



Nutrition for Older Adults' Health

Whole Grains
Lesson 4: The Brown Rice Bonus

Getting Started

1. Review lesson plan before each session.
2. Copy handouts:
 - a. Cooking Basic Brown Rice
 - b. Get the Brown Rice Whole Grain Bonus
 - c. Recipes (3)
 - d. Lesson 4 post-test

Supplies Needed

1. Food Guide Pyramid or Tufts Pyramid for Older Adults, if available.
2. Flip chart and markers.
3. Varieties of brown rice to display, such as instant, boil-in-bag, long-, medium- or short grain brown rice.
4. Ingredients for recipe tasting and supplies for tasting recipe, such as plates, forks and napkins.
5. Supplies for activity (one of each for every participant): small zip top bag with ½ cup brown rice and 1 bouillon cube or 2 tsp bouillon granules.

Beginning the Lesson

1. Introduce yourself and the organization you represent.
2. Summarize the lesson by reading the objectives.
3. Let the group know the lesson will be informal and they can ask questions any time.

Objectives: The participants will:

1. Understand the nutrition benefits of brown rice.
2. Learn how to include brown rice in their meals.
3. Learn how to prepare and store brown rice.
4. Overcome barriers to eating brown rice.
5. Set a goal to eat brown rice twice a week.



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Script

Review (*Display different types of brown rice if available – long, medium and/or short grain; instant and boil-in-bag varieties.*)

In previous lessons we've talked about different whole grains - which foods are whole grains and why they're good for us. What are some of these whole grain foods? *Allow time for answers – whole grain breads and cereals.* We've also learned how many whole grain servings we should eat daily to stay healthy and fit. Can someone tell me this? That's right, at least three whole grain servings daily because **3 Are Key**. Today we're going to talk about good old rice – brown rice, that is.

Introduction

How many of you grew up eating rice? Did you know people have been eating rice for more than 5,000 years? Early Americans started growing rice more than 300 years ago in South Carolina. We still eat a lot of rice. Ninety percent of the rice we eat is grown right here in the United States. We can do a lot with rice and it's good for us! Both brown and white rice are healthy foods – both are low in fat and calories and supply no cholesterol. Both can be part of a healthy diet. However, I am going to try to convince you to go for the whole grain bonus with brown rice.

Can anyone name the three parts of a whole grain? *Allow for answers.* That's right, these are the bran, germ and endosperm (or starch) layers. Remember, the bran and germ layers are removed when grains are processed. Brown rice is a whole grain. White rice is milled to remove the bran and germ. This also removes some of the important nutrients. Some, but not all, of the nutrients are added back. This is why white rice is called enriched rice.

Brown rice is like Cinderella when compared to white rice. White rice is prepared at home more often than brown rice. White rice is offered on many more menus than brown rice. For instance, how many of you cooked brown rice in the past month? White rice? See what I mean? White rice is like the stepsisters, who get all the attention, even though brown rice has much more to offer like Cinderella.

Brown Rice Bonus

Brown rice is packed with disease fighting nutrients that can help us stay healthy and fit. These include protein, B-vitamins, vitamin E, iron, magnesium, phytochemicals and fiber. In fact, brown rice supplies six times more fiber than white rice (almost 2 g fiber in ½ cooked brown rice compared to 0.3 g fiber in ½ cup cooked white rice). Brown rice also supplies 17 times more vitamin E than white rice. You could say all these add up to the bonus in brown rice – and that like other whole grains as part of a diet low in saturated fat and cholesterol, brown rice can:



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1. Help lower total blood cholesterol levels and LDL cholesterol levels (LDL is bad or lousy cholesterol).
2. Help reduce risk of heart disease and heart attack.
3. Help lower high blood pressure and reduce risk of stroke.
4. Help reduce risk of certain cancers, especially colon and rectal cancers.
5. Help keep you regular and prevent constipation.
6. Help reduce risk of developing type 2 diabetes.
7. Help lower blood sugar (glucose) levels.
8. Help with weight control – people who eat whole grain foods are more likely to be at a healthy weight. This may be from the fiber in whole grain foods that can help you feel full longer after a meal.

