應對食物中的抗菌素耐藥性問題 業界篇

How to address AMR in food for food businesses

業界諮詢論壇 Trade Consultation Forum

食物環境衞生署 Food and Environmental Hygiene Department

食物安全中心 Centre for Food Safety

什麼是抗菌素耐藥性？
What is antimicrobial resistance?

- 抗菌素耐藥性是指某種微生物（主要為細菌）具有令抗菌劑（例如抗生素）不再對其有效的能力

  Antimicrobial resistance (AMR) is the ability of a microorganism, most significantly bacteria, to stop an antimicrobial agent, such as antibiotics, from working against it

- 結果，標準治療無效，病人受感染的情況持續，更可能傳染他人

  As a result, standard antimicrobial treatments become ineffective, infections persist and may spread to others

- 耐藥性問題若不獲改善，有效的治療方案會愈趨減少

  If the problem of AMR does not improve, there would be fewer effective treatment options

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什麼是抗菌素耐藥性？(2)
What is antimicrobial resistance? (2)

- 這些抗菌素耐藥性細菌不一定是病原體，也可以是於人體裡與人類共生而又對身體無害的微生物

  AMR bacteria are not necessarily pathogens. They can also be commensal bacteria that derive benefits from their association with humans and are generally harmless

- 抗菌素耐藥性細菌不論是否有致病性，都有可能把抗藥性基因轉移到人體內的其他細菌，因而影響抗菌素的藥效

  AMR bacteria can cause illnesses, they may transfer their antibiotic resistance genes to other bacteria in our body and consequently reduce the effectiveness of antimicrobials

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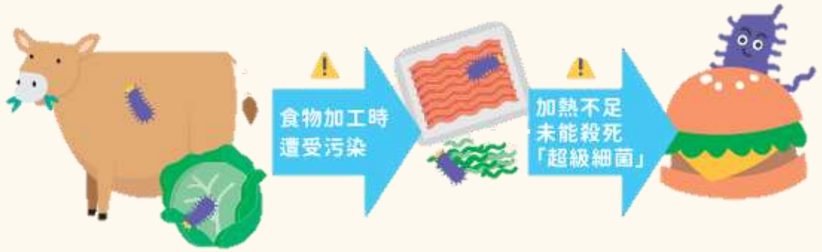
抗菌素耐藥性如何擴散到人類
How AMR spreads to humans

① 抗菌素耐藥性可隨時間通過基因轉變而自然出現

AMR may occur naturally over time, usually through genetic changes



② 可由濫用抗菌素引發，通過污染食物源頭令人類受感染

It can also be a result of misuse of antimicrobials, whereby humans then contract AMR bacteria via contaminated food

③ 在屠房屠宰牲口時，不慎將食用動物的腸道污染到肉上。如果進食受污染而未經徹底煮熟的肉類，抗菌素耐藥性細菌便可進入食物鏈

Careless evisceration at slaughterhouse may contaminate the animal's meat with its intestinal content. AMR bacteria may enter the food chain if the contaminated meat is consumed raw or undercooked

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抗菌素耐藥性如何擴散到人類 (2)

How AMR spreads to humans (2)

④ 沒有正確處理農場的糞便或會造成污染，於是抗菌素耐藥性細菌可經由受排泄物污染的土壤或水源進入食物鏈

Improper disposal of manure from farms may allow AMR bacteria to enter the food chain through contaminated soil or water

⑤ 使用受污染的水灌溉而傳播至水果及其他農作物

Using contaminated water for irrigation of fruits and other produce

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抗菌素耐藥性細菌會否影響我?
Would AMR affect me?

- 抗菌素耐藥性細菌感染可傳播給他人，且較難醫治的，嚴重的甚至可致命，因此威脅社區及人口健康

  AMR bacteria can spread to others and are difficult to treat. Severe infection may be fatal, thus threatening community and population health

- 現時問題令治療感染和預防死亡的工作更趨困難，情況惹人關注

  AMR is of great concern as the current problems are complicating efforts to treat their infections and prevent deaths

- 我們需採取行動提高食物安全，並改善食物、人類與環境之間的協調工作

  We need to take action on reinforcing food security and improving the balance between food, humans and the environment

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「一體化健康」方法以對付抗菌素耐藥性
One Health approach to combat AMR

- 「一體化健康」

The "One Health" approach

  - 人類與動物的健康和環境息息相關
    Health of humans is connected to health of animals and the environment
  - 抗菌素耐藥性防控策略的主要元素
    A major element of AMR control and prevention strategies

- 人類醫學、獸醫、農業和食物界別均須同心協力採取行動，減緩抗菌素耐藥性的興起和傳播
  Human medicine, veterinary medicine, agriculture and the food sector should therefore take collective actions to minimise the emergence and spread of AMR

- 抗菌素耐藥性對食物安全構成影響。人類如果進食未經徹底煮熟的受污染食物，又或者製備食物的方式不衞生（例如處理食物前沒有洗手）造成交叉污染，都有機會接觸到耐藥性細菌
  AMR is a food safety concern. People may be exposed to AMR bacteria when they consume contaminated food without being thoroughly cooked or prepare food with poor food hygiene practice (e.g. hands are not washed before handling food)

