

A person in a supermarket is shown from the chest down, holding a green water bottle in their right hand and an orange water bottle in their left hand. The background is a blurred supermarket aisle with shelves of products. In the foreground, a shopping cart is filled with groceries, including a white plastic water bottle, a bag of oranges, and several apples.

**What Kiwis Need to Do to  
Avoid the GMOs Invading Our  
Supermarkets**

# **Hatchard Report**

**Dr. Guy Hatchard**

# What Kiwis Need to Do to Avoid the GMOs Invading Our Supermarkets

After the bombshell information in our last two releases (see [here](#) and [here](#)) everyone has to consider their position very carefully. We reported the results of a recent study which has revealed that most of the processed foods in our New Zealand supermarkets (and in fact around the world) now inevitably contain residues of Genetically Modified Microorganisms (GMMs) and processing agents, including antibiotics and antibiotic-resistant bacteria. As a result of agreements between regulators and industry, these are not identified in any way on food labels nor have their likely effects on health been officially tested or assessed. This release discusses how we should respond to this.

## The situation we find ourselves in is completely unacceptable

It may not have escaped your notice that the public are being treated like animals who are subjected to feed containing low level antibiotic doses and who are incapable of knowing what is going on or choosing to opt out. Without this realisation, last week we supposed that our opposition to the pending Gene Technology Bill would be enough to protect us from unlabelled Genetically Modified Organisms (GMOs) in our foods. Now we learn that progressive substitution of food processing enzymes, flavours, colours and ingredients produced by genetic modification has been going on behind our back for a number of years rubber stamped by Medsafe.

If passed, the Gene Technology Bill will accelerate this process. In fact, the Bill appears to be an attempt to legitimise what is already taking place. Our food content is being determined by overseas companies and regulators who have worked together to prevent any identification of genetically modified content or contamination on labels. Clauses in the Gene Technology Bill before parliament make it *mandatory* to continue in this fashion, essentially giving up control to giant overseas food, pharmaceutical and biotech corporations.

Even if we succeed in stopping the Bill or some provisions are deleted, we will be left subject to the existing wholesale adulteration of the food processing chain. Therefore we need to demand that regulations be stiffened to ensure that ingredients, additives, enzymes, flavours and processing aids produced using GMMs are clearly identified on labels so that the public can avoid them if they wish and we certainly should be demanding this. **As Kiwis we should not be treated like animals who have no say in what they are given to eat.**

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Following the publication of the study in the journal *Food Chemistry: Molecular Sciences* entitled “[Metagenomics-based tracing of genetically modified microorganism contaminations in commercial fermentation products](#)”, it is no longer tenable in any way for the government to cling to ‘*no label required*’ classifications such as *Generally Recognised As Safe* (GRAS) or ‘*Substantially Equivalent to natural products*’ as the Bill proposes for most GMOs including those produced using CRISPR gene editing.

## Batch fermentation inevitably leads to genetic adulteration

Genetic contamination is not easily controlled at any point in the batch fermentation processes which have come to dominate the food processing sector. The dynamic bacterial-based genetic processes involved are partially controlled through the use of genetically modified microorganisms designed to promote cell proliferation, antibiotics to control pathogens and molecules engineered to be resistant to the antibiotics. Residues are now known to be inevitable and the end products cannot be purified to any satisfactory level.

Food regulators particularly in North America and Europe are unwilling to act responsibly. For example Upside foods in the US received [preliminary approval from the FDA in 2022](#) to grow chicken meat “*directly from animal cells, without the need to raise and slaughter animals,*” claiming its products “*are real meat, made without the animal.*” The [FDA’s scientific memo](#) accompanying its recent approval, contained a three-page list of “*potential identity, quality, and safety issues*” involved with Upside Foods’ manufacturing processes, including:

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- Cells from different lines or species inadvertently used.
- Carryover of adventitious agents such as bacteria, fungi, viruses, parasites, and prions during the process of isolating the product.
- Introduction of contaminants in laboratory reagents.
- Introduction of contaminants from animal-derived reagents (e.g. bovine serum, trypsin).
- Unintended effects of cell immortalisation.
- Contamination, and facility environment contamination, with adventitious agents through inadequate sterilisation of bioreactors.
- Presence of elemental contaminants (toxic heavy metals) after harvest.
- Presence of residual unintended material from genetic engineering.

However, despite these potential risks, the memo stated that *“at this time we have not identified any information indicating that the production process ... would be expected to result in food that bears or contains any substance or microorganism that would adulterate the food.”* The FDA didn't identify these contaminants because they didn't test for them; they acknowledged the problems but ignored them because of the cozy relationship they enjoy with big industry. It has become *'standard'* regulatory practice to assert that batch fermentation is safe, despite it seems knowing full well that it isn't.

