

## **Open letter from scientists and doctors around the world regarding human feeding trials of genetically modified wheat in Australia**

Dear Dr. Megan Clark, Chief Executive CSIRO,

We are writing to express our unequivocal denunciation of the experiments being conducted by your colleagues that involve feeding genetically modified (GM) wheat to human subjects. We are all senior scientists/academics with a professional interest in the health and environmental effects of GMOs. We refer to the trials described on the website of the Office of the Gene Technology Regulator (OGTR):

- DIR 093 - Limited and controlled release of wheat and barley genetically modified for altered grain starch composition

The biological and biochemical characterisation of the GM wheat being used in these experiments is inadequately described in the publicly available literature. Much of the information required to conduct adequate pre-clinical evaluation is withheld on the basis that it is 'confidential commercial information'.

Genetically modified products have not been shown to be distinctive, uniform and stable over time. There is a large body of evidence that shows that GM crop / food production is highly prone to inadvertent and unpredictable pleiotropic effects, which can result in health damaging effects when GM food products are fed to animals (Pusztai and Bardocz, 2006; Schubert, 2008; Dona and Arvanitoyannis, 2009).

The feeding trials, as described in the documents from the OGTR, are completely inadequate to assess these risks. Feeding trials on rats, pigs and humans are proposed for a period of 1 to 28 days. The intention of these trials is to assess the altered grain starch composition of the wheat, but not to test for any unintended results. We have seen in the independent research conducted on consumption of GM plants to date that unintended effects may appear in later generations (Velimirov et al, 2008).

The use of human subjects for these GM feeding experiments is completely unacceptable. The experiments may be used to dispense with concerns about the health impacts of consuming GM plants, but will not in fact, address the health risks GM plants raise.

The feeding trials should not be conducted until long-term impact assessments have been undertaken and appropriate information released to enable the scientific community to determine the value of such research, as against the risks.

Yours sincerely,

The undersigned signatories:

**Dr Michael Antoniou**

Gene expression and Therapy Group  
King's College London School of Medicine  
Department of Medical and Molecular Genetics  
8th Floor, Tower Wing  
Guy's Hospital

Great Maze Pond  
London  
SE1 9RT, UK

**Dr Vandana Shiva Ph D**

Navdanya  
Research Foundation for Science Technology and Ecology  
105 Rajpur Road  
Dehra Dun, India

**Dr George Crisp MBBS MRCGP**

General Practitioner  
Western Australia

**Professor Andres Carrasco**

Lab Molecular Embryology  
School of Medicine UBA - CONICET  
Argentina

**Professor Carlo Leifert**

Res Dev Prof of Ecological Agriculture  
Newcastle University School of Agriculture,  
Food and Rural Development (SAFRD)  
Nafferton Farm  
Stocksfield  
Northumberland, NE43 7XD, UK

**Professor David Schubert**

Salk Institute for Biological Studies  
10010 N. Torrey Pines Road,  
La. Jolla, CA 92037  
USA

**Dr Benjamin Ticehurst BSc(Med) MBBS MPH FRACGP**

General medical practitioner & senior lecturer  
School of Medicine, Sydney  
University of Notre Dame Australia

**John B. Fagan, Ph.D.**

Professor of Molecular Biology  
Maharishi University of Management  
(Maharishi International University 1971 to 1995)  
1000 North Fourth Street  
Fairfield, Iowa, 52557-10

**References:**

1. Puzstai A. and Bardocz S. (2006). GMO in animal nutrition: potential benefits and risks. In: *Biology of Nutrition in Growing Animals*, eds. R. Mosenthin, J. Zentek and T. Zebrowska, Elsevier Limited, pp. 513-540.
2. Schubert D.R. (2008) The problem with nutritionally enhanced plants. *J Med Food*. 11: 601-605.
3. Dona A. and Arvanitoyannis I.S. (2009) Health Risks of Genetically Modified Foods. *Crit Rev Food Sci Nutr.*, 49: 164–175.
4. Velimirov, A., Binter, C., and Zentek, J. (2008) "Biological effects of transgenic maize NK603xMON810 fed in long term reproduction studies in mice" *Bundesministerium für Gesundheit, Familie und Jugend Report*, Forschungsberichte der Sektion IV Band 3/2008, Austria