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即食食物內的抗菌素耐藥性
AMR in Ready-to-eat (RTE) food

- 「即食食品」：已預先烹製，無須再烹煮便可進食的食物
  “Ready-to-eat foods”: Foods that have been prepared so they can be consumed without any additional cooking

- 部份食物都是在生或未煮熟的狀態下進食的，例如刺身、沙律菜、三文治、切開水果、燒味及鹵味，以及未煮熟的肉類等。即食食品屬高風險食物，原因是沒有經過熱處理或熱處理不足，未能消滅當中可致病的微生物
  Some foods are served raw or undercooked, such as sashimi, salad greens, sandwiches, cut fruits, Siu-mei and Lo-mei, and undercooked meat. RTE foods are high-risk foods as there is no or inadequate heat treatment to eliminate the microorganisms present that can pose risks to human health

- 烹煮可殺死食物中的抗菌素耐藥性細菌，而生或未煮熟的食物則容易存有微生物，包括可透過進食途徑感染人類的抗菌素耐藥性細菌
  While cooking can kill AMR bacteria, raw or undercooked foods are more likely to carry microorganisms including AMR bacteria that can be transferred to humans through food intake

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食物內抗菌素耐藥性恆常監測計劃
Routine Surveillance Programme on AMR in food

- 因應抗菌素耐藥性對公共衞生的影響，食物安全中心（中心）自 2022 年起正進行食物內抗菌素耐藥性恆常監測計劃

  Considering the public health significance of AMR, the Centre for Food Safety (CFS) has been conducting a routine surveillance programme on AMR in food since 2022

- 從香港各處零售層面抽取食物樣本

  Food samples are collected from retail level across Hong Kong

- 測試細菌對抗菌素的耐藥性

  Resistance of bacteria to antimicrobials is tested

  - 耐美羅培南細菌　　Meropenem-resistant organisms (MRO)
  - 耐萬古霉素腸道鏈球菌　　Vancomycin-resistant *Enterococcus* (VRE)

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耐美羅培南細菌
Meropenem-resistant organisms (MRO)

- 耐美羅培南細菌是對美羅培南產生耐藥性的細菌
  Bacteria that are resistant to the effects of meropenem are known as meropenem-resistant organisms (MRO)
- 美羅培南是碳青霉烯類別抗菌素的其中一種，被用作測試對碳青霉烯的抗藥性
  Meropenem is one of the carbapenems, which is a group of antimicrobials. Meropenem is often used for testing for carbapenem resistance
- 根據世界衞生組織（世衞）資料，碳青霉烯是對人類醫學至關重要的抗微生物藥物
  According to information of the World Health Organization (WHO), carbapenems are critically important antimicrobials for human medicine
- 碳青霉烯是用於治療當細菌對所選主要藥物有耐藥性時的各種嚴重感染，院內感染，多種細菌感染
  Carbapenems are used to treat infections including: a variety of serious infections when an organism is resistant to the primary agent of choice, infections acquired in hospital, mixed bacterial infections

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耐美羅培南細菌 (2)
Meropenem-resistant organisms (MRO) (2)

- 耐碳青霉烯細菌對大量的抗生素（包括碳青霉烯及第三代頭孢菌素等用於治療多重抗藥性細菌的最佳可用抗生素）產生耐藥性

  CRO have become resistant to a large number of antibiotics, including carbapenems and third generation cephalosporins – the best available antibiotics for treating multi-drug resistant bacteria

- 耐碳青霉烯腸道桿菌、鮑氏不動桿菌及綠膿假單胞菌在《世衛組織新型抗生素研發重點病原體清單》當中屬於「1類重點：極為重要」級別

  Carbapenem-resistant *Enterobacteriaceae*, *Acinetobacter baumannii* and *Pseudomonas aeruginosa* are bacteria ranked as "Priority 1: CRITICAL" on the list of "WHO priority pathogens list for research and development of new antibiotics"

耐萬古霉素腸道鏈球菌
Vancomycin-resistant *Enterococcus* (VRE)

- 耐萬古霉素腸道鏈球菌是對萬古霉素產生耐藥性的腸道鏈球菌
  Enterococcus that are resistant to the effects of vancomycin are known as VRE
- 根據世衛資料，萬古霉素是對人類醫學至關重要的抗微生物藥物
  According to information of the WHO, vancomycin is a critically important antimicrobial for human medicine
- 萬古霉素是糖肽類抗菌素的其中一種
  Vancomycin is a member of a class of antimicrobial agents known as glycopeptides
- 糖肽是用作治療嚴重腸道鏈球菌感染為數不多的治療方法之一
  Glycopeptides are one of the few available therapies for serious *Enterococcus* bacterial infections

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食物抗菌素耐藥性監測計劃的即食食物

RTE food in the AMR Surveillance Programme on Food

- 自恆常食物抗菌素耐藥性監測計劃開始直至 2022 年 12 月（匯報期），一共抽取了逾 700 個即食食物樣本，包括：

More than 700 RTE food samples collected since the start of the AMR Routine Surveillance Programme to December 2022 (reporting period). Samples included are:

