GM Food Newsletter

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Safety and Labelling of Genetically Modified Food

Genetically modified (GM) crops have been commercially produced since the 1990s. Examples of GM crops include herbicide-tolerant corns, soyabeans with improved nutritional value, etc. Over the past two decades, GM food has been growing in prevalence in different parts of the world, with the most adopted GM crops being soyabean, corn, cotton and canola.

What is the recent development of the international and local situation regarding the safety and labelling of GM food?

To date, there is already international consensus amongst the scientific community that GM foods on the international market are safe compared with their non-GM counterparts. For the labelling of GM food, policies vary in different countries and regions and views on this issue remain mixed. Let's take a look in more details in this article.

Safety of GM food

Some places like Mainland China, Australia, New Zealand, Canada, European Union and the United States have implemented pre-market safety assessment schemes (PMSAS) for GM foods to tie in with their development of relevant industries and confirm the safety of newly emerging GM events.

Although the operational details of the PMSAS in different places may vary, they are all implemented in accordance with the same framework, i.e. the internationally-recognised scientific principles and guidelines recommended by the Codex Alimentarius Commission (Codex) as well as the Organisation for Economic Cooperation and Development (OECD). The approach of the safety assessment is based on the principle of the comparative approach, that the safety of the GM food is assessed relative to its conventional counterpart having a history of safe use, taking into account both intended and unintended effects (see Figure).

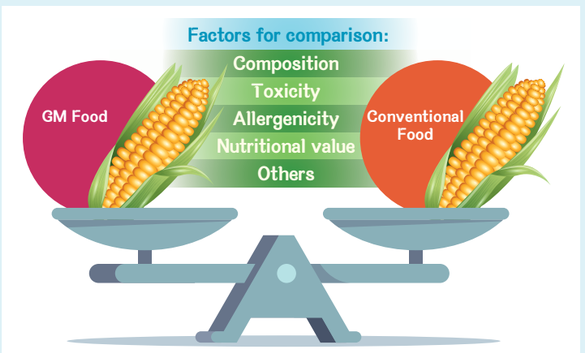

Figure: The comparative approach is aimed to establish the relative safety of a GM product with its comparator, i.e. the conventional or non-modified counterpart, by determining if a GM product has new or altered hazards. The comparator is usually considered safe on the basis of its long history of consumption.

To date, the World Health Organization (WHO) has stated that GM foods currently available on the international market have passed safety assessments and are not likely to present risks to human health. In addition, there is no evidence showing that GM foods have resulted in any food safety issues in the countries where they are available for sale after assessment.

In recent years, various study reports of different places (e.g. the Institute of Genetics and Developmental Biology of the Chinese Academy of Sciences, US National Academy of Sciences, Royal Society of the United Kingdom, US Society of Toxicology, Australian Academy of Science, and American Cancer Society) also commonly pointed out that consumption of GM foods is as safe as their non-GM counterparts.

In Hong Kong, the Government also proposed previously to implement a mandatory PMSAS for GM foods. However, considering that most food in Hong Kong is imported, the Centre for Food Safety (CFS) has been monitoring international studies on the safety of GM food when further developing the relevant proposal.

It is noted that study reports of different places in recent years commonly pointed out that consumption of GM foods is as safe as their non-GM counterparts, as aforementioned. GM events of GM foods commercially produced and sold internationally have generally passed safety assessments in other countries and regions with a PMSAS in place for years, and that such GM foods are not likely to present risks to human health. Therefore, conducting another round of local pre-market safety assessment for GM foods will have little practical effect on improving the level of food safety in Hong Kong and may not be an effective use of resources.

Labelling of GM food

The Codex considers that governments of different places may make their own decisions on whether or not to label GM food. It also emphasises that such labelling arrangement, if made, should be in conformity with the provisions promulgated by the Codex to avoid potential trade issues.

At present, policies on GM food labelling vary in different places. For example, Singapore has no specific requirements on GM food labelling; Canada implements voluntary GM food labelling on the consideration that safety assessments have found GM foods to be as safe and nutritious as non-GM foods, thus GM foods are only required to be labelled like any other foods. While mandatory GM food labelling is implemented in the United States, the European Union, Australia and Mainland China etc., details of their implementation such as the scope of food products covered, the format of labelling and the threshold level of labelling required vary. The exemption arrangements for food products with GM materials undetectable (e.g. refined foods) are generally different as well.

The CFS issued the "Guidelines on Voluntary Labelling of Genetically Modified Food" (Guidelines) in 2006 to set out the basic principles and reference materials of the recommended GM food labelling approaches for the trade. The CFS all along communicates with the trade on issues relating to the safety and labelling of GM food, and encourages the trade to label GM foods with reference to the Guidelines. Major local food manufacturers, importers and retailers generally attach great importance to the truthfulness of GM food labels and make reference to the recommendations in the Guidelines when applying such labels.

Mandatory GM food labelling, if implemented in Hong Kong, would result in cost increases. The impact of such costs to small enterprises would be particularly significant. They would encounter a range of difficulties including the need to secure contractual agreements with product manufacturers as to whether their products contain GM ingredients, possibly resulting in some products being dropped from the market.

Local situation

The Public Health and Municipal Services Ordinance (Cap. 132) has laid down the legal framework for food safety regulation in Hong Kong. Section 54 of the said Ordinance provides that all food intended for sale for human consumption, no matter whether it is GM food or not, must be fit for human consumption.

The CFS will continue to monitor the safety of foods sold in the local market to ensure they meet the required safety standards, and also keep in view relevant developments of GM food and the continued implementation of the Guidelines by the local trade.

For more information on GM food, please visit our website

http://www.cfs.gov.hk/english/programme/programme_gmf/programme_gmf.html

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