The Effects of GMO Foods on Human Health

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Introduction

Hippocrates once said, “Let food be thy medicine and medicine be thy food.” People should consume the food that makes them healthy, happy and let them live long lives. However, the food consumers find on the market shelves these days might not be the best options to choose, and what is worse, they can even have negative effects on their health. It is not a new thing that many of the products that are found in the stores are genetically engineered (GE). Even though some think that genetically modified organisms (GMO) do not have adverse effects on the human body, others believe that the chemicals used for GMO productions might be harmful to the consumers (Q and A, 2014) (Landigan, 2015). The advocates, on the other hand, believe that GMO food is good for the people. By eating GMO food, customers might hazard themselves, and impact their lives negatively. Since there are many concerns relating GMO foods, and there is no consensus whether GMO is safe or not, ethical issues about their production and consumption rise.

Utilitarianism

According to Zimdahl (2012), a person who behaves according to the Utilitarianism creates "the greatest balance of happiness or pleasure over pain or suffering for all affected by an act.” This theory can be applied to behaviors on both sides of the issue, the producers and the consumers. The Golden Rice that was invented by scientist brings positive effects on human health on many people around the world. It is called “golden” because it has β carotene, which makes it yellowish, and it also makes it more nutritious than white rice. β carotene found it golden rice is also more ingestible by the human body compared to the plants like carrots or sweet potatoes that are known for high amounts of β carotene. Additionally, fruits and vegetables that are high in vitamin A are not always consumed by the low-income families, but rice is eaten by many

cultures around the world. Thus, the innovation of golden rice decreased deficiency of vitamin A in many countries, and it reduced many diseases related to vitamin A deficiency (Courtesy). The same theory can be observed in the behavior of the consumers. According to "Just label it" more than 90% of Americans would like to see labels on their products that inform them which ingredients are genetically modified. People want to make conscious choices, and to avoid GMO because they think that the consequences of GMO food are unknown. Some people believe that there should not be any modifications of food in the laboratory, and they refuse to buy and eating foods like plants that have genes transferred from animals. They want to have a "happiness," and avoid the potential "pain or suffering" in the future (Zimdahl, 2012, p.64).

Ethical Egoism

Shafer-Landau (2015, p. 107) states that based on this theory "actions are morally right just because they best promote one`s self-interest." People do not do what is right to do, but rather act based on the profits they can gain. The perfect example of this theory is Monsanto company which is the largest producer of the GMO seeds. All information about GMO food and company itself that is posted on their website is very welcoming and says only positive sides about the company`s actions. From there, readers can find that the company "committed to a carbon neutral footprint by 2021" (About Monsanto). Additionally, they reassure that their GMO food production brings only positive sides, for example, smaller usage of water, growing plants that are resistant to diseases, or yield of bigger crops. However, readers cannot find any negative sides of GMO. Even if we assume that GMO food is safe, there are still some negative sides of this type of agriculture. One of the problems is the amount and types of herbicides that are used for GMO production. The chemicals that are used for spraying not only affect the environment and neighboring plants, but they might negatively affect consumers` health. Glyphosate is the

most widely used chemical in GMO farms, and it is classified as a "probable human carcinogen" (Landigan, 2015). By not informing potential customers, and readers about the possible adverse effects of their actions, Monsanto acts egotistical. The company does not lie, but at the same time, it does not say all the truth.

Kantian Ethic

Lastly, if people want to behave according to the Kantian Ethic theory, they should "do what is right not because it makes us happier, is convenient, or makes money", but they should "do it because it is the right thing to do, regardless of the consequences" (Zimdahl, 2012, p.63). The producers of GMO seeds behave some way according to Kant. Monsanto states that GMO foods will help the feed the world since the number of people on the Earth increases, and there is not enough available land for farming. The company also thinks that GMO bring better harvest for farmers, and thus a balanced and nutritious diet is more accessible for most people. Monsanto also tries to convince that the plant breeding they do, is very like what people have done for thousand years, but it is more complex and performed by researchers (About Monsanto). The intentions the company has are good for human health, even though other think that the consequences are unknown. However, based on Kantian Ethics "consequences are not unimportant but the intention is paramount" (Zimdahl, 2012, p.62).

Conclusion

The ethical issue on the topic of GMO food will never end. The advocates of the modern agriculture see the only positives effect of it, while opponents cannot find any positives in it. This topic is very controversial, and there is not a correct way to behave. There are some good sides of GMO like golden rice, but the effects of genetically modified food are unknown. I believe that every individual needs to act according to own beliefs and knowledge. If we do not

focus on the consequences, GMO food might be a perfect alternative for farming, and it actually might help the human race. However, if we start thinking about the future, and the consequences of producing this type of food, we might conclude that at some point GMO foods might displace "normal" food, and this might be scary.

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