

PUBLIC SENTIMENT TOWARD GENE EDITING/ ADVANCED BREEDING SOLUTIONS

July 2022

One of the biggest changes on the horizon for NZ food production is gene editing (CRISPR, or 'advanced breeding'). It is a given that conversation needs to be happening in this space, but a big question is who should lead it? In recent years, there has been an increase in genetically modified (GM) crops and the products derived from them. This has been accompanied by market concerns over safety and vocal opposition by activists. Brands are therefore going to be careful in approaching gene editing conversations; it is likely that any controversy will quickly be attached to the forerunner brands.

Research First has extensive experience in designing and delivering insight studies within the rural sector, this often incorporates public perception components. Curiosity got the better of us on this one; with none of our primary sector clients commissioning the study, we decided to do it anyway!

Our survey provides some first insights to indicate what the consumer wants from its food producers. The study was conducted with a statistically robust, nationally representative sample of New Zealanders. For more information or to discuss a more in-depth insights project please contact liz@researchfirst.co.nz

in association with

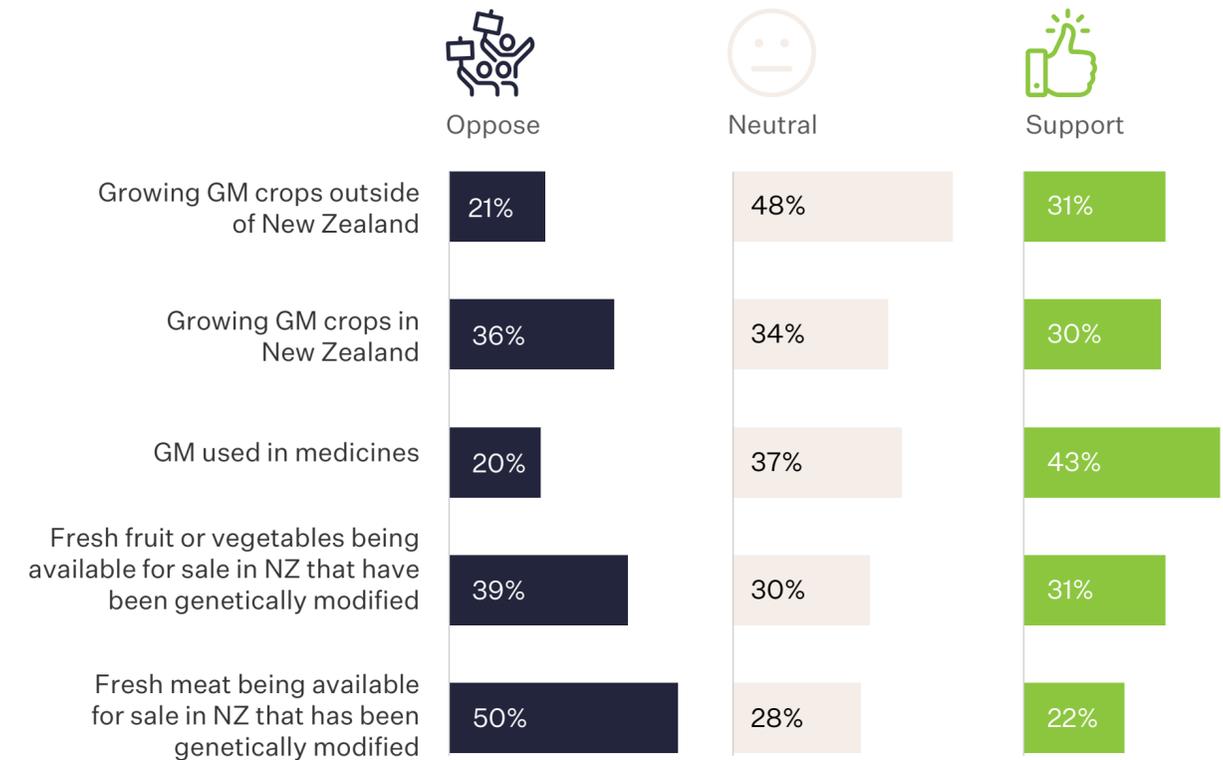


A third of New Zealanders would support GM crops being grown in New Zealand

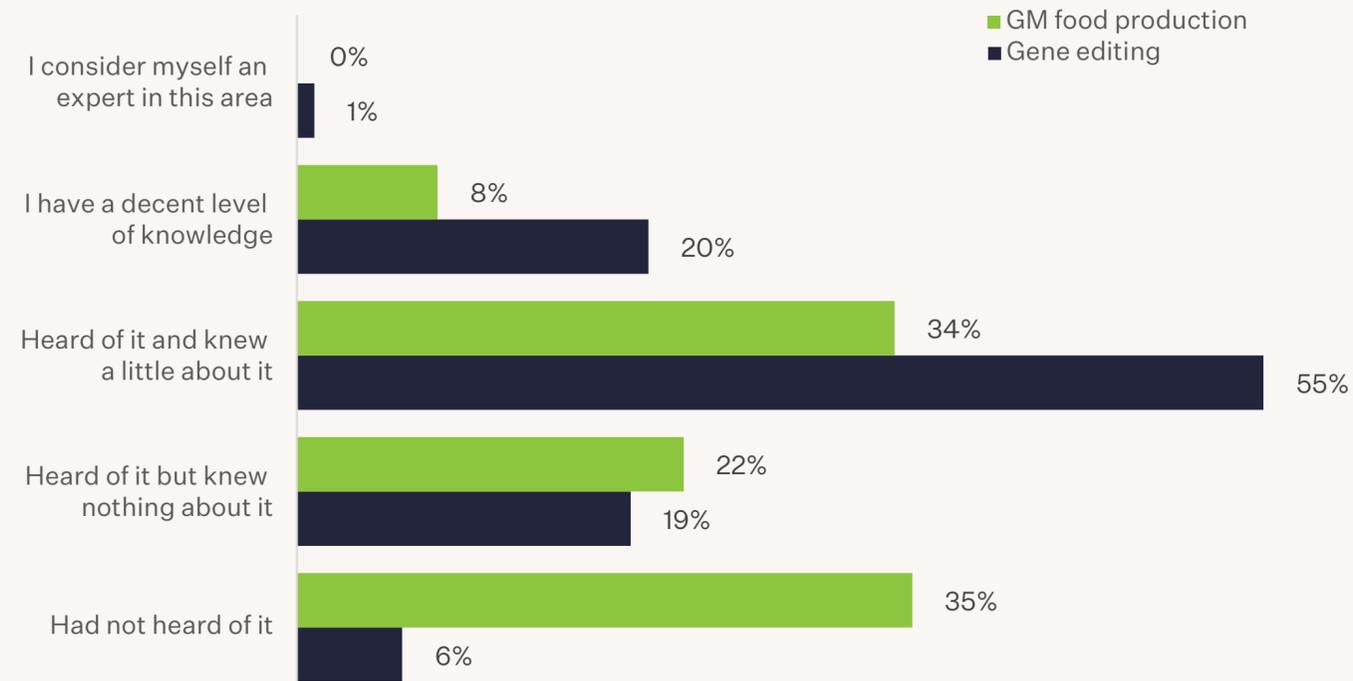
The reasons FOR support focused on:

- Improved yields as demand increases
- Providing resilience to climate change, pests and diseases (and lower needs for pesticides, fertilisers and water use)
- Ability to produce nutritionally richer foods
- Creation of jobs
- Potential to reduce cost to consumer and increase shelf life
- Belief in the science behind the process
- Just a lack of reasons not to

GM use in medicine receives more support than GM use in food production. However, a third would support GM fresh fruit and vegetables being for sale in NZ.



Awareness and knowledge of gene editing is much lower than GM



Our survey participants were provided with the definition that: "Gene edited foods are not the same as genetically modified foods (GM foods or GMO). GM foods add a gene (DNA) from a different plant or animal, whereas gene editing just changes the DNA that is already there; nothing new is added in. With gene editing we can disable some genes, correct harmful mutations, and change the activity of some specific genes in plants and animals."

Initial support for gene editing in New Zealand food production came in at 32% for, 47% neutral, and 21% against.

