Food Safety Report for June 2011

Centre for Food Safety
Food and Environmental Hygiene Department

July 2011
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.

- The CFS releases the “Food Safety Report” every month so as to allow the public to obtain the latest food safety information timely. Besides, the CFS has released the results of the following two targeted food surveillance projects recently:
  - “Enterobacter Sakazakii (Cronobacter spp.) in Powdered Infant Formula”
  - “Microbiological Quality of Ice-cream and Frozen Confections”

- This presentation gives an account of the food surveillance sample result analyses in June 2011.
About 16800 food samples of various food groups were tested.

- Cereals, grains & products 8% (1400)
- Vegetables, fruits & products 19% (3200)
- Meat, poultry & products 4% (600)
- Aquatic products 5% (800)
- Milk, milk products & frozen confections 7% (1200)
- Others 57% (9600)

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

- Chemical analysis: 23% (3800)
- Microbiological analysis: 10% (1800)
- Radiation level analysis: 67% (11200)

N.B.: Figures in brackets are rounded. Figures may not add up to total due to rounding.
Types of testing (Cont’d)

- In view of an incident involving a nuclear power plant in Japan after an earthquake, the CFS has stepped up surveillance of fresh produce imported from Japan for examination of radiation level from mid March. In June, all the radiation level test results of about 11100 samples were satisfactory.

- Except that, types of testing for the remaining food surveillance samples are distributed as follows:

  - Chemical analysis: 67% (3800)
  - Microbiological analysis: 31% (1800)
  - Radiation level analysis (products not imported from Japan): 3% (200)

N.B.: Figures in brackets are rounded. Figures may not add up to total due to rounding.
There were 40 unsatisfactory samples in total. Overall satisfactory rate was 99.8%.

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

- 40 unsatisfactory food samples included 33 previously announced results. The remaining 7 unsatisfactory samples are as follows:

<table>
<thead>
<tr>
<th>Food Group</th>
<th>No. of Samples Tested</th>
<th>No. of Unsatisfactory Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables, fruits &amp; products</td>
<td>3200</td>
<td>0</td>
</tr>
<tr>
<td>Meat, poultry &amp; products</td>
<td>600</td>
<td>1</td>
</tr>
<tr>
<td>Aquatic products</td>
<td>800</td>
<td>1</td>
</tr>
<tr>
<td>Milk, milk products &amp; frozen confections</td>
<td>1200</td>
<td>2</td>
</tr>
<tr>
<td>Cereal, grains &amp; products</td>
<td>1400</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>9600</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>16800</td>
<td>7</td>
</tr>
</tbody>
</table>
1. Vegetables, fruits & products

- About 3200 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:
    - Preservatives
    - Pesticides (e.g. methamidophos, isocarbophos, DDT, HCH)
    - Colouring matters
    - Metallic contamination
  - Radiation level tests

- All samples were satisfactory.
2. Meat, poultry & products

- About 600 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, colouring matters and veterinary drug residues)
  - Radiation level tests

- Overall satisfactory rate was 99.8%, with 1 unsatisfactory sample in this report.
2. Meat, poultry & products (Cont’d)

Veterinary drug residues

1 unsatisfactory sample:

<table>
<thead>
<tr>
<th>Sample</th>
<th>Unsatisfactory testing item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen suckling pig</td>
<td>Chlortetracycline</td>
<td>0.27 ppm (1)</td>
</tr>
</tbody>
</table>

(1) The level exceeded the legal limit. However, based on the detected level, it is unlikely to pose adverse health effect upon normal consumption.
2. Meat, poultry & products (Cont’d)

Other tests

- Samples for other tests (e.g. pathogens, preservatives and colouring matters) were satisfactory.
3. Aquatic products

- About 800 samples were collected. They generally covered fish, shellfish, shrimp/prawn, crab, squid and their products.

- Analysis included:
  - Microbiological tests
  - Chemical tests (e.g. preservatives, colouring matters, metallic contamination, biotoxins and veterinary drug residues)
  - Radiation level tests

- Overall satisfactory rate was 99.9%, with 1 unsatisfactory sample in this report.
3. Aquatic products (Cont’d)

Metallic contamination

- 1 unsatisfactory sample:

<table>
<thead>
<tr>
<th>Sample</th>
<th>Unsatisfactory testing item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catfish fillet</td>
<td>Mercury</td>
<td>0.99 ppm</td>
</tr>
</tbody>
</table>

(1) The detected level exceeded legal limit. Occasional consumption will not cause adverse health effect, but consumption on a long-term basis may affect the nervous system.
3. Aquatic products (Cont’d)

Other tests

- The remaining samples for other tests (e.g. pathogens, preservatives, colouring matters, biotoxins and veterinary drug residues) were satisfactory.
4. Milk, milk products & frozen confections

- About 1200 samples included ice-cream, cheese, milk and milk products.

