

By María Eugenia Rodríguez León, MS, RD, CSR, LND, Registered Dietitian Nutritionist https://menutritionpr.com

ne of the recommendations given for following a healthy diet is choosing half of your daily grains as whole grains. Whole grains can help in preventing some diseases (e.g., diabetes, cancer, high blood pressure and heart disease).¹ A whole grain has the three original parts of the seed: bran, germ and endosperm.²

Bran is the edible part surrounding the seed. It contains antioxidants, B vitamins and fiber.

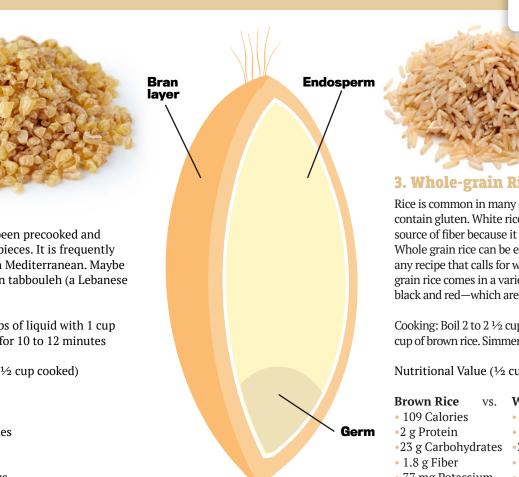
Germ is the seed embryo. It is the part that has the potential to become a new plant. It contains B vitamins, protein, minerals and healthy fats. Endosperm is the germ's food. It is the bulk of the seed and provides energy so that the plant can grow. It contains carbohydrates, protein and small amounts of vitamins and minerals.

Refined grains have the germ and bran removed—leaving only the endosperm. This causes them to lose protein, fiber, potassium and phosphorus, among other nutrients.

In the past, people with kidney disease were recommended to limit whole grains because they had a higher phosphorus and potassium content. We know that our body absorbs less phosphorus from plant sources than from animal sources and from processed foods and beverages with added phosphorous (also known as phosphate additives). Low-potassium food can be defined as food with fewer than 200 mg of potassium per serving. The alternatives presented below are all low in potassium.

The fiber content of whole grains can also help you manage or prevent constipation. Constipation is a common problem among people with kidney disease. Avoiding constipation can also help you manage potassium. People with kidney disease eliminate more potassium through the stools.

Finally, some people feel that the renal diet is very limited with few options. Including whole grains will give you more variety in your diet. Try new foods and recipes. Enjoy a varied diet with these whole grains.



3. Whole-grain Rice

Rice is common in many diets. It does not contain gluten. White rice is not a good source of fiber because it is a refined grain. Whole grain rice can be easily exchanged in any recipe that calls for white rice. Whole grain rice comes in a variety of colors-brown, black and red-which are all equally healthy.

CATION

Cooking: Boil 2 to 2^{1/2} cups of liquid with 1 cup of brown rice. Simmer for 35 to 45 minutes.

Nutritional Value (1/2 cup cooked)

Brown Rice vs	. White Rice
 109 Calories 	 121 Calories
•2 g Protein	 2 g Protein
 23 g Carbohydrate 	es •27 g Carbohydrates
 1.8 g Fiber 	• 0.3 g Fiber
 77 mg Potassium 	 27 mg Potassium
 75 mg Phosphoru 	is • 34 mg Phosphorus

in cook time. The amount of liquid and cooking time will vary depending on the oats you buy.

In addition to hot oatmeal, you can prepare overnight oats (leave it in the fridge from the night before) or baked oatmeal for breakfast. Also, you can use oats in different recipes such as granola, meatballs, cookies, smoothies or bars.

Nutritional Value (1/2 cup raw oats)

- 154 calories
- 5 g protein
- 28 g carbohydrates
- 4.1 g fiber
- 147 mg potassium 166 mg phosphorous

 $\frac{1}{2}$ cup raw oats (or prepared with water) 166 146 Oatmeal prepared with $\frac{1}{2}$ cup raw oats and 8 ounces cow's milk 398 512 Oatmeal prepared with $\frac{1}{2}$ cup raw oats, 4 ounces cow's milk and 4 ounces water 282 329 Oatmeal prepared with ½ cup raw oats and 8 ounces almond milk (Silk) 186 176 Oatmeal prepared with $\frac{1}{2}$ cup raw oats and 8 ounces unenriched rice milk (Rice Dream Classic) 196 176

2. Oldways Whole Grains Council. Whole Grains A to Z. Available at: https://wholegrainscouncil.org/whole-grains-101/whole-grains-z

1. Bulgur

Is wheat that has been precooked and broken into small pieces. It is frequently used in the eastern Mediterranean. Maybe you have eaten it in tabbouleh (a Lebanese salad) or in a pilaf.

Cooking: Boil 2 cups of liquid with 1 cup of bulgur. Simmer for 10 to 12 minutes

Nutritional Value (1/2 cup cooked)

- 76 Calories
- 3 g Protein
- 17 g Carbohydrates
- 4 g Fiber
- 62 mg Potassium
- 36 mg Phosphorus



Oatmeal is a common breakfast choice. It

can be prepared with milk or water. When

prepared with milk, cooked oatmeal will have more phosphorus and potassium

than if it is prepared with water or other

milk substitutes low in phosphorus and

potassium. Oats come in different forms:

traditional rolled oats and steel cut oats,

which are nutritionally similar, but differ

2. Barley

Has a very hard outer shell and is difficult to remove without losing some of the bran. Pearl barley is easy to buy but has some of its bran removed. Although it is not completely a whole grain, pearl barley is still a good fiber source. It can be used in risotto, salads and soups.

Cooking: Boil 2 cups of liquid with 1 cup of pearl barley. Simmer for 30 to 40 minutes.

Nutritional Value (1/2 cup cooked)

- 97 Calories
- 2 g Protein
- 22 g Carbohydrates
- 3 g Fiber
- 73 mg Potassium
- 42 mg Phosphorous

^{1.} Sparks, Brittany. Is there room for more than white rice in the renal diet? A new look at ancient grains. J Ren Nutr. 2018:28:e15-e18.