For discussion
on 8 March 2016

LegCo Panel on Food Safety and Environmental Hygiene

Report on the Food Surveillance Programme for 2015

Purpose

This paper briefs Members on the Food Surveillance Programme (FSP) of the Centre for Food Safety (CFS) in 2015 and reports on the major surveillance results for the period and the follow-up actions taken.

Food Surveillance Programme

2. CFS adopts the World Health Organization (WHO)'s "from farm to table" strategy to ensure food safety in Hong Kong. Control at source includes allowing only food from registered farms / processing plants with audit inspections to enter Hong Kong, and requiring health certificates for certain food animals and food products, etc. At the downstream of the food supply chain, the food surveillance programme is a key component of our measures to ensure food safety.

3. The FSP of CFS monitors food on sale to ensure its compliance with the legal requirements and fitness for human consumption. 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. The sampling programme is under regular review by CFS, taking into account factors such as past food surveillance results, local and overseas food incidents, and relevant risk analyses. CFS consults the Expert Committee on Food Safety (the Expert Committee) on food surveillance projects under the FSP, which will be implemented only after they have been endorsed by the Expert Committee.

4. The three-pronged food surveillance strategy consists of regular food surveillance, targeted food surveillance and seasonal food surveillance. In addition, CFS conducts surveys on popular food items to assess the safety of food commonly consumed in Hong Kong. In 2015, CFS completed eight targeted food surveillance projects, six seasonal food surveillance projects and one survey on popular food items. Details are set out in the **Annex**.

Announcement Mechanism

5. CFS releases a monthly Food Safety Report that summarises all surveillance results of the previous month. If test results indicate that a food sample poses immediate threats to public health or is related to issues of public concern, CFS will issue press releases immediately to explain the risks involved and advise the public against consuming the food concerned.

6. The results of targeted food surveillance projects and surveys on popular food items will be released upon completion, while the results of seasonal food surveillance projects will be announced ahead of the relevant festivals and seasons to enable consumers to make informed choices.

7. Apart from announcement through press releases, the food surveillance results will also be uploaded onto the CFS' Facebook page. Advice will be given to consumers on measures to minimise health risks posed by problem food.

Overall Results

8. Besides radiation testing on samples of imported food from Japan[1], CFS also conducted tests on a total of about 64 300 food samples in 2015, i.e. about nine samples per 1 000 persons of the population of Hong Kong. This is a relatively high testing rate when compared with overseas economies.

[1] Please refer to paragraphs 24 to 26 below for radiation testing of samples of imported food from Japan.

9. The test results revealed 195 unsatisfactory samples (please see **Table 1**). The overall satisfaction rate was 99.7%. The results of a number of targeted food surveillance projects[2] and surveillance on some seasonal food[3] and popular food items[4] were all satisfactory.

Table 1: Major problems of unsatisfactory samples

Food group	Number of samples tested*	Number of unsatisfactory samples	Major problems (number of unsatisfactory samples involved)
Vegetables, fruits and related products	29 700	130	Pesticides (93), colouring matters (14), preservatives (12), pathogens (5), food labelling (4), metallic contaminants (2),
Meat, poultry and related products	6 300	11	Preservatives (7), pathogens (4)
Aquatic products and related products	5 800	18	Metallic contaminants (7), pesticides (5), veterinary drug residues (4), pathogens (1), hygiene indicators (1)
Milk, milk products and frozen confections	7 900	24	Hygiene indicators (21), food labelling (2), composition (1)
Cereals and cereal products	2 900	2	Preservatives (1), metallic contaminants (1)
Others	11 700	10	Pathogens (3), food labelling (2), colouring matters (2), composition (1), undeclared allergens (1), pesticides (1)
Total	**64 300**	**195**	

* Figures are rounded to the nearest hundred.

[2] Including projects on Listeria monocytogenes and coagulase-positive staphylococci organisms in ready-to-eat food.

