

FN-SSB.064

GREAT GRAINS PACKED WITH NUTRITION

Why do we eat? We eat to support our everyday activities and ultimately for survival. We all know that eating nutrient-dense foods has a huge effect on our health and wellness. Scientific evidence has become more exact in figuring out what we should eat to reduce the risk of developing chronic disease. According to the Centers for Disease Control and Prevention, an estimated 74% of American adults are overweight or obese. Obesity increases the risk for developing many chronic disease states, including heart disease, hypertension, stroke, diabetes, and elevated cholesterol and triglyceride levels. So, a healthy diet plan is important.

WHY EAT WHOLE GRAINS?

Adding whole grains to your diet is an easy, tasty, and convenient way to increase your healthy food choices while also reaping many health benefits. Research suggests that adding whole grains to your diet improves health in many ways, including lowering cholesterol, low-density lipoprotein (LDL) cholesterol, triglycerides, and insulin levels. Grains are an important source of complex carbohydrates, which supply the body with energy. Grains are also a good source of B-vitamins, iron, magnesium, selenium, and fiber.

Dietary fiber is the part of the plant fiber that we eat in food. It is found only in plant foods, such as fruits, vegetables, and grains. High fiber foods are also generally low in fat. Fiber helps maintain regularity and provides a feeling of fullness and satisfaction in a meal. Americans should eat 20 to 35 grams of fiber per day. The fiber content of

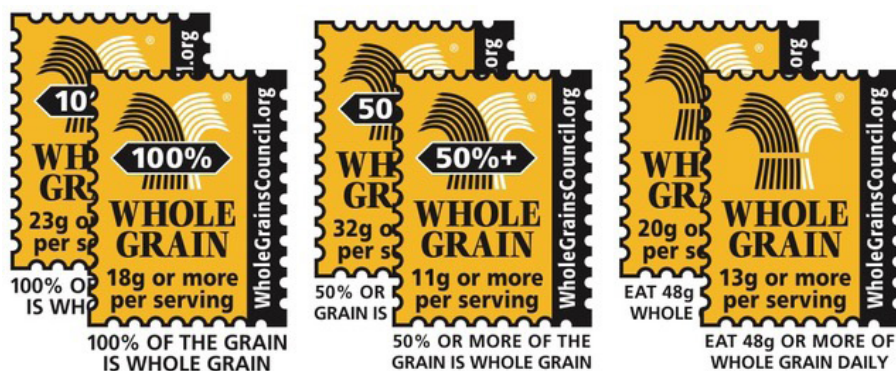


different grains varies per cup, ranging from three grams in millet, 5 grams in corn grits, and 11 grams in oats, rye, whole wheat, or buckwheat. Use the food label to choose whole-grain foods with a lot of fiber.

WHOLE GRAINS VERSUS REFINED GRAINS

While no one whole food will guarantee good health, some whole-grain foods are healthier than others. There are many different grains such as barley, oats, and quinoa. Grains can be divided into two sub-categories - whole grains and refined grains. Whole grains and refined grains have significant nutritional differences. Refining a grain removes a quarter of the protein in the grain and greatly reduces many key ingredients. In contrast, the bran found in whole grains is high in fiber, protein, and B-vitamins. The germ is also high in protein, fiber, and B-vitamins and contains healthy polyunsaturated fats.

Whole grains include the entire grain kernel (the bran, endosperm, and germ). Examples of whole grains are whole-wheat flour, bulgur (cracked wheat), oatmeal, and brown rice. Refined grains



Oldways Whole Grains Council, www.wholegrainscouncil.org

have been modified and usually do not have the bran and germ. Examples of refined-grain products are white flour, corn grits, white bread, and white rice. Many refined grains are enriched. This means certain B-vitamins (thiamin, riboflavin, niacin, folic acid) and iron have been added back to the food. Fiber, however, cannot be added back to enriched grains.

Daily Recommendations

While most Americans consume enough grain foods, very few eat enough whole grains. At least half of the grains we eat need to be whole grains. According to USDA MyPlate, the number of grains you need to eat depends on your age, sex, height, weight, and physical activity. To see what the recommendations are for you, check out <https://www.myplate.gov/myplate-plan>. Here, you'll also find that 1 ounce of whole grains is considered a serving. Equivalents include 1 slice of bread, 1 cup of ready-to-eat cereal, and ½ cup of cooked rice, cooked pasta, or cooked cereal. Start with adding one extra serving of whole grains to your diet a day. This will help you slowly replace your refined-grain products and build up your whole grain intake.

