**Whole-Grain Hacks**

**Time:** 70 Minutes

Whole grains are an important part of an overall healthy eating pattern that can help reduce your risk of developing some chronic diseases. They’re also a good source of fiber, B vitamins and minerals. Learn how to sneak whole grains into your diet as often as possible.

**OBJECTIVES:**
- Describe the recommended servings of whole grains.
- List two types of high fiber whole grains and their cooking preparation.
- Identify five ways to add whole grains to recipes.

**SETUP**

- Review the resource list and print it out.
- Purchase all necessary supplies after reviewing the HFL Cost Calculator.
- Set up the stations for participants with the necessary activity supplies.
- Provide computer, internet access, and projector, if available.

**INTRO (10 Minutes)**

- Welcome participants and introduce yourself.
- Take care of any housekeeping items (closest bathroom, water fountain, silence cell phones, etc.).
- Give a brief description of the educational experience.
- Engage in an icebreaker to gauge topic knowledge from the bank of options provided in the Welcome Toolkit.

**DEMO (20 Minutes)**

- Demonstrate content (see demo script).
  Play video as indicated.

**ACTIVITY (15 Minutes)**

- Divide the group into teams of four and have each team prepare the Southwestern Quinoa and Egg Breakfast Bowl recipe and then enjoy it.

**RECAP (10 Minutes)**

- Pass out the handout(s) and go through them together.

**GOAL SETTING/CLOSING (15 Minutes)**

- Engage in a goal setting activity from the bank of options provided in the Welcome Toolkit.
  Pass out the Setting SMART Goals handout to participants.
- Thank participants and encourage them to join the next activity. (Provide date/time/location if known.)
Whole-Grain Hacks Resource List

**HANDOUTS/VIDEOS**
Find these resources on AHA’s YouTube channel or heart.org/healthyforgood

- Video – Cooking Whole Grains
- Video – Southwestern Quinoa and Egg Breakfast Bowl

Find these resources in this lesson

- Handout – Whole Grains vs. Refined Grains
- Handout – Types of Whole Grains and How to Prepare Them
- Recipe – Southwestern Quinoa and Egg Breakfast Bowl
- Recipe – Mediterranean Toasted Quinoa and Spinach
- Handout – Setting SMART Goals

**SPACE SETUP**

- Chairs and tables for participants
- Pens for participants
- Folders
- Table for cooking demo
- Computer, internet access and projector, if available
- Easel
- Poster board, easel pad or large dry erase board.
  Write the following on it:

**Whole Grains:**
- Brown rice
- Buckwheat
- Bulgur
- Millet
- Oatmeal
- Quinoa
- Rolled oats
- Whole-grain barley
- Whole oats
- Whole rye
- Whole wheat
- Wild rice

**DEMO AND ACTIVITY INGREDIENTS AND SUPPLIES**

- Hot plate
- Skillet with lid
- Cooking pot with cover
- Cutting knives
- Cutting boards
- Spatulas
- Serving spoons
- Bowls
- Forks
- Quinoa
- ¼ cup uncooked quinoa, rinsed and drained
- 2 medium tomatoes, chopped (about 2 cups)
- 1 cup frozen whole-kernel corn, thawed and drained
- ½ medium avocado, pitted and diced
- ¼ cup chopped fresh cilantro
- ¼ cup chopped green onions
- Cooking spray
- 4 large eggs
- ¼ teaspoon salt
- ¼ teaspoon pepper (freshly ground preferred)
- Red hot-pepper sauce (optional)
Today we are going to explore the world of whole grains. Whole grains are rich in fiber and are linked to a lower risk of heart disease and other health problems. Whole grains help you feel full and satisfied, which also helps with weight control.

The American Heart Association recommends that at least half of the grains you eat in a day are whole grains.

What are whole grains?
Whole grains contain the entire grain — the bran, germ and endosperm. (See Whole Grains vs. Refined Grains Handout) Examples include rolled oats, rye, barley, corn, popcorn, brown rice, wild rice, buckwheat, bulgur (cracked wheat), millet and quinoa.

Whole grains are good sources of fiber and other important nutrients, such as B vitamins, iron, folate, selenium, potassium and magnesium. These nutrients are important for a variety of body functions like forming new cells, carrying oxygen in the blood, regulating the thyroid and maintaining a healthy immune system.