蔬菜	Vegetables
刺身	Sashimi
預先切割水果（預切水果）	Cut fruits
三文治	Sandwiches

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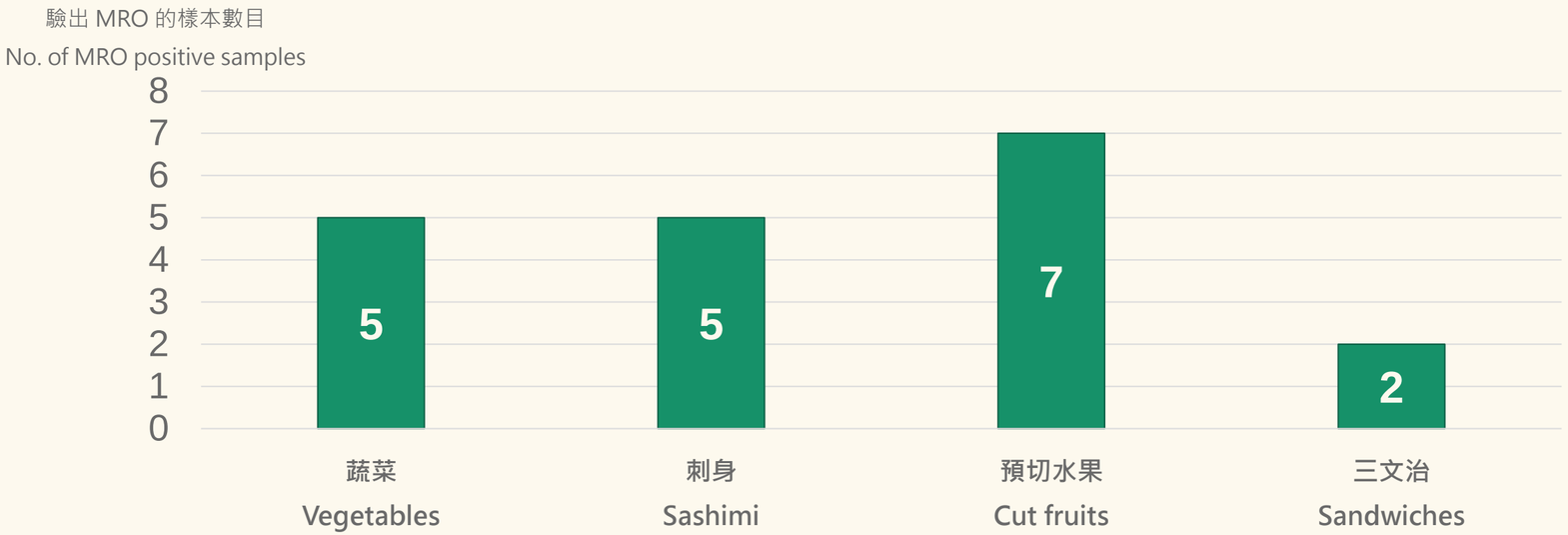
結果 – 即食食物的耐美羅培南細菌及耐萬古霉素腸道鏈球菌

Results – MRO and VRE in RTE food

一共有 19 個即食食物樣本被驗出耐美羅培南細菌

A total of 19 RTE food samples were identified as MRO positive



1 個即食刺身樣本被驗出耐萬古霉素腸道鏈球菌

1 RTE sashimi sample was identified as VRE positive

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結果 – 即食食物的耐美羅培南細菌及耐萬古霉素腸道鏈球菌 (2)

Results – MRO and VRE in RTE food (2)

即食食物樣本類型 RTE food sample type	樣本 Sample	驗出的抗菌素耐藥性細菌 AMR bacteria isolated
蔬菜 Vegetables	葉菜類瓜類及果類蔬菜 Leafy and fruiting vegetables	耐美羅培南細菌（腸道桿菌、鮑氏不動桿菌及綠膿假單胞菌） MRO (*Enterobacteriaceae*, *Acinetobacter* and *Pseudomonas aeruginosa*)
刺身 Sashimi	帶子、三文魚、吞拿魚及油甘魚 Scallop, salmon, tuna and yellow tail	耐美羅培南細菌（腸道桿菌及鮑氏不動桿菌） MRO (*Enterobacteriaceae* and *Acinetobacter*)
	即食甜蝦 Shrimp sashimi	耐萬古霉素腸道鏈球菌 VRE
預切水果 Cut fruits	單一或不同的水果 Single or mixed types of fruit	耐美羅培南細菌（腸道桿菌及鮑氏不動桿菌） MRO (*Enterobacteriaceae* and *Acinetobacter*)
即食三文治 Sandwiches	餡料包括不同的配料 Multiple ingredients in sandwich fillings	耐美羅培南細菌（鮑氏不動桿菌） MRO (*Acinetobacter*)

