



The Pervasive Myth That GMOs Pose a Threat

Science consistently shows GMOs pose no threat to our health

By Alex Berezow Editor of RealClearScience June 5, 2013



Dr. Alex B. Berezow is the editor of RealClearScience and co-author of [Science Left Behind](#). He holds a PhD in microbiology.

Perhaps the most difficult thing about being a science journalist is combating and extinguishing malevolent myths, which always seem to spread faster and further than the actual truth. The largest falsehood currently in circulation is that GMOs represent a threat – to our health, to our environment and to our food supply. But nothing could be further from the truth.

GMOs are nutritionally indistinguishable from their non-GMO counterparts, and in fact, they can be used to enhance nutrition in poorer parts of the world. (As a side note, anti-GMO activists routinely claim that organic food is healthier, but a systematic review in the *Annals of Internal Medicine*, which covered more than 30 years of data, concluded that this isn't true.)

Recently, anti-GMO activists seized upon a notorious study conducted by French scientist Gilles-Eric Séralini. He claimed that GMOs caused cancer in lab rats. The paper caused a major uproar in the scientific community, not just because of its suspicious conclusion, but because of how poorly the study was conducted. The research was widely condemned as inadequate and flawed by the scientific community, and Henry Miller, the founding director of the Food and Drug Administration's Office of Biotechnology, went so far as to say Séralini was "attempting fraud."

Like agriculture or hunting-and-gathering, GMOs leave an impact on the environment. Some of it is bad, like when farmers overuse the herbicide glyphosate, which in turn may speed the evolution of "superweeds." But some of it is very good, like when GMO corn reduces insecticide use. It should be kept in mind that not all pesticides are created equal. Indeed, insecticides are generally more toxic than herbicides; therefore, GMOs have an overall net positive effect on the environment. Additionally, GMOs have been shown to be beneficial to ecosystems.

Finally, many activists worry that agriculture giant Monsanto is "taking control of the food supply" by patenting GMOs. This is quite silly. No farmer is required to buy Monsanto's product, and the accusation that Monsanto sues unsuspecting farmers has been greatly exaggerated. On the contrary, many farmers willingly accept GMOs (and the stipulations that come with them) because they increase crop yields and lower costs, particularly in developing countries.

Many people believe that labeling GMOs is a fair compromise. Americans claim a "right to know" what's in their food. But this is misguided. A label implies that something is worth labeling. Cholesterol content is worth labeling. But the science consistently shows that GMOs pose no threat to our health. Therefore, it would make about as much sense to put a warning label on GMO corn as it would to place a warning label on corn grown in Nebraska.

In summary, GMOs really aren't controversial in the scientific community. In fact, we teach high school and college biology students the basic techniques of molecular biology that are used to genetically modify organisms. It's quite literally textbook science.

<http://www.usnews.com/debate-club/>