

Trade Guidelines on Safe Production of Sweet Food



食物安全中心
Centre for Food Safety

This set of guidelines is intended for food businesses that prepare and sell sweet food. It aims to help food trade implement food safety measures in their operations in order to produce and sell wholesome and safe products.



In addition, some non-hot served sweet food also contains raw ingredients e.g. fresh fruits, fresh fruit juices and eggs, in which a variety of microorganisms such as mould, yeast and bacteria may naturally be found. Besides, unhygienic handling of ready-to-eat sweet food may also result in contamination by dangerous microorganisms e.g. *Staphylococcus aureus* which may be present on human skin. These factors may affect the safety and hygienic quality of these products.

In order to ensure food safety, it is important to implement food safety measures in the production of sweet food, particularly the non-hot served ones.

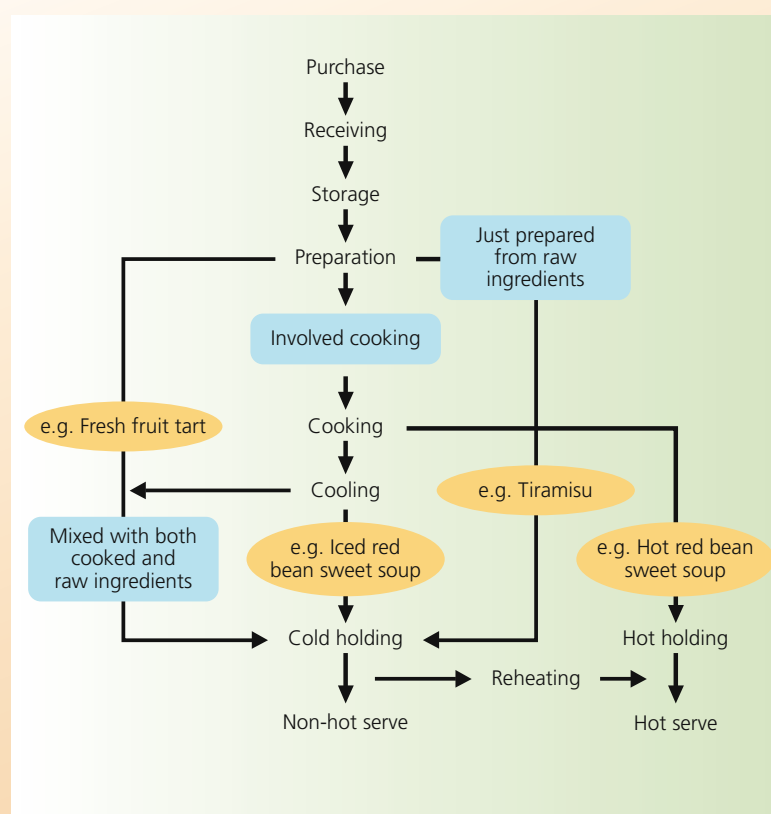
Introduction

Sweet food is popular in Hong Kong. Various types of sweet food ranging from tiramisu to red bean sweet soup are commonly available in the territory.

Sweet food can be prepared in different ways e.g. some products may involve cooking while some are just prepared from raw ingredients and the others are mixed with both cooked and raw ingredients. Subject to the nature of the product, sweet food can be served hot and/or cold. In general, non-hot served sweet food may have higher microbiological risks.

Non-hot served sweet food is commonly prepared in advance and stored for a period of time before serving and is not reheated before consumption. If the ingredients are cooked thoroughly, most microorganisms are destroyed. However, some bacterial spores e.g. *Bacillus cereus* spores may survive cooking. Prolonged storage of sweet food under room temperature may allow microorganisms to grow and spores to germinate, multiply and may even produce heat-stable toxin.

A generic flow diagram of the production of different sweet food (Some may involve cooking, some are just prepared from raw ingredients and some are mixed with both cooked and raw ingredients)



Food Safety Measures for Preparing Sweet food

In order to prepare safe and wholesome food, including sweet food for consumers, it is essential to follow the **5 Keys to Food Safety** in the daily operation:

- 1. Choose**
(Choose safe raw materials)
- 2. Clean**
(Keep hands and utensils clean)
- 3. Separate**
(Separate raw and cooked food)
- 4. Cook**
(Cook thoroughly)
- 5. Safe Temperature**
(Keep food at safe temperature)

Below are some practical tips on how you can practise the 5 Keys to Food Safety in the production of sweet food.