[3] Including mooncakes, hairy crabs and poon choi.

[4] Hotpot food and soup base

10. Most unsatisfactory samples did not involve serious problems and would not cause adverse health effects to the general public. Details of individual food items with more unsatisfactory samples are set out below.

I. Pesticide residues in vegetables and fruits

11. Following the commencement of the Pesticide Residues in Food Regulation (Cap. 132CM) on 1 August 2014, CFS completed pesticide residue tests on about 36 000 food samples collected at import, wholesale and retail levels in 2015. Of these, 93 samples were found to be unsatisfactory while the remaining samples were all satisfactory. The overall unsatisfactory rate was less than 0.3%.

12. According to the findings of the risk assessment[5] conducted by CFS on the unsatisfactory samples, normal consumption of the foods concerned would unlikely pose immediate adverse health effects. Excessive pesticide residues in these foods may be due to the trade not observing the Good Agricultural Practices, e.g. using excessive pesticides and / or not allowing sufficient time for pesticides to decompose before harvesting. The maximum residue limit (MRL) of pesticide residues in food stipulated in the Regulation is not a safety indicator. It is the maximum concentration of pesticide residues permitted in a food commodity under the Good Agricultural Practices when applying pesticides. In this connection, consumption of food with pesticide residues higher than the MRL does not necessarily lead to any adverse health effects.

13. CFS has followed up on the samples concerned, including announcement of the testing results to the public, tracing of the source and distribution of the foods concerned, as well as collection of samples for testing, with a view to protecting public health.

[5] The assessment methodology involves comparison between the data determined by the detected level of pesticide residues in a food sample in combination with the relevant consumption pattern of the food (i.e. the result of risk assessment) and the safety reference values (e.g. acceptable daily intakes (ADI) for long-term exposure assessment, or acute reference dose (ARfD) for short-term exposure assessment).

II. Preservatives in fresh meats

14. CFS collected over 700 fresh meat samples for testing of preservatives in 2015. Six samples were found containing sulphur dioxide, a preservative not permitted to be used in the food concerned. According to the risk assessment on the levels of preservatives in these samples, normal consumption of the food concerned would not pose any adverse health effects to consumers.

15. CFS had immediately notified the traders in question and samples were taken to monitor their improvement. Prosecutions were taken against five cases with sufficient evidence. As at 31 December 2015, there were four convicted cases with fines imposed, while the ruling for the remaining case was pending.

16. Under the Preservatives in Food Regulation (Cap. 132BD), any person who sells food containing levels of preservatives exceeding the legal limits shall be guilty of an offence and liable on conviction to a maximum penalty of a fine of $50,000 and imprisonment for six months. Regarding shop operators selling fresh meats adulterated with sulphur dioxide, their licences will be subject to suspension or cancellation by the Food and Environmental Hygiene Department (FEHD) in accordance with the Demerit Points System. If the offenders are public market stall tenants, the tenancies of their stalls will also be subject to termination by FEHD.

III. Levels of metallic contaminants in aquatic products beyond legal standards

17. CFS collected over 1 100 aquatic food samples through its regular food surveillance projects for testing of metallic contaminants in 2015. Seven samples were detected with metallic contaminants at levels exceeding the legal limits, five were fish samples with excessive mercury and two crab samples with excessive cadmium. The testing results of the remaining samples were satisfactory.

18. Occasional consumption of crabs with cadmium exceeding the above-mentioned legal limits would not cause adverse health effects. However, prolonged excessive intake of cadmium may do harm to the kidney. Some international organisations such as WHO have noted that consuming

predatory fish species is the main source of mercury intake for human beings. CFS' Total Diet Study Report has also pointed out that large fish or predatory fish species (e.g. tuna, alfonsino, shark, swordfish, marlin, orange roughy and king mackerel) may contain high mercury levels. Hence, groups particularly susceptible to the adverse effects of mercury, such as pregnant women, women planning pregnancy and young children, are advised to opt for fish that are smaller in size and avoid the consumption of these types of fish which may contain high levels of mercury, in order to minimise the risk of excessive exposure to metallic contaminants in food.

