



Advice on Raw Food

Trade Consultation Forum

10 Apr 2019

Risk of Eating Raw Food

- Intended for raw consumption : Inherent risk as there is no heat treatment
- Raw seafood are welcomed by consumers
- Microbiological hazards
 - Bacteria
 - Viruses
 - Parasites



Local Food Poisoning Outbreaks

- In 2018, the CFS received 158 food poisoning outbreaks (FPOs) referred from the DH, affecting 641 persons.
- Bacterial foodborne agents remained the leading causes (82%) of all FPOs, with *Salmonella*, *Vibrio parahaemolyticus* and *Bacillus cereus* being the top three.
- Viral causes accounted for around 12.7% of all the FPOs and all were related to norovirus.

Bacteria & Viruses

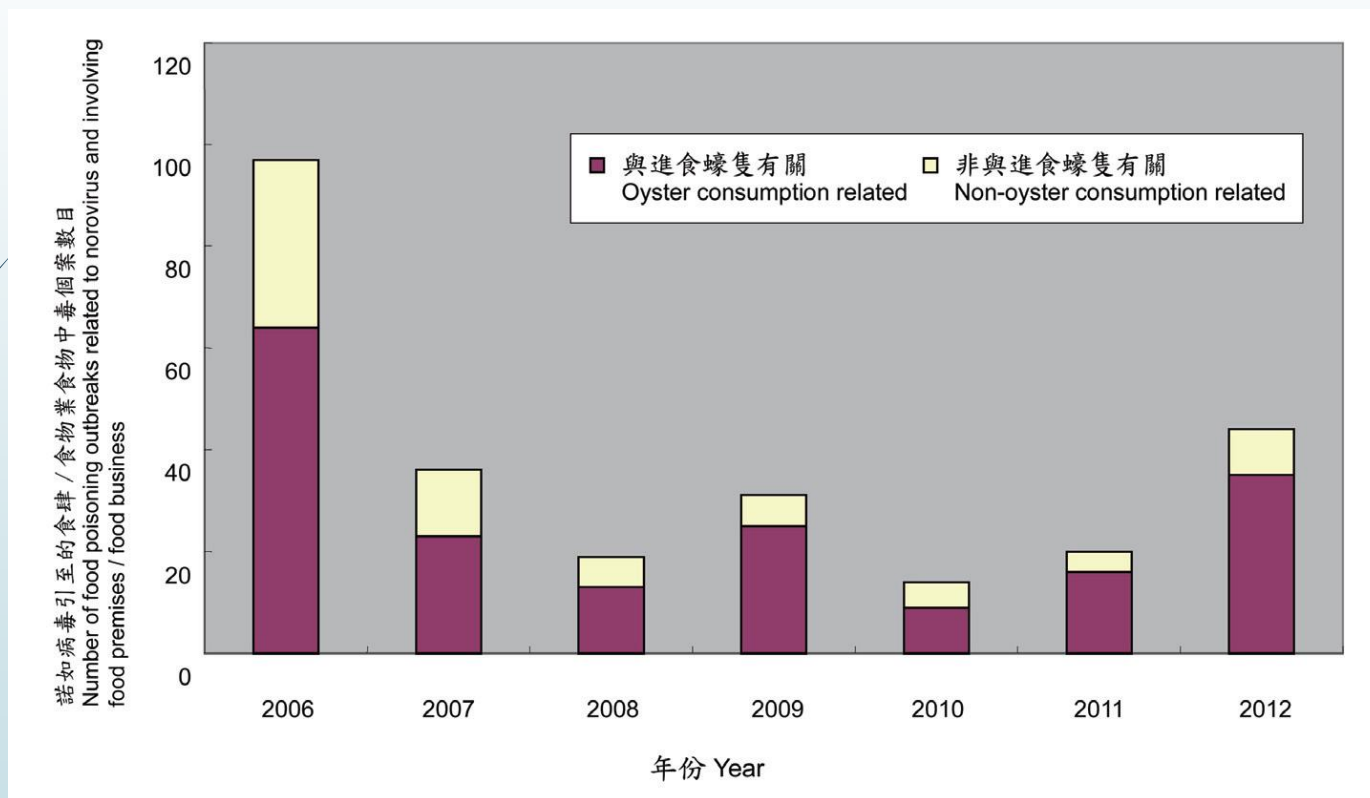
- ▶ Two broad groups of bacteria may contaminate products at time of capture of seafood
 - ▶ (i) indigenous microflora, e.g. *Vibrio parahaemolyticus*, *V. vulnificus*
 - ▶ (ii) those introduced through environmental contamination, e.g. *Salmonella* spp. and *E. coli*
- ▶ Norovirus is a prevalent foodborne virus that is commonly found in polluted seawater and shellfish living in polluted areas is easily contaminated.

Previous Local Incidence – Raw Mantis Shrimp

- In June 2012, two fatal *Vibrio vulnificus* infection cases, including one causing necrotizing fasciitis (also known as flesh-eating disease) were reported to CHP.
- Available information showed that both patients had underlying medical conditions and one of them had consumed raw mantis shrimp.
- This bacterium is a serious health threat predominantly to those with underlying chronic diseases, particularly liver disease or alcoholism, diabetes, haemochromatosis and HIV/AIDS.



