

# GE Honesty Evidence

www.gehonesty.nz

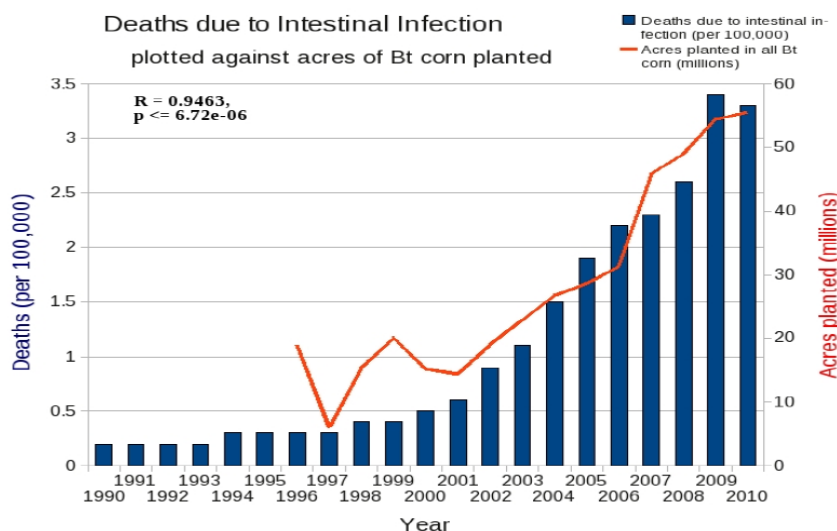
## 'Gene Tampering' Bill: A Threat to Our Health, Economy, and Future

Below are some, not all, of the available references on genetic engineering issues listed in the GE Honesty Gene Tamperers poster. Explore the websites listed at the end of this file where hundreds of articles and additional references lists are available.

## Health Dangers

### ⚠ GE damages gut health and immunity

1. The organisms in our microbiome, especially bacteria, govern our digestion, immune responses and even our moods. Most GE is done to force and perpetuate gene changes in bacteria but it causes thousands of unanticipated gene changes: our bacteria become unpredictable and no longer work naturally and properly. Genetic modification of bacteria can be seen as a form of infection, similar to the bad effects of antibiotic resistance. Gut infections increased dramatically since GE crops introduced.



[https://www.organic-systems.org/journal/92/JOS\\_Volume-9\\_Number-2\\_Nov\\_2014-Swanson-et-al.pdf](https://www.organic-systems.org/journal/92/JOS_Volume-9_Number-2_Nov_2014-Swanson-et-al.pdf) Access this link for additional charts showing very strong correlations between GMO crops and increasing human diseases.

2. Recent research indicates GE corn's insecticidal Cry1a proteins interact with Enterococcus species, common in the human gut, making the GE Cry1a's effect more damaging to gut microbes:

<https://www.sciencedirect.com/science/article/abs/pii/S0141813023055538>

### ⚠ Glyphosate Used on most GE crops risks birth defects

1. Spontaneous birth defect and spontaneous abortions 2 and 3 times higher in Argentine town surrounded by GE crops than national average. Article: <https://www.gmwatch.org/en/106-news/latest-news/18245-argentine-study-links-glyphosate-herbicide-to-miscarriage-birth-defects>
2. Rat Study found glyphosate exposure of grandparent rats caused dramatic increase in disease and birth defects in their grand and great grandchildren. April 2019 Nature Scientific Reports: <https://www.nature.com/articles/s41598-019-42860-0.pdf>
3. Monsanto and Germany keep birth defect research secret 2011 articles: <http://earthopensource.org/earth-open-source-reports/roundup-and-birth-defects-is-the-public->

[being-kept-in-the-dark/](http://being-kept-in-the-dark/) and Journal article: <http://earthopensource.org/wp-content/uploads/Antoniou-Teratogenic-Effects-of-Glyphosate-Based-Herbicides.pdf>

