

[Fears grow as study shows genetically modified crops 'can cause liver and kidney damage'](#)

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Fresh fears were raised over GM crops yesterday after a study showed they can cause liver and kidney damage. According to the research, animals fed on three strains of genetically modified maize created by the U.S. biotech firm Monsanto suffered signs of organ damage after just three months. The findings only came to light after Monsanto was forced to publish its raw data on safety tests by anti-GM campaigners.

They add to the evidence that GM crops may damage health as well as be harmful to the environment. The figures released by Monsanto were examined by French researcher Dr Gilles-Eric Seralini, from the University of Caen. Yesterday he called for more studies to check for long-term organ damage. 'What we've shown is clearly not proof of toxicity, but signs of toxicity,' he told New Scientist magazine. 'I'm sure there's no acute toxicity but who's to say there are no chronic effects?' The experiments were carried out by Monsanto researchers on three strains of GM maize. Two of the varieties contained genes for the Bt protein which protects the plant against the corn borer pest, while a third was genetically modified to be resistant to the weedkiller glyphosate. All three strains are widely grown in America, while one is the only GM crop grown in Europe, mostly in Spain. Monsanto only released the raw data after a legal challenge from Greenpeace, the Swedish Board of Agriculture and French anti-GM campaigners. Dr Seralini concluded that rats which ate the GM maize had 'statistically significant' signs of liver and kidney damage. Each strain was linked to unusual concentrations of hormones in the blood and urine of rats fed the maize for three months, compared to rats given a non-GM diet. The higher hormone levels suggest that animals' livers and kidneys are not working properly. Female rats fed one of the strains also had higher blood sugar levels and raised levels of fatty substances caused triglycerides, Dr Seralini reported in the International Journal of Microbiology. The analysis concluded: 'These substances have never before been an integral part of the human or animal diet and therefore their health consequences for those who consume them, especially over long time periods are currently unknown.' Monsanto claimed the analysis of its data was 'based on faulty analytical methods and reasoning, and does not call into question the safety findings for these products'.
<http://www.dailymail.co.uk/news/article-1244824/Fears-grow-study-shows-genetically-modified-crops-cause-liver-kidney-damage.html>