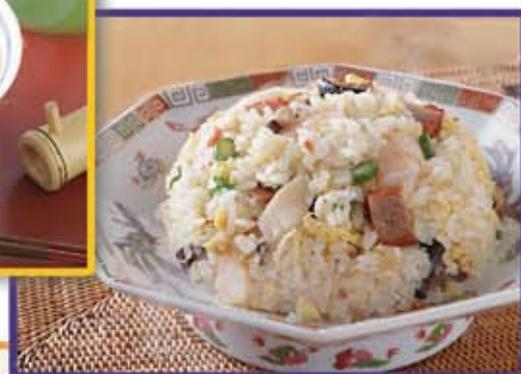
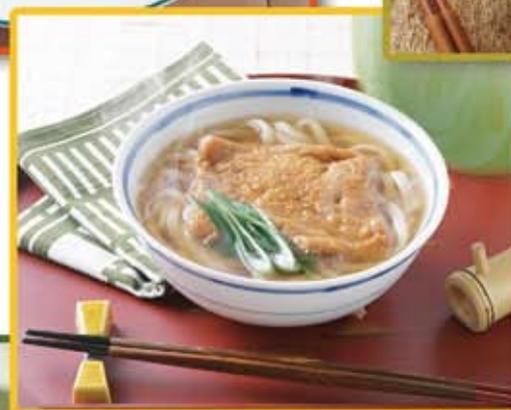


Trade Guidelines on Safe Production of Rice and Noodles



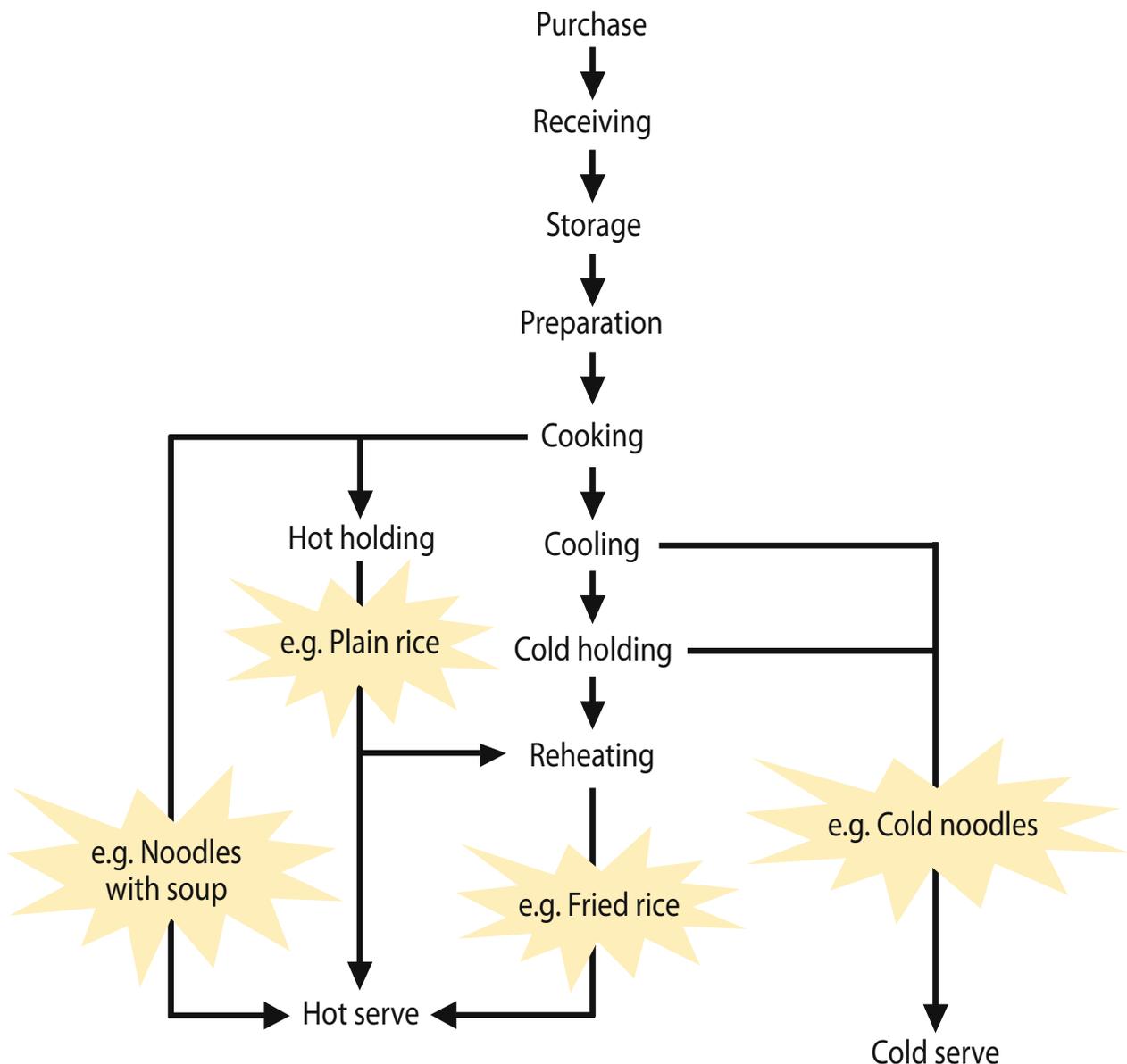
This set of guidelines is intended for food businesses that prepare and sell rice and/or noodles at premises. It aims to help food trade implement food safety measures in their operations in order to produce and sell wholesome and safe rice and/or noodles.

