to just avoid it. In the end, it worked, and I was not only named the *Top Chef*, but also voted fan favorite by the show's audience.

I love food! I love the people in this industry. I love the challenges. I love the excitement. And I really just love feeding people delicious food.

You have to really love food and cooking to last in this industry. You have to be ready to work harder than you ever have before. There's nothing easy about it. But at the end of the day (or rather, some time after midnight) you have the satisfaction

that you just made a serious amount of people very, very happy. You'll most likely be working longer, harder hours than most of your friends, but you'll be going to work and doing what you love every day, which is a lot more than most people can say. And have fun in the kitchen because in the end, that's what it's all about. Excite the entire palate with every bite.

Remember:

“Make it happen.”

About Potatoes and Grains

I grew up loving potatoes in any shape or form. . . baked, twice baked, French fries, tater tots, hash browns, mashed. . . the list goes on. I still love all potatoes, and lately I've begun to explore all varieties from fingerlings to new potatoes to purple potatoes and others at the farmers' markets. It is important to know the difference in the starch content and flavor of each. I think that Idaho potatoes are best for fries; Yukons work better for mashed because they are creamier and less starchy; and new potatoes are perfect with the skins on because the skin is thin, beautiful, and delicious.

Grains have wonderful health benefits, as do potatoes. In vegetarian cooking, grains can be an essential way to get nutrients. I love “fun grains” like quinoa—they make great healthy salads.

11.1 Potatoes

- Types of potatoes
- Selecting and storing potatoes
- Cooking potatoes

11.2 Legumes and Grains

- Legumes
- Selecting and storing legumes
- Cooking legumes
- Grains
- Selecting and storing grains
- Cooking grains

11.3 Pasta

- Pasta and dumplings
- Cooking pasta
- Cooking dumplings

SECTION 11.1 POTATOES

Potatoes are native to North and South America. In the fifteenth century, the Spanish explorer Francisco Pizarro introduced them to Europe and sent them back to Spain. Potatoes became a staple in many countries, particularly in Ireland, because they were inexpensive and easy to grow. Today, the potato is the most important noncereal crop in the world.

Study Questions

After studying Section 11.1, you should be able to answer the following questions:

- What are the different types of potatoes?
 - What are the methods to selecting, receiving, and storing potatoes?
 - What types of cooking methods and recipes are there for preparing potatoes?
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Types of Potatoes

All potatoes are not the same. Potato varieties differ in starch and moisture content, shape, and skin color. That's why different varieties produce a different end product. Potatoes are categorized by the potato's starch and moisture content. The starch content of any potato increases with age.


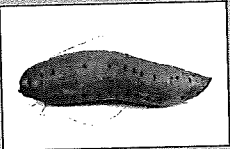
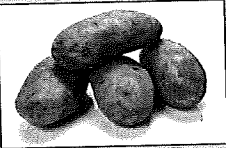

High-starch, low-moisture potatoes are dense because they have a high amount of dry starch. These potatoes swell and separate as they cook, which makes the potato fluffy. High-starch, low-moisture potatoes are best when baked, puréed, or fried. They include Idaho and russet potatoes.

Medium-starch, medium-moisture potatoes are versatile. The high moisture prevents the potato from swelling when cooked. These types of potatoes hold their shape, so they are good for potato salads and potato cakes. Medium-starch, medium-moisture potatoes are best for boiling, steaming, sautéing, oven roasting, stewing, mashing, and braising. They include chef's all-purpose, Yukon gold, and yellow-fleshed potatoes.

Low-starch, high-moisture potatoes are new potatoes. New potatoes are best for boiling, steaming, and oven roasting.

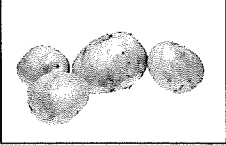

Sweet potatoes, yams, and russet potatoes are suited to baking, puréeing, and frying because they are high in starch and low in moisture. Table 11.1 lists the characteristics of the different types of potatoes.