中心就驗出耐美羅培南細菌或耐萬古霉素腸道鏈球菌的樣本採取的行動
Actions taken by CFS for MRO or VRE +ve samples

- 中心的食物監測及投訴組及風險傳達組已派員巡查有關商戶
  Food Surveillance and Complaint Section (FSCS) and Risk Communication Section (RCS) of the CFS conducted joint site inspection to concerned vendors

- 雖然個人衞生環境情況滿意，但不能排除交叉感染
  Potential risk of cross-contamination cannot be excluded despite satisfactory personal hygiene

  - 不排除同一食物製造廠內的不同食物之間的交叉感染
    Cross-contamination between different food produced in the same food factory could not be ruled out

  - 員工在不同生產線之間的流動亦有機會引致交叉感染
    Movement of staff from different production lines may result in cross-contamination

- 指示有關商戶清洗處所
  Instructed the concerned vendors to conduct cleansing

- 提供有關抗菌素耐藥性的健康建議及小冊子
  Health advice and pamphlet on AMR and food safety have been given

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業界的注意事項
Points to note for the trade

- 中心提供健康教育後，將於曾於即食食物驗出有耐美羅培南細菌或耐萬古霉素腸道鏈球菌的商戶再次抽取樣本
  The CFS will conduct re-sampling at vendors with MRO or VRE positive results as follow-up after providing health education

- 中心提醒業界以下事項：
  The CFS reminds the members of trade the following:

  - 配戴手套前要先洗手
    Hands should be washed being wearing gloves

  - 遵守有關衞生經理及/或衞生督導員的規定，以確保食物安全的妥善監督
    Observe the requirements of Hygiene Manager and / or Hygiene Supervisor to ensure proper supervision of food safety

  - 巡查時應出示衞生經理及/或衞生督導員的證書
    The certificate of hygiene manager and / or hygiene supervisor should be available at the time of inspection

  - 為食物製造廠申領適合的牌照及批註
    Obtain suitable license and endorsement(s) for food factory

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如何對抗即食食品的抗菌素耐藥性
How to tackle AMR in RTE food

- 食物從業員應了解和實踐「食物安全五要點」，並與良好衞生規範 (GHP)結合應用，以確保從採購、貯存、配製、烹煮到運輸和供餐的食物安全

  Food handlers should understand and practice the “Five Keys to Food Safety”, and apply them in conjunction with Good Hygiene Practice (GHP) to ensure food safety from procurement, storage, preparation, cooking to transportation and serving

- 運用「食物安全五要點」，對無論是否帶有抗菌素耐藥性的病原體，都能有效預防食源性疾病

  Applying the “Five Keys to Food Safety" can effectively prevent foodborne illness from pathogens with or without antimicrobial resistance

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食物安全五要點
Five Keys to Food Safety

- 食物安全五要點由世界衞生組織提倡，旨在為食物業界和公眾提供相關指引，保障食物安全

The five keys to food safety has been advocated by the WHO to provide handy tips for the trade and public to ensure safe eating

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食物安全五要點 (2)

Five Keys to Food Safety (2)

五要點	建議	重要性
精明選擇	• 避免食用生或未煮熟的食物，尤其是高危人士	• 生的或未煮熟的食物未經熱處理，可能含有「超級細菌」
徹底煮熟	• 上菜前徹底煮熟食物	• 烹調可有效殺死食物中的「超級細菌」
保持清潔	• 清洗蔬果才進食	• 水洗可去除部分食物表面的「超級細菌」
	• 處理食物前清潔雙手和食物準備區	• 防止熟食或即食食物被「超級細菌」交叉污染
生熟分開	• 將熟食或即食食物與生的食物分開及存放 • 用不同工具分開處理熟食或即食食物和生食	• 防止熟食或即食食物受到生食的「超級細菌」交叉污染
安全溫度	• 如不立即食用，應將凍食保持在攝氏 4 度或以下，熱食則保持在攝氏 60 度以上	• 安全溫度可避免食物滋生細菌

Five Keys	Advice(s)	Why important?
Choose	• Avoid eating raw or undercooked food, especially for susceptible populations	• Without heat treatment, raw or undercooked food can contain “superbugs”
Cook	• Cook food thoroughly before serving	• Cooking is effective to kill “superbugs” in food
Clean	• Wash fruits and vegetables before eating	• Washing can partially remove “superbugs” from food’s surface
	• Clean hands and food preparation areas before handling foods	• Prevent cross-contamination of cooked or ready-to-eat foods with “superbugs”
Separate	• Store cooked or ready-to-eat foods and raw foods separately • Handle cooked or ready-to-eat foods and raw foods with separate utensils	• Prevent cross-contamination of cooked or ready-to-eat foods with “superbugs” from raw food
Safe Temperature	• Keep cold food cold at 4°C or below and hot food hot over 60°C if not consumed at once	• Safe temperatures can avoid bacterial growth in food

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即食食品與食物安全五要點
RTE food and Five Keys to Food Safety

- 由於燒味、滷味、三文治等食物在製作後不會煮熟或重新加熱，因此「保持清潔」、「生熟分開」和「安全溫度」對於處理即食食物中的食源性抗菌素耐藥性尤為重要

  As food such as Siu-mei, Lo-mei, sandwiches may not be cooked or reheated after preparation, “clean”, “separation” and “safe temperatures” are particularly important in addressing foodborne AMR in RTE food

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保持清潔 - 什麼時候要洗手？

Clean - When should you wash your hands?

