# Food Safety Report for June 2012

Centre for Food Safety
Food and Environmental
Hygiene Department







## Introduction

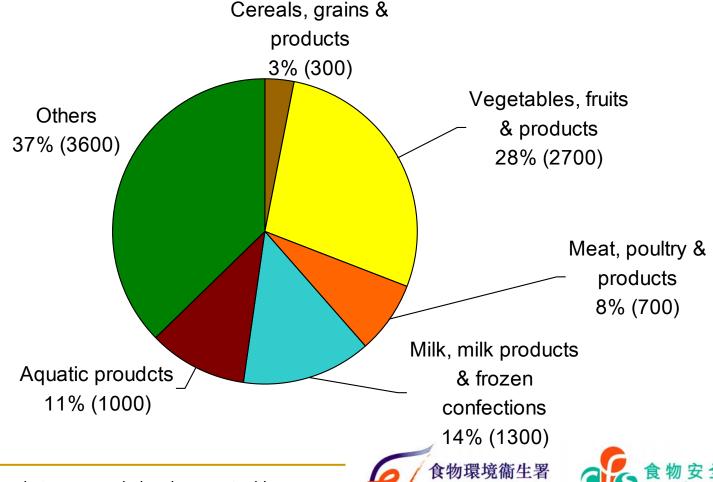
- The Centre for Food Safety (CFS) adopts the three-tier food surveillance approach, i.e. routine food surveillance, targeted food surveillance and seasonal food surveillance to collect samples at import, wholesale and retail levels for microbiological, chemical and radiological tests.
- CFS releases the "Food Safety Report" every month so as to allow the public to obtain the latest food safety information timely.
- This presentation gives an account of the food surveillance sample result analyses in June 2012.





## Types of food tested

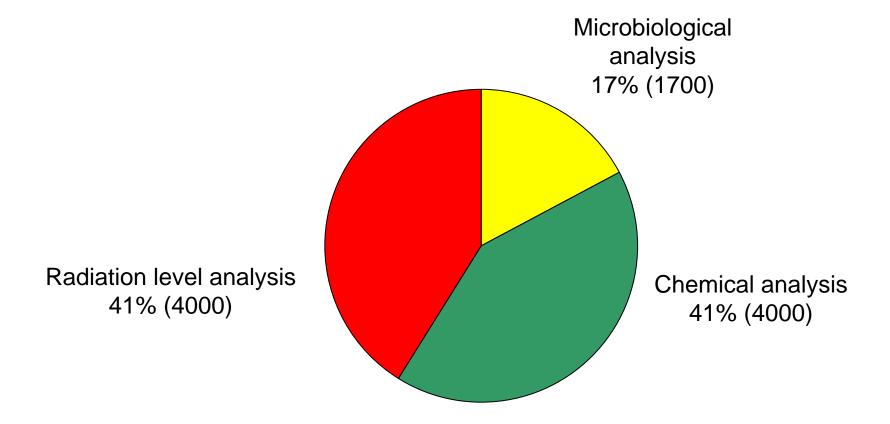
About 9700 food samples of various food groups were tested.



N.B.: Figures in brackets are rounded and may not add up to total due to rounding.



## Types of testing

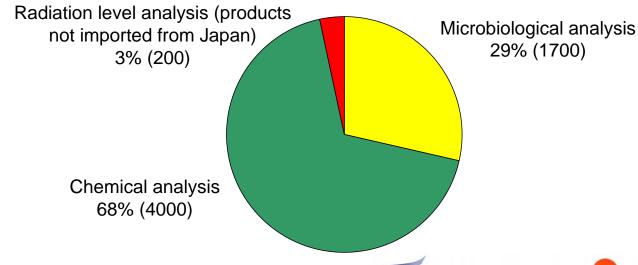






## Types of testing (Cont'd)

- In response to the Fukushima nuclear power plant incident in Japan, CFS has stepped up surveillance of imported Japanese food for testing of radiation level from mid-March 2011. In June 2012, all the radiation level test results of about 3800 samples were satisfactory.
- Except that, types of testing for the remaining food surveillance samples are distributed as follows:

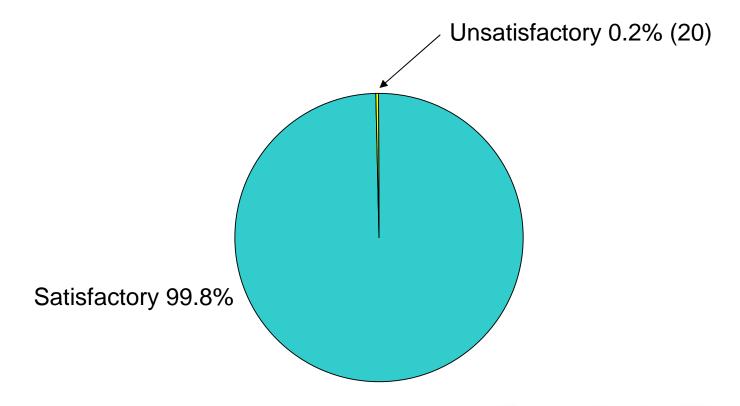






#### Overall results

There were 20 unsatisfactory samples. Overall satisfactory rate was 99.8%.







