

Rice & Other Grains

After reading this section, you will be able to:

- Describe different varieties of rice.
- Describe four common grains.
- Demonstrate various cooking methods used for rice and other grains.

GRAINS are a staple in the diets of people around the world. This is because of the variety of grains, and the fact that they store well and have high nutritional value. The seed, or grain, which is packed with nutrients, is the part of the plant people eat. The main nutrients in grains are in the form of carbohydrates and fat. Grains are usually dried for storage. Cooking grains with liquid adds water back to the dehydrated grains. This makes the grain tender and edible. There is a wide variety of grains to choose from. Rice, wheat, and corn are three of the most common grains. Others include barley, oats, cornmeal, and hominy. By learning how to prepare rice and other grains, you will be able to prepare a variety of dishes.



KEY TERMS

- risotto
- brown rice
- enriched rice
- parboiled rice
- polenta
- hominy
- pilaf method
- risotto method

X TYPES OF RICE

Rice is served around the world. Rice picks up the flavors of other foods so it is often served as part of a main dish. Rice increases in volume as it cooks and yields a high profit. All varieties of rice come in different grain types: short-grain, long-grain, and medium-grain. See Fig. 25-6.

■ **Short-grain.** Short grain rice contains the most starch. It becomes sticky when cooked, but is the most tender type of rice. Short-grain rice is used in risotto, for example. Risotto is a rice dish in which the grain has been sautéed in butter, and then simmered in a flavored cooking liquid, which

has been added gradually to the rice until it has finished cooking.

■ **Medium-grain.** Medium-grain rice is firm when it is hot. It becomes sticky, like short-grain rice, when it cools.

■ **Long-grain.** Like short-grain rice, long-grain rice remains slightly firm when cooked properly. However, it should not become sticky when cooked. The grains of rice separate easily after cooking. Long-grain rice can be used in just about any food dish.

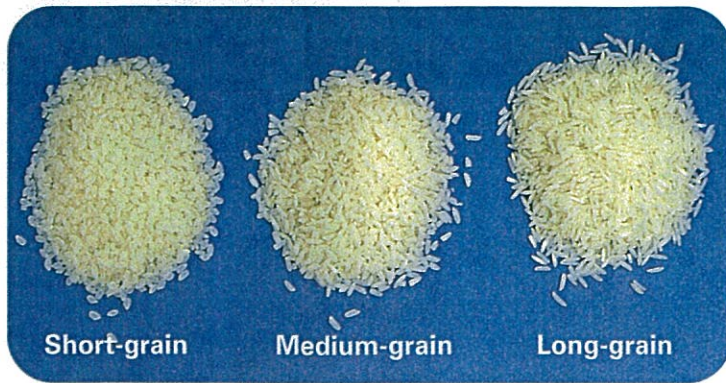


Fig. 25-6. Here are three grain types of rice. How do they differ?

All three types of rice can be processed. Processing rice removes the hull, or outer covering, from the grain. If the grain is left whole, the rice is brown. If the grain is polished, the rice is white. White rice can be processed even further, producing converted rice and instant rice. Rice varieties are helpful in selecting rice for different menus.

Brown Rice

Rice that has had the hull, or outer covering, removed is called **brown rice**. Brown rice has a tan color, a chewy texture, and slightly nutty taste. Available in long-grain, short-grain, and medium-grain, brown rice takes longer to cook and needs more cooking liquid than white rice. See Fig. 25-7.

White Rice

White rice has had the outer layers of the grain removed. Without the outer layers, the rice grain is white and cooks more quickly with less water. White rice has a lighter texture, but is also lower in some vitamins and minerals. There are a number of varieties of white rice: long-grain rice, short-grain rice, hard rice, soft rice, and enriched rice. **Enriched rice** has a vitamin and mineral coating added to the grain. This makes up for nutrients lost when the outer coating is removed. All types of white rice can be enriched.

Converted Rice

Converted rice, sometimes called **par-boiled rice**, has been partially cooked with steam and then dried. This process removes some of the surface starch and increases the nutrient value by forcing nutrients from the outer layer into the grain. After it's steamed, the rice is polished and milled. This results in a light white-grain rice that has more nutrients than regular white rice.

Converted rice can be used in the same way as regular white rice, except it takes longer to cook and requires slightly more liquid. It also is very fluffy. The grains don't clump together if they are served from a steam table.




