

How to Talk About Whole Grains

Whole Grains are Good For You, From Head to Toe!

Whole grains are linked with **less inflammation** (ranking best among all 37 food groups studied) and **slower cognitive decline in aging**. Healthy diets with whole grains may also **reduce the risk of Alzheimer's disease** by up to 54%.

2016 Ozawa M et al., 2015 Morris MC et al.

Those eating the most whole grains had a **14% lower risk of stroke** than those eating the least whole grains.

2015 Fang L et al.

Greater servings of whole grains at breakfast are significantly related to **higher scores in reading comprehension and fluency and math** in Elementary students.

2015 Ptoomey LT et al.

Increasing whole grain food intake by about 3 servings is linked with a **19-22% lower risk of a heart disease**.

2016 Aune D et al.

Fiber from whole grains is thought to be the most protective type of fiber against type 2 diabetes. For every additional 10g of total fiber or cereal fiber (the fiber in whole grains), the **risk of type 2 diabetes is 9% or 25% lower**, respectively.

2015 InterAct Consortium

Replacing 5% of daily calories from saturated fat (like butter, cream, and red meat) with whole grains is associated with a **9% lower risk of heart disease**.

2015 Li Y et al.

Whole grains can help **improve gut bacteria**.

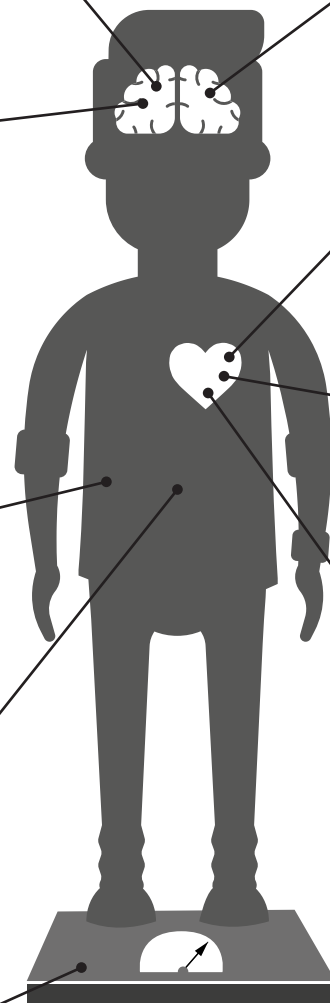
2016 Falony G et al., 2015 Vitaglione P et al.

Patients on statins who also eat more than 1 serving of whole grains per day have non-HDL cholesterol (a combination of LDL and VLDL, or "**bad cholesterol**") levels that are **11 mg/dL lower** than those taking statins but not eating as much whole grain.

2014 Hang H et al.

Those eating the most whole grains have a **lower BMI and waist circumference**, and are **less likely to be overweight or obese**.

2016 Albertson AM et al.



LIVE LONGER WITH WHOLE GRAINS!

Compared to people who eat the least whole grains, people who eat the most whole grains have a 16-18% lower risk of death from all causes, 18% lower risk of death from heart disease, and 12% lower risk of death from cancer.

2016 Aune D et al. 2016 Zong G et al.

References on back...

Compared to enriched wheat, whole wheat has...

28%
more
protein

Protein helps build and repair muscles, and is important for every cell in our body

3x
more
Potassium

Potassium helps offset sodium's effect on blood pressure, and is also important for our nerves and muscles

3x
more
Zinc

Zinc keeps our immune system healthy, and helps kids grow and develop

4x
more
Fiber

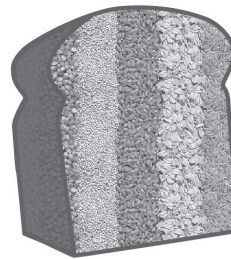
Fiber feeds our friendly gut bacteria, and supports a healthy digestive system

6x
more
Magnesium

Magnesium helps normalize our blood pressure and also helps muscles relax after exercise

87%
of those who **NEARLY ALWAYS CHOOSE WHOLE GRAINS FOODS**
HAVE INCREASED their consumption compared to **5 YEARS AGO**

Although **37%** of people cited **TASTE AS A BARRIER...**



40% of people said **TASTE** was a reason they **CHOOSE WHOLE GRAINS**

Data from the Oldways 2015 Whole Grain Consumer Insights Survey

References:

