

Name _____

Date _____

What About Wheat?

Ag in 10 Minutes a Day!

Did you eat a bowl of cereal this morning? Or maybe a sandwich for lunch? Chances are, unless you are **gluten free**, you have eaten at least one food containing wheat today.



[2019-01-18 | World Grain \(world-grain.com\)](http://world-grain.com)

What is Wheat?

Wheat is a plant, a type of grass. The seeds from the flowering part of the plant, called a **spike**, are the grain that is most often used to make flour for all types of breads, pastas, cakes, and other baked goods. Wheat is the most widely produced and consumed cereal grain in the world. There are more than 30,000 different varieties of wheat. Farmers use **crossbreeding** to bring out more desirable traits, such as size of kernel, height, or resistance to pests.

What is the History of Wheat?

Wheat can be traced back at least 12,000 years to an area known as the **Fertile Crescent**, along the Mediterranean Sea in what is now parts of Western Asia and North Africa. Wheat is grown on more land area than any other crop. The top producers of wheat are China, India, Russia, The United States, and France.

Is Wheat a Healthy Food?

Depending on how it is eaten, wheat can be a healthy choice. In today's busy world, many people don't take the time to read labels or do any research before eating. Wheat is often used in foods that are highly processed, or as an additive such as a thickener or filler for foods like hot dogs or ice cream, sauces, or gravies. Sometimes, processed foods have many different added ingredients, so if someone has an allergic reaction, they may not be able to determine whether it was due to the wheat or another ingredient. Only a small number of people are allergic to wheat itself.

Some people need to eat a gluten free diet. An **autoimmune** condition called **Celiac Disease** can cause people who eat foods containing gluten to become extremely sick. They can suffer serious damage to their intestines. **Gluten** is a protein contained in wheat and other grains that gives dough an elastic texture. Gluten can trigger **inflammation** in some people, particularly those who have Celiac Disease.



www.maefonline.com



For most people, wheat, when eaten as a **whole grain**, is an excellent choice. Whole grain means that the kernels of wheat have not been processed to remove the bran and the germ. The bran and the germ are the healthy parts of the wheat that contain the most nutrients. Look for the words “whole wheat” or “whole grain” when you eat a product made from wheat.

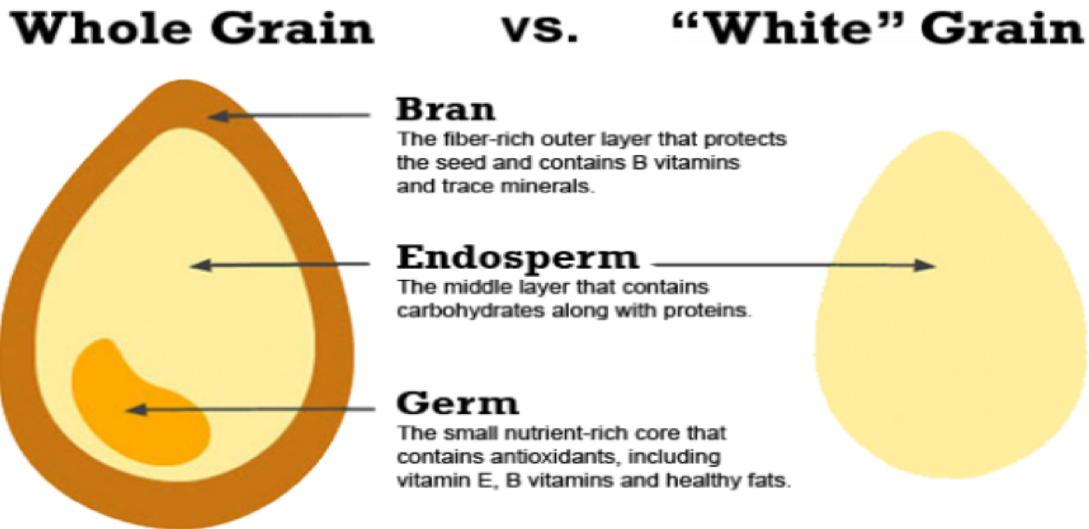


Image from [EAT YOUR WHOLE GRAINS \(ascendisdirect.com\)](http://EAT YOUR WHOLE GRAINS (ascendisdirect.com))

What Other Products are Made from Wheat?

