

# Genetically Modified (GM) Food



食物安全中心  
Centre for Food Safety

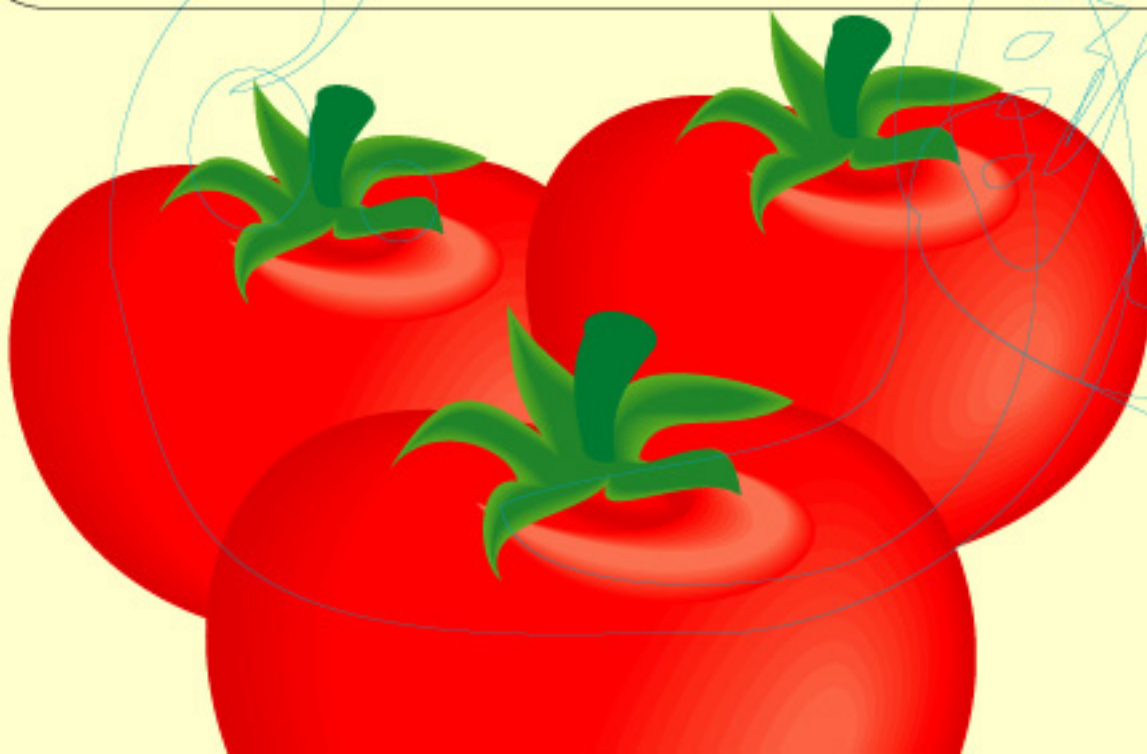


# What is GM food?

GM food refers to any food or food ingredient that is, or is derived from, an organism in which the genetic material has been modified using modern biotechnology.

## What are some of the examples of GM food available on the market?

The most common GM foods currently available in the market are soya bean and corn. Soya bean can be further processed into soy oil, soy flour to make food items such as pastries, edible oil and other soy products. Corn can be further processed into corn oil, flour or syrup to make food items such as snacks, bakery products and soft drinks.





# Are GM foods safe for human consumption?

World Health Organization (WHO) has pointed out that GM foods currently available on the international market have passed risk assessments and are not likely to present risks for human health. In addition, no effects on human health have been shown as a result of the consumption of such foods by the general population in the countries where they have been approved.

All GM foods are subject to safety assessments including characteristics of the organisms used, composition, nutrition, toxicity and allergenicity before they become available for sale.

## Do GM crops contain animal genes?

There is no GM crops currently on sale containing animal genes.



# **Will antibiotic resistance properties be transferred to the microorganisms in the human gut upon consumption of GM foods?**

Marker genes such as antibiotic resistance genes are used during the development of GM foods. The use of these antibiotic resistance genes has raised concerns that clinical effectiveness of antibiotics may be compromised. The possibility of transferring these genes to recipient cells is considered remote. Nevertheless, the industry has been advised to use alternative methods.





# **Will GM foods elicit any allergic responses upon consumption?**

Allergenicity is associated with many conventional foods including nuts and seafood. When new genes are introduced, there is a theoretical possibility that new allergens may be expressed in the food. However, allergenicity is included in the safety assessment of GM foods before the products are launched on the market. Such assessments could help to exclude GM foods that are likely to be allergenic from entering the market.

## **How to identify GM foods in the market?**

Basically, physical appearances of most GM foods are similar to their conventional counterparts. Biochemical analyses such as Polymerase Chain Reaction (PCR) or Enzyme Linked Immunosorbent Assay (ELISA) are ways to differentiate them.



# What is the purpose of labelling GM foods?

According to WHO, GM foods currently available on the international market have passed risk assessments and are not likely to present risks for human health. Therefore, the prime purpose for GM food labelling is to address the consumer's right of informed choice.

## Where can I find more information about GM foods?

### **Food and Environmental Hygiene Department**

24-hour Hotline : 2868 0000

Communication Resource Unit : 2381 6096

Website : [www.cfs.gov.hk](http://www.cfs.gov.hk)

E-mail : [enquiries@fehd.gov.hk](mailto:enquiries@fehd.gov.hk)