

GMO's: They're What's For Dinner

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When you think of produce you purchase from your local grocery store, it should make you feel good about the healthy choices you are making. As an average citizen, when I think of where my produce originated, I visualize a small or medium-sized farm. The farmer, in his bib overalls, awakens at sunrise. He hops into his tractor, tending to the planting and harvesting of all the wonderful fruits and vegetables I love. What I don't envision is instead of planting a standard seed, the farmer plants one that has been modified in a sterile laboratory with organisms that will provide a quicker, more plentiful return and the modification is slowly killing me.

I decided I wanted to know which scenario above was more accurate when it came to the question, "Is my produce truly healthy?" I wanted to know what all the Monsanto hype was about. Is it simply the new sensationalized topic by mainstream media or is our government helping Monsanto poison our food supply?

What I already know and what I don't know about my topic:

I know Monsanto is the largest producer of the herbicide "Round Up". I know that seeds are genetically altered (genetically modified organisms (GMO)/genetically engineered (GE)) in efforts to produce larger yields and higher profits. I know that although many countries have banned GMO products, others such as the U.S. continue to fight to do so. I know that although a large portion of the U.S. population and smaller countries fight to have all products containing GMO's labeled as such, both Monsanto and our government fight against it. I know that the products containing GMO's have been linked to increased cases of specific cancers. Although uncertain as to what the ramifications of GMO products are for our future, I do know future generations will feel the impact of our generation's need for bigger, faster yields. I know

Monsanto claims to be in business to help the small/medium-sized farmers compete with larger operations. In contrast, I also know there have been many lawsuits that included Monsanto versus small farmers.

What I don't know are the types of cancers are directly linked to the consumption of GMO products. Why is our government fighting against current legislative bills that would require products containing traces of GMO's to be labeled as such? How can Monsanto claim their products are "safe" when it has been proven to cause cancer and shorten life expectancy? How has smaller third world countries been able to successfully ban GMO's altogether and US has not? Do all Roundup products produce a GMO (sprayed vs. genetically engineered)?

Why I want to learn more about Monsanto?

I think it is important to understand how our choices today impact future generations. I want to know both the pros and cons of what is included in the food we purchase and how this knowledge will impact society's purchasing habits. Personally, I feel like too many people would rather bury their heads in the sand than confront the issues that plague them; obesity, diabetes, cancer and chronic migraines/pain. I want to know why our government is so invested in hindering the general public's ability to educate themselves about what we are consuming. There is obviously a financial gain for the Monsanto Corporation and our federal government, but what impact does producing GMO products have on the farmers who make the switch vs. those who don't? How are GMO fields impacting the land in which it is planted?

I want to know more about the end products of Monsanto GMO seeds. Am I unknowingly serving a side of Monsanto cancer to my family for dinner? I would like see if there is a link between convenience food (Lean Cuisine, Hormel, and Kraft) and Monsanto?

Without food labels calling out “GMO 100%DV” how is the average consumer supposed to know what to look for/avoid on our food label? Knowing Kellogg’s products contain GMO’s, I want to know why it is legal to target our children in the manner they do; for example the popular cereal Fruit Loops is 100% genetically engineered. When cigarette companies began targeting our children, our government took action to protect them. Why are the same measures not being taken to protect our children against equally cancer-causing Monsanto products?

I want to understand the potential impact Monsanto products have on my life. Being informed about what chemicals are in the food my family consumes will help me to make better choices. Presently, I’d like to think the meals I prepare for my family are nutritious; I fear however there are underlying cancer causing substances. By researching Monsanto and businesses that use the genetically engineered products (Kellogg’s, Smart Ones), I can begin to find suitable alternatives that are safer for myself and my family.

The Story of my search

I began researching Monsanto on the web. Several websites returned in my generic “Monsanto” search. The first, Monsanto’s own website, served best to uncover information regarding who Monsanto is and what a GMO is exactly. I found Monsanto.com page to be very informational, biased but still informational.

I returned to my original search results and was extremely surprised at the number of websites passionately highlighting the negative implications of GMO’s, and why Monsanto Inc. believes GMO’s are necessary. I also learnt what Monsanto claims to do with the money collected from the patent infringement lawsuits.

