Food Safety Report for January 2009

Centre for Food Safety

Food and Environmental Hygiene Department

March 2009

食物環境衞生署
Food and Environmental Hygiene Department

食物安全中心
Centre for Food Safety

Introduction

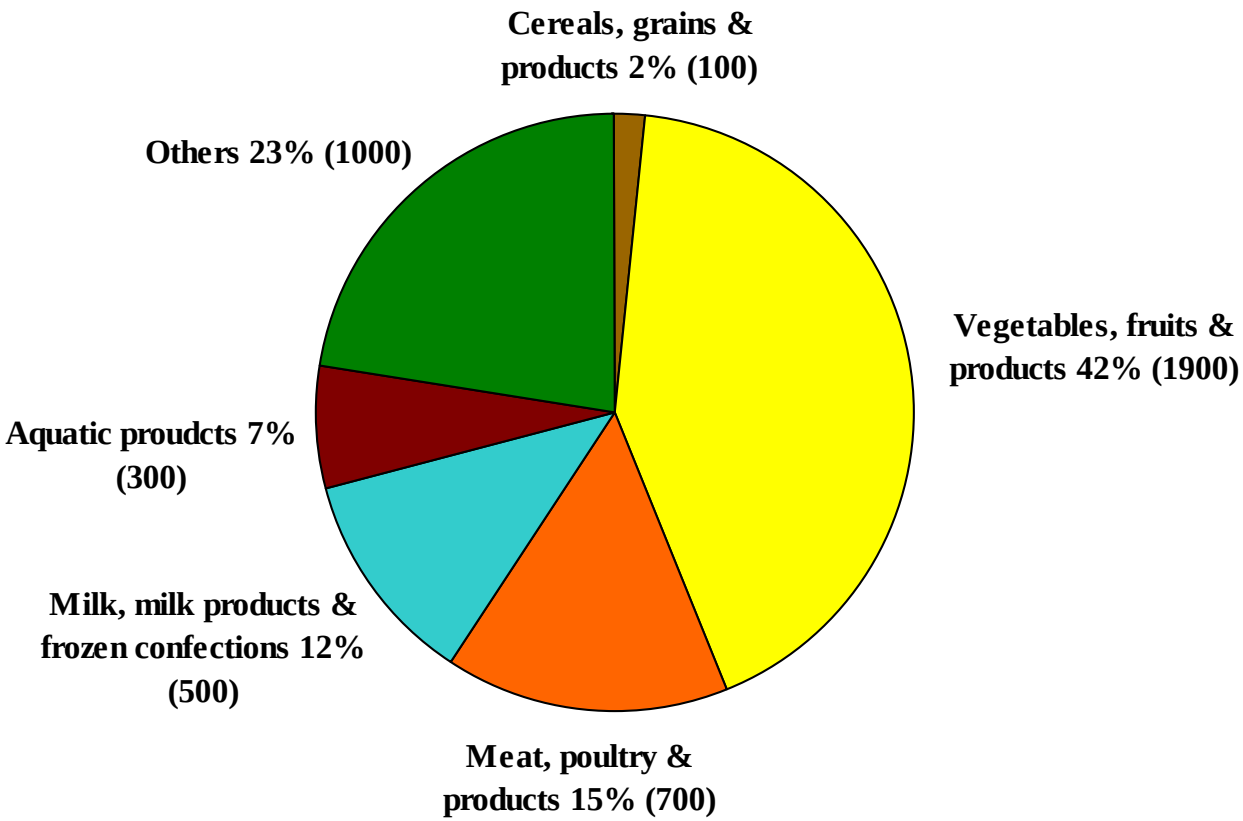
- The Centre for Food Safety (CFS) adopts the three-tier food surveillance approach, i.e., routine food surveillance, targeted food surveillance and seasonal food surveillance to collect samples at import, wholesale and retail levels for chemical and microbiological tests.

- Besides the “Food Safety Report”, CFS also releases the results of seasonal and targeted food surveillance projects. In January 2009, CFS has completed a seasonal food surveillance project on “Lunar New Year Food” and timely released the results to the public.

- This presentation gives an account of the food surveillance sample analyses that were completed in January 2009.

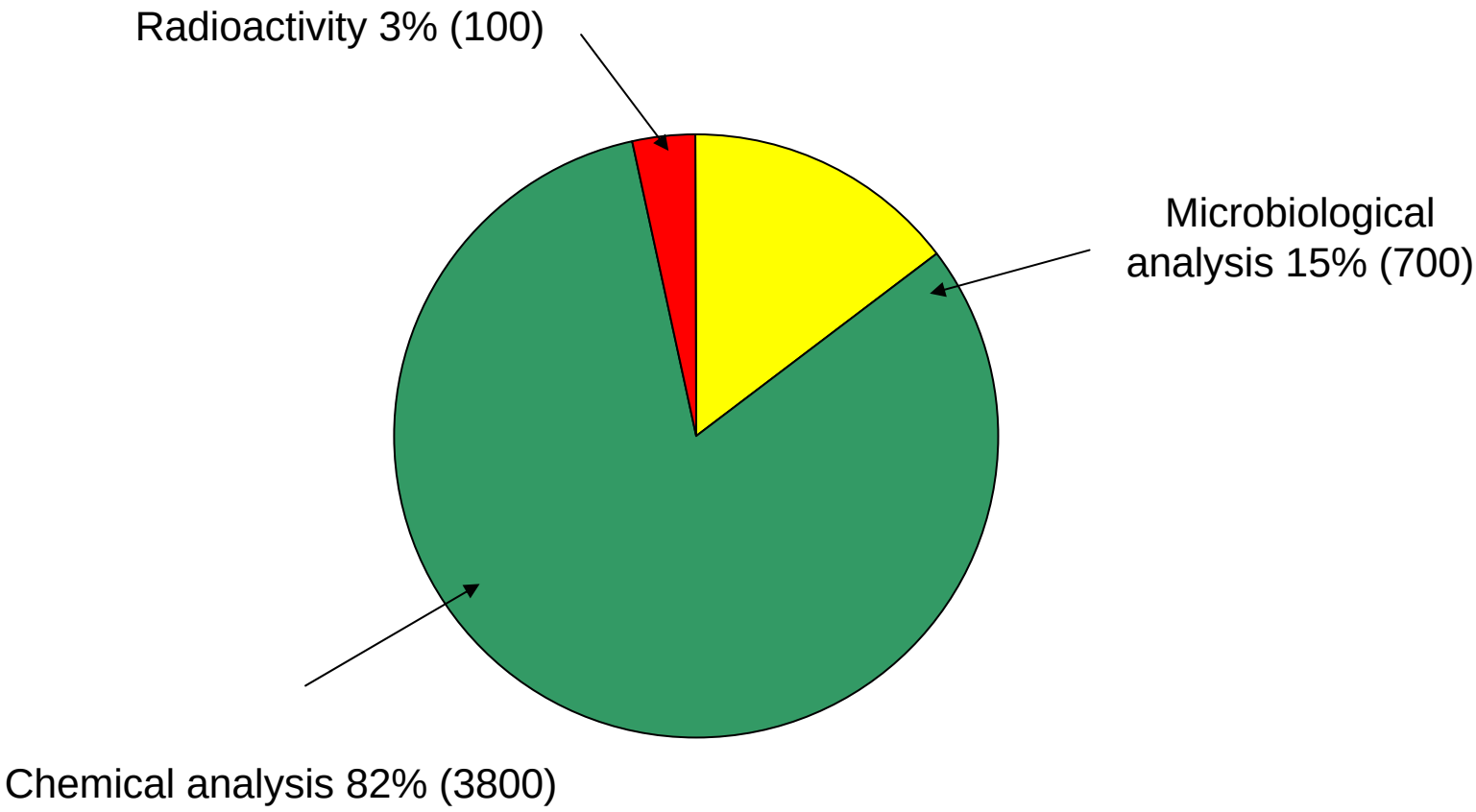
Types of food tested

- About 4600 food samples of various food groups were tested.



