THE ROYAL SOCIETY

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Royal Society submission to the Government's GM Science Review

The regulatory process and human health

The genetic modification of plants raises important issues for science and the public, and the Royal Society encourages debate, informed by sound science, about the potential benefits and risks of this technology. We have been offering policy-makers advice on GM plants during the development of this branch of science and we have published a number of reports during the last five years. Further details and the latest information of the Society's work can be found at http://www.royalsoc.ac.uk/gmplants/.

The use of genetically modified (GM) plants has the potential to offer benefits in agricultural practice, food quality, nutrition and health. In the Royal Society's report 'Genetically modified plants for food use and human health – an update', published in February 2002, we found no evidence for any harmful effects of GM foods on human health but we did express some concerns about some aspects of the regulatory processes governing the development and use of GM plants. In particular:-

- We agree with the FAO/WHO 2000 report that the criteria for safety assessments should be made explicit and objective and that differences in the application of the principle of substantial equivalence, for example in different Member States of the European Union, need to be resolved (OECD, 2000; reference within Royal Society 2002 report). Therefore we welcome the development of consensus documents for different crops by the OECD, which will help to facilitate the uniform application of substantial equivalence. It may not be necessary or feasible to subject all GM foods to the full range of evaluations, but those conditions which have to be satisfied should be defined
- The UK Government should review the enforcement of the regulations on infant foods and GM foods to ensure these regulations are complementary. Likewise the European Commission should consider the use of novel and GM foods in infant foods as part of its review of Directive 91/321/EEC that covers infant formulas and follow-on foods.
- In the longer term, should GM foods be re-introduced into the market in the UK, we suggest that the Food Standards Agency considers whether post-marketing surveillance should be part of the overall safety strategy for allergies, especially of high-risk groups such as infants and individuals in 'atopic'* families.
- Research should be undertaken to develop modern profiling techniques and to define the 'normal' compositions of conventional plants. The working group welcomes the funding initiatives already put in place by the European Union Framework V programme and the UK's Food Standards Agency.

* atopic – pre-disposition to allergic response, usually inherited

We monitor the uptake of the recommendations we make in our reports, although it is too soon for those from our 2002 report to have been implemented fully. In response to our recommendations the Food Standards Agency (FSA) said that it had already commissioned a feasibility study looking at the issue of post-market surveillance and how this may be taken forward. We look forward to the publication of the results of this study, which we understand will be later this year. In addition the FSA said that, although no GM foods have yet been developed specifically for infant formulae, it shares the Society's view that GM and infant formulae regulations should be complementary and that it is pursuing this issue in Europe, as these are EU regulations. (The FSA's full response can be seen at http://www.food.gov.uk/news/newsarchive/gmreport).

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Reference: Genetically modified plants for food use and human health – an update, The Royal Society, February 2002
http://www.royalsoc.ac.uk/templates/statements/StatementDetails.cfm?statementid=165