

# Summary of 2013 Food Surveillance Programme

Centre for Food Safety  
Food and Environmental  
Hygiene Department



# Food Surveillance Programme in 2013

- The Centre for Food Safety (CFS) adopts the World Health Organization's "from farm to table" framework to ensure food safety in Hong Kong. Control at source includes allowing only the supply of food produced by approved farms / processing plants with audit inspections, and the requirements of health certificates for certain food animals and food products, etc. At downstream stages of the food supply chain, the food surveillance programme is a key component to ensure food safety.
- The programme monitors foods offered for sale to ensure their compliance with legal requirements and fitness for human consumption. Samples are collected at import, wholesale and retail levels for microbiological, chemical and radiation level testing.
- CFS has adopted a three-tier surveillance strategy, consisting of routine food surveillance, targeted food surveillance and seasonal food surveillance. CFS also conducts surveys on popular local food items to assess the safety of commonly consumed food items.

# Routine food surveillance

- Routine food surveillance covers major food groups such as fruits and vegetables, meat, poultry, aquatic products, milk and cereals.
- Types of testing:
  - Microbiological testing included pathogens and total bacterial count, etc
  - Chemical testing included food additives, contaminants and natural toxins, etc
  - Radiation level testing
- CFS announced all surveillance results of the previous month by a monthly “Food Safety Report”. The reports were announced in press releases and also presented in a user-friendly format in CFS website. Apart from announcing results, CFS also gave advice to consumers to minimise health risks posed by problem foods.

# Targeted food surveillance

- In 2013, CFS had undertaken a number of targeted food surveillance projects and published the relevant reports, including:
  - ❑ Sulphur dioxide in meat (3 phases)
  - ❑ Microbiological quality of lunch boxes
  - ❑ Microbiological quality of refrigerated pre-packaged boxed meal that required reheating before consumption
  - ❑ Microbiological quality of ice-cream and frozen confections
  - ❑ Microbiological quality of Chinese cold dishes



# Targeted food surveillance (Cont'd)

- ❑ Microbiological quality of bottled water
- ❑ Sudan dyes in eggs and egg products
- ❑ Nitrate and nitrite in meat, meat products and cheese
- ❑ Preservatives in preserved fruits and vegetables
- ❑ *Listeria Monocytogenes* in ready-to-eat food kept under refrigeration
- ❑ Cooking oil



# Seasonal food surveillance

- CFS continues to monitor and assess the safety of highly popular festive and seasonal food items. The completed projects included:
  - ❑ Lunar New Year food
  - ❑ Rice dumplings
  - ❑ Mooncakes
  - ❑ Hairy crabs
  - ❑ Poon Choi





# Survey on popular food

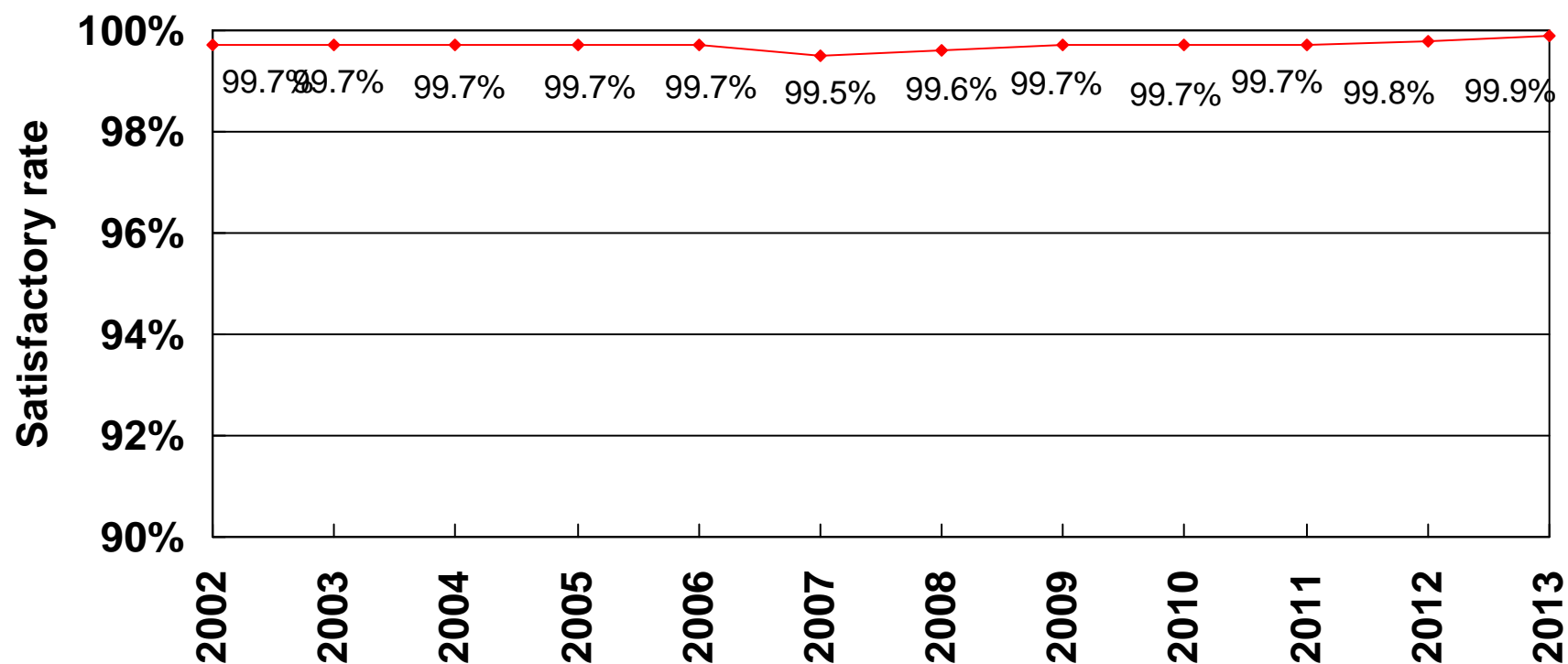
- CFS also conducted surveys on popular local food items to assess the safety of commonly consumed food items, which include:
  - Nuts and seeds