## Unsatisfactory samples

20 unsatisfactory food samples included 7 previously announced results. The remaining 13 unsatisfactory samples are as follows:

Food Group	No. of Samples Tested	No. of Unsatisfactory Samples
Vegetables, fruits & products	2700	2
Meat, poultry & products	700	3
Aquatic products	1000	4
Milk, milk products & frozen confections	1300	1
Cereal, grains & products	300	0
Others	3600	3
Total	9700	13



## 1. Vegetables, fruits & products

- About 2700 samples were collected. They included various kinds of fresh vegetables, fruits and legumes, preserved vegetables and pickled fruits, dried vegetables and ready-to-eat vegetables.
- Analysis included:
  - Microbiological tests
  - Chemical tests such as:
    - Pesticides (e.g. methamidophos, isocarbophos, DDT, HCH)
    - Metallic contamination
    - Preservatives
  - Radiation level tests
- Overall satisfactory rate was 99.9 %, with 2 unsatisfactory samples in this report.





## 1. Vegetables, fruits & products (Cont'd)

#### **Pesticide residues**

1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Water spinach	Triazophos	0.42 ppm <sup>(1) *</sup>

(1) Upon normal consumption, it is unlikely that the above vegetables with triazophos at the detected levels would pose any adverse health effect to consumers. Long term excessive consumption of water spinach with the same level of triazophos may affect nervous system.





## 1. Vegetables, fruits & products (Cont'd)

#### **Metallic contamination**

1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Chinese cabbage	Cadmium	0.20 ppm <sup>(1) *</sup>

- (1) The level exceeded the legal limit (0.1 ppm). Upon normal consumption, it is unlikely that the above vegetables with cadmium at the detected levels would pose any adverse health effect to consumers.
- \* Thorough washing and soaking of vegetables will remove cadimum attached on their surfaces.

#### Other tests

 The remaining samples for other tests (e.g. pathogens and preservatives) were satisfactory.





## 2. Meat, poultry & products

- About 700 samples were collected. They included fresh, chilled and frozen pork, beef and poultry, ready-to-eat dishes of meat and poultry served at food premises, the meat and poultry made products such as Chinese preserved meat, sausage and ham.
- Analysis included:
  - Microbiological tests
  - Chemical tests (e.g. preservatives, veterinary drug residues and colouring matters)
  - Radiation level tests
- Overall satisfactory rate was 99.6%, with 3 unsatisfactory samples in this report.















## 2. Meat, poultry & products (Cont'd)

#### **Preservatives:**

1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Fresh beef	Sulphur dioxide	25 ppm <sup>(1)</sup>

(1) Sulphur dioxide is not permitted in fresh, chilled and frozen meat. It is of low toxicity and it is unlikely that it would pose any adverse health effect to consumers upon normal consumption. However, for individuals who are allergic to this preservative, there may be symptoms of breathing difficulty, headache and nausea.





## 2. Meat, poultry & products (Cont'd)

#### **Microbiological tests:**

2 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
1 ham sample	Listeria monocytogenes	11000/g <sup>(1)</sup>
1 marinated sliced goose meat	Salmonella	Detected in 25 g of food sample (2)

- (1) Listeria monocytogenes can cause symptoms such as diarrhoea and fever. While healthy individuals rarely develop symptoms, the effects on pregnant women, newborns, the elderly and people with lowered immunity could be severe and could include miscarriage and meningitis.
- (2) Salmonella may cause gastrointestinal upset such as vomiting, abdominal pain and diarrhoea.

#### Other tests

 Samples for other tests (e.g. veterinary drug residues and colouring matters) were satisfactory.

## 3. Aquatic products

- About 1000 samples were collected. They generally covered fish, shellfish, shrimp/prawn, crab, squid and their products.
- Analysis included:
  - Microbiological tests
  - Chemical tests (e.g. preservatives, metallic contamination, toxins and veterinary drug residues)
  - Radiation level tests
- Overall satisfactory rate was 99.1%. Other than the 5 grilled grouper samples found to contain Tetrodotoxin announced last month, there were 4 unsatisfactory samples in this report.