So you see, why settle for less than whole grains when they offer so much more than the processed grains, like white rice!

Blowing Away Barriers to Eating Brown Rice

Even though brown rice has more health benefits to offer, most people eat a lot more white rice. Why might this be? *Allow time for answers and write on flip chart if available. Include these if not mentioned by participants.*

Brown rice costs more than white rice. This is true, but the price difference may not be large. Compare prices between store brands and national brands to stretch your food dollar. Stock up on brown rice when it is on sale. For example, at one store, one pound of brown rice costs \$0.69 and one pound of white rice costs \$0.59. That's only ten cents difference. Let's think about it this way.

You get more bang for your nutrition buck with brown rice. Brown rice provides six times more fiber per serving than an equal serving of white rice (*almost 2 g fiber in ½ cup cooked brown rice verses 0.3 g fiber in ½ cup cooked white rice*). So, one pound of brown rice costs \$0.69 while six pounds of white rice costs \$3.54 (*six times more rice, six times more price*). It would take 17 bags of white rice to equal the vitamin E in brown rice. Who wants to do the math for this? Let's just say that's the brown rice bonus! It's worth the extra ten cents.

Brown rice takes too long to cook. Unfortunately, this is also true. It can take 40 to 50 minutes to cook brown rice. However, there are ways to save time with brown rice. *Refer to Cooking Basic Brown Rice handout.*

1. Plan meals ahead and cook extra brown rice at one time. You could do this once a month. Portion out cooked brown rice in the amount needed for each meal. Store in a tightly sealed freezer container or zip top freezer bags. You can store in the freezer for up to six months.



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2. Use instant or quick cooking brown rice (such as Uncle Ben's® or similar store brands). It has been precooked and is still whole grain. It only takes about 15 minutes to cook.
3. Try boil-in-bag brown rice (such as Success®, Uncle Ben's® or similar store brands). It is also precooked and only takes about 10 minutes to cook.
4. Cook brown rice in a crock-pot, pressure cooker, rice cooker or steamer (*see handout for directions*). These methods allow you to do other things while the rice is cooking.

Brown rice tastes different. Brown rice has a nutty taste, chewy texture and a different aroma than white rice. Most people find they like the taste of brown rice better than white rice once they try it. So don't turn your nose up to brown rice until you give it a chance. Brown rice comes in different varieties and textures. You can find a type you like.

1. Try long-grain brown rice if you like your rice grains to cook up separate and fluffy. Long grain brown rice is good to serve as a side dish with meals. Try some of the varieties that give off a great smell while cooking. These are called aromatic rice. Jasmine and Basmati rice are two kinds that give off a smell similar to popcorn while cooking. They taste great also.
2. Try medium-grain brown rice if you like stickier rice. Medium-grain brown rice is good to add to salads, casseroles or to make rice pudding.
3. Try short-grain brown rice if you like soft and sticky rice. Short-grain brown rice will cook up more like Chinese-style rice dishes.
4. Of course, try the quicker cooking varieties we mentioned if you want to save cooking time.

Well, I would say you are out of excuses for not trying brown rice. I challenge you to substitute brown rice for white rice at least two times weekly. Of course, more often is better.

Brown Rice on Your Plate

Brown rice can be used in the same recipes as white rice. Brown rice makes a great side dish with meals. Try some of these ideas to add the brown rice bonus to your meals. *Refer to the Get the Brown Rice Whole Grain Bonus handout.*

1. Plan to eat brown rice as a side dish at least twice a week.
2. Add brown rice to salads, stuffing, stew, casseroles or soups.
3. Use leftover brown rice to make rice pudding or a rice salad.
4. Use chicken, vegetable or beef broth as the cooking liquid for extra flavor.
5. Think brown when you make beans and rice, chicken and rice, rice pilaf, rice and gravy, rice and tomatoes or other rice dishes.