The Oldways Whole Wheat Council created a stamp called the whole grain stamp which appears on the package as a yellow and black postage stamp. This stamp makes it easy to tell if the product contains whole grain. Try to pick food items with the 100% whole grain stamp and a few items with any whole grain stamp. If there is no stamp on the product, it is harder to tell if the product has whole grains. Check the ingredients list and look for the word whole before the first

ingredient. Then see if any of the ingredients are made from whole grains. These foods may include brown rice, buckwheat, quinoa, bulgur, whole-grain barley, whole wheat, whole rye, and more.

Multigrain does not necessarily mean the product is whole grain. Multigrain means the food has more than one type of grain. Don't let the color fool you either. A darker color doesn't mean it is a whole-grain food. You may see foods that say they contain whole wheat. Wheat is a type of grain, so whole wheat is a type of whole grain. However, wheat bread should not be confused with whole-wheat bread. Wheat bread simply means the product was made using wheat flour. There are also many naturally gluten-free whole-grain foods, such as brown rice, quinoa, and buckwheat.

GREAT GRAINS TO TRY

There are a wide variety of grains available in your local supermarket or health food stores. Experimenting with these grains may help you meet your recommended servings of whole grains. Packages usually provide cooking directions on the back. Included in this list are pseudocereals or pseudograins. Pseudograins like amaranth, buckwheat, and quinoa are seeds but contain similar nutrients to grains. Pseudograins are also gluten free.

Amaranth looks like golden poppy seeds. It has a peppery taste and has a high content of protein. Amaranth is high in dietary fiber, iron, phytosterols, and more. The Tasting Table has a Amaranth polenta recipe that is an easy first use of the grain (<https://www.tastingtable.com/687183/how-to-make-amaranth-polenta-with-tuscan-kale/>).

Barley is native to Asia and is one of the first grains to be used to make bread. Sometimes it is referred to as farro. It is low in fat and is mainly starchy carbohydrates. Barley has a low glycemic index which can help with blood glucose control. Usually, it is sold as refined or pearled barley, rather than a whole-grain version. Try adding half a cup of barley to your favorite vegetable soup or toss two cups of barley with a 12-ounce can of tuna, ½ cup of cooked frozen peas, and ¼ cup chopped scallions for a lunchtime salad.

Buckwheat, sometimes referred to as kasha or roasted buckwheat groats has a nutty flavor. It is very high in protein, carbohydrates, zinc, and linoleic acid. It is commonly used as flour. Try making savory buckwheat crepes or Kasha Varnishkas, an Eastern European Jewish dish.

SAVORY CREPES WITH BUCKWHEAT FLOUR

Yield: 6 filled crepes

Preparation time: 20 minutes + 2 hours set time

Cooking time: 10 minutes + 5 minutes to fill

Nutritional analysis per filled crepe:

420cal, 20g fat, 95mg cholesterol, 900mg sodium, 36g carbohydrate, 25g protein

Crepe Ingredients

- 2¼ cups buckwheat flour
- 3 cups water + ⅓ cup to adjust the batter consistency, if needed
- 1 large egg
- ½ teaspoon salt

For the Filling

- 12 ounces thinly sliced Black Forest ham
- 6 ounces thinly sliced Gruyère cheese

Instructions

1. In a blender, add all ingredients and blend for 30 seconds or until smooth. Cover the batter. Place in the refrigerator for at least 2 hours or overnight.
2. Remove from the refrigerator when ready to make the crepes. Thin the batter, if needed,

with up to ⅓ cup water. It should have the consistency of melted ice cream.

3. Because buckwheat crepes are thicker, they are harder to spread. A crepe pan makes this easier but is not necessary. Test your batter consistency with the first crepe. (The French discard the first crepe, but an ugly crepe is still a tasty crepe!) Using a lightly greased 8-inch pan, over medium heat, lift the pan at a slight angle and pour ⅓ cup of batter into the pan, tilting the pan to spread the batter to the edges. Return the pan to the heat and cook until the crepe is golden underneath, 1 to 2 minutes. Flip and cook on the other side. Remove the crepe from the pan and set aside until ready to fill. Repeat with each crepe, making sure to grease the pan lightly each time.
4. For the filling, lay the crepe flat. Add 2 ounces of ham and top with 1 ounce of cheese. Fold into quarters and repeat with the remaining crepes and filling. In the same pan, lightly grease, and over medium heat, add the crepes. Cook about 1 to 2 minutes per side, until cheese begins to melt. Serve immediately.

