

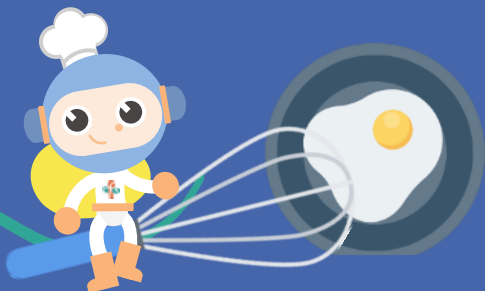


安樂
查飯
SAFE KITCHEN



安全烹製蛋及蛋製品的業界指引 業界諮詢論壇

Trade Guidelines on Safe Preparation of Eggs and Egg Products
Trade Consultation Forum
2021.4.16



蛋與沙門氏菌

- 蛋可含沙門氏菌，使人患病
- 家禽可帶有沙門氏菌，在蛋殼尚未形成之前污染蛋的內部
- 蛋殼也可受家禽糞便中的沙門氏菌污染，沙門氏菌可能會透過蛋殼上的小孔或裂紋進入蛋內
- **蛋的內部如受沙門氏菌污染，看來可與正常無異**



Eggs and *Salmonella*

- Eggs may contain *Salmonella* that can make people sick.
- Poultry may carry bacteria such as *Salmonella*, which can contaminate the inside of eggs before the shells are formed.
- Egg shells may become contaminated with *Salmonella* from poultry droppings, and *Salmonella* may enter into the eggs through pores or cracks on the shells.
- **The inside of eggs contaminated with *Salmonella* can appear normal.**

蛋與沙門氏菌

- 吃下受沙門氏菌污染的食物，可引致沙門氏菌病
- 症狀：噁心、發燒、腹痛、腹瀉及嘔吐
- 長者、嬰兒等免疫力較弱的人病情通常較為嚴重，甚至可致死亡
- **徹底煮熟食物能有效殺死沙門氏菌**

Eggs and *Salmonella*

- Eating food contaminated with *Salmonella* may result in salmonellosis
- Symptoms : nausea, fever, abdominal pain, diarrhoea, and vomiting within 6 - 72 hours (usually 12 - 36 hours)
- Serious consequences, even death, may be resulted in the elderly, infants and those with impaired immune systems
- **Thorough cooking can kill *Salmonella* effectively**

