

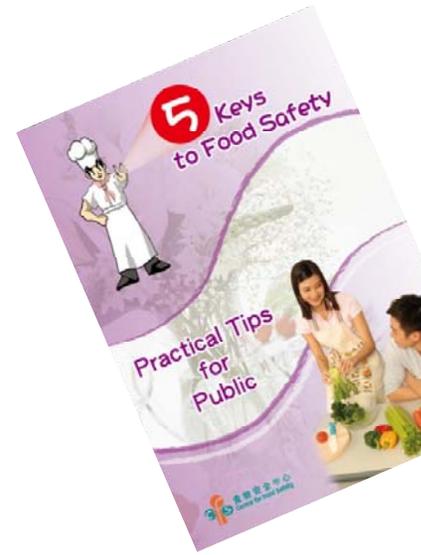
5 Keys to Food Safety Practical Tips for Public



Centre for Food Safety
Risk Communication Section

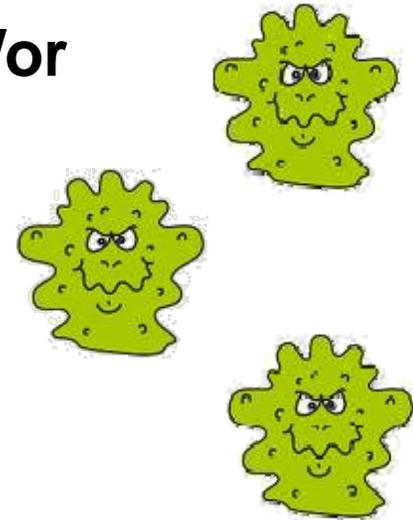
Content

- **What is Foodborne Disease?**
- **Symptoms, causes and contributing factors of Foodborne Disease**
- **What are the 5 Keys to Food Safety?**
- **How to apply the 5 Keys to Food Safety**
 - Purchase
 - Store
 - Prepare
 - Cook
 - Manage Leftovers



What is Foodborne Disease?

- **Sickness caused by food that people eat**
- **Causes**
 - dangerous microorganisms and/or
 - toxic chemicals

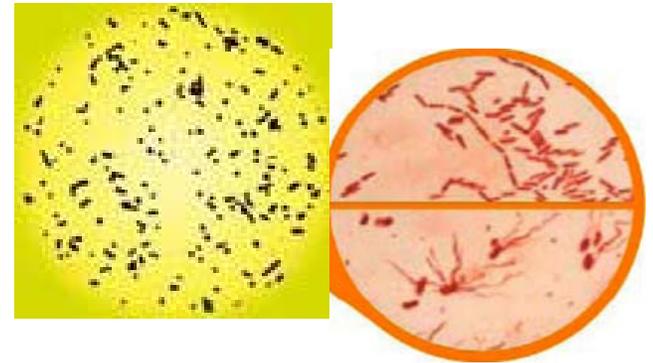


Common symptoms of Foodborne Disease

- Most symptoms occur in **24 to 72** hours after eating
 - stomach pains
 - vomiting
 - diarrhoea, etc
- Most symptoms are mild
- Some diseases may severely affect **infants, pregnant women, elderly** and the **sick**

What are the causes locally?

- In the past five years (2003-2007)
 - about **90%** of food poisoning cases were caused by **bacteria** and **viruses**
- In 2006, the top four commonest dangerous microorganisms
 - ***Vibrio parahaemolyticus*** (40%)
 - ***Salmonella* species** (19%)
 - ***Staphylococcus aureus*** (19%)
 - **Noroviruses** (15%)

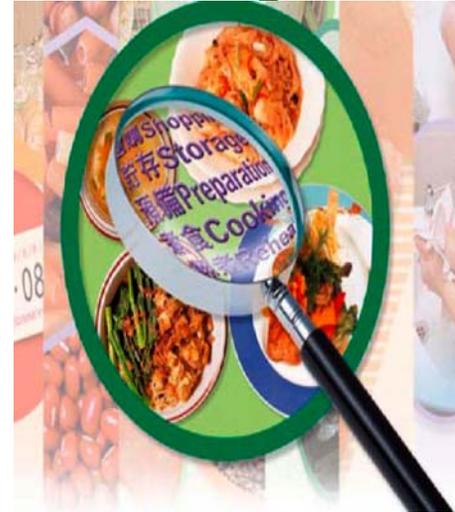


Local contributing factors

- **In 2006, the top three contributing factors**
 1. **inadequate cooking (38%),**
 2. **contamination by raw food (15%)**
 3. **poor personal hygiene of food handlers (14%)**

What are the 5 Keys to Food Safety?

- **Advocated by the World Health Organization to prevent foodborne diseases**
 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)**



How to apply 5 Keys to Food Safety in Daily Life

- Purchase
- Store
- Prepare
- Cook
- Manage leftovers



Purchase - CHOOSE(1)

Buy food from **hygienic** and **reliable** shops

- **Don't** buy food from **illegal** hawkers
- **Don't** buy food from **questionable** source, e.g. food of unreasonably low price or meat with abnormal red colour

Purchase - CHOOSE(2)

Select **fresh** and **wholesome** food

- Fruits or vegetables are **not damaged** and **without bruised areas**
- Canned foods are **not bulging or dented**
- Jars are **not cracked** or have **loose lids**
- Eggs in the carton are **not cracked or leaking**



Choose ready-to-eat, cooked or perishable foods that are **stored correctly**

- **Hot Food: above 60°C**
- **Cold Food: at or below 4°C**
- **Frozen Food: at or below -18°C**

Purchase - CHOOSE(3)