Purchase and Receiving

- Obtain food and food ingredients from approved and reliable sources.
- Choose food before its expiry date.
- Use fresh and wholesome food ingredients and check the quality of the ingredients upon receipt.
- Choose pasteurised egg products or dried egg powder to prepare products not requiring heat treatment, in particular ready-to-eat sweet food e.g. tiramisu.

Storage

- Store food and food ingredients at safe temperatures e.g. perishable items including shell eggs at 4°C or below.
- Ideally, use two separate refrigerators for storing raw food and cooked food or ready-to-eat food including sweet food.

- If raw food and cooked food or ready-to-eat food have to be stored in the same refrigerator, do the following :
 - ▶ Store food in containers with lids to avoid contact between raw food and ready-to-eat food or cooked food.
 - ▶ Store raw meat, poultry, and seafood below ready-to-eat food or cooked food in the refrigerator to prevent juices from dripping onto ready-to-eat food or cooked food.
- Apply the first-in-first-out principle to store food. Do not use food beyond its expiry date or expected shelf life.

Preparation

- Estimate the demand of each type of sweet food carefully to avoid over-production.
- Plan the production schedule ahead to avoid preparing sweet food too far in advance.
- Food contact surfaces of equipment and utensils should be maintained in a clean and sanitary condition.
- Use separate utensils to handle raw food and cooked food or ready-to-eat food e.g. use different colour codes for different utensils (including cutting boards and knives):

Red- Raw food

Blue- Cooked food

Green- Ready-to-eat food

Cooking

- Cook thoroughly, with core temperature at 75°C or above for at least 30 seconds.

Cooling (where applicable)

- Cool food from 60°C to 20°C as quickly as possible (within 2 hours); and from 20°C to 4°C, within 4 hours or less.
- Speed up the cooling process by using wide, shallow containers or reducing the size of the

portions e.g. dividing sweet soup into small portion for rapid cooling.

- Use potable water/ ice wherever necessary to cool ready-to-eat food.

Holding

- Keep cold served sweet food at 4°C or below while keep hot served sweet food at above 60°C.
- Except certain sweet foods e.g. cookies and muffins which are safe to store at room temperature, as a general rule, after proper cooling, if sweet food have been kept under room temperature:
 - ▶ for less than 2 hours, they can be refrigerated for final use later or used before the 4 hours limit is up.
 - ▶ for more than 2 hours but less than 4 hours, they should be used within the 4 hours limit is up but should not be returned to the refrigerator.
 - ▶ for more than 4 hours, they should be discarded.
- Adopt appropriate measures to ensure first-in-first-serve of sweet food which are cooked or prepared in advance e.g. use date and time coding to show the storage time.

Reheating (where applicable)

- Reheat cooled sweet food intended for hot serving thoroughly, with core temperature reaching at least 75°C.
- Do not reheat sweet food more than once.

Personal Hygiene

- Always follow good personal hygiene practices, including:
 - ▶ Wash hands thoroughly with running water and soap for 20 seconds before and after handling food, often during food preparation and after going to the toilet;

- ▶ Wear clean and light-coloured outer clothing or protective overalls;
- ▶ Refrain from smoking and eating during preparation. Open wound should be covered by bright-coloured waterproof bandages or gloves;
- ▶ Suspend from engaging in any food handling work when suffering or suspected to be suffering from an infectious disease or symptoms of illness such as flu, diarrhoea, vomiting, fever, sore throat and abdominal pain.