Table 11.1: Characteristics of Potatoes

Name	Characteristics	Best Cooking Methods
<p>Sweet potatoes</p> 	<ul style="list-style-type: none"> • Sweet potatoes (as other potatoes) are tubers. Tubers are fat, underground stems capable of growing a new plant. • Their thick skin ranges in color from light to brownish red. • They are high in starch and low in moisture. • They have an orange, mealy flesh that is very high in sugar. • Unlike the russet or chef's potato, sweet potatoes are available canned in a sweet, sugary sauce. • They are available year-round. • They are popular ingredients in breads, pies, puddings, soups, and casseroles. 	<p>Boiling Baking Puréeing Roasted</p>
<p>Yam</p> 	<ul style="list-style-type: none"> • Yams are not related to the sweet potato. • They originated in Asia. • They are less sweet than sweet potatoes. • They range in color from creamy white to deep red. • Yams have more natural sugar and a higher moisture content. • Yams and sweet potatoes are used interchangeably. 	<p>Baking Puréeing Frying</p>
<p>Russet</p> 	<ul style="list-style-type: none"> • They are referred to as Idaho potatoes, although many other states also produce these potatoes. • They are the standard white baking potato. • Their skin is generally a brownish-red color. • Their flesh is mealy and white. • They are available in many shapes and sizes. • Russet potatoes are good for baking, frying, mashing, roasting, and broiling. They are often used to make French fries. 	<p>Baking Frying</p>
<p>Chef's/All-purpose</p> 	<ul style="list-style-type: none"> • They are drier and less starchy than russet potatoes. • They are less expensive than russet potatoes. • Since they are irregularly shaped, they are most suited to preparation in which the final shape of the potato is not visually important, such as mashing, puréeing, in salads, scalloped or casserole dishes, soups, braising, and sautéing. 	<p>Mashing Puréeing Braising Sautéing</p>

continued

Table 11.1: Characteristics of Potatoes *continued*

Name	Characteristics	Best Cooking Methods
<p>New potatoes</p> 	<ul style="list-style-type: none"> • These are small, immature red potatoes that are harvested when they are very small, less than 2 inches in diameter. • Unlike other baking potatoes, new potatoes are high in moisture and sugar, but have a low starch content. • Boiling and steaming brings out the natural sweetness and fresh flavor of new potatoes. • They are good to use in any preparation where the potato must keep its shape. 	<p>Boiling Steaming Roasting</p>
<p>Yellow-fleshed</p> 	<ul style="list-style-type: none"> • Yellow-fleshed have become increasingly popular in the United States in recent years. • They are common in other parts of the world, including Europe and South America. • They produce a golden color and a buttery flavor. • They are good, all-purpose potatoes. • Yukon gold is one well-known variety. • They are good for baking, mashing, frying, whipping, or roasting. They are especially good for potato pancakes. 	<p>Mashing</p>

[fast fact]

Did You Know...?

The U.S. Census Bureau 2008 reports that 1.8 billion pounds of sweet potatoes were produced by major sweet potato-producing states in 2007. North Carolina produced the most sweet potatoes, with 667 million pounds. California was a distant second with 426 million pounds of sweet potatoes produced.

One Bad Apple

There is an old expression: "One bad apple will spoil the whole bunch." Apples aside, this is true with potatoes. Soft bacterial rot in potatoes can begin with one infected tuber and spread to an entire pile. Some potato problems are carried in bacteria or mold spores in the dirt that clings to the potatoes. Store and clean them properly before preparation, and these potential problems will never develop into real problems.

However, if grown, harvested, or stored improperly, a potato can develop diseases with names like soft rot, pink rot, silver scurf, and pythium leak. Most of these ailments are discovered and treated on the farm level before the crop goes to market. However, improper storage of potatoes in the pantry can initiate growth of bacteria that can do great damage to an entire shipment.