4. Mothers' glyphosate levels associated with pre-term births: <https://www.sciencedirect.com/science/article/abs/pii/S0013935121011051?via%3Dihub>
5. IARC classifies Glyphosate as 2A, a probable human carcinogen, while indicating "sufficient evidence" of it causing cancer in animals. <https://www.iarc.who.int/featured-news/media-centre-iarc-news-glyphosate/>
6. Decades of duplicity in science. The Monsanto Papers: Poisoning the Scientific Well <https://journals.sagepub.com/doi/full/10.3233/JRS-180028>

### ⚠ GE Food remains untested on humans. Why is that?

1. In the mid 1990's all GE/GMO food crops were deemed to be 'substantially equivalent' to natural food by a former Monsanto attorney working for the US FDA, against the advice of Agency scientists. This action allowed introduction of untested, unregistered GMOs into the food supply in the US and worldwide. Article: Suppressing Research Trials to Determine Safety in Humans <https://responsibletechnology.org/the-cover-up/>
2. First long term animal study of GMO toxicity by Dr Gilles-Eric Seralini published in 2012 was retracted under intense pressure from scientists in the pay of chemical and biotech companies. See Monsanto Papers link above. It was later validated and republished. It is acknowledged now to be valid research. <https://pubmed.ncbi.nlm.nih.gov/27752412/> He found serious kidney damage, tumours and premature deaths in rats fed GMO corn with or without glyphosate compared to non GMO corn.

**Chronic Toxicity of GMO Crop or Roundup®**

GMO and/or Roundup cause adverse health effects

- 50% males & 70 % females died prematurely
- (Tumors developed after 4-7 months vs 23 mo in control)
- Females = 2-3 X mammary tumors & pituitary disorders
- Males = kidney & skin tumors, liver & kidney damage
- All GMO and RU had digestive disorders

**Livers (L) UTC; (R) GMO+R**

**Mammary cancer: GMO, GMO+RU, RU @ (1 ppb)**

**Kidney damage (below)**  
(L) UTC GMO GMO+R RU

3. Analysis of Seralini 'Affair' 2015 confirms validity of Seralini findings of increased tumours and death from both GMO corn and glyphosate: <https://enveurope.springeropen.com/articles/10.1186/s12302-015-0049-2>
4. Evaluation of adverse effects/events of genetically modified food consumption: a systematic review of animal and human studies C. Shen et al Env Sci Eur Jan 22 "Serious adverse events of GM consumption include mortality, tumour or cancer, significant low fertility, decreased learning and reaction abilities, and some organ abnormalities." <https://enveurope.springeropen.com/articles/10.1186/s12302-021-00578-9>

*People want to know if their food comes from GE crops. This bill would remove any requirement for registering or labelling GMOs in food. We need compulsory labelling in order to have a choice in what we eat.*

### **⚠ Mexico banned GE corn** to protect their people and their crops.

1. Mexico has an ongoing 'trade war' with the US over GMO corn in their staple food – corn tortillas. Article: <https://usrtk.org/gmo/new-scientific-analyses-mexicos-restrictions-on-gm-corn-glyphosate-health-risks/> Dossier: <https://usrtk.org/wp-content/uploads/2024/11/DOSSIER-MAIZ-2024-ENGfinal-5.pdf>
2. International support for Mexico dossier on GE Corn risks: <https://sustainablepulse.com/2024/04/02/food-safety-experts-support-mexico-as-us-attempts-to-overturn-gmo-ban/>
3. Analysis of GE CRISPR modified human cells show thousands of unintended changes particularly associated with cancer. Overview: <https://sustainablepulse.com/2024/07/15/gene-editing-causes-unintended-genetic-changes-with-implications-for-food-and-agriculture/> Research: <https://www.nature.com/articles/s41588-024-01758-y>

**⚠ Tampering with Food Labelling** We must know what's in our food. Our markets currently demand GMO labelling of the foods we export. Testing of GMOs in products will only increase and we will be blocked by overseas unless we label truthfully.

