

# [Gm foods](https://assignbuster.com/gm-foods/)

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The issues of Genetically Engineered of food have entered media in many countries.

A lot of food that individuals are eating during these times that has been characterized with global warming, economic turmoil, rising food prices and wide spread famine. Genetic modification has been defined as the alteration of genetic make up of organisms either through addition or even deletion of gene(s), in a manner that such changes will be will be inherited in a fashion that has been defined as being Mendilian. As an effect, genetically modified (GM) foods originate from genetically modified organisms. Such changes that lead to modification are much more precise as compared to mutation breeding. GM foods were introduced in that market in early 1990s, where such foods were typically plants, however, in 2010, animal products were also modified.

On several grounds, critics have ended up objecting GM foods. Due to this reason, this research paper critically discusses whether Genetically Modified Foods: Global Savior or Anti-agriculture biological terrorists, (Shah, par 5). Advantages of GM foodIn times of global warming, economic turmoil, rising food prices and wide spread famine, the topic of genetically modified food is vital and relevant. As a mater of fact, in such times, genetically modified food has lots of economic and social benefits. It has been proved that, GM food saves farmers a lot; for instance, farmers will no longer spray their plants with the use of pesticides.

This is based on the fact that, such plants have in-built protection. In addition, farmers have the capability of producing with less seeds within a shortest period of time, as an effect, they ends up saving much as they have immensely cut down the costs. Another cost saving parameter arises from the savings from pesticides, herbicides and even fertilizers, which are not needed when dealing with Gm food crops (Deborah, par 12). With the help of technology, genetically modified foods have been tilted in a manner that they have the ability to resist diseases, which can attack the plant when not expected; hence laying them a waste because they will just be destroyed or their growth interfered with. With this point in mind, such a capability will assist in reducing plant wastes, hence optimal production. Concerning the same factor of plants being tilted, different crops have been tilted to ensure that they have the capability of growing in different environmental conditions.

For instance, plants like strawberries can be genetically modified with the aim of making them grow in frosts regions. On the other hand, there are other foods that grow in cold climates only, hence making them grow in hot climates, genetic engineering is far much important. To elaborate on this point, with such technology, such foods can grow in different continents like Africa where much of the continent does not have enough food as better part of it is just a desert. In general, modification has made food to grow in places that other plants could not grow. Furthermore, genetically engineered foods can also be manipulated in a manner that, such foods might contain nutrients that it never had.

For instance, there are foods that have been altered in a manner that now they contain vitamins, since it is universally known that lack of vitamins causes’ blindness, in Africa only for instance 500, 000 people go blind each year. As a result, such foods like rice can be engineered with the target of increasing vitamins and minerals, to reduce the number of individuals going blind each year. Having all these advantages of GM foods, scientists are in laboratories expanding this technology. For instance, they are looking atthe possibilities of modifying fish nuts, and plants genetically to ensure that they grow faster. This technology will not only increase food production, but also reduce food production costs. Is GM foods Bio-Terrorism? Other than all these advantages of GM food, it has been shown that, such foods have a lot of implications on morals, health, economics as well as social life of individuals.

If the trend is not going to be controlled, then there are signs indicating that genetically modified foods present an extremely serious threat to individual’s future. There are various psychological as well as physical impacts that are brought about by the process of tempering with natural processes of plants and animal development and growth. For instance, it might cause unintended harm to other organisms in the region. To elaborate on this point, it has been shown that pollen grains that originated from a GM corn resulted to a high rate of mortality in Monarch butterfly Caterpillars. This happened after pollen grain from B. t, which ids a corn with insect resistant chemicals got dusted to milkweed plants.

As an effect, these caterpillars that ended up feeding on such plants ended either dyeing or become stunted. As an effect, long term consumption of GM foods might also lead to unknown suffering. As an effect, over long time, GM foods might lead to ecological damages, (Shah, par 15). In addition, though scientists have involved themselves in a serous research concerning GM foods, but it should be known that, as humans, they have limits on how they can manipulate the earth. They have the capability of selecting the gene to manipulate; however, they lack the capability of knowing where in the DNA the gene can be precisely inserted.

