

Top GMO question consumers want answered: Do GMOs cause cancer?

In light of the recent push by advocacy groups for GMO labeling, some legislators and food producers have called for a corresponding increase in consumer education about GMOs. In response, GMO Answers, an initiative by the members of the biotech industry working to answer questions about GMOs, posted an initiative, [Top ten consumer questions about GMOs, answered](#).

The site surveyed consumers nationally to find out their most pressing questions. GMO Answers plans to address one question per week, beginning with: [Do GMOs cause cancer?](#)

The answer to the most asked question is “no”, according to Dr. Kevin Folta, chair and associate professor in horticultural sciences at University of Florida, Gainesville:

Cancer is a name applied to a spectrum of diseases where cells proliferate abnormally. There is no way that the subtle and well-understood alterations of a plant's genes can cause cancer. There is nothing about the Bt protein (used in insect resistance, also in organic pest control), the EPSPS enzyme (which confers herbicide resistance simply by substituting for the native enzyme in the plant) or the process itself that would induce such cellular changes in human cells that would lead to cancer. It is just not plausible.

Cancer is a terrifying prospect, one of the most feared diseases. The American Cancer Society says that there are “many possible causes” for cancer and provides [comprehensive lists](#) of established and anticipated cancer-causing agents. GMOs are not on the lists, not even in the “Reasonably anticipated to be human carcinogens” category.

Still, it is telling that some people are most worried about cancer-causing GMOs –a fear likely stoked by anti-GMO campaigning and the notorious 2012 study of GMO corn by French scientist Gilles-Eric Seralini. Seralini and his research team also published photographs of rats with gigantic, scary tumors. But scientists worldwide [debunked the research](#) because the team used rats that were genetically predisposed to have cancer, cherry-picked the data and used sloppy methodology. The [paper was retracted](#) last November.

Yet that hasn't stopped anti-GMO activist groups from continuing to promote the discredited research as ‘proof’ that GMOs cause cancer. For example, NaturalNews.com's list of [Top 10 most unhealthy, cancer-causing foods – never eat these again!](#) cites GMOs as the number one cancer-causing food with Seralini's retracted study as the only evidence.

As the GLP has documented, [GMO safety has been widely established](#) by independent scientific organizations around the world, including the World Health Organization, the National Academy of Sciences and the European Food Safety Authority. The site Biofortified provides [a searchable database](#) of more than 1100 available peer-reviewed research on GMO risks with its GENERA project. A team of Italian scientists [collected more than 1700 studies on GMOs](#) over the last decade alone, none of which

showed any cancer risks or significant health threats from GMOs. So to reinforce Dr. Folta's answer, no, GMOs do not cause cancer.

Additional Readings:

- "[Hyped GM maize study faces growing scrutiny](#)," Nature
- "[The Seralini GMO study – Retraction and response to critics](#)," Science Based Medicine