19. As metallic contaminants in food mainly derive from the environment, source control is more effective in containing metallic contamination of food. As such, CFS has traced the sources of the unsatisfactory samples and notified the authorities in the places of origin to take follow-up actions. CFS has also informed the retailers concerned of the above irregularities and required them to stop selling and dispose of the foods in question immediately.

IV. Hygiene indicators of milk products and frozen confections exceeding legal standards

20. CFS has taken samples of milk products and frozen confections at the import level for testing. In particular, milk products and frozen confections imported into Hong Kong for the first time have to be detained for testing and will only be allowed for sale in the market after passing the tests. During such operations in 2015, CFS found eight samples from two consignments of imported milk products and two consignments of imported frozen confections with hygiene indicators (total bacterial count, colony count or coliform organisms) exceeding the legal standards of Hong Kong. While the hygienic conditions of these samples were unsatisfactory, it did not imply that the samples would pose direct adverse health effects.

21. CFS has notified the authorities of the exporting countries for follow-up. The products in question have been suspended from import into Hong Kong until CFS is satisfied with the remedial actions of the importers / manufacturers and the investigation reports to be submitted by the relevant authorities of the exporting countries.

22. At the retail level, the hygiene indicators of five milk product samples and eight frozen confection samples were found to have exceeded the legal limits of Hong Kong in 2015. The eight unsatisfactory samples of frozen confections were all manufactured locally. FEHD had conducted site inspections and the six manufacturers concerned had suspended the production line as instructed by CFS for thorough cleansing and disinfection, as well as a review to improve the production process, until the hygienic conditions were to the satisfaction of FEHD, so as to ensure that their products comply with the hygiene standards.

23. Given the 2015 test results, apart from strengthening communication with the trade to enhance food safety levels, FEHD will step up testing of frozen confections both imported and locally manufactured in 2016. Besides, inspections will be targeted at local frozen confection factories with unsatisfactory samples. Training for food safety management will also be provided to the persons-in-charge of these factories to assist them in upgrading the hygiene and safety standards of the factories.

V. Radiation testing on food imported from Japan

24. In response to the Fukushima nuclear power plant incident in Japan in 2011, the Director of Food and Environmental Hygiene issued an order under Section 78B of the then Public Health and Municipal Services Ordinance (Cap. 132) to prohibit the import of certain fresh produce, milk, milk beverages and milk powder from the five most affected prefectures of Japan, namely Fukushima, Ibaraki, Tochigi, Chiba and Gunma. Targeted radiation testing on food imports from Japan has been carried out since then.

25. More than 72 500 samples of food imported from Japan were tested in 2015. The test results of all samples were satisfactory. The surveillance results were uploaded onto CFS' website every working day. Of these, two samples (one tea powder sample and one tea bag sample) were detected with low radioactivity levels not exceeding the guideline levels set by Codex, which would not pose any adverse health effects. Despite that, the importers voluntarily surrendered the related food consignments for disposal upon learning the test results. The food consignments concerned had not entered the local market.

26. Furthermore, CFS found in January 2015 that an importer contravened the order issued in 2011 under Section 78B of the then Public Health and Municipal Services Ordinance (Cap. 132) by importing a small quantity of carrots from Chiba, Japan, for sale in Hong Kong. CFS immediately put the remaining box of carrots at the retailer under mark and seal. Samples were taken for testing of radiation levels and the results were satisfactory. In November 2015, CFS also found that an importer had imported a consignment of 652 cartons of fresh vegetables and fruits from Ishikawa and Nagano in Japan which contained 90 cartons of radish from Chiba and 40 cartons of cabbage from Ibaraki rather than from the other two prefectures. CFS immediately marked and sealed all the illegally imported products stored in the warehouse of the importer. None of the products had entered the market. Samples of the products concerned were taken for testing of radiation levels and the results were satisfactory.

