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

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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°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.

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.

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.