



Rice

Nutrition and Food Sciences Fact Sheet

FN 141

Rice is a versatile, economical food for family meals. It is a good source of energy, and can supply vitamins and minerals to the diet.

It is generally classified as a grain, but in family meals it can be used as:

1. A cereal

2. A vegetable

- a. As a substitute for potatoes
- b. As a base for meat
- c. In soups

3. A dessert

- a. Puddings
- b. Custards

Rice has been commonly known and used since ancient times. It has been and still is a medium of exchange in some countries. The custom of throwing rice at weddings is a survival of the ancient Chinese religious belief that rice is the symbol of fertility. It is easy to store, takes little storage space, and has no waste since it is completely edible. Rice has been grown in America since 1668, and technological developments have kept pace to provide the kind of rice needed for any purpose.

Even though there are 7,000 varieties of rice produced in the world, the consumer needs to be aware that generally there are only three different lengths of rice grain and five different kinds.

Lengths

Long grain rice is distinguished because its length is four to five times its width. The grains are clear and translucent. The grains remain distinct and separate after cooking.

Medium grain rice is about three times as long as its width. This type is less expensive than long grain rice. This is due to the fact that it requires a shorter growing season and produces a higher yield per acre. It is also easier to mill than the long grained variety.

Short grain rice is only one and a half to two times as long as it is wide. It is generally the least expensive of the three lengths.

Kinds

With five different kinds of rice to select from, it is important to be able to distinguish between the different varieties available.

Brown rice is the whole, unpolished grain of rice with other the outer fibrous, inedible hull removed. Brown rice requires more water and longer cooking time than white rice. It has a delightful, chewy texture, with a distinctive nut-life flavor.

Regular milled white rice is rice from which hulls, germ, outer bran layers and most of the inner bran are removed in the milling process. The grains are bland in flavor and are fluffy and distinct when cooking directions are followed.

Parboiled rice—sometimes called processed or converted rice—has been treated to keep some of the natural vitamins and minerals the whole grain contains. It has been cooked before filling by a special steam pressure process. It requires longer cooking time than regular milled white rice, but after cooking the grains are fluffy, separate and plump.

Pre-cooked rice—quick type—is completely cooked. It needs only to stand in boiling water to be ready for serving. Cooking this product will result in a gummy, indistinguishable mass.

Fortified or Enriched rice: This produce is a combination of highly fortified rice with ordinary milled rice. A coating of vitamins and minerals—thiamine, niacin, iron, and sometimes riboflavin—is used to fortify rice. This coating adheres to the rice and does not dissolve with ordinary washing or cooking.

Wild rice is not rice at all, but the seed of a wild water grass found around the Great Lakes region. It is much more expensive than the types of rice described above. Many Americans have discovered this rice and developed a taste for it. The demand for it is almost greater than the supply.

Some rules are a **MUST** in preparing rice. Due to the fact that the B vitamins are added to rice in the form of powder, much of the valuable nutrients are lost if the product is not handled properly.

Do not wash rice before cooking, or rinse it after cooking. Rice is one of the most sanitary foods. Rice grown and milled in the U.S. is clean. Nutrients on the surface of the rice are washed away if it is washed or rinsed before cooking.

Do not use too much water when cooking rice. Any water drained off means wasted food value. Too much water makes soggy rice. Too little water results in a dry product.

Do not peek when cooking rice. Lifting the lid lets out steam and lowers the temperature.

Do not stir rice after it comes to a boil. This breaks up the grains; makes rice gummy.

Do not leave rice in a pan in which it is cooked for more than 5 to 10 minutes or the cooked rice will pack.

Preparation Timetable

Rice Variety	Water	Salt	Cooking Time	Yield
1 cup brown (uncooked)	2½ cups	1 tsp.	45 min.	4 cups
1 cup regular	2 cups	1 tsp.	14 min.	3 cups
1 cup par-boiled or reconstituted	2½ cups	1 tsp.	20 min.	4 cups
1 cup uncooked precooked	1 cup	1/2 tsp.	Do not boil. (5 min. in hot water)	2 cups

Time may need to be lengthened due to altitude adjustment.

Cooking Rice in Various Liquids

(If using brown or parboiled rice, increase total liquid specified below by ½ cup water; adjust cooking time.)

Chicken broth, beef broth, or consomme: Use 1 cup rice, 2 cups broth, and 1 teaspoon salt, and cook 14 minutes.

Maraschino cherry juice: Use 1 cup rice, 1½ cups water, ½ cup cherry juice, 1 teaspoon salt, and cook 15 minutes.

Orange, tangerine, or apple juice: Use 1 cup rice, 2 cups juice, and 1 teaspoon salt, and cook 15 to 20 minutes.

Tomato or vegetable juice: Use 1 cup rice, 1 cup water, 1 cup tomato or vegetable juice, and 1 teaspoon salt; cook 15 minutes.

Carrot juice: Use 1 cup rice, 1½ cups water, ½ cup carrot juice, and 1 teaspoon salt; cook 20 minutes.

Tinting Rice

Mix a few drops of food coloring in liquid in which rice is to be cooked. Blend to preferred shade. Add rice and follow cooking directions. Rice will absorb color and cook a shade lighter.

How to Test Doneness

To test the doneness of cooked rice, press a kernel with a spoon. When ready for serving, it should be soft throughout.

Frozen Rice

Place chilled, cooked rice in freezer containers, seal and label. Store up to 8 months at zero degrees or less. Thaw and reheat by cooking with a few tablespoons of water in covered saucepan.

Refrigerated Rice

Cooked rice will keep in the refrigerator one week when tightly covered. When the rice is reheated, it is as good a product as when it was first prepared.

To reheat rice, place enough liquid in pan to cover bottom and keep rice from scorching. Heat to boiling and add rice. Cover tightly, turn heat to simmer, and steam about 5 minutes.

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