Redefining GM:

A "novel" approach to food labelling

Foods developed using new breeding techniques (NBTs), such as precise gene-editing tools, have been excluded from the definition of genetically modified (GM) food after an update to the Food Standards Code this year. The move modernises an antiquated Code, brings Australia into line with global trading partners and ensures Australia gets to take advantage of new technologies.

The updated definition provides a science-based, risk-proportionate definition of "novel DNA". From now on, only foods containing genetic material that could *not* occur through traditional breeding will be regulated and labelled as GM ensuring ongoing integrity in the food labelling system.

Why it matters

Gene-edited foods simply replicate changes that can occur naturally, only faster with greater precision. They're indistinguishable from conventionally bred crops but under the old rules they faced the same lengthy and costly GM assessments.

This change in definition prevents misleading labelling. Without it, everyday crops that are no different from conventional varieties risk being stamped "GM", confusing consumers and eroding trust.

It also cuts red tape. By removing unnecessary regulatory hurdles, changes to the food standard ensures Australia can remain competitive in global agricultural innovation and deliver benefits to consumers through crops with enhanced nutrition, longer shelf life or even reduced allergenic proteins, such as gluten-free wheat.

The missing link in modernising gene tech

This decision builds on earlier reforms by the Office of the Gene Technology Regulator (OGTR) which in 2019 modernised regulations to ensure that gene-editing innovations were not inappropriately treated as GM innovations by the Regulator. However, the journey isn't over.

Despite these positive actions over the last five years, no further necessary updates to the regulations can commence until the implementation of the recommendations from the Third Review of the National Gene Technology Scheme. Those reforms would modernise how gene-edited crops themselves, not just food, are regulated, ensuring consistency across agencies and giving farmers, consumers and innovators more clarity from research, to paddock, to plate.

What is Novel DNA?

Novel DNA means genetic material that couldn't be obtained through conventional breeding. Under the new rules, a food is only classed as GM if it contains:

- DNA from an unrelated species
- DNA rearranged in ways that can't occur through breeding
- Synthetic DNA built in a lab

If the change could occur on its own just faster or more precisely, it's not considered GM.

GM vs Gene-editing in action

Norfolk Healthy Produce

Genetically modified (GM): The Purple Tomato™

A GM tomato could soon appear in Australian supermarkets if regulators give the green light. The tomato contains genes from the edible purple snapdragon, enabling it to produce high levels of antioxidants. The high-antioxidant genes were incorporated using traditional GM techniques so this tomato falls under GM regulation.

Gene-editing: Climate resilient wheat

Australian and US researchers have collaborated on Australia's first gene-edited wheat field trials. The edits aim to boost yield potential and input-use efficiency, enhancing climate resilience and food security. These varieties do not contain foreign DNA, and the technique enables faster, more precise genetic improvement.