



What's Inside That Seed?



Corn seeds are called kernels. One ear of corn averages 800 kernels in 16 rows.

Endosperm—Holds the energy and protein the new plant will use to begin to grow. This area is full of starch, which is used the most in corn processing.

Pericarp (seed coat)—Outside cover of the seed. It protects the inside of the seed from cold temperatures, moisture and insects until the seed is ready to germinate.

Germ—Only living part of the seed. It will become the new plant. It has all of the genetics, vitamins and minerals for a new plant to be created. There is also oil inside of the germ, which is the most valuable part of the corn kernel when it is processed.



Tip Cap—Where the kernel was attached to the cob. As the kernel grew on the cob, it took in water and nutrients from this area.

PLANTING: Farmers plant the corn seeds, or kernels, in the ground using a piece of machinery called a planter. A tractor pulls the planter through the field as it drops the kernels one by one into the ground. Corn is planted in the spring when the soil is warm enough to germinate the seeds, but not so early that the young plants are likely to be damaged by frost.



POLLINATING: Once the corn plant tassels, pollen from the tassel lands on the silk on the ear and travels down to make one kernel of corn. On average 800 grains of pollen land on 800 different silks which develop into the 800 kernels on an ear of corn.



MATURING: Most corn plants produce just one ear of corn. In the fall, after approximately 120 days of growth, the plant matures and is ready for harvest.



HARVESTING: Corn is harvested with a machine called a combine. The combine separates the kernels from the ear and the rest of the corn plant.



STORING: After the corn is harvested, it is taken to a storage facility called a grain elevator. There it is dried, stored, and prepared for sale.



TRANSPORTING: When the corn is sold, it is loaded into semi-trucks, and eventually freight trains or barges and shipped all over the United States and the world.



PROCESSING: The corn is used for animal feed, fuel, and many other products.



QUIZ!

Is corn a vegetable, fruit, or grain?

When you picture corn in your head, you likely imagine fresh, yellow, corn on the cob. This type of corn, also called sweet corn, belongs in the vegetable food group. Scientifically, because corn is a structure to bear seeds, corn is a fruit. However, in agriculture, corn is called a cereal grain. This is because corn is a grass harvested for its kernels. Most corn is field corn and, unlike sweet corn, is harvested after it is fully mature and had time to dry out. Field corn is soaked and milled so the germ, oil, starch, and hulls can be separated.

These items are then made into cornstarch, cooking oil, sweeteners, cereal, beverages, and over 4,000 other products we use every day. When we eat dried corn, like corn meal, cereal, corn flour, or popcorn, it falls in the grains part of our diet. So...corn is a vegetable, fruit and a grain!



Family Farms: A Tradition...

Did you know that 95% of all corn farms in America are family owned? In fact, those family farms produce 90% of all corn grown in the United States.

Family farmers throughout Illinois and around the United States are committed to raising crops that are nourishing and healthy for not only your family, but theirs, too. To do this, they are devoted to taking care of the land on which these crops are raised. This is important not only because of the responsibility farmers feel to take care of the environment, but also because they want to ensure the land on which they farm is there for future generations.



To keep family farms running and to guarantee they are around for years to come, every member of the family is involved. Whether it is driving the combine, picking sweet corn, running a roadside fruit and vegetable stand or delivering meals to the field, each family member has a job. Farm kids learn about hard work, dedication and family loyalty from an early age. This helps prepare them to come back to the farm to continue the legacy of their family. Therefore, so many farms have been around for several generations. Modern day family farms carry on the traditions of their ancestors, but continue to grow and learn about technology and practices that make their farm more efficient and sustainable while being good stewards of the land. This ensures their farm will continue to raise safe healthy food for our growing population.



Illinois
AGRICULTURE
in the Classroom™

From *Illinois Ag in the Classroom* [Corn Ag Mag](#)