# Overall satisfactory rate

- The overall satisfactory rate was 99.9%, which was comparable to those of recent years.

**Overall satisfactory rates of food surveillance programme  
(2002 - 2013)**





# Results of different types of food

- Apart from samples of imported Japanese food taken for testing of radiation level in response to the Fukushima nuclear power plant incident in Japan, about 64600 samples were tested by CFS in 2013. Of these, 57 samples were found unsatisfactory.

Food group	No. of samples*	Unsatisfactory samples	Satisfactory rate
Vegetables, fruits & products	27000	8	99.9%
Meat, poultry & products	6600	4	99.9%
Aquatic & related products	6500	7	99.9%
Milk, milk products & frozen confections	8000	24	99.7%
Cereal, grains and products	1400	1	99.9%
Others	15200	13	99.9%
<b>Total</b>	<b>64600</b>	<b>57</b>	<b>99.9%</b>

\* N.B.: Figures may not add up to total due to rounding.

# Major problems of the unsatisfactory samples

Food group	No. of unsatisfactory samples	Major problems (no. of unsatisfactory samples)
Vegetables, fruits & products	8	Metallic contamination(3), preservatives(3), pesticides(2)
Meat, poultry & products	4	Preservatives(3), veterinary drug residue (1)
Aquatic & related products	7	Metallic contamination(3), pathogens(2), preservative (1), veterinary drug residue (1)
Milk, milk products & frozen confections	24	Hygienic indicators(24)
Cereal, grains and products	1	Metallic contamination(1)
Others	13	Pathogens(5), colouring matters(5), preservatives(3)

## Major problems of the unsatisfactory samples (Cont'd)

- As far as the unsatisfactory samples were concerned, most of them were not serious and would not pose serious health effects to the general public.
- Some of the more concerned incidents and results are as follows:
  - ❑ Hygiene indicators for imported milk products and frozen confections
  - ❑ Preservatives in fresh meats and dried food
  - ❑ Excessive metallic contaminants in vegetables and aquatic products
  - ❑ Pathogens in cold dishes and oysters

# Hygiene indicators for imported milk products and frozen confections

- Samples of imported milk products and frozen confections are taken for testing at the import level. In particular, milk products and frozen confections imported into Hong Kong for the first time are detained for inspection and testing before entering the market for sale.
- In 2013, CFS found that the hygiene indicators (total bacterial count, coliform organisms or colony counts) of 16 samples from 6 consignments of imported milk products or frozen confections had exceeded the legal standards. All these consignments were either sealed and disposed of without entering the market.
- CFS had immediately issued warning letters to the relevant importers and also notified the authorities of the exporting countries for follow-up. The products in question have been suspended from import into Hong Kong until CFS receives reports on satisfactory remedial actions from the importers or manufacturers.

# Preservatives in fresh meats and dried food

- Surveillance results showed that food that were commonly found to contain preservatives exceeding legal limits were fresh meats and dried food (like bamboo fungus, white fungus, candied lotus seed and preserved pummelo, etc.). However, it is unlikely that the foods concerned with preservatives at the detected levels would pose any adverse health effect to consumers upon normal consumption.
- Warning letters were immediately issued to the traders concerned and follow-up samples were taken to monitor their improvements. Prosecutions were taken against the traders when there was sufficient evidence.
- Selling food containing preservatives at level exceeding legal limits is an offence under the Preservatives in Food Regulation (Cap. 132, sub. leg.), and the maximum penalty is a fine of \$50000 and 6 months' imprisonment. Regarding premises selling fresh meats adulterated with sulphur dioxide, upon conviction, FEHD will impose the penalty of suspension or cancellation of the concerned licence according to the "Demerit Points System". For public market stall owners, their tenancies might be terminated.