Specialty Rices

Many interesting, flavorful rices have made their way into American menus from a variety of foreign foods. These rices, with their different textures and flavors, offer foodservice professionals interesting options for including rice in planning menus. Fig. 25-8 provides an overview of the most popular specialty rices.

Fig. 25-7. Brown rice gets its color from the bran.



Fig. 25-8.

| SPECIALTY RICE | DESCRIPTION | USES |
|--|--|--|
| <p>Arborio (ar-BOH-ree-oh)</p>  | <p>Short-grain, white rice; sticky when cooked; cook in 3 cups of water for every cup of rice.</p> | <p>Best rice for risotto-style preparation.</p> |
| <p>Basmati (bahs-MAT-tee)</p>  | <p>Extra long-grain with polished, cream-colored grain; light, sweet flavor; aged before use, so should be well-rinsed; cook in 1½ cups of water for every cup of rice.</p> | <p>Delicate flavor best used in side dishes, including pilaf.</p> |
| <p>Jasmine (JAZ-muhn)</p>  | <p>Long-grain white rice; similar to basmati, but more delicate flavor.</p> | <p>Side dishes.</p> |
| <p>Wild Rice</p>  | <p>Not a true rice, but a wild water grass; brown and black grain with a nutty flavor; chewy texture; three grades, with the best having very long grain; cook in three times the amount of water as rice.</p> | <p>Served as a side dish and used in poultry stuffing; lower grades used in soups and baked goods.</p> |
| <p>Red Rice</p>  | <p>A red rice, also called Wehani (we-HAN-i) rice; aromatic, earthy flavor.</p> | <p>Served with meat and bean dishes.</p> |

HANDLING & STORING RICE

Uncooked rice should be stored in airtight containers at room temperature in a dry, dark room. White rice has a long shelf life if properly stored because the sprouting portion of the grain, which contains oil, has been removed with the hull.

Brown rice, even when properly stored, has a shorter shelf life because the oil in the grain can spoil.

After rice has been cooked, it should be used as soon as possible. Its high protein content and neutral pH mean it can spoil easily and be dangerous to eat if left at room temperature. Refrigerate any unused, cooked rice as soon as possible.

OTHER GRAINS

While rice is a very versatile and popular grain, there are many other grains that can add variety and nutrition to the menu. The high carbohydrate and protein content of traditional grains, such as oats, wheat, and barley, can add nutritional value and flavor to any meal. In addition, specialty grains, such as kasha (KAH-shuh), quinoa (KEEN-wah), and triticale (trih-tuh-KAY-lee), offer diverse flavors, textures, and colors.

Grains are also an important part of menu planning because they can be used from breakfast to dinner to prepare many different kinds of dishes. For example, kasha and oatmeal make excellent breakfast cereals. Cracked wheat can be used in cold salads.

Barley

Barley is a hardy, adaptable grain that can grow in both warm and cold climates. It is available unmilled, and in a form called pearled barley, which has been milled and polished.

Barley has a slightly sweet flavor and chewy texture. It is often added to soups and stews, giv-

ing them a hearty consistency and rich texture. Barley is also used as a poultry stuffing and as a pilaf side dish. Its mild flavor makes it a good candidate for cooking with onions, garlic, herbs, and other seasonings. A ratio of three parts liquid to one part barley is used for cooking barley. See Fig. 25-9A.

Oats

Oats are the berries of oat grass. They can be purchased as oatmeal and as a whole grain, called groats or oat berries. See Fig. 25-9B. Oatmeal, a popular, but plain hot cereal, can be dressed up with fruits, berries, cream, maple syrup, and other similar toppings to make a simple breakfast something special. Oatmeal also makes an excellent addition to bread and cookies, adding flavor, nutrition, and texture. A ratio of two parts liquid to one part oats is used to cook oatmeal.

Oat berries, or groats, do not have the outer layer removed, so they are a whole grain, with all the texture and nutrients found in other whole grains. They can be cooked and served as a hot cereal, used to stuff poultry, and added to baked goods. A ratio of four parts liquid to one part oat groats is used for cooking groats.

