#### **OBJECTIVES**

After completing this section students will be able to:

- Understand the proper handling of dry and cooked rice in the foodservice kitchen
- Explain the importance of using the correct ratio of rice and liquid to the outcome of the finished dish
- Identify factors that will influence the quality of cooked rice
- Cook rice by simmering/steaming, pilaf, boiling and risotto methods
- Determine which types and forms of rice are best suited for which cooking methods
- Understand the classic methods for cooking rice that are the foundation for countless rice dishes

#### **LESSON PLAN**

Торіс	Suggested Activity	Suggested Time
Rice in Foodservice Purchasing Rice Storing Rice Cooking Rice	Lecture/Discussion	20 min
Rice Cooking Methods		
Simmering & Steaming methods	Lecture/Discussion	10 min
	Demonstration	30 min
	Cooking Laboratory	30 min
Pilaf method	Lecture/Discussion	10 min
	Demonstration	30 min
	Cooking Laboratory	45 min
Boiling method	Lecture/Discussion	5 min
	Demonstration	20 min
	Cooking Laboratory	30 min
D:	Lastura /Diagrasian	10:
Risotto method	Lecture/Discussion	10 min
	Demonstration	30 min
	Cooking Laboratory	45 min

### RICE IN FOODSERVICE

Rice is an ideal flavor carrier for both traditional and global dishes that customers desire, and for that reason most foodservice establishments stock rice in bulk and serve it often. The following is a 'how to' guide for purchasing, storing and preparing rice according to basic cooking methods.

### **PURCHASING RICE**

Rice is packed in a variety of sizes for foodservice. Typical sizes include:

Rice Type or Form	Common Pack Size
White Rice	25, 50 or 100 lb
Parboiled	25 or 50 lb
Whole Grain Brown	25 or 50 lb
Precooked (Instant)	25 lb
Aromatic (U.S. jasmine, U.S. basmati)	25 lb
Seasoned Rice Mixes	6/36 oz. boxes/case or 12/28 oz. boxes/case

#### TIPS FOR ORDERING RICE

- Select the type of rice best suited to the cooking method and type of dish you are serving.
- Refer to the list of U.S. Rice Suppliers online at www.MenuRice.com/suppliers, to search different rice types and sources.
- Know the origin of products you order. The "Grown in the USA" logo ensures the high quality rice you expect, shows your support for the U.S. rice industry and reduces your carbon footprint by reducing shipping distances. Ask your distributor or supplier about the types of U.S.-grown rice available.



### **STORING RICE**

### Dry Rice Storage:

- Uncooked rice should be stored in a cool, dry place in tightly sealed waterproof containers to prevent absorption of moisture and aromas from other foods.
- When stored properly, white rice will last almost indefinitely. For best quality, rotate your rice supply on a regular basis.
- Whole grain brown rice has a shelf life of about six months. Keep whole grain rice in a refrigerator or cooler to extend shelf life to one year.

### **RICE STORAGE TIP**

Kept in a cool dry place, white rice can be stored in a tightly covered container almost indefinitely. Whole grain brown rice stays fresh for six months, or up to a year when refrigerated.

# Cooked Rice Storage:

- Hold hot rice for service in a steam table above 140°F (60°C).
- To store cooked rice, cool the hot rice as quickly as possible by transferring it to a shallow pan. Cool rice to 70°F (21°C) within two hours and then to 40°F (4°C) within the next four hours.
- Always wrap and date containers of cooked rice prior to storing in the refrigerator.
- Cooked rice can be stored in the refrigerator in a tightly covered container for up to three days.

# **RICE STORAGE TIP**

Rice can absorb strong
aromas, so store rice in an
air-tight container away from
foods such as onions or garlic.

### **COOKING RICE**

There are many different methods for cooking rice. It is important for students to learn multiple ways of cooking rice so that they are able to choose the best method for each situation and recipe.

When deciding which method to use, consider:

- Type and form of rice being used
- Recipe and desired finished product
- Cooking equipment available
- Time available
- Skill level of kitchen staff

#### PROPORTION OF LIQUID TO RICE AND COOKING TIME

Regardless of which cooking method is chosen, the proportion of liquid to rice and the cooking time are key to preparing perfectly cooked rice.

