



**Friends of
the Earth**

GM-Free Britain

Sticky Questions

Farmers have been conducting selective breeding for years. How are GM crops any different?

For thousands of years farmers and plant breeders have been selecting and breeding from plants which grow well, have a higher yield or taste better. But this process stays within natural barriers which stop different species of organisms from breeding with each other.

Genetic modification is very different as it allows scientists to put genes (given the name 'novel' genes) into plants from completely unrelated organisms, for example fish. It is a difficult and fairly haphazard procedure and there is no way to control or direct what happens. New genes end up being inserted at random into the genetic make-up of the organism which can produce unpredictable changes with unknown health and environmental impacts.

Is Friends of the Earth saying no to GM crops and food for ever?

No. Friends of the Earth is not opposed to research or the technology in itself, but rather the uses to which it has been put and the speed with which it has been developed. We want to wait until all the problems around GM crops and food have been sorted out before considering commercial production.

For example, GM crops haven't shown any real benefits for farmers or consumers and their safety is far from proven. Legal responsibility for any damage caused by GM crops or food has not been decided but it is likely to fall to those producing or providing the product — farmers, food businesses and other service providers such as local councils — rather than the big biotechnology companies marketing them. Background levels of GM pollen will mean that even farmers who are not growing GM crops may well have to label their crops as GM. This will threaten the production of organic crops, which are not permitted to contain any GM contamination, and seriously threaten the right of consumers to buy GM-free food.

If we could find a way to use GM or our knowledge of genetics safely, without causing harm to the environment, human health, society and the economy, then this would be the time to introduce the technology. There is no reason to rush into commercialisation, which is why we are calling for a GM-free Britain at the present time. We also recognise that many people have a moral or ethical objection to GM and we will campaign to ensure that their right to choose GM-free products is upheld.

Is the evidence that GM crops and food pose a threat to our health and the environment conclusive?

One of the problems with GM crops and foods is that it is difficult to test their environmental and health safety, since methods to test them properly are still being developed because the crops are so new. However, there is growing evidence that they have the potential to cause serious problems.

- In Canada GM oilseed rape weeds have been found that are resistant to three herbicides.
- Researchers at Newcastle University found that genes from GM soya can pass into bacteria in the human gut. Because antibiotic resistance genes have been put into many GM plants as markers, one impact of this could be to spread resistance to antibiotics in humans and animals.
- In Mexico, which is the world's storehouse of maize varieties, widespread GM contamination of supposedly GM-free produce has been found.

People have been eating GM food in America for years and there are no health problems, so surely it is safe?

It is true that GM food has been available in foods in the US for 8 years. However, there is no GM food labelling, so people don't know when they are eating GM ingredients. Opinion polls have shown that most Americans don't know they're eating GM ingredients. Therefore any new health problems, such as allergies, may not be reported as people won't make the link between any problems and eating GM food, and no studies have so far been reported.

What process will the Government have to go through to commercialise GM crops?

Before GM crops can be grown commercially and sold as food they need to get several approvals.

1. The GM crop needs approval to be grown and marketed across the EU. The UK Government takes part in the decision whether to grant approval, although all member states and the European Commission have to agree together.
2. Before a GM crop can be sold as food, it needs 'Novel Foods' approval, which is also an EU-wide decision in which the Government is involved.
3. Before GM seeds can be sold to farmers in the UK, the new GM variety has to be added to the Government's 'National List' of varieties. To do this, the company has to show that the new variety has 'value for cultivation and use'. One GM maize seed was close to getting this permission – Chardon LL fodder maize – but this has now been shelved by the biotech company that owns it - Bayer CropScience.

Have the Farm Scale Trials told us whether or not it's safe to grow GM crops commercially?

The Farm Scale Evaluations (FSE) were not designed to provide all the answers about the impact of GM crops on the environment, they have only provided data on the impacts of a handful of herbicide tolerant GM crops on biodiversity. The trials revealed that growing GM beet or oilseed rape would cause more harm to the environment than conventional varieties. Although GM maize appeared to be better for the environment than conventional varieties, the weedkiller used on the non-GM maize, atrazine, has now been banned by the EU so does not represent a real comparison with alternative maize growing methods. The trials also did not record yield, leading to concern that the results would be different in a real situation where farmers seek to maximise yield, rather than weeds and insects.

More generally, the trials compared GM with the current intensive methods of production so not all the possible ways of farming were examined (organic agriculture for example). Key areas of concern, such as the impact on soil micro-organisms were not looked at. They were short term trials and did not represent the future use of GM in arable rotations where they would be grown year after year and so the harmful effects on wildlife may build up. Finally, there are many other issues, such as food safety, labelling and traceability, liability, coexistence of GM and non-GM crops and seed purity (and preventing contamination) which have to be resolved before any crop should be grown commercially.

The Government held a public debate on GM crops. What was the outcome?

The Government announced it would hold a public debate in summer 2002, and a catalogue of errors over funding, timing and delivery followed as the debate finally took place in summer 2003. However, despite all this over 36,000 people took part in the debate, and nearly 700 public meetings took place. The results generated clearly demonstrated that there is widespread scepticism and distrust of GM in the UK. The debate process also looked at whether a 'silent majority' with different views had not taken part in the debate, but found that a broad section of the public held similar views when they learnt about the issues, and the more they learnt the more sceptical they became.

