Newsweek puts it frankly: You are totally wrong about GM food

By ACSH Staff — May 27, 2015

Newsweek’s recent cover story puts it bluntly: YOU ARE TOTALLY WRONG ABOUT GENETICALLY ALTERED FOOD. And author Tom Parrett eloquently explains why in his article [1]: GMO Scientists Could Save the World From Hunger, If We Let Them.

Parrett starts his piece by pointing out global issues that threaten traditional agriculture overfarming, drought, bugs, and extreme heat and how overcoming these issues is becoming increasingly more urgent due to our rapid global population growth. Indeed, the UN predicts that global food production will need to double by 2050 to feed the estimated world population of 9 billion. And keep in mind there will be no new arable land by then, in fact, there will likely be less of it.

The solution may come in the form of genetic modification specifically mentioned is CRISPR-Cas9, a highly specific tool that can be used to focus in on a single gene to turn it on or off, remove it, or exchange it. Parrett writes: The process can easily modify plant DNA without changing the plant’s essence except to make it tastier, more nutritious, quicker to market, easier to ship, machine-pickable, less needy of water and/or able to flourish in a heat wave. And we can do it for big companies and small, the world at large and isolated communities.

Nobel Peace Prize winner Norman Borlaug the father of the Green Revolution and one of the original founders of ACSH needed almost two decades to create a better wheat variety using hit-or-miss natural processes. With CRISPR-Cas9, that development cycle can be compressed to only a few days or weeks.

In describing CRISPR-Cas9, Parrett dispels many misconceptions about GMOs specifically that genetically modifying crops creates new species of potentially dangerous, unstudied frankenfood: It’s critical to note this has nothing to do with creating a new species. CRISPR-Cas9 is a tool that helps us adapt plants to new environments by fine-tuning their own genetic traits, using their own genes from plants they d naturally breed with, such as their wild versions. As the tool targets a tiny segment of a plant’s DNA, the plant stays the same species technically, even the same genotype. As scientists see it, the technology respects a plant species for its evolutionary capacity to thrive over eons, while helping it evolve more quickly to adjust to today’s environment. We are only putting our foot to the accelerator of natural plant processes.

While this sounds like an absolutely viable solution to many modern agricultural problems, there is
a huge obstacle to overcome: the anti-GMO movement. Indeed, unfounded fears about GM technology are rampant throughout society a recent poll found that 88 percent of US scientists think GMO technology is harmless, compared to only 33 percent of civilians. Clearly, there is some severe misinformation flying around, much of which is due to environmental NGOs, including Greenpeace. Parrett references the group’s violent action against GMOs, specifically their destroying of an experimental Golden Rice field last year. Golden Rice is simply basic rice that has been modified to produce its own vitamin A, potentially saving up to 2.8 million children a year from blindness and a million from death. Parrett points out that not only is it lifesaving, but it is being offered to the world by a nonprofit, with no commercial stipulations. Yet Greenpeace is vehemently against it. (Also of note: prominent anti-GMO activist Mark Lynas who participated in the Greenpeace GMO crop vandalism recently apologized and condemned [2] his past actions in an April New York Times op-ed: How I Got Converted to GMO Food.)

Tom Parrett’s article is an informative read for anyone confused or unsure about what exactly happens in the genetic modification process, and why GMOs are beneficial and even necessary.

For further reading on the subject, see ACSH’s publication Feeding The World With Modern Agricultural Biotechnology [3].

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

Source URL: https://www.acsh.org/news/2015/05/27/newsweek-puts-it-frankly-you-are-totally-wrong-about-gm-food

Links