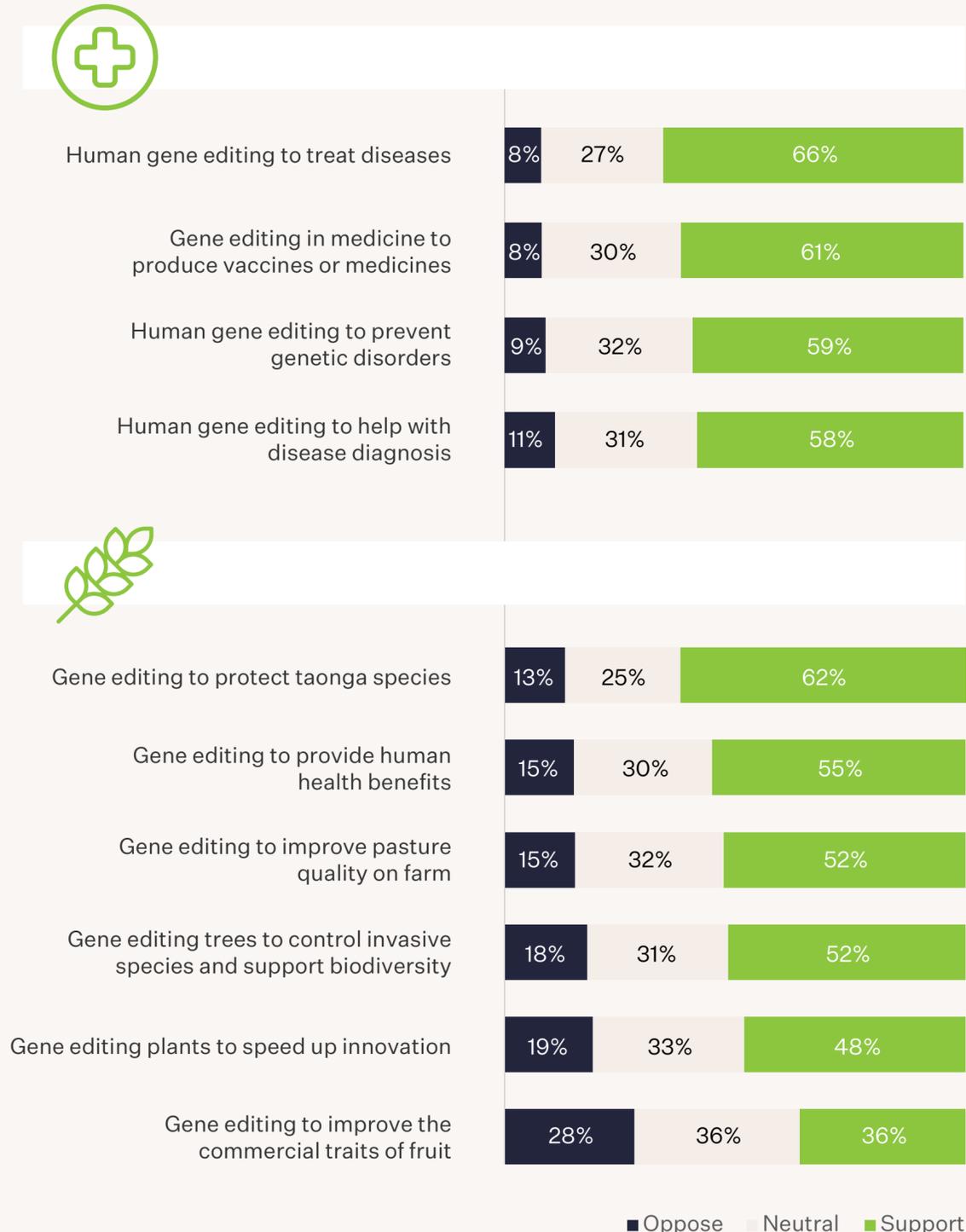
Reasons **AGAINST** focused on

- It not being natural
- It not being necessary
- Lack of information on the long-term effects (both to human health and to the planet)
- It being a mis-match with NZ's 'clean, green' image

When support is tested for specific applications, the results are interesting. We used sentiment toward use in health care as a way to provide context to perceptions of use in food production and farming.