Do not use food beyond its **expiry date**

- Read food labels carefully and follow instructions
- Choose food before its expiry date
 - “use by” Date
 - “best before” Date

Separate raw food from ready-to-eat food or cooked food

- Pick up your **packaged and canned foods first**, shop for **raw** meat, poultry and seafood **last**
- Keep raw meat, poultry, and seafood **separate** from other food items in your grocery cart and shopping bags to **prevent their juices** from **contaminating** other food items

READ THE FOOD LABELS

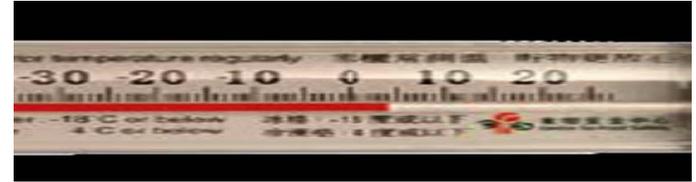


Purchase - CHOOSE(4)

Difference between “use by” and “best before” date

	“use by” date	“best before” date
Example of Food	A cup of ice-cream	A pack of biscuit
Example of Expiry Date	1-1-2008 If the food is properly stored, it is recommended for use on or before 1-1-2008	1-1-2008 If the food is properly stored, it can be expected to retain its specific properties on or before 1-1-2008
Recommendations after the Expiry Date	Usually, the food is highly perishable. If you consume it after the date, there is a chance that you will suffer from foodborne disease	If you consume it after the date, the food may not be at its best flavour and quality

Store - SAFE TEMPERATURE



- Refrigerate cooked and perishable food within **2 hours**
- Check the **temperature of the refrigerator** with a thermometer
 - **Fridge: at or below 4°C**
 - **Freezer: at or below -18°C**
- **Don't overstuff your refrigerator**

Store - SEPARATE

- In the refrigerator
 - Store food in **containers with lids** to avoid contact between raw and ready-to-eat food or cooked food
 - Store **raw** meat, poultry, and seafood **below ready-to-eat food or cooked food** to prevent juices from dripping onto ready-to-eat food or cooked food



Prepare - CLEAN (Personal Hygiene)

■ Always Wash your Hands

- ❑ Before handling food
- ❑ After handling raw meat or poultry
- ❑ During food preparation
- ❑ Before eating
- ❑ After blowing nose, handling rubbish, going to the toilet or changing nappies
- ❑ After playing with pets
- ❑ After smoking

Prepare - CLEAN (Personal Hygiene)

Wash your hands with warm soapy water for 20 seconds

1. Wet hands under running water
2. Rub hands together for at least 20 seconds with liquid soap
3. Rinse hands under running water
4. Dry hands with a clean dry towel, preferably a paper towel



Prepare – CLEAN (Environmental Hygiene)

- Wash utensils and worktops with **hot water** and **detergent** after each use
 - Scrape **excess food** into a rubbish bin
 - Wash in hot water with detergent, using a clean cloth or brush (sponge is not recommended) to remove **leftovers** and **grease**
 - Rinse in **clean** hot water
 - Leave cutting boards, dishes, or utensils to air-dry, or wipe with a clean dry cloth



Prepare – CLEAN (Environmental Hygiene)

- **Keep kitchen clean and away from insects, pests and other animals**
 - Keep food covered or in **closed containers**
 - Keep **rubbish bins** covered and remove rubbish **regularly**
 - Keep food preparation areas in good condition, e.g. repair wall cracks or holes
 - Use baits or insecticides to kill pests but **take care not to contaminate food**
 - Keep pets away from kitchen



Store - SEPARATE

- Use separate utensils to handle raw food and cooked or ready-to-eat food such as poached chicken or fruits
- Label utensils (including cutting boards and knives) with different colours, e.g.
 - Red- Raw food
 - Blue- cooked food
 - Green- Ready-to-eat food
- Use one utensil to taste and another to stir or mix food



Cook - **COOK** thoroughly



- Thaw frozen food properly before cooking, put it
 - in microwave
 - in the fridge or
 - under running water



Cook - **COOK** thoroughly

- Ideally, use a food thermometer to check that the core temperature of food reaches **at least 75 °C**
- When you use the food thermometer, make sure you use it properly:
 - place the food thermometer **in the centre of the thickest part** of the meat
 - the food thermometer is not touching a bone or the side of the container
 - **clean** the food thermometer between each use



Digital Food Thermometer



Bi-metallic Stemmed Thermometer

Cook - **COOK** thoroughly



- If you do not have a food thermometer, cook or reheat food thoroughly until it is piping hot throughout and check
 - **Meat and poultry**: make sure that **juices are clear, not red**, blood is not visible when you cut the cooked meat
 - **Eggs**: egg yolks are **not runny or liquid**
 - **Soups and stews**: bring to a **boil** and continue to boil for **at least one minute**
- When microwaving
 - Stir, rotate and cover food to ensure thorough cooking



Manage Leftovers- SAFE TEMPERATURE

- Take food promptly after cooking. **Do not** leave cooked food at room temperature for **more than 2 hours**
- Promptly **cool** leftovers and refrigerate **within two hours**
- Leftovers can be cooled quickly by
 - Slicing large pieces of meat into smaller pieces
 - Placing food in a cool, clean container
 - Stirring regularly for soups



Manage Leftovers- SAFE TEMPERATURE

- If cooked food are not eaten immediately, keep them **piping hot (above 60°C)** prior to serving
- Leftovers **should not** be stored in the refrigerator for **longer than 3 days** and **should not** be reheated **more than once**
- Reheat leftovers thoroughly until it is **steaming hot** before consumption

“Follow Five Keys to Ensure Food Safety”