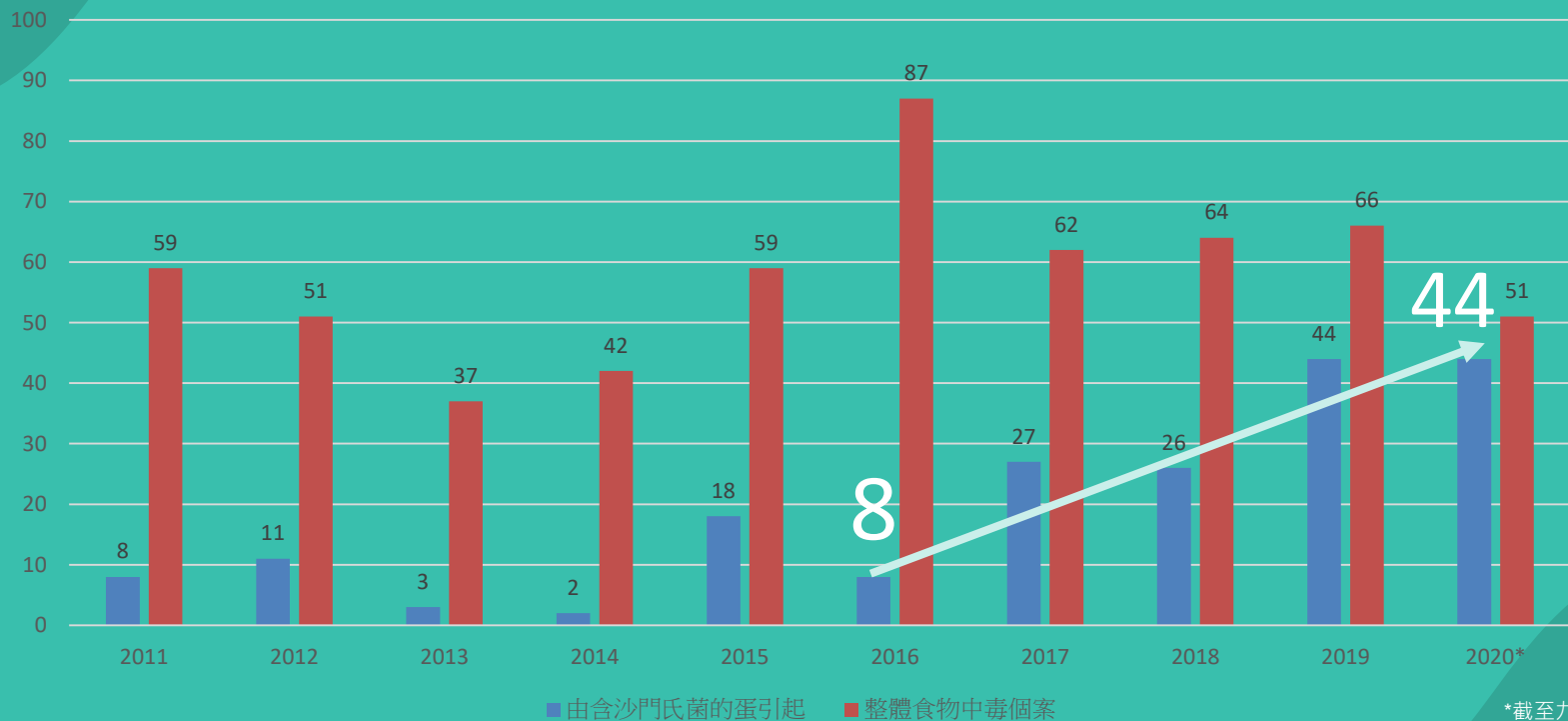
沙門氏菌食物中毒

- 自2015年以來，食肆及食物業的食物中毒個案主要由沙門氏菌引起
- 過去五年(2016年-2020年)，衛生防護中心確認了**149宗由蛋類的沙門氏菌引起的食物中毒個案**，涉及**445名患者**

Salmonella Food Poisoning

- Since 2015 *Salmonella* has become the leading cause of food poisoning related to food premises and food business.
- Over the past five years (2016-2020), there were **149 food poisoning outbreaks** involving 445 victims caused by *Salmonella* in eggs as confirmed by the Centre for Health Protection.

過去10年已確認的食肆食物中毒事故



預製混合蛋漿有風險

- 混合蛋漿是指把若干隻蛋打開後置於容器中混合而成的蛋漿
- 常見於食肆以節省時間和方便控制分量
- 若有一隻或以上的蛋受感染，把蛋混合便會使容器中全部蛋漿都受到污染
- 如未有徹底煮熟，可能會導致食物中毒



Pooling of Eggs Poses Risk

- Pooling refers to the practice of breaking a number of eggs into containers and using the combined eggs to make multiple servings of egg dishes or for use in multiple recipes.
- Pooling is a common practice in some restaurants to save time and control portion size.
- Pooling eggs can allow one or more infected eggs to contaminate the whole pool of eggs.
- If people consume egg dishes prepared from the pool without thorough cooking, they may get food poisoning.

食物業處所常見用以烹製蛋類菜式的高風險做法

Common high-risk egg preparation practices in food premises



1. 雙手、用具及工作地方清洗不當，衛生欠佳
1. Improper washing and sanitation of hands, utensils and working areas



2. 製作混合蛋漿並置於室溫待用
2. Pooling eggs and leaving them at room temperature for later use



3. 採用未經巴士德消毒的蛋製作的蛋類菜式
3. Using non-pasteurised eggs for raw egg dishes



4. 蛋未有徹底煮熟(例如蛋黃仍未凝固)
4. Inadequate cooking of eggs (e.g. the yolk is still runny)



5. 熱存不當(例如使用攝氏60度以下的溫水隔水熱存煮熟的蛋)
5. Improper hot holding (e.g. using a warm water bath lower than 60°C to keep cooked eggs)



6. 冷存不當(例如把三文治存放在冷度不足的雪櫃)
6. Improper cold storage (e.g. keeping sandwiches in a refrigerator that is not cold enough)

可能含有生或未煮熟的蛋的菜式例子

Examples of egg dishes that may contain raw or undercooked eggs



太陽蛋
Sunny side-up egg



本尼迪蛋
Eggs Benedict



溫泉雞蛋
Onsen egg



點火鍋配料
用的生雞蛋
Raw eggs as a dipping
sauce for hot pot



自製蛋黃醬
Homemade
mayonnaise



意大利芝士蛋糕
Tiramisu



芒果布甸
Mango pudding



叉燒滑蛋飯
Soft scrambled eggs
for char siu rice



梳乎厘班戟
Souffle pancake



高力豆沙
Gaoli Dousha



焗蛋白
Meringue pie



巴斯克芝士蛋糕
Basque burnt
cheesecake

食物安全五要點



5 Keys to Food Safety



採購及接收

- 向可靠的供應商採購清潔及蛋殼完整的蛋
- 避免使用有裂紋的蛋
- 有殼蛋是不用清洗的，但如沾有家禽糞便，可將之清洗洗淨的蛋應立即使用
- 選用經**巴士德消毒**的蛋、蛋漿或或蛋粉來製作無需熱處理的菜式