## 3. Aquatic products (Cont'd)

#### Veterinary drug residues

4 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
1 green grouper	Malachite green	2300 ppb <sup>(1)</sup>
3 freshwater groupers	Malachite green	3-467 ppb <sup>(1)</sup>

(1) Not permitted in food.

#### Other tests

 Samples for other tests (e.g. pathogens, preservatives and metallic contamination) were satisfactory.





#### 4. Milk, milk products & frozen confections

- About 1300 samples were tested. They included ice-cream, cheese, milk and milk products.
- Analysis included:
  - Microbiological tests (total bacterial count, pathogens e.g. Salmonella and Staphylococcus aureus)
  - Chemical tests (e.g. melamine, preservatives, veterinary drug residues and colouring matters)
  - Radiation level tests
- Overall satisfactory rate was 99.8%. Other than the two ice-cream samples which were found to contain coliform organisms and have its total bacterial count exceeding the legal limits announced earlier, there was 1 unsatisfactory samples in this report.











## 4. Milk, milk products & frozen confections (Cont'd)

#### **Microbiological tests:**

1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
1 milk sample	Aerobic plate count	160000/ml <sup>(1)</sup>
	Coliform count	Detected in 1/10 <sup>th</sup> of a millilitre <sup>(1)</sup>

(1) Aerobic plate count and coliform count are hygienic indicators, the detected levels exceeded the legal limits respectively.

#### Other tests

 Samples for other tests (e.g. pathogens, melamine, preservatives, veterinary drug residues and colouring matters) were satisfactory.





## 5. Cereal, grains and products

- About 300 samples included rice/noodles, flour, bread and breakfast cereal.
- Analysis included:
  - Microbiological tests
  - Chemical tests (e.g. preservatives, pathogens)
  - Radiation level tests
- All samples were satisfactory.













#### 6. Other food commodities

About 3600 food samples were collected. Types included:

Mixed dishes  □ Pathogens and preservatives	Condiments and sauces  • Preservatives and colouring matters
Dim Sum  Pathogens , preservatives and colouring matters	Snack  □ Pathogens and colouring matters
Beverages  • Preservatives, colouring matters and metallic contamination	Eggs and egg products  □ Colouring matters and melamine
Sushi and sashimi	Others  □ Plasticisers
Sugar and sweets  □ Preservatives, colouring matters and metallic contamination	

 Overall satisfactory rate was 99.9%, with 3 unsatisfactory samples in this report.

## 6. Other food commodities (Cont'd)

#### Microbiological tests:

2 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
1 Rice roll	Bacillus cereus	650000/g <sup>(1)</sup>
1 Salad	Staphylococcus aureus	63000/g <sup>(1)</sup>

(1) Bacillus cereus and Staphylococcus aureus may cause gastrointestinal upset such as vomiting, abdominal pain and diarrhoea.

#### **Tests for Preservatives:**

1 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
1 Crispy roll	Butylated Hydroxytoluene	450 ppm <sup>(2)</sup>

(2) The level exceeded the legal limit of 200 ppm. However, based on the detected level, it is unlikely to pose adverse heath effect upon normal consumption.





## 6. Other food commodities (Cont'd)

#### Other tests

 Samples for other tests (e.g.melamine, plasticizers, veterinary drug residues and colouring matters) were satisfactory.





## Follow-up actions

- Trace source of food items in question.
- Request the vendors concerned to stop sale and dispose of incriminated food items.
- Issue warning letters to the vendors concerned.
- Take follow-up samples for analysis.
- Take prosecution actions if there is sufficient evidence.





#### Advice for trade

- Always follow the "5 Keys to Food Safety" during food preparation to prevent foodborne disease:
  - Choose Choose safe raw materials
  - Clean Keep hands and utensils clean
  - Separate Separate raw and cooked food
  - Cook Cook thoroughly
  - Safe Temperature Keep food at safe temperature
- Importers should source milk products from reliable food manufacturer and pay attention to temperature control during transportation. Manufacturers should ensure that the process of producing milk products and frozen confection is hygienic, including proper disinfection of the equipment.
- Comply with the legal requirements and follow "good manufacturing practice" (GMP). They should use permitted food additives, pesticides and veterinary drugs only in an appropriate manner.
- Maintain a good recording system in accordance with the Food Safety Ordinance to allow source tracing if needed.





#### Advice for consumers

- Fruit and vegetables are important components of a healthy diet as they are good sources of dietary fibre, vitamins and minerals. Vegetables should be soaked and washed thoroughly before consumption to remove chemicals like cadmium and pesticide residues attached on the surface.
- Do not buy or consume meat which is unnaturally red.
- Buy ice-cream and frozen confections from reliable shops.
- Maintain a balanced diet to minimize risk.