- 我們的雙手可能沾染了數以百萬計的微生物，當中有些更會令我們生病

  Our hands may carry millions of microorganisms, including those that may result in illness

- 處理食物前後

  Before and after handling food

- 如廁後

  After toilet

- 觸摸面部後

  After touching face

- 咳嗽、打噴嚏或擤鼻子後

  After coughing, sneezing or blowing nose

- 帶上手套前與脫下手套後

  Before and after wearing gloves

- 完成清潔工作後

  After cleaning up

- 處理髒物如金錢、垃圾後

  After handling dirty items, e.g. cash and garbage

- 接觸化學品後、吸煙後

  After handling chemicals and smoking

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保持清潔 (2)
Clean (2)

① 把衣袖拉到手肘

Pull sleeves up to the elbows

② 以流動清水弄濕雙手

Wet hands under running water

③ 塗上梘液

Apply liquid soap

④ 徹底搓手20秒，包括前臂、手腕、手掌、手背、手指及指甲底下

Rub hands thoroughly for 20 sec, including the forearms, wrists, palms, back of hands, fingers and under the fingernails

⑤ 徹底沖洗

Rinse thoroughly

⑥ 以抹手紙抹乾或風乾雙手，避免共用抹手巾

Dry with a paper towel and avoid sharing a hand towel

⑦ 如果水龍頭不是自動或腳踏操作，使用抹手紙關上

Use a paper towel to turn off the tap if it is not automatic or foot operated

保持清潔 (3) - 手套使用

Clean (3) - Use of gloves

- 即棄手套是有助安全處理食物的工具，尤其是當手上有傷口或處理即食食物
  Disposable gloves help us handle food safely, especially when our hands have wounds or when handling RTE food

❶ 即棄手套不能代替洗手，**戴上手套前、脫下手套後及更換手套時**要洗手
Wearing disposable gloves cannot replace hand washing. Wash **thoroughly before putting on, after removing and when changing gloves**

❷ 使用過的手套要棄掉，不可重用
Discard gloves after use and do not reuse them

適時更換手套，包括：
Change gloves at appropriate times:

- 在處理生和熟的食物之間
  Between handling raw and cooked foods
- 在完成每項工作（例如處理垃圾）後
  After completing each task (e.g. handling garbage)
- 手套出現破損或弄污時
  When gloves are torn or dirty
- 手套被手汗弄濕
  When gloves are wet with hand sweat
- 轉換工作崗位或換班時
  When switching jobs or shifts
- 使用食物鉗等工具也可避免徒手接觸食物
  Use of tools such as food tongs can also avoid contact of food with bare hands

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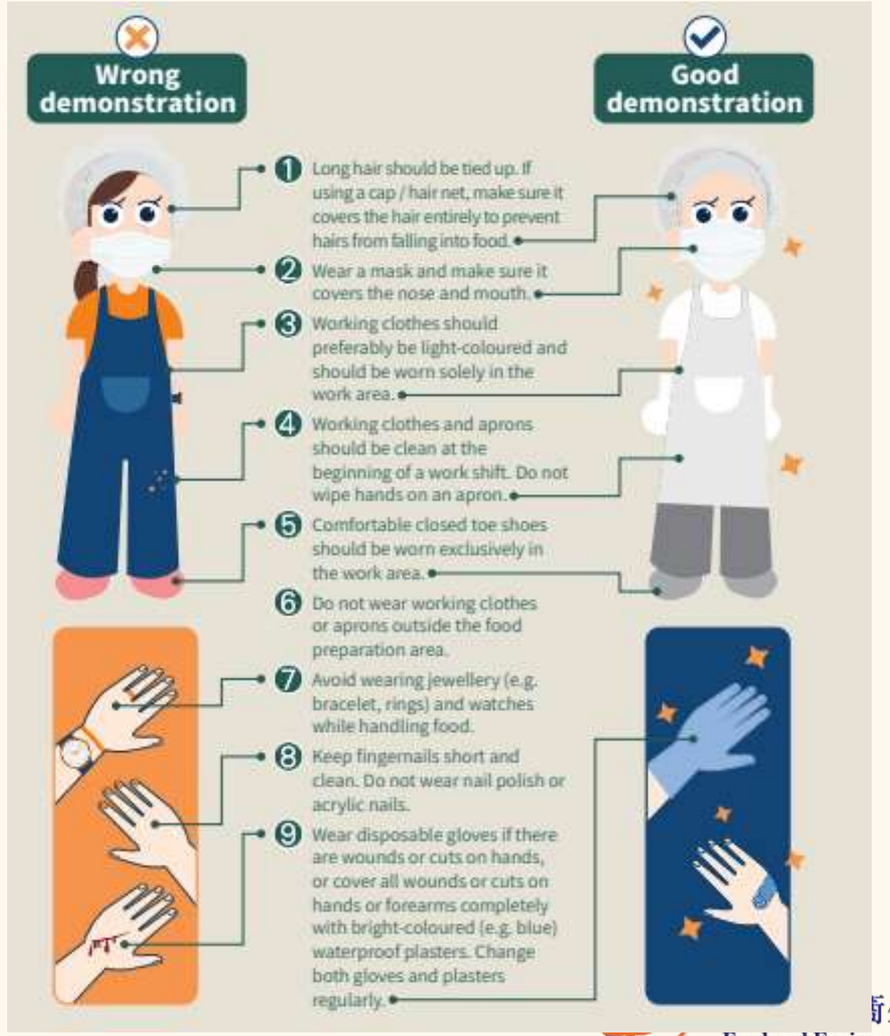
保持清潔 (4)
Clean (4)



