WHOLE GRAINS















Examples include rolled oats, brown rice, 100 percent whole wheat or stone ground wheat, popcorn, quinoa, whole wheat pasta/bread/crackers, and whole corn.

Incorporating whole grains into your meals

ENDOSPERM

Why should I choose whole grains?

Consuming whole grains may reduce the risk of:

- Heart disease
- Diabetes
- Gastrointestinal cancers (colon, rectum, small intestine)

Whole grains also can help you maintain a healthy body weight. Whole grains contain fiber, which reduces constipation, aids in reducing blood cholesterol levels and in managing blood glucose, and keeps you full longer.

How do whole grains differ from refined grains?

Grains are the seeds of grasses. Whole grains are grains that have all parts of the kernel.

Bran: outer portion of the grain containing fiber, B vitamins, minerals, and phytochemicals

Germ: small, inner portion of the grain containing B vitamins and vitamin E, antioxidants, phytochemicals, and minerals

Endosperm: the starchy inner portion of the grain containing carbohydrates, protein, and B vitamins

Whole grains differ from refined grains due to processing. Refined grains contain only the endosperm. Because the bran and germ are removed in refined grains, the amount of protein, fiber, and other important nutrients are reduced. Often, refined grains are "enriched," meaning the lost nutrients are added back, but usually not to the same level as found in the original whole grain kernel.

It's important to remember that not all foods that contain fiber are whole grain foods.

How many whole grains should I eat daily?

Start by replacing some of your refined grains with a whole grain alternative.

- 2010 Dietary Guidelines for Americans recommend that half of your grains be whole grains (3 servings daily).
- 1 serving of whole grains = 16g whole grains

Examples of a serving of whole grains include:

1 slice of whole wheat bread, 1 cup cold cereal, ½ cup cooked cereal, 5 whole wheat crackers, 3 cups of popcorn, ½ cup cooked brown rice

WHOLE GRAINS

TYPES OF WHOLE GRAINS (1 CUP) AMARANTH Tiny beige seeds that cook up into a delicate, slightly	LIQUID (per cup of grain) 3 cups water or broth or	BASIC COOKING DIRECTIONS Bring liquid and amaranth to a boil. Reduce heat to low and cover. Cook and stir occasionally until	YIELD 3 cups	NUTRITION NOTES Gluten-free. Rich in calcium and iron.	NUTRITION FACTS (per 1/4 cup dry) 180 calories; 7g protein; 7g fiber	SERVING SUGGESTIONS For breakfast, top with fruit, honey, and yogurt or serve as a savory side dish.	
gelatinous porridge.	half water/ half milk	thick, 20-25 minutes.	in the			·	
United States is used for animal		e Middle East. Most of the crop grow to make beer and whiskey.	Contains gluten. Provides B-glucan, which may help reduce LDL cholesterol.				
HULLED BARLEY Barley kernels are intact but the outer (inedible) husk has been removed.	4 cups water	Bring barley and liquid to a boil. Reduce heat to low; simmer covered till grains are tender, 60-75 minutes. Drain.	3 cups	Healthiest form: germ and bran are intact.	170 calories; 6g protein; 8g fiber	Add to soups and stews. Stir sautéed mushrooms and parsley into cooked barley for a side dish. Toss cooked barley with black beans, red bell pepper, corn, and a limecumin dressing for a salad.	
PEARL BARLEY Kernels, polished to remove hull and bran. Not a true whole grain, but nutritious.	3 cups water or broth	Bring barley and liquid to a boil. Reduce heat to low; simmer, covered, till most liquid is absorbed, 40-45 minutes.	3¼ cups	Rich in fiber and nutrients.	176 calories; 5g protein; 8g fiber		
OUICK-COOKING BARLEY This type has been rolled thinner than pearl barley.	1¾ cups water or broth	Bring liquid to a boil; add barley. Reduce heat to low and simmer, covered, 10-12 minutes.	2 cups	Makes a quick, healthy side dish.	128 calories; 4g protein; 4g fiber		
CORNMEAL Ground, dried corn kernels popular in baked goods. Can be cooked into a creamy mush. Choose stone-ground cornmeal, which retains some hull and germ. Regular cornmeal is degermed and is not a whole grain.	4 cups water or broth or half water/ half milk	Mix cornmeal and 1 cup cold liquid until smooth. Bring remaining liquid to a boil. Add cornmeal mixture and return to a boil, whisking. Reduce heat to low and cook, uncovered, whisking often, until creamy and thick, 20-30 minutes.	3 cups	Gluten-free. Contains fiber, potassium, and folic acid. Yellow cornmeal contains carotenoids.	110 calories; 2g protein; 5g fiber	Enjoy cornmeal "mush" for breakfast topped with maple syrup. Savory cornmeal "mush" is called polenta. Serve with any tomato pasta sauce.	
QUINOA Tiny seeds with delicate flavor. Typically ivory but red and black varieties also available. An inherent insect repellent (sapotin) must be removed from seeds prior to cooking (removed from most commercially packaged quinoa).	2 cups water or broth	Rinse thoroughly in several changes of water. Combine quinoa and liquid; bring to a boil. Reduce heat to low and simmer, covered, until most liquid has been absorbed, 12-15 minutes. Let stand 5 minutes.	3 cups	Gluten-free. A complete protein. Rich in iron, potassium, riboflavin, and B vitamins.	160 calories; 6g protein; 2g fiber	After cooking, stir in chopped fresh parsley and freshly grated lemon zest for a side dish. Make quinoa salad with scallions, cherry tomatoes, green beans or asparagus and lemon dressing.	
MILLET Small yellow kernels that create a texture between a pilaf and porridge. A nutritious, mild grain.	2½ cups water	Combine millet and liquid. Bring to a simmer. Reduce heat to low and cook, covered, till most of the liquid is absorbed, 25-30 minutes.	3 cups	Gluten free. Rich in B vitamins.	189 calories; 5.5g protein; 4g fiber	An interesting alternative to rice or couscous. After cooking, stir in reduced-fat cheese.	
	st hull is removed, so the bran and ge y brown rice convenience foods such e using directions given.	Gluten-free. Good source of selenium, manganese, and magnesium.					
BROWN RICE Short, medium, and long- grain varieties are available. Cooking directions for each type are similar.	2½ cups water	Bring rice and water to a boil. Reduce heat to low and simmer, covered, until most of the liquid is absorbed, 40-50 minutes.	2½ cups	See Above	171 calories; 4g protein; 2g fiber	Use as a side-dish to accompany stir-fries and other main dishes. Embellish with toasted sesame seeds and low sodium soy sauce. Try leftover brown rice in a salad with tuna, carrots, dill, and lemon dressing.	
PAR-BOILED BROWN RICE Often labeled as natural whole-grain brown rice, it goes through a process to ensure firm, separate grains.	2¼ cups water or broth	Bring rice and liquid to a boil. Reduce heat to low and simmer, covered, until most of the liquid has been absorbed, about 30 minutes.	3 cups	See Above	170 calories; 4g protein; 2g fiber		