1. Fonterra finds a GMO free label preferred by 71% of global milk drinkers who are willing to pay a premium of 52% for non GMO milk <https://www.nzmp.com/global/en/news/organic-dairy-earns-its-premium.html>
2. The USA and most countries are demanding GMOs in food be labelled. <https://www.justlabelit.org/right-to-know-center/labeling-around-the-world/>
3. Most countries prefer non GMOs [https://www.sustainabilitynz.org/wp-content/uploads/2018/12/GMFood\\_FactFigures\\_Dec-2018.pdf](https://www.sustainabilitynz.org/wp-content/uploads/2018/12/GMFood_FactFigures_Dec-2018.pdf)

*Why gamble with our health? Demand testing, registration, and clear GE food labels. We deserve to know what we're eating.*

## **Environmental Sabotage**

**⚠ Contamination of NZ** Genetic Engineering is based on outdated, simplistic and dead wrong 'science'.

1. Dr Jack Heinemann, Professor Bio Science U Canterbury outlines inevitable contamination from CRISPR gene editing <https://www.quorumsense.org.nz/content/podcast/45-unintended-consequences-of-ge-and-gmos-with-prof-jack-heinemann?rq=Heinemann>
2. Recent overview of GE contamination risks for microbes and agriculture. FOE 2023 <https://www.gefree.org.nz/assets/Uploads/GE-Microbes-Report-Final.pdf>
3. GE dsRNA does persist and replicate in the environment. NZ review by Dr J Heinemann U of Canterbury Article: <https://pubmed.ncbi.nlm.nih.gov/31174887/>
4. Thousands of unintended gene changes found when entire genome of CRISPR organisms were analysed. Results were unpredictable proteins, mutation reactions, particularly significant cancer tendencies. Discussion: <https://sustainablepulse.com/2024/07/15/gene-editing-causes-unintended-genetic-changes-with-implications-for-food-and-agriculture/> Research article: <https://www.nature.com/articles/s41588-024-01758-y>
5. Fonterra's stated views on GE contamination and market rejection risks:

*"Fonterra does not support field trials of GMOs in New Zealand at this time and would only support such trials if we can be convinced that this would not be perceived as a release; containment could be assessed; and that doing so would not be counter to the needs and desires of customers, consumers and key stakeholders. At this time we do not have the confidence that such criteria can be met." Fonterra Statement prepared for Radio New Zealand programme, The Future of Genetic Modification in New Zealand. December 9 2012.*

*"New Zealand is one of the only dairying countries in the world which has not approved release of genetically modified crops"* NZMP April 2023. Leveraging the Non-GMO Project Advantage

*"We recognise that once these regulations are relaxed there is no turning back, so we believe this is a conversation that must proceed carefully."* Fonterra March 2023 Submission to the Draft Food and Beverage Industry Transformation Plan

6. Canadian report on GE plants escaping into environments worldwide. List of known events to date: <https://cban.ca/gmos/issues/contamination/>
7. Brazilians find 34% of native corn species had acquired GE proteins from genetically engineered corn crops in the region. 2022 Research paper: <https://www.gefree.org.nz/assets/Uploads/plants-11-00603-with-cover.pdf>
8. Biodiversity is reduced by cultivation of GE crops. Farmers have valid concerns about acceleration of herbicide-resistant weeds: <https://www.sciencedirect.com/science/article/abs/pii/S0278691517303411>
9. GE crops have not reduced pesticide use nor appreciably increased yield. They have caused a dramatic increase in herbicide resistant weeds in soy, corn, canola and cotton crops. <https://eu.boell.org/en/PesticideAtlas-genetic-engineering>

