

# The "Whole" Picture of Whole Grain Nutrition

# What is a whole grain?<sup>1</sup>

Whole grains are when the entire grain seed (kernel) is intact, including the bran, endosperm, and germ.

Whole grain foods can be processed, but must offer the same proportions of the bran, endosperm, and germ as the original grain.



## Whole Grain Components

#### BRAN

The grain kernel's protective outer layer. Contains Bvitamins, minerals, antioxidants, and fiber.

#### ENDOSPERM

The largest component of the grain kernel. Contains primarily carbohydrates (50-75%), some protein, and few vitamins and minerals.

#### GERM

The grain kernel's innermost component. Contains B-vitamins, minerals, some protein, and fats.

# Whole grains are an important source of essential nutrients<sup>2</sup>

#### **B-vitamins**

Thiamin, niacin, riboflavin, pantothenic acid, vitamin B6, folate

#### **Minerals**

Magnesium, phosphorus, manganese, zinc, selenium, copper, and iron

## **Dietary Fiber**

# Potential health benefits of whole grains



EMERGING SCIENCE

## **HEART HEALTH**

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A large amount of research has found a well-established association between eating whole grains and positive cardiovascular health.<sup>3,4</sup> The U.S. FDA uses this evidence to allow the approved health claim that "a diet rich in whole grain foods may help reduce the risk of heart disease." <sup>5</sup>

# **BODY WEIGHT**

While several studies may suggest a relationship between increased whole grain consumption and positive changes in body weight, more research is needed to better understand how whole grain intake truly influences body weight, body composition, energy intake, and hunger and satiety.<sup>6-8</sup>



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## CANCER

A moderate amount of research has suggested higher intakes of whole grains and dietary fiber may reduce risk of certain cancers, particularly colorectal and breast cancers.<sup>4</sup>

## TYPE 2 DIABETES

The 2020 Dietary Guidelines concluded there is moderate scientific evidence to support higher intakes of whole grains to reduce the risk of developing type 2 diabetes.<sup>8,10</sup>



# How much whole grains should we eat?

The Dietary Guidelines for Americans recommends adults consume at least 6 ounce equivalents of grains per day, with at least half being from whole grains.\*

\* Daily recommendations for total and whole grain intakes differ based on gender, age, and level of physical activity and can be found at MyPlate.gov





## What counts as an ounce equivalent of grains?<sup>2</sup>

- 1 medium slice of bread, tortilla, or flatbread
- 1 cup of ready-to-eat cereal
- 1/2 cup of cooked rice, pasta, or cereal •
- 5 whole wheat crackers
- 1/2 cup cooked oatmeal
- 3 cups popcorn (popped) •

# Most Americans consume enough grains overall. However, only 2%

consume the recommended 3 ounce equivalents of whole grains per day.<sup>1</sup>

# Identifying whole grain foods

Some examples of whole grains and whole grain foods include: oatmeal, rice (brown), corn, and whole wheat / grain flour, bread, pasta, cereal, & crackers.<sup>12</sup>

#### LOOK FOR THESE WORDS ON THE LABEL:

**INGREDIENTS: WHOLE CORN. SUNFLOWER AND/OR** CANOLA OIL, WHOLE WHEAT, BROWN RICE FLOUR, WHOLE OAT FLOUR, SUGAR, SALT, NATURAL FLAVOR, AND

- WHOLE GRAIN [name of grain], such as 'WHOLE GRAIN CORN'
- WHOLE [name of grain], such as WHOLE WHEAT'

MALTODEXTRIN (MADE FROM CORN). CONTAINS WHEAT INGREDIENTS.

- **BROWN RICE**
- OATS, OATMEAL
- WHEATBERRIES

Nutrition Colories

# **Certain PepsiCo products can** contribute to whole grain intake:



#### AMOUNT OF WHOLE GRAINS PER SERVING:

| Product                       | Serving Size | Ounce<br>Equivalents |
|-------------------------------|--------------|----------------------|
| Quaker Old-Fashioned Oats     | 1 cup cooked | 2                    |
| Quaker Instant Oatmeal        | 1packet      | 1                    |
| Quaker Oatmeal Squares Cereal | 1cup         | 1                    |
| SunChips - Original           | 15 chips     | 1                    |

\*Note: all products are 100% whole grain

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