CRISPR won't be creating an 'allergy-free' peanut anytime soon

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Peanut allergies are one of the more frightening food allergies to have, because the body's response can be both deadly and entirely unpredictable. . . .The list of what my daughter can't eat is a long one.

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.... A piece at Fast Company about the "CRISPR revolution" informs me that CRISPR will revolutionize our food system, and that includes removing allergens from peanuts. According to Business Insider, scientists could create "an allergy-free version of the popular snack food."

It sounds so simple—remove a few genes and kids like my daughter will be able to safely eat peanut butter—but it turns out that creating an allergy-free peanut is anything but a foregone conclusion. There are significant science and market-based challenges to creating a hypoallergenic peanut and CRISPR. . . won't be revolutionizing the peanut market with an "allergy-free" product anytime soon.

"I would never say 'allergy-free'," says Peggy Ozias-Akins, a plant geneticist at the University of Georgia who works with CRISPR and other biotech tools to reduce peanut allergenicity. . . . The peanut is . . .up of many allergenic proteins, and each of those proteins contains multiple genes. You'd need to remove all of the allergenic genes in order to call a peanut "allergy-free" and that's a significant challenge, even with a tool as powerful as CRISPR. . . .

Even if scientists could remove every last allergenic gene with CRISPR, it's unlikely anyone would want to eat what's left. Some of those allergenic genes are significant sources of protein. . . . Ozias-Akins adds, "you might be dramatically changing the nutritional value, flavor and processing properties."

Read full, original post: Allergy-Free Peanuts? Not So Fast