

SCIENTISTS AND GOVERNMENT REGULATORS SPEAK OUT AGAINST GENETIC ENGINEERING

"This technology is being promoted, in the face of concerns by respectable scientists and in the face of data to the contrary, by the very agencies which are supposed to be protecting human health and the environment. The bottom line in my view is that we are confronted with the most powerful technology the world has ever known, and it is being rapidly deployed with almost no thought whatsoever to its consequences."

— *Dr. Suzanne Wuertbele, U.S. Environmental Protection Agency (EPA) toxicologist*

"The fundamental problem of the way in which genetically modified (GM) foods have been approved is that they haven't really been tested properly at all. All that has happened is something which I would characterize as an exercise in wishful thinking."

— *Dr. Erik Millstone, Sussex University*

"If you look at the simple principle of genetic modification it spells ecological disaster. There are no ways of quantifying the risks... The solution is simply to ban the use of genetic modification in food."

— *Dr. Harash Narang, microbiologist and senior research associate at the University of Leeds, who originally pointed to the possible link between mad cow disease (BSE) and CJD in humans*

"In 1983, hundreds of people in Spain died after consuming adulterated rapeseed oil. This adulterated rapeseed oil was not toxic to rats." Dr. Parke warns that current testing procedures for genetically altered foods including rodent tests are not proving safety for humans. He has suggested a moratorium on the release of genetically engineered foods.

— *Professor Dennis Parke of University of Surrey School of Biological Sciences, a former chief advisor on food safety to Unilever Corporation and British advisor to the U.S. FDA on safety aspects of biotechnology*

"If it is left to me, I would certainly not eat it. We are putting new things into food which have not been eaten before. The effects on the immune system are not easily predictable and I challenge anyone who will say that the effects are predictable."

— *Professor Arpad Pusztai, world leading nutritional science expert, formerly of the Food, Gut, and Microbial Interactions Group, Rowett Research Institute*

"Up to now, living organisms have evolved very slowly, and new forms have had plenty of time to settle in. Now whole proteins will be transposed overnight into wholly new associations...going ahead in this direction may be not only unwise, but dangerous. Potentially, it could breed new animal and plant diseases, new sources of cancer, novel epidemics."

— *Dr. George Wald, Nobel laureate and Higgins professor of biology, Harvard University*

The FDA's approach "is trying to force an ultimate conclusion that there is no difference between foods modified by genetic engineering and foods modified by traditional breeding . . . The processes of genetic engineering are

different, and according to the technical experts in the agency, they lead to different risks."

— *Memo from Dr. Linda Kabl, Food and Drug Administration (FDA) compliance officer, to Dr. James Maryanski, FDA biotechnology coordinator, January 8, 1992*

"The insertion of any DNA into the plant genome may result in various phenotypic changes (desirable or undesirable). Increased capability for concentrating toxic substances from the environment—e.g., pesticides or heavy metals—and undesirable alteration in the levels of nutrients may escape breeders attention unless GE plants are evaluated specifically for these changes."

— *Comments from Division of Food Chemistry and Technology and Division of Contaminants Chemistry on the points to consider for safety evaluation of GM foods, to James Maryanski, FDA biotechnology coordinator, November 1, 1991*

"Approval of new transgenic organisms for environmental release, and for use as food or feed, should be based on rigorous scientific assessment of their potential for causing harm to the environment or to human health. Such testing should replace the current regulatory reliance on 'substantial equivalence' as a decision threshold."

— *"Elements of Precaution: Recommendations for the Regulation of Food Biotechnology in Canada: An Expert Panel Report on the Future of Food Biotechnology," prepared by The Royal Society of Canada at the request of Health Canada, Canadian Food Inspection Agency and Environment Canada, January 2001*

"We believe that animal feeds derived from GM plants present unique animal and food safety concerns."

— *Points made by Dr. Gerald B. Guest, director, Center of Veterinary Medicine FDA to James Maryanske on the regulation of transgenic plants—FDA draft Federal Notice on Food Biotechnology, February 5, 1992*

"The application of biotechnology at present is most likely. . . not to increase maximum yields."

— *U.S. Department of Agriculture (USDA), 2001 Agricultural Information Bulletin*

In 2001, the USDA stated, "adopting herbicide tolerant corn did not increase yields."

— *Shoemaker, R. (ed), "Economic Issues in Agricultural Biotechnology," Agriculture Information Bulletin, no. 762, Economic Research Service of the USDA, February 2001*

(Source: Norfolk Genetic Information Network, a news and research service founded in 1998.)