Besides the obvious breads, cakes, and cereals, wheat can be used for a variety of other purposes. The hollow stalks are sometimes used as drinking straws. Wheat can also be compacted to make particle board and paper. It can be made into a plastic like substance for things like cups and tableware. The elasticity of gluten makes it a perfect additive to glues and chewing gums. Wheat is also found in things like cat litter, Play Doh, lotions, shampoos, and some cosmetics.

What is the Future of Wheat?

Currently, wheat accounts for about 20% of the total number of calories eaten by humans on the entire planet. In the U.S., wheat is the third most planted crop by acreage, after corn and soybeans. As the population continues to grow, the amount of land we have available for farming dwindles. Drought, disease, or pests can quickly destroy a crop for the season. Farmers are constantly looking at new technology to help them produce better, stronger, more productive crops. It is vital to the survival of future generations that we find the best options to grow the most food in the smallest amount of space.

What About Wheat? – Reading Passage

Directions: Read each question and fill in the best answer.

1. What part of wheat is made into flour?

- A. Stems
- B. Seeds
- C. Leaves
- D. Bread

2. Where is the area that was known as the **Fertile Crescent**?

- A. Along the Pacific Ocean
- B. Along the Mediterranean Sea
- C. Kansas
- D. China

3 a. How many different varieties of wheat are grown today?

- A. 30,000
- B. 12,000
- C. 10,000
- D. 300,000

3 b. What process do farmers use to develop improved varieties of wheat?

- A. Fertilizers
- B. Water
- C. Crossbreeding
- D. Pesticides

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4. Why is whole grain better for you than white grain?
Select **ALL** that apply.

- A. It has Bran/Fiber
- B. It has Vitamins/Healthy Fats
- C. It is processed
- D. It is softer

5. What does **gluten** do?
Select **ALL** that apply.

- A. Makes dough more elastic
- B. Causes wheat allergies
- C. Helps make chewing gum chewy
- D. Triggers inflammation in some people

Extended Response: Use details from your own experience and information from the article in your response.

If you could make any modification to the wheat plant, what would you modify, and why?

Wheat Facts

- Wheat is grown on every continent except Antarctica
- In the U.S., wheat grows in 42 states
- Kansas grows the most wheat: 20% of the total U.S. crop. Kansas grows enough wheat in one year that they could feed every single person on the entire planet for 2 weeks!
- One bushel of wheat weighs about 60 pounds, enough to make about 90 loaves of whole wheat bread.
- Americans eat close to 20 pounds of pasta per person, per year



A FUN RECIPE TO TRY AT HOME – WHOLE WHEAT PANCAKES

Ingredients:

- 1 cup milk
- 1 cup whole wheat flour
- 3 eggs
- ¼ teaspoon salt
- 1 tablespoon honey
- 2 teaspoons baking powder
- 1 teaspoon baking soda
- ¼ cup vegetable oil

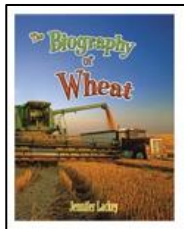


Directions:

1. Pour one cup milk and one cup whole wheat flour into a blender and blend for 3 minutes.
2. Add the eggs, salt, honey, baking powder, baking soda and vegetable oil.
3. Blend until smooth.
4. Pour pancakes onto a hot, greased griddle or skillet and cook for 1 – 2 minutes on each side until golden brown.
5. Top with your favorite pancake toppings and enjoy!



CHECK OUT THESE BOOKS



THE BIOGRAPHY OF WHEAT

BY JENNIFER LACKEY

Explains how wheat allowed settlers to develop land, and how wheat is grown and processed.



FROM WHEAT TO BREAD

BY STACY TAUS-BOLSTAD

How does a grain of wheat become a loaf of bread? This book explains the process of growing, harvesting, and baking.



SUPER SIMPLE BAKING

FOR KIDS

BY CHARITY MATHEWS

This book gives kids the basic techniques for becoming an expert. Recipes are leveled based on the difficulty of skill required