

Sir—Your decision to publish the research of Stanley Ewen and Arpad Pusztai<sup>1</sup> breaks unfortunate new ground for a scientific journal. Put simply, *The Lancet* has placed politics and tabloid sensationalism above its responsibility to report and assess new science. Most peer-reviewed journals are respected, and read, for the integrity of the research they publish and their dependability in weeding out irresponsible work.

Richard Horton (Oct 16, p 1314)<sup>2</sup> argues that *The Lancet* might have been criticised for suppressing information by not publishing Ewen and Pusztai's work, but I believe he has jeopardised the journal's credibility, especially among readers and contributors in the scientific community. This pandering to popular debate rather than promoting responsible scientific inquiry may appeal to some, but I believe that the editor's poor judgment will strengthen the resolve of other scientific journals to adhere to the publication standards *The Lancet* saw fit to abandon.

I doubt if *The Lancet* would have published Ewen and Pusztai's research if it had implied the safety of biotech foods. But that is fine. Those who work hard to apply biotechnology to agriculture have no interest in flawed data.

Horton is naïve if he really believes that "publication of Ewen and Pusztai's findings is not, as some newspapers have reported, a 'vindication' of Pusztai's earlier claims". Anti-technology activists already have seized on *The Lancet's* publication of this work as precisely that. They claim that publication, in itself, is proof the research is valid because that is the standard scientific journals are supposed to apply.

In the USA, biotech crops and foods have been tested more than any other agricultural products in history. We have a regulatory system that applies science-based policies to guard the health of consumers and the environment. That system would have trashed Pusztai's potatoes if they had been submitted for approval. Too bad *The Lancet* failed to exercise such oversight on research submissions.

Carl B Feldbaum

Biotechnology Industry Organization,  
1625 K Street NW, Suite 1100, Washington,  
DC, 20006, USA

- 1 Ewen SWB, Pusztai A. Effects of diets containing genetically modified potatoes expressing *Galanthus nivalis* lectin on rat small intestine. *Lancet* 1999; 354: 1353-54.
- 2 Horton R. Genetically modified foods: "absurd" concern or welcome dialogue? *Lancet* 1999; 354: 1314-15.

Sir—I disagree with Richard Horton's view, expressed at the end of his commentary on the controversy surrounding genetically modified (GM) foods.<sup>1</sup> It seems to be that we as scientists have not been nearly aggressive enough in attacking the scaremongering and sheer nonsense put out by the lay media on a variety of medical and scientific topics. Besides writing about these issues we should be lobbying the Press Complaints Commission and the government to try and ensure that journalists are taken to task and made to publish amendments if they grossly distort the facts in any kind of technical reporting, just as we would expect a retraction and apology for the libelling of an individual. If we do not do this we are in danger of sliding into a sort of mob rule when the media can with impunity whip up such a furore over supposed malpractice that pro-testers burn fields of experimental GM crops.

Consider the damage done to immunisation campaigns by the steady drip of adverse publicity in the media. This public hostility to one of the most effective forms of disease control in the history of medicine (a hostility to which, sadly, *The Lancet* has indirectly contributed) means that there is now a serious possibility of a measles epidemic because of the poor uptake of vaccine.

Let us be proud of the scientific method and of scientific rigour. We must try to stop the slide into alarmism and negativity to innovation. In the Middle Ages superstition led to the burning of witches; if we are not careful it could soon be scientists who are being burned.

Roger A Fiskin

Friarage Hospital, Northallerton DL6 1JG, UK

- 1 Horton R. Genetically modified foods: "absurd" concern or welcome dialogue? *Lancet* 1999; 354: 1314-15.

Sir—*The Lancet* criticised the Royal Society last May<sup>1</sup> for its "breathtaking impertinence" in reviewing Arpad Pusztai's work before it had been published. Richard Horton now repeats that criticism.<sup>2</sup> We commented on Pusztai's unpublished work because he himself had commented on it, so extensively that it had become a matter of public interest. Since a one-sided debate was raging on the back of unvalidated experimental data, the Royal Society had a duty to examine such evidence as it could secure from all sources, including Pusztai himself. That is impertinence only if you endorse scientists flouting normal practice and rushing to the press with unvalidated data and invalid conclusions.

In introducing the Ewen and Pusztai research letter<sup>3</sup> Horton helpfully

describes the ambivalence of the referees and emphasises the value of having the data out in the open. He also states that the data are non-generalisable. It is therefore surprising that the journal allowed the paper to appear with two general conclusions in the final paragraph.

In the circumstances, Horton's comments on the "failure to understand the . . . dialogue of accountability" are somewhat ironic.

Aaron Klug

The Royal Society, 6 Carlton House Terrace,  
London SW1Y 5AG, UK

- 1 Editorial. Health risks of genetically modified foods. *Lancet* 1999; 353: 1811.
- 2 Horton R. Genetically modified foods: "absurd" concern or welcome dialogue? *Lancet* 1999; 354: 1314-15.
- 3 Ewen SWB, Pusztai A. Effect of diets containing genetically modified potatoes expressing *Galanthus nivalis* lectin on rat small intestine. *Lancet* 1999; 354: 1353-54.

Editor's reply

Stanley Ewen and Arpad Pusztai's research letter was published on grounds of scientific merit, as well as public interest. Four out of six invited reviewers recommended publication after revision on scientific grounds, one argued the public interest case, and one voted against publication. In the face of such clear support, the "irresponsible" action that Carl Feldbaum alludes to would have been to suppress publication. A debate about the science, rather than unsupported claims about that science, has now begun—a useful step forward.

Roger Fiskin invites scientists to be more "aggressive". *The Guardian* newspaper has already reported one example of aggression, relating to *The Lancet's* decision to publish Ewen and Pusztai's work.<sup>1</sup> That instance does not speak well of scientists' (in this case, a very senior scientist's) tolerance for open and reasoned debate.

Aaron Klug defends the Royal Society's wish to damn Ewen and Pusztai's work in the absence of both investigators. What he cannot defend is the reckless decision of the Royal Society to abandon the principle of due process in passing judgment on their work. To review and then publish criticism of these researchers' findings without publishing either their original data or their response was, at best, unfair and ill-judged.

Richard Horton

- 1 Flynn L, Gillard MS. Pro-GM food scientist 'threatened editor'. *Guardian* 1999; Nov 1: 1-2.