Most methods of cooking rice require a measured amount of liquid to ensure a properly cooked product. The general 'rule of thumb' is 2 to 1 (2 parts liquid to 1 part rice by volume).

However, it is important to note that different rice types may require slightly less or slightly more liquid. Check the package instructions to verify the proper ratio of liquid to rice and cooking time for the specific rice you are using.

# COOKING WHOLE GRAIN BROWN RICE

Growing interest in whole grains has spurred increased use of brown rice and other types of whole grain rice on menus.

Brown rice can be cooked using the same methods as white rice. However, because it retains its nutritious bran and germ layers, brown rice requires slightly more liquid and longer cooking time than white rice. For best results, follow package directions.

Below are the approximate liquid ratios and cooking times for rice most commonly used in foodservice.

# **Rice Cooking Guide**

Rice	Parts liquid to 1 part rice (by volume)	Cooking time (minutes)
Long grain white	2	15 - 18
Medium grain white	1 ½	15 - 18
Short grain white	1 1/4	15 - 18
Parboiled	2 1/4	20
Parboiled brown	2 1/4	25
Medium or long grain brown	2 1/4	40 - 45
U.S. jasmine	2	15 - 18
U.S. basmati	2	15 - 18
U.S. arborio	4	20 - 30
Wild Rice	3	40 - 50
Seasoned rice mixes	Follow package directions	

For best results, refer to package directions for specific rice types.

### **RICE YIELDS**

Dry rice typically triples in volume during cooking.

1 cup dry rice = 3 cups cooked rice 1 quart dry rice = 3 quarts cooked rice

Dry rice more than doubles in weight during cooking, making rice dishes an excellent choice for keeping food cost low.

1 pound dry rice = 2 + pounds cooked rice



#### OTHER FACTORS AFFECTING COOKING

The quality of the final product is affected by a number of factors in addition to the water to rice ratio and cooking time. Some key considerations include:

#### **Pots and Pans:**

- The size and shape of pots and pans will affect the cooking time of a rice dish. Shallow, wide pans tend to cook faster and more evenly than deeper pots.
- The seal of the lid on a pot or pan will affect how much liquid is absorbed by the rice and how much evaporates as steam. Tight-fitting lids speed up cooking and reduce moisture loss.
- Heavy-bottom pots and pans are recommended for stovetop cooking to disperse heat evenly and avoid scorching.



- The calibration of ovens can change the cooking time for baked rice; check the calibration of your oven thermostat regularly and adjust accordingly.
- Adding boiling water to dry rice brings cooking temperature up quickly and speeds cooking.
- Recovery time of different ovens is also a factor in keeping temperatures constant.

#### **Batch Size:**

- A larger batch takes longer to come to temperature and longer to cook.
- Larger batches require slightly less liquid than smaller batches.

#### **Rinsing:**

- U.S. rice is a clean product and does not require washing or rinsing before or after cooking.
- Rinsing will cause nutrient loss in enriched rice.
- There are specific preparations where rinsing may be required to produce the desired result, such as preparing rice for sushi.
- If rice is rinsed or soaked before cooking, the amount of liquid needed will be slightly less, and the cooking time may be reduced, depending on length of time rice is soaked.



### STOCK OR WATER?

The most common liquids for cooking rice are water or stock (chicken, veal, seafood and vegetable are commonly used). Stock gives you a richer tasting finished product that may be desirable for specific recipes or when pairing rice with other foods. Water produces mild tasting rice that is a versatile flavor carrier and can be paired with any food.

### RICE COOKING METHODS

### **Simmering/Steaming Method**

Simmering and steaming methods are often referred to interchangeably. The characteristics of "steamed rice" change with the type of rice. Long grain rice is tender and fluffy with separate grains, while short and medium grain rice is tender, moist and sticky.

Simmering/steaming can be done in a pot on the stove, in a hotel pan in the oven or in a rice cooker. Although simmering rice on a stove top is the most common practice, using one of the other options is helpful in foodservice operations, especially when stove top space is limited. Steamed rice can also be made in a commercial steamer, where water combined with steam cooks rice more quickly.

# **Key Tips:**

(For best results, refer to Package Directions or Rice Cooking Guide on page 20)

- Use a measured amount of liquid and rice to ensure the proper texture of the cooked rice.
- Gentle simmering ensures that rice will absorb liquid evenly and kernels will remain intact.
- Water-soluble nutrients are retained when all of the cooking liquid is absorbed into the rice.
- Simmering and steaming methods are appropriate for all types of rice.



