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

Centre for Food Safety

Food and Environmental Hygiene Department

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Introduction

■ Background

- Ice-cream and frozen confections are a popular food in summer. As ice-cream is a milk-based product with high nutrient value, its almost neutral pH value rendered it to be a good medium for microbial growth. The high temperature in summer is also favourable to bacterial growth.
- 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.

Introduction

- Objective
 - The Centre for Food Safety is conducting a targeted food surveillance project in May and June, 2009 to assess the microbiological quality of ice-cream and frozen confections. Phase one test results are released in this report.

Types of test

- 550 samples of ice-cream and frozen confections were collected from food factories, mobile vans, supermarkets, restaurants and retail outlets for microbiological tests including:
 - Total bacterial count (TBC)
 - Coliform organisms
 - Pathogens (*Salmonella*, *Staphylococcus aureus*)

Results

- All samples were satisfactory for the test of pathogens.
- Out of the 550 samples tested, the quality and hygienic indicator (total bacterial count and coliform organisms) for 9 samples of soft ice-cream, sundae, ice-cream scoop collected from retail outlets and mobile van were found to exceed the legal standard. Nevertheless, usual consumption is unlikely to pose significant health effect.
 - Total bacterial count: 66 000 /g – 630 000 /g
 - Coliform organisms: 160 /g – 750 /g

Follow up actions

- Warning letters were issued.
- Follow-up inspections were conducted.
- Advice on personal hygiene, cleaning and sanitizing of production facilities was given to the retail stores and mobile van.
- Collect follow-up samples for testings.

Summary

- The results for all sample were satisfactory in terms of pathogen testing.
- Only individual soft ice-cream, sundae 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.

■ 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. 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.