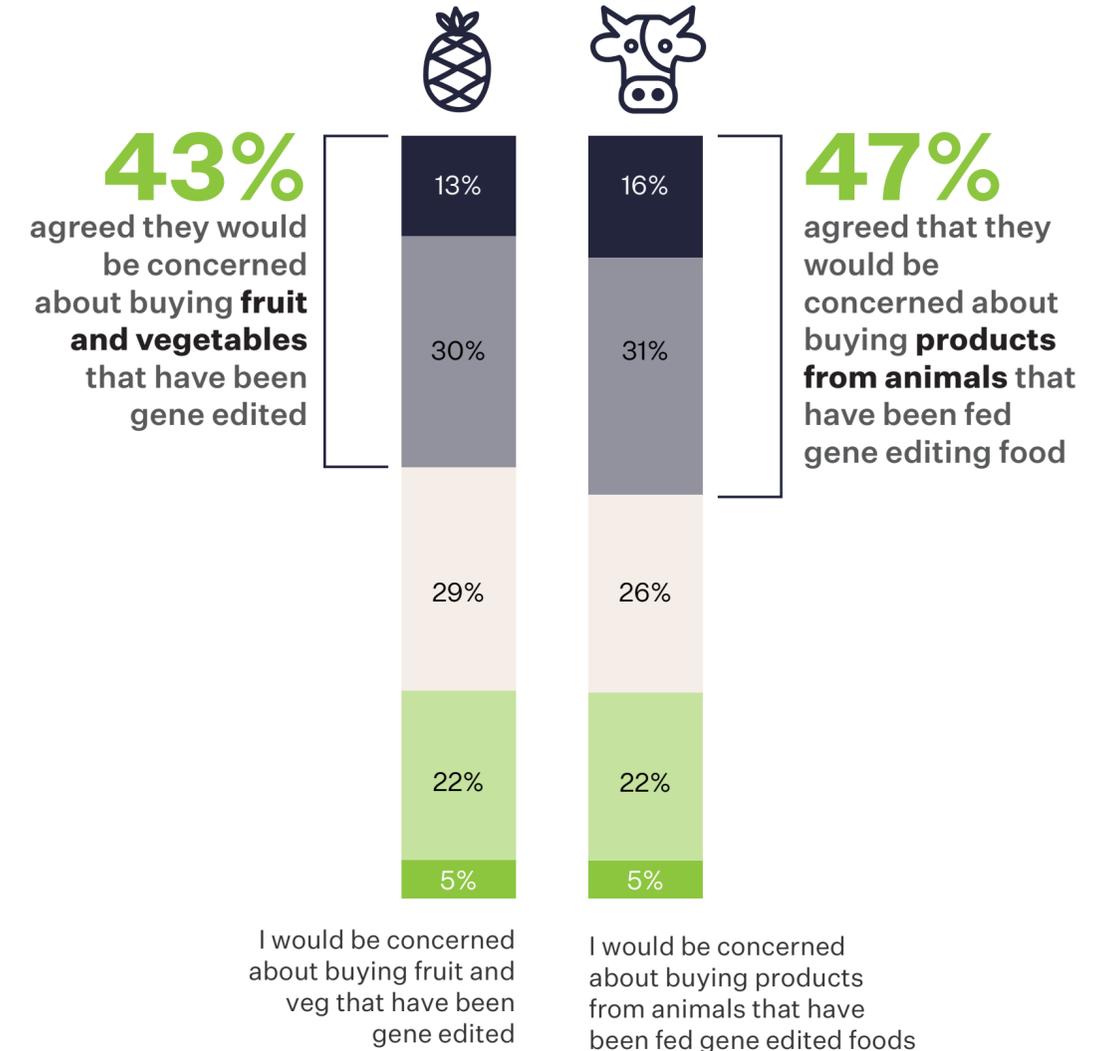
Levels of opposition to gene editing in the health care examples are slightly lower than those in the food production and farming examples. However, in the majority of cases, supporters are in the majority.

Within food and farming, support was highest where gene editing could offer protection for taonga species (e.g., increasing the disease resistance of Manuka to protect the species for honey producers). The lowest levels of support were attached to applications designed to improve just the commercial traits of fruit (e.g., to provide longer shelf lives)



Support is there, but the concerns are there too.

Despite reasonably high levels of support for gene editing...



Legend: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree