

05/22/05 - Revealed: health fears over secret study into GM food.

By Geoffrey Lean, Environment Editor, The Independent (UK)

Rats fed on a diet rich in genetically modified corn developed abnormalities to internal organs and changes to their blood, raising fears that human health could be affected by eating GM food.

The Independent on Sunday can today reveal details of secret research carried out by Monsanto, the GM food giant, which shows that rats fed the modified corn had smaller kidneys and variations in the composition of their blood.

According to the confidential 1,139-page report, these health problems were absent from another batch of rodents fed non-GM food as part of the research project.

The disclosures come as European countries, including Britain, prepare to vote on whether the GM-modified corn should go on sale to the public. A vote last week by the European Union failed to secure agreement over whether the product should be sold here, after Britain and nine other countries voted in favour.

However, the disclosure of the health effects on the Monsanto rats has intensified the row over whether the corn is safe to eat without further research. Doctors said the changes in the blood of the rodents could indicate that the rat's immune system had been damaged or that a disorder such as a tumour had grown and the system was mobilising to fight it.

Dr Vyvyan Howard, a senior lecturer on human anatomy and cell biology at Liverpool University, called for the publication of the full study, saying the summary gave "prima facie cause for concern".

Dr Michael Antoniu, an expert in molecular genetics at Guy's Hospital Medical School, described the findings as "very worrying from a medical point of view", adding: "I have been amazed at the number of significant differences they found [in the rat experiment]."

Although Monsanto last night dismissed the abnormalities in rats as meaningless and due to chance, reflecting normal variations between rats, a senior British government source said ministers

were so worried by the findings that they had called for further information.

Environmentalists will see the findings as vindication of British research seven years ago, which suggested that rats that ate GM potatoes suffered damage to their health. That research, which was roundly denounced by ministers and the British scientific establishment, was halted and Dr Arpad Pusztai, the scientist behind the controversial findings, was forced into retirement amid a huge row over the claim.

Dr Pusztai reported a "huge list of significant differences" between rats fed GM and conventional corn, saying the results strongly indicate that eating significant amounts of it can damage health. The new study is into a corn, codenamed MON 863, which has been modified by Monsanto to protect itself against corn rootworm, which the company describe as "one of the most pernicious pests affecting maize crops around the world".

Now, however, any decision to allow the corn to be marketed in the UK will cause widespread alarm. The full details of the rat research are included in the main report, which Monsanto refuses to release on the grounds that "it contains confidential business information which could be of commercial use to our competitors".

A Monsanto spokesman said yesterday: "If any such well-known anti-biotech critics had doubts about the credibility of these studies they should have raised them with the regulators. After all, MON 863 isn't new, having been approved to be as safe as conventional maize by nine other global authorities since 2003."