Don’t confuse whole grains with refined grains. Refined grains have been ground into a flour or a meal, which removes the bran and the germ. This process gives grains a finer texture and improves their shelf life. But it also removes some important nutrients. Some examples of refined grains are wheat flour, enriched bread and white rice.

Some examples of a serving of whole grains are:
- 1 slice whole-grain bread (such as 100% whole-wheat bread)
- 1 cup ready-to-eat, whole-grain cereal
- ½ cup cooked whole-grain cereal, brown rice, or whole-wheat pasta
- 5 whole-grain crackers
- 3 cups unsalted, air-popped popcorn
- 16-inch whole-wheat tortilla

Most people don’t eat enough whole grains so I’m going to offer some simple tips to make whole grains a part of your healthy diet.

First, read labels while grocery shopping. Choose whole-grain foods that contain one of the following ingredients first on the label’s ingredient list:

Point to the easel where you’ve written the following:
- Brown rice
- Buckwheat
- Bulgur
- Millet
- 100% whole-grain bread (such as 100% whole-wheat bread)
- Oatmeal
- Rolled oats
- Whole-grain barley
- Quinoa
- Whole oats
- Whole rye
- Whole wheat
- Wild rice

Even popcorn is a whole grain. But for a healthier snack, use butter and salt sparingly or try air-popping. 100% whole-wheat or rye crackers are another healthy snack.

Turn to the demo table and begin cooking the quinoa.

Before we go any further, I’m going to show you how to prepare quinoa (pronounced KEEN-wah) so you can use it to prepare a recipe. Let me heat up my hot plate and get the water boiling. I have already rinsed the quinoa to prevent it from tasting bitter.

I’m going to add one cup of quinoa to the boiling water. Now I’ll reduce the heat, cover and cook for about 20 minutes.

Adjust the amount of quinoa depending on how many people are in the audience. Figure a quarter-cup per person.

Quinoa is a South American grain that has a slightly crunchy texture and is growing in popularity in the U.S. You may have seen it used to make some brands of gluten-free pastas.
While the quinoa’s cooking, I’ll share more tips for increasing the whole grains in your diet.

At breakfast time, choose a whole-grain cereal, oatmeal or whole-grain toast. When selecting breads, buns, bagels, tortillas and pastas, choose the whole-grain versions.

Instead of using white rice, try brown rice, wild rice, barley or bulgur. You can save money by buying these ingredients from bulk bins in your grocery store. Consider making extra whole grains and freezing them for a convenient side dish later.

You can actually “sneak” whole grains into your meals.

For example, use wild rice or barley in soups, stews, casseroles and salads.

Or, add whole grains, such as cooked brown rice or whole-grain bread crumbs, to ground meat or poultry for extra bulk.

Instead of using dry bread crumbs in recipes, use rolled oats or crushed whole-wheat bran cereal.

You can change up your favorite recipes with whole grains. For example, try brown rice in your stuffed peppers or stuffed tomatoes. You can even whip up a lasagna using whole-wheat noodles.

Substitute millet, buckwheat or oat flour for up to half the flour in your favorite pancake or waffle recipe.

When baking, use whole-wheat or white whole-wheat flour in place of all-purpose flour. Whole-wheat flour gives a grainier, more rustic flavor to your baking. But if you’re looking for a fine, soft texture, use white, whole-wheat flour. It’s perfect for sandwich breads, cakes and cookies.

Wheat bran or wheat germ can be used in many recipes. Toss it in oatmeal or homemade granola. Add a few tablespoons to your flour breading for chicken nuggets or use it in streusel or crumb toppings.

Those tips can help you add more whole grains to your diet.
Turn to the demo table and remove the quinoa from the pot.

SAY:
Now I’m going to divide you up into teams and dish out the quinoa so you can prepare the Southwestern Quinoa and Egg Breakfast Bowl.

First, we’ll fluff the quinoa with a fork and divide it among the four bowls for each member of your team.

Cut up the tomatoes, avocado, cilantro and green onions.

Along with the corn, arrange all the ingredients on the quinoa.

Now lightly spray your skillet with cooking spray. Heat over medium-high heat. Crack each egg in the skillet with salt and pepper. Cook, covered for 3 to 4 minutes or until the egg whites are set but the yolks are still runny.

