Additional Q&A - Steve Corin MPI

Q: Given that some gene editing techniques produce changes that are indistinguishable from naturally occurring processes, how are these labelling requirement enforced?

Food produced with gene technology must be approved by FSANZ and is subject to labelling requirements.

Gene editing is one of the new breeding techniques that FSANZ is reviewing. The focus is on what should be captured under GM food definitions in the Food Standards Code and hence the need for pre-market approval and safety assessment by FSANZ. As noted in the excerpt below - gene technology currently means recombinant DNA techniques that alter the heritable genetic material. Gene editing that does not involve recombinant DNA techniques falls outside Standard 1.5.2.

However, such foods could fall within the wider definition of novel food and if so would require an assessment if there was a safety issue identified (as with any new or novel food). Also if there was no novel DNA or protein they would be exempt from GM labelling as they as indistinguishable from their non-GM versions.

Further information on new breeding techniques and GM foods can be found on the FSANZ site including Q&As

https://www.foodstandards.gov.au/consumer/gmfood/Pages/Review-of-new-breeding-technologies-.aspx

Q: Moreover, if a producer claims their product contains no GMOs (but it actually does), and they do not apply for an approval, are there any mechanisms somewhere in the system to pick this up?

GM foods will need approval regardless of whether the product contains any novel DNA or protein e.g. GM soybeans need approval even though the refined soy oil from such beans does not need to be labelled.

https://www.foodstandards.gov.au/code/Pages/default.aspx

1.5.2—2 Definitions

Note 1 In this Code (see section 1.1.2—2):

food produced using gene technology means a food which has been derived or developed from an organism which has been modified by gene technology.

Note This definition does not include food derived from an animal or other organism which has been fed food produced using gene technology, unless the animal or other organism is itself a product of gene technology.

gene technology means recombinant DNA techniques that alter the heritable genetic material of living cells or organisms.

- Note 2 Definitions for genetically modified food, novel DNA and novel protein are in section 1.5.2—4.
- Note 3 Definitions for conventional breeding, line and transformation event are in Schedule 26.

1.5.2—4 Requirement to label food as 'genetically modified'

(1) This section applies to a food for sale that consists of, or has as an ingredient, food that is a genetically modified food, unless:

- (a) the genetically modified food:
 - (i) has been highly refined where the effect of the refining process is to remove novel DNA or novel protein; and
 - (ii) is not listed in section S26—3 as subject to the condition that its labelling must comply with this section; or
- (b) both of the following are satisfied:
 - (i) the genetically modified food is a substance *used as a processing aid or *used as a food additive in the food in accordance with this Code;
 - (ii) no novel DNA or novel protein from the substance remains present in the food; or
- (c) the genetically modified food is a *flavouring substance that is present in the food in a concentration of no more than 1 g of flavouring/kg of food; or
- (d) the genetically modified food is:
 - (i) unintentionally present in the food; and
 - (ii) present in an amount of no more than 10 g in a kilogram of each ingredient; or
- (e) the food is:
 - (i) intended for immediate consumption; and
 - (ii) prepared and sold from food premises and vending vehicles, including restaurants, take away outlets, caterers, or self-catering institutions.
- (5) In this section:

novel DNA and **novel protein** mean DNA or protein which, as a result of the use of gene technology, is different in chemical sequence or structure from DNA or protein present in counterpart food that has not been produced using gene technology, other than protein that:

- (a) is *used as a processing aid or *used as a food additive; and
- (b) has an amino acid sequence that is found in nature.

genetically modified food means a *food produced using gene technology that

- (a) contains novel DNA or novel protein; or
- (b) is listed in Section S26—3 as subject to the condition that its labelling must comply with this section.