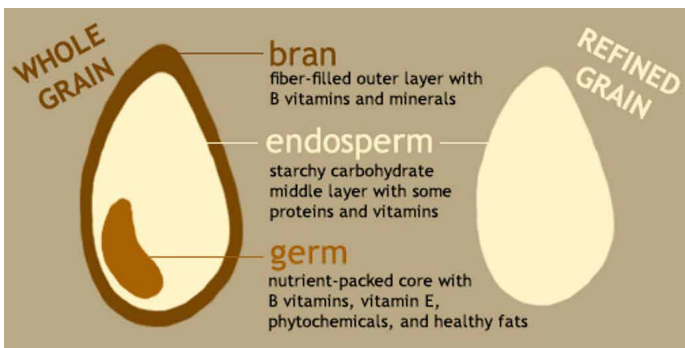




# WHOLE GRAINS

Grains, especially whole grains, provide health benefits and can reduce the risk of chronic diseases. In whole grains, the entire kernel remains intact, and each section provides beneficial nutrients <sup>1</sup>:

- The bran is the fiber-filled outer layer that contains B vitamins, minerals and phytochemicals. Phytochemicals are chemical compounds that help prevent diseases.
- The germ is the core of the seed with B vitamins, vitamin E, phytochemicals and healthy fats.
- The endosperm is the interior layer that holds carbohydrates, protein and small amounts of B vitamins and minerals.



Source: [Harvard T.H. Chan School of Public Health](#)

Meanwhile, refined grains undergo a process known as milling, which removes the bran and germ so all that remains is the endosperm.<sup>2</sup> The difference between whole grains and refined grains includes <sup>2-3</sup>:

WHOLE GRAINS	REFINED GRAINS
Lower risk of heart disease	Higher risk of heart disease
Contains B Vitamins (thiamin, riboflavin, niacin and folic acid)	Enriched with B Vitamins (thiamin, riboflavin, niacin and folic acid)
Provides satiety and helps with weight management	Leads to overeating due to high blood sugar levels and increased hunger
Examples: Whole wheat bread, brown rice and whole wheat flour	Examples: White bread, white rice and white flour

## OTHER WHOLE GRAIN OPTIONS

Barley, buckwheat, millet, oats, rye, quinoa, wheat berries, whole grain cornmeal and wild rice



## OTHER BENEFITS

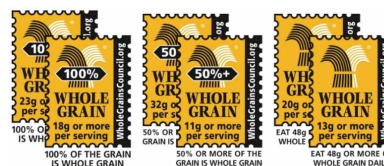
- Fiber can reduce blood cholesterol levels, lower the risk of heart disease and help with digestion.<sup>1</sup>
- Bran and fiber can help maintain steady blood sugar levels.<sup>1</sup>
- Phytochemicals and minerals such as magnesium, selenium and copper may protect against some cancers.<sup>1</sup>
- B vitamins can help the body release energy from protein, fat and carbohydrates.<sup>2</sup>
- B vitamins and selenium help support a healthy nervous system.<sup>2</sup>

## SERVING SIZE AND PORTION SIZE\*

- The daily amount of whole grains is six ounces.<sup>4</sup>
- An ounce is equivalent to a half cup of cooked rice or pasta, a half cup of cooked oatmeal, one slice of bread and one cup of cereal.

## TIPS

- Aim to make at least half of the grains you consume whole grains.
- Check the ingredient list on the packaging and look for “whole grain” as the first or second ingredient. Food manufacturers must display every ingredient used in a product on the ingredients list. Ingredients are listed in descending order, starting with the most prevalent ingredient in the food, and ending with the least prevalent.
- Find the whole grain stamp on the packaging to easily identify a whole grain item:



Source: [Oldways Whole Grains Council](#)

\*Based on a 2,000-calorie eating pattern. The amount from each food group varies by age.

Sources:

1. [Harvard T.H. Chan School of Public Health, Whole Grains](#)
2. [MyPlate, Grains](#)
3. [Harvard Health Publishing, The right plant-based diet for you](#)
4. [MyPlate, 2000 Calories](#)