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Course

Date

GMO Essay

GMO is a “genetically modified organism: an organism or microorganism whose genetic material has been altered by means of genetic engineering” (GMO n. d.). Genetically modified organisms are becoming more and more popular. Some people consider them good. At the same time, others state they have risks to those who consume them.

GMO products are often considered useful and beneficial. Usually, crops are damaged by various pests. To cope with this problem, farmers use pesticides. They kill insects; however, people who then eat such crops are endangered, too. Consumers do not want to eat crops with pesticides. As a result, GMO crops that are not damaged by pests were developed. They can be grown without dangerous pesticides. Moreover, GMO crops can be resistant to other risks. They can become tolerant to herbicides that are used to remove weeds. Crops can be made resistant to different diseases caused by viruses, fungi and bacteria. Plants can be also made tolerant to cold. For this, scientists introduced into plants an antifreeze gene from cold water fish. Therefore, such plants can be grown in cold areas where they did not grow before. Controversially, it is possible to create plants that are tolerant to heat and drought. It is possible to create plants that contain certain vitamins and microelements. They can be grown and consumed in areas where people suffer from the lack of those vitamins and microelements. Moreover, GMO plants can have higher nutrition than common ones (Genetically Modified Foods: Harmful or Helpful? 2000).

In addition to genetically modified plants, such animals can be produced. Genetically modified animals can have particular genes inserted into their genomes in order to produce milk, eggs, or meat of better quality. Such animals also are expected to be more resistant to disease and to have better health in general (Vaesa 2013).

Nevertheless, not all is so positive with GMO products. More and more scientists state that wide production of GMO can be harmful to people who consume such products, as well as for other organisms and the environment. GMO foods can cause some allergic reactions among people who eat them. Such reactions are caused by new proteins that were not present in crops before. In addition, people who often eat GMO foods can suffer from problems with the efficiency of antibiotics used to cure them (Duvauchelle 2014). In addition, the taste of GMO foods is considered worse than for natural foods (Advantages and Disadvantages of Genetically Modified Crops (GMOS) 2014).

GMO can also influence the environment. For example, some GMO plants include genes that make them harmful to insects. However, not only pests, but also rare and useful insects can be harmed. For instance, monarch butterfly can be poisoned by GMO corns. Weeds and pests can change, too. They can become more resistant to genes designed to struggle with them. As a result, GMO plants should be modified constantly in order to make them more and more resistant to pests and weeds. In addition, cross-pollination of GMO plants with common ones is possible. It can make GMO plants lose their specified features. In addition, such process can make problematic distinguishing organic and GMO fields. It can cause a problem of the proper

labeling of non-GMO and GMO food products (Advantages and Disadvantages of Genetically Modified Crops (GMOS) 2014).

To summarize, GMO products have benefits and possible risks. GMO organisms can be more resistant to different hazards and diseases. They can have higher nutrition and contain certain vitamins and microelements. At the same time, GMO products can be harmful to people who consume them, as well as to other organisms. Therefore, it is necessary to study all benefits and drawbacks of such foods before producing and consuming them.

Works Cited

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