保持清潔 (5) - 手提電話

Clean (5) - Mobile phones

- 越來越多食肆提供手提電話點餐服務，或透過自助點餐機為顧客下單
  The use of mobile phones or self-service catering machines to take customer orders is becoming more popular amongst restaurants
- 電話上的細菌有可能傳播到食物處理人員雙手，然後再傳播至食物中， 造成交叉污染
  Phone bacteria can be transferred to food via our hands, causing cross-contamination and becoming a food safety risk for consumers
- 食物處理人員須留意下列各項建議：
  Food handlers should be aware of the following advice:

消毒屏幕
Disinfect mobile device

觸摸顧客手機後要洗手
Wash hands after touching customers' mobile

配製食物前如曾觸摸手機，要洗手
Wash hands after touching mobile before preparing food.

切勿把手機放在食物檯上
Never leave mobile on food preparation table.

配製食物時切勿使用手機
Never use mobile when preparing food.

如廁時切勿使用機
Never use mobile when in the toilet

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保持清潔 (6)
Clean (6)

- **清潔：**指使用**溫水配合清潔劑**，擦拭或沖洗去除表面可見的污垢、油脂和碎屑

  Clean: Wipe or rinse away visible dirt, grease and debris from surfaces **using warm water and detergents**

- **消毒：**指用**沸水或食品級別的消毒劑**，覆蓋需消毒表面**一段時間**

  Sanitisation: **Use boiling water or food-grade disinfectants** on surfaces that require disinfection **for a period of time**

養成**「邊做邊整理清潔」**的習慣，會減低食物受到污染的機會，應訂立時間表，列出須定進行清潔的項目

Adopting the **"Clear and clean as you go"** approach can effectively reduce the chance of food contamination and make cleaning easier. Food premises should have a schedule for items that require regular cleaning

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生熟分開 - 防止交叉污染

Separate – prevent cross-contamination

- 交叉污染發生是食物中毒最常見的原因之一，生食接觸到熟食或即食食物、用具與食物接觸；用相同的工具處理生食和熟食或即食食物；雙手處理生食後沒有徹底清洗；這都可導致交叉污染

  Cross-contamination is one of the most common causes of food poisoning. It occurs when raw food comes in contact with cooked or RTE food, and when using the same equipment for raw and cooked or RTE food. Hands can also spread germs if not properly washed after handling raw food

- 使用**獨立的食物預備區**來分別處理生食、熟食、即食食物及高風險食物，每次使用後須徹底消毒

  Use **separate food preparation areas** for handling raw, cooked, RTE and high-risk foods. Disinfect the area thoroughly between each use.

- 使用**指定的器具** (包括砧板、刀、抹布等)處理生食 (例如生肉)、熟食(例如白切雞)或即食食物(例如水果)，可以不同顏色標籤作識別

  Use **designated utensils** (e.g. cutting boards, knives and wiping cloths) to handle raw foods (e.g. raw meat) and cooked foods (e.g. poached chicken) or RTE foods (e.g. fruits). Colour coding can be applied to utensils for different types of food

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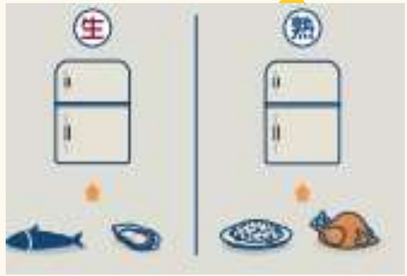
生熟分開 (2) - 防止交叉污染

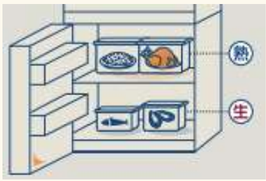
Separate (2) – prevent cross-contamination



- 用**兩個雪櫃分開**貯存生的食物和熟食或即食食物
  Use two separate refrigerators for storing raw foods, and cooked or RTE foods

- 如生食和熟食或即食食物需貯存在同一雪櫃內，必須以有蓋的容器貯存，並把**熟食和即食**食物放在雪櫃**上層**，生的食物放在**下層**

  Store all the food in **lidded containers** if raw foods, and cooked or RTE foods must be stored in the same refrigerator. **Cooked or RTE foods** should be placed on the **upper shelf** of the refrigerator, and raw foods in **the lower shelf**



- 不可在地板上、座廁或排水渠旁等配製食物或飲料
  Do not prepare food and drinks on the floor, near the toilet or drains

