



**ASIAN FOOD INFORMATION CENTRE
(AFIC)**



SEAMEO TROPMED NUTRITION INSTITUTE



**INDUSTRY COUNCIL FOR DEVELOPMENT
(ICD)**

**PREVENTING FOOD-BORNE ILLNESS
FROM FARM TO PLATE
HIGHLIGHTS OF BEST PRACTICE**
An Overview

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FOOD-BORNE ILLNESS
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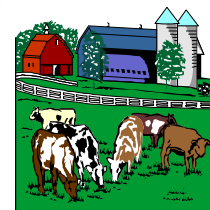
This series of short briefings on best practice for the prevention of food-borne illness and emerging risk factors is intended to contribute to the continued growth in awareness and demand for safe, nutritious food “from farm to plate”.

Each topic briefing has been designed so that it may be read separately or in conjunction with others for an overall synopsis on current best practice. Further briefs on more specialised food safety topics are planned for future release.

Sections 1-7 of the information pack is divided into the following sections:

- Overview
- The Farm - Beginning of the Food Chain
- Food Processing – Preventing Food-borne Illness and Improving Quality
 - Transport and Storage - Safeguarding Food
 - Food Safety and Retailing
 - Food Safety in the Home
 - Glossary

“Food-borne illnesses” are defined by the World Health Organization (WHO), as diseases, usually either infectious or toxic in nature, caused by agents that enter the body through the ingestion of food. Every consumer is at risk of food-borne illness but conversely every incidence of food-borne illness is potentially preventable. There is much everyone in the food chain, from production at farm level, to the final presentation and consumption of food stuffs can do to prevent food-borne illness. The first step in preventing food-borne illness is to be well-informed about the basics of food safety: the hazards and risks; and how to recognise, and eliminate them through the use of best food safety practices.



Food-borne illness may be caused by physical, chemical or biological food hazards. Of these, three types of food safety hazard, microbiological contamination is by far the most common cause of food-borne illness. In spite of the advances in food variety, convenience and safety, WHO says cases of disease caused by microbiologically-contaminated food are on the increase both in developed and developing countries. For this reason the AFIC series of documents on Best Practices in Food Safety, focus mainly, although not exclusively, on prevention of food-borne illness caused by micro-organisms such as moulds, bacteria and viruses.

Food-borne illness severely impacts health, particularly society’s most vulnerable groups (for example, the elderly, pregnant women, those with diminished immunity and the very young). Food-borne illness also markedly reduces economic productivity. Whilst chemical and physical contaminants of food can pose serious risk to health and safety of consumers, experts agree that the most common cause of food-borne diseases is microbiological contamination.

Many public and private sector agencies are investing huge amounts of effort and resources in the prevention of food-borne illness. Improving the knowledge of all those involved in all stages of the food supply chain is absolutely fundamental to the success of these initiatives. Safety of food can only be assured if all those involved from the farm right through to those consuming the food understand and play their part. Food safety is truly everybody’s business, and everybody’s responsibility.

Food-Borne Illness and Social Change

More choices exist now than ever before and increased choice brings with it greater complexity - for example

- Increased variety demands increased knowledge about how to store, prepare and eat imported fruit, vegetables, meat, seafood and dairy products; how to select and prepare food for people who are particularly susceptible to food-borne illnesses or who suffer food allergies and intolerances such as intolerance to lactose in dairy products, or allergy to peanuts.
- Consumers place increased emphasis on convenience and speed in preparing meals but, convenience foods need to be correctly stored and prepared in the home.
- The use of a greater variety of cooking methods such as micro-waving, barbecuing and slow cooking enhance food variety, but knowledge is required to ensure these methods are used correctly, and without undermining health and safety of the end-consumer.
- Many traditional “food wisdom’s” historically passed down from one generation to the next are being forgotten or becoming obsolete, but some sectors of the general population have been unable to replace that traditional knowledge with modern scientific understanding of food safety and nutrition.
- As more meals are consumed from street vendors, in restaurants, and other public places it can be difficult for individual consumers to determine if food in public places is safe to eat

Rapid population increases, particularly in the urban environment further aggravate this problem. Up to 50% of the urban population living in the major cities of Asia live in conditions of extreme poverty, overcrowding and poor sanitation. In addition, changing social structures have resulted in a heavier emphasis on the purchase and consumption of food outside the family home. Without strict control of food preparation, storage and display practices, food-borne illness will continue to grow.

Prevention of Food-Borne Illness - An Achievable Goal.

Food-borne illness is almost always preventable. The key is better knowledge and understanding, throughout the whole food supply chain from farm to the consumer’s plate.



To protect the food safety of citizens and ensure that the needs of the export markets and consumers overseas are met, governments all over the world are intensifying their efforts to improve food safety. The food industry also continues to review and improve practices and procedure designed to eliminate hazards and risks in the food supply chain.

Consumers also have a vital role to play. Consumer vigilance and knowledge not only creates demand for better, more consistent food hygiene and safety standards, but also ensures that safe food purchased remains safe to eat, and potentially unsafe food is recognised and rejected.

Food Safety – A Shared Responsibility.

A large proportion of food consumed nowadays passes through some, or all elements of the food supply chain. Each link in the chain has a role to play, indeed a responsibility, in ensuring that our food remains wholesome and safe to eat.

Food safety and prevention of food-borne illness is everybody’s responsibility.

Scientific and technological understanding on food safety has never been greater. Examples and models of best practise which eliminate or massively reduce the risk of food-borne illness exist for all stages of the food supply chain.

Safer Food – Everybody’s Responsibility:

Many revolutionary and beneficial changes have occurred in the food industry in recent years, but although consumers are increasingly aware of the connection between food and health, the greatest risk to human health from food is the lack of knowledge about major food-related health risks and how to avoid those risks.

All along the food chain, procedures and good practices are being implemented to ensure that the food which reaches the consumer’s table is fit for consumption and the risks of contamination are minimised, so that the population as a whole enjoy the health benefits of safe quality food. But responsibility for food safety should not only be the priority of professionals in the food industry, the consumer is equally responsible in ensuring the safety of food in the home and when eating out.



Ultimately, everyone benefits from being better informed about food safety.

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