# Recipe: Simmered/Steamed Long Grain White Rice yield: 3 pt. (1.5 L)

1 at. 1 L. water

1 pt. 500 ml. long grain white rice or parboiled rice\*

1 tsp. 5 ml. salt

## For Stove Top:

- 1. Combine water, rice and salt in a heavy pot; bring to a boil.
- 2. Cover the pot and simmer over low heat for 15-20 minutes, or until rice is tender and water is absorbed (see Rice Cooking Guide on page 20).
- 3. Remove from heat; let stand 5 minutes. Remove cover and fluff with a fork to help release steam.

#### For Oven:

- 1. Combine rice and salt in a hotel pan. Place near oven. Carefully pour boiling water into pan and stir to moisten.
- 2. Cover tightly with lid or heavy foil. Using oven mitts, carefully place pan in preheated 350°F (177°C) oven.
- 3. Bake 30 minutes (up to 40 minutes for parboiled rice) or until rice is tender and water is absorbed (see Rice Cooking Guide on page 20).
- 4. Remove from oven; let stand 5 minutes. Remove cover and fluff with a fork to help release steam.

<sup>\*</sup> To simmer/steam medium or short grain rice using this method, see Rice Cooking Guide on page 20 for amount of water. To retain the desired moist, clingy texture of medium or short grain rice, fluffing with a fork is NOT necessary.

#### **Commercial Steamer**

Rice may be cooked in a commercial steamer in essentially the same way as oven-simmered rice except the pan is not covered and the cooking process is completed in about half the amount of time.

#### **Rice Cookers**

Electric rice cookers are increasingly popular in foodservice kitchens for preparing steamed rice. Rice cookers are easy to use and foolproof, producing a consistent product by employing a thermostat sensor to cook rice for precisely the right amount of time.



As soon as all of the water has been absorbed, the thermostat detects the increase in temperature and automatically converts the cooking cycle to a "warm setting" that keeps the rice hot without overcooking it. Because rice cookers are insulated and sealed, there is less evaporation and the ratio of water to rice may be slightly lower than in other rice cooking methods. For best results, follow the directions recommended by the rice cooker manufacturer for the type of rice you are preparing.

### **Pilaf Method**

The pilaf method begins by sautéing rice in butter or oil, often with herbs or aromatic vegetables (onions, celery, garlic, etc.), and then adding a measured amount of flavorful liquid (usually stock) for simmering. The initial sautéing step enhances the flavor of the rice by toasting it lightly and coating the grains with fat to prevent them from sticking together and resulting in highly flavored rice with separate fluffy grains.

Rice pilaf is a popular dish in foodservice operations.

- Its flavor is versatile and varies by changing the cooking liquid, vegetables and seasonings used.
- The cooking technique ensures that the grains of rice remain separate, so rice pilaf holds well for long periods without becoming sticky.

# Key Tips

- Keep the heat low when sautéing aromatic vegetables and herbs to release maximum flavor without browning.
- Make sure the rice is completely coated with fat and 'toasted' to the degree desired before adding the liquid.
- After the liquid is added, pilaf rice is simmered on the stove top or in the oven in the same method used in making simmered/steamed rice.
- Use long grain white or brown rice, parboiled rice or aromatic rice for the most separate grains.
- Wild rice is a popular addition to rice pilaf. Because it is a whole grain and requires longer cooking time than white rice, it is recommended that wild rice is cooked separately and added at end of cooking to ensure proper texture.

# REHEATING COOKED RICE

- Rice may be reheated on top of the stove, in an oven or in a commercial steamer.
   Smaller quantities of rice can be reheated in a microwave oven. When reheating rice, be sure that it reaches an interior temperature of at least 165°F (74°C).
- Cooked rice becomes firmer during refrigeration, but will soften when it is reheated.
   You may add a small amount of water to rice to add moisture when reheating.

