Scientists plan to engineer gluten-free wheat

People with serious gluten allergies such as celiac disease now have only one tried-and-true option: swear off all foods containing wheat, barley and rye.

Scientists have experimented with another tack: sifting through different varieties of wheat and barley lines that lack, or make a lot less of, key gluten proteins in their grains. ut though they've found varieties that lack some of the important allergenic proteins, "None of the tested materials was completely nontoxic for celiac patients and thus could not be recommended for general consumption," note authors of the current study.

Those authors, Shanshan Wen of Washington State University in Pullman and colleagues, tried a different approach. It hinged on a key enzyme — one that helps activate a whole set of genes that make the most problematic gluten proteins. Using a genetic engineering trick, they knocked out that enzyme. As a result, the seeds of the wheat they studied had sharply reduced levels of this set of problem proteins.

View the original article here: Wheat for people allergic to gluten: Possible?