In addition, they lack the knowledge of how gene expression can be controlled. It should be noted that, genes never work in an isolated state, hence altering just a few of them, ends dup changing the entire DNA structure. These alterations might result to different pictures, having unpredictable and far much different impacts at different conditions. This might in one way or the other lead to allergies (Rissler, 56). Research has indicated that, most of the GM foods companies do not indicate on the GM food products that such foods are genetically modified materials. This is due to the fact that, their businesses will be affected b due to GM food bias in most countries and communities.

However, their point of not labeling is very immoral and unethical, and even unfair to the consumers as a whole. This is based on the fact that, every consumer needs to know, or even has a right of being acquainted on what they are buying. After which, they have a right of buying it or not. Even if health factor has never been an issue with GM foods, there are those individuals who hold either religious or moral values that making them object GM foods. As a matter of fact, they should not be forced to eat GM foods by not telling them the content (Parker & Kareiva, 200).

The point of claiming that the growth and consumption of GM foods will food shortages has no foundation. This is based on the fact that, food shortages are not in any way caused by shortages in food production, other than poor planning and management, as well as lack of access to other food types produced by other communities, as well as financial and political problems. Another danger of GM foods is that, food diversity will disappear if in any case everyone engages in the production of Gm foods. Those foods that are herbicide and pesticide resistance resistant crops could result to hybrid herbs and pests that that will be much resistant to the current chemicals. This is due to the fact that, such insects will mutate and adapt to former drugs, which might be weaker and ineffective. Such like insects might need stronger chemicals.

This means that, though those proposing it claim that it leads o cost reduction, have no roots. This is based on the fact that, such stronger chemicals needed to deal the mutated pest and, will require more research, which is very expensive act that many individuals have to bear with. In addition, more destructions brought about by mutated pests, might be even 100 times the former pests, as an effect, more foods will be destroyed (Deborah, par 16). The other objection is that, companies which have embraced GM technology have ended up patenting their crops. In addition, such organizations have gone a head engineering their crops to an extent that it might not be of any use to the small scale farmer, other the enjoying such benefits by themselves. For instance, the crops have been engineered in a manner that, dthe harvested grain germs can not in any way develops.

This is neither helping nor empowering impoverished third world countries, growers who are not able save seeds for replanting (Nield, par 8). As an effect, they year after year buy very expensive seeds from established companies every time. As an argument, those proposing the idea, claim that, the technology was going to help the poor produce more at a cheaper costs, yet the technology can serve those much in need as they cant afford their seeds year after year, then the big question is whom then is the technology serving? In addition, it has been observed that, the new technology interferes with the traditional way of currying out agriculture. This acts as a disturbance in one way or the other. This is rooted on the fact that, the technology needs a shift from traditional way of doing things to modern ways.

The problem occurs when the current technologies are not favored by the prevailing conditions. A global shift in Agro-thinking: From Farmlands to the City. After having a very close look at pros of GM foods on one hand and the threats posed by the technology, it is though evident that, GM food production will tent to increase food production in the world, but it will not solve the problem of food shortages. This is based on the fact that, food production level has never been and will never be a source of food shortage. In is place, it will just pose ecological, and human disaster.

However, in stead of going for GM foods, governments and individuals should start concentrating on organic subsistence farming and Urban Agriculture. Organic subsistence farming system should be encouraged to both families and communities as a whole to engage in activities that will provide them with organic foods of their own. Such systems produce healthful and nutritious foods as compared to GM foods. On top of this method, people should be encouraged to participate in Urban Agriculture, which can be termed as being a forward thinking system. This system involves cultivation, processing, and the distribution of food in villages and towns. The goodness with Urban Agriculture unlike GM system is that, it will enhance food security as well as food safety in two major roles at the local level.

To start with, the system will increase the amount of food available to those living in cities and towns. Secondly, it allows perishable foods like vegetables to be available for city customers. One of the most efficient Urban Agriculture systems is bio-intensive system (Michaela par 3). In addition, urban agriculture will tent to promote energy saving local food production. As a matter of fact, both Urban and peri-urban agriculture are considered as being sustainable practices.