

GMOs are prevalent in the U.S. food supply

Dr. Nancy Swanson

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Chances are that corn chip you are eating has been genetically engineered. Even more so if it has been fried in canola, corn, cottonseed, or soy oil. Most residents of the U.S. are consuming large quantities of Genetically Modified Organisms (GMOs) in their food. GMOs were first approved by the FDA for food crops in 1994. Since then the number of FDA approvals for GMO crops has steadily increased.

How are transgenic or genetically engineered (GE) crops approved?

The USDA/[Animal and Plant Health Inspection Service \(APHIS\)](#) issues permits for field trials, and later for general environmental release of GE crops. If the GE crop contains a pesticide, as is the case for [Bt crops](#), approval is also required by the Environmental Protection Agency. If the product from a transgenic crop is for food or feed use, the Food and Drug Administration (FDA) must give final approval before the crops can be grown commercially.

How many and what kind of GE crops have been approved?

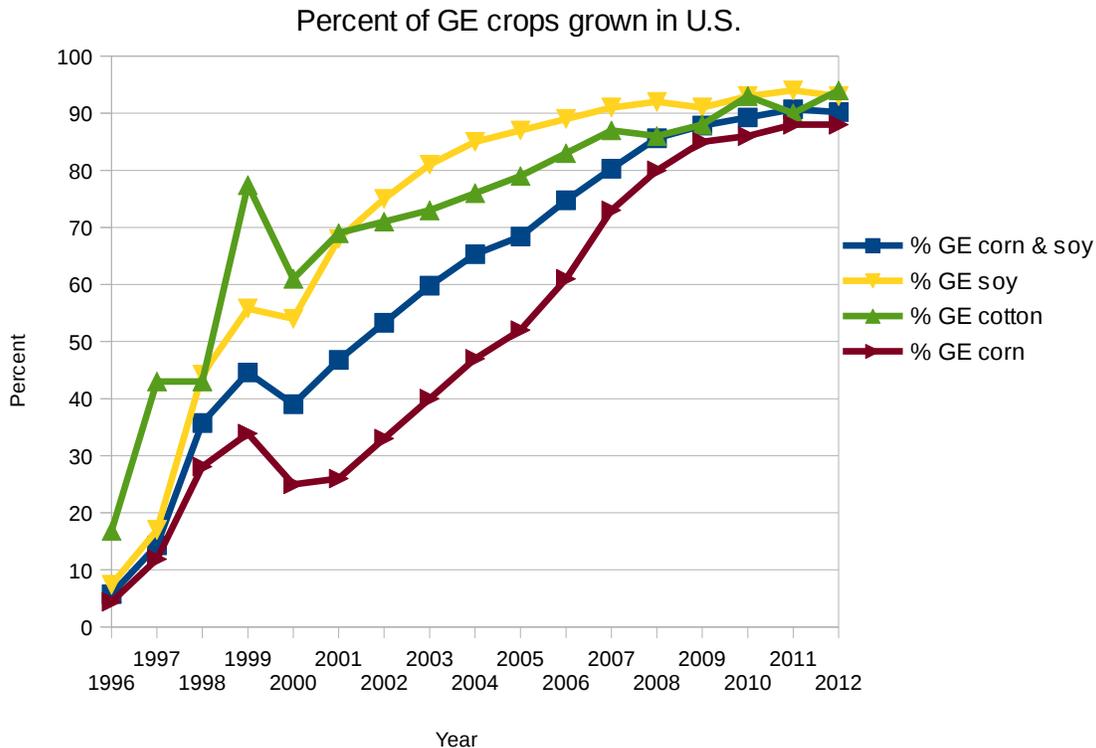
As of August, 2012, there have been a total of 144 crops approved by the FDA. The most widely and rapidly adopted transgenic crops in the United States are those with herbicide-tolerant traits. Of the 144 crops approved by the FDA, 75% have been genetically engineered to either withstand direct applications of herbicides or they contain an insecticide Bt toxin, or both. In the mid-'90s, scientists figured out how to combine more than one trait in the same plant. These were first released in 1997 and are called "stacked gene traits." The crops that have been approved are summarized in the table below, along with a partial list of food products and other uses for each type of crop. Any or all of these products can be found in packaged foods and drinks: cereals, energy bars, chips, juices etc.

GE Crop	# of FDA approvals	Food Product	Other Uses
Alfalfa	1	Seeds, sprouts, leaf meal used for fortifying baby food and other special diet foods	Animal feed
Canola (rapeseed)	17	Cooking oil, mayonnaise, salad dressing	Animal feed
Cantaloupe	1	Cantaloupe	
Cotton	22	Cottonseed oil for fried foods	Cloth, animal feed
Flax	1	Oil as a supplement, meal added to grain products	Animal feed, cloth
Corn (maize)	38	Cooking oil, corn products, corn, corn syrup	Animal feed
Papaya	2	Papaya, juice	
Plum	1	Plum, jelly, jam, canned plums	
Potato	28	Potato, potato chips, flour	Animal feed
Radicchio	1	radicchio	
Rice	2	Rice, crackers, cereal, flour	Animal feed
Soybean	17	Cooking oil, tofu, soy sauce, lecithin, soy nuts, soy milk, infant formula, cereal products, flour, soy protein, mayonnaise, salad dressing	Animal feed
Squash	2	squash	
Sugar beet	3	Anything that contains beet sugar	Animal feed

Tomato	7	Tomato, tomato sauce, paste, ketchup, canned tomato	
Wheat	1	Flour	
Source: FDA : Completed consultations on bioengineered foods			

How prevalent are these transgenic crops in the food supply?

The USDA estimates that in 2012, 93% of all soy, 88% of the corn and 94% of the cotton grown in the U.S. was genetically engineered. The USDA only collects GE data on these three crops. The figure below shows the percent change of GE crops planted since 1996



1996-1999 data: [USDA Agricultural Economic Report No. \(AER-810\) 67 pp. May 2002](#)

2000-2012 data: [USDA:NASS National Agricultural Statistics Service](#)

It could be argued that not all of these crops are grown for human consumption. Some are grown for animal feed. But the percentage of the crops grown for animal feed are still in the food supply in the form of meat, eggs, milk and milk products. Some of these crops are grown for bio-fuels and textiles. But as long as the amount used for non-food products are taken randomly from the supply, the percentage does not change. Only if most or all of the GE corn and soy are used for bio-fuels, for example, would the overall percentage change. The same is true for the cotton.

Are you eating GMOs?

You have been eating GMOs in steadily increasing amounts since 1996. If your diet consists of a lot of corn, soy, potato, sugar, or packaged foods, you are eating a great deal of GMOs.