Tips for Safe Production of Specific Non-hot Served Sweet Food

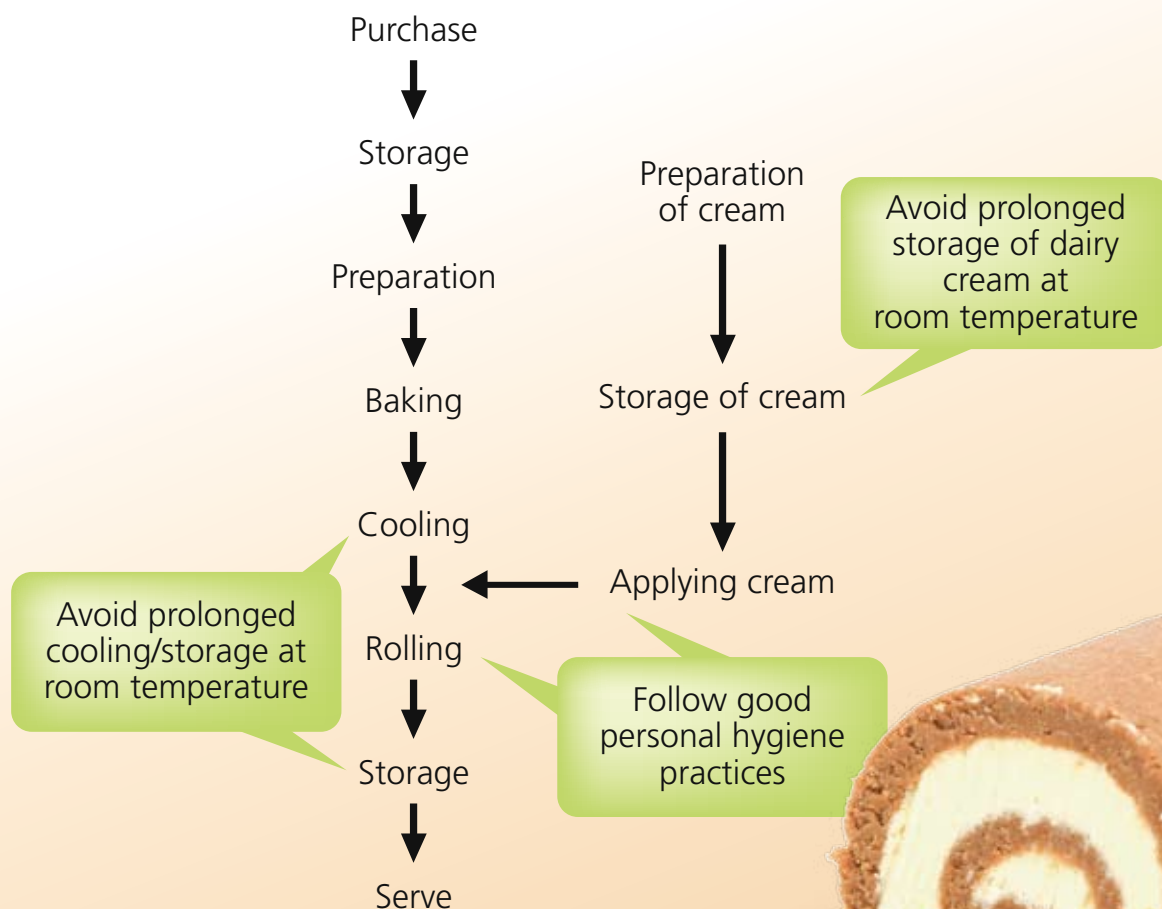
Available data have shown that some non-hot served sweet food such as Swiss roll and sweet sago cream with coconut milk available in the local market may have sub-optimal microbiological quality and some may even be potentially hazardous to health. Factors such as post-cooking contamination, improper cooling/storage and unhygienic handling may affect the microbiological quality of these products. To ensure food safety, special attention should be paid in producing the concerned products as highlighted below.

A. Tips for the production of Swiss roll* to ensure food safety

Swiss roll is a bakery product consisting of a sheet of sponge cake spread with cream or other ingredients which is rolled up to a cylindrical cake. In general, microorganisms are killed when the sponge cake is baked. Manual handling may be involved when the cooled sponge cake is spread with cream and rolled to form the Swiss roll. Below are the measures which need special attention during production:

- ▶▶ Estimate the demand carefully to avoid over-production.
- ▶▶ Use separate utensils to handle raw food and cooked food i.e. sponge cake.
- ▶▶ Cool sponge cake as quickly as possible.
- ▶▶ Keep ready-to-eat dairy cream at 4°C or below. Due to the high sugar content which will not support the growth of dangerous microorganisms, some artificial creams may be safe at room temperature. In case of doubt, advice should be sought from the supplier.
- ▶▶ After proper cooling, refrigerate Swiss rolls which are kept under room temperature within 2 hours or discard them after 4 hours.
- ▶▶ Always follow good personal hygiene practices.

* Variations are expected to suit particular operations



B. Tips for the production of sweet sago cream with coconut milk* to ensure food safety

In general, when preparing sweet sago cream with coconut milk, the sago is cooked and cooled/ rinsed with water. Below are the measures which need special attention during production:

- ▶▶ Cool/ rinse ready-to-eat sago with potable water.
- ▶▶ Keep cooked sago in covered containers and away from raw food.
- ▶▶ After proper cooling, refrigerate non-hot served sweet sago cream with coconut milk products which are kept under room temperature within 2 hours or discard them after 4 hours.
- ▶▶ Always follow good personal hygiene practices.

* Variations are expected to suit particular operations

