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Text in Conversation

Genetically modified foods are subject to much scrutiny by practically all types of people. Questions of its safety and morality are raised constantly, yet companies such as Monsanto still churn out genetically modified seeds for farmers to plant. This company is especially famous for receiving allegations of ridiculous lawsuits and unfair contracts. The practices of genetically modified seed producers, such as Monsanto, lead to debate over the safety, ethics, and economics of genetically modified food.

The producers of genetically modified seeds defend their products, citing the results of tests they’ve done that ensure their safety. Economists, however, are more concerned about whether humanity needs genetically modified crops to be able to sustain the world’s growing demand for food (Annual Review of Resource Economics). These economists might view genetically modified food as a necessary evil, regardless of the safety of the crops yielded. Meanwhile, scientists, particularly biologists and biotechnologists, spend countless dollars and hours researching the safety of genetically modified foods, protecting the public from ignorance of the health issues that might arise from consumption.

Looking at these particular viewpoints on genetically modified foods gives us a broad view on the issue, while also focusing on some of the more important aspects. An economist’s view on them tells us whether humanity needs these special seeds to sustain the needs of a growing population, or whether the big producers are just taking advantage of farmers. We can see the benefits of genetically modified foods when looking at what producers like Monsanto have to say for themselves. When asked about the safety of their crops, Monsanto had to say that because their crops have been consumed for 17 years, and that they have been passed through the scrutinization of various worldwide government agencies, that the crops are safe for human consumption (Monsanto).

Like the economists and producers of genetically modified foods, there are more farmers in support of the cultivation of genetically modified seeds than not. This is simply because the threats of droughts, floods, pests, and weeds, make farming a risky business. Genetically modified foods can decrease all of these risks while also increasing the yield of crops, thus increasing profit for farmers, even if it means paying a higher price for genetically modified seeds (Chaudry).

Monsanto, the big company itself, has a lot to say about its products. While they are obviously very supportive of their product by default, there is also a lot of good points that they make. According to their website, their products are completely safe, and have been tested by with thousands of approvals (Monsanto). All types of scientists test the genetically modified crops, including independent, corporal, and federal scientists. Apparently the whole process is very rigorous and thorough, so there is nothing to worry about. The FDA, USDA, and EPA all make sure they are safe for the things they manage.

It is unincorporated scientists however, that will give us the most unbiased view and let us see truly the advantages and disadvantages of genetically modified foods, from data gathered in some rigorous tests. However, these perspectives on health clash, which has allowed for major controversy. It was found that in a scientific study, that when fed genetically modified potatoes were compared to rats who were fed unmodified potatoes, the rats fed genetically modified potatoes had abnormalities in their digestive tract. This brings widespread concern over the possibility that such case would be found in a human consumer of genetically modified foods (Whitman).

While genetically modified foods definitely seem to be safe, at least according to Monsanto’s website, the question of their usefulness is also brought up. The website quickly dispels any doubt however, by saying that genetically modified foods “improve yield for farmers, reduce draws on natural resources and fossil fuels and provide natural benefits” (Monsanto). The “natural benefits” can be said by the assumption that unmodified crops require pesticide. Companies that develop genetically modified foods develop seeds that reduce the crops’ need for water or increase their resistance to pests and drought. Monsanto is also injecting nutritional benefits into their seeds, such as oils that are helpful in diets.

While Monsanto has facts and figures that support their products, some biotechnicians would disagree with the idea that genetically modified foods are proven safe. Injecting seeds with new genes is a very dangerous business, and our standard scientific tests might not be all we need to do. These scientists think that something as complicated as genetic engineering needs more complicated tests, as well. Also there are some potential dangers of genetically modified foods that Monsanto’s website does not account for. Some these dangers include harm to native organisms (Teitel). For example, monarch butterfly caterpillars were shown to have high mortality rates because of B.t. corn pollen. Genetically modified seeds can also reduce the effectiveness of pesticides, because some genetically modified seeds produce their own pesticides that insects can become resistant to. There is also the possibility of these genetically modified plants cross-breeding with other crops and even weeds. If weeds developed the resistance that the GMOs have, it would be a disaster (Tietel). There are also scientific studies that suggest that genetically modified crops are not actually that much better for farmers. That is, the yield and efficiency might not be as high as they should be. Biologists are torn on whether these risks and rewards are balanced.

Finally, there is the economy of these genetically modified crops. A lot of experts in the field say that we need these kinds of crops to feed the constantly growing population. If the crops really are more efficient and yield more, then it would surely help. However, other economists say that feeding the entire world is not as simple as growing tons of crops. The issue is distribution. There is plenty of food for starving people in, say, South Africa, but transporting it there is an issue that genetically modified foods cannot solve.

One thing is true about genetically modified crops, and that is that they are easier to harvest. Is that worth it? Some say it is, especially in countries like the U.S.A where labor is a major expense. Others still say that the extra yield and efficiency is not worth the risks that genetically modified crops might pose to the environment and its inhabitants.

On the right side of the isle, republicans are split on their opinions of genetically modified crops. Democrats however are 26 percent more likely to not support genetically modified food than not (Langer). This is often linked to more right-winged people having values similar to the economists, as discussed above.

A final opinion on genetically modified foods can be found in the American public. The For the most part, Americans are doubtful that genetically modified foods are safe to eat for the very reasons discussed above. In a national poll, more than half of the people asked (52 percent) claimed that they believed genetically modified foods are dangerous and should not be grown nor served, when only one third of the people who took part in the poll claimed that genetically modified foods would be safe for human consumption (Langer). Surprisingly though, the public was almost unanimous in saying that the FDA should require labels that inform the consumer of the genetic makeup of the food sold in stores – something congress voted against (Ananda). Studies have also found that more and more people want to buy organic food, which is believed to be directly proportional to the low-public support of genetically modified food developers like Monsanto (Langer). Americans have such a low approval rating of companies like Monsanto because of their business practices, which in involve suing various farmers for reusing seeds.

All of these viewpoints are definitely conflicting. While Monsanto says their foods are safe, with federal approval to back that up, other scientists say that we have not fully studied the possible effects. Long-term effects especially have not been established as safe. There is no way that the good it does for farmers and citizens, and the money that it makes the big corporations is worth the chance that something dangerous could happen.

Politicians and government organizations do not outright support genetically modified foods over unmodified foods; however, they do not condone them. It is undisputable that there have been countless studies on the overall safety and risks of their cultivation and consumption, which has given the FDA, EPA, and USDA enough confidence to allow the production and sale of genetically modified foods. Despite this, the government, nor any other organization, knows the long term health and environmental effects of genetically modified foods, simply because they have not been around long enough for significant research.

Genetically modified crops are a topic of great controversy. Every group of people, whether they are economists, farmers, scientists, politicians, corporations, or even the general public, has their own opinion on the safety and ethics of cultivating and selling genetically modified foods for human consumption. In the end, genetically modified foods do offer a large array of financial benefits to corporations and farmers, but it comes at the risk of cultivating and consuming produce that has no long term research. This leaves it up to the individual to be educated and make their own decisions on what they eat.

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