



Follow a corn kernel from field to Market



Production

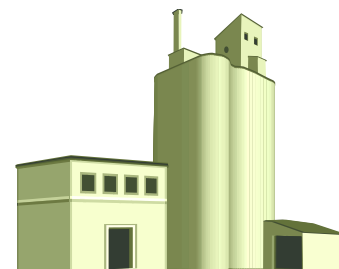
- Farmers plant kernels of corn in their fields in late April and May.
- A single kernel grows into one stalk of corn.
- The corn stalks grow all summer in fields.
- Farmers use fertilizer, weed control, and insect control for a larger crop.
- Each stalk of corn produces one or two ears of corn.
- In the fall corn is harvested by a grain combine or by hand.

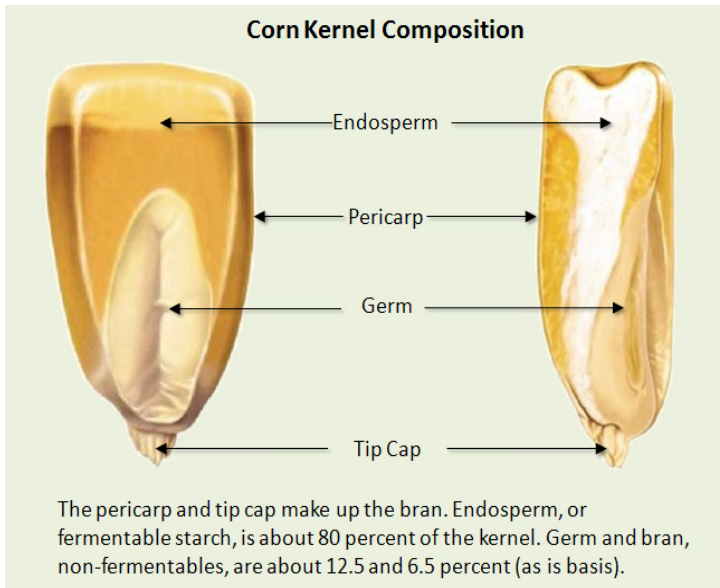


- Once the corn is harvested it is dried and stored on the farm or in a grain elevator.
- From the grain elevator the corn is shipped to mills and refineries.

Processing

- Mill means to grind. Mills grind corn kernels into corn meal and flour for baked goods.
- Some of the corn is fermented to create beverage alcohol.
- Mills separate the germ and the hull from the starch. The starch is called the “grit”.
- Corn mills sell the germs, gluten, and hulls to animal feed companies.
- The grits (starch) are sold to companies that make cereal, snack foods, and beer.
- A corn flake is a grit cooked with flavorings and vitamins, pressed flat, toasted, and sprayed with more vitamins.
- A refinery purifies a natural substance and converts it into other products.
- A corn refinery is a group of buildings connected by pipes through which the corn can be passed from building to building.





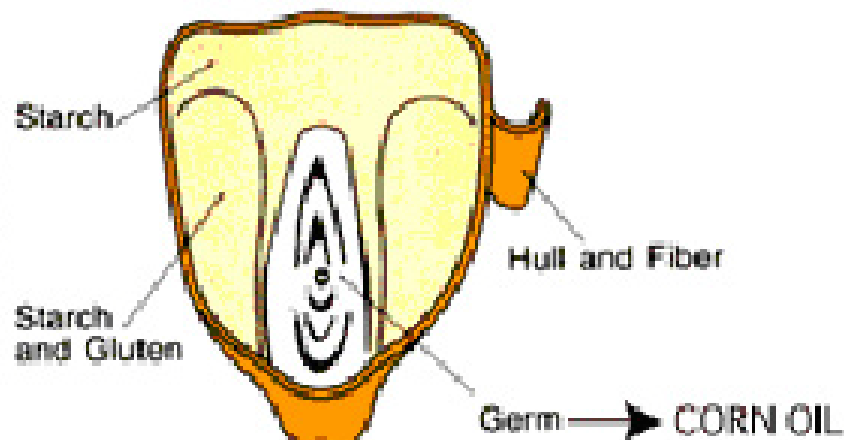
- The kernel is separated into its parts.
 - Germ: removed and processed into corn oil and corn germ meal.
 - Meal, Hull, Gluten, are sent to a plant that makes animal feed.
 - The starch is washed and dried to be used in food and industrial products.
 - It is also roasted to make dextrin, converted into corn syrup and into high fructose and dextrose (glucose) syrups.

- A bushel of corn weighs 56lbs. and can be processed many different ways. It can be soaked, pressed, ground, cooked, and flaked.

Packaging and Distribution

- After corn products have been processed, they are packaged.
- We consume corn in many different ways: from corn flakes to corn chips, margarine to corn oil, puddings to tofu, and much more.
- Of 10,000 items in a typical store, at least 2,500 items use corn in some form during production or processing.

A KERNEL OF CORN



Questions

Name: _____ Date: _____

1. When do farmers around here plant corn in their fields? _____

2. How is corn harvested? _____

3. Where is corn stored at? _____

4. Where is corn processed at? _____

5. What does it mean to mill something? _____

6. What part of the corn kernel is used to make cereal and snack food?

7. What part of the corn kernel is used to make animal feed?

8. List as many items as you can in the store that contain corn?

Answers:

1. Late April, May
2. Grain combine or by hand
3. Grain bins and grain elevators
4. Mills and Refineries
5. To grind
6. Starch
7. Germ, Gluten, and Hulls
8. Refer to the list of products that contain corn