TYPES OF WHOLE GRAINS (1 CUP)	LIQUID (per cup of grain)	BASIC COOKING DIRECTIONS	YIELD	NUTRITION NOTES	NUTRITION FACTS (per ¼ cup dry)	SERVING SUGGESTIONS		
OATS - A resilient grain that has long be removed before oats are processed into	Gluten-free, but often cross-contaminated with gluten-containing grains. Rich in soluble fiber, which helps lower cholesterol and stabilize blood sugar.							
OAT GROATS Entire kernel minus the inedible husk. Individual oat groats remain separate when cooked (like brown rice). Chewy texture; nutty flavor.	3 cups water	Bring liquid to a boil. Add groats and reduce heat to low. Simmer, covered, stirring occasionally, until groats are tender, 45-50 minutes. Drain.	2¼ cups	Most whole, therefore most nutritious, form of oats.	160 calories; 7g protein; 4g fiber	Try in a savory stuffing with onion, celery, apple, and poultry seasoning.		
STEEL-CUT OATS Oat groats that have been cut into pieces by steel blades (hence, steel-cut).	3 cups water	Boil liquid. Add oats; reduce heat to low. Simmer, covered, stirring occasionally, 30-35 min. Let stand 5 minutes.	2¾ cups	Minimally processed.	140 calories; 6g protein; 4g fiber	Cook dried fruit with oats. Top with low-fat milk, yogurt, and brown sugar or maple syrup, and toasted nuts.		
OLD-FASHIONED ROLLED OATS Oat groats that have been steamed and rolled into flakes. Quick-cooking oats rolled thinner to cook faster.	1¾ cups water or half water/ half milk	Bring liquid to a boil. Stir in oats. Reduce heat to low; simmer, uncovered, stirring often, till thick, about 5 minutes. Let stand for a few minutes.	1½ cups	A convenient, healthy breakfast choice.	80 calories; 3.5g protein; 2g fiber			
TEFF Miniscule brown seeds in whole grain or flour form. Flavor similar to chocolate.	3 cups water	Bring liquid to a boil. Add teff; simmer, uncovered, stirring frequently, till thick, 15-20 minutes.	2¾ cups	Gluten-free. Good source of calcium and iron.	180 calories; 7g protein; 4g fiber	Serve as a breakfast porridge or a savory polenta-like side dish. Tasty with spicy stews.		
WHEAT - Most North Americans are familiar with milled wheat in bread and pastas but other forms, such as whole kernels, are delicious and nutritious.					All wheat products contain gluten. Provides fiber, manganese, magnesium, selenium, phosphorous, and lignans.			
FARRO Nutty tasting and creamy consistency when cooked. Good whole-grain substitute for rice in risottos.	2 cups water or broth	Combine faro and liquid; bring to a boil. Reduce heat to low and simmer, covered, until most of the liquid has been absorbed, about 25 minutes.	2 cups	See Above	150 calories; 6g protein; 2g fiber	Add to soups. Serve as a side dish in place of rice. Add to a salad with apples, celery, nuts, and vinaigrette.		
KAMUT Larger kernels than regular wheat.	4 cups water	Combine kamut and liquid; boil. Reduce heat, simmer covered, till tender, 50-60 minutes. Drain.	2 cups	See Above	170 calories; 6g protein; 5g fiber	Add to a salad with citrus dressing, onion, oranges, and craisins.		
WHEAT BERRIES Whole kernels with outer husk removed. Nutty flavor and chewy texture. Use hard and soft berries interchangeably.	4 cups water	Combine berries and liquid; bring to a boil. Reduce heat and simmer, covered, till tender, 60-75 minutes. Drain.	2 cups	See Above	170 calories; 7g protein; 5g fiber	Stir cooked wheat berries into breakfast oatmeal, soups, or side salads with onion, fruit, nuts, and dressing.		
CRACKED WHEAT Wheat berries broken into small pieces. Do not confuse with bulgur.	21/3 cups water or half milk/ half water	Boil liquid. Add cracked wheat. Reduce heat to low and cover; cook and stir occasionally till tender, 20 minutes.	21/3 cups	See Above	102 calories; 6g protein; 4g fiber	Serve as a breakfast porridge topped with brown sugar, nuts, cinnamon, and yogurt.		
BULGUR Steamed, dried, and cracked whole wheat kernels. Available in various sizes.	1½ cups broth or water	Bring bulgur and liquid to a boil. Reduce heat to low and simmer, covered, till most of the liquid is absorbed, 15-20 minutes.	2¾ cup	See Above	120 calories; 4g protein; 6g fiber	For fine or medium bulgur in salads: cover with boiling water; let stand 20 minutes; drain.		
WHOLE-WHEAT COUSCOUS Tiny pasta made from semolina; not a grain. Pre-cooked and dried; only need to plump before serving.	1¾ cup water, broth, or milk	Boil liquid; stir in couscous. Remove from heat and let stand, covered, 5 minutes. Fluff with a fork. Whole wheat variety cooks as fast as white.	3 cups	See Above	105 calories; 4g protein; 4g fiber	Add raisins and toasted almonds for a side dish. Plump in milk with dates and honey for breakfast porridge.		
WILD RICE Not a true grain or rice (actually an aquatic grass) but offers similar nutritional benefits as whole grains.	3 cups water	Rinse. Bring wild rice and liquid to a boil. Reduce heat to low and simmer, covered, till grains are tender (many will split open), 45-50 minutes. Drain.	2 ² / ₃ cups	Gluten- free. Rich in minerals, fiber, and B vitamins.	143 calories; 6g protein; 2.5g fiber	Stir in dried fruit and top with toasted nuts, or stir in sautéed mushrooms and parsley.		