Potatoes are amazing. They breathe and circulate and can even heal their own wounds. But if rot begins, they can no longer breathe and heal. This creates decay as the bacteria feed on the starch and sugar and proliferate throughout the spud. Once growing, the bacteria can take hold on neighboring tubers and block their respiration and otherwise wreak havoc. As the bacteria do their work, they generate heat, which increases the temperature of the storage pile of potatoes, moving them into the danger zone for more bacterial growth. A vicious cycle ensues, and before too long, the entire pantry is filled with rotting potato stench.

Store potatoes in a cool, dry, well-ventilated environment away from sunlight. Store them in an area that is too cool, and the potato will "stress," which reduces the cooking quality. The ideal temperature is 45°F to 55°F, with good airflow. Avoid storing potatoes in plastic. Store them in paper or cardboard, or in open crates. Remove excess dirt and clean the storage bins of dirt and debris between shipments.

If you notice small flying insects (fruit fly-type) or smell a musty, rotten, or ammonia odor near the potatoes, check all the potatoes immediately, especially toward the bottom of the pile. If one dark, soft, wrinkled, damp, or foul-smelling potato is found, immediately remove it from the pile. Check all the remaining potatoes, especially the neighbors to the bad one, and rotate them bottom to top. Remove and discard any suspicious potatoes.

If potatoes seem wholesome, but have begun to slightly wrinkle or shrink, clean and boil them for use in recipes. Only bake firm, fresh potatoes. And always purchase potatoes from approved, reputable farms, vendors, and suppliers.

Selecting and Storing Potatoes

When selecting potatoes, choose potatoes that are firm and smooth. Do not accept potatoes with dark spots, green areas, mold, or large cuts. Store potatoes in a cool, dry place at temperatures ranging from 45°F to 55°F. The maximum storage period for russet and all-purpose potatoes is 30 days. Store yams for up to two weeks. Store sweet potatoes for up to one week. Store new potatoes—a small, immature red potato—no longer than one week. All potatoes are best stored in ventilated containers in indirect light. Figure 11.1 shows potatoes in a ventilated container.

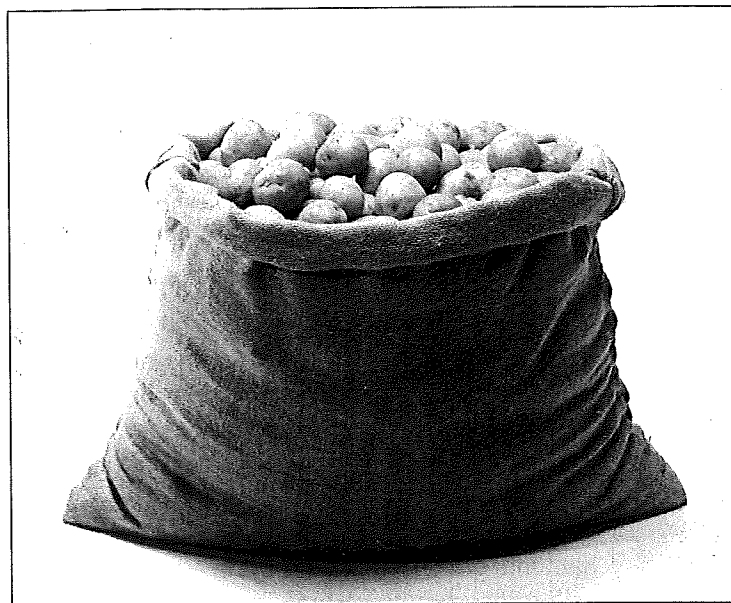


Figure 11.1: Store potatoes in cool, dry places in ventilated containers to preserve freshness.

A wide variety of market options exists when purchasing potatoes. These forms include fresh, frozen, refrigerated, canned, and dried. Value-added forms are also available, such as potatoes cut into shapes.

[nutrition]

Peruvian Purples and Red Thumbs

Potatoes, just like other fresh produce, can be colorful. Although potatoes might not seem like the most colorful tuber, heritage varieties are filled with bright color. Fingerling potatoes are small, mature potatoes from delicious historic seed lines that come in yellow, orange, red, and even purple.

