

Shopping for Health: Whole Grains¹

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Whole grains vs. refined grains

Grain products include foods such as bread, pasta, breakfast cereals, and crackers. Any food made with wheat, oats, rice, corn, barley, or another cereal is considered a grain product (1).

Whole grains contain the entire grain kernel. Whole-grain foods may be minimally or highly processed.

Refined grains have been processed so that the germ and the bran have been removed (*see diagram below*). This also removes much of the fiber from the grain. B vitamins, removed in the refining process, need to be added back through enrichment.

How many grains do we need?

Recommendations for servings of grains depend on your age, gender, and energy needs. The U.S. Department of Agriculture (USDA) recommends that people of all ages get half their grain servings from whole grain sources. An ounce equivalent is comparable to a slice of bread, a cup of breakfast cereal, or a half cup cooked rice or pasta.

Whole grain kernel

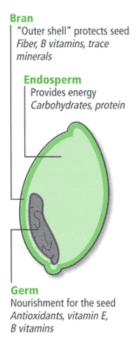


Figure 1. A whole grain kernel consists of three main parts —the fiberrich bran exterior or outer shell, the starchy endosperm it protects, and the nutrient-packed germ, which provides nourishment for the seed. Credits: USDA

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Table 1 lists the recommended daily grain intake for individuals with moderate physical activity (1).

Table 1. Recommended daily grain intake

Life Stage	Grain Recommendation (ounce equivalents/ day)	Whole Grain Recommendation (ounce equivalents/ day)
Children, 2–3	3	1 ½
Children, 4–8	5	2 ½
Girls, 9-13	5	3
Girls, 14-18	6	3
Boys, 9-13	6	3
Boys, 14-18	8	4
Women, 19-50	6	3
Women, 50+	5	3
Men, 19-30	8	4
Men, 31-50	7	3 1/2
Men, 51+	6	3

Shopping for whole grains

One of the best ways of identifying foods containing whole grains is to look for a "Whole Grain Stamp" (Figure 2). A "Whole Grain Stamp" on a food package identifies foods approved by the Whole Grains Council.

The ingredient list on the label of food products is also helpful in identifying whole grains. If whole grains are listed as the first ingredient of the product, it is probably a good source of whole grains. Examples of whole grains include: whole wheat, whole oats /oatmeal, whole grain corn, popcorn, brown rice, whole rye and whole grain barley.

WHOLE GRAIN 20g or more per serving Per se

Figure 2. Stamps indicating the minimum grams of whole grains per serving Credits: Whole Grains Council

An example of a whole grain product ingredient list is shown below, taken from Kelloggs* Frosted Mini-Wheats* cereal.

INGREDIENTS: **Whole Grain Wheat**, Sugar, High Fructose Corn Syrup, Gelatin, Reduced Iron, Niacinamide, Zinc Oxide....

Shopping for Snacks

Many whole grain snack foods are becoming available. Whole grains often have more fiber than refined grain snacks which may satisfy your appetite and keep you feeling full longer!

Several brands of crackers and other snack foods offer varieties made with whole grains. Listed below are some snacks that carry the "Whole Grain Stamp". When shopping for snacks, read labels carefully as brands often carry similar varieties that may not have the same quantity of whole grains.

Table 2. Snack foods with whole grains

Snack	Whole Grains Per Serving (g)			
Frito-Lay® Sun Chips	18			
Kashi® TLC Crackers	8			
Rold Gold® Tiny Twist Pretzels Made With Whole Grains	8			
Cascadian Farm® Granola Bars	8			
Nutri-Grain® Cereal Bars	8			
Tostitos® Tortilla Chips	8			
General Mills® Cheerios Snack Mix	8			
g = gram				

Shopping for Dinner

Shopping for easy-to-cook meals that contain whole grains may seem challenging, but there are several whole grain pastas available in the marketplace, as well as entrées and side dishes that incorporate whole grains. Table 3 lists some examples of entrées and side dishes that contain whole grains.

Table 3. Whole grains for main meals

Entrée	Whole Grains Per Serving (g)	
Buitoni® 100% Whole Wheat Linguini	62	
Buitoni® 100% Whole Wheat Four Cheese Ravioli	45	
Kashi® Garden Vegetable Pasta	40	
Barilla® Whole Grain Pastas	28	
Smucker's® Uncrustables Peanut Butter & Grape Jelly on Whole Wheat	16	
Kashi® Frozen Pizzas	8	
Weight Watchers® Pasta with Ricotta & Spinach	8	
g = gram		

Shopping for Breakfast Cereal

Getting enough whole grains is becoming easier, as many breakfast cereals are now made with whole grains. Table 4 lists some examples of breakfast cereals that carry the "Whole Grain Stamp". Many more breakfast cereals are made with whole grains, so check the labels of your favorites.

Table 4. Breakfast cereals with whole grains

Cereal	Whole Grains Per Serving (g)		
Kellogg's® Mini-Wheats	58		
Kashi® Summer Berry Granola	41		
Heartland® Granola	30		
Kashi® Go Lean Crunch	17		
Cascadian Farm® Fruit & Nut Granola	16		
General Mills® Cheerios, Multigrain Cheerios, Total, Wheaties	16		
General Mills® Cinnamon Toast Crunch, Golden Grahams, Cocoa Puffs	8		
g = gram			



Figure 3. Image of whole wheat pasta with Brussels sprouts and mushrooms. Credits: ~Photo by Bryan Ochalla and licensed under a Creative Commons Attribution-ShareAlike 2.0 License.



Figure 4. Image of whole grain cereal topped with blueberries.

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Be an Informed Shopper!

Substituting whole grain products for refined ones may help with weight management and decrease your risk of chronic diseases (3). When shopping, read food labels and look for the "Whole Grain Stamp"!

Here are tips to help you incorporate whole grains into your day:

- Choose whole grain breads or cereals for breakfast
- Snack on whole wheat pita triangles and hummus
- Snack on whole grain ready-to-eat cereals
- Serve brown rice instead of white
- Substitute whole wheat flour for all-purpose flour in baking

References

- 1. U.S. Department of Agriculture. *MyPlate*. Accessed: 21 December 2013. . http://www.choosemyplate.gov/food-groups/grains.html
- Whole Grains Council. Whole Grain Stamp. Accessed:
 December 2013. http://wholegrainscouncil.org/ whole-grain-stamp
- 3. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans*, 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, January 2010.