Review of the Genetically Modified Crops Free Areas Act 2003

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Conclusion – Retain the Genetically Modified Crops Free Areas Act 2003

MADGE believes that the current Genetically Modified Crops Free Areas Act 2003 should be retained for the following reasons:

- It provides the WA government with the ability to decide if GM crops are to be grown, and if so, where they can be grown
- Each crop can be assessed for its markets and marketability

The reasons for the conclusion are listed below:

- (1) Continued lack of market acceptance for GM crops
- (2) Consumers want to know what they are eating
- (3) There is a wide and rational basis for consumer rejection of GM food
- (4) Consumer opposition is intensifying and is supported by doctors' calling for a ban on GM food
- 1) Continued lack of market acceptance for GM crops

GM crops have been grown commercially since 1996 yet they are becoming increasingly controversial. There is no market anywhere in the world that prefers GM crops. The main commercially grown GM crops are: GM soy, cotton, corn, canola and sugar beet. None of these are eaten without being processed first (GM corn is the high starch corn not sweet corn). They also provide a large amount of the mysterious ingredients in processed food for example: lecithin and HFCS.

They are mainly used for:

- Animal feed
- Biofuels
- Processed food

The two traits in GM are:

- HT herbicide resistance which means the crop can be sprayed with herbicide and not die
- IR insect resistance the plant produces an insect toxin in every cell

Both traits lead to the increasing use of pesticides and therefore the contamination of food with toxins. Both traits are becoming increasingly unworkable. Weeds and insects are becoming resistant to the poisons used on and within the plants. This can be demonstrated by:

- Reports of superweeds (1)
- Reports of resistant insects (2)
- New "Smartstax" GM corn containing 8 different GM traits. Six make the plant toxic to insects and two make it able to be sprayed with two different herbicides and not die (3)



Application to create 24D resistant soya. 24D is an ingredient of Agent Orange which
would be sprayed onto the plant. This is required as weeds are becoming resistant to
milder herbicides (4)

It is clear that GM is a technology that centres on applying or creating poisons in crops. Since nature is never static the number and strength of the poisons has to increase to continue to defeat weeds and pests. Whether the toxin intensive GM method of agriculture is a sensible way to produce food urgently needs to be debated.

2) Consumers want to know what they are eating

Food labelling regulations worldwide have influenced consumers:

- In the US there is no labelling requirement and most people do not know they are eating GM food. However this is changing and the labelling of the GM hormone rBGH led to it being phased out in the dairy industry (5). Now people are asking for labelling of other ingredients.(6)
- In Australia, although it is estimated that GM ingredients are in 70% of processed food the labelling laws mean that virtually no GM ingredient requires labelling (7).
 MADGE has found less than a handful of products with labelled GM ingredients. The Australian public have repeatedly shown that they want GM ingredients labelled (8)
- In Europe foods produced with GM crops, even if there is no novel DNA in the final product, are labelled. Europeans are now demanding that products from animals fed GM are labelled (9). Promoters of GM point to the increase in GM canola being exported into Europe. These imports are due to the requirement for a certain percentage of biofuels to be produced. The GM canola is not going into the food supply as it is continually rejected by the European public.(10)

The enormous resistance by companies and regulators to the labelling of GM foods merely increases public levels of doubt about their safety. If these foods are no different to non-GM foods, then why is there a reluctance to let people know they are eating them? Food labels would create the basis for comparing whether GM food is in fact the same as non-GM food.

In fact since the introduction of GM foods, food allergies have soared (11). Many other food related illnesses have increased too (12). GM foods may or may not be the cause of this. However since GM foods are not adequately labelled it is impossible to tell whether they are having an effect on public health. There have been no epidemiological studies into the effect of GM food on public health anywhere in the world.

The public is rightly sceptical of claims that just because there has not been a visible dramatic health catastrophe directly linked to GM foods they must be safe.

3) There is a wide and rational basis for consumer rejection of GM food

The public mistrust how GM food was introduced and who controls it

The majority of the general public has never accepted that GM foods are safe. GM foods were introduced without a comprehensive public discussion, understanding of the technology or adequate labelling. This leaves the general public with little choice to know



exactly what they are eating. Many people feel outrage when they discover they have been buying and feeding their family GM food.