Does anyone have other suggestions? Well, with these tips in mind, be sure to write brown rice on your shopping list. Remember to try instant or boil-in-bag for quicker cooking. Compare



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prices between national brands and store brands to save money. Then include brown rice dishes in your weekly meal plans.

Note to the speaker: Remind participants it is important to plenty of water and other fluids when starting to eat more fiber and to slowly increase fiber intake to avoid discomfort.

How to Store Brown Rice

When you bring brown rice home, be sure to store it properly to prevent spoilage. Since brown rice is whole grain it can spoil faster than white rice. Brown rice will keep about six months stored in the pantry. Store in an airtight container or zip top bag. Store brown rice in the refrigerator to extend its shelf life. Cooked brown rice will keep in the refrigerator about six days. Frozen cooked brown rice will keep about six months.

Review

Let's review what we've learned about whole grains and the importance of brown rice:

1. How many servings of whole grains do you need to eat daily? *At least 3 – 3 Are Key.*
2. How can eating whole grains like brown rice keep you healthy and fit? *Decreases your risk of heart disease, some cancers and type 2 diabetes. Also helps maintain healthy weight and prevents constipation.*
3. How are you going to include brown rice in your meals this week? *Answers vary, see list above. Remember, this week your goal is to choose brown rice more often than white rice – try it with at least two meals this week.*

Activity

Note to the speaker: You can prepare one of the recipes for participants to taste. If you prefer instead, prepare different kinds of brown rice (regular, instant and boil-in-bag, or long-, medium- and short-grain brown rice) to compare tastes.

Also, to encourage participants to try brown rice at home, give participants zip top bags with ½ cup to 1-cup brown rice with a bouillon cube or 2 teaspoons bouillon granules so they can try one of the cooking methods or recipes at home. Be sure to indicate how much rice is in bag so they know how to cook it.

Ask participants to bring in packages from granola bars, crackers or popcorn to the next lesson.



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The Food Stamp program provides nutrition assistance to people with low income. It can help buy nutritious foods for a better diet. To find out more, contact your local food stamp office, food bank or senior center.

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Cooking Basic Brown Rice

Brown rice takes longer to cook and requires more cooking liquid than white rice. Follow your package directions when cooking brown rice for cooking times and liquid amounts. Use these directions if package directions are not available.

1 cup uncooked brown rice ¼ tsp salt, optional
2 to 2 ½ cups water, broth or juice ½ Tbsp oil, optional



Combine rice, liquid and salt and oil, if using, in a 2- to 3-quart saucepan. Bring to a boil; stir once or twice. Reduce heat, cover with lid and simmer 45 to 50 minutes, or until rice is tender and liquid is absorbed. Fluff with fork before serving. Makes 3 to 4 cups (about 6 servings).

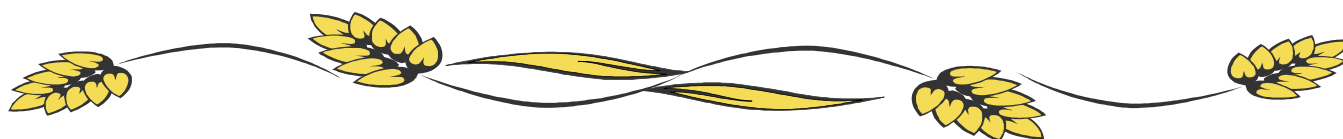
Nutrition Facts per serving
(without added oil or salt)

Serving size: ½ cup cooked rice

Total calories	108
Total fat	1 grams
Total carbohydrate	22 grams
Total dietary fiber	1.8 grams

Microwave Instructions

Combine brown rice and liquid in deep 2- to 3-quart microwave-safe dish. Cover and cook on HIGH 5 minutes or until boiling. Reduce setting to MEDIUM (50% power) and cook 30 minutes. Fluff with fork and serve.