VI. Others

27. CFS also strengthened surveillance in response to public concerns on other food incidents and reports, such as the detection of pesticide residues with levels exceeding their regulatory standards in a number of tea leaf / floral tea samples available for sale in Taiwan, the massive explosions in Tianjin, and the recall of several kinds of coconut drinks containing undeclared dairy ingredients in Australia and New Zealand. CFS took immediate risk management measures, including liaising with the relevant authorities and the trade for more details and information, conducting sales check to determine whether the affected products were sold in Hong Kong and, where necessary, taking relevant food samples from the local market for testing of the hazardous substances in question. Test results of the unsatisfactory samples were announced immediately through press releases.

Recent Developments

28. The Government has all along been vigilant about the regulation of food safety and from time to time reviews the existing regulatory system with a view to making corresponding improvement if and when necessary. For example, FEHD has imposed licensing conditions associated with the permit for online sale of restricted foods on 22 February 2016 in order to ensure food

safety. The licensing conditions require that restricted foods must be obtained from lawful sources, that they shall not be tampered with during transportation to prevent cross-contamination, and that the food products shall be stored at a safe and proper temperature at all times. Moreover, the operators shall provide information on their websites such as the permit number, registered address and the restricted foods permitted for sale, so that consumers can verify such information through the FEHD website when making a decision to purchase the foods online.

29. To further enhance control measures on food imports by sea, and to align such measures with those being applied to food imports by air and land, CFS has set up a Food Control Checkpoint for food imported by sea at Kwai Chung Customhouse (KCCH) to strengthen food safety. The checkpoint has commenced operation since the end of October, 2015. CFS adopts the risk-based principle in selecting containers conveying food via the sea route for inspection, taking into account such factors including intelligence, food safety incidents in neighbouring areas and overseas countries, whether the importer concerned has previously disregarded instructions to contact CFS for food inspections, whether cargo manifests have been submitted to the Customs and Excise Department prior to arrival of containers, and whether the cargo manifests contain all the required information, etc. We note that the Panel on Food Safety and Environmental Hygiene intends to visit the Food Control Checkpoint of CFS at KCCH. To enable Members to understand more fully the inspection of food imports by sea, we suggest Members should also observe the inspection operation carried out by CFS at the godown or cold store of the importer concerned. We will inform the Secretariat of the visit arrangements in due course.

Conclusion

30. The FSP implemented by CFS in 2015 revealed that the overall satisfaction rate of the food sold in Hong Kong remained at a high level, which was comparable to that of recent years. For individual food products with problems identified, CFS has taken prompt and effective risk management actions to safeguard public health.

Advice Sought

31. Members are invited to note and comment on the FSP implemented by CFS in 2015.

Food and Health Bureau
Food and Environmental Hygiene Department
Centre for Food Safety
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Annex

Projects under the 2015 Food Surveillance Programme

(A) Regular Food Surveillance

It covered major food groups such as fruits and vegetables, meat, poultry, aquatic products, milk and cereals. CFS adopted a risk-based approach in taking samples for chemical and microbiological analyses.

(B) Targeted Food Surveillance

(i) Sulphur dioxide in meat
(ii) Metallic contaminants in food
(iii) Listeria monocytogenes in ready-to-eat foods
(iv) Vibrio parahaemolyticus in ready-to-eat foods
(v) Salmonella in ready-to-eat foods
(vi) Staphylococcus aureus in ready-to-eat foods
(vii) Bacillus cereus in ready-to-eat foods
(viii) Clostridium perfrigenes in ready-to-eat foods

(C) Seasonal Food Surveillance

(i) Lunar New Year food
(ii) Rice dumplings
(iii) Mooncakes
(iv) Hairy crabs
(v) Lap mei
(vi) Poon choi

(D) Survey on Popular Food Items

(i) Hot pot food and soup base