

Agricultural Biotechnology: Get the Facts on Food Safety and Labeling

Since the first biotech crop was commercialized in 1996, questions have been raised about whether or not biotech crops are as safe as conventional crops, and why foods derived from biotech crops don't require special labels.

As the use of agricultural biotechnology increases globally, people need to be informed about food production, so they can form opinions based on facts, not fear.

Producing Safe Food for Nearly Two Decades

The safety of biotech-derived food products has been thoroughly addressed by the international scientific community.

The world's top scientific authorities – such as the United Nations Food and Agriculture Organization, the World Health Organization, the National Research Council of the National Academies of Sciences, the American Medical Association and the American Dietetic Association and the regulatory authorities for each of the products have concluded that foods with biotech-derived ingredients pose no more risk to people than any other food.

Biotech crops have been cultivated for more than 15 years, and foods derived from agricultural biotechnology have been eaten by billions of people without any significant health problems.

“Genetic engineering is one of the newer technologies available to produce desirable traits in plants and animals used for food, but it poses no unique health risks that cannot also arise from conventional breeding and other genetic alteration methods.”

Safety of Genetically Engineered Foods: Approaches to Assessing Unintended Health Effects,
Institute of Medicine and National Research Council of the National Academies (2004)

Government Regulation Under the Coordinated Framework

Biotechnology products in the United States are regulated more strictly than any other agricultural or food product in history.

Under the 1986 Coordinated Framework for the Regulation of Biotechnology, biotech products are not approved until they have been proven to be safe for human consumption and safe for the environment by:

- the U.S. Department of Agriculture (USDA),
- the Environmental Protection Agency (EPA), and
- the U.S. Food and Drug Administration (FDA).

Safe and Beneficial for the Environment

To ensure that a new plant is safe for the environment, extensive field-testing is conducted under USDA and EPA oversight.

In fact, the National Research Council has documented that, in addition to their safety, biotech crops contribute positively to farm sustainability in the United States, due to their environmental and economic benefits to farmers.

Current crops designed to resist pests and tolerate herbicides have already cut chemical usage on farms significantly. Herbicide-tolerance promotes practices like no-tillage farming that reduce soil erosion, prevent water loss, and even limit release of greenhouse gases.

Food Labeling Requirements

The FDA's evaluation of a biotech food focuses on its characteristics, not the method used to develop it. The U.S. Food and Drug Administration's regulations state that requiring the labeling of foods that are indistinguishable from foods produced through traditional methods would mislead consumers by falsely implying differences where none exist.

**A new biotech food that is “substantially equivalent”
(meaning it has the same chemical composition and nutritional value
to conventional varieties) does not require a special label.**

*Draft Guidance for Industry: Voluntary Labeling Indicating Whether Foods Have or Have Not Been Developed Using Bioengineering;
Docket No. 00D-1598. U.S. Food and Drug Administration (2001)*

While there is not a mandatory requirement to label food products containing these ingredients, food manufacturers can voluntarily label their products if they chose to do so.

According to the 2010 Consumer Survey by the International Food Information Council (IFIC), consumer satisfaction with current information on food labels remains high. Only 18 percent of consumers supported additional information on food labels, with only three percent supporting the labeling of biotech foods.

The Use of Biotechnology in Mainstream Agriculture

- In the United States, more than 165 million acres of biotech crops were planted in 2010.
- In the United States, the majority of all the corn (86 percent), soybeans (93 percent) and cotton (93 percent) are grown using biotechnology. Other biotech crops grown in the United States are canola, squash, papaya, alfalfa, and sugarbeets.
- A record 15.4 million farmers in 29 countries are using agricultural biotechnology for a total biotech crop acreage of 366 million acres. Ninety percent (14.4 million) of these are resource-poor farmers in developing countries.