The public understands that some companies will benefit enormously from GM food and this increases the mistrust. When regulators and government appear to allow no choice in the matter of GM, shown by the lack of labelling, weak regulation and no requirements for independent testing, then large sections of the public becomes cynical about GM food.

Scientific studies showing harm from GM dismissed

When evidence of harm is produced, as occurs repeatedly, instead of the evidence being examined and dealt with in a reasoned, transparent and thorough manner it is dismissed. Here are some examples:

- 1998 Dr Arpad Pustzai was a top plant transgenic expert in Europe. He reported that rats fed GM potatoes had multiple health problems including: inhibited development of their brains, livers and testicles, partial atrophy of the liver, enlarged pancreases and intestines and immune system damage (13)
- 2008 Mengheri et al Mice fed GM corn had negative intestinal and immune responses (14)
- 2008 Velimirov et al Mice fed GM corn had reduced fertility (15)
- 2000 Dr Chapela found GM contamination of native Mexican corn with GM corn
 (16)
- 2009 Dr Andres Carrasco showed that Roundup, the herbicide sprayed on Roundup Ready crops, causes birth defects at much lower levels than is used on crops. People in Argentina have been dealing with an explosion in serious ill-health since the introduction of GM crops. (17)

Dr Pustzai was dismissed from his post, his research team was disbanded, he was gagged with threats of legal action and the research project was terminated. Dr Chapela was denied tenure at his university by a committee described as having "conflicts of interest as naked as it gets". He appealed and was later granted tenure.(18) Dr Andres Carrasco has received threatening visits and phone calls since his research was made public (19).

When the public understand that issues of science are not being examined in a scientific way they become deeply concerned and mistrustful.

Superficial and deceptive reporting

Media reports of GM are mainly of the "jam tomorrow" variety. There are promises of feeding the world, increased nutrients, drought tolerance etc. There is no balanced reporting of the GM crop failure which happened recently in GM corn in Africa and in GM cotton in India (20). There is also limited reporting of studies such as the "Failure to Yield" which showed that GM crops had mainly either equivalent or reduced yield and that the conventional breeding was the main cause of increased yield (21).



There is also no clear or comprehensive analysis of the performance of GM to date. This is one of the reasons that groups like MADGE spend a considerable amount of time and effort to inform people of the wider story of GM. The media's repeated failure to report on the credible evidence of harm caused by GM crops encourages cynicism.

Weak regulation

Our food regulator, FSANZ, has passed every application for GM crops. FSANZ does no independent testing but relies on the studies done by the GM companies that wish to release the GM food. FSANZ expects the companies to inform them if there are any post market problems with the food. (22)

4) Consumer resistance is intensifying and is supported by doctors warnings on GM food

Globally consumers are campaigning for labelling of GM food. When labels give consumers choice, the overwhelming choice is for non-GM food.

The American Academy of Environmental Medicine (AAEM), a US doctors' group, issued a statement on GM food in May this year (23). They are calling for:

- Physicians to educate their patients, the medical community, and the public to avoid GM foods when possible and provide educational materials concerning GM foods and health risks.
- Physicians to consider the possible role of GM foods in the disease processes of the patients they treat and to document any changes in patient health when changing from GM food to non-GM food.
- Our members, the medical community, and the independent scientific community to gather case studies potentially related to GM food consumption and health effects, begin epidemiological research to investigate the role of GM foods on human health, and conduct safe methods of determining the effect of GM foods on human health.
- For a moratorium on GM food, implementation of immediate long term independent safety testing, and labeling of GM foods, which is necessary for the health and safety of consumers.

They are asking for this because "There is more than a casual association between GM foods and adverse health effects. There is causation as defined by Hill's Criteria in the areas of strength of association, consistency, specificity, biological gradient, and biological plausibility. The strength of association and consistency between GM foods and disease is confirmed in several animal studies."

Irish Doctors are also calling for a ban on GM food. (24) It is extremely likely that other doctors groups will follow suit.

Conclusion



The Genetically Modified Crops Free Areas Act 2003 allows WA to make independent decisions on the growing or prevention of growing GM crops. GM is an unrecallable living technology. GM crops have been resisted for many years by consumers worldwide. Their rejection of GM is seemingly increasingly rational and sensible in the light of health warnings from doctors, increasing food related illnesses and the increasingly toxic GM crops being developed.

WA is in the fortunate position to supply the market with GM free canola. GM free canola is what the majority of consumers want to eat. Why not give the customers what they want?

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