

The fight between genetically modified foods in today's diet essay sample

[Food & Diet](#)



**ASSIGN
BUSTER**

Genetically Modified Organisms (GMO's), also called GEO (Genetically Engineered Organism), have become a trend for important food manufacturing companies, as well as a threat for health organizations and other leading groups. GM is a technology that alters the genetic makeup of living organisms like animals, plants, or bacteria; biotechnology uses living organisms or their components, such as enzymes to make “ man-made” products such as wine, cheese, beer and yogurt. Food manufacturing companies have been able to bring certain food processing products to the next level for human kind, which allows them to sell cheaper (manufacturer's profit), and alter these foods for the “ convenience” of its consumers. Such improvements provided to daily meals may include the addition of extra nutrients, by genetically inserting other genes to fruit and/or vegetables, and by complimenting it with other man-made chemicals also known as nutrients for the best of human kind. Other reasons for the utilizations of GMO's are for the convenience of entrepreneurs: better packaging and making things more practical or suitable for shipping and selling.

The benefits and disadvantages over the past few decades have created an intense debate on the topic of the production of organic foods. Both sides in this argument are adamant and present strong facts. The pro-organic food side argues that they use little to no chemicals in any of their products, that they use traditional methods like crop rotation to keep the earth fresh and avoid overuse, that the foods are free of genetically modified ingredients, that their produce is healthier, and that organic livestock are treated more humanely and without the use of any chemicals. The “ genetic modification” campaign says that organic companies indeed use chemicals that are

harmful, that there are unique problems with organic animals that bring out certain problems for humans, and that organic food production is not adequate to meet the world's food needs.

According to Bettina Metzler from the " Campaign to Ban Genetically Engineered Foods," since 1996, the sale of organic foods in America has increased twenty percent every year, from \$78 million in 1980 to about \$6 billion presently. Almost 50% of the American population buys at least one organic product at least once a month (ScienceDaily LLC).

Health organizations and other leading organic groups that are against genetic modification and the rest of its biotechnology support the idea that a particular gene or genes being modified or added to any food that will be digested, fruits or vegetables, would be considered as unnatural. Even though these foods are based on natural fruit and vegetables, biochemists can manipulate the flavor, shape or its nutrients that makes it a totally different thing to consume. The edible products from today's diet exist because early ancestors ate certain foods that were present in nature thousands of years ago. For example, the reason why we cannot eat plastic is that it did not exist when the first humans began to populate the earth; we don't have the enzymes to be able to digest it. Taking a look at today's modified foods, the seedless squared watermelons sold in Asia as well as the colorless cauliflower are not some things that our stomach can digest without a risk of developing side effects that may be life-threatening (Cherie Berkley, MS).

People who are afraid of genetically modified foods also argue that plantations and modified crops can spread their seed, or that these seeds can reach the “ natural” crops and make hybrids of these. In a worst case scenario, this event could possibly eliminate the natural crops because of their cross pollination with the modified ones, thus, having only “ man-molded” crops and no pure natural agricultural food. Cross pollination would be destroying the “ varied” gene pool we had or still have into a smaller gene pool or having none at all.

The major benefit that food manufacturers believe is realized through genetic engineering is that they can erase the food supply problem around the world. Cultivating crops will be easier if resistant D. N. A. strands are added to these foods to fight plagues and pests, making crops cheaper to cultivate. Modified goods will increase and as a result they will no longer be vulnerable to pests; therefore, there will be enough fruits and vegetables to feed the “ whole world.” In certain cases, having these “ man-made” products can benefit human kind. Refined rice, as an example, has no nutrients at all for humans to use for their cellular metabolic processes, but, if rice is genetically modified to have certain nutrients that are hard to obtain through a diet based on rice, having these nutrients would eliminate illnesses such as the one that caused BSE (Bovine Spongiform Encephalopathy) also Known as *Mad Cow Disease* , and maybe reduce the same symptoms in humans (Cherie Berkley, MS). Rice with increased iron and vitamins may alleviate chronic malnutrition in Asian countries, and the modified variety of plants will be able to survive weather extremes.

