

# Food Safety Report for October 2010

Centre for Food Safety  
Food and Environmental  
Hygiene Department



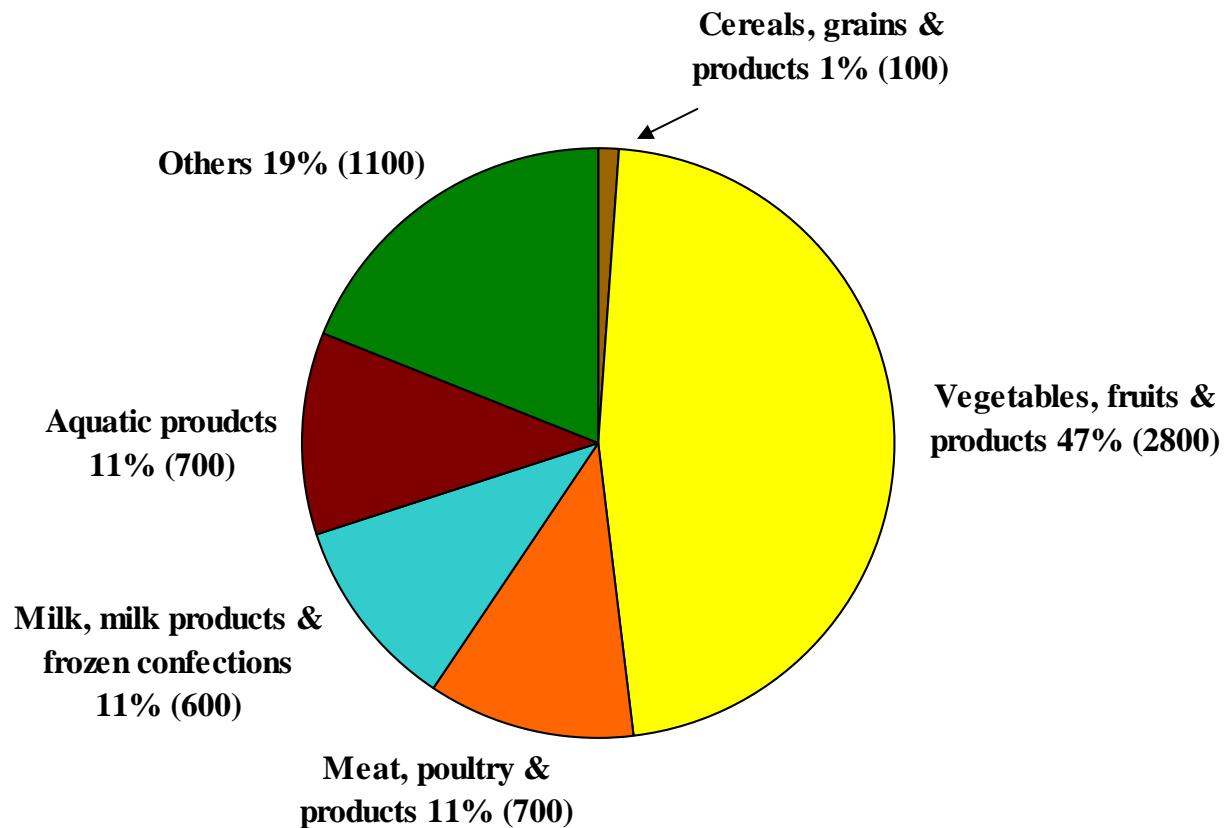
December 2010

# 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 chemical and microbiological tests.
- The CFS releases the “Food Safety Report” every month so as to allow the public to obtain the latest food safety information more timely. Besides, the CFS has released the results of the following 1 Seasonal and 1 Targeted Food Surveillance projects recently:
  - “Hairy crabs”
  - “Sudan dyes in eggs and egg products”
- This presentation gives an account of the food surveillance sample analyses that were completed in October 2010.

# Types of food tested

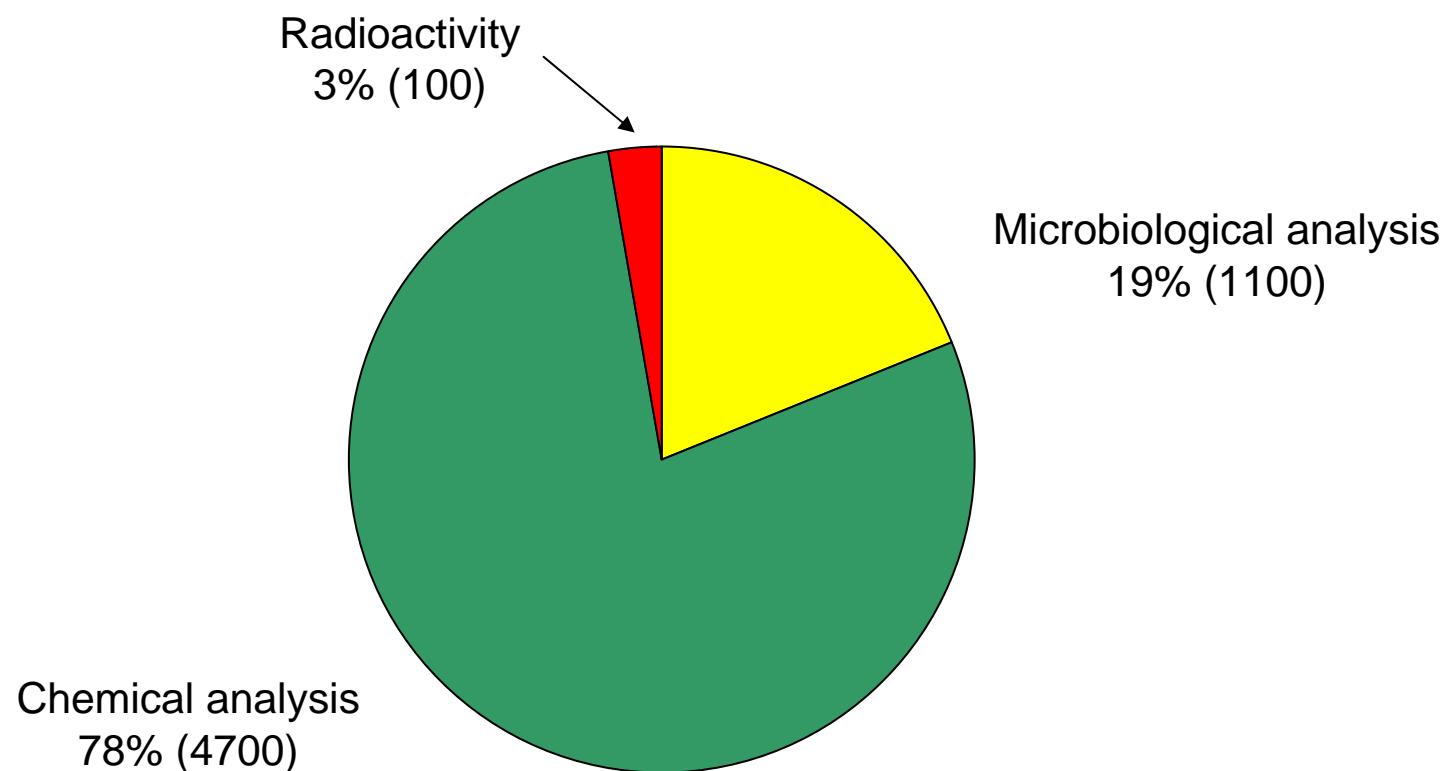
- About 6000 food samples of various food groups were tested.