Now take your spatula and transfer a cooked egg to each bowl. Sprinkle with the hot-pepper sauce and enjoy.

What do you think? **Wait for a few replies**

After the group activity SAY:

Great job, everyone.

I have a few handouts for you including a fact sheet on how to prepare different whole grains. Don’t be afraid to experiment.
Whole Grain vs. Refined (White) Grain

Whole Grain

- Bran = Packed with fiber and B-vitamins
- Endosperm = Starchy carbohydrate with some protein and vitamins
- Germ = Nutrient packed core

Refined (White) Grain
### Types of Whole Grains and How to Prepare Them

**BARLEY**

Description: Barley is high in fiber. It has a chewy texture and nutty taste, like brown rice. Barley is also found in packaged granolas, hot cereals and soup mixes. Hulled barley has the most fiber because its bran layer is not removed, and it takes the longest to cook.

Common Sources: Hulled or hull-less barley or whole-grain barley

Cooking Tips: Bring 3 cups of water to a boil. Add 1 cup of hulled barley, cover and turn heat to medium low. Cook for 40 – 45 minutes. Cooked barley adds bulk and flavor to soups, casseroles and cooked vegetables. You can swap in barley in just about any recipe that calls for rice. Toss cooked barley with your favorite cooked beans, chopped onions and fresh herbs for a twist on plain rice and beans.

**BULGUR**

Description: Bulgur is made from wheat kernels that have been dried and boiled. It’s usually sold as fine or coarse. Sometimes bulgur is confused with cracked wheat. Cracked wheat isn’t previously boiled so it needs to be cooked longer than bulgur.

Common Sources: Bulgur wheat

Cooking Tips: Soak 1 cup bulgur in ½ cups very hot water and it’s ready in 15 minutes! You can add bulgur to soups, meatballs and meatloaf, or substitute it for rice in cold and hot dishes. To make tabbouleh, a popular Middle Eastern grain salad, mix cooked bulgur with chopped parsley, mint, tomatoes, lemon juice and a drizzle of olive oil.

**CORN**

Description: Surprise! Corn is a whole grain that’s available in many forms and is inexpensive, too. Plus, corn is gluten-free. When buying corn products (flour, meal, grits) other than kernels, look for the words “whole grain corn” in the ingredient list.

Common Sources: Whole kernels (fresh, frozen, canned), popcorn, whole cornmeal, whole grits, corn tortillas (made with whole-grain corn or whole cornmeal).

Cooking Tips: To cook cornmeal (polenta), mix 1 cup whole cornmeal with 1 cup cool water. Bring 3 cups water to a boil and slowly whisk in cornmeal mixture. Reduce heat and cook for 10 – 15 minutes, stirring often. Use whole cornmeal to make muffins, cornbread or pancakes. Add fresh or frozen kernels to salads, soups and casseroles. Serve grits with black pepper or a drizzle of honey.

**MILLET**

Description: Millet is more often found in birdseed than on our tables, but when cooked, the tasty tiny yellow balls fluff up like rice. Millet has a delicious, nutty flavor.

Common Sources: Hulled millet or whole millet

Cooking Tips: Bring 2½ cups of water to a boil; add 1 cup millet. Lower heat, cover and cook for 20 – 25 minutes. After cooking, whip millet just like you would to make mashed potatoes. For extra flavor, toast millet in a pan for 10 minutes before cooking. Add ½ a cup to batter for banana bread or corn muffins for an added crunch.

**OATS**

Description: Oats are one of the most popular, affordable whole grains in America and gluten-free. Choose plain steel-cut or old-fashioned oats instead of flavored oatmeal products which have added sodium, sugar and preservatives.

Common Sources: Steel-cut oats, old-fashioned/rolled oats, quick or instant oats, whole oat flour.

Cooking Tips: Bring 2 cups water and 1 cup old fashioned oats to a boil. Lower to medium heat and cook 8 – 10 minutes until creamy, stirring frequently. Cook your oatmeal in low-fat milk for a creamier taste and extra nutrients. Mix in dried fruit and nuts for a filling breakfast.

**QUINOA**

Description: Quinoa is a South American grain. It has a slightly crunchy texture and is rising in popularity in the U.S. Quinoa is also used to make some brands of gluten-free pastas.

