

Dent

This corn is named for having a small indentation on the top of each of its kernels and has the scientific name of *Zea mays indentata*. It is a type of field corn that has a high, starch content that is soft enough to make into cornmeal flour for cornbread, corn chips, tortilla shells and taco shells. Though, it is mainly used for animal feed, cooking oil and the production of ethanol, a biofuel. Its starch can also be used to create plastics, such as water bottles and disposable kitchen utensils as well as high fructose corn syrup which is a sweetener for many foods. It can even be used to create paper and food-grade starch to thicken your gravy! It is grown more than any other crop on the planet and was developed by an Illinois farmer by the name of James Reid which won him the blue ribbon at the 1893 World's Fair.



Flint

This corn goes by the scientific name of *Zea mays indurata* but is also known as Indian or Calico corn due to its many different colors of kernels. Because of its coloration, it is used as decoration for the holidays which give it another name, ornamental corn. Though, its official name is flint corn because its kernels have a hard outer layer that protects its soft inner endosperm. Other than decorations, you may have come across it as hominy and perhaps eaten it as grits or popcorn which is a specific variety of flint corn. It is famous for being the only crop to survive New England's "Year without summer" in 1816. This was because it has very low water content in the kernel that makes it more resistant to freezing.



Pod

Zea mays tunicata is one crazy looking variety of corn! There are leaves growing around each kernel which is why it is also known as wild maize. This is a mutant variety of corn and not an ancestor of the maize family.



Popcorn

This is a special variety of flint corn with remnants being dated all the back to 3600 BC. *Zea mays everta* has the strongest hull and contains a hard, starchy endosperm with a moisture content between 13.5 and 14 percent. This moisture is what heats up and turns to steam creating an inside pressure of up to 135 psi! The steam gelatinizes the starch when it finally "pops" breaking through the hull and immediately expands into an airy foam. This creates two types of popcorn "flakes:" the butterflies or snowflakes that are irregularly shaped with a number of protruding wings, and the mushrooms which are ball-shaped. Those poor kernels that do not pop are called "old maids." During the Great Depression in the 1930s and World War II in the 1940s, popcorn became one the most popular snacks around. It wasn't until 1981, when General Mills patented the very first microwaveable bag for us to enjoy in a jiffy!



Flour

What can be said about *Zea mays amyloperla*? As its common name suggests; it is mainly used to make corn flour, which can be found as an ingredient in many food products. It is easy to ground into flour due to its soft, starchy endosperm within a thin pericarp.

Sweet

Now this is the one corn type that makes it to the dinner table, especially during the summer grilling season! *Zea mays rugosa* was first recorded by European settlers in 1779 when it was introduced by the Iroquois, which was not all that long ago.

It has a high sugar content due to a natural recessive mutation. It is harvested very quickly, when the kernels are in the immature milk stage. It is then cooled down by putting it on ice to stop the sugars converting into starch, keeping them from losing their sweetness. This lack of starch causes sweetcorn to not store very well which is why you find it many times in the refrigerated section in the produce aisle. In Latin America, it is eaten with beans in order to balance out the abundance and deficiency of essential amino acids contained in each.

Blue

What kind of tortilla chips do you think are made from this corn type? Yep, it's blue tortilla chips! It's the different kinds of anthocyanin pigments that give this corn its unique color. This is another variety of flint corn that has roots that go deeper into the soil, making it more drought tolerant, but has an overall shorter height at only 4-5 feet tall. That is short for corn! It packs a bit more protein, 7.8 percent, versus yellow corn's puny 5.7 percent. It was originally developed by the Pueblo Indians of the Rio Grande, known as the Hopi.

Amylomaize

This is a new kind of corn that was developed to have a very high amylose content. Amylose is a polysaccharide sugar and this type of corn contains 50 percent greater amylose than other corn types. Some have even reached 94 percent! This makes it great for industrial wet milling processes such as the production of ethanol and biodegradable plastics.