

# Eating Naturally & Avoiding GM Foods

## An Information Guide – Aug 2008



### Make a difference, one purchase at a time !

Countless polls have shown that the vast majority of Australians do not want genetically modified (GM) foods for themselves, their children, or indeed as food for our country's agricultural animals such as chickens or dairy cows. Rather, increasing numbers of Australians simply want whole natural foods.

This brief information sheet provides you with the essential facts you need if you wish to exercise your legitimate rights as a consumer to avoid GM foods. It tells you: what GM foods are on sale in Australia, what labels do (and do NOT) tell you, and the steps you can take to eat food as nature intended it.

### So what GM Foods are in Australia now? (August 2008)

There are two sources of GM food in Australia, locally grown and imported.



**Local:** There are only two GM food crops currently approved for growing in Australia, GM cotton and GM canola.<sup>1</sup> GM cottonseed oil is used extensively in Australian fast food outlets, and GM cotton by-products are used for animal feed. GM canola (though only a very small % of the overall canola crop in its first year 2008) will enter the food chain later this year as oil for human consumption and probably in by-product form ("canola cake") for animal feed.

**Global Imports:** The federal government, via Food Standards Australia and New Zealand (FSANZ), has approved the sale of the following imported GM food items, either whole or as processed ingredients: soy, corn, potato, sugar beet, canola, cotton, and several food processing enzymes of GM origin (notably amylase used in bread).<sup>1</sup> These GM products may be found in food for human consumption and in animal feed.



### But we have labelling, don't we?

In July 2000 Australian and NZ Health Ministers resolved to require the labelling of GM foods; these resolutions became law in December 2001.<sup>2</sup> Unfortunately, the Ministers also resolved to allow many exemptions. In summary the permitted exemptions are:

- highly refined food (eg. *sugars* or *oils*)
- processing aids and food additives (eg. *refined soy lecithin*)
- flavours in small amounts
- food prepared at the point of sale (e.g. *fast food outlets* and *restaurants*)
- food containing up to 1% of GM material - "*where its presence is unintended*"
- eggs, meat, and milk from animals that have been fed GM feed.

Further, there are question marks over the level of compliance and policing of these relatively weak labelling laws; in NSW for instance there are just a few sample checks on a quarterly basis. Imagine if this was how highway speed zones were enforced!

## Five simple guidelines to help you choose

It is a pleasant surprise to find that if you eat local (Australian) food that is not heavily processed you are not only well on your way to avoiding GM foods, but also minimising “food miles” and industrial energy use. Further, if a good proportion of this Australian food is certified Organic or Biodynamic then you are not only minimising food miles, but supporting a more sustainable agricultural system as well.

The following five guidelines will help you to minimise the GM content of your food. Please note, these guidelines do not cover pharmaceutical products (drugs, vitamins, etc), many of which are produced directly from or by Genetically Modified Organisms (GMOs).



### 1 . Buy food certified *Organic* or *Biodynamic*

By definition foods that are certified<sup>3</sup> Organic or Biodynamic by Australian certifiers are as free of GM content as is humanly possible. The production of such foods is subject to stringent checking, auditing, and input control.

It is worth noting that unless certified as “100% Organic”, “Organic” certification means that at least 95% of the ingredients are organic. Notably and importantly however, the remaining 5% or less, regardless of source, must still be GM-free.



Organic certification is particularly important in the case of eggs, milk, and meat. The reason for this is that current labelling laws do not require the producer of such animal products to tell you if the animals (e.g. chickens, dairy cows, etc) were fed GM food as part of their diet. It is possible that animal feeds may contain either imported or local constituents that are GM, for example cotton trash, canola cake, soy meal, etc. At present, only the *organic* certification process, and its tracking of all agricultural *inputs*, can provide an assurance that eggs, milk, or meat are GM-free.



### 2. Buy “Product of Australia”

A food that is labelled “Product of Australia” is a food where all “*significant*” ingredients are of Australian origin. As such, provided it does not contain any GM canola or GM cotton product (to date these are the only Australian GM food crops) then the food is almost certainly predominantly GM-free. However, given that the most likely form these canola or cotton products will take is as oils, and oils are exempt from GM labelling provisions, the safest bet is to simply not buy any Australian product that contains canola, cottonseed, or unspecified vegetable oils unless it is explicitly labelled as GM-Free. Two additional points to note: (1) any egg, milk, or meat ingredients (unless certified organic) may have come from animals fed GM feed; (2) any minor ingredients (eg. preservatives, emulsifiers, etc) may be imported, so Guidelines 3 & 4 are also relevant.



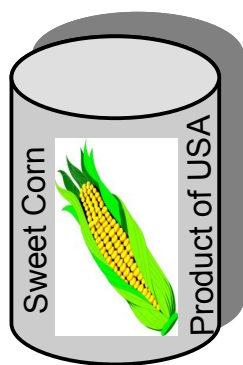
**Note:** “Product of Australia”, “Produce of Australia” and “Produced in Australia” all mean the same thing. However, “Made in Australia” is very different: this simply means the food was put together / processed / transformed in Australia but may still contain significant imported ingredients, which may well be GM, and exempt in terms of labelling.

### 3. Eat whole natural foods, not processed foods

The more complicated the food is in terms of ingredients and processing the harder it is to be sure of its GM-free status. For example, a bag of simple *rolled oats*, even if imported, is almost certainly GM free; whereas a highly processed muesli bar, even if made in Australia, is very difficult to assess. This is due to the many exemptions in current labelling laws. For instance, refined soy lecithin is a commonly used emulsifier in foods (e.g. chocolate) and is frequently of GM origin but would not be labelled as such.



