

From the seed to the store

Have you ever wondered just how exactly the corn gets on the cob? Or for that matter, how it becomes a component of the 3,500 products it's a part of? Here's a quick look at the step-by-step process of how corn gets from the seed to the store...

Step 1: PLANT IT

Did you know that not all crops begin with a seed? Potatoes, for example, are grown from tubers and sugarcane begins with plant cuttings. Corn, however, begins with a simple seed and is planted in loose, moist soil.

Step 2: GIVE IT FOOD

Just like humans need food, water and shelter to grow up healthy and strong, so do plants. The following list of words demonstrates some of the items that plants need to grow properly. See how many of them you can find in the crossword puzzle.

- | | | |
|-----------------|----------------|----------------|
| fertilizer | moisture | carbon dioxide |
| macro-nutrients | organic matter | food |
| micro-nutrients | sand | rainfall |
| water | loam | seedbed |
| irrigation | clay | greenhouse |
| sun | soil | nitrogen |
| heat | air | phosphorus |
| light | oxygen | potassium |
| photosynthesis | tuber | seed |
| bulb | | plant cutting |

Step 3: FIGHT PESTS

Even plants encounter a few bullies from time to time. Some of the most common are weeds, insects, animals, and poor weather. To fight some of these problems, farmers spray with pesticides, cultivate the soil and cross their fingers that Mother Nature will be kind!

Step 4: HARVEST IT

Corn is harvested with a combine and measured in terms of bushels. It is one of our most valuable crops, so much that in 1997 the United States harvested 79 million acres of corn—enough that if you stacked each ear from end to end, they would reach from the Earth to Mars!

See if you can match the following crops with their type and world's leading producer.

Match the crop with type and leading world producer

CROP	TYPE	WORLD LEADING PRODUCER
Cotton	Oil Crop	United States
Cacao	Sugar Crop	U.S.S.R
Corn	Beverage Crop	Brazil
Sugar Beets	Fiber Crop	Indonesia
Dry Beans	Cereal Crop	India
Banana	Starch Crop	China
Coconut	Pulse Crop	Coted'Ivoire

O I K S G K E M Z J S T W F E K J S T J S T P J H
 R D C L A Y T D V N S E E D K G L D G U O H I I T
 G O T D K L E T D B G K E G X D Y M J I O J I U K
 A W I L F B I E X B J S T J W N F X I T K H B Y O
 N D L L D E X S Z X N B H I O Y Y V O W W E V D R
 I O O E H N Z U V Z T H G I L Z J S X Z R H I K S
 C A E Q W K V O D V T G T V D R Y A E M G S D D U
 M S E P G A D H S D T A F Y V N V N A A J U O T D
 A K Q H J J T N Z S G F E D T F E D D C I V W I L
 T U E O I Q U E F I Q G K H V D R Y S R F V D R K
 T E U S D D U E R E N K E J K Y J U Y O J Y S N E
 E S P P H N V R M I J S T N E I R T U N O R C I M
 R K P H J E I G T H I K S C X E E S P U S Q B T I
 R K X O G H S T F S D D U Z Z H O K P T E S P R V
 D U I R A S U D D U O T D I V D R K X R O K P O D
 K A E U A C E S P X W I L E D L M O E I R K X G G
 L M K S T F O K Y D Z I L A G U U I I E D D U E E
 E L J N H A R G X G T B M P I J D D U N J W T N H
 L Y A K L S E R Z R E T U S U M O I S T U R E V K
 X L H F A N S K E J E V S B J P V Z S S J L V S F
 P D F F N Q E F G E L A R D G M D D U U N B P U U
 K O I N I I J V O T T F I C C X G Y I M V U K R Q
 W T J R I M A S P O O K E K R O B X Z L R L H I Q
 N U S U L A O R P E D X E D I X O I D N O B R A C

Step 5: PROCESS IT

Have you ever stopped to wonder how many times a day corn touches your life? It is now found in everything from shoe polish to peanut butter and new uses continue to be discovered almost daily. Corn has three primary products, and three coproducts, that are used in more than 3,500 different ways. See if you can identify which of the following are the three primary products of corn.

- Germ
- Starches
- Syrups
- Glutens
- Dextrose
- Solubles

