Genetically modified food: is it acceptable essay examples

Science, Genetics



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The term genetically-modified food is used for all the products that are " produced from organisms where their genetic structure has been adjusted or altered from that which would occur naturally" (" Genetically Modified Food"). In other words, genetically-modified food refers to the crop plants that are manufactured (to be consumed by animals or human beings) by employing the most up-to-date techniques of molecular biology. In the contemporary society, the introduction of the GMOs' cultivation and their circulation all over the world has turned out as a debatable topic in many countries. This controversy regarding the farming and marketing of GMOs is because many people are fearful that it may lead to health and environmental effects that are damaging, unfavorable and potentially out of control.

The process of production of genetically modified food involves the modification of plants in the laboratory for developing or boosting the preferred qualities for instance better herbicide resistance or superior dietetic content. In the previous times, desired traits were developed by the employment of breeding. However, those methods took much time to produce results and were often found to be inappropriate and inaccurate. On the other hand, plants with the perfectly desired trait have been created very quickly and with immense accurateness with the use of genetic engineering (" Genetically Modified Food").

The world population is continuously increasing and it has been predicted that the present population will multiply in the next five decades. Thus, it is

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now a major challenge for the governments to make sure that that there will be sufficient supplies of food for this ever-increasing population. The advocates of genetically-modified food believe that this unique method can meet this challenge in many ways. The benefits of genetically-modified foods include resistance for pests and diseases, tolerance for herbicides and cold as well as resistance for droughts and salinity. Thus, those in favor of genetically-modified foods consider it as a potential solution to a number of problems in the world that are related to hunger and malnutrition. The mentioned advantages also emphasize on the idea that genetically modified foods can facilitate in the protection and preservation of the environment as they demonstrate an increase in farm outputs and lessen the farmers' dependence on chemical pesticides and herbicides (" Genetically Modified Food").

However, there are still many challenges regarding the production and use of genetically-modified foods that are being faced by the governments today. Moreover, the issues like safety testing, guidelines, international policies and labeling of food products are to be considered as major challenges. Many people think that genetic engineering is that technology that is hard to ignore considering the present circumstances in the world. They believe so as genetic engineering is an unavoidable field of the upcoming times carrying gigantic possible benefits. Conversely, it is the responsibility of the authorities to make sure that every procedure involved is carried out cautiously for avoiding any damage to health and the environment ("Genetically Modified Food").

When the disadvantages of genetically-modified food are observed, there are

a number of harms that this technology may have. This technology may cause harm to other living organisms unintentionally. Secondly, it lessens the pesticides' effectiveness and cause unknown effects on human health. Moreover, the marketing and circulation of genetically-modified food require much time and money, thus making it an expensive process (Perry). The crops that are produced using genetic engineering have instigated a reaction that is far more complex than placing it within disagreements about communal wellbeing, rights and fair dealing. In simple words, geneticallymodified crops are considered by many people as "going against nature" and critically object to the development of such crops. The majority of people also hold the belief that treating nature in a commercial manner is completely against moral and ethical standards. They believe so not because they consider it disadvantageous for health and environment but on the ground that manufacturing and selling such foods are intrinsically immoral. However, it is exceedingly important to mention here that the occurrence of genetic alteration happens only on one occasion during the whole process. After the generation of the first genetically-modified plant, " all subsequent seed used is manufactured through the perfectly standard crossing techniques of plant breeding" (Perry 150). Therefore, it can be easily concluded that no biblical verse clearly restricts the manufacture of GM crops.

The opinions of the general public regarding the food biotechnology have not joined together because the embracing and implementation of this revolutionary technology have been much swifter than peoples' ability to understand the process and its consequences completely. However,

biotechnology and genetically modified can be said to be the future representatives carrying numerous benefits for the human race as they have "incredible potential to enhance nutrition, feed a growing world population, open up new markets for farmers, and reduce the environmental impact of farming" (Mann 5).

References

"Genetically Modified Food - Social and Ethical Aspects of Science and Technology, Science and Technology | Questia, Your Online Research Library." Questia, Your Online Research Library. N. p., n. d. Web. April 13. 2014.

Mann, R. W. "Biotechnology Regulation." Issues in Science and Technology Winter 2000: 5. Questia. Web. April 13. 2014. .

Perry, J. N. "Genetically-Modified Crops." Science & Christian Belief 15. 2 (2003): 141-163. Science and Christian Belief. Web. 13 April. 2014.