- 粉料及其他乾製食物應保持乾爽，避免以濕的器具及木匙接觸，以防霉菌的傳入和污染
  Store powdery ingredients, spices and other dried foods in dry areas, and avoid its contact with wet or wooden utensils to prevent mould formation and subsequent contamination

- 清潔劑等化學品不應存放在食物處理區
  Keep detergents and other chemicals away from food preparation areas

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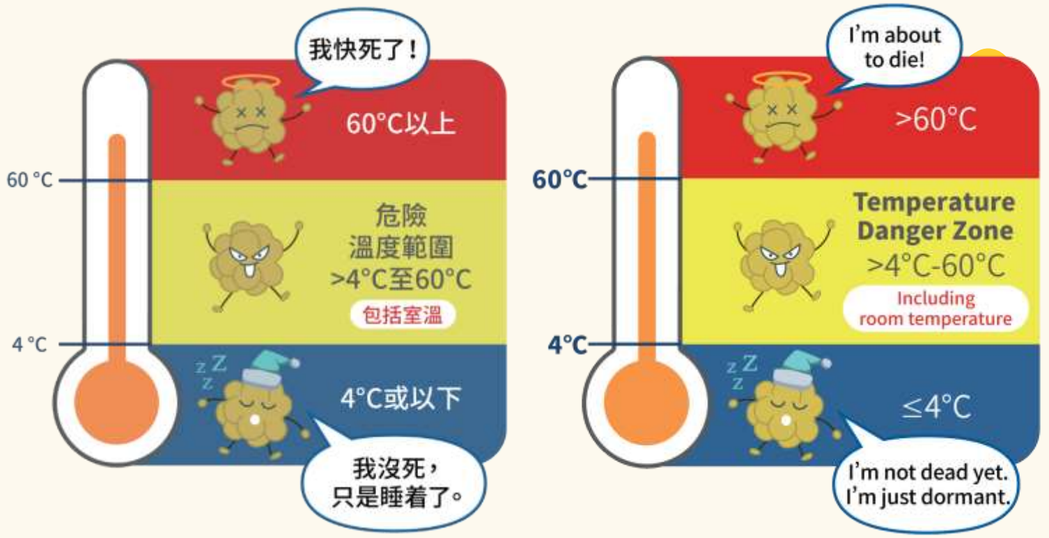
安全溫度
Safe temperature



危險溫度範圍：
Temperature Danger Zone:

食物如存放在 **4至60°C** 的範圍內，容易滋生各種細菌

Storing food at a temperature between 4°C and 60°C allows various types of bacteria to grow rapidly

- 烹製食物各階段中須妥善控制溫度，是預防細菌性食物中毒的有效方法
  Proper temperature control at all stages of food preparation is an effective way to prevent bacterial food poisoning

- 低溫貯存只可抑制細菌生長，不能殺菌，而高溫處理則可有效消滅細菌
  While chilling will inhibit bacterial growth (but cannot kill them), high temperature treatment can destroy bacteria effectively

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安全溫度 (2)
Safe temperature (2)

2小時 / 4小時原則：保存、食用或棄掉？
2-hour / 4-hour rule: to keep, to eat or to throw away?

- 是確保食物安全的好方法
  It is an effective way to ensure food safety

- 適用於已從雪櫃取出或已經煮熟，並放在室溫下的食物
  Applicable to food out of refrigeration or placed at ambient temperatures after cooking

- 這項原則建基於微生物可在「危險溫度範圍」內迅速生長的理論，已獲科學實證支持
  The rule has been scientifically proven and is based on how fast microorganisms grow in foods kept at the Temperature Danger Zone

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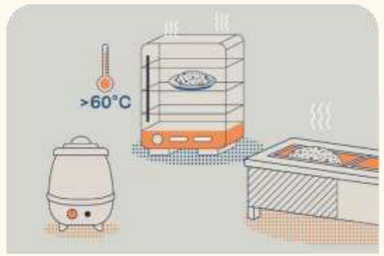
安全溫度 (3)
Safe temperature (3)

熱存及冷存
Hot and Cold Holding

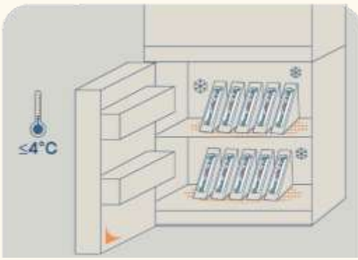
大量預先烹製的食物，尤其是肉類、家禽及肉汁等，如非立即食用，就應2小時內進行熱存或冷存

Store large amounts of precooked food, especially meat, poultry and gravy (e.g. stewed beef or curry properly in hot or cold-holding devices within 2 hours of preparation if not for immediate serving

- **熱存要夠熱**：預先煮好的熱食應熱存在60℃以上
  Keep hot food hot: Hot food must be kept at temperatures above 60°C



- **冷存要夠冷**：預先處理好的冷食應冷存在4℃或以下
  Keep cold food cold: Cold food must be kept at 4°C or below



