Health Benefit:
High cholesterol, high triglycerides, insulin resistance, type II diabetes, and weight gain are common side effects seen in PLWHA. Research has shown that consuming a diet high in whole grains may reduce the risk for:

- Coronary heart disease
- High blood cholesterol
- Type 2 diabetes
- Constipation
- Diverticulosis
- Obesity
- Stroke

Common Types of Whole Grains:
- Brown rice, Wild rice
- Oatmeal
- Popcorn
- Whole wheat pasta
- Whole wheat bread
- Whole wheat crackers

Less Common Types of Whole Grains:
- Amaranth
- Millet
- Quinoa
- Sorghum
- Triticale

What are Whole Grains?
Grains are the seeds of the plant. A whole grain contains the entire grain kernel: the bran, the endosperm and germ. If all three parts of the grain are present in a food, it is considered to be a whole grain. By comparison, refined grain foods usually contain only the endosperm. When the bran and the germ portions are removed during milling, it removes dietary fiber, iron and many B vitamins. Most refined grains are enriched with some of the nutrients lost in milling. However, fiber is not added back to the enriched grains. Check the ingredient list to make sure that the food is a whole grain product.

Nutrients in Whole Grains:
Whole grain foods provide energy, a wide variety of vitamins and minerals, antioxidants, phytochemicals and dietary fiber. All of these nutrients are vital for health and maintenance of our bodies.

- **Dietary fiber**: helps reduce cholesterol, may lower risk of heart disease, helps reduce constipation & diverticulosis, and helps provide a feeling of fullness with fewer calories.
- **B vitamins (Niacin, Thiamin, Riboflavin)**: helps produce energy from protein, fats and carbohydrates in all body cells.
- **Folate**: helps body form red blood cells.
- **Iron**: carry oxygen in the blood and reduces risk of iron-deficiency anemia.
- **Magnesium**: builds bones and releases energy from muscles.
- **Selenium**: protects cells from oxidation and helps build a healthy immune system.
- **Phytochemicals**: helps protects our cells against oxidative damage and reduces the risk of developing certain types of cancer.

Serving Sizes of Common Whole Grain Foods  
Each Serving is Equivalent to One Ounce

Whole grain cereal: 1/2 cup cooked or 1 cup ready-to-eat
Whole grain bread: 1 regular slice
Whole wheat bagel: 1 “mini”
Whole grain pancake/muffin/tortilla: 1 small
Brown rice, whole wheat pasta: 1/2 cup cooked
Popcorn (low fat): 3 cups popped

Dietary Recommendations

The 2005 Dietary Guidelines for Americans recommend that at least half of an individual’s daily grain serving should come from whole grains.

Identify Whole Grains When Shopping:

- Choose foods that list a whole grain first on the label’s ingredient list, such as “whole wheat,” “whole oats,” or “whole-grain corn”.
- Foods labeled with the words “multi-grain,” “stone-ground,” “100% wheat,” “cracked-wheat,” or “seven-grain” are usually not whole grain products.
- Color is not an indicator of a whole grain food. Bread can be dark or brown due to molasses or other added ingredients.
- Look for a whole grain health claim on the package. This ensures that the product has 51 percent or more whole grains by weight and contain specific amounts of total fat, saturated fat, trans fat and cholesterol meets.

Get Whole Grains into your Daily Diet!

⇒ Choose ready-to-eat whole grain cereal for breakfast.
⇒ Snack on ready-to-eat whole grain cereal or a whole grain cereal bar.
⇒ Choose brown rice or a whole wheat pasta
⇒ Try brown rice stuffing in baked green peppers or tomatoes
⇒ Try adding whole grains such as wild rice, brown rice or whole grain barley to your favorite soup, stew or casserole.
⇒ Pop low fat popcorn
⇒ Enjoy low fat whole grain crackers or baked tortilla chips as a snack.
⇒ Try muffins made with whole wheat flour or rolled oats.
⇒ Choose whole grain bread, tortilla, bagels, pita bread and rolls.
⇒ Add oats to cookies or other desserts.