



for a responsible, fair
and sustainable food system

What is GM and why does it matter?

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What is GM?

Genetically Modified (GM) organisms have had DNA artificially added, removed or changed in the lab. GM is also known as genetic engineering. It is not the same as traditional crop breeding and never can be.

Is it safe?

DNA is a bit like a computer programme, but one that doesn't come with instructions. Adding, removing or editing sections of complex genetic code is not a simple "cut and paste" process - there is much that can go wrong^{1 2 3 4 5}. Safety tests are usually controlled by the companies that profit from GM. It is incredibly difficult to carry out independent studies but many of those that have been done have found problems^{6 7 8 9}.

The most common types of GM crop (like Monsanto's Roundup Ready soya, maize and oilseed rape) are designed to be heavily sprayed with glyphosate. This powerful weed killer is classified by the World Health Organisation as probably causing cancer¹⁰.

Does it do any harm?

GM crops support some of the most environmentally damaging farming practices in the world. Research by the American National Academy of Sciences in 2016 showed that GM farming had caused 'major agricultural problems'¹¹. Their use has led to the development of resistant "super-weeds"^{12 13} that are resistant to weed killers and has been proven to reduce biodiversity¹⁴.

The monarch butterfly has declined by 80% since 1996 and studies show that GM farming is one of the main causes^{15 16 17}.

Contamination of non-GM crops is widespread¹⁸ and could wipe out traditional plant varieties. Farmers are not allowed to save GM seed for planting next year as their contracts demand that they buy both the seed and the associated weed killers from the same company each year.

Do we need it?

Those promoting GM claim that it can work wonders but the only drought-tolerant crops, blight-resistant potatoes and omega-3 crops available to grow and eat today have been developed through non-GM breeding techniques¹⁹. We need farming and pest management regimes that work **with**, rather than against, nature. This is where future funding for research and development should be invested, not in the false solution that is GM crops.

Globally, we produce enough food for at least 10 billion people – the predicted 2050 peak world population²⁰. About a third of this food – approximately 1.3 billion tonnes – is lost or wasted²¹.

Hunger and malnourishment are political problems that can only be solved by lifting people out of poverty and giving them control over their own food and farming²².

GM crops are about profits for the few, not sharing the world's resources more fairly²³.

How can I avoid it?

In the UK, GM ingredients have to appear on the label so always read the small print and ask about GM cooking oil when you are eating out (restaurants and takeaways should list this on the menu but many do not).

Most meat, eggs and dairy products on sale in the UK come from animals that have eaten GM feed. This does not have to be listed on the label so unless it's organic (where GM is not allowed), it is very difficult to know what we are eating.

There are no GM crops grown commercially in the UK. Northern Ireland, Scotland and Wales have policies that reject GM farming but the UK Government supports GM. Ministers have suggested that it should be grown in England once we have left the European Union²⁴. If this happens, it will be very difficult to protect non-GM crops from contamination.

We need to stand together and protect our right to grow, produce and eat GM free.

What can I do?

Join the growing community of people who are saying no to GM in their food and on our farms. You can sign up to the free GM Freeze email list, check what you are buying and take action in lots of different ways at www.gmfreeze.org.

Visit www.gmfreeze.org to join us, get involved or just find out more.

Twitter: [@GMFreeze](https://twitter.com/GMFreeze) Facebook: /GMFreezeUK Email: info@gmfreeze.org T: 0845 217 8992
www.gmfreeze.org

Phone calls cost 3p per minute plus your telephone company's access charge.

GM Freeze is the national umbrella campaign for a moratorium on GM food and farming in the UK. We believe that our food should be produced responsibly, fairly and sustainably. Our members include national charities like Friends of the Earth and the Soil Association, specialist and grassroots campaign groups, scientists, farmers, food producers, retailers and concerned individuals.

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