RECIPE



Raisin Strudel Oatmeal

Ingredients:

¼ cup instant oatmeal½ cup boiling water1 tablespoon raisins

1 teaspoon brown sugar ¼ teaspoon cinnamon 2 tablespoons skim milk 1 tablespoon low-fat granola

Instructions:

- 1. Place oatmeal, raisins, brown sugar, and cinnamon in a coffee mug or cereal bowl.
- 2. Pour boiling water over all. Stir and steep for 2 minutes.
- 3. Top with skim milk and low-fat granola.













"Diets rich in whole grain foods and other plant foods and low in total fat, saturated fat, and cholesterol may reduce the risk of heart disease and some cancers."- The Food and Drug Administration

How do I identify a whole grain food?

Three steps to three servings of whole grains:

- Front of package Check the front of the package for key terms such as "100% whole grain," "whole oats," "made with whole wheat."
- Ingredients Read the list of ingredients; one of the first three should contain key terms such as "100% whole wheat," "stone ground whole wheat," "whole rye flour," "whole oats," "whole wheat flour," "brown rice," or "wheat herries"
- 3. Extra claims and logos Examine the other panels for extra whole grain health claims or whole grain stamps/ symbols that will support your decision. If the food item is qualified to use the FDA-approved health claim (as quoted above), then that product must contain 51 percent or more of whole grain ingredients.

Types of whole grain stamps:



Basic "whole grain" stamp - The product contains at least 8 grams (a half serving) of whole grains, but refined grains also may be included.



"100% whole grain" stamp - All of the grain ingredients are whole grain, and it must contain a minimum of 16 grams (1 serving) of whole grains.

Not all foods made with whole grains contain the Whole Grains Council stamp on the package due to an extra expense required on behalf of the manufacturer. It is important to pay extra attention to the front of the package and the ingredients list.

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