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FOOD

# The Case for GMO Labeling

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**Genetically engineered (GMO) crops are created by transferring genetic material from one organism into another to create specific traits, such as resistance to treatment with herbicides or to make a plant produce its own pesticide to repel insects.[1] Unlike traditional plant and animal breeding, which tries to develop better varieties by selecting traits from the same species, genetic engineering techniques can insert specific genes from any plant, animal or microorganism into the DNA of a different species.**

The first GMO crops became commercially available in the United States in 1996, and now GMO varieties constitute the vast majority of corn, cotton and soybean crops grown in the country.[2] At this point, most GMO food crops are genetically engineered to produce a soil bacterium called *Bacillus thuringiensis* (Bt) that repels insects, or to allow the crop to withstand treatment with an herbicide, like glyphosate (often sold as Roundup).[3] More recently, biotechnology firms have developed genetically engineered animals, including food animals such as hogs and salmon.[4]

Proponents of the technology contend that these alterations are improvements because they add desirable traits. Yet companies submit their own safety-testing data, and independent research on GMO foods is limited because biotechnology companies prohibit cultivation for research purposes in the restrictive licensing agreements that control the use of these patented seeds.[5]

Some of the independent, peer-reviewed research that has been done on biotech crops has revealed troubling health implications including deterioration of liver and kidney function and impaired embryonic development.[7] However, the Food and Drug Administration (FDA) has no way to track adverse health effects in people consuming GMO foods, and because there is no requirement that foods containing GMO ingredients be labeled,[8] consumers do not know when they are eating them.

The FDA does not require the labeling of GMO food products as such because the agency views GMO foods as no different from conventional foods. The FDA does permit voluntary GMO labeling as long as the information is not false or misleading.[9] Food manufacturers are allowed to affirmatively label GMO food or indicate that the food item does not contain GMO ingredients (known as "absence labeling"). But virtually no companies disclose that they are using GMO ingredients under this voluntary scheme. This means that consumers in the United States regularly consume foods that contain GMO ingredients without knowing it.[10]

For consumers to have the opportunity to make informed choices about their food, all GMO foods should be labeled. A 2010 Consumers Union poll found that 95 percent of U.S. consumers favor mandatory labeling of meat and milk from GMO animals.[16] A 2013 New York Times poll found that 93 percent of respondents were in favor of a mandatory label for genetically engineered food.[17]

Labeling GMO foods is not a novel idea. The European Union specifically addresses the new properties and risks of biotech crops and evaluates the safety of every GMO crop.[18] Additionally, the EU requires all foods, animal feeds and processed products with biotech content to bear GMO labels.[19] Australia, Brazil, China, Japan, New Zealand, Russia, and Saudi Arabia are among at least 60 countries that require some labeling on GMO foods.[20]

## Major Commercially Available GE Crops[6]:

- alfalfa
- canola
- corn
- cotton
- papaya
- soy
- squash
- sugar beet
- sweet corn

## Hidden GMO Foods in Our Food Supply

Perhaps one of the reasons there is no requirement that GMO food be labeled is that food companies do not want consumers to know exactly how much GMO content there already is on supermarket shelves. Since most corn, cotton and soybeans are now genetically engineered, it can be assumed that ingredients made from these crops contain GMO content. For example, corn starch, corn meal, corn syrup, glucose, dextrose, canola oil, cottonseed oil, soy oil, soy flour, soy lecithin and "protein extracts" — present in many processed foods — are all likely derived from GMO crops.[11] Since the partial approval of Roundup Ready sugar beets, 95 percent of sugar beets grown in the United States are genetically engineered, so products containing sugar made from beets are most likely GMO foods.[12]

Other foods with "hidden" GMO content are dairy products like milk and cheese that came from cows treated with rBGH, a GMO growth hormone.[13] Most feed consumed by livestock consists of GMO grains and grasses[14] — like Roundup Ready soybeans, corn and alfalfa — so dairy products and meat from these animals are considered GMO foods as well.

Also, GMO potatoes, sweet corn, papayas and virus-resistant squash have been commercialized[15] and may be sold in supermarkets without a label.

Certified organic foods cannot be genetically engineered or contain GMO ingredients.

Without an affirmative label on foods containing GMO ingredients, the only way for consumers to avoid GMO foods is to buy organic. The USDA National Organic Program prohibits the use of GMO material in any product that carries the "certified organic" label.[21]

It took government regulation to make food processors put ingredient lists and nutrition facts on food packaging — labels that consumers are now accustomed to seeing and are using to make food choices. But the government has failed to require that consumers get to know other basic information about our food, like that it is genetically engineered.

Tell your state and federal lawmakers you want mandatory labeling of genetically engineered foods.

For more information: **http://www.foodandwaterwatch.org/food/genetically-engineered-foods/**

## Endnotes


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