

Scientific articles counter common misconceptions on Internet condemning GMOs

A member of Skepti-Forum, Ethan Kessler, provides links to several scientific studies countering many of the common misconceptions we often see shared around the Internet condemning GMOs. Here, the top two links for each claim are posted; for more, read the full, original article.

In general, there's nothing dangerous or bad about the principle of GM foods and crops.

Genetically modified crops are not killing the honey bees:

- <http://www.ncbi.nlm.nih.gov/pubmed/22194811>
- <http://www.ncbi.nlm.nih.gov/pubmed/23533634>

In addition, Monarch butterflies are not harmed by GM crops:

- <http://www.ncbi.nlm.nih.gov/pubmed/11559839>
- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3628874/>

In order for the genetically engineered (GE) crops to be successful, a reduction in biodiversity is to be expected. Still, according to a review of 1,783 research papers, *“On the other hand, higher reductions on biodiversity is generally expected with non-GE crops and herbicide/insecticide applications, because the chemicals used are often more toxic and persistent in the environment”*

Ultimately, most studies find that GM foods don't have a significant impact on animal health:

- <http://www.agbioworld.org/biotech-info/articles/biotech-art/peer-reviewed-pubs.html>
- <http://www.ncbi.nlm.nih.gov/pubmed/19011971>

Specifically, GM foods do not affect the reproductive system in animals:

- <http://www.ncbi.nlm.nih.gov/pubmed/23828972>
- <http://www.ncbi.nlm.nih.gov/pubmed/24012644>

A detailed review concluded that DNA from GM food cannot be incorporated into our DNA, and that the proteins encoded by the genes inserted into GM crops are not toxic or allergenic:

- <https://geneticliteracyproject.org/wp-content/uploads/2013/10/Nicolia-20131.pdf>
- <http://www.ncbi.nlm.nih.gov/pubmed/24041244>

Just to be safe, *“pre-screening of transgenic proteins through bioinformatic analyses contributes to avoid the introduction of potentially toxic, allergenic or bioactive proteins into food and feed crops”*

Food acquired from GM crops have not affected the health of the world-wide population, even after 15 years of consumption by millions of people:

- <http://www.genetics.org/content/188/1/11.long>
- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2408621/>

Here’s what the International Seed Federation has to say, *“The development of GM crops has benefited farmers, consumers and the environment... Today, data shows that GM crops and foods are as safe as their conventional counterparts: millions of hectares worldwide have been cultivated with GM crops and billions of people have eaten GM foods without any documented harmful effect on human health or the environment”*

Kessler concludes: “Basically, there’s no reason why the GMO discussion should be inundated with panic. Let’s look at the GMO debate with a clear mind.”

Read the full, original article: Ethan Kessler: There’s nothing dangerous or bad about the principle of GM foods and crops.