

Dear Aggie, what happens to the corn in the fields after the machinery chops it down?

Living in the North Country, we are all very used to seeing farm equipment out and about, especially during planting & harvest seasons. We are getting close to the time of year when our dairy farms will be harvesting their corn to make corn silage! But- what exactly is corn silage and how is it made?

When you are driving by fields in September & October, you may see big choppers with long spouts shooting chopped corn into trucks or wagons hauled behind tractors. However, there is a lot of strategic planning that goes into this process- even before the corn is chopped down. First, farmers try and plant their corn at the optimal time in the spring so that it will be ready to harvest in the fall. There are some types of corn that mature in a shorter amount of time than others and there are lots of factors that go into choosing what kind(s) of corn to plant that we are not going to get into in this article. When corn is nearing its time to be harvested, farmers keep track of the corn's moisture so that it is not getting chopped when it is too wet or too dry- both of which could cause problems in the ensiling process. Ensiling is the process of preserving this corn so that it can be fed out to cows later, thus making corn silage.

Once corn is at the right moisture levels to be chopped for silage, the farm chops the corn (the whole plant- ears, stalk, leaves and all!), transports it back to the farm in a truck or wagon, and then it is put where it will be stored. This may be an upright silo, a bunker silo, or in a silage bag. With an upright silo, the tall cylindrical structures you may see on a farm, the weight of the chopped corn helps to pack it down to remove oxygen. For a bunker silo, which are large open areas often edged with concrete barriers where feed can be stored, large tractors drive over the pile before it is covered to pack the feed down. In plastic silage bag storage systems, the special equipment associated with that storage method does the packing. It is very important that chopped corn is packed properly to remove oxygen to ensure the best possible fermentation & feed preservation possible for the feed being ensiled. Preventing oxygen exposure & creating that sealed, anaerobic environment where the feed can ferment properly helps to preserve the feed and prevent spoilage due to bacteria & molds. This fermentation process goes through multiple phases before it is complete. This fermentation helps to improve the digestibility of the corn.

On dairy farms, this corn silage is removed in small batches from its storage location with careful techniques used to minimize exposure of oxygen & spoilage of the remaining feed. The corn silage is then mixed with other feed ingredients such as hay, grain, minerals, etc., mixed in a feed mixer and then delivered to the cows. A well-balanced diet helps them to produce nutritious milk that we can enjoy!

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