International scientists raise concerns over genetically modified food

British Labour government rushes to defend biotech industry

Keith Lee, Richard Tyler
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The Labour government has been rocked by a dispute over the possible health dangers posed by genetically modified food. Last week 20 scientists from 13 countries issued a memorandum supporting their colleague Dr. Arpad Pusztai's research into the possible harmful effects of genetically modified (GM) food.

They oppose attempts by his former employers, the Rowett Research Institute in Scotland, to undermine his research and tarnish his reputation as a scientist, and are calling for his reinstatement.

Dr. Pusztai, a world authority on plant proteins called lectins, has written three books on the subject and published 270 research papers. He worked at the Rowett Institute for 35 years. His research involved feeding GM potatoes to rats and looking for changes in their physiology, particularly the gut, metabolic process and immune systems. This showed that the size of several organs decreased, including the brain, and that their immune system was weakened after the feeding trials.

Last year, Pustzai was abruptly removed from his research project at the Rowett Institute and forced to retire after raising his concerns in the media. In April Pusztai appeared on Granada TV's *World in Action* programme, with the consent of the Rowett Institute. In the course of the documentary, he remarked that he would not eat GM food and that he found it "very, very unfair to use our fellow citizens as guinea pigs".

Two days later, Professor Philip James, director of the Rowett Institute, suspended Pusztai and forced him to retire. Pusztai's supporters say that his removal was the result of industry and political pressure on the institute to silence him. Following his dismissal, Pusztai was gagged from speaking in his own defence, while his scientific methodology was publicly questioned and he was all but accused of cheating.

An internal audit carried out by the Rowett Institute into Dr. Pusztai's research denies the rats suffered any physiological abnormalities as a result of being fed the GM potatoes. The audit report did exonerate his experimental method and approach, and Professor James told the press that the investigation found absolutely no misconduct on Dr. Pusztai's part. However, the Institute has only made a summary of its findings available.

Dr. Stanley Ewen of the pathology department at Aberdeen University repeated the experiments and reached similar conclusions to Dr. Pusztai. He submitted his findings to a meeting of COST 98 Action (European Union Programme) in Lund, Sweden, in November 1998. The organisers also invited both Professor James and Dr. Chesson, the chairman of the Audit Committee, to present and justify the conclusions in the Rowett Institute's audit report to this gathering of senior scientists. Neither James nor Chesson attended or even responded to the invitation.

On February 12, professor Edilbert van Driessche and professor Thorkild C. Bøg-Hansen, joint organisers of the COST 98 meeting, issued a memorandum supported by over 20 other leading scientists who had studied Dr. Pusztai's findings.

Their memorandum states, "Those of us who have known Dr. Pusztai's work or have collaborated with him, were shocked by the harshness of his treatment by the Rowett and even more by the impenetrable secrecy surrounding these events. It is an unacceptable code of practice by the Rowett and its Director, Professor James, to set themselves up as arbiters or judges of the validity of the data which could have such a profound importance not only for scientists, but also for the public and its health."

The memorandum concludes, "There is no doubt in our minds that the reviews will remove the stigma of alleged fraud and will restore Dr. Pusztai's scientific credibility."

One of the scientists who reviewed Pustzai's work, Dr. Vyvyan Howard, foetal and infant toxico-pathologist at the University of Liverpool, told the *World Socialist Web Site*, "I am working on some features of lectin toxicity and that is how I came to know Arpad Pusztai, who is certainly one of the world's experts in this field."

Dr. Howard said that he believed Dr. Pusztai's data was sound. "We think it would pass peer review and be published and we are at a loss to really explain why the Rowett Institute came to the conclusion it did." Dr. Howard added that Pusztai's findings "are of considerable importance in the current debate on the safety and hazard assessment of genetically modified foods".

Professor S. Pierzynowski, from the Department of Animal Physiology, Lund University, Sweden, said, " I must stress that there is enough strong evidence that the work of the audit group was not objective and per se dangerous, not only for Dr. Pusztai, but generally for free and objective science."

Joe Cummins, Emeritus Professor of Genetics at the University of Western Ontario, Canada described the Rowett Institute's treatment of Pusztai as "a great injustice", adding that the "Institute continues to look inward to cover up its mistakes".

These eminent scientists have not only raised serious concerns about the way research into GM food is being conducted, but that those who have dissenting voices are being suppressed and have had their careers ruined, and sometimes their health. Dr. Pusztai has suffered a mild heart attack brought on by the stress caused by trying to restore his scientific reputation and the credibility of his research.

These concerns were echoed by Dr. Kenneth Lough, FRSE, a former principal scientific officer at the Rowett Institute between 1956 and 1987. He said, "In my view the evidence presented in the audit report must be considered as unsafe and is without justification for use against the scientific reputation of Dr. Pusztai. The Institute is at risk in sending the wrong signals to scientists in this field of research that any sign of apparent default will be treated with the utmost severity. The awareness will of course act as strong deterrent to those who wish to conduct

research in this vitally important field."