Crock Pot Instructions

Heat oil in a skillet and add 1 cup rice. Cook and stir until rice begins to crackle, careful not to brown. Add rice and 2- $\frac{1}{4}$ cup liquid to crock pot. Cook on high for 4 to 6 hours, or cook on low for 8 to 10 hours. Fluff with a fork and serve.

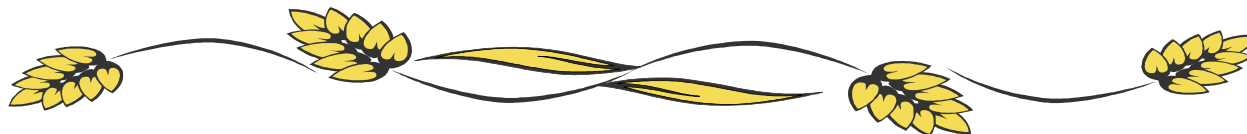
Pressure Cooker Instructions

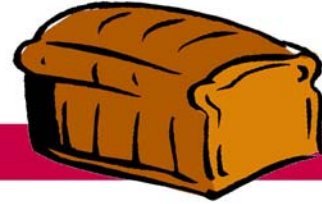
Heat 1 tablespoon oil in pressure cooker. Add 1 cup rice and sauté 1 to 2 minutes, stirring often to prevent browning. Turn off heat and stir in 1- $\frac{3}{4}$ cup boiling water and any seasonings. Lock lid in place and bring to high pressure over high heat. Adjust heat to keep at high pressure and cook 15 minutes. Turn off heat and let pressure drop naturally and let rice continue to steam for 10 minutes. Reduce any remaining pressure with a quick-release (refer to your manual). Remove the lid, tilting it away from you to let excess steam escape. Check rice for doneness. If not done, stir in a couple tablespoons of boiling liquid, if dry, and replace lid. Simmer over very low heat for one or two minutes, or until done. Fluff with fork and serve.

Reheating Instructions (for leftovers or frozen rice that has been thawed)

Add 2 tablespoons of liquid for each cup of cooked rice to be reheated. Cover and heat on medium-high on stove or in 350°F oven until heated through, about 5 minutes.

To reheat in microwave, add 2 tablespoons of liquid for each cup of rice. Cover and cook on high until heated through, about 2 minutes per cup.





Get the Brown Rice Whole Grain Bonus

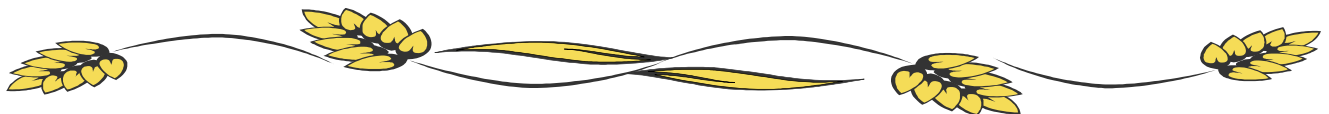
Brown rice makes a great side dish with meals. Break out of the white rice slump and the brown rice bonus to your meals this week.



- Brown rice has a nutty taste, chewy texture and unique arom brown rice to add great flavor to recipes and meals!
- Plan to eat brown rice as a side dish at least twice a week.
- Add brown rice to salads, stuffing, stews, casseroles or soups.
- For extra flavor, try cooking brown rice with chicken, beef or vegetable broth instead of water.
- Cook extra brown rice and freeze leftovers to use later.
- Use leftover rice to make rice pudding or a rice salad.
- Think brown when you make beans and rice, chicken and rice, rice pilaf, rice and gravy or rice and tomatoes.
- Stock up on instant or boil-in-bag brown rice for quick cooking.
- Try different types of brown rice to find the texture you like – from fluffy long-grain to sticky short- and medium-grain.

Storing brown rice.