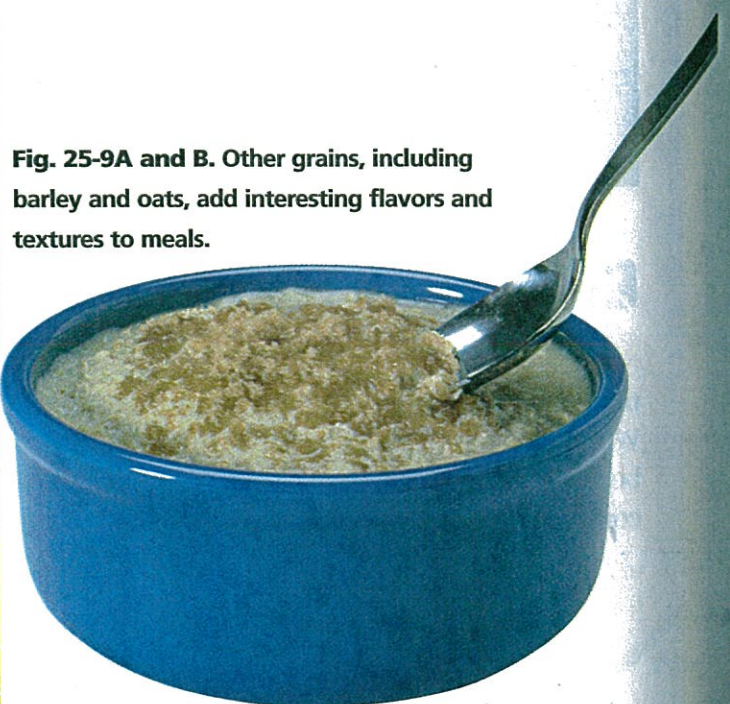


Fig. 25-9A and B. Other grains, including barley and oats, add interesting flavors and textures to meals.

CULINARY **TOP**

NUTRIENTS IN GRAINS—Adding ingredients that have been removed during the milling process can increase the nutritional value of grains. For example, 4 oz. of toasted wheat germ adds 33 grams of protein, 56 grams of carbohydrates, 14 grams of fiber, 6 grams of niacin, and over 1,000 milligrams each of potassium and phosphorus.

Wheat Products

When you think of wheat, flour and bread are probably two of the first things that come to mind. Certainly wheat, in the form of flour, is a staple in bread-making and other kinds of baking. It is actually a very versatile grain that is also milled into semolina and cracked wheat. These two wheat products can be served as side dishes, and used in stuffings and casseroles. Couscous (KOOS-koos) is made from the semolina that is milled from wheat. Fig. 25-10, on pages 564-565, provides an overview of these grain products.

Corn Products

Corn is different from the other grains discussed in this section because it can be eaten fresh. It also can be eaten as a dried grain. When eaten fresh, it is served as a vegetable. As a dried grain, it comes in two main forms: cornmeal, used to make breads and polenta; and hominy, a dried corn kernel. See Fig. 25-11.

Fig. 25-11. Corn products may be used in a variety of ways, as in this tortilla soup.

Polenta

Polenta (po-LEN-tah) is made from cornmeal that is gradually sprinkled into simmering water or stock and cooked until it becomes a thick paste. It is the right consistency when it pulls away from the pot when stirred. Polenta can be served with butter, cheese, or various sauces. It also can be poured into shaped containers or spread on a baking sheet to cool. When cool, it can be sliced or cut into interesting shapes that can be baked, fried, grilled, or broiled. A very versatile food, polenta can be served as a breakfast food with maple syrup, or as a side dish for dinner. Spices, dried tomatoes, cheese, herbs, and other ingredients can be added during the simmering process.







Hominy

Hominy is made by soaking dried corn in lye so that the kernels become swollen. As they swell, the outer layers loosen and are easily removed.

Hominy is often served as a side dish or added to soups. When cooking hominy, use 2–2½ times the amount of water as grain. Hominy also is made into other corn products, including grits and masa harina.






Fig. 25-10.