所有熱食必須徹底煮熟至沸騰才開始熱存保溫

Food must be cooked thoroughly to steaming hot before hot holding begins

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良好衞生規範
Good Hygiene Practices

- 中心為一般食物處理人員製作了一份良好衞生規範圖解指南，其中載有良好衞生規範和食物安全五要點如何解決食物鏈中的抗微生物藥物耐藥性的信息。專題網站已推出：

  The CFS has produced an illustrated guide on Good Hygiene Practices (GHPs) for food handlers in general, which contains messages on how GHPs and Five Keys to Food Safety can address AMR in the food chain. A thematic website has been launched:

  http://cfs.gov.hk/safekitchen

  https://www.cfs.gov.hk/amr

《食安Guide：給食物處理人員的食安圖解指南》
"Food Safety Guide: An Illustrated Guide to Good Hygiene Practices for Food Handlers"

- 協助食物業界有效確保食物安全，保障消費者健康

  To help food handlers ensure food safety and protect consumers' health

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在餐牌上就高風險食物向消費者作出食用忠告

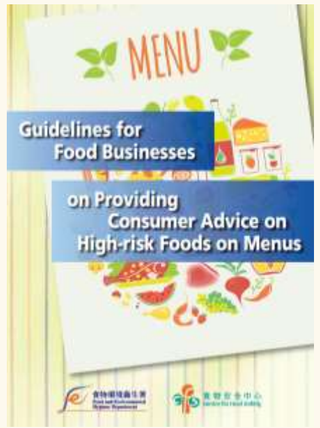
Providing Consumer Advice on Menus of High-Risk Foods

- 為鼓勵和協助食物業者告知消費者進食生的或未煮熟的食物及即食食物的配料的風險增加，中心發出《在餐牌上就高風險食物向消費者作出食用忠告的業界指引》

  To encourage and facilitate food businesses in informing consumers of the increased risk of consuming raw or undercooked foods and ingredients RTE foods, the CFS has issued the "Guidelines for Food Businesses on Providing Consumer Advisory on High-risk Foods on Menus"

- 該指引通過2019年貿易食品安全研討會、貿易諮詢論壇和與餐飲協會的指定會議發布。 該指引以電子方式製作，而印刷本於2020年初郵寄給食物業，尤其是食物業處所

  The Guidelines were promulgated through the Food Safety Seminar for Trade 2019, Trade Consultation Forum and a designated meeting with catering associations. The Guidelines are made electronically, while hard copies were distributed to the food trade especially food premises by post in early 2020.



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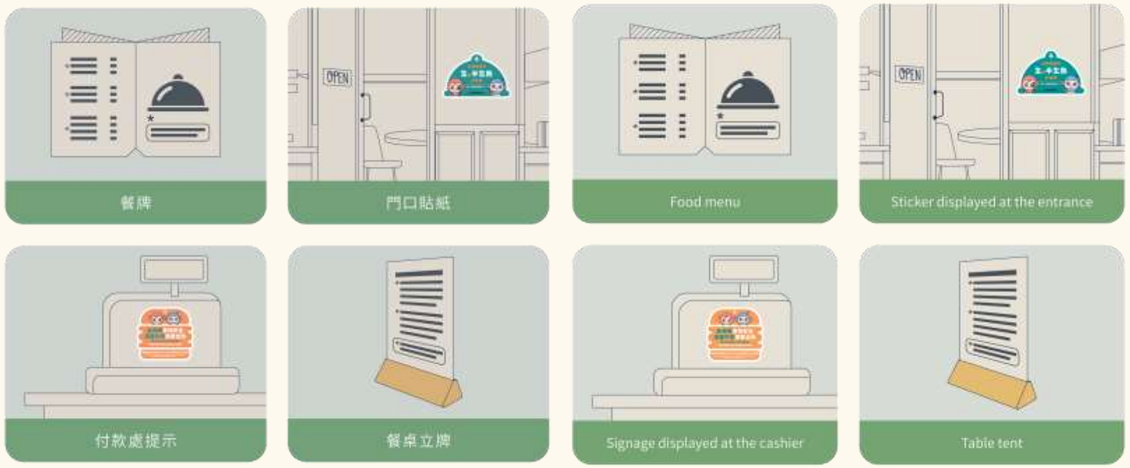
食用忠告
Consumer Advice

- 食肆有責任提供準確及充分的食物資料，以助消費者作出明 智的選擇
  Restaurants are obliged to provide accurate and sufficient information to help consumers make informed food choices

- 可透過小冊子、海報、餐牌、座檯卡或其他書面方式，向消費者作出食用忠告
  Food advice can be given to consumers through brochures, posters, menu cards, table cards or other written means

- 此舉亦可提升食肆的盡責形象
  This can promote the restaurant's image as a responsible food trader



＊食用生或未煮熟的食物，可增加患上**食源性疾病**的風險，尤其是孕婦、嬰幼兒、長者和免疫力弱人士。

＊Consuming raw or undercooked foods may increase **the risk of foodborne illness**, especially for pregnant women, infants, young children, the elderly and people with weakened immunity.

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Thank you
謝謝