

RNAi technology promising in developing gluten-free wheat

Genetic modification of wheat genes to 'silence' protein fractions toxic to those with celiac disease holds promise for cereal development, researchers say. The review, published in the *Journal of Cereal Science*, suggested that while conventional breeding approaches to obtain wheat strains with reduced gluten toxicity was difficult, using RNA interference (RNAi) technology held the greatest promise in reducing or 'silencing' the gluten proteins in wheat and other cereals.

Via the technology, the gluten fractions toxic to those with celiac disease could be adjusted, enabling the development of gluten-free cereal grains. However, the researchers said progression could face hurdles given global concerns around GMO.

"Until now, most commercialized GM crops offer pest or herbicide resistance, for which the end consumer benefits are not obvious. For consumers, large companies and/or farmers, are the major beneficiaries of GM crops, and the benefits that they may have for agriculture and the environment is very diluted as a result of heavy campaigning by anti-GMO groups in developed countries," the researchers wrote. However, they said the development of GM wheat suitable for celiacs and other gluten intolerances could be a major turning point.

Read the full, original article: [GM wheat presents 'attractive' gluten-free opportunity: Review](#)