## A return to food honesty is required

Historically, breakdowns in honest practice and public trust happen in the food supply chain, they have done so for hundreds of years. By the Victorian era, [the adulteration of bread was common](#). Cheaper and inferior ingredients didn't just whiten the bread but added weight and bulk. The additives that bakers used to fluff, whiten, and prolong their bread included plaster of Paris, bean flour, chalk, ground-up bone, and alum. Alum led to malnutrition and a myriad of health issues – like bowel problems, constipation, and chronic diarrhea – which were often fatal for children. By the 1870s the government started policing the food industry which led to the modern practices which required standards, testing, ingredient labelling and traceability.

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Our present day food industry has reached a point where corrective action is necessary to ameliorate the adverse effects of processed foods on health which has led to a rapidly growing epidemic of chronic disease including cancer, bowel disease, inflammatory disease, cardiac illness, ADHD, obesity and diabetes to name but a few. [Various studies](#) have calculated that around 50-60% of Americans suffer from chronic diseases. Around 40% have two or more. The genetically altered content in processed foods has been widely identified as a prime causal candidate that needs to be controlled. The solutions are similar to those used in 1870, the enforcement of standards, testing, ingredient labelling, traceability and a return to natural ingredients.

## What can we do to avoid GMMs?

You will appreciate that we have been placed in a David and Goliath situation. On the one hand the world's giant food corporations, on the other the individual consumer. Yet we are not powerless, our food purchasing choices ultimately affect the shelf stocking practices of retailers. Our article [Major Health Alert: the Extraordinary Genetically Modified Invasion of Our Supermarkets by Stealth](#) lists a great many affected foods that you may want to avoid buying but what are we going to buy instead?

If you want to avoid eating GMMs, antibiotic residues and genetically engineered ingredients and additives you could investigate the following suggestions, you will no doubt know of many more:

### **Favour**

Cold pressed oils

Artisan sourdough breads

non-homogenised milk

Butter that has been traditionally churned

Freshly prepared/cooked fruit and vegetables

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Organic flours

Home made jams

Homemade fresh cheese (just add lemon or yoghurt to boiled whole milk).

Dried fruit—dates, raisins, etc., free of sulphites, oils.

Nuts

Plain Yoghurt, (add the fresh fruit yourself)

Unprocessed organic ingredients rather than so-called organic processed alternatives like cornflakes

Grains—rice, wheat, millet, quinoa, barley

Lentils, chickpeas, beans, (soak ahead for quicker cooking)

Pasta

Rather than instant noodles get asian ramen, somen or soba noodles, they cook quickly

Organic meats and flours

Pure spices not ready mixes and stocks

Plain crisps and crackers rather than flavoured

Choose breast feeding if possible rather than infant formula

Fresh squeezed juice rather than store bought

# What Kiwis Need to Do to Avoid the GMOs Invading Our Supermarkets

Home made smoothies using a bullet

Use cookbooks like Jaimie Oliver's *15 Minute Meals* or YouTube hints.

Air fryers are quick and can cook healthy choices

If you are pressed for time to shop selectively, there are some great fresh food ingredient delivery companies that offer menu choices and cooking instructions.

## **Avoid**

Most supermarket breads and flours (they contain synthetic folic acid, and many other processing aids like synthetic yeasts, flour improvers, vegetable fats, preservatives, etc.)

Vegetarian and vegan meat substitutes

Zero sugar drinks

Foods with high sugar content

Cheese made with GM rennet, often labelled as 'vegetarian rennet' rather than traditional animal rennet

Processed convenience foods, including ready meals like frozen pizzas, lasagna, pies, chips, etc

Coloured and flavoured foods including confectionary, chocolate

Yoghurts with multiple ingredients

Fast food

Ice cream

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Sauces with multiple ingredients like most ketchup and mayonnaise

Food with thickeners

Energy drinks

## **Nothing beats reading the labels**

But remember headline phrases like 'natural' 'derived from plants', 'low fat', 'low sugar', 'plant-based', 'healthy', 'no additives' and 'extracted' increasingly have little meaning. They have become misleading marketing tools. The ingredient list is the thing to read. Be inquisitive about how your food choices have actually been prepared and what they contain.

We realise that our suggestions are not a solution as such, but they can be a step in the right direction. Many people are so busy they have hardly any choice except to rely on pre-prepared food options. Even so, everyone has a right to know what goes into food, that is absolutely basic and historically has always been the direction of food regulation. The government is proposing to extend an already deteriorating food safety situation by permanently exempting numerous genetically modified ingredients and contaminants from identification. They are essentially delivering our food system into the hands of giant international food corporations who couldn't care a fig about consumers and are anxious to avoid full disclosure labelling laws.

***We have to demand the government extend labelling laws to identify the involvement of GMMs in processing.***

Dr. Guy Hatchard

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