

NEW DOUBTS OVER SAFETY OF GM FOOD

A new study by the EU's official food watchdog, the European Food Safety Authority (EFSA), has revealed that the international approval process for GM crops failed to identify a viral gene that could be poisonous to humans as they have not investigated its impact on human health and the plants themselves, when assessing whether these crops were safe.

Nancy Podevin of the EFSA and Patrick du Jardin of the Plant Biology Unit at the University of Liege in Belgium discovered that 54 of the 86 GM plants approved for commercial growing and food in the US, including corn and soya, contain the viral gene, which is known as 'Gene VI'. In this country, these crops are typically fed to farm animals producing meat, milk and eggs. Significantly, the EFSA researchers concluded that the presence of segments of Gene VI 'might result in unintended phenotypic changes'.

Such changes include the creation of proteins that are toxic to humans. They could also trigger changes in the plants themselves, making them more vulnerable to pests.

Critics say the revelations make clear that the GM approvals process, which has been in place for 20 years, is fatally flawed. They argue the only correct response is to recall all of the crops and food products involved. Director of the campaigning group, GM Freeze, Pete Riley, said the discovery of the gene, 'totally undermines claims that GM technology is safe, precise and predictable'. He said:

"This is a clear warning the GM is not sufficiently understood to be considered safe. Authorisation for these crops must be suspended immediately and they should be withdrawn from sale, until a full and extended review of their safety has been carried out."

Typically, GM crops are modified in the laboratory to give them resistance to being sprayed with powerful weed killers such as Monsanto's Round-up. This means that, in theory, fields can be doused with the chemical, so wiping out the weeds and allowing the food plants to thrive.

The modification process involves inserting genes into the plants using a technique that allows them to piggyback on viruses that are commonly found in the soil and plants.


It has been assumed that virus genes are not present in the plant once it is grown in the field and reaches consumers; however, it is now clear that this is not the case.




GM critics and EFSA are at odds over the implications of the research paper. EFSA insists that the research highlighting the presence of Gene VI does not represent a new discovery of a viral gene and does not indicate a safety concern about GM crops already approved. It said the viral gene ‘cannot infect animals or humans and therefore presents no threat to human or animal health’.

This is challenged by GM critics who say this situation represents a complete and catastrophic system failure. There is no research evidence to justify this statement; instead, there are clear indications that not only this viral gene might not be safe for human consumption, but it also may disturb the normal functioning of crops, including their natural pest resistance.

(Abstracted from: www.dailymail.co.uk)

1  Read New doubts over safety of GM food and decide which of the expressions below mean the same as those underlined in the passage.

- a. in disagreement with:
- b. eradicating/eliminating:
- c. covered completely:
- d. to ride on somebody's back:
- e. decisively imperfect:
- f. unambiguous advice to beware or desist:
- g. provoke alterations:
- h. to withdraw:

2  Are the following sentences true (T) or false (F)? Correct the false ones.

- | | T | F |
|---|--------------------------|--------------------------|
| a. EU watchdog has revealed that the international approval for GM foods identified a dangerous gene. | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Most GM plants were approved even though they contained a viral gene. | <input type="checkbox"/> | <input type="checkbox"/> |
| c. It may be dangerous to eat products derived from farm animals fed on unsafe GM feed. | <input type="checkbox"/> | <input type="checkbox"/> |
| d. EFSA researchers admitted viral genes might cause unwanted changes in the organisms. | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The approval process of GM foods has proved to be efficient. | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Critics to GM food state that this technology is safe, precise and predictable. | <input type="checkbox"/> | <input type="checkbox"/> |
| g. GM critics and EFSA experts agree that the presence of Gene VI represents no problem for people and animals. | <input type="checkbox"/> | <input type="checkbox"/> |
| h. The viral gene could make plants less resistant to pests. | <input type="checkbox"/> | <input type="checkbox"/> |