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

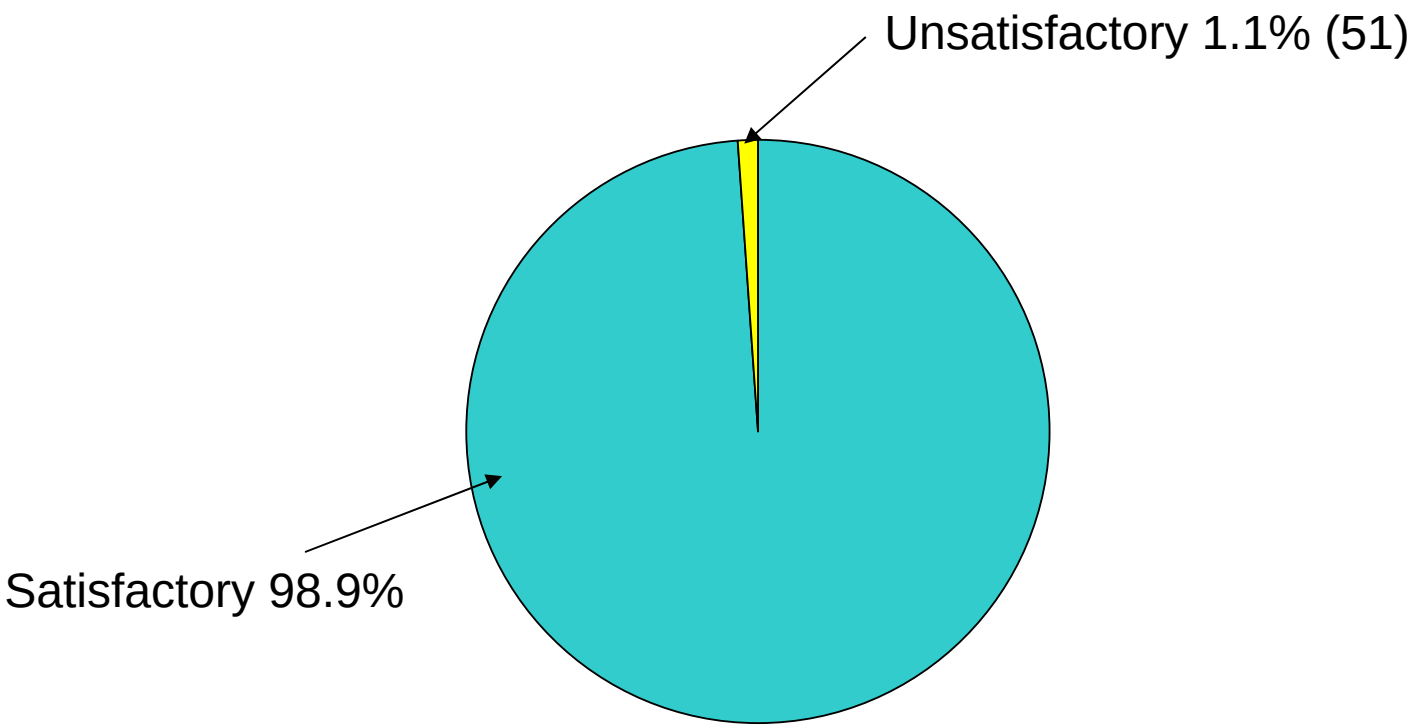
Types of testing



N.B.: Figures in brackets are rounded

Overall results

- Total 51 unsatisfactory samples. The overall satisfactory rate was 98.9%.



Unsatisfactory samples

- 51 unsatisfactory food samples included 26 previously announced results. The remaining 25 unsatisfactory samples are as follows:

Food Group	*No. of Samples Tested*	*No. of Unsatisfactory Samples*
Vegetables, fruits & products	1900	2
Meat, poultry & products	700	18
Aquatic products	300	2
Milk, milk products & frozen confections	500	1
Cereal, grains and products	100	0
Others	1000	2
Total	***4600***	***25***

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

1. Vegetables, fruits & products

- About 1900 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, etc.



- Analysis included:
  - Microbiological tests
  - Chemical tests such as:
    - Pesticides (e.g., methamidophos, isocarbophos, DDT, HCH)
    - Preservatives (included sulphur dioxide, sorbic acid and benzoic acid)
    - Colouring matters
    - Metallic contamination (e.g., cadmium, arsenic and lead)

- Overall satisfactory rate was 99.7%, with 2 unsatisfactory samples in this report.

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

Preservatives

- Except for the 4 previously announced Lunar New Year food samples, there were 2 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
Pickled plum	Sulphur dioxide	4000 ppm (1)
Red date	Sulphur dioxide	2400 ppm (2)

(1,2) The detected levels of sulphur dioxide exceeded the legal limits. Sulphur dioxide is of low toxicity and should not pose significant health effect on consumers. For individuals who are allergic to this preservative, they may have symptoms of breathing difficulty, headache and nausea.

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

Other tests

- The remaining samples for other tests (pesticides, colouring matters, metallic contamination and microbiological tests) 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, etc.

- Analysis included :
  - Microbiological tests
  - Chemical tests (e.g. preservatives, veterinary drug residues and colouring matters, etc)

- Overall satisfactory rate was 94.4%, with 18 unsatisfactory samples in this report.





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

Preservatives

- Except for the 20 previously announced unsatisfactory samples of fresh beef, there were 18 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
15 fresh beef	Sulphur dioxide	20 - 3800 ppm (1)
2 pork wiener sausages 1 pork loin ham	Sorbic acid	1200 - 1500 ppm (2)

(1) Two of the beef samples were follow up samples.
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 should not pose significant health effect on consumers. 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.