What do you mean by GM-free areas?

Firstly, companies, farmers, retailers and local authorities can agree not to use or grow GM crops and foods. This will give protection against those GM crops and foods that have already been approved. On top of this, your local authority can ask the European Commission and the Government to provide your area with protection against any future approvals of GM crops and foods, on a case by case basis. This is because a new EU law on genetically modified organisms makes specific provision for the protection of 'geographical areas'.

Specifically, Friends of the Earth is calling on local authorities to:

- ask the European Commission and the Secretary of State for the Environment, Food and Rural Affairs to prohibit specific GM crops being grown in their area, in line with Article 19 of 2001/18/EC;
- ensure that no GM crops are grown on land over which it has control;
- adopt a GM-free policy for all goods and services for which the council is responsible.

Why does the campaign focus on persuading local authorities to declare themselves GM-free?

The Government has made clear indications that they wish to press ahead with commercialisation of GM crops. Lobbying central government alone is unlikely to be productive. Instead we're asking people to campaign locally, calling on their local authorities to declare themselves GM-Free.

The Government will find it difficult to cope with areas that don't want to grow GM crops. How can you develop a framework for growing GM crops if local authorities make it clear they want to be GM free?

The support of the community and businesses at a local level will be crucial in persuading local authorities to adopt a GM-free policy.

I live in a city. Is this campaign relevant?

Yes. Urban centres in the UK provide much of the market for what is produced in rural areas, and their purchasing habits will help influence what is grown. Local authorities may find it more difficult to see the value of declaring themselves GM-free but it is still important to get a debate going, focusing on service provision, the moral issue of consumer choice and unclear liability for problems caused by GM plants and food. A GM-Free policy would be consistent with any Local Agenda 21 policies and it is worth remembering that some urban authorities own rural land outside of their administrative boundaries.

We are not just worried about GM crops in our area. What about crops and food that are imported?

The majority of imported GM food (maize and soya) comes from North and South America and goes into animal feed. On 18th April 2004 new labelling and traceability laws came into force that required GM animal feed to be labelled for the first time, as well as derivatives from GM crops such as vegetable oils, lecithin, syrup and starch. Unfortunately the products of GM-fed animals such as milk, eggs and meat do not have to be labelled. Most food companies and supermarkets have removed GM ingredients from their foods, although not all animal products are from animals fed GM-free diets. Friends of the Earth is very concerned about the lack of safety testing of GM foods and wants their import halted until robust safety checks are in place. The UK and EU have not banned any imports because they fear a trade war with the US. If you want to halt GM imports the most effective way is to lobby your supermarket to get them to remove GM feed from their supply chain for milk, dairy products, eggs and meat. Visit our Zero Tolerance website at <http://www.foe.co.uk/gmfree/> for more details.

How do I know if my food is GM? Is there a GM-free label?

Many processed foods contain soya or maize. Any food containing GM DNA or protein has to be labelled if the content exceeds 0.9%. Also, any derivative (such as oil, lecithin, starch) derived from material containing more than 0.9% GM must be labelled. However, it is very difficult, given the present sampling techniques, to say for

sure that no GM DNA or protein is present; hence the need for a threshold at which labelling is legally required. Friends of the Earth wants the threshold set at 0.1 per cent which is the current reliable limit of detection. New seed laws are also being introduced to limit the contamination of seeds, but again the proposed thresholds are too high.

There is currently no proposal for a GM-free label, as this would increase the cost of GM-free food, making consumers pay more for something that they have always had before. It would also be very difficult to prove and enforce.

In addition organic food cannot under EU law contain GM.

The best way to ensure your right to choose GM food and remove the threat of contamination is to support the GM-free campaign. The best way to avoid GM ingredients in the food you buy is to avoid processed foods as much as possible, buy fresh fruit and vegetables as much as you can and choose organic food when possible.

I want to get more involved, what can I do?

- Write to the Leader of your local council. If you live in an area with county and district councils write to both if you can. Visit the GM-free Britain website or contact the Local Government Association for contact details (see below).
- Friends of the Earth have a network of over 200 local groups which will be involved in local campaigning in your area. Contact your local group co-ordinator for what is happening near you. Get in touch with Friends of the Earth for contact details or visit the GM-free Britain website (see below).
- Visit our website for background information on a wide range of GM issues, briefings, reports and press releases. Contact the Friends of the Earth Information Service if you need any of these but don't have access to the internet (contact details below).
- You can also order GM-Free window stickers from Friends of the Earth on 020 7490 1555.

Local Government Association

Visit: <http://www.lga.gov.uk>
Tel: 020 7664 3000

Friends of the Earth Local Groups

Visit: http://www.foe.co.uk/campaigns/local_groups_and_campaigns/
Tel: 0808 800 1111

Friends of the Earth Information Service

Freephone: 0808 800 1111

Friends of the Earth GM website

Visit: <http://www.GMFreeBritain.com>