Previous Local Incidence – Oysters contaminated with Norovirus

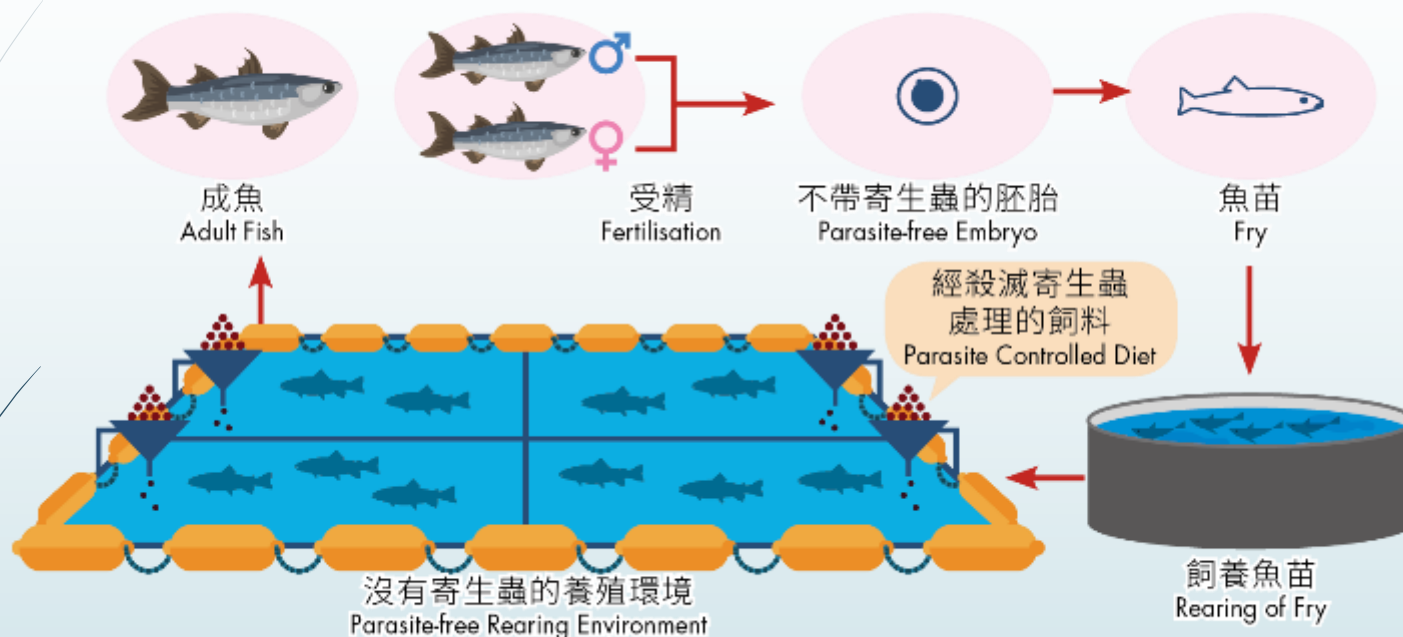


Number of food poisoning outbreaks involving food premises and food business related to norovirus and consumption of oysters from 2006 to 2012.

Parasites

- Food and Agriculture Organization of the United Nations: parasites are more likely to be present in wild caught aquatic animals and certain aquaculture fish if the fish is not fed exclusively on a diet free of parasites.
- Examples
 - Salmon, trout: *Dibothriocephalus latus* (previously known as *Diphyllbothrium latum*) (the fish or broad tapeworm)
 - Salmon, trout, herring, cod: *Anisakis simplex* (one of the roundworms)
- Good aquaculture practice and freezing treatment can greatly reduce the risk of parasite infection.

Good Aquaculture Practice



Farmed fish cultured from embryo, fed with parasite-controlled diet (e.g. feed that has been heat-treated), and reared in parasite-free environment have a much lower risk of parasite infection.

Freezing treatment

- Environment of wild fish cannot be controlled, measures have to be taken at a later stage
- Freezing treatment: Parasites commonly found in raw fish for sushi and sashimi can generally be killed by freezing (-20°C for 24 hours) of the fish core.
 - Longer time or lower temperature is required for killing flukes in freshwater fish
- Freezing doesn't kill all harmful microorganisms.

Local Requirements (I)

- Public Health and Municipal Services Ordinance Cap 132, Sections 52 & 54
 - General protection for purchasers of food is provided in Section 52 of the Ordinance when a person may be guilty for selling to the prejudice of a purchaser any food which is not of the nature, substance or quality demanded by the purchaser.
 - Section 54 of the Ordinance stipulates that it is an offence to sell food that is unfit for human consumption.
- According to the Food Business Regulation (Cap 132X) schedule 1, “Chinese dishes – Yu Sang” has been prohibited for sale in Hong Kong.

