



Food Safety Regulator Fails GM Lysine Corn Test

Media Statement – 19 July 2007

A novel form of genetically modified corn that poses serious health risks, but has been inadequately safety tested, looks set to be approved for human consumption on Monday - unless New Zealand stands aside from this decision.

New Zealand has the right to “opt out” of decisions made by the Trans-Tasman food safety regulator, FSANZ, and the spectrum of hazards this animal feed poses for humans fully justifies such a break.

The high levels of lysine engineered into this product, called LY038, make it the first GM corn designed to be substantially different to conventional corn in its nutritional profile. While lysine is an essential amino acid, it is also highly reactive with common sugars and the heat of cooking accelerates the formation of Advanced Glycation Endproducts (AGEs). These AGEs are implicated in a series of major and important human diseases (or their complications), including atherosclerosis and coronary artery disease, hypertensive heart disease, the cardiovascular complications of diabetes mellitus, and chronic kidney failure amongst others.

Despite these risks, FSANZ has failed to even apply baseline testing standards. In particular:

- It has accepted a Monsanto study based on rats and chickens fed with raw corn, when humans eat cooked corn - and it is the cooking process that accelerates the production of the AGEs.
- Contrary to international food safety guidelines, it has not consistently compared the high lysine corn to one that is free from genetic modification in order to detect differences. The Codex guidelines intend that comparisons are made with a corn variety that has a long history of safe use, not another variety that is also the product of gene technology.

High lysine corn was never intended to be a human food. Permission is being sought for this animal feed to be classed as human food in order to minimise legal risks for the developer, Monsanto. Without such an approval, if the high lysine corn is detected in food, then those food products would be illegal to sell and subject to potentially costly recalls.

This decision is precedent-setting as once one GM bio-industrial product is accepted as a food on this basis, the stage is set for a raft of other products – including plants producing industrial and medical substances – to be approved using this lower safety standard.

FSANZ states that it has not identified any benefits to consumers from the lysine corn. People seeking wholesome food are being confronted with a regulator prepared to allow pollution of the food chain simply to provide legal protection for those who are unwilling to spend the money to keep such contaminants out.

FSANZ claims that if approved, only very small proportions of the new corn would become human food. However, even small quantities of such substances pose serious food safety risks and once approval is given, there is no upper limit on the proportion of LY038 corn that can legally enter the human food supply.

In the case of a food engineered to express high levels of lysine, it would be prudent to ensure that appropriate tests of safety are performed on all such engineered products, beginning with a study that measures AGEs. This is particularly the case given the known role of lysine-containing compounds in some of the most serious diseases afflicting Western society, and the growing evidence for their toxicity when consumed in foods. The tests assessed to date by FSANZ fall well short of that mark.

In February, New Zealand's Food Safety Minister Annette King triggered a first review by FSANZ of LY038. Following this, FSANZ has again recommended approval and the minister has one vote out of nine, along with each Australian state, as to whether the high lysine corn is approved, as is expected to be the case. Given the lack of adequate safety testing, if the corn is approved, the minister should exercise New Zealand's right to opt out on this decision.

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Supporting Statement by Dr Garth Cooper

http://www.sustainabilitynz.org/docs/HighLysineFoods_DrGarthCooper.pdf

Supporting Statement by Dr Jack Heinemann

<http://www.inbi.canterbury.ac.nz/ly038.shtml>

Notes:

1. Food Standards Australia New Zealand (FSANZ) issued a recommendation to the Ministerial Council, of which Annette King is a member, on May 23 2007. From there, the Minister has a statutory 60 days within which to respond to that recommendation.
2. International guidelines for food safety testing have been laid down by a joint WHO/FAO body - the Codex Alimentarius Commission. The Codex test protocol for biotech foods specifies that testing be carried out by comparing characteristics of the new GM food with a "conventional counterpart". The 2003 guideline further notes that: "for the foreseeable future, foods derived from modern biotechnology will not be used as conventional counterparts". If GM varieties are accepted as safe comparators, the fundamental rationale of the testing protocol is undercut.
3. The potential costs of a product recall due to an unauthorised GMO contaminant were clearly demonstrated by another GM corn variety called Starlink that was also intended only as an animal feed, was not approved as a human food, and was supposed to be strictly segregated when grown. However, segregation proved ineffective and it contaminated a large proportion of US corn production, triggering the most costly food product recall in US history.