Purchase and Receiving

- Purchase clean and intact shell eggs from reliable suppliers
- Avoid using cracked eggs
- Shell eggs need not to be washed
- However, they can be washed if soiled with droppings. Washed eggs should be used immediately
- Choose **pasteurised** eggs, liquid eggs or dried egg powder to prepare dishes not requiring heat treatment

巴士德消毒的蛋

- 巴士德消毒法是透過低熱殺死病原體，並使引致食物腐壞的酶失去活性
- 巴士德消毒不會把蛋弄熟或影響其色澤、味道、營養價值或用途
- 市面上有巴士德消毒的有殼蛋



Pasteurised eggs

- Pasteurisation is the process of applying low heat to kill pathogens and inactivate spoilage enzymes.
- Pasteurisation does not cook the eggs or affect their colour, flavour, nutritional value or use.
- Pasteurisation eggs are available on the market

減低預製混合蛋漿 風險的措施

Measures to reduce risk from pooling of eggs

製作混合蛋漿的 食物安全措施



混合蛋漿是指將多隻蛋打入容器中，混合而成蛋漿，用於製作多份蛋類菜式或用於多種食膳。為了節省時間和控制分量，製作混合蛋漿是一些食肆常見的做法。由於混合蛋漿含有細菌的機會較大，因此應徹底煮熟，不應用於製作生或略煮的菜式。

如需要製作混合蛋漿，為了降低微生物風險，可採取下列額外的食物安全措施：

- 盡可能採用經巴士德消毒的蛋來製備混合蛋漿。

採購+接收

- 盡可能製備只供烹製一客菜式的混合蛋漿，烹製後立即供顧客食用。

貯存

- 小心不要把生蛋澆到其他食物或接觸面上。
- 預先計劃製作時間，避免過早製備混合蛋漿；儘可能在烹煮前才把蛋混合製成蛋漿。

製作混合蛋漿

- 製作混合蛋漿後，清洗打蛋器、其他用具及雙手。

貯存

- 並非即時使用的混合蛋漿應以有蓋容器貯存在攝氏4度或以下的雪櫃內，使用時只取出所需分量。

- 混合蛋漿應即日用完，不要添加新蛋。

烹煮

- 混合蛋漿應徹底煮熟至中心溫度達攝氏75度，或經同等的熱處理。

冷/熱存

- 混合蛋漿煮熟後如稍後才食用，熱食應存放於攝氏60度或以上，凍食應存放於攝氏4度或以下。

食用

10

Food Safety Measures for Pooling of Eggs



Pooling refers to the practice of breaking eggs into containers and using the combined eggs to make multiple servings of egg dishes or for use in multiple recipes. Pooling is a common practice in some restaurants to save time and control portion size. As pooled eggs have a higher chance of harbouring bacteria, they should be cooked thoroughly and not be used for making raw or lightly cooked dishes.

Extra food safety measures can be taken to minimise the microbiological risk when pooling eggs is required:

- It is better to use pasteurised eggs to prepare pooled eggs.

Purchase + Receiving

- Prepare the pooled eggs for a single dish for immediate consumption as much as possible.

Storage

- Be careful not to splash raw eggs onto other foods or surfaces.

- Plan the production schedule ahead to avoid preparing pooled eggs too far in advance; pool eggs just prior to cooking as much as possible.

Pooling of eggs

- Wash the whisk, other utensils and hands after pooling eggs.

Storage

- Pooled liquid eggs not for immediate use should be kept in covered containers in the fridge and only take out the amount as needed.

- Use all pooled liquid eggs on the day of pooling and do not top them up with new eggs.

Cooking

- Cook pooled eggs thoroughly, with core temperature at 75°C or with equivalent heat treatment.

Cold/Hot holding

- After cooking, hot dishes should be kept at above 60°C and cold dishes at 4°C or below if served at a later time.