| GRAINS | DESCRIPTION | USES |
|---|---|---|
| <p>Cracked wheat</p>  | <p>The whole wheat berry cracked into irregular pieces; cooks more quickly than whole berries; brown exterior, white interior; unmilled grain is high in nutrients; cook in twice as much water as wheat.</p> | <p>Side dishes, hot cereal.</p> |
| <p>Semolina (seh-muh-LEE-nuh)</p>  | <p>Bran and germ are removed from Durum wheat; cream-colored pellets; partially cooked; to cook, soak briefly in water, drain, and steam until tender.</p> | <p>Side dishes, hot cereal, dumplings, and sweet pudding.</p> |
| <p>Couscous (Kooos-koos)</p>  | <p>A granular form of semolina, to cook, soak in water, drain, and then steam. Packaged, precooked couscous is also available. Add precooked couscous to boiling water and let stand about 5 minutes.</p> | <p>Sweet and savory side dishes.</p> |
| <p>Kasha</p>  | <p>Hulled, roasted buckwheat groats; sometimes ground or cracked; strong nutty flavor; cook in 1 to 1½ times the water as groats.</p> | <p>Side dishes, cold salads.</p> |
| <p>Quinoa (KEEN-wah)</p>  | <p>A small, bead-shaped grain; ivory color; neutral flavor; cooks fast and is high in protein.</p> | <p>Add to side dishes and soups.</p> |
| <p>Triticale (Triht-ih-KAY-lee)</p>  | <p>A type of wheat and rye that has more protein, a nutty-sweet flavor, and lower gluten content; comes as berries, flour, or flakes; cooked similarly to cracked wheat and semolina.</p> | <p>Side dishes, casseroles, cereal.</p> |

(Continued on next page)

Fig. 25-10 (Cont'd.).

| GRAINS | DESCRIPTION | USES |
|--|---|---|
| <p>Kamut (kah-MOOT)</p>  | <p>Brown, rice-like shape; earthy, nutty flavor.</p> | <p>Pastas.</p> |
| <p>Spelt (SPEHLT)</p>  | <p>Wheat product available as a whole grain or ground; can be boiled or simmered; mild, nutty flavor.</p> | <p>Baked goods.</p> |
| <p>Amaranth</p>  | <p>Very small, round grain; light brown in color.</p> | <p>Salads, baked goods, and in cooking.</p> |

- **Grits.** Cracked hominy is served as a side dish or cereal called grits. Cook grits in four parts water to one part grits.
- **Masa harina (MAH-sah ah-REE-nah).** This finely ground hominy is used for making tortillas and breads.

✕ COOKING RICE & OTHER GRAINS

Cooking rice and grains involves adding enough water to make the grain moist and tender. Depending upon the length of the rice or grain, the proportion of water to rice or grain, and the cooking method, the product can be light and fluffy or sticky. The degree of tenderness may vary, depending on the grain and the way in which it will be served. There are times when a very tender product may be needed, or when a

chewier one is most desirable. There are four main methods of cooking grain: boiling, steaming, braising, and the risotto method.

Boiling

To boil grains, the grain is added to slightly salted boiling water and then simmered until tender. Boiling produces a good product that can be served as is—usually with the addition of seasonings—or incorporated into other dishes such as salads or casseroles. The proportion of water to grain is about the same as for cooking pasta.

Steaming

Steaming grains is different from steaming vegetables. To steam grains, add the appropriate amount of boiling liquid to the grain. Cover and cook the grain until the liquid is completely absorbed by the grain.



Fig. 25-12. A rice cooker is often used to steam rice.
What other equipment could be used to steam rice?

You can steam grains a number of ways. Grains can be steamed in a saucepan on the rangetop. They can also be steamed in the appropriate bakeware in the oven. Another way to steam grains is by using a convection steamer.

In addition, grains can be steamed in a rice cooker. This piece of equipment controls the cooking time by automatically shutting off when the cooking process is done. This prevents burning. See Fig. 25-12.

Braising

Braising, often called the **pilaf method**, involves sautéing the grain in oil or butter before adding the liquid. Often, onions, garlic, seasonings, and items such as red or green peppers may be added to the rice during the sautéing process. The coating of oil on each grain results in a fluffy product in which individual grains do not stick together.

Once the grain is sautéed, a seasoned liquid is added. The grain is then usually cooked on the range in a saucepan or baked in the oven in a hotel pan.

Generally, the grain is done when all the water has been absorbed and there are small, tube-like holes on the surface. See Fig. 25-13. Cooking can either be completed on the range, or the saucepan or stockpot can be removed from the heat for the last five or ten minutes of cooking and left to stand tightly covered.

