

# Genetically modified foods what you need to know

[Food & Diet](#), [Genetically Modified Food](#)



Genetically modified foods (GM foods) have made for big talk in the public lately. Public interest groups have been actively protesting against GM foods for months. In response to the up swelling of public concern, the U. S. Food and Drug Administration (FDA) have held meetings to solicit public opinions and, begin the process of establishing a new regulatory procedure for government approval of GM foods. I would like to research and maybe, explain the reasons why I feel that GM foods are not humanity's solution to our food consumption problem. What are Genetically Modified Foods?

Genetically modified foods are foods produced from organisms that have had specific changes introduced into their DNA using the methods of genetic engineering. These techniques have allowed for the introduction of new crop traits as well as a far greater control over a food's genetic structure than previously afforded by methods such as selective breeding and mutation breeding (Wikipedia. com). To date most genetic modification of foods have primarily focused on cash crops in high demand by farmers such as soybean, corn, canola, and cotton seed oil.

These have been engineered for resistance to pathogens and herbicides and better nutrient profiles. GM livestock have also been experimentally developed, although as of November 2013 none are currently on the market. There are many reasons to not be a fan of GM foods but, before I explain the reasons not to consume GM foods, let me tell you some reasons why scientists and so-called, “ experts”, are pushing to have developers and, manufacturers of GM foods make sure, that they are various advantages of consuming these foods, as well as, persuade the public to purchase these products. Are there advantages to GM Foods?

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One advantage to GM foods is that they help to control certain diseases that can cause people to have an allergic reaction to certain foods. With GM foods the DNA system is modified to eliminate the properties causing these allergies (<http://www.buzzle.com/articles/genetically-modified-foods-pros-and-cons.html>).

Another advantage to GM foods is that they are said to be high in nutrients and contain more vitamins than traditionally grown food. They also claim to have a longer shelf life than traditionally grown food, which means less waste. Now that we have heard why developers, manufacturers, and scientists want GM foods massively produced, let's hear about some of the reasons why most of the population is not so accepting.

### Threats

The biggest threat caused by genetically modified foods is that they can have harmful effects on the body (<http://www.csa.com/discoveryguides/gmfood/overview.php>). It is believed that consumption of these foods can cause the development of diseases which are immune to antibiotics. According to experts, people who consume these foods have high chances of developing cancer (<http://www.csa.com/discoveryguides/gmfood/overview.php>).

Because these are new inventions on food, there's not much known about the long-term effects that genetically modified foods will have on humans. Foodstuffs made of genetically modified crops that are currently available (mainly maize, soybean, and oilseed rape) have been judged safe to eat, and the methods used to test them have been deemed appropriate. These

conclusions represent the consensus of the scientific evidence surveyed by the International Council for Science (ICSU) and are consistent with the views of the World Health Organization (WHO). However, the lack of evidence of negative effects does not mean that new genetically modified foods are without risk.

The possibility of long-term effects from genetically modified plants cannot be excluded and must be examined on a case-by-case basis. New techniques are being developed to address concerns, such as the possibility of the unintended transfer of antibiotic-resistance genes. Earlier, I mentioned an advantage to GM foods that allows them to be modified to eliminate properties within certain foods, so that people do not have an allergic reaction to them. My question is, “what in the world makes these developers think that we want to eat anything that has been modified”? Not to mention, knowing that the long-term effects are not certain if I consume one of these products. That's not comfortably sitting on my stomach! Response

These developers and, manufacturers claim that GM foods contain more vitamins and nutrients, along with a longer shelf life than traditional foods. The way the public sees it is the genetically modified anything, cannot be better for you than the real thing. Throughout my research, I have found that most of society's response to GM foods is, “why fix something that's not broken”? Most of society throws criticisms towards genetically modified foods, criticizing agribusinesses for pursuing profit without concern for potential hazards, and the government for failing to exercise adequate regulatory oversight

(<http://www.csa.com/discoveryguides/gmfood/overview.php>).

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## Concerns

The most concerns about genetically modified foods falls into three categories: environmental hazards, human health risks, and economic concern. Environmental hazards are causes of unintended harm to other organisms. For example; the pollen blown around by the wind off of a GM plant, stands a chance of becoming involved with the milkweed plants that often grow near these crop fields. The concern is for the monarch butterfly, monarch butterflies eat milkweed plants and, if the butterflies eat the milkweed plant with the pollen from the GM plant on it, the butterflies then stand a chance of dying if they come in contact with this pollen. This could create a huge problem for the monarch butterflies extinction rate.

Human health risks contain allergency, which are allergies to things like peanuts and other foods. The possibility still remains that introducing a gene into a plant may create a new allergen that will cause someone to have an allergic reaction and, they could possibly die from that. Economic concern is the most talked about category out of all three. Things like, putting farmers out of business and bringing this product to the market is a costly process, as well as the tech companies wishing to turn a profit on their investment. Consumer advocates are worried that patenting new plants will raise the price of seed. When the prices of seed goes up, the farmers in third world countries cannot afford to purchase the seeds each year. No seeds means no crops for the farmers, no crops means no money.

## Conclusion

Consumers may wish to select conventional foods on the basis of several criteria such as methods of production (e. g. organic or fair-trade food), religious principles (e. g. kosher food), or the presence of known allergens (e. g. groundnuts). Labeling of foods as genetically modified or non-genetically modified may enable consumer choice as to the process by which the food is produced. However, it conveys no information as to the content of the foods, and what risks or benefits may be associated with particular foods. More informative food labeling, explaining how food has been transformed and what the resulting changes in food composition are, could enable consumers to assess these risks and benefits ([http://www. greenfacts. org](http://www.greenfacts.org)).

Genetically modified foods is a big deal in today's society, many people have a very strong opinion about GM foods. Many people are also unaware of what a genetically modified food is. Most people consume genetically modified foods on a daily bases and do not even realize it. Nor is the government obligated to inform you that you are consuming genetically modified foods. Throughout my research, I have found out why I feel that GM foods are not humanity's solution to our food consumption problem. Throughout my argument, I have tried to explain the good and, the bad things associated with genetically modified foods. I have come to the conclusion that genetically modified foods are not for me or myfamily. There are too many health issues and, risks that I am not willing to take because my family's health may lay in the balance.