Likewise, I was surprised by the large number of sites focused on the negative implications of GMO contaminations as well as the impact on a smaller farmer who is no longer able to pick and save their own seed. In the documentary “*Food Inc.*” I read the theory that whoever controls the world’s seed supply also controls the food supply and in turn controls the world. (Kenner, 2008) If you stop and think about this statement you realize how truly scary this theory is.

After a little web research, armed with a better understanding of Monsanto’s products, I interviewed my grandfather-in-law, Donald Hanus. We discussed as he put it “the good ole’ days” of farming. He stressed farming 30 years ago was much harder as they didn’t have all the fancy equipment and products available today. During the interview, I was saddened to learn one of the reasons Don no longer farmed his own land. Instead, he now rents the land to his neighbor. About 17 years ago, when all of his neighbors began to use Monsanto seed, he refused. In a gathering at the Dysart Co-Op, he overheard a conversation about another farmer who, like himself, had chosen not to plant GMO seed. The farmer was sued by the Monsanto Corporation, for saving his own seed. Although the farmer did not use GMO seed, his neighbors did. Their seed made its way into his field therefore rendering him guilty of patent infringement. At the time, Don had farmed his land for over 30 years. He did not know the farmer in the story. Honestly, he wasn’t sure if it was even a true story. He began asking questions and ultimately the information he uncovered was a major reason in his decision to rent his land.

I read through numerous websites and watched countless videos on the cons of GMO products. I read articles that linked several current FDA and EPA employees as past Monsanto employees. I even ran across a video of 11 year old Birke Baehr who in effort to paint a picture of how crazy he feels GMO seeds are, suggests we envision introducing a fish gene to a tomato.

Baehr also poses this question “are organic foods truly more expensive?” Based on his logic, “we can either pay the farmer to produce a healthy food supply or we can pay the healthcare system to cure an ailment our less expensive GMO products may have caused”. (Gucciardi, 2013)

What I Have Learned

As a result of the surveys I conduct in class as well as on Facebook, I discovered over three fourths of the respondents had no idea who or what Monsanto is (Fell, 2013). Further, I learnt none of my respondents currently purchase organic produce, however, would consider making the switch if they were able to purchase organic products at a similar price as the non-organic products. And although over half of my survey participants did not currently know who/what Monsanto is, they did feel strongly our government has a responsibility to inform and protect us from possible cancer causing products (Fell, 2013).

My first question to answer was who is Monsanto? Monsanto is a sustainable agriculture company founded in 1901 by John F. Queeny. (Monsanto, 2002-2013) Company headquarters are in St. Louis, MO, however they have locations all around the world. According to Monsanto's website, Monsanto.com, they strive to make their products available to farmers, both large and small, to produce more from their land while conserving more of our world's natural resources, such as water and energy. (Monsanto, 2002-2013) Monsanto's products include; corn, cotton, oilseeds (canola oil), fruits and vegetables. “Along with their seed, they provide an array of products that aid in protecting the farmer's crop while promoting efficiency and reducing their overall on-farming cost”. (Monsanto, 2002-2013)

The products Monsanto aims to make available to all farmers are genetically modified organisms or GMO's. According to the Bacillus Thuriensis, a study from the University of California San Diego, a GMO is when a gene from one organism is purposely moved to improve

or change another organism in a laboratory. For example, some GMO crops are resistant to certain insects. (Chien)

Monsanto GMO seeds are patent, why? According to their website, Monsanto chose to patent their seed because of their annual investment into continued product research and development. With the world's population continuing to grow, farmers using non GMO seeds will not be able to produce enough food to support the ever growing populations.

Up to this point, Monsanto and GMO seeds were the good guys in the every progressing society. So I began looking elsewhere for information. I found a video of 11-year-old Birke Baehr's speech from the 2013 "March against Monsanto." (Gucciardi, 2013) In Baehr's speech, he discusses how marketing campaigns target today's youth, using colorful packaging and little plastic toys to get parents to purchase food that is not healthy for them or the planet. He continues to challenge both old and young generations to become educated as to where the food they eat comes from. He vividly describes the place he imagined his food coming from as "happy little farms where pigs roll in mud and cows graze on grass all day" and then poses the question – "Does your food come from a place like I described or does your food come from and industrialized corporations that use altered DNA seeds?" (Gucciardi, 2013) In his quest to better understand where his food supply is from, Baehr discovers almost all of the corn we consume has been altered in some way, a fact most people are not aware. Incorporating humor into a serious topic, Baehr shares with the audience his dream to be an NFL player and what now has replaced that dream with becoming an organic farmer. The overall resounding message I took away from this video is to know where your food comes from; buy local organic produce when possible and avoid past assumptions when it comes to offering a healthy option to our children.