(2) A commonly used preservative but is not permitted in this kind of food. It is of low toxicity and should not pose significant health effect on consumers.

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

Colouring matters

- Except for the previously announced unsatisfactory sample of preserved Chinese sausage, all samples tested for colouring matters were satisfactory.

Other tests

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

3. Aquatic products

- About 300 samples were collected. They generally cover fish, shellfish, shrimp/prawn, crab, squid and their products.

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

- Overall satisfactory rate was 99.3%, with 2 unsatisfactory samples in this report.




3. Aquatic products (Cont'd)

Metallic contamination

- There were 2 unsatisfactory samples:

Sample	Unsatisfactory testing item	Result
Chilled orange roughy fillet	Mercury	0.94 ppm (1)
Slipper lobster	Cadmium	3.4 ppm (2)

(1) The detected level exceeded legal limit. Occasional consumption would not cause adverse health effect, but consumption on a long-term basis could exceed safety level.

(2) The level exceeded legal limit but upon normal consumption, it is unlikely to pose adverse effect on consumers.

3. Aquatic products (Cont'd)

Other tests

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

4. Milk, milk products & frozen confections

- About 500 samples were tested. They included ice-cream, cheese, milk and milk products, etc.

- Analysis included:
  - Microbiological tests (total bacterial count, pathogens, e.g., *Salmonella* and *Staphylococcus aureus*)
  - Chemical tests (melamine, colouring matters, sweeteners)

- Overall satisfactory rate was 99.8%, with 1 unsatisfactory sample in this report.

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

- All samples were satisfactory for pathogens.
- 1 sample was unsatisfactory for hygienic indicator:

Sample	Unsatisfactory testing item	Result
Prepackaged milk beverage	Colony counts	>10 (1)

(1) Colony count is a hygienic indicator. The detected quantity exceeded the legal limit. The affected batch of products were marked and sealed by CFS. None of them have entered into the local market.

5. Cereal, grains and products

- About 100 samples including rice/noodles, flour, bread and breakfast cereal, etc.
- Analysis included microbiological and chemical tests such as:
  - metallic contamination
  - preservatives
  - colouring matters
- All samples were satisfactory.




6. Other food commodities

- About 1000 samples were collected. Overall satisfactory rate was 99.7%, with 2 unsatisfactory samples in this report.
- Types of food included:

Mixed dishes ❑ Pathogens, colouring matters & preservatives	Condiments and sauces ❑ Colouring matters & preservatives
Dim Sum ❑ Pathogens, preservatives & colouring matters	Snacks ❑ Metallic contamination & preservatives
Beverages ❑ Preservatives, colouring matters & sweeteners	Eggs and egg products ❑ Melamine & colouring matters
Sushi and sashimi ❑ Microbiological examination	Others
Sugar and sweets ❑ Metallic contamination, sweeteners & preservatives	

6. Other food commodities (Cont'd)

Microbiological analysis

- 1 unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Imitated crab meat sushi	*Staphylococcus aureus* (pathogen)	8.6 x 10^4 (1)

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

6. Other food commodities (Cont'd)

Chemical analysis

- Besides the previously announced sample of Lunar New Year food, there was another unsatisfactory sample:

Sample	Unsatisfactory testing item	Result
Canned root beer	Benzoic acid (preservative)	410ppm (1)

(1) The detected level exceeded legal limit. Since benzoic acid is of low toxicity, it should not pose adverse effect on consumers.

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
- Take prosecution actions if there is sufficient evidence

Summary

- The major problems in this report were the use of non-permitted food additives or excessive use of food additives in food. They included the use of sulphur dioxide in fresh beef and use of preservatives and colouring matters in pickled fruits and meat products, etc.
- There were samples of aquatic products found to contain environmental metallic contamination. The detected levels exceeded legal limits.
- For the samples unsatisfactory for microbiological tests, there was a milk beverage with hygienic indicator exceeding the legal limit and a ready-to-eat food found to contain unacceptable level of pathogen.

Advice for food trade and consumers

- The trade should comply with legal requirements and follow “good manufacturing practice” (GMP). They should use permitted food additives only in an appropriate manner.
- Retailers should source materials from reliable suppliers and avoid purchase foods of unknown sources.
- The trade should always follow the “5 Keys to Food Safety” to minimize the risk of foodborne diseases.
- The consumers should patronize licensed restaurants and reliable retailers. They should maintain balanced diet to reduce food risk.
- Pregnant women, women planning pregnancy and young children are the susceptible groups being affected by mercury. When choosing food, they should avoid eating large predatory fish.