Introduction

Uncooked rice and milled cereal products such as flour are raw agricultural commodities. They are naturally associated with a variety of microorganisms such as mould, yeast and bacteria. In general, uncooked rice and milled cereal products are dried to inhibit the growth of microorganisms.

When rice and noodles are cooked thoroughly, most microorganisms that may be present in food are destroyed. However, some bacterial spores e.g. *Bacillus cereus* spores may survive cooking. Prolonged storage of cooked products under room temperature may allow these spores to germinate, multiply and produce heat-stable toxin. In addition, unhygienic handling of cooked rice and noodle products may result in contamination by dangerous microorganisms e.g. *Staphylococcus aureus* which may be present on human skin. In order to ensure food safety, it is important to implement food safety measures in the production of rice and noodles.

A generic flow diagram* of rice and noodle products production



* There are variations among food producers

Food Safety Measures for Preparing Rice and Noodles



Purchase

- Obtain food and food ingredients including rice and noodles from approved and reliable sources.

Receiving and storage

- Check the quality of food and food ingredients upon receipt.
- Store food and food ingredients at safe temperatures e.g. perishable items including fresh rice noodles at 4°C or below.
- 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 rice and noodles carefully to avoid over-production.
- Plan the production schedule ahead to avoid preparing rice and noodle products too far in advance.

Cooking

- Cook rice and noodles thoroughly, with core temperature reaching at least 75°C.

Cooling

- Cool cooked rice and noodles 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.
- Use potable water/ ice wherever necessary to cool cooked noodles.



Holding

- Keep cooked rice and noodles in covered containers and away from raw food at temperature above 60°C or at 4°C or below. Check the temperature regularly to ensure that the food is kept at designated temperature.
- As a general rule, after proper cooling, if cooked rice and noodles 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 before 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 rice and noodles which are cooked in advance e.g. use date and time coding to show the storage/display time.

Reheating

- Reheat refrigerated rice and noodles intended for hot serve thoroughly, with core temperature reaching at least 75°C.
- Do not reheat cooked rice and noodles more than once.



Personal Hygiene

- Always follow good personal hygiene practices, including:
 - Wash hands thoroughly with warm soapy water for 20 seconds before and after handling foods;
 - Refrain from smoking and eating during preparation. Open wound should be covered by 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 diarrhoea, vomiting, fever, sore throat and abdominal pain.

Tips for Safe Production of Fried Rice and Cold Noodles

In some production process of fried rice and cold noodles, rice and noodles are cooked, cooled and hold for a period of time before further processing or consumption. Plan the production schedule ahead can avoid cooking food too far in advance. To ensure food safety, special attention should be paid in producing fried rice and cold noodles as highlighted in the diagram below.

Special tips for fried rice and cold noodles production to ensure food safety

