

Guest Editorial

Genetically engineered food - the right to say no

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All parties engaged in the current debate about genetically engineered food (GEF) have declared their rights.

The biotech industry has declared the right to embark on a multibillion dollar commercial enterprise. This group believes they have the right *not* to declare that the food they produce has transpecies DNA inserts.

Elected governments of the developed world have declared the right to form a consortium and support these industries by forming the World Trade Organisation. They act as if they have the right to install a neo-feudalism system that disenfranchises people of the right to know the composition of their food. The feudal lord is the profit-driven genetech industry and the serfs are the consumer. The overseers of this fiefdom are governments who get a share of the profits.

Captive scientists declare it their right to produce ever increasing transpecies DNA inserts into common foods and to accept funding from the industry in the name of pure science.

Consumer organisations believe it is their right to choose the food they eat and are demanding labelling of GEF and encouraging consumer boycotts of commercial outlets of GEF and peaceful protest activism including legal action. The media believe they have the right to call these organisations eco-terrorists.

Independent scientists¹ and doctors believe it is their right to make a cautionary call. The RNZCGP, in accordance with its constitution,² has firmly declared that GEF must be labelled because its long term effects on human health is unknown and in the presence of significant scientific uncertainty, food labelling is essential to give consumer choice. This is in accordance with the philosophy laid down by the Public Health Commission in 1995.³

GE is an artificial insertion of transphyla genetic material into commonly consumed foods without testing the effects on human health. It is being introduced in an unethical manner, without the Three Phase Pharmacological study that all new drugs and vaccines are subjected to.

The FDA has not independently evaluated the safety of these novel food substances, yet has passed them as safe.

GEF causes concern because of potential risks of antibiotic resistance,⁴ primary allergenicity, delayed hypersensitivity, anamnestic reactions, autoimmune disorder and alterations of the HLA system, tumour formation, altered patterns of morbidity

from known and yet to be identified disease processes. Detractors say this risk occurs anyway. Random chance can be coped with, but widespread assault of our cell lines with several types of never-before-encountered DNA carries immense risk in the long term.

Cancer rates are climbing, male and female fertility is falling, chronic fatigue syndromes are widespread and we do not really know why. What are the variables that can present with unknown gene codes in our gut?

Morbidity and disability are important outcomes that should also be taken into account. One such approach which has generated a comprehensive picture of the burden of disease, covering all major disease and injury categories, is the Disability Adjusted Life Years (DALYs)⁵ a WHO/World Bank classification as a measure of health epidemiology.

Cotton seed oil and fibre are used extensively in foodstuffs, including cooking oil, mayonnaise and salad dressing, the fibre in sausage casings, and viscosity enhancers. The cotton lines have three new genes transferred from the soil bacterium *Bacillus thuringiensis kurstaki*.⁶ These genes have the potential to horizontally transfer antibiotic resistance – to *E. coli* – the microbiologist's nightmare.⁷

It is essential that we act as patient advocates in this matter and be vigilant in preventing what could be a massive environmental disaster. A moratorium on this technology is essential until hazards are identified. If we are proven wrong, we have still acted as wise counsel using the precautionary principle.⁸

- See also p59 for the EWP report

References

- 1 Union of Concerned Scientists (<http://www.ucsusa.org/agriculture/index.html>)
- 2 RNZCGP Constitution, Amendment 1997.
- 3 The Public Health Commission's Advice to the Minister of Health, 1994 -1995; 11-20.
- 4 Levy SB. *The antibiotic paradox: how miracle drugs are destroying the miracle*. New York: Plenum, 1992.
- 5 Murray CJL and Lopez AD, (eds). *The Global Burden of Disease: A Comprehensive Assessment Of Mortality And Disability From Diseases and Injuries and Risk Factors in 1990 and Projected to 2020*. Published by Harvard School of Public health on behalf of WHO and the World Bank. Harvard University Press, 1996.
- 6 ANZFA/Monsanto application to amend the food standard code cl 2 of Standard 18. A 338, Roundup Ready Soya Bean, A341 Ingard Cotton.
- 7 Personal communication, Dr Arthur Morris, FRACPA, Microbiologist, Diagnostic Laboratories, Auckland.
- 8 Wingspread, Wisconsin. The precautionary principle.