### **Gene Editing to Cut Emissions. We Don't Need It.**

1. Taxpayers have invested \$300million+ over 20 years to develop technologies to reduce NZ's pastoral emissions from cows and sheep through biotech (genetically modified) vaccines and boluses. [https://www.pggrc.co.nz/files/1671050487\\_PGgRc%20Summary%20Dec22%20final%20121222v2.pdf](https://www.pggrc.co.nz/files/1671050487_PGgRc%20Summary%20Dec22%20final%20121222v2.pdf) . Similar feed additive Bovaer recently introduced in the UK is being rejected by milk consumers.
2. Ag Research has been carrying out GE Rye Grass research aimed at boosting production and drought tolerance of NZ's main pasture species for over 20 years, but withdrew its 2023 application for field trials in Australia due to insufficient growth in previous trials and the likely rejection by the Australian regulator. <https://www.gefree.org.nz/press-releases-2019-2023/20230602/> and <https://www.gefree.org.nz/press-releases-2019-2023/20220907/>
3. Despite clear decline in NZ pasture productivity and soil carbon levels from increased urea applied, instead of regenerative farming practices, Ag Research recommends applying more nitrogen as a solution. This ignores large documented increases in soil carbon sequestration, increased production and nutrition in multi-species pastures when regenerative principles are used. Regenerative grazing has been shown to quickly store enough soil carbon to more than offset all of NZ's greenhouse gas emissions. <https://www.farmersweekly.co.nz/news/grass-no-longer-as-green-in-nz-pastures/>
4. Up to 10+tonnes of Carbon/hectare/yr. can be stored through regenerative grazing: [tandfonline.com/doi/abs/10.2989/10220119.2017.1334706](https://tandfonline.com/doi/abs/10.2989/10220119.2017.1334706)
5. Diverse pastures match production of high fert pastures: <https://bg.copernicus.org/articles/6/1695/2009/>

6. Regenerative grazing can offset commercial and residential emissions and restore degraded land:  
<https://civileats.com/2021/01/06/a-new-study-on-regenerative-grazing-complicates-climate-optimism/>
7. Grass cover can reduce methane emissions:  
<https://www.sciencedirect.com/science/article/abs/pii/S0048969722033228>
8. Regenerative grazing solves most farming/climate change issues:  
<https://www.tandfonline.com/doi/full/10.1080/00380768.2020.1718548#abstract>

*We don't need more polluting urea or contaminating monoculture GE rye grass or expensive methane vaccines and feed additives. The solution to our emissions issue lies in growing varied grasses with greater nutrient density and fewer synthetic inputs. Regenerative farming can restore natural landscape functions.*

## Economic Damage

### ⚠️ Our customers would reject GE food from NZ costing us over \$20 billion a year

The New Zealand Institute of Economic Research (NZIER) recently released the report Potential costs of regulatory changes for gene technology: economic assessments of an MBE proposal. A report to Organics Aotearoa New Zealand. Nov 2024. It is the only recent, prestigious and independent study of the economic impacts of the Gene Tampering Bill.

[https://drive.google.com/file/d/1U\\_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view](https://drive.google.com/file/d/1U_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view). The NZIER report states:

1. “Environmental release of GMOs in New Zealand could reduce exports from the primary sector by up to \$10 billion to \$20 billion annually.” NZIER. 2024. Tables 1, 2, 3
2. “The central point is that a science-push focus promoted by the new regulations – invent it and they will come – ignores the actual evidence of prior attempts to commercialise agri- food products of gene technology.” NZIER 2024 p20

### ⚠️ Only dishonest corporations and scientists would benefit

*“Those changes would encourage people and companies to come to New Zealand to experiment. They would also **encourage bad actors** to try their luck in a weakly regulated environment. One possibility is a race to the bottom: poorly capitalised companies with weak ties to New Zealand experimenting without oversight in the hopes of finding success, but able to exit quickly if the experiments go badly.”* NZIER ‘24 p4

[https://drive.google.com/file/d/1U\\_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view](https://drive.google.com/file/d/1U_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view)

### ⚠️ Honest farmers, workers and customers would suffer

1. “The proposed regulations would likely encourage New Zealand to take on more risk from gene technology than is economically optimal. The **individual innovators** making decisions about growing specific crops would **benefit** from the upside risk **but not bear sufficient costs from the downside risk**. Their individual calculations would lead the country to take on more risk in aggregate than is optimal.” NZIER 2024 p16  
[https://drive.google.com/file/d/1U\\_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view](https://drive.google.com/file/d/1U_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view)
2. “If people do not bear enough costs for risks, then they take too much risk and harm the collective wellbeing.” NZIER 2024 p15  
[https://drive.google.com/file/d/1U\\_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view](https://drive.google.com/file/d/1U_E4gdKm8ijNhqMNqSipCPwK2T6rGRp3/view)



## ⚠ **More and More Countries Ban GE/GMOs**

Few countries grow GMOs. Some prohibit importation. Most allow importation of products containing GMO Corn, Soy, Canola, Cotton, Lucerne and Sugar Beet, especially for animal feed. Vast majority want mandatory labelling of GMO human foods and increasingly want food labelled if the animals were fed GE feed.

