

# Successful initial safety tests for genetically-modified rice that fights allergy

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A new transgenic rice designed to fight a common pollen allergy appears safe in animals, scientists in Japan report. Credit: David.Monniaux, Wikimedia Commons

In a first-of-its-kind advance toward the next generation of genetically modified foods -- intended to improve consumers' health -- researchers in Japan are reporting that a new transgenic rice designed to fight a common pollen allergy appears safe in animal studies. Their report is in the current issue of *ACS' Journal of Agricultural and Food Chemistry*.

Fumio Takaiwa and colleagues note that the first generation of genetically-modified crops was designed to help keep crops weed and

insect free. The next generation of transgenic crops is being developed to directly benefit human health. This includes veggies and grains that produce higher levels of nutrients, such as vitamins and minerals, or even medicines and vaccines. Like the first generation of transgenic foods, however, researchers are anxiously trying to determine whether foods produced from these “biopharmaceutical” [crops](#) will be safe for humans and the environment.

The scientists describe development of a transgenic rice plant that has been genetically- engineered to fight allergies to Japanese cedar pollen, a growing public health problem in Japan that affects about 20 percent of the population. In laboratory studies, the researchers fed a steamed version of the transgenic rice and a non-transgenic version to a group of monkeys everyday for 26 weeks. At the end of the study period, the test animals did not show any health problems, in an initial demonstration that the allergy-fighting rice may be safe for consumption, the researchers say.

More information: [Journal of Agricultural and Food Chemistry](#), Journal Article: “26-Week Oral Safety Study in macaques for Transgenic Rice Containing major Human T-Cell Epitope Peptides from Japanese Cedar Pollen Allergens”

Provided by American Chemical Society ([news](#) : [web](#))

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