According to Monsanto.com, their products are safe for human consumption and safe for our environment. I, however, found an extremely large number of websites that are claiming the exact opposite. On the website www.foodmatters.tv, I found several pictures of rats whose bodies are riddled with enormous tumors. (Adams, 2013) According to Dr. Michael Antoniou, molecular biologist, the reach on lab rats that consume GMO products, “female rats show an extraordinary number of tumors developing earlier and more aggressive.” (Adams, 2013) The first ever long term (lifetime) effects of GMO consumption on rats showed organ damage, both liver and kidney damage and premature death (50% of men and 70% of women). If you are like me, you are scratching your head, wondering why has it taken so long for such a study to be conducted, and furthermore what products am I currently eating that could potentially be causing such damage to my body and my children’s body.

I think what I learnt next, for me, was one of the most important. Which products am I feeding my family that contains GMO products? I found several websites that listed out which products were part of the GMO project. One of the more easily to decipher sites I found was readersupportednews.org, 80% of the manufactures would be impacted by the Right to know act. (Woodruff, 2012) Manufactures such as Sunny D, Kellogg’s, Campbell’s, Del Monte, and Ocean Spray and hundreds more are all currently including some GMO in the production of their product. (Woodruff, 2012) It appeared to me many of the manufactures on the list were, like I had originally thought, producers of “convenient foods;” foods that require little effort to prepare and consume. I began asking myself are GMO’s a result to the world becoming lazy and therefore, we are indeed killing ourselves in more than one capacity; one) lazy/inactive and two) lack of desire to better understand what we consume. This was not something I was able to locate specific documentation on, however, I do feel the general population’s desire for instant

gratification and low effort solutions have helped create the demand for more and more GMO laced products.

Who is protecting us from manufactures? The first answer that popped in my mind was the US government. It should be both the EPA and FDA's responsibility to protect the general public from potentially cancer causing food, right? If not, the EPA and the FDA, maybe congress or better yet our president, yep those are the top agencies I thought would be working to better educate society on what is in the food we currently are consuming. Boy was I shocked to learn currently both the FDA and the EPA have staff that was once employed by Monsanto Inc. (Null, 2013). Along with the obvious conflict of interest in overlapping employment, currently the FDA does not require any testing to support the safety of GMO's. Obviously, if Monsanto is responsible to perform studies on their own products, we as a society are only hearing glowing reviews regarding to GMO's. In addition to the lack of government regulations on GMO's, our current legislation along with the legislations dating to the first Bush administration has taken steps to legally deceive the general public. You see, GMO's are big business for our government. Our health is being traded to the highest payer/lobbyist. (Null, 2013)

Although, I have just begun to understand what GMO's are and who Monsanto is, I know enough to conclude that although up front organic options are slightly more expensive at the grocery checkout, that increased price is worth it if it means decreased possibilities of cancerous tumors, liver/kidney damage, and decreased life expectancy for my family and me. I learned there are many alternatives to GMO product, such as the brand Amy's Organic, Applegate Farms, Earthbound Farms, and many more. (Talty, 2013) I will continue to educate myself and my family on the effects of GMO's and the benefits of non-GMO's food consumptions. I know the conversion will not happen overnight, but I will continue to challenge myself to begin

phasing out GMO food selections out of my family's diet and replacing them with the healthier options.

In conclusion, one of my major takeaways from my research is do your homework and know what you are putting in your body. Instead of relying on the word of big business and our government, I will continue to look for ways to provide my family with healthy foods choices that will actually be healthy instead of being marketed as such. Because of my research for this paper, my husband and I are looking into planting an organic garden next spring and having free range chickens act as the herbicide/pesticides. Not only with our garden provide us with a healthier option to GMO produce, it will also provide a healthier protein as well.

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