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# Targeted Food Surveillance on Microbiological Quality of Ice-cream and Frozen Confections

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Food and Environmental Hygiene Department

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# Background

- Ice-cream and frozen confections are particularly popular during summer time. However, due to the hot weather, improper handling of these products such as storage temperature not low enough ( $-18^{\circ}\text{C}$  or below) or unsatisfactory hygiene conditions, is favourable to bacterial growth.
- In view of this, the Centre for Food Safety (CFS) has conducted a targeted food surveillance regularly since 2007 to assess the microbiological quality of ice-cream and frozen confections.

# Types of test

- The CFS collected 1 100 samples of ice-cream and frozen confections from food factories, mobile vans, supermarkets, restaurants and retail outlets for microbiological tests from May to June this year:
  - Total bacterial count (TBC)
  - Coliform organisms
  - Pathogens (e.g. *Salmonella*, *Staphylococcus aureus*)



# Results

- All samples were satisfactory for the test of pathogens.
- Out of the 1 100 samples tested, the quality and hygienic indicator (total bacterial count and coliform organisms) for 5 samples of soft ice-cream and ice-cream scoop collected were found to exceed the legal standard. Nevertheless, usual consumption is unlikely to pose significant health effect.
  - Total bacterial count: 190 000 – 220 000/g\*
  - Coliform organisms: 130 – 2 000 /g\*

\* According to the Frozen Confections Regulation, Cap. 132AC , no person shall sell, or offer or expose for sale, any frozen confection which contains more than 50 000 bacteria per gram or more than 100 coliform organisms per gram.

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# Follow up actions

- Issue warning letters to concerned vendors.
- Conduct follow-up inspections.
- Advise on personal hygiene, cleaning and sanitizing of production facilities.
- Take follow-up samples for analysis.
- Take prosecution actions if there is sufficient evidence.

# Summary

- The results for all sample were satisfactory in terms of pathogen testing.
- Only individual soft ice-cream and ice-cream scoop samples exceeded the standard for hygiene indicator. It is believed to be caused by sub-optimal hygienic conditions in the course of processing at the food premises concerned.



# Advice for trade

## ■ Manufacturers

- ❑ Ensure the products are fit for consumption and can meet legal requirements.
- ❑ Obtain ingredients, such as milk, cream and ice-cream mix, from licensed and reliable sources.
- ❑ Establish and practise food safety control plans such as HACCP.

## ■ Retailers & Mobile Van

- ❑ Drain off and discard the leftover of soft ice-cream daily.
- ❑ Cleanse and sanitize all equipment and utensils each day.
- ❑ Observe good hygienic practices during all preparation and handling processes (including personal hygiene of food handlers). Keep both hands clean.

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# Advice for consumers

- Buy ice-cream and frozen confections from reliable shops.
- Do not buy or consume any ice-cream and frozen confections which is out of expiry date or not in a good quality.
- Maintain a balanced diet. Avoid over-eating of ice-cream as it is generally high in energy.