New gene-edited tomatoes stay firm longer, extending shelf life

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

In an attempt to produce plump, tasty tomatoes with longer shelf lives, scientists have successfully tweaked a gene that slows how quickly the fruits soften without affecting their size or color.

The genetically modified tomatoes, described in a <u>paper published</u> [July 25] in the journal Nature Biotechnology, didn't show telltale signs of softening, like pruned skin, 14 days after harvesting, compared with wrinkled ones from normal plants. To engineer them, the researchers turned to two DNA-altering techniques, including CRISPR-Cas 9, an editing tool used to snip out and replace unwanted genes.

The number of tomatoes growing on genetically modified and normal plants was roughly the same. Plus, the modified plants and normal controls had similar amounts of molecules known to affect taste, color, and smell, according to the study.

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"The current work is potentially important because it only slows down one aspect of ripening—softening—that is critical to shipping and shelf life," said Harry Klee, a horticultural-sciences professor at the University of Florida in Gainesville who wasn't involved with the research.

Soft tomatoes are easily crushed, which impacts their salability. . . .

Wall Street Journal subscribers can read full, original article here: GMO Tomatoes May Stay Firm Longer