The response of the Labour government has been to rush to the defence of the biotech industry. Cabinet Office Minister Jack Cunningham, who chairs the Cabinet committee on biotechnology, swept round the TV studios and newspaper offices dismissing calls for a moratorium on the sale of GM foods. Conservative Shadow Minister of Agriculture Tim Yeo said the only possible explanation for the government's willingness to allow the commercial growing of GM crops was because they were "very, very close to a number of the companies involved". He told the BBC programme "On the Record": "We now have information that Monsanto has hired people who were working very closely with Labour both before and during the last election."

Monsanto, the world's largest supplier of soya beans, had sales last year of $7 billion and is estimated to be worth $35 billion. Last week Monsanto became the first commercial company to be prosecuted for allegedly releasing genetically modified material in Britain. A spokesman for the company said it expects to plead guilty for illegally releasing modified oil-seed rape and would face a fine of £20,000. It has employed a former senior Labour "spin doctor" as its media adviser. The company has pressured the US government to ensure that its genetically manipulated soya is not prevented from being sold, particularly in Europe where it finds its way into many processed food products. It has been revealed that Monsanto made a £140,000 donation to the Rowett Institute last year.

An even more direct conflict of interests came into sharp relief involving Lord Sainsbury, Minister for Science at the Department of Trade and Industry and a member of the Cabinet biotechnology committee. Lord Sainsbury is Britain's most wealthy individual and has a massive share ownership in the supermarket chain of the same name. He has owned the biotech company Daitech Ltd for 11 years. This controls the world-wide patent on key genes involved in the genetic modification process. He is disputing whether any gene for which Daitech owns the patent was involved in the research carried out by Dr. Pusztai.

To distance himself from his commercial interests, Sainsbury established a blind trust to control his assets after joining the government. Lord Sainsbury was ennobled by Tony Blair, but did not declare his interests in Diatech in the 1997 register of Lords' interests. His appointment as a government Minister took place just days after Dr. Pustzai was suspended.

The *Guardian* newspaper also noted that the inventor of the patent is Michael Wilson, who until 1988 worked for the John Innes Institute, which shares facilities with the Sainsbury plant biology lab in Norwich. Wilson was the deputy director at the Scottish Crop Research Institute at a time when it was collaborating with aspects of Pustzai's research project. Cunningham's response to this latest revelation was to blandly declare that Sainsbury "has no financial interests while he's serving in the government". Prime Minister Tony Blair also rushed in to defend Lord Sainsbury, worried that he might become the third Minister to be forced to resign under a cloud of suspicion in almost as many months.

The British government is this week offering £13 million in inducements to biotechnology companies, which could include GM food producers, to extend their operations in Britain, and has had no less than 81 meetings with such firms. Following in the wake of recent health scandals, such as that over BSE/"Mad Cow Disease", the Labour government now faces pressure from within its own ranks to act to prevent a similar disaster resulting from GM foods. Environment Minister Michael Meacher urged that the government "think again" and proposed an "Ethics Committee" to provide advice and guidance on GM foods, and even to extend a moratorium on the planting of some GM crops. This was supported by a number of Labour backbenchers, but rejected out of hand by Cunningham.

The *Telegraph* newspaper reported Monday how it had been approached by Downing Street to run a pro-GM article, which the government had solicited from a supposedly independent scientist. The *Telegraph* writes, "Asked why the Government was involved in distributing the work of an independent scientist, a spokesman said that Downing Street was better able than Prof. Jones to place the article. 'He is not a patsy for us. There is no politics involved in all this'."

It turns out that Professor Jones works at the Sainsbury Laboratory in Norwich, funded by a foundation set up by Lord Sainsbury.

The government also faced pressure from the British Retail Consortium (BRC) to pronounce GM foods safe. The large retail supermarkets have complained that the government has left them to fend off the questions and complaints of angry customers. BRC represent 90 percent of the UK retail sector, and are concerned that adverse consumer reaction will threaten the profits from some £53 billion spent each year on food. Elizabeth Phillips, BRC deputy director, wrote to the Minister of Agriculture saying, "We urge your department to put consumers' minds at rest and make a statement on the safety of those GM foods and ingredients approved by the government."

The leading advisory board to the government has 8 of its 13 members linked to the biotechnology industry. One said that its members were so committed to GM that they were unlikely to question it. Several members on the Advisory Committee on Novel Foods and Processes are linked to biotechnology companies, while others are academics researching the subject.

Kate Venables, who was appointed to the committee last year, has criticised its remit for being too narrow. Speaking to the *Independent* newspaper she said, "Scientists who are desperately excited by the idea of genetic modification are not going to be deflected from this as an interesting and exciting research tool. If companies have put millions of pounds into research of something or other then I suspect the Government is going to listen to them. Wouldn't you?"

Venables was supported by Julie Shephard of the Consumers Association, who was rejected for a place on the committee. "I would not dream of accusing anybody of acting for improper reasons because of links with commercial interests. I don't think that happens. But do think it happens in a more subtle way. You are hardly likely to question the fundamental assumptions about its safety if it would mean questioning your whole career."

The Government's "Invest in Britain Bureau" now boasts that the UK "leads the way in Europe in ensuring that regulations and other measures affecting the development of biotechnology take full account of the concerns of business".