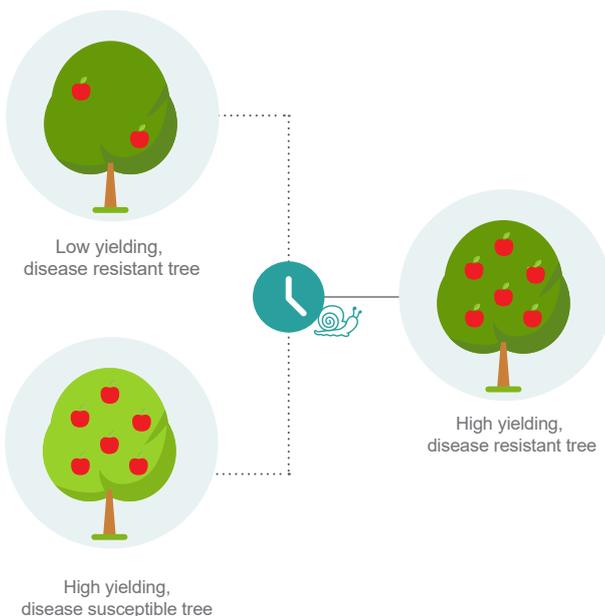


GM Food Explained

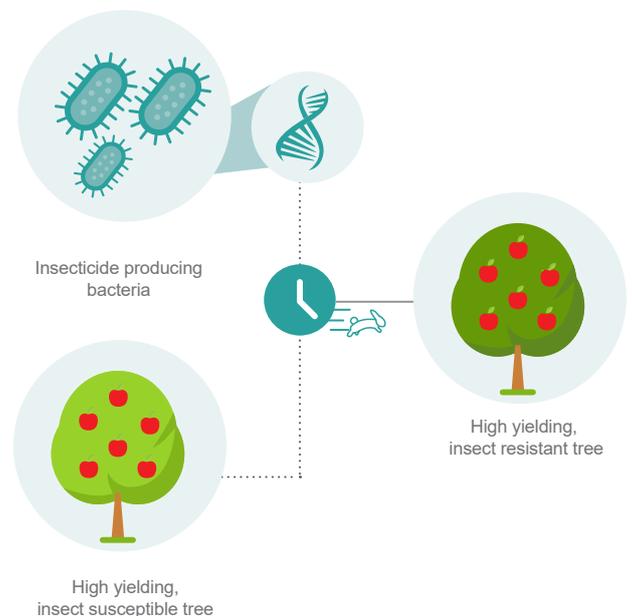
People have been changing plant and animal genes for thousands of years using methods like **cross-breeding**. Cross-breeding involves using cross-fertilisation to transfer genes between related varieties of plants or breeds of animals to improve their characteristics. This process is **indirect** and **slow** – it can take many years.

Over the last few decades, technology has been developed to directly transfer individual genes between plants, animals and microbes (e.g. bacteria and yeasts). This is known as **Genetic Modification (GM)**. GM has the advantage of making changes that cannot be achieved by cross-breeding and takes a **fraction of the time**.

Cross-breeding



Genetic Modification



Why GM foods?

GM foods have been developed for many of the same reasons as food from cross-breeding.

These include:

- higher crop yields
- drought resistance
- improved nutrition
- herbicide tolerance
- disease and insect protection
- reduced food waste.

Did you know?

A type of soybean has been genetically modified to improve nutrition. It produces less trans fats and more mono-unsaturated fats which are better for health.



GM Food Facts

1. GM foods are as safe as non-GM foods.

GM food has been in our food supply for over 20 years. Research around the world and by FSANZ has shown that GM foods are as safe to eat as non-GM foods.

Before GM foods can be sold, they undergo a thorough assessment to confirm they are just as safe as non-GM foods and offer the same (or improved) nutritional benefits.

2. GM foods do not cause allergies.

Food allergies occur in 2-4% of adults in Australia and New Zealand. They are triggered by specific proteins found in a limited range of foods.

When we assess GM food, we look at new proteins for their potential to be allergenic before we decide whether or not they can be approved for sale.

3. GM foods are as nutritious as non-GM foods.

Not only are GM foods as nutritious as non-GM foods but in some cases the nutrient content can be increased. In Australia, GM has been used to develop a new canola with high levels of omega-3 fatty acids, an important nutrient that keeps us healthy.

In other parts of the world, a type of rice known as 'golden rice' has been developed using GM. Golden rice produces beta-carotene to help fight against Vitamin A deficiency and the serious health impacts that can result.

FACT

We regularly monitor scientific publications for new information on GM food.

To date there has been no credible evidence that GM foods are harmful to health.

Did you know?



To reduce serious food allergy risks, scientists are using GM to remove allergenic proteins from foods like peanuts.

FACT

There is no evidence that GM foods are less nutritious compared to other foods.