



TO: Diabetes Care and Education Dietetic Practice Group (DCE DPG) members

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TOPIC: Reproduction of the education handout *Healthier Eating with Whole Grains*

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Can you identify whole grains? More importantly, are you eating enough of them? While research continues to point to the benefits of eating whole grains, the average American eats only one serving per day. Unfortunately, that's two servings short of what the Dietary Guidelines recommend.

What are whole grains?

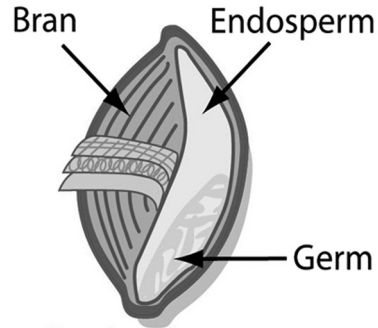
According to the Whole Grains Council, whole-grain foods contain all the essential parts and naturally occurring nutrients of the entire grain.

Whole grains consist of three distinct layers:

Bran — The fiber-rich outer shell contains important phytochemicals (disease-fighting plant substances), B vitamins and minerals.

Endosperm — The inner portion of the grain contains carbohydrates, protein and some B vitamins.

Germ — The nutrient-rich inner core, which is the seed of a new plant, contains B vitamins, vitamin E, unsaturated fat, phytochemicals and antioxidants.



How do you know if a food is whole grain?

- Look for the words “100% whole grain” on product labels.
- Check the ingredient list. The first ingredient should include the word “whole,” such as “whole wheat,” “whole oats” or “whole rye.”
- Look at the grams of Dietary Fiber listed under the “Total Carbohydrate” line of the Nutrition Facts label. Choose whole-grain products with 3 grams of fiber or more per serving.

Whole grains	Refined grains
<ul style="list-style-type: none"> • Amaranth • Barley • Brown rice (including instant) • Buckwheat • Bulgar (cracked wheat) • Whole cornmeal • Oatmeal and whole oats • Popcorn • Quinoa • Rye bread, crackers (whole) • 100% whole-wheat bread, pasta or crackers • Wild rice 	<ul style="list-style-type: none"> • Ingredient list names, such as stone ground, multigrain, honey wheat, unbleached wheat flour • “Enriched” pasta • Corn flakes • Grits • Pretzels • White rice • White bread • White flour

How to count whole grains for optimal glucose control:

Whole grains count as part of the total carbohydrate for each meal. Be sure to check the Nutrition Facts on food labels for the total carbohydrate amount per serving. The fiber portion of the whole grain does not cause your blood glucose to increase as much as refined carbohydrate foods. If a food contains 5 grams or more of dietary fiber per serving, subtract half the grams of fiber from the total grams of carbohydrate to determine the number of carbohydrate grams or choices you will “count” for that food.

Example:

A food contains 33 grams of total carbohydrate and 6 grams of dietary fiber:

$$\begin{array}{rclcl}
 \mathbf{33 \text{ grams}} & - & \mathbf{3 \text{ grams}} & = & \mathbf{30 \text{ grams of total carbohydrate}} \\
 \text{(total carbohydrate)} & & \text{(half the amount of dietary fiber)} & & \text{(2 carbohydrate choices)}
 \end{array}$$

Check your blood glucose to find out the effect whole grains have on you.

Benefits of whole grains

Whole grains are less processed or refined than other grain products (e.g., white rice, white bread or sugary breakfast cereals), so essential nutrients — including vitamins, minerals and fiber — are not removed during processing. In addition to providing important nutrients, whole grains:

- Add texture and flavor to foods
- Are slowly digested and may help you feel more full between meals, which helps with weight management
- May help normalize blood glucose levels and lower blood cholesterol

How much whole grain should you eat?

- The USDA 2005 Dietary Guidelines for Americans recommend eating 3 or more servings (or 3 ounces) of whole-grain products per day. Aim to have half of the grains you eat be whole grains.
- The USDA Food Guide Pyramid defines a serving of grains as a one-ounce serving. In general, the following equals a one-ounce serving of whole grains: 1 slice of whole-grain bread; 1/2 cup cooked brown rice or whole-grain pasta; 3/4 to 1 cup ready-to-eat cereal made from whole-grain sources; 1/2 whole-wheat hamburger bun; 1/2 whole-wheat English muffin.

Menu ideas for adding whole grains to meals

Breakfast	Lunch	Dinner	Snacks
<ul style="list-style-type: none"> • High-fiber, ready-to-eat cereal • Oatmeal • Whole-wheat toast • Whole-grain bagel • Frozen whole-grain waffles 	<ul style="list-style-type: none"> • Sandwich made with 100% whole-wheat bread • Frozen, prepared meals made with whole grains • Vegetable soup served with whole-grain crackers • Instant whole-grain brown rice with vegetable stir-fry • Pizza made with whole-grain crust 	<ul style="list-style-type: none"> • Whole-wheat spaghetti with marinara sauce and grilled skinless, boneless chicken breast • Whole-grain pasta with shrimp • Whole-wheat couscous with grilled meat and vegetable kabobs • Chicken, beef, vegetable fajitas made with whole-grain tortillas 	<ul style="list-style-type: none"> • Whole-grain and fruit snack bars • Popcorn • Whole-grain pretzels

For more information on healthy meal planning with whole grains and other foods, visit www.MyPyramid.gov



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