Store uncooked brown rice in an airtight container in the pantry for up to six months. For longer storage and to prevent spoilage, store brown rice in an airtight container in the refrigerator. Cooked rice will keep in the refrigerator up to 6 days, and in the freezer for up to 6 months.





Brown Rice Royal

1 Tbsp vegetable oil	1/2 cup thinly sliced green onions
2 cups (8 ounces) sliced fresh mushrooms, or 10 ounces canned	3 cups cooked brown rice (cooked in beef, chicken, or vegetable broth)

Stove Top Directions

1. Cook mushrooms and onions in oil in a large skillet over medium-high heat until tender.
2. Add rice. Stir until thoroughly heated, about 5 minutes.

Microwave Directions

1. Combine mushrooms, onions, and oil in 2-quart microwave safe baking dish. Cook on HIGH 2 to 3 minutes.
2. Stir in rice and continue to cook on HIGH 3 to 4 minutes, stirring after 2 minutes, or until thoroughly heated.

Makes 6 servings.

Nutrition Facts per serving Serving size: 3/4 cup

Calories	138
Total fat	3 g
Total carbohydrate	25 g
Total dietary fiber	2.4 g

Adapted from US Rice Federation, <http://ricecafe.com/recipe22.htm>





Brown Rice Pilaf

2 Tbsp butter or oil
1 large onion, chopped
1 cup uncooked brown rice
dash cinnamon (optional)

2 ½ cups chicken broth
1/8 tsp salt, optional
1/4 tsp pepper



1. Sauté onion in butter or oil in skillet over medium heat until golden.
 2. Add rice and sauté until onions are slightly browned.
 3. Add broth and cook until mixture boils.
 4. Remove from heat and place mixture in a covered baking dish.
 5. Add salt, pepper and cinnamon; cover and bake at 350° F for 1 hour.
- Makes 6 servings.

Nutrition Facts per serving Serving size: 3/4 cup

Calories	175
Total fat	5 g
Total carbohydrates	27 g
Total dietary fiber	1.5 g

Adapted from Southern US Cuisine, <http://southernfood.about.com/library/news/bln451.htm>





Brown Rice Primavera with Chicken

1 Tbsp vegetable oil	½ cup sliced carrots*
¾ pound boneless, skinless chicken breasts, cut into strips	½ cup sliced yellow squash or zucchini*
2 cloves garlic, minced	Ground black pepper to taste
1 ½ cups low-salt chicken broth	1 ½ cups instant brown rice, uncooked
1 cup broccoli flowerets*	¼ cup grated Parmesan cheese
½ bell pepper, cut in strips*	

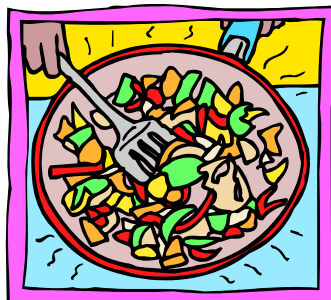
1. Heat oil in large skillet over medium-high heat. Add chicken and garlic, stirring until chicken is lightly browned.
 2. Add broth, vegetables and pepper to skillet. Bring mixture to boil.
 3. Stir in rice and let return to boil. Reduce heat to low, cover and let simmer 5 minutes. Remove from heat and let stand another 5 minutes.
 4. Stir in cheese and serve. Makes 4 servings.
- *Can use 2 ½ cups of other vegetables, including frozen vegetables.

Nutrition Facts per serving

Serving size: ¼ of recipe

Total calories	330
Total fat	9 g
Total carbohydrate	31 g
Total dietary fiber	3 g

Adapted from Diabetic Cooking, September/October 2003.





Whole Grains
Lesson 4 – The Brown Rice Bonus Post Test

Date:	Name:
County:	Age:

Please circle or write in your answers.

1. I like the taste of brown rice.
a. Yes b. No
2. I will add brown rice to my shopping list this week.
a. Yes b. No
3. I plan to eat one serving of brown rice this week.
a. Yes b. No
4. I learned something new from this lesson.
a. Yes b. No