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

2

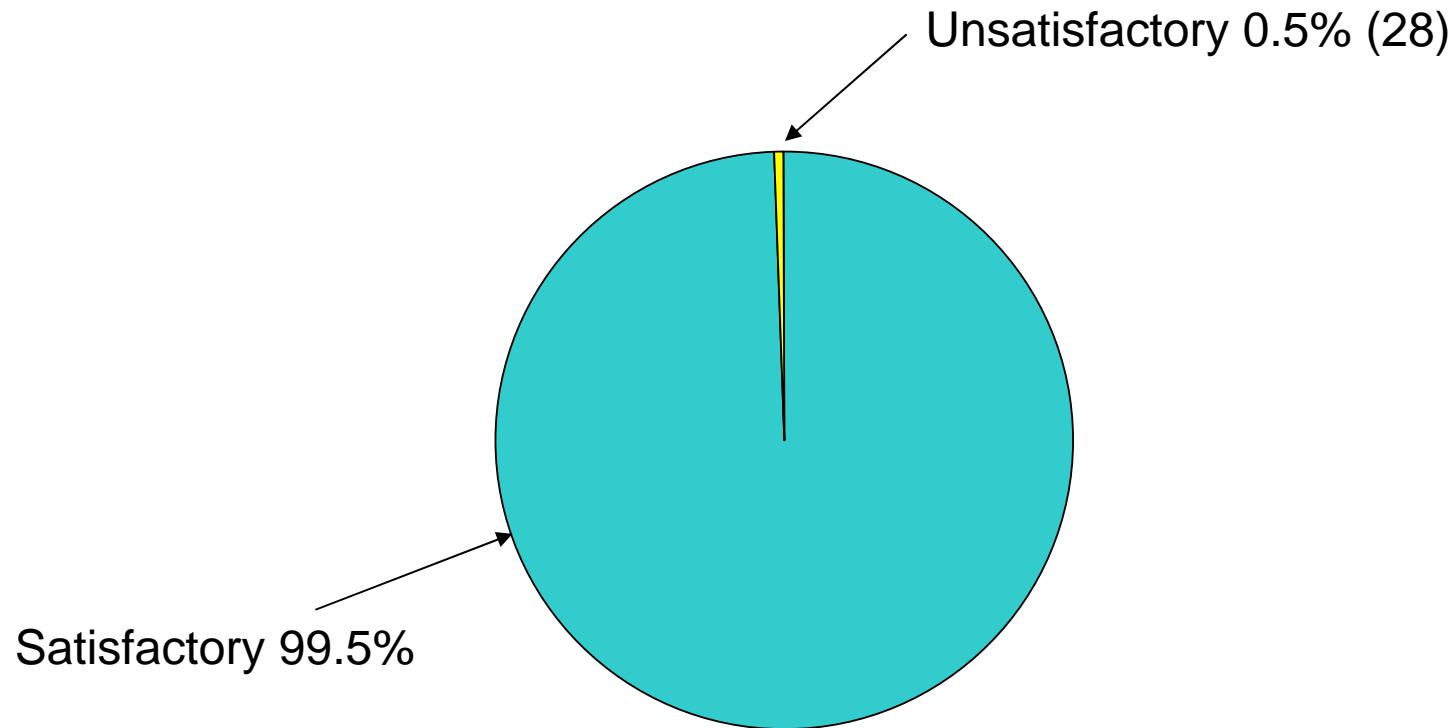
# Types of testing



N.B.: Figures in brackets are rounded

# Overall results

- Total 28 unsatisfactory samples. The overall satisfactory rate was 99.5%.



# Unsatisfactory samples

- 28 unsatisfactory food samples are as follows:

<b>Food Group</b>	<b>No. of Samples Tested</b>	<b>No. of Unsatisfactory Samples</b>
<b>Vegetables, fruits &amp; products</b>	2800	3
<b>Meat, poultry &amp; products</b>	700	3
<b>Aquatic products</b>	700	3
<b>Milk, milk products &amp; frozen confections</b>	600	18
<b>Cereal, grains &amp; products</b>	100	0
<b>Others</b>	1100	1
<b>Total</b>	<b>6000</b>	<b>28</b>

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

# 1. Vegetables, fruits & products

- About 2800 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)
    - Preservatives
    - Colouring matters
    - Metallic contamination
- Overall satisfactory rate was 99.9%, with 3 unsatisfactory samples in this report.



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

## Pathogen

- 1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Curry vegetarian food	<i>Clostridium perfringens</i>	140000/g <sup>(1)</sup>

<sup>(1)</sup> *Clostridium perfringens* may cause gastrointestinal upset such as vomiting, abdominal pain and diarrhoea.

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

## Preservative

- 1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Dried apple ring	Sulphur dioxide	1570 ppm <sup>(1)</sup>

<sup>(1)</sup> The level exceeded the legal limit. It is of low toxicity and will not cause adverse health effects upon normal consumption. For individuals who are allergic to this preservative, there may be symptoms of breathing difficulty, headache and nausea.

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

## Metallic contamination

- 1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Fresh mushroom	Cadmium	0.47 ppm <sup>(1)*</sup>

<sup>(1)</sup> The level exceeded the legal limit. However, it is unlikely to pose significant health effects upon normal consumption. Thorough washing and soaking of vegetables will remove some cadmium attached on their surfaces.

\* Long term excessive consumption of fresh mushroom with the same level of cadmium may affect the kidneys.

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

## Other tests

- The remaining samples for other tests (e.g. pesticides and colouring matters) 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, colouring matters and veterinary drug residues)
- Overall satisfactory rate was 99.6%, with 3 unsatisfactory samples in this report.



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

### Preservatives

- 2 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
Fresh beef	Sulphur dioxide	3600 ppm <sup>(1)</sup>
Almond crispy meat fibre	Nitrate	1064.7 ppm <sup>(2)</sup>

<sup>(1)</sup> Sulphur dioxide is not permitted in fresh (including chilled and frozen) meat. On the other hand, it is permitted in foods such as pickled fruits and juices. It is of low toxicity and will not cause adverse health effects upon normal consumption. For individuals who are allergic to this preservative, there may be symptoms of breathing difficulty, headache and nausea. Since it is water soluble, most of it can be removed through washing and cooking.

<sup>(2)</sup> The level exceeded the legal limit. It is of low toxicity and will not cause adverse health effects upon normal consumption.

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

### **Veterinary drug residues**

- 1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Frozen chicken fillet	Metronidazole	0.018 ppm <sup>(1)</sup>

<sup>(1)</sup> Not permitted in chicken meat. However, normal consumption of the product with the detected level was unlikely to pose adverse health effects.