The people who are against GMO's have no choice and no way to fight back since prepared foods that are naturally derived come from genetically modified fruits and/or vegetables converting them into altered products too. The majority of these manufacturing companies argue that the people who are against GMO's foods are not obligated to eat them, but they should let these companies "solve" one of the world's worst problems, such as starvation.

Experts agree that GMO's have the potential to affect allergies and asthma. GMO's involve in the making of new proteins, and, at the same time, it could create new allergies and food intolerances (Bettina Metzler, Mathias Schmidt, & Eckart Stein). Environmentalists postulate that if creating new proteins or allergens through GMO's, it will be more difficult to diagnose new allergies that may arrive from such manipulation, and fatal consequences may arrive when trying to find a cure for them. For example, genetically modified cows can produce milk that contains higher levels of milk proteins or human blood clotting components or a human breast milk component.

It is an ongoing fight for scientists and their supporters to reach a conclusion. Fruits and vegetables are still being manipulated. In Japan, watermelons are being manipulated to grow in almost perfect square shapes instead of the traditional round ovals because this makes it easier to pack them in boxes and ship them to other continents. The seedless watermelon is also another kind of the GMO's victims; it is for the convenience of the consumer and to obtain more profits for the seller. In 2003, about 167 million acres grown by 7 million farmers in 18 countries were planted with

transgenic crops (combined with other genes), the most important ones being herbicide and insecticide resistant genes for soybeans, corn, wheat, cotton, and canola (ScienceDaily LLC).

The genes of fruits and vegetables are being combined to create other new processed foods that might be attractive to the consumer. These foods are more resistant to weather and maturation periods; this explains why tomatoes are easier to cut because of their almost perfect peel, and that is why they last longer in the consumers' fridges. Some people see biotechnology as something beneficial and, for others, genetic modified foods may be life-threatening. The people who are against GMO's have a stronger campaign now ever since organic products started showing in the markets, but there is now a choice, is still being argued that it is unfair to pay more for foods they consider healthier since the government should only be allowing " natural and safer" foods to be sold to the public. Although, non-organic products is one of the biggest markets in greater nations, the safety of allergy reactions with others, comes in second place and the profits in first place. A potential human health impact may include allergens, unknown effects on other organisms and loss of flora and fauna biodiversity. The genetic modification of agricultural products may lead to a historical extinction of all the natural organisms.

Genetic engineering is a new technology that makes genetic information to trespass the species barriers in an unnatural way, for example, medicines for illnesses today are produced chemically, unnatural, with no plants or herbs as ingredients. Why be concerned? One of many good reasons is that these

laboratory-created mutations are unlabeled and untested, and placed on grocery shelves everywhere. It would be better to see labels advising the contents of modified ingredients on the products, having a long-term safety testing for own good of the consumer, and a full liability for damages resulting from the irresponsible introduction of GMO's to the environment and food supply around the world.

With all the burning issues at hand, there is bound to be controversy and disagreement. Scientists and biotechnologically based companies claim that genetically modified foods (GMO's) can hold the key to the solution of many problems facing our world today. These have led to the development and production of new drugs and potentially supply the answer of how to feed a growing population on limited space, to cure world hunger. The developers of Genetically Modified Foods, Monsanto, DuPont and others, report that the foods sold by these companies are completely safe and offer to show a list of their scientific advancements in the field of biotechnology in an effort to gain public confidence. Farmers, retailers, and consumers seem separated on the subject however.

Genetically Modified Organisms (GMO's) have become a trend for important food manufacturing companies as well as a health-threat to its consumers. Food manufacturing companies have been able to bring certain food processing products to the next level for human kind, *killing Mother Nature*, and presenting biotechnology as its substitute. It's an injustice to let these chemicals kill the natural flavor of an orange or substituting the nutrients of a carrot. It is unfair for our children to not be able to taste a 100% natural

grape juice without passing through pesticides and gene mutations. The beauty of natural fruits, vegetables and fauna is walking to a point of extinction where there is no way back, and all the food to be eaten has been passed through chemicals and man-made substances.

Works Cited Page

“ AllergyHealthOnline.” Food Allergy & Intolerance Center 2000-2005.
Health Centers Online, Inc. Updated on June, 2006. July 18, 2006.