1. Overall list of countries prohibiting cultivation or banning use: <https://worldpopulationreview.com/country-rankings/countries-that-ban-gmos>
2. Bio tech-friendly education site provides similar figures: <https://geneticliteracyproject.org/gmo-faq/where-are-gmo-crops-and-animals-approved-and-banned/>

## **Organisations and Additional Info:**

**RCR** <https://realitycheck.radio/> Extensive coverage of NZ genetic engineering issue. Multiple interviews. Specific section devoted to the Gene Tampering Bill <https://realitycheck.radio/gene-tech/> Get their Action Pack.

**OANZ** <https://www.oanz.org/> Committed to growing NZ's organic sector. Good source of Bill-oriented information and submission template.

**GE Free NZ** <https://www.gefree.org.nz/> Prolific source of NZ articles, links and press releases.

**GE Honesty** <https://www.gehonesty.nz/> See website for 1 pager poster and an extensive list of evidence. <https://www.gefree.org.nz/articles-and-journal-publications/>

**Hatchard Report** <https://hatchardreport.com/> NZ perspectives from an international food safety specialist.

**GM Watch UK** <https://gmwatch.org/en/> Long time source of info on GE worldwide.

[https://www.gmwatch.org/files/GMO\\_Myths-and-Facts.pdf](https://www.gmwatch.org/files/GMO_Myths-and-Facts.pdf) Myths, Facts and References  
<https://gmwatch.org/en/67-uncategorised/18765-references-for-genetically-modified-crops-and-foods-the-facts>

<https://www.gmwatch.org/en/106-news/latest-news/19697-gmwatch-mythbuster-exposes-uk-government-misinformation-on-gene-editing> Dozens of references on problems with GMOs.

<https://gmwatch.org/en/articles/non-gm-successes> History of broken gene tech promises.

**Institute for Responsible Technology USA** <https://responsibletechnology.org/> Extensive information and short videos on GE issue from USA and international angles.

*Thank you for reading this far! NZ's genetic integrity and economic future depend on what you do with this information. We have a precious advantage being GE free. Let's not squander it.*

## GE Honesty Call to Action [www.gehonesty.nz](http://www.gehonesty.nz)

### Powerful actions to take NOW to stop the Gene Tampering Bill. Before February 17<sup>th</sup>:

- **Ring your MP** via Parliament's 0800 7273 6282. Tell them to kill the GE Bill. No explanation is necessary. Cite whatever most disgusts you.
- **Get 5 other people to do** the same thing. Make the calls multiply and go viral. Post this info where ever you can. Very effective move...they do pay attention to lots of calls.
- **Make a submission on the Bill** through any of these Links:

[https://www.parliament.nz/en/pb/sc/make-a-submission/document/54SCHEA\\_SCF\\_22059628-B0CC-4931-5E07-08DD18A12BFB/gene-technology-bill#RelatedAnchor](https://www.parliament.nz/en/pb/sc/make-a-submission/document/54SCHEA_SCF_22059628-B0CC-4931-5E07-08DD18A12BFB/gene-technology-bill#RelatedAnchor)

<https://realitycheck.radio/gene-tech/> Get their Action Pack.

<https://www.oanz.org/gefree-future-make-a-submission>

<https://www.gefree.org.nz/gene-technology-bill/>

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<https://www.gmwatch.org/en/106-news/latest-news/19697-gmwatch-mythbuster-exposes-uk-government-misinformation-on-gene-editing>

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