- Albertson AM, Reicks M, Joshi N, et al. Whole grain consumption trends and associations with body weight measures in the United States: results from the cross sectional National Health and Nutrition Examination Survey 2001-2012. *Nutr J*. 2016 Jan 22;15:8.
- Aune D, Keum N, Giovannucci E, et al. Whole grain consumption and risk of cardiovascular disease, cancer, and all cause and cause specific mortality: systematic review and dose-response meta-analysis of prospective studies. *BMJ*. 2016;353.
- Falony G, Joossens M, Vieira-Silva S, et al. Population-level analysis of gut microbiome variation. *Science*. 2016;352(6285):560-4.
- InterAct Consortium. Dietary fibre and incidence of type 2 diabetes in eight European countries: the EPIC-InterAct Study and a meta-analysis of prospective studies. *Diabetologia*. 2015;58(7):1394-408.
- Li Y, Hruby A, Bernstein A, et al. Saturated Fats Compared With Unsaturated Fats and Sources of Carbohydrates in Relation to Risk of Coronary Heart Disease. *J Am Coll Cardiol*. 2015;66(14):1538-1548.
- Liqun Fang, Wen Li, Wenjie Zhang, et al. Association between whole grain intake and stroke risk: evidence from a meta-analysis. *Int J Clin Exp Med*. 2015; 8(9): 16978-16983.
- Morris MC, Tangney CC, Wang Y, et al. MIND diet associated with reduced incidence of Alzheimer's disease. *Alzheimers Dement*. 2015;11(9):1007-14.
- Ozawa M, Shipley M, Kivimaki M, et al. Dietary pattern, inflammation and cognitive decline: The Whitehall II prospective cohort study. *Clin Nutr*. 2016;pic: S0261- 5614(16)00035-2.
- Ptomey LT, Steger FL, Schubert MM, et al. Breakfast Intake and Composition Is Associated with Superior Academic Achievement in Elementary Schoolchildren. *J Am Coll Nutr*. 2016;35(4):326-33.
- Vitaglione P, Mennella I, Ferracane R, et al. Whole-grain wheat consumption reduces inflammation in a randomized controlled trial on overweight and obese subjects with unhealthy dietary and lifestyle behaviors: role of polyphenols bound to cereal dietary fiber. *Am J Clin Nutr*. 2015;101(2):251-61.
- Wang H, Lichtenstein AH, Lamon-Fava S, et al. Association between statin use and serum cholesterol concentrations is modified by whole-grain consumption: NHANES 2003-2006. *Am J Clin Nutr*. 2014 Oct;100(4):1149-57.
- Zong G, Gao A, Hu FB, et al. Whole Grain Intake and Mortality From All Causes, Cardiovascular Disease, and Cancer: A Meta-Analysis of Prospective Cohort Studies. *Circulation*. 2016;133(24):2370-80.

Why Switch to Whole Grains?

User Friendly:

Unlike their more delicate, refined counterparts, whole grains are less fussy, and can withstand the tough conditions that cooks throw at them. Overmixing is rarely a problem in baking whole grain cakes and muffins because the bran and germ cut through the elastic gluten strands, keeping them tender rather than tough. Most whole grains (like brown rice, farro, wheat berries, sorghum, millet, wild rice, and spelt) can even be cooked “pasta style” in a large pot of boiling water, then drained, to drastically reduce cooking time.

Less Expensive:

When trendy whole grains, like quinoa, black rice, or farro are the star of your plate, you can cut down on the portion of other ingredients, like meat, to help cut costs. Additionally, America’s Test Kitchen found using brown rice in fried rice required significantly less oil than the white rice version, since the bran keeps the grains from sticking together.

More Flavor:

Unlike refined grains and flours, which simply disappear into the background, whole grains and whole grain flours actually have a distinct flavor, and a decadent one at that. In her James Beard Foundation Award winning book, *Flavor Flours*, Alice Medrich writes, “I was startled at the delicate textures and aromas I found in the simplest cakes made from their flours. I never dreamed that a plain oat flour sponge cake would taste like butterscotch, or that a brown rice sponge could have such a moist and delicate butter flavor, or that buckwheat would have notes of honey and rose.”

More Sustainable:

As “nose-to-tail” cooking captivates diners and chefs across the country, working with the entire grain kernel is just as important for reducing food waste. One bushel of wheat yields enough flour for making 60 loaves* (24 oz) of whole wheat bread, or only 42 (24 oz) loaves of white bread. Grain-centric dishes often require less water and energy. In fact, growing grains uses only 0.51 liters** of water to make 1 calorie of food (compared to 10.19 liters for beef, 2.09 liters for fruits, and 1.34 liters for vegetables). Many ancient grains are also more tolerant of extreme weather. For example, millet has one of the lowest water requirements of any grain crop, while teff thrives in drought.

Consumers Want Them:

Whole grains consistently rank favorably among consumers. In a December 2015 survey, Mintel found that 30% of respondents are interested in, and would pay more for, menu items that feature whole grains. This is greater than the interest in non-GMO (29%), high fiber (28%), low sodium (26%), low sugar (26%) and gluten free (22%). According to the 2016 International Food Information Council (IFIC) Food and Health survey, 76% of respondents rate whole grains as “healthy” (compared to only 33% for enriched grains). In a 2015 report from HealthFocus International, 71% of respondents (spanning 16 countries) reported that they want whole grains as a source of nutrition.

*Kansas Wheat Commission

**Mekonnen MM, Hoekstra AY. A Global Assessment of the Water Footprint of Farm Animal Products. *Ecosystems*. 2012 Jan 24;15:401-415.



Why Award Winning Cookbook Authors and Chefs Prefer Whole Grains

“When I switched to whole grains, the greatest revelation was a world of flavor I had been stubbornly resisting for years.”

– Alice Waters, *My Pantry*

“I don’t eat whole grains because they are healthy, or wholesome, or to reap their nutritional benefits. To me, whole grains carry luxurious qualities: lively textures, vivid colors, and rich flavors.”

– Maria Speck, *Ancient Grains for Modern Meals*

“... the most finicky techniques of classic baking can be entirely ignored with these flours: ingredients usually do not have to be at room temperature, flour need not ever be added to batters in three parts alternating with two parts of liquid, and overmixing is rarely the problem because absent gluten, mixing cannot make a cake or biscuit tough”

– Alice Medrich, *Flavor Flours*

“Who needs white rice when you have nutty, fragrant brown rice, sweet and earthy black rice, or Wehani red rice, with its hint of chestnuts and spice? If you want a beautifully composed plate or a gorgeous bed for a simple piece of fish or meat, nothing beats whole grains.”

– Robin Asbell, *The Whole Grain Promise*