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

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Background

- Ice-creams and frozen confections are popular in the summer. However, improper handling of these products such as storing in places with poor hygiene or keeping at temperature not low enough (should be -18°C or below) are both conducive 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 1100 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 1100 samples tested, the quality and hygienic indicator (TBC and coliform organisms) for 5 samples of ice-cream scoop or soft ice-cream collected were found to exceed the legal standard [#]. Nevertheless, usual consumption is unlikely to pose significant health effect.
 - TBC: 170,000 – 1,200,000/g*
 - Coliform organisms: 210 – 6600/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 50000 bacteria per gram or more than 100 coliform organisms per gram.

[#] 3 out of the 5 unsatisfactory results were reported in May issue of Food Safety Report

Follow up actions

- Issue warning letters to concerned vendors.
- Conduct follow-up inspection.
- 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.
- The finding of coliform organisms and total bacterial count of individual ice-cream scoop samples above the legal limit suggested suboptimal 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 (e.g. milk, cream and ice-cream mix) from licensed and reliable sources.
- ❑ Establish and practise food safety control plans such as Hazard Analysis & Critical Control Point (HACCP).

■ Retailers & Mobile Van

- ❑ Discard the defrosted products and do not re-freeze melted frozen confection for sale
- ❑ 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.