

Are you eating genetically modified food?

There are some foods on the supermarket shelves now that are produced by a new food production, namely from a Genetically Modified Organism (GMO) or Genetically Engineered (GM). The GMO food products are basically altered from the natural form by changing the genetic (DNA) material in the cells of the crops. This method of food production is used to improve yield, make crops resistance to plant diseases or increase nutritional value. The most common GMO crops are corn and soybeans, which are ingredients in many food products. Whenever new novel concepts emerge in food production systems, consumers become more concerned and sometimes apprehensive about safety and health value of these newly developed foods. Their knowledge about these foods may not be very comprehensive and accurate and the available information is sometimes confusing and not precise and may come from unreliable sources.



There are several factors that influence consumers' food selection, among them are: wholesomeness and nutritional value, cost and most recently the production methods (organic, GMO) and possible environmental impact and ethical value.

Since 1994 when first GMO food (Flavr Savr tomatoes) appeared on supermarket shelves, consumers have been offered more foods that either contain GMO ingredients or are produced by this method.

Consumer Knowledge about GM foods and Sources of Information

Currently consumer knowledge about GMO food is insufficient according to several published studies. Therefore, consumers are very cautious when it comes to GMO food and in the US over 70% believe that GM-food production is unsafe for all living things and that it could be dangerous to consume GMOs, according to one study. A study conducted at the Rutgers University Food Policy Institute indicated that consumers as a whole were fairly uninformed about GMOs, with just 48% knowing that GMO products are available in supermarkets and only 31% believing that most likely they consumed food that contained GMO products.

One possible reason for consumers' confusions and hesitation is that they may obtain their knowledge from unreliable and nonscientific sources. Popular media such as television or radio (64-74%) or the Internet (77 %) seem to be the main sources of information for most consumers. About 13.6% used scientific papers to acquire information about the food products. Some analysis showed that higher levels of scientific knowledge were significantly associated with acceptance of the genetic modification technology for medical uses, GMO foods, and animal feed applications. Knowledge and understanding about GMO food and other bioengineered products may affect consumer attitude and consequently, food purchasing behavior. Therefore, providing the accurate, truthful information on food products is the most central medium for consumers to select their foods according to their health and ethical beliefs.

GMO Regulation and Labeling

The policies to improve consumer knowledge regarding the food they consume is essential. The regulation of genetically modified foods in the US is the responsibility of three federal agencies: the Food and Drug Administration (FDA) handles food destined for human or animal consumption, the Environmental Protection Agency (EPA) regulates the use of pesticides, and the United States Department of Agriculture (USDA) 's Animal and Plant Health Inspection Service (APHIS) deals with farm products. The USDA also evaluates and regulates GMOs through their Biotechnology Regulatory Services (BRS) Program.

Currently, GMO labeling is not mandatory in the United States despite recent campaigns for GMO product labeling. The Non-GMO Project, the third-party verification organization offers voluntary food testing and placing the "Non-GMO Project Verified" seal on foods. The demand for labeling is stronger in some European countries.

Conclusion

The GM products have been in the food system for decades and still a large number of consumers are unaware of GMOs and/or do not completely understand how these products are produced and what their safety, ethical and environmental issues are. Therefore, experts in the field should provide more effective methods of education for the public about GMO products so they will be able to make fully informed decision about their food choices.

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