

ADVISORY COMMITTEE ON NOVEL FOODS AND PROCESSES

SAFETY ASSESSMENT OF GM FOODS

Issue

The Committee is invited to comment on points raised in a letter received after the recent open meeting, concerning the basis for assessing the safety of foods derived from GM sources.

Background

1. The attached letter (Annex 1) was received by the Committee Chairman from a representative of Genetic Food Alert, an association founded by the UK wholefood trade to campaign against GM foods and crops. The author wished to raise these points at the Committee's Open Meeting in November, but was unable to attend.
2. The letter raises a number of questions concerning the lack of research into the safety of foods derived from genetically modified sources using feeding trials on animals and humans. While some of the specific questions are outside the Committee's remit – such as the commissioning of such research – the fundamental point is whether it is valid to evaluate the safety of GM foods in the absence of data obtained from feeding trials on the actual food or ingredient that is under evaluation.

Committee Action

3. Members are invited to comment on the points raised by the attached letter.

**Secretariat
January 2005**

Annexes attached:

Annex 1: Letter from Genetic Food Alert on GM food safety research

ACNFP/70/5 Annex 1

ADVISORY COMMITTEE ON NOVEL FOODS AND PROCESSES

Letter from Genetic Food Alert on GM food safety research

**Secretariat
January 2005**

GENETIC FOOD ALERT

A Campaign of the UK Wholefood Trade

Hope House, 75a High Street, Totnes TQ9 5PB

Dear Professor Casson,

6/12/04

GM FOOD SAFETY RESEARCH - Why has it not taken place?

As I was unfortunately unable to participate in the recent ACNFP open day I hope that I can address in writing the matter that I had hoped to raise on that occasion.

Browsing through the latest three editions of the British Journal of Nutrition I found quite a few feeding studies assessing the effects of whole foods on animals (usually without harming them) or on human volunteers. One looked at the effects of Jarlsberg cheese on blood serum levels in 22 human volunteers. Another assessed the effects of a new barley variety on cholesterol levels in pigs. A third looked at the effect of Camembert cheese on intestinal microbiota in rats. A fourth compared the effects of whole milk and fermented milk on eight human volunteers. A fifth investigated effects of sesame oil on rats. A sixth assessed the effects of pearl barley on starch digestion in piglets.

The latest edition of the (American) Journal of Nutrition likewise reports on the effects of the Traditional Mediterranean Diet on Obesity in a Spanish Population - involving over 3000 human volunteers. Also covered are the results of a three year study of the effects of an Ovo-Lacto Vegetarian Diet on pregnant women (involving over 100 volunteers). Also assessed were the effects of olive oil on men, raw peas on pigs, Soy Protein Isolate on rats and Flaxseed Products on rabbits.

In the archives of both publications there are a vast number of such reports. As all these studies are published in academic journals they will have been peer reviewed and they are all available to the public and the scientific community for further independent evaluation. It is clear that professional nutritionists assess the long and short term effects of a wide variety of whole foods in this manner as a matter of course.

The safety of GM foods and the possible long-term effects on both humans and farm animals of eating them has been, as you will know only too well, a burning issue since late 1998 - the date of the "Pusztai Case". For the last five years over 200 non-governmental organisations, under the umbrella of the Five Year Freeze alliance, have been demanding a moratorium on GM foods until they have been demonstrated to be safe beyond reasonable doubt. Virtually the entire population of Europe has chosen not to eat such foods whilst such uncertainty remains. The entire insurance industry has failed to obtain access to reassuring research data and so have advised their members to add exclusion clauses to avoid liability for any health effects of GM foods. The European food industry has decided not to use such ingredients. None of them want to know about gene expression or substantial equivalence, they want to know what happens when you eat the stuff year on year.

And yet survey after survey continues to confirm the almost total absence of long-term, independent, published, peer-reviewed studies of the effects of feeding GM foods to humans or

animals. Major publications such as Science, Nature and the Lancet have reached similar conclusions, as has the Royal Society of Canada, a committee of Irish GPs and the EU-US Biotechnology Consultative Forum. I'm interested to find out why this research has not taken place.

One claim is that such research is unnecessary. It is claimed that US citizens have eaten GM crops for years without any effect. Yet during this period many health problems have increased in the USA (including soya and maize allergies) and these have cost the US medical service dearly. There has been no attempt to find out whether these correlate in any way with GM food consumption. There has been no post-release monitoring of the population. No coroner or doctor is in a position to record any symptoms, even death, as resulting from GM foods because no-one knows what symptoms there could be. Whether or not the products are safe they are being rejected by consumers and food manufacturers. Surely the economic impact of this alone indicates the necessity of such research.

Another claim is that such research is expensive - but surely the food manufacturers and importers and the major insurance companies can afford to pay for independent research that could open up an entire new market to them? After all, the examples of research that I have listed above would not appear to be especially expensive. And how much will it cost the economy if we make the wrong decisions in the absence of such research?

Another claim (made verbally by GM industry lobbyists) is that such research would be 'Luddite' and 'anti-science' because it would slow or obstruct the introduction of food and crop biotechnology. Make of that claim what you wish! I, for one, am pro-science in the sense that I would like more rigorous safety research, not less.

Yet another claim is that no-one is interested carrying out or publishing such research - yet it has been by far the most significant food controversy of the last decade. The UK Government was certainly interested enough at one point to employ Dr Pusztai to carry out its official feeding studies. At that time the Government felt that such long-term whole food feeding studies were possible, necessary and affordable. Why does the Government no longer think this?

At the time Dr Pusztai was sacked, silenced and publicly disgraced, a key argument used by the Government was that research was not valid until it was published and peer-reviewed (I refer to the time before Dr Pusztai had the research peer-reviewed and published in the Lancet, despite threats to the editor). Does this not strengthen the case for ensuring that the public and consumer groups, the food manufacturers and insurers have direct access to published and peer-reviewed feeding studies to provide reassurance? Yet the reality seems to be that the sacking of Dr Pusztai marks the final end of public GM safety research in the UK. The Government terminated the research programme, decided not to repeat or improve Dr Pusztai's experiments and has never since commissioned any such research.

Not only has such Government research been terminated but independent scientists wishing to carry out such research have been made to understand that their department or institute may lose funding if they are involved in 'irresponsible' research. Scientists have been denied access to the GM crop varieties and null cassette isotopes. Of the very few published papers on GM food safety that we have been able to identify, half were industry-funded and reported negative results, the other half were independent and all raised safety concerns. All the scientists raising concerns have subsequently been subjected to campaigns of intimidation or ridicule. The only two independent scientists on the Government's GM Science Review panel, Dr Andrew Stirling and Professor Carlo Leifert, were likewise threatened as a result of raising their concerns.

The two hundred or more organisations in the Five Year Freeze alliance have demanded a moratorium on GM foods until adequate research has been published to confirm its safety beyond reasonable doubt. My impression - and it is a widespread impression - is that the UK government and the biotech industry has instead decided that there will be a moratorium on the safety research until the products are on the shelves.

We would welcome reassurance that the ACNFP and related bodies are not trying to hide the facts and that such research will be published - because it must now be clear to you that there is no hope of these products ever being sold in Europe in the absence of public access to this data.

Yours sincerely,

A handwritten signature in black ink that reads "Robert Vint". The signature is written in a cursive style with a horizontal line underneath the name.

Robert Vint,
Director.