Maintaining the Cold Chain When Importing Perishable Foods

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Recently, the food poisoning outbreak associated with eating of sandwiches from Taiwan has aroused public concern. Improper temperature and time control during the transportation and storage of food can cause excessive growth of pathogens. The CFS reminds the trade the importance of maintaining the cold chain when importing perishable foods.
What Foods are Perishable?

- Two completely different families of bacteria can be found on food
  - pathogenic bacteria, the kind that cause food poisoning
  - spoilage bacteria, the kind of bacteria that cause foods to deteriorate and develop unpleasant odors, tastes, and textures

- Perishable foods are any foods that need to be kept refrigerated (4°C) or frozen (-18°C) to minimize or prevent growth of pathogenic bacteria and/or food spoilage
  - Examples: food that consists wholly or in part of milk, milk products, eggs, meat, poultry, fish or shellfish, etc.
Perishable “Ready-to-eat” Foods are High-risk

- Any ready-to-eat food (cooking or heat treatments are not required) that are perishable (supports the growth of pathogenic bacteria easily) are high-risk.
- No further cooking = no step to eliminate microbial hazards → High-risk.
- Examples: milk, gravy, any foods containing eggs, meat, poultry, seafood as ingredients (such as sandwiches, ham, sushi, custard, dairy-based desserts, etc.), and prepared fruits and vegetables (such as salads).
Temperature Danger Zone

- Under suitable temperature (i.e. from 4°C to 60°C), bacteria can multiply very quickly on high-risk foods
- Their number can double every 10 to 20 minutes
- When some pathogenic bacteria multiply to a certain amount, they can cause food poisoning
- Refrigeration slows bacterial growth and freezing stops it
A cold chain is a temperature-controlled and monitored supply chain

The goal of the cold chain is to keep a sample or material within a certain temperature range during all stages of delivery, processing and storage
Food Safety Questions to Think About before Importing Food

- Is the food product I intent to import into Hong Kong a perishable/high-risk food?
- What are the specific temperatures and time-temperature tolerances on each process in the cold chain?
- Can my suppliers/distributors/logistics providers ensure that the cold chain is maintained before I receive the product? And how?
- After receiving, can I keep the product at safe temperature during transportation/storage before delivering them to consumers? And how?
Advice to Trade

- The importers should verify that their overseas suppliers have proper controls (e.g. implementing HACCP food safety management system) in place to ensure that the imported perishable foods are fit for human consumption and comply with legal standards.

- The importers should ensure that perishable foods are transported and stored at appropriate temperature throughout the whole supply chain.

- Observing the shelf-life (i.e. expiry date) of the food under specific temperature as suggested by suppliers.
Thank you!