- Analysis included:
  - Microbiological tests (total bacterial count and pathogens, e.g. *Salmonella* and *Listeria monocytogenes*)
  - Chemical tests (e.g. melamine, preservatives, colouring matters, sweeteners and veterinary drug residues)
  - Radiation level tests

- Overall satisfactory rate was 99.6%. Except for the previously announced 3 unsatisfactory samples of ice-cream scoop or soft ice-cream (hygienic indicators found to exceed the legal standard), there were 2 unsatisfactory samples in this report.
4. Milk, milk products & frozen confections (Cont’d)

Pathogens

- 1 unsatisfactory sample:

<table>
<thead>
<tr>
<th>Samples</th>
<th>Un satisfactory testing item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skimmed hi-calcium milk drink</td>
<td><em>Bacillus cereus</em></td>
<td>$1.3 \times 10^7$/ml (^{(1)})</td>
</tr>
</tbody>
</table>

\(^{(1)}\) Consuming food contaminated with *Bacillus cereus* or its toxin may cause food poisoning symptoms such as vomiting and diarrhoea.
Preservatives

1 unsatisfactory sample:

<table>
<thead>
<tr>
<th>Samples</th>
<th>Unsatisfactory testing item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
<td>Pimaricin</td>
<td>170 ppm (1)</td>
</tr>
</tbody>
</table>

(1) The level exceeded the legal limit. However, based on the detected level, it is unlikely to pose adverse health effect upon normal consumption.
4. Milk, milk products & frozen confections (Cont’d)

Other tests

- The remaining samples for other tests (e.g. melamine, colouring matters, sweeteners and veterinary drug residues) were satisfactory.
5. Cereal, grains and products

- About 1400 samples included rice/noodles, flour, bread and breakfast cereal.

- Analysis included:
  - Microbiological tests
  - Chemical tests (e.g. preservatives, colouring matters and metallic contamination)
  - Radiation level tests

- All samples were satisfactory.
6. Other food commodities

- About 9600 food samples were collected. Types included:

<table>
<thead>
<tr>
<th>Mixed dishes</th>
<th>Condiments and sauces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathogens, preservatives and colouring</td>
<td>Preservatives, colouring matters and metallic contamination</td>
</tr>
<tr>
<td>matters</td>
<td></td>
</tr>
<tr>
<td>Dim Sum</td>
<td></td>
</tr>
<tr>
<td>Pathogens, preservatives, colouring</td>
<td></td>
</tr>
<tr>
<td>matters and metallic contamination</td>
<td></td>
</tr>
<tr>
<td>Beverages</td>
<td></td>
</tr>
<tr>
<td>Preservatives, colouring matters and</td>
<td></td>
</tr>
<tr>
<td>metallic contamination</td>
<td></td>
</tr>
<tr>
<td>Sushi and sashimi</td>
<td></td>
</tr>
<tr>
<td>Microbiological tests</td>
<td></td>
</tr>
<tr>
<td>Sugar and sweets</td>
<td></td>
</tr>
<tr>
<td>Preservatives, colouring matters and</td>
<td></td>
</tr>
<tr>
<td>metallic contamination</td>
<td></td>
</tr>
</tbody>
</table>

- Overall satisfactory rate was 99.7%, with 3 unsatisfactory samples in this report.
6. Other food commodities (Cont’d)

Microbiological analysis

- 3 unsatisfactory samples:

<table>
<thead>
<tr>
<th>Samples</th>
<th>Unsatisfactory testing item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swiss roll</td>
<td>Bacillus cereus</td>
<td>$1.3 \times 10^6/g$ (1)</td>
</tr>
<tr>
<td>Egg mayo bun</td>
<td>Bacillus cereus</td>
<td>$2.9 \times 10^5/g$ (1)</td>
</tr>
<tr>
<td>Spinach with preserved bean curd</td>
<td>Bacillus cereus</td>
<td>$1.1 \times 10^6/g$ (1)</td>
</tr>
</tbody>
</table>

(1) *Bacillus cereus* may cause gastrointestinal upset such as vomiting, abdominal pain and diarrhoea.
Test results of plasticisers

- In view of the plasticiser contamination incident in Taiwan, samples of Taiwan food and drinks have been collected from the local market to test for di(2-ethylhexyl)phthalate (DEHP), di-isononyl phthalate (DINP), and di-butyl phthalate (DBP).

- In June 2011, 460 samples finished the test. In which, results for 30 samples were unsatisfactory and all have been announced.
Follow-up actions

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

- Should comply with the legal requirements and follow Good Manufacturing Practice (GMP). They should use permitted food additives only in an appropriate manner.

- Should establish and practise food safety control plans such as HACCP for milk and dairy product manufacturing.

- Store milk and dairy products strictly according to the instructions on the labels.
Advice to the trade (Cont’d)

- For those samples detected with pathogens, they indicated that the food processing was unhygienic. The food trade should 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
Advice to consumers

- Should patronize reliable premises for buying food.
- Should maintain balanced diet to minimize risk.