

Guidelines on Serving Raw Oysters in Food Retail Outlets

A public health document prepared by:
Singapore Food Agency

INTRODUCTION

Oysters are commonly eaten raw by consumers of food retail outlets around the world. Raw (or undercooked) oysters are categorised as high-risk foods as they may be contaminated with pathogens such as *Vibrio* spp. from environment or during food handling. Consumers, particularly those with compromised immune system, may come down with foodborne illness if they consume raw oysters contaminated with these pathogens. Hence, food retail outlets serving raw oysters should take extra precautions to ensure that the oysters served to consumers are safe and wholesome for consumption.

The set of guidelines presented in this document details the necessary measures that a food retail operator should implement in order to prevent the occurrence of foodborne illnesses associated with raw oysters.

GUIDELINES

1) For All Food Retail Outlets

- a) Purchase raw oysters from sources licensed by the Singapore Food Agency (SFA). Check the quality of oysters to ensure they are closed and that the shells are not damaged.
- b) Adopt first-in-first-out principle for storage and serving of raw oysters.
- c) Do not serve thawed frozen oysters as raw oysters. Eating thawed frozen food in the raw form increases the risk of food poisoning.
- d) Food handlers should observe strict hygiene practices (personal, operational and environmental) when handling raw oysters as follows:

- i. Wash hands thoroughly with soap and water before and after handling raw oysters.
- ii. Clean cutting boards, countertops and utensils thoroughly before preparation and after exposure to raw oysters.
- iii. Do not handle or prepare any food when you are unwell with vomiting and/or diarrhoea. Inform your supervisor and see a doctor promptly. You may still be contagious, even though you no longer have diarrhea or display symptoms. Infected food handlers could become the source of food borne illnesses!
- iv. Avoid cross-contamination. Store and handle the oysters separately from other raw foods (including raw meat, poultry, fish etc.) and ready- to-eat foods.
- v. Use gloves/utensils when handling raw oysters.
- vi. Pay special attention to the hazards and factors (critical control points) that may contaminate or encourage the growth of pathogens in oysters during receiving, storage, preparation and serving.

All food handlers must be registered with SFA as required under the Environmental Public Health (Food Hygiene) Regulations.

2) For Food Retail Outlets Serving Buffet

- a) Keep the display time as short as possible since growth of pathogens may occur during such time interval. It is advisable to shuck the oysters only upon customer's order. If this is not possible, display the shucked raw oysters in smaller portions and replenish when required.
Prolonged display of ready-to-eat food (exceeding four hours) has been implicated in foodborne outbreaks as it may allow sufficient time for the bacteria to multiply to dangerous level and produce toxins!
- b) Ensure raw oysters are stored and displayed at below 5⁰C in chillers or immersed in food-grade ice.
- c) Provide separate tongs for customers to handle the oysters.
- d) Discard all leftover raw oysters. Do not reuse the leftovers and serve them as cooked oysters.
- e) Keep the environment clean. Have a staff to monitor the hygiene conditions of the displayed raw oysters.

Did You Know?

Oysters are filter feeders and can filter large quantities of water during harvesting in the oyster farms. If there are contaminants or microorganisms in the water, these can be picked up by the oysters' organs or digestive tract. When a person consumes contaminated oysters - raw or undercooked - the person may be at a risk of developing foodborne illnesses (especially those who have a weakened immune system or liver disorders).

International guidelines often recommend that oysters should be thoroughly cooked in order to destroy the microorganisms. Serving fully cooked oysters (e.g. steamed, boiled, baked, smoked etc.) greatly reduces the chance of foodborne illnesses.

The common pathogens that may contaminate raw oysters include *Vibrio* bacteria species, Norovirus (also known as Norwalk-like virus), Hepatitis A virus, etc. There is no way to tell from sight or smell if the oysters are contaminated with these pathogens!

HACCP Plan (Hazard Analysis Critical Control Point)

If you are dealing with oysters or other high-risk foods, it is advisable to implement a HACCP plan to ensure safe and wholesome food. The HACCP system identifies various hazards involved during receiving, storage, preparation, transportation and serving of food. Documented process flows and checks to ensure control measures are effective to eliminate and prevent the occurrence of food borne illnesses in your food retail outlet.