Announcer:

The Missouri State Journal, a weekly program keeping you in touch with Missouri State University.

Emily Yeap:

Some items in our food supply, such as alfalfa, corn, potatoes and soybeans are genetically modified or engineered. While these types of food often cause controversy, they’re subject to regulations and rigorous safety assessments. I’m Emily Yeap.

Last week on the Missouri State Journal, registered dietitian Jaime Gnau explained what GMOs and GE foods are and why there’s a need for them. Gnau, a clinical instructor in Missouri State University’s Department of Biomedical Sciences, is back with me again today to address some myths about these types of food.

Jaime Gnau:

There's a long list of myths surrounding genetically engineered foods. I think the two most common that I hear are related to environmental concerns, as well as health concerns. While there are some very valid environmental concerns with genetically engineered crops such as the herbicide-resistant weeds that are becoming more of a problem, there are also some positive environmental effects to consider as well.

So, genetically engineered crops have reduced pesticide use by 37% and increased crop yields by 22%. This is really important because we are getting less and less families in farming. So, there are lots of farms that are generational farms, yet we are seeing a decline in farmers. And so, the ability to be able to increase our crop yields with less people farming is really important to be able to feed the global population.

These genetically engineered foods have also reduced soil erosion by 93%. That’s a huge number, and that’s all due to the ability for the farmers to not have to worry about tillage. So, instead of having to till up the soil to get rid of weeds, they’re weed-resistant due to the engineered crop. So, this decrease in tillage also reduces carbon emissions; the equivalent of removing 12.4 million cars from the road per year. So, there are a lot of really positive environmental effects that people don’t talk about as much and there’s a lot of misinformation that goes on that kind of I feel like drowns out the positives.

Another common myth is that genetically engineered are unsafe for human consumption, but in reality, there are really strict safety regulations for a genetically engineered crop to be approved to be consumed in our food system. It's not just in the United States either. So, 90 government bodies globally have reviewed and approved genetically engineered foods in our system. On average, it takes genetically engineered foods about 13 years to be tested for safety and approved to get into our food system, $130 million before coming to market through all of these testing and safety regulations and that can take quite a while.

A lot of times people think, “Oh, I don’t trust the government. Oh, I don’t trust these large corporations. It's all about making money,” but I think it’s important to come back to, these are not just corporate farms making these crops. These are families, these are family farmers that are also feeding these foods to their families and their kids. If they weren’t safe, they wouldn’t be feeding these foods to their families, right? So, I think it’s easy to get in that headspace of, “Well, we don’t trust these regulations,” but there’s no research that has shown that these are unsafe for our consumption after all of that testing.

Emily Yeap:

To educate yourself about GMOs and GE foods, Gnau suggests checking out reputable sources.

Jaime Gnau:

It’s understandable to be concerned because we want to provide healthy foods for our families and ourselves, and this is a topic that gets a lot of misinformation because there are so many different sources of information out there that are conflicting. And so, being able to identify that information that’s evidence-based, look at the source.

So, if somebody’s talking about GE foods and they are gaining money or profit off of talking bad about those foods, that could be kind of a red flag to look further. I’m not saying that all of their information’s incorrect, but maybe just dig a little deeper and try to go for those evidence-based reliable sources.

The FDA has some great information on GE foods in our food systems. So does the USDA because those are the governing bodies that approve GE foods for consumption. Also, the EPA, if you’re interested in environmental protections, they also have some great information. Other than that, a good site that I found is the Alliance for Science, and that’s through Cornell University. They have some really great user-friendly, easy-digestible information communicated in a really engaging way that’s backed by research and backed by science.

Emily Yeap:

That was Jaime Gnau, an MSU registered dietitian. I’m Emily Yeap for the Missouri State Journal.

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