Recipe: Rice Pilaf yield: 3 pt. (1.5 L)

2 oz. 30 g. butter

2 oz. 60 g. onion, small dice

1 pt. 500 ml. long grain white rice or parboiled rice

1 gt. 1 L stock (chicken, veal, seafood or vegetable), hot

1 ea. bay leaf

to taste salt and white pepper

# For Stove Top:

- Melt butter in a heavy saucepan over medium-low heat. Add the onion, stir to coat with fat, cover the pan and cook until onion is translucent (do not allow to brown).
- 2. Add rice and stir to coat with the butter. Sauté briefly to lightly toast rice.
- 3. Add stock and bay leaf and season to taste. Stir to moisten rice, and bring to a simmer.
- 4. Cover the pot and simmer over low heat for 15-20 minutes until rice is tender and liquid is absorbed (see Rice Cooking Guide on page 20).
- 5. Remove from heat; let stand for 5 minutes. Remove cover and fluff with a fork to help release steam.

### For Oven:

- 1. Melt butter in a rondo or heavy, oven-proof saucepan over medium-low heat. Add the onion, stir to coat with fat, cover the pan and cook until onion is translucent (do not allow to brown).
- 2. Add rice and stir to coat with the butter. Sauté briefly to lightly toast rice.
- 3. Add stock, bay leaf and season to taste. Stir to moisten rice, and bring to a simmer.
- 4. Cover and place in a 350°F (177°C) oven for about 30 minutes (up to 40 minutes for parboiled rice) until rice is tender and liquid is absorbed (see Rice Cooking Guide on page 20).
- 5. Remove from oven; let stand for 5 minutes. Remove cover and fluff with a fork to help release steam.

To make Whole Grain Brown Rice Pilaf using this method, see Rice Cooking Guide on page 20 for amount of liquid and cooking time.



# **Boiling Method**

The boiling method, sometimes referred to as the "pasta method," produces tender grains of rice that are completely separate and not sticky. The method is sometimes used for rice that will be used in soups and salads.

Although boiling is a very easy method to execute, it should be noted that water-soluble nutrients including those in enriched rice, will disperse in the cooking water and will be lost when water is drained off, so this method it is not recommended for everyday rice preparation.

# Key Tips:

- Use a large amount of lightly salted boiling water—about 1 gallon of water for each pound of rice.
- Bring the water to a vigorous boil before adding the rice. Vigorous movement keeps the grains of rice from sticking together.
- Once the rice is tender and fluffy drain off the excess water.
- Cooked rice may be used immediately or rinsed with cold water to cool for later use.
- The boiling method is appropriate for most varieties of rice.

# Recipe: Boiled Rice yield: 3 pt. (1.5 L)

1 gal. 4 L. water 1 Tbsp. 15 ml. salt

1 pt. 500 ml. medium or long grain white rice or parboiled rice

- 1. Combine water and salt in a large pot and bring to a rapid boil.
- 2. Add rice, stir, cover and return to a boil.
- 3. Uncover and boil until rice is tender (see Rice Cooking Guide on page 20).
- 4. Drain off water. Serve immediately or rinse the rice in cold water. Reheat for service.



#### **Risotto Method**

Risotto is a traditional Italian method for cooking medium grain or arborio rice which has become increasingly popular in the U.S. Unlike the steaming and pilaf methods, where the rice is gently cooked and not disturbed during cooking to ensure the rice grains are fluffy and separate, the risotto method cooks rice at an active simmer while stirring in hot flavorful liquid (usually a combination of stock and wine) in small increments until the rice is tender.

# **Key Tips:**

- Risotto is made in an open pot or pan; constant evaporation means that more
  cooking liquid must be used and the liquid's flavors become concentrated, making
  risotto one of the most highly flavored methods of preparing rice.
- By stirring the rice as it simmers, the constant friction rubs cooked starch from the surface of the rice grains to thicken the liquid into a creamy sauce while retaining the firm texture of the rice.
- Risotto is frequently enriched with butter, cheese or cream and a wide range of ingredients can also be added, including ham, mushrooms, shellfish, various cheeses and vegetables.
- Risotto is best made using medium grain or U.S. arborio rice.



Some of the most well known types of risotto include:

Risotto Milanese:

Add ½ tsp. (3 ml) saffron threads to the rice before adding the stock to the basic risotto recipe.

Risotto Piemontaise:

Cooked risotto is finished with thin slices of truffle.

Risotto alla Zucca:

Cook 10 oz. (300 g.) diced pumpkin or squash with the onions in the basic risotto recipe.

