

**For Discussion
on 11 July 2017**

Panel on Food Safety and Environmental Hygiene

**Labelling system for genetically modified food and
proposal on introduction of pre-market safety assessment on
genetically modified food**

Purpose

This paper briefs Members on the current regulatory control of genetically modified (GM) food in Hong Kong, the implementation of the voluntary GM food labelling system, our publicity and education efforts on GM food and a proposal on the introduction of pre-market safety assessment of GM food.

International scenario

2. GM food is any food that is, or is derived from, an organism in which the genetic material has been modified using modern biotechnology.¹
3. The Codex Alimentarius Commission² (Codex) considers that governments of different places may make their own decisions on whether or not to label GM food, and emphasizes that labelling arrangements should be in

¹ According to the World Health Organization, “genetically modified organisms (GMOs) can be defined as organisms (i.e. plants, animals or microorganisms) in which the genetic material (DNA) has been altered in a way that does not occur naturally by mating and/or natural recombination. The technology is often called “modern biotechnology” or “gene technology”, sometimes also known as “recombinant DNA technology” or “genetic engineering”. It allows selected individual genes to be transferred from one organism into another, also between nonrelated species. Foods produced from or using GM organisms are often referred to as GM foods.” (http://www.who.int/foodsafety/areas_work/food-technology/faq-genetically-modified-food/en/)

² Codex was established by the Food and Agriculture Organization and the World Health Organization of the United Nations in 1960s and has been the single most important international reference point for consumers, food producers, processors, national food control agencies and the international food trade in developing food associated standards.

conformity with the provisions promulgated by the Codex to avoid potential trade issues.

4. The World Health Organization (WHO) is of the view that the safety of individual GM food should be assessed on a case-by-case basis, given that different GM organisms are developed in different ways. Thus, “it is not possible to make general statements on the safety of all GM food”.

5. The Codex has formulated guidance on the risk assessment of GM food. Also, it recommends member countries to set up a regulatory framework for safety assessment of GM food and has established relevant guidelines for the assessment.

6. At present, different countries and places have formulated their labelling, assessment and/or regulatory arrangements on GM food (including pre-market safety assessment schemes), having regard to their circumstances. The major considerations include consumers’ right to information, food safety and choices, operation costs of the trade, protection of local agricultural markets, economic and trade considerations, as well as conservation of ecological environment.

7. According to WHO, GM food currently available for sale in the international market has passed safety assessments of the food safety regulatory bodies of the relevant countries or places and is not likely to present risk for human health. WHO assists different countries and places in identifying food that should be subject to risk assessment and recommends appropriate approaches for conducting safety assessment. Where any countries or places decide to conduct safety assessment on GM food, WHO recommends the use of the Codex guidance for such purposes (please refer to paragraph 5 above). In general, the safety assessment of GM food focuses on direct health effects (toxicity), possibility of allergic reaction (allergenicity), specific components considered to have nutritional or toxic properties, and any unintended effects which could result from the gene insertion, etc.

Current regulatory control of GM food in Hong Kong

8. Hong Kong is an open economy with very limited crop yields and

livestock production. The supply of food, therefore, mainly relies on import. In considering food regulatory measures, the primary focus of the Administration pertains to safeguarding food safety and public health. We have all along attached great importance to food safety. All food for sale in Hong Kong for human consumption (including GM food) must comply with the same set of statutory standards on safety, quality and labelling to ensure its fitness for human consumption. Like any other food, GM food is covered in the routine Food Surveillance Programme of the Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department (FEHD). CFS takes food samples at the import, wholesale and retail (including online retailers) levels and adopts a risk-based principle in determining the types of samples to be collected, the frequency and number of samples taken for testing, and the types of laboratory analysis to be conducted. CFS releases the test results to the public through various channels.

Implementation of voluntary GM food labelling system

9. The Government encourages the trade to adopt GM food labelling on a voluntary basis and provide accurate and user-friendly information on the labels for consumers. In 2006, CFS issued a set of “Guidelines on Voluntary Labelling of Genetically Modified Food” (the Guidelines)³, setting out the principles underlying the recommended labelling approaches for GM food.

10. In gist, the Guidelines’ advice to the trade is that any food items with 5% or more GM materials in their respective food ingredient(s) should be labelled; additional declaration should be provided on the label if a GM food concerned has undergone significant modifications in specific aspects; absolute terms are not recommended to be used for negative GM food labelling; should the trade wish to apply negative labelling, they should ensure that there is documentation to substantiate such a declaration.

11. In 2013, CFS and the Consumer Council conducted a joint study on GM food ingredients in corn and corn-based products available in the local market. Results of the study revealed that majority of the tested products

³ The Guidelines were formulated by a working group set up by FEHD. The working group comprised representatives from the food trade, the Consumer Council and relevant government departments.

complied with the recommendations on voluntary GM food labelling as set out in the Guidelines. Only five samples were found to have contained more than 5% GM materials and yet did not carry GM food labels. The GM materials found in the five samples had however passed the safety assessments conducted by relevant regulatory bodies, and were unlikely to present risk for human health.

Publicity and education

12. CFS disseminates information on GM food to the trade and the public through seminars, trade consultation forums, publications and CFS' website. From January 2013 to June 2017, CFS organised such seminars in 50 schools and family / elderly centres (involving over 7,000 participants). In addition, CFS organised seven trade consultation forums and made use of those occasions to discuss the proposed pre-market safety assessment scheme and labelling systems of GM food with the trade and exchange views with them on regulation of GM food. CFS also uploads "GM Food Newsletters" onto its website every year and distributes the printed copies to the general public. CFS will continue to update the database on GM food approved in different countries and places for the reference of the public.

Proposal on introduction of pre-market safety assessment of GM food

13. As abovementioned, GM food currently available for sale in the international market has passed risk assessments of the food safety regulatory bodies of relevant countries or places and is not likely to present risk for human health. In addition, CFS monitors the safety of food (including GM food) through its Food Surveillance Programme, encourages the trade to adopt the voluntary GM food labelling system, as well as conducts public education actively. Nevertheless, it is worthwhile to consider introducing a mandatory pre-market safety assessment scheme in Hong Kong, in order to provide a further safeguard to enhance the food safety control over GM food and provide the legal basis for preventing unauthorised GM food from entering into the local market.

14. Our initial idea on the pre-market safety assessment scheme is that a GM food developer who intends to place a GM food on the local market would be required to submit an application together with the necessary supporting

documentation to CFS for evaluation. CFS will determine whether the GM food developer has adequately addressed the safety issues based on Codex principles and guidelines. GM food which consists of, or is derived from, GM microorganisms, plants and animals must pass the safety assessment before it may be sold in Hong Kong. CFS will draw up a list of approved GM food and upload the list on its homepage for the reference of the public and the trade.

15. It is envisaged that an application for pre-market safety assessment would normally be submitted by biotechnology companies which develop the GM organisms for food production. As such, the expected impact of the pre-market safety assessment scheme on traders, importers, distributors and retailers should be minimal. The assessment procedures could be simplified for GM food that has already been approved for human consumption by other food safety regulatory bodies, provided that the approaches and principles adopted by the relevant regulatory bodies are similar to those of Codex.

16. In considering the introduction of a mandatory pre-market safety assessment scheme, the Food and Health Bureau and CFS have been monitoring the international development on regulation of GM food and the local circumstances, with a view to launching a public consultation on the proposed scheme in due course.

Advice sought

17. Members are invited to note and provide views on the Government's work on GM food.

**Food and Health Bureau
Centre for Food Safety
Food and Environmental Hygiene Department
July 2017**