### 4. Read labels to avoid imported and “hidden” GM ingredients



Unless certified as organic, biodynamic, or GM free, then any imported **corn, soy, cotton, potato, or canola** products should be considered suspect. The GM food expert, Jeffrey Smith, quotes the following percentages of commercial crops as being GM in the United States in 2007: soy (89%), corn (60%), canola (75%), cotton (83%).<sup>4</sup> These percentages do not yield favourable odds, if one is concerned about possible GM contamination. Further, there are other ingredients (not labelled as GM) that may be derived from these GM crops, they include: corn syrup, high fructose corn syrup, and refined soy lecithin. Some other common ingredients that may be produced by GM microbes, are: MSG, aspartame (the artificial sweetener with additive number 951), xanthum gum, and chymosin which is a rennet substitute in hard cheeses.

### 5. Grow your own

Last, but not least, one of the very best ways to ensure the integrity of your food is to grow some of it yourself. Even a small backyard or community garden plot can make a significant contribution to the household food supply. Organically certified and GM-free seeds are readily available from a number of sources, (eg. [www.greenpatchseeds.com.au](http://www.greenpatchseeds.com.au), [www.edenseeds.com.au](http://www.edenseeds.com.au), or [www.greenharvest.com.au](http://www.greenharvest.com.au)). Growing some of your own food, that is *synthetic-chemical-free* and *GM-free*, not only provides a level of self reliance, it makes a very positive personal statement and decreases the environmental load on our agricultural lands. You may also like to participate in the great work of the Seed Savers Network [www.seedsavers.net](http://www.seedsavers.net)

#### In Summary:

- Where ever possible choose foods that are certified Organic or Biodynamic
- Choose “Product of Australia”, but avoid those containing cottonseed, canola, or unspecified vegetable oils (unless explicitly labelled GM-Free)
- Be aware that unless certified as organic or biodynamic then eggs, milk, and meat may have come from animals fed GM feed.
- Eat simple unprocessed foods that are easy to assess in GM terms
- Avoid imported foods that contain high risk ingredients (particularly corn, soy, cotton, and canola) or any unspecified vegetable oils.
- Purchase your food from outlets that have a public commitment to GM free food (eg. most community Food Co-ops)
- Choose where you eat out and your menu choice carefully, and ask the restaurant if it has a GM policy.

## The government tells us it's safe, why should we worry?

You may have heard the *spin* from multinational bio-tech corporations and collaborating government departments and authorities that Genetically Modified (GM) crops are just a natural advance on traditional selective-breeding techniques - nothing could be further from the truth. In fact, genetic modification techniques are designed to overcome nature's inbuilt defence mechanisms that protect the integrity of species specific DNA. In GM, foreign DNA material is forced into the plant's genome using techniques such as high voltage electricity, invasive bacteria, or gene guns – with this forced insertion inevitably causing *collateral damage* in the genome<sup>4</sup>, all of which has unforeseen consequences. For the most common GM crops this alien DNA comes not from closely related plants but from bacteria and viruses.

As such it should be no surprise that there is a growing body of evidence that GM foods constitute a significant health risk to humans and animals. Identified risks include: allergic reactions, organ function impairment or enlargement, fertility problems, and growth abnormalities.<sup>4</sup> Eminent Australian epidemiologist Dr Judy Carman, among others, has argued extensively that current testing of GM foods is grossly inadequate, hence these health issues are no surprise.<sup>5</sup>



*“The ability to introduce alien genes into a genome is an impressive technological manipulation but we remain too ignorant of how the genome works to anticipate all the consequences, subtle or obvious, immediate or long-term, of those manipulations.” 2007*

Professor David Suzuki,  
Geneticist, Author, Environmentalist  
Awarded UNESCO Prize for Science

## Stay Informed

- MADGE (Mothers Are Demystifying Genetic Engineering) produce an excellent weekly email newsletter. See [www.madge.org.au](http://www.madge.org.au) and sign up.
- The True Food Network of GreenPeace regularly produces its True Food Guide that rates food brands by their policy on GM ingredients. The next update is due later this year. See: [www.truefood.org.au](http://www.truefood.org.au)
- GeneEthics maintains an ongoing campaign for a GM free Australia. See [www.geneethics.org.au](http://www.geneethics.org.au)
- Jeffrey Smith (author of Genetic Roulette) maintains an information rich site. Note: This site is however United States centric. See: [www.responsibletechnology.org](http://www.responsibletechnology.org)

---

### References:

1. GMO Record of the Office of the Gene Technology Regulator <http://www.ogtr.gov.au>
2. Food Standards Australia New Zealand <http://www.foodstandards.gov.au/foodmatters/>
3. Certifier logos as listed by Organic Federation of Australia <http://www.ofa.org.au/pages/Organic-Certifiers.html>
4. This evidence has been compiled and summarized in the book *Genetic Roulette The Documented Health Risks of Genetically Engineered Foods* by Jeffrey M Smith 2007. See also: <http://www.responsibletechnology.org/>
5. See Chapter 5 in the book: *Recoding Nature: Critical Perspectives on Genetic Engineering*, edited by Richard Hindmarsh and Geoffrey Lawrence and published by the University of New South Wales Press in February 2004. Available electronically with full references in the *Publications* section at : <http://www.iher.org.au/>

26<sup>th</sup> August 2008  
Blue Mountains Food Co-op GM-Free Working Group  
PO Box 305 Katoomba, NSW 2780, Australia  
<http://www.bluemtnsfood.asn.au/>

the blue mountains  
**FOOD CO-OP**  
where good food doesn't cost the earth