

11. Biotechnology and Food Safety

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Introduction. Since the first biotech crop was commercialized in 1996, some food activists have raised uncertainty about whether or not biotech crops are as safe as conventional crops.

As the use of agricultural biotechnology increases globally (currently biotech crops are preferred by more than 15 million growers in 29 countries), people need to be better 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 other food. In fact, a National Academies of Science study concludes:

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.”

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.

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,

Future Challenges Why do we need biotechnology? Well, the United Nations is predicting that the global population will grow by one-third to 9.1 billion by 2050. This will require a 70 percent increase in agricultural production. Biotechnology has proven to be an essential tool in meeting this challenge of increasing our safe and affordable food supply. Biotechnology helps farmers to grow crops that resist diseases and pests and that requires less fertilizers. With biotech seeds, farmers can grow crops without tilling the soil, decreasing on-farm fuel use, reducing carbon dioxide emissions and conserving soil quality. Future technologies will enable farmers to grow crops that are drought-tolerant, or freeze-tolerant, and crops that have an increased nutritional value – this is especially important in developing countries where malnutrition and food poverty has reached tragic levels.

Supporting Policies that Encourage Innovation

The House Agriculture Subcommittee hosted a public hearing on June 23 to review and discuss the opportunities and benefits of agricultural biotechnology for farmers, the environment, food and energy security, and competition in the global marketplace.

Conclusion. In order to ensure that the development of modern biotechnology, and more specifically of GMOs, takes place in complete safety, the European Union has established a legal framework regulating genetically modified (GM) food and feed in the EU. This framework pursues the global objective of ensuring a high level of protection of human life and health and welfare, environment and consumer interests, whilst ensuring that the internal market works effectively.