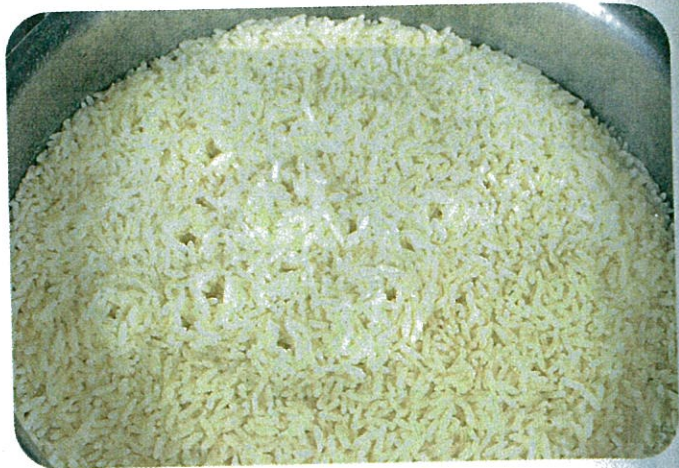
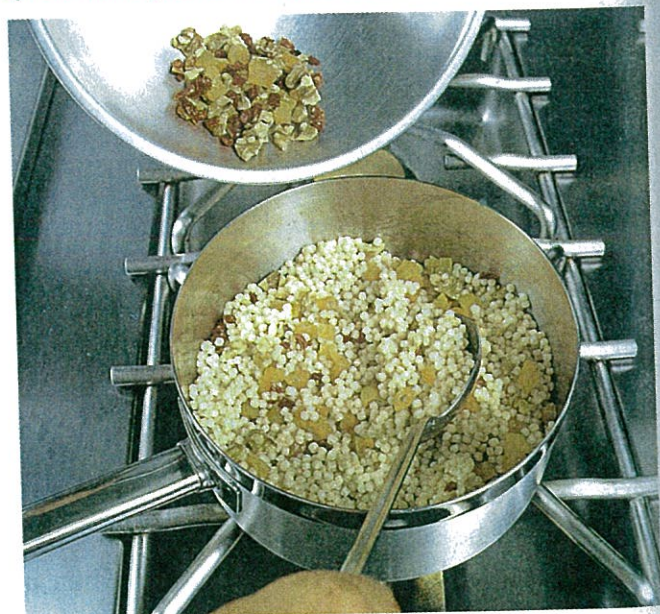


Fig. 25-13. Rice is considered done when the surface develops characteristic steam holes or tunnels that appear on the surface of the rice.

Baking is the preferred method because the uniform heat results in a more flavorful product in which each grain remains separate from the others. Ethnic spices and a variety of chopped foods can be added after sautéing, before the liquid is added. Foods such as nuts, mushrooms, peas, carrots, raisins, diced ham, or bacon add flavor and texture. Pilaf can be made with rice, barley, cracked wheat, and other grains. See Fig. 25-14.

Fig. 25-14. Seasonings, nuts, and dried fruits can be added to couscous or barley for flavor. **What herbs and spices would you use to flavor couscous?**



Risotto

The **risotto method** is a little like boiling and the pilaf method combined. First, the grain is sautéed, and then a small amount of hot liquid—often a soup stock—is added. The grain is stirred until all the liquid is absorbed. This process of adding liquid and stirring the grain is continued until the grain is completely cooked. When the grain is done, it will still be firm. Seasonings and chopped mushrooms can be added to risotto after the sautéing stage.

Grains cooked by the risotto method are creamy. Risotto should be served immediately after being cooked to maintain its texture and creamy consistency. Butter, olive oil, or cheese are often stirred in just before serving.

1. Simmer the seasoned liquid in a pot.
2. In a separate saucepan, heat the fat.
3. When the fat is melted, add onions, garlic, and seasonings. Sauté for 2 minutes.
4. Add the grains to the melted fat and other ingredients in the saucepan. Stir the grains into the fat so they are evenly coated. Do not scorch the grains. See Fig. 25-15.
5. Gradually add the simmering liquid to the grains in stages. Stir frequently to prevent scorching.
6. Test for doneness.
7. Remove saucepan from heat source.
8. Add butter, herbs, cheese. Mix and serve.



Fig. 25-15. Each grain must be evenly coated with melted fat to create a good risotto dish.

SERVING RICE & OTHER GRAINS

All grains should be served as soon as possible after being cooked. They lose their texture quickly and can become either clumped or dried out if they are held for a period of time. Any grains not used immediately after being cooked should be refrigerated in an airtight container.

SECTION 25-2

Knowledge Check

1. What are the three main types of rice grains?
2. Name four different specialty grains.
3. What are the four most common ways of cooking grains?

MINI LAB

In teams, boil, steam, or braise a grain. Each team's dish must be different. Serve your finished product to another team and have that team evaluate the results.