

生或未煮熟的食物存有食物安全風險 Inherent Food Safety Risks of Raw or Undercooked Foods

有人為了品嚐食物的原味，會選擇進食生或未煮熟的食物，但這樣做會冒上較大的食物中毒風險。在本地的食物中毒個案中，最常見的成因之一就是生吃受污染的食物，例如生或未煮熟的水產便是引致食物中毒的常見媒介。

生或未煮熟的食物微生物風險

在從農場到餐桌的不同階段，食物都可能受到致病微生物污染。以水產為例，無論是天然捕獲或是人工養殖的，都有可能受污染。舉例來說，蠔屬濾食性動物，牠們在進食時有機會從受污染的水中環境吸入諾如病毒及沙門氏菌。同樣地，鹹水魚與淡水魚均有機會帶有寄生蟲，只是寄生蟲種類可能有所不同。進食帶有寄生蟲的淡水魚魚生，有機會引致膽管梗塞、發炎及癌症。良好的水產養殖方法及冷藏可大幅降低寄生蟲感染的風險，但未能完全消除其他微生物的風險。此外，有報告指乙型鏈球菌感染個案與生吃淡水魚有關。

另一方面，食物加工環境或會藏有污染水產的微生物，例如煙三文魚可在加工環境中受到李斯特菌污染。由於冷熏程序不能消滅李斯特菌，而煙三文魚保質期長，便會使李斯特菌得以滋長。

使用調味料、酒、香草及香料生醃水產，或將水產略煮，都無法殺死當中的致病微生物。只有徹底煮熟食物，才可有效殺死病原體，而進食火鍋及粥品就更要格外留意。

食物中毒的高危人士

食物中毒可以發生在任何人身上，但高危人士，包括孕婦、嬰幼兒、長者及免疫力弱人士（例如糖尿病、肝病、腎病或接受器官移植的病人、愛滋病患者，以及接受化療或放射治療的人士），若進食生或未煮熟的食物，引致感染

Some people choose to eat raw or undercooked foods for the original taste, but this comes at a price of having a higher risk of food poisoning. Contaminated raw foods have been one of the most frequently identified contributing factors of local food poisoning cases. Examples are raw or undercooked aquatic products which are common agents of food poisoning.

Microbiological Risks of Raw or Undercooked Foods

Foods may be contaminated by pathogenic microorganisms at different stages from farm to table. Aquatic products, for instance, can be contaminated regardless if they are cultivated by humans or caught from nature. For example, oysters which are filter-feeding animals can take in norovirus and *Salmonella* in contaminated water environments during feeding. Similarly, both saltwater fish and freshwater fish may have parasites, although the types of parasites could be different. Eating raw freshwater fish with parasites may cause bile duct obstruction, inflammation and cancer. Good aquaculture practices and freezing can greatly reduce the risk of parasitic infections, but they cannot completely eliminate the risk of other microorganisms. Besides, outbreaks of Group B *Streptococcus* infection have been reported to be associated with consumption of raw freshwater fish.

On the other hand, the food processing environment may contain microorganisms that contaminate aquatic products. For example, smoked salmon may be contaminated by *Listeria monocytogenes* in the processing environment. While the cold-smoking process cannot eliminate the bacteria, the long shelf-life of smoked salmon will allow the bacteria to grow.

Using seasonings, wine, herbs and spices to marinate raw aquatic products, or slightly cooking the aquatic products, cannot kill the microorganisms that cause diseases. Only thorough cooking can effectively kill the pathogens in foods, and this should be paid extra attention to especially when you are having hot pot and congee.

Susceptible Populations of Food Poisoning

Anyone can get food poisoning, but susceptible populations including pregnant women, infants, young children, the elderly and people with weakened immunity (e.g. people with diabetes, liver or kidney diseases, organ transplants and HIV infection; or people receiving chemotherapy or radiation therapy) are of a higher risk of being infected or having complications if they consume raw or undercooked foods, due to their health status. Symptoms of food poisoning may range from mild to severe and vary depending on the microorganisms that cause the disease. The most common symptoms include

或併發症的風險較高。食物中毒的症狀有輕重之分，視乎致病微生物的種類而定。最常見的症狀包括嘔吐、腹瀉、腹痛及發燒，但高危人士可能會出現較嚴重甚至致命的症狀。舉例來說，幼兒及長者受產志賀毒素大腸桿菌感染，較易出現溶血尿毒症。孕婦若受李斯特菌感染，症狀可能較輕微，但細菌或會透過胎盤傳染給胎兒，可能引致流產、死胎，甚至初生嬰兒夭折。長者及免疫力弱人士受李斯特菌感染，則可能導致血液或腦部受嚴重感染。

處理食物前妥善處理傷口

事實上，不少生的食物都可能含有致病微生物，例如水產中的創傷弧菌（俗稱「食肉菌」）及乙型鏈球菌、豬肉中的豬鏈球菌。市民在烹製食物期間，稍不留神，便可能會透過雙手原有的或處理食物時割傷的傷口感染這些細菌。完好的皮膚是保護身體的第一道防線。處理食物前，如發現皮膚有傷口，應先包紮好；處理生的水產或接觸魚缸水時，應使用手套，以減少受傷及感染的機會。

注意事項

1. 在從農場到餐桌的不同階段，生或未煮熟的食物都可能受到病原體污染，故存有食物安全風險。
2. 食物中毒有時可導致相當嚴重的後果，對高危人士尤甚。
3. 徹底煮熟食物才進食，是清除致病微生物的有效方法，從而預防食物中毒。
4. 雙手若有傷口，切勿直接接觸食物。若在處理食物的過程中造成傷口，須立即徹底清潔傷口，並以防水敷料妥善覆蓋。若發現傷口感染，應立即求醫。

vomiting, diarrhoea, abdominal pain and fever, yet more severe or even life-threatening symptoms may occur in susceptible populations. For example, hemolytic-uraemic syndrome (HUS) is more likely to occur for Shiga toxin-producing *Escherichia coli* infection in very young children and the elderly. For *Listeria* infection in pregnant women, symptoms may be relatively mild in mothers, but the passage of the bacterium through the placenta may cause miscarriage, stillbirth, or even infant death. *Listeria* infections in the elderly and people with weakened immunity may lead to severe infections of the bloodstream or brain.

Dress Wounds Properly Before Handling Foods

In fact, many raw foods may contain disease-causing microorganisms, such as *Vibrio vulnificus* (commonly known as 'flesh-eating bacteria') and Group B Streptococcus from aquatic products, and *Streptococcus suis* from pork. People not paying attention when preparing their meals may be infected with these bacteria through wounds on their hands or cuts inflicted during food handling. Intact skin is the first line of defense to protect the body. Before handling foods, if you find a wound on your skin, you should cover it; when handling raw aquatic products or contacting with fish tank water, gloves should be used to reduce the chance of injury and infection.

Key Points to Note

1. Raw or undercooked foods could be contaminated with pathogens at different stages from farm to table and hence have inherent food safety risks.
2. Consequences of food poisoning sometimes could be quite serious, particularly in susceptible populations.
3. Cooking foods thoroughly before consumption is an effective way to get rid of disease-causing microorganisms and hence prevent food poisoning.
4. Do not touch foods directly whenever there is a wound on hands. If a wound is sustained during handling foods, the wound must be cleaned immediately and properly covered with waterproof adhesive dressings. Individuals should seek medical advice promptly when wound infection is found.

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