Risotto con Funghi:

Cook 6 to 8 oz. (170-225 g.) mushrooms (domestic or wild) with the onions in the basic risotto recipe.





Recipe: Basic Risotto yield: 2 qt. (2 L.), 10 (6 oz./200 ml.) appetizer or side dishes

2 qt. 2 L. stock (chicken, veal, seafood, or vegetable)

to taste salt and white pepper

3 oz. 45 g. butter

2 oz. 60 g. onion, small dice

1 pt. 500 ml. medium grain or U.S. arborio rice

1 c. 250 ml dry white wine

3 oz. 85 g. grated Parmesan cheese

- 1. Bring chicken stock to a simmer and season with salt and pepper; keep hot.
- 2. Melt 2 oz. (60 g.) butter in a heavy saucepan over medium-low heat. Add the onion, stir to coat with fat, cover the pan and cook until onion is translucent—do not allow to brown.
- 3. Add rice and stir to coat with the butter.
- 4. Add wine; raise heat to medium and stir until most of the wine is absorbed.
- 5. Add about 1 pt. (500 ml.) of hot stock. Stir until most of the stock is absorbed.
- 6. Repeat step 5 until all the stock is absorbed and the rice becomes tender. (See Method below for directions for cooking risotto "to order").
- 7. Finish the risotto by stirring in the remaining butter and the Parmesan cheese. Serve immediately.

### **Risotto in Foodservice**

Traditionally, risotto is cooked from start to finish without stopping, then served as soon as it is finished to retain the ideal consistency—rice that is firm to the bite with a sauce that is delicate and creamy. For this reason, it is not recommended that risotto be "held" for an extended period, as the rice will continue to absorb liquid, the sauce will thicken, and it will lose the characteristic texture and consistency essential for this classic dish. These limitations can be challenging for foodservice operations, however, the following instructions provide a fail proof method of precooking risotto ahead so that it can be "finished" to order with outstanding results.

# Shortcut for Making "Risotto to Order":

- 1. Prep the risotto as directed until it is about three quarters of the way done. Do not add the last addition of liquid or any embellishments.
- 2. Spread the partially cooked risotto on a baking tray to cool quickly, cover and refrigerate it until service. In the refrigerator the starch firms, giving the grains of rice more resilience than if it were fully cooked and kept warm.
- 3. For service, reheat a portion of the chilled risotto in a pot or pan, stirring in the last addition of liquid and any embellishments. During this process the rice warms and retains its shape, while the added liquid is thickened with the starch that had previously been released from the grains.

Visit www.MenuRice.com for more information on all of these topics.

## **REVIEW/QUIZ QUESTIONS**

- 1. Which method/classic dish requires the most liquid in the cooking process?
- 2. When substituting brown rice for white rice in a recipe, what adjustments are needed?
- 3. True or False: All rice should be rinsed in cold water before cooking.
- 4. Describe three reasons why rice is a profitable ingredient on the menu?
- 5. How much cooked rice will 1 cup of dry rice yield?
- 6. Why is it important to add boiling water to oven preparation of steamed rice and rice pilaf?
- 7. What liquid is most often used to cook rice by the pilaf method and why?
- 8. Name three pieces of equipment that can be used for simmering or steaming rice.
- 9. True or False: "Steamed rice" can be achieved using the "simmering" or "steaming" method.
- 10. Describe the shortcut for how to precook risotto to make "Risotto to Order."



### **REVIEW/OUIZ ANSWERS**

- 1. Risotto
- 2. More liquid, increased cooking time.
- 3. False. Rinsing U.S. rice is not necessary and washes away nutritious water-soluble vitamins, such as enriched nutrients. It is only recommended for techniques that require rinsing, such as rice for sushi.
- 4. Low food cost (less than 10 cents a serving), offsets cost of more expensive ingredients, generous plate coverage, popular, complements all foods and fits all cuisines.
- 5. About 3 cups of cooked rice.
- 6. To bring temperature up to speed and reduce cooking time.
- 7. Stock; adds rich, concentrated flavors.
- 8. Stove top, oven, commercial steamer (also electric rice cooker).
- 9. True
- 10. Follow directions and prepare risotto 34 of the way. Spread on sheet pan and chill. When ready to serve, finish risotto with remaining stock and garnish ingredients.