The naturally occurring colors come from pigment nutrients called flavonoids. The purple and red pigments are flavonoids called anthocyanins, which is the same pigment in blueberries or red cabbage. These are antioxidants that might even help fight off cancer.

Gorgeous color and great flavor aside, these foods are worth eating for the health-giving qualities of the pigments. As with all anthocyanin foods, a slightly acidic cooking medium keeps the color perky red; while a little alkaline causes a dull blue.

Cooking Potatoes

Potatoes that are exposed to light may develop a greenish color. Although the color is harmless, it means that the potato contains **solanine** (SOLE-ah-noon), a harmful, bitter-tasting substance. Potato sprouts can also contain **solanine**. Cut away and discard sprouts and any green portions before using potatoes. Always discard potatoes if you have any doubts about their freshness or safety. Figure 11.2 is a greenish potato with sprouts.

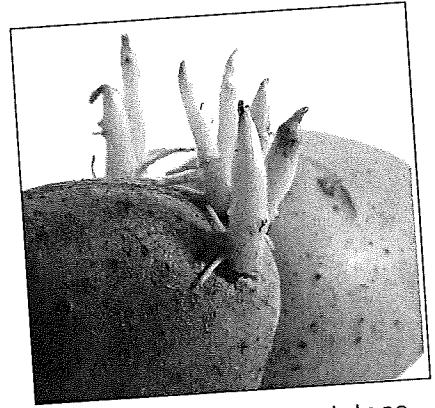


Figure 11.2: Green potatoes and potato sprouts contain solanine, which can be poisonous and cause gastrointestinal and neurological symptoms.

The potato is one of the most popular vegetables because it is inexpensive, adaptable, versatile, and tasty. Apply any cooking methods, including boiling, steaming, baking, sautéing, *en casserole*, deep-frying, and puréeing to produce a number of preparations with special flavors, textures, and appearances. Different potato varieties will produce different results.

The two categories for cooking potatoes are single-stage and multiple-stage techniques. In the **single-stage technique**, take potatoes directly from the raw state to the finished state by using one cooking method. Boiled and baked potatoes are examples of single-stage techniques.

In a **multiple-stage technique**, prepare potatoes using more than one cooking method before they are a finished dish. One example of potatoes prepared using the multiple-stage method is **lyonnaise** (LEE-on-AZE) potatoes. In this recipe, the potatoes are precooked, sliced, and then fried with onions, as shown in Figure 11.3.

Boiling is one of the easiest methods of cooking potatoes. In addition, boiling is often the first step for other preparations, such as puréed potatoes.

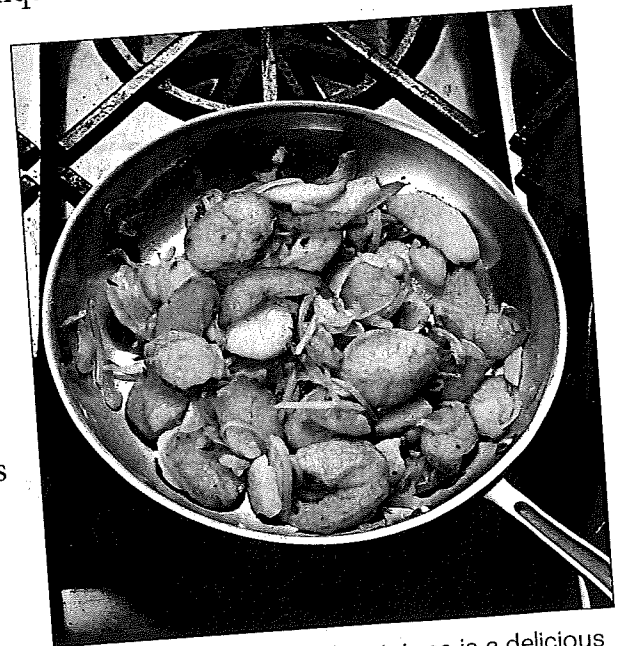


Figure 11.3: Lyonnaise potatoes is a delicious French dish.