Local Requirements (II)


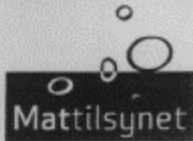
- Obtain relevant licence/permit from FEHD for manufacturing and/or sale of sushi and sashimi.



- Obtain fishery products from reliable sources with **health certificates issued by relevant authority** of the exporting countries.

Example of Health Certificate – Norway

SANITARY CERTIFICATE
covering fish and fishery products for export

 **NORWAY** 

Reference number: 15100 008157

Country of dispatch:	NORWAY		
Competent authority:	NORWEGIAN FOOD SAFETY AUTHORITY, N-2381 BRUMUNDDAL, NORWAY		
Inspection body:	NORWEGIAN FOOD SAFETY AUTHORITY, DISTRICT OFFICE		
Phone: +47 23 21 68 00	Facsimile: +47 23 21 68 01	E-mail: postmottak@mattilsynet.no	

I. Details identifying the fishery products

Description – Species (scientific name)	State or type of processing	Type of packaging	Number of packages	Net weight
Farmed Atlantic salmon/ Salmon salar	FRESH	STYROFOAM	161	3120.6
Sum:			161	3120.6

Temperature required during storage and transport: +0 - +2 °C


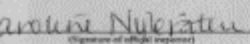
II. Provenance of the fishery products

IV. Attestation

The undersigned official inspector hereby certifies that the fishery products described above:

- 1) have been handled, prepared, processed, marked, packaged, stored and transported in accordance with the relevant provisions of Regulations (EC) No 178/2002, (EC) No 852/2004, (EC) No 853/2004, (EC) No 854/2004 and (EC) No 2073/2005;
- 2) in the case of bivalve molluscs, they have in addition been harvested and handled in accordance with the relevant provisions of Regulations (EC) No 852/2004, (EC) No 853/2004, (EC) No 854/2004 applicable to live bivalve molluscs;
- 3) have been produced in accordance with the relevant provisions of the official Norwegian Quality Regulations relating to Fish and Fishery Products of 14 June 1996.

Date of Exports on 29.06.2015

Stamp:  

Karoline Nybråten
On behalf of Chief District Officer
(Name and qualifications in capitals)

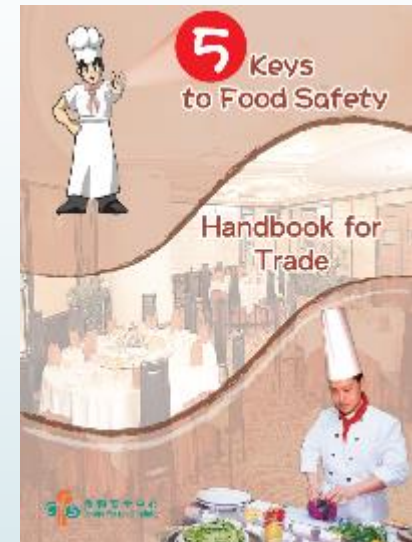
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Advice to the Trade

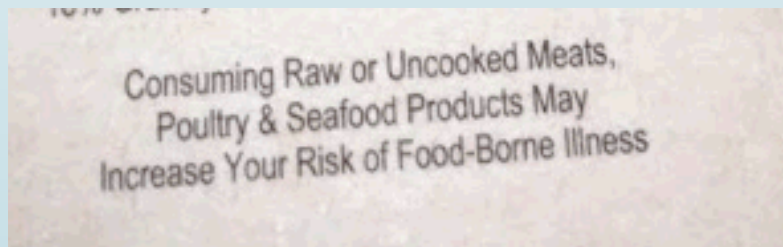
- Raw or undercooked food could be contaminated with pathogens at different stages from farm to table and hence have inherent food safety risk.
- For preparing sashimi, buy fish from reliable sources and obtain health certificates issued by relevant authority of the exporting countries.
- Control measures: avoid contamination and minimise growth along the food chain
 - Food handlers should maintain good personal, environmental and food hygiene when handling food.
 - Five keys for Food Safety



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Consumer Advisory: Risk of consuming raw food

- Consumer advisory:
 - Food product description/ingredients, e.g. "Containing raw or undercooked ingredients"
 - **Consuming raw or undercooked food may increase your risk of food borne illness, especially to susceptible populations**
- Brochures, deli case or menu advisories, label statements, table tents, placards...etc.



Pregnant woman, young children, elderly people and people who are immunocompromised should not consume this food product.

孕婦，幼兒，老人以及個人免疫功能低者，不應進食此食品。



高危人士

Susceptible populations

請留意生或未煮熟食物的風險

Pay attention to the risks associated with raw or undercooked food items



生牛奶芝士
Raw milk cheese



預先包裝沙律菜
Prepackaged salad
vegetables



未熟的蛋
Undercooked egg



煙三文魚
Smoked salmon



刺身
Sashimi

Summary

- There is inherent microbiological risk (bacteria, viruses & parasites) of eating raw seafood.
- It's always best to eat food that has been cooked thoroughly to minimise the risk of foodborne illness.
- Buy sashimi from reliable source & practice “Five keys to Food Safety”
- Consumer advisory is recommended when providing raw food.

THANK YOU