Common Sources: Whole-grain quinoa, whole quinoa flakes, whole quinoa flour.

Cooking Tips: To prevent it from tasting bitter, always rinse quinoa before cooking. Bring 2 cups of water to a boil; add 1 cup quinoa. Reduce heat, cover and cook for about 20 minutes. Use in salads, casseroles, hot breakfast cereals and bean dishes for a boost of nutrition and a nutty crunch.
Southwestern Quinoa and Egg Breakfast Bowl

Makes 4 servings; 1 bowl per serving
Per serving: 244 Calories; 2.5 g Saturated Fat; 154 mg Sodium

Liven up your breakfast routine. Quinoa contains a hefty amount of protein, making this bowl a great morning option. Make it your own by adding cucumber, radishes, black beans and more. The eggs can be over-easy, poached or even scrambled.

**INGREDIENTS**
- ¼ cup uncooked quinoa, rinsed and drained
- 2 medium tomatoes, chopped (about 2 cups)
- 1 cup frozen whole-kernel corn, thawed and drained
- ½ medium avocado, pitted and diced
- ¼ cup chopped fresh cilantro
- ¼ cup chopped green onions
- Cooking spray
- 4 large eggs
- ⅛ teaspoon salt
- ¼ teaspoon pepper (freshly ground preferred)
- Red hot-pepper sauce (optional)

**DIRECTIONS**
1. Prepare the quinoa using the package directions. Remove from heat. Fluff with a fork. Divide the quinoa among 4 bowls. Arrange the tomatoes, corn, avocado, cilantro and green onions on the quinoa.
2. Lightly spray a large skillet with cooking spray. Heat over medium-high heat. Crack each egg into the skillet. Sprinkle with the salt and pepper. Cook, covered, for 3 to 4 minutes, or until the egg whites are set, but the yolks are still runny.
3. Using a spatula, carefully transfer a cooked egg to each bowl. Sprinkle with the hot-pepper sauce.

**Cook’s Tip:** For a quick weekday breakfast, substitute hard-boiled eggs that you’ve made in advance.
Mediterranean Toasted Quinoa and Spinach

Makes 4 servings; 1½ cups per serving
Per serving: 292 Calories; 1.5 g Saturated Fat; 129 mg Sodium

Feta cheese and lemon give a Mediterranean twist to this dish, made colorful with shreds of deep green spinach and slivers of red onion.

**INGREDIENTS**

- 1½ cups uncooked quinoa, rinsed and drained
- 3 cups fat-free, low-sodium vegetable broth
- 4 cups shredded spinach, stems discarded
- 1 ounce low-fat feta cheese, crumbled
- ½ teaspoon grated lemon zest
- 1 tablespoon fresh lemon juice
- 1 tablespoon olive oil
- ¼ teaspoon pepper
- ¼ cup slivered red onion

**DIRECTIONS**

1. In a large nonstick skillet, dry-roast the quinoa over medium-high heat for about 3 to 4 minutes, or until lightly toasted and any excess water has evaporated, stirring frequently (the quinoa won’t turn golden brown).

2. In a medium saucepan, bring the broth to a boil over high heat. Stir in the quinoa. Return to a boil. Reduce the heat and simmer for 15 to 20 minutes, or until the broth is absorbed and the quinoa is tender.

3. Stir in the remaining ingredients except the onion. Just before serving, sprinkle with the onion.

**Cook’s Tip on Quinoa:** Dry-roasting the quinoa really enhances its flavor. Although most packaged quinoa has already been rinsed, it is a good idea to rinse it yourself to be sure the bitter coating is removed. One way is to swirl it around in a bowl of water and drain it in a fine-mesh strainer. Replacing the water each time, repeat several times until the water runs clear.
Setting SMART Goals

**SPECIFIC**
- What exactly do you want to accomplish?

**MEASURABLE**
- How will you track your progress towards your goal?

**ACHIEVABLE**
- Is reaching your goal possible with your full effort?

**REALISTIC**
- Do you have the resources and ability to achieve your goal? If not, how can you get them?

**TIME-BOUND**
- When will your goal be achieved?

**EXAMPLE OF A SMART GOAL:**
I will increase the number of fruit servings I eat daily by 2 cups within the next 3 months.