

# Microbiological Contamination of Edible Ice

**Trade Consultation Forum**  
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# Edible Ice

- Edible ice is widely used in preparing food, e.g. cold drinks. This makes its hygienic quality and safety so important.
- If not manufactured or handled properly, edible ice can potentially be a vehicle of spreading foodborne diseases.



# An Edible Ice Sample was Found to Contain Excessive Coliform Bacteria

## Edible ice sample detected with coliform bacteria

The Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department today (July 4) announced that an edible ice sample was found to contain coliform bacteria. Follow-up is in progress.

A spokesman for the CFS said, "The Centre collected a sample of edible ice produced at a food premises in Causeway Bay for testing under its routine Food Surveillance Programme. The test result showed that the sample contained coliform bacteria at a level of 1 200 colony-forming units per 100 millilitres." Investigation revealed that the produced ice cubes were for use at the premises only.

According to the Microbiological Guidelines for Food, the microbiological criteria for coliform bacteria for loose edible ice from retail outlets should be less than 100 colony-forming units per 100ml. The fact that the coliform count exceeded the Guidelines' level indicated unsanitary conditions or poor hygiene practices during or after production of ice, but it did not mean that consumption would lead to food poisoning.

[http://www.cfs.gov.hk/english/press/20170704\\_0880.html](http://www.cfs.gov.hk/english/press/20170704_0880.html)

# Source of Edible Ice in Food Premises

- Generally speaking, edible ice used for human consumption in retail outlets is from two major sources:-
  - (1) supplied by ice manufacturing plants in which the ice is prepared and packed and then transported to the food premises as a packaged form.
  - (2) produced locally at individual food premises, e.g. by ice-making machines.

# Potential Microbiological Contamination of Edible Ice (1)

- Source water directly affects the quality and safety of the edible ice manufactured.
- After manufacturing:-
  - lapses in hygiene in handling of edible ice at the manufacturing plants, during transport and at food premises.

# Potential Microbiological Contamination of Edible Ice (2)

- During transportation or storage of the packaged edible ice, the external surface of the ice bags can be contaminated with microorganisms which can subsequently cross-contaminate the edible ice during opening and emptying of the ice bags.
- Poor maintenance of ice-making machine
- Infrequent cleansing of equipment such as ice buckets and scoops
- Unhygienic practices in handling edible ice, e.g. with bare hands ...

# Preventive Measures (1)

- **Potable water supply** and **good hygiene practices** are prerequisites to the production of good quality edible ice.
- The external surface of the ice bags should be cleaned and dried with a clean cloth before opening and emptying and the external surface of the ice bags and bare hands should not touch the edible ice when filling the ice buckets.

## Preventive Measures (2)

- Clean utensils such as scoops, instead of bare hands, should always be used to dispense edible ice and the scoops should be cleaned at the end of every working day and whenever necessary.



- Edible ice storage chests should never be used for cooling or storing other items such as cans/bottles of beverages.
- As regards the edible ice produced on the food premises by ice-making machines, the machines should be regularly cleaned and properly maintained in accordance with manufacturer's instructions.



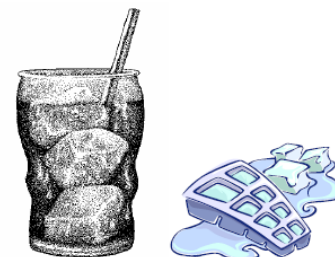
# Advice to Trade

- Obtain relevant licence from the Food and Environmental Hygiene Department for manufacturing and/or sale of edible ice.
- If edible ice is produced on premises using ice-making machines, manufacturer's instructions should be followed for proper cleaning and maintenance of the machines.
- Observe good hygienic practices when handling edible ice.
- Can make reference to "Guidelines on Hygienic Production and Handling of Ice in Food Premises"

[http://www.cfs.gov.hk/english/multimedia/multimedia\\_pub/files/ice\\_in\\_food.pdf](http://www.cfs.gov.hk/english/multimedia/multimedia_pub/files/ice_in_food.pdf)

## Guidelines on Hygienic Production and Handling of Ice in Food Premises

(These Guidelines apply to ice intended for human consumption)



# Advice to Public

- Use potable water to prepare edible ice.
- Use clean utensils to prepare and store edible ice.
- Avoid any cross-contamination during storage and handling edible ice.

# END

## Thank you