Note: Practice makes perfect! And there are so many possibilities for fillings.

Bulgur is a staple ingredient in Middle Eastern and Mediterranean regions. Bulgur is very common in falafel and tabbouleh. It has a very nutty flavor and is rich in fiber. Try making a tabbouleh salad with bulgur or replace the rice in your recipe with bulgur wheat.

Couscous is actually a pasta made of crushed semolina wheat flour that is mixed until it forms tiny balls. It is a traditional North African dish. Couscous is typically served with fruits, vegetables, or meats, making it a great main or side dish.

Millet was widely consumed in Asia before rice. Millet is low in fat and high in carbohydrates. It is a great source of dietary fiber and is also a gluten-free option. Millet has a mild flavor that allows it to pair well with other foods. It is a great bed for roasted vegetables or curries.

Oats are the edible seeds of oat grass which usually ends up in our breakfast bowls. It has beta-glucan, which is a soluble fiber found to improve blood glucose control. You can add oats to meatloaf, make them into multigrain bread, or add them along with apples to make a milkshake.

NUTTY GRANOLA BARS

Yield: 16 bars

Preparation time: 30 minutes

Cooking time: 40 minutes

Nutritional analysis per bar: 190cal, 10g fat, 5mg cholesterol, 65mg sodium, 24g carbohydrates, 4g protein

Ingredients

- 1½ cups old fashioned rolled oats
- 1 cup chopped walnuts
- ½ cup sliced almonds
- ⅔ cup shredded unsweetened coconut
- ½ cup honey
- 3 tablespoons packed brown sugar
- 2 tablespoons unsalted butter
- 1½ teaspoons vanilla extract
- ¼ teaspoon salt + ⅛ teaspoon salt
- 1 cup rice cereal
- ¾ cup dried fruit, such as cranberries, raisins, blueberries, or apricots

Instructions

1. Preheat the oven to 350 degrees F.
2. Line a baking pan with parchment paper or spray with nonstick cooking spray. Sprinkle the oats, walnuts, and almonds on the baking pan. Place in the oven, and toast for about 5 to 7 minutes. Stir occasionally. Watch carefully, as it is easy to burn nuts.
3. Remove from the oven and carefully add the coconut to the oat mixture. Return to the oven to bake for about 4 to 5 minutes more or until the coconut turns golden but does not burn.



4. Remove from the oven and reduce heat to 300 degrees F.
5. In a small saucepan, over medium-high heat, combine the honey, brown sugar, butter, vanilla extract, and salt. Bring to a rapid boil, stirring constantly. Remove from heat and set aside to mix with other ingredients
6. In a large mixing bowl, combine the oat mixture, honey mixture, rice cereal, and dried fruit. Make sure it is mixed well.
7. Line a 9-inch-by-13-inch baking dish with heavy duty aluminum foil or parchment paper, overlapping on the sides. Evenly spread the granola mixture in the baking dish. Return it to the reduced-temperature oven and bake until lightly golden, about 20 minutes.
8. Remove the granola from the oven and cool completely, about 2 hours.
9. Remove the granola from the baking dish by grabbing the foil or parchment paper overhang. Turn out onto a cutting board and cut into rectangles.
10. In an airtight container, store the bars in a single layer or wrap individually for up to 1 week at room temperature. Freeze for up to 3 months.

Note: You can use any nuts or seeds and whole-wheat cereal, if you keep the proportions the same.



Quinoa is an ancient South American grain that is a small and round that is available in white, red, and black colors. Quinoa provides all essential amino acids, which is unusual in plant proteins. Quinoa is usually combined with fruits and vegetables to make delicious salads.

QUINOA SALAD

Yield: 6 servings

Serving size: ½ cup

Preparation time: 10 minutes

Cooking time: 10 minutes

Nutritional analysis per ½-cup serving: 140cal, 1.5g fat, 209mg sodium, 26g carbohydrates, 3g protein

Salad Ingredients

- 2 cups cooked quinoa
- ½ cup chopped carrots
- ½ cup chopped cucumber
- ½ cup chopped red onion
- ½ cup chopped yellow bell pepper
- ½ cup halved cherry tomatoes

Dressing Ingredients

- ¼ cup of lemon juice
- 1 tablespoon whole-grain mustard
- 1 teaspoon olive oil
- ½ teaspoon red pepper flakes
- Dash of salt
- Dash of black pepper

Instructions

1. Follow package instructions to prepare 2 cups of cooked quinoa.
2. In a medium bowl, combine quinoa with cut vegetables and toss with dressing.
3. Serve immediately. Refrigerate leftovers in an airtight container for 3 days.