# Excessive metallic contaminants in vegetables and aquatic products

- In 2013, CFS continued to detect several samples of vegetables (such as Chinese wolfberry, baby Shanghai green, Chinese celery) and aquatic products (e.g. codfish, frozen ling fish) that contained levels of cadmium and mercury (both metallic contaminants) exceeding the legal limits, respectively. Except for two frozen fish fillets on which the risk of adverse health effect upon long term consumption cannot be ruled out (particularly for vulnerable groups such as pregnant women, fetuses and young children), it is unlikely that the other food concerned with cadmium or mercury at the detected levels would pose any adverse health effect to consumers upon normal consumption.
- As metallic contaminants in food mainly come from the environment, it is more effective to control at the source of food products. As such, CFS had traced the sources of the unsatisfactory samples. For those cases with identified source, CFS had notified the authorities of the places of origin for follow-up.
- CFS also issued warning letters to the traders concerned requiring them to stop selling and to dispose of the affected food.



# Pathogens in cold dishes and oysters

- Among all unsatisfactory results for pathogen testing in the 2013 food surveillance programme, over 70% involved cold dishes (*Salmonella* and *Clostridium perfringens*) and uncooked raw oysters (norovirus).
- Cold dishes are usually prepared in advance and stored at room temperature for a period of time before serving and they are not usually reheated before consumption. These factors may affect the safety and hygienic quality of the products. On the other hand, raw oyster was identified as the most commonly incriminated food for local foodborne norovirus outbreaks.
- CFS also issued warning letters to the traders concerned requiring them to stop selling and to dispose of the affected food. For those cases with required control at source, CFS had also notified the authorities of the places of origin for follow-up.

# Advice for the trade

- Food manufacturers and importers should source food ingredients from reliable sources and ensure that the food complies with local regulations. The trade should also maintain a good recording system in accordance with the Food Safety Ordinance to allow source tracing if needed.
- Besides, regarding the finding of pathogens from some ready-to-eat food samples, the trade should adhere to good hygiene practices in processing food, especially to observe time and temperature (i.e. 4°C or below; above 60°C) controls, and separate raw food from ready-to-eat food. Also, the trade should only obtain oysters and bivalve shellfish for raw consumption from reliable sources, and properly handle them to minimize risk of contamination.
- The trade should always take note of the information issued by CFS through its webpage, food alert, publications, letters and Trade Consultation Forum for the latest development on food safety.

# Advice for consumers

- With regard to some food samples containing excessive/ non-permitted food additives or veterinary drug residues, most of the levels concerned were low and would not pose adverse health effects. However, consumers should still take a balanced diet so as to avoid excessive intake of certain harmful substances as a result of frequent consumption of a small range of food items.
- Although excessive cadmium (a metallic contaminant) was found in some vegetable samples, the detected levels were low. Soaking and thorough washing of vegetables before consumption can remove contaminants adhered to the surface.
- Since some fish samples were found containing excessive mercury, appropriate consumption of a variety of fish is recommended. As pregnant women, women planning pregnancy and young children are more susceptible to the effects of mercury, they should avoid large predatory fish when choosing fish dishes.

## Advice for consumers (Cont'd)

- Concerning the findings of pathogens in some Chinese cold dishes and raw oyster samples in several occasions, consumers are advised to patronise licensed restaurants or premises with valid permit and pay attention to the hygiene condition.
- The public should beware that due to their specific growing nature, oysters can be easily contaminated by pathogens like norovirus. Currently there is no foolproof method to ensure oysters are absolutely safe for raw consumption. If people consume raw oysters contaminated with pathogens, they may develop symptoms of food poisoning and health may be affected as a result.
- One can hardly distinguish the affected oyster or identify the virus or bacteria as they are too small for naked eyes. Eating raw or incompletely cooked oysters carries inherent food safety risk and may lead to food poisoning. Susceptible population (e.g. young children, elderly people, pregnant women and persons with weakened immune systems, etc.) should avoid consumption of raw or incompletely cooked shellfish (including oysters). Thorough cooking of shellfish is an effective way to combat against risk associated with consumption of food contaminated with norovirus or other pathogens.

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# Conclusion

- The food surveillance programme of 2013 revealed that the overall satisfactory rate of food products in Hong Kong was maintained at a high level, which was comparable to the results of recent years.
- For individual problem food items identified, CFS has taken prompt and effective risk management actions to safeguard public health.

# Food Surveillance Programme in 2014

- CFS will maintain the three-tier food surveillance approach i.e. routine food surveillance, targeted food surveillance and seasonal food surveillance in 2014, and collect samples at import, wholesale and retail levels for microbiological, chemical and radiation level testing.
- In planning the food surveillance programme, CFS takes into consideration various factors including the consumption level, the risk of food items, past surveillance data and local and overseas food incidents. In addition to focusing on those unsatisfactory conditions in 2013 such as the excessive use of preservatives in food, and metallic contamination in vegetables and aquatic products exceeding the standards, the food surveillance programme of 2014 will continue to include various targeted and seasonal food surveillance projects. In addition, CFS will conduct thematic surveillance on food focusing on issues of concern, such as safety of food consumed in hotpot setting.
- In order to allow the public to obtain the latest information on food safety, CFS will continue to issue results of food surveillance via various channels on a timely basis. CFS will also closely monitor the latest international development on food safety and adjust the food surveillance programme accordingly.