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

### Other tests

- Samples for other tests (e.g. pathogens and colouring matters) were satisfactory.

### 3. Aquatic products

- About 700 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)
- Overall satisfactory rate was 99.5%, with 3 unsatisfactory samples in this report.



### 3. Aquatic products (Cont'd)

#### Pathogens

- There was 1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Smoked salmon	Listeria monocytogenes	Detected <sup>(1)</sup>

<sup>(1)</sup> 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, including miscarriage and meningitis.

### 3. Aquatic products (Cont'd)

#### **Veterinary drug residues**

- 2 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
2 spotted snakehead from the same consignment	AOZ	0.021 ppm <sup>(1)</sup>
	Malachite green	0.494 ppm <sup>(2)</sup>

<sup>(1)</sup> However, normal consumption of the product with the detected level was unlikely to pose adverse health effects.

<sup>(2)</sup> Not permitted in food, but normal consumption of the product with the detected level was unlikely to pose adverse health effects.

### 3. Aquatic products (Cont'd)

#### Other tests

- The remaining samples for other tests (e.g. preservatives, colouring matters, metallic contamination and biotoxins) were satisfactory.

## 4. Milk, milk products & frozen confections

- About 600 samples were tested. They included ice-cream, cheese, milk and milk products.
- Analysis included:
  - Microbiological tests (total bacterial count and pathogens)
  - Chemical tests (e.g. melamine, preservatives, colouring matters, sweeteners and veterinary drug residues)
- Overall satisfactory rate was 97.2%, with 18 unsatisfactory samples in this report.



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

### **Microbiological examination**

- 18 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
*18 frozen confections (9 flavors: orange chocolate, hazelnut chocolate, purple sweet potato, pumpkin, mellow melon, fresh corn, raspberry zuccotto, cream cheese, coconut & passion fruit) taken from the same consignment	Coliform organisms	140-900/g <sup>(1)</sup>
	Total bacterial count	92000-6200000/g <sup>(1)</sup>

<sup>(1)</sup> Total bacterial count and coliform organisms are hygienic indicators. The detected levels exceeded the legal limit.

\* The samples were collected at import level. The affected products did not enter into the market.

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

### Other tests

- The remaining samples for other tests (e.g. pathogens, melamine, preservatives, colouring matters, sweeteners and veterinary drug residues) were satisfactory.

## 5. Cereal, grains and products

- About 100 samples included rice/noodles, flour, bread and breakfast cereal.
- Analysis included:
  - Microbiological tests
  - Chemical tests (e.g. preservatives, sweeteners, colouring matters and metallic contamination)
- All samples were satisfactory.



## 6. Other food commodities

- About 1100 food samples were collected. Types included:

Mixed dishes <ul style="list-style-type: none"><li>□ Pathogens, sweeteners &amp; colouring matters</li></ul>	Condiments and sauces <ul style="list-style-type: none"><li>□ Preservatives, colouring matters &amp; sweeteners</li></ul>
Dim Sum <ul style="list-style-type: none"><li>□ Pathogens, sweeteners &amp; colouring matters</li></ul>	Snack <ul style="list-style-type: none"><li>□ Pathogens &amp; colouring matters</li></ul>
Beverages <ul style="list-style-type: none"><li>□ Preservatives, colouring matters, sweeteners &amp; metallic contamination</li></ul>	Eggs and egg products <ul style="list-style-type: none"><li>□ Colouring matters &amp; melamine</li></ul>
Sushi and sashimi <ul style="list-style-type: none"><li>□ Microbiological tests</li></ul>	Others
Sugar and sweets <ul style="list-style-type: none"><li>□ Preservatives, colouring matters, sweeteners &amp; metallic contamination</li></ul>	

- Overall satisfactory rate was 99.9%, with 1 unsatisfactory sample in this report.

# 6. Other food commodities (Cont'd)

## **Microbiological tests**

- 1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Cake	<i>Bacillus cereus</i> (Pathogen)	590000/g <sup>(1)</sup>

<sup>(1)</sup> *Bacillus cereus* may cause gastrointestinal upset such as vomiting, abdominal pain and diarrhoea.

# 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.
- Retailers should source food from reliable suppliers. Maintain a good recording system to allow source tracing if needed.
- Importers should source frozen confections from reliable food manufacturer. Manufacturers should ensure that the process of producing frozen confections is hygienic, including proper disinfection of the equipment.

# 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

- Patronize licensed restaurants and reliable suppliers of food.
- Keep food not for immediate use at safe temperatures (4°C or below; above 60°C).
- Maintain a balanced diet to minimize risk.
- Wash vegetables and fruits thoroughly.