Note: You can substitute Italian dressing for this dressing. Add any of your favorite vegetables to this salad, including zucchini squash, spinach, cooked pumpkin, avocado, etc.

Rye is used to make flour, rye bread, and rye beer. It has less gluten than wheat. Rye has a low glycemic index which can help with blood glucose control. It is high in carbohydrates, potassium, and soluble fiber. It can be eaten whole, either as rye berries or rolled, like rolled oats. Try substituting dark-rye bread when making your next sandwich.

Rice is a grain that has more than 120,000 different varieties. Carbohydrates are the main component of rice. Protein is the next abundant nutrient. It can be eaten by itself or consumed with other foods. Substitute brown, wild, black, or red rice for a higher fiber dish. Refined white rices include Jasmine, Basmati, or Arborio.



Sorghum grains have significant amounts of protein, niacin, riboflavin, thiamin, copper, iron, potassium, magnesium, fiber, and antioxidants. Choose whole-grain sorghum for the most nutrition, but pearly sorghum is more tender to eat. Like quinoa, it is usually combined with fruits and vegetables to make delicious salads.

WARM SORGHUM BERRY BOWL

Yield: 10 servings

Serving size: ½ cup

Preparation time: 10 minutes

Cooking time: 60 minutes

Nutritional analysis per serving: 310cal, 9g fat, 20mg sodium, 53g carbohydrates, 10g protein

Ingredients

- 3 cups of cooked whole-grain sorghum
- 1¼ cups of 2% milk (or any kind of milk)
- ½ teaspoon cinnamon
- ½ teaspoon cardamom
- 1 teaspoon vanilla extract
- 2 tablespoons maple syrup
- 2 cups raspberries
- ¼ pound chopped cashews
- 2 tablespoons chia seeds

Instructions

1. Follow package instructions to prepare 3 cups of cooked sorghum.
2. In a medium saucepan, over medium heat, combine cooked sorghum, milk, maple syrup, cinnamon, and cardamom. Bring mixture to a boil, then reduce heat and simmer for 10 minutes, stirring often to prevent sticking.
3. Serve sorghum grain immediately with raspberries, cashews, and chia seeds sprinkled on top.

Note: Serve as a warm cereal salad, a larger luncheon bowl, or as a cold snack. Refrigerate leftovers in an airtight container for 3 to 4 days.

Wheat grains range from almost spherical to long, narrow, and flattened shapes. Since there are many varieties, it is the most-used grain for both animals and humans. Recipes that use 100% whole wheat feature a delightfully nutty taste and a fine-grained, moist, faintly sweet loaf. You can substitute up to 50% of your favorite recipe's all-purpose flour with whole-wheat flour. Substituting just 25% whole-wheat flour for your white flour will probably make no difference in flavor, color, or texture. The best way is to weigh instead of measuring by cups, so substitute 113 grams of whole-wheat flour for every 1 cup of white flour called for in your recipe.

WHOLE-WHEAT MUFFINS

Yield: 12 muffins

Preparation time: 10 minutes

Cooking time: 30 minutes

Nutritional analysis per serving: 203 calories;
8g fat; 5g fat; 29g carbohydrates; 3g protein;
162mg sodium

Ingredients

- *2½ cups whole-wheat self-rising flour*
- *¾ cup sugar*
- *½ cup melted, unsalted butter*
- *1 beaten egg*
- *½ cup buttermilk*
- *1 cup mashed or puréed banana, sweet potato, apple, zucchini, cooked or canned pumpkin, or other fruits or vegetables*

Instructions

1. Preheat oven to 375 degrees F and grease 12-cup muffin tin or use liners.
2. In a large bowl, combine flour and sugar.
3. In small bowl, combine the melted butter, banana, egg, and buttermilk.
4. Fold wet mixture into dry mixture and stir until just combined.
5. Fill muffin tins or liners, and bake for about 25 to 30 minutes or until muffins turn a golden brown on top.
6. Serve warm. Or freeze for up to 1 month in an airtight container.

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It is important to know how to cook whole grains to make them taste good. There are many resources for recipes available at your local library or from websites. Not all will be delicious but exploring new ways to prepare whole grains will be a treat!

RESOURCES

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