Serving

10

減低混合蛋漿風險的措施

- 備用的混合蛋漿應以**有蓋容器貯存在雪櫃內**，使用時只取出所需分量
- 混合蛋漿應**即日用完**，**不要添加新蛋**
- 由於混合蛋漿含有細菌的機會較大，因此應徹底煮熟，**不應用於製作生或不熟透的菜式**

Measures to Reduce Risk of Pooled of Eggs

- If choose to break eggs for later use, keep the pooled eggs **in covered containers in the refrigerator** and only take out the amount as needed.
- Use all pooled eggs **on the same day** and **do not top up with new eggs.**
- As pooled eggs have a higher chance of harbouring bacteria, they should be cooked thoroughly and **not be used for making raw or lightly cooked dishes.**

蛋要徹底煮熟並存放於安全溫度

- 把蛋徹底煮熟至中心溫度達**攝氏75度**，或直至蛋黃凝固
- 如烹製後並非即時食用，炒滑蛋等熱食應經常保持於**攝氏60度以上**
- 三文治及甜品等冷食則應保持於**攝氏4度或以下**
- 縮短外送食物置於沒有溫度控制下的時間

Cook Eggs Thoroughly and Keep Them at a Safe Temperature

- The best way of eliminating harmful bacteria is to cook the eggs thoroughly until the core temperature **reaches 75°C** or yolks are firm.
- If not consumed immediately after preparation, hot dishes such as soft-scrambled eggs should always be served or kept at above **60°C**.
- Cold dishes such as sandwiches and desserts should be kept at **4°C or below**.
- Shorten the time the delivered foods left out of temperature control.

烹製蛋或蛋製品注意事項

Notes to Take of When Preparing Eggs and Egg Products



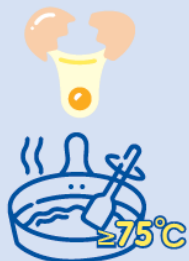
採用經巴士德消毒的蛋
製作含生或半生熟蛋的菜式
Use pasteurised eggs for dishes
containing raw or undercooked eggs



保持雙手、用具
及工作地方清潔
Keep hands, utensils and
working areas clean



慎用混合蛋漿
並須一天內用畢
Use pooled eggs carefully
within a day



蛋須煮至75°C或以上
或至蛋黃凝固
Cook eggs at 75°C or above
or until the yolks are firm



如非立即進食，
熱食須保持於60°C以上
Keep hot dishes at above 60°C
If not to be eaten immediately



凍食存放在4°C或以下
而非置於室溫
Keep cold dishes at 4°C or below,
not at room temperature

指引

- 為烹製和售賣蛋及蛋製品的食物業界而編製
- 目的在於協助食物業處所在配製食物的過程中採取適當的食物安全措施，以烹製和售賣既合乎衛生又可供安全食用的蛋及蛋製品

The Guidelines

- This set of guidelines is intended for food businesses that prepare and sell eggs and egg products
- It aims to help food premises implement appropriate food safety measures in the course of food preparation to produce and sell wholesome and safe eggs and egg products



總結

- 沙門氏菌可引致嚴重疾病，是常見導致食物中毒的微生物
- 沙門氏菌能在未經煮熟的食物中存活，**生吃或進食未經煮熟的蛋類菜式，存有風險**
- 食物處理人員應遵從「**食物安全五要點**」

Conclusion

- *Salmonella* can cause severe illness and is a common food poisoning microorganism.
- *Salmonella* can survive in undercooked food. **It is risky to consume raw or undercooked egg dishes.**
- To prevent food poisoning outbreaks, food handlers should adhere to **Five Keys to Food Safety**

給業界的建議

- 遵從食物安全五要點，確保食物**徹底煮熟**和**貯存於安全溫度**
- 滑蛋即點即製，避免長時間置於室溫
- 避免用有裂紋的雞蛋配製菜式
- 混合蛋液**應即日用完**，**避免添加新蛋**
- 用**經巴士德消毒的蛋**來製作無需加熱處理的食品
- **提供消費者提示**，表明即食食品中有含有生或未經煮熟的食物/配料，以作出知情選擇

Advice to the Trade

- Follow the Five Keys to Food Safety to ensure the food is **thoroughly cooked** and **properly kept at safe temperatures**.
- Prepare scrambled eggs on a per-order basis and avoid leaving them under room temperature for a prolonged period of time.
- Avoid using cracked eggs in preparing dishes.
- Use all pooled liquid **egg on the day of pooling and avoid topping up with new eggs**.
- Use **pasteurised eggs** for food without heat treatment.
- **Indicate the presence of raw or undercooked foods/ingredients** in ready-to-eat items to help consumers make informed choices by providing a consumer advisory.

謝謝
Thank you

歡迎瀏覽 *please visit* www.cfs.gov/eggs