

Harmonisation with International Standards in Preparation of Future Challenges



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Outline

- Globalisation of Food Supply
- Risk Analysis, Food Incident and Regulatory Food Standard
- World Trade Organisation and International Standards
- International Standards and Local Standards
- Local Food Standard Setting
- Preparation for Future Challenges



Globalisation of Food Supply

- Food grown in one country can be transported and consumed halfway across the world
- A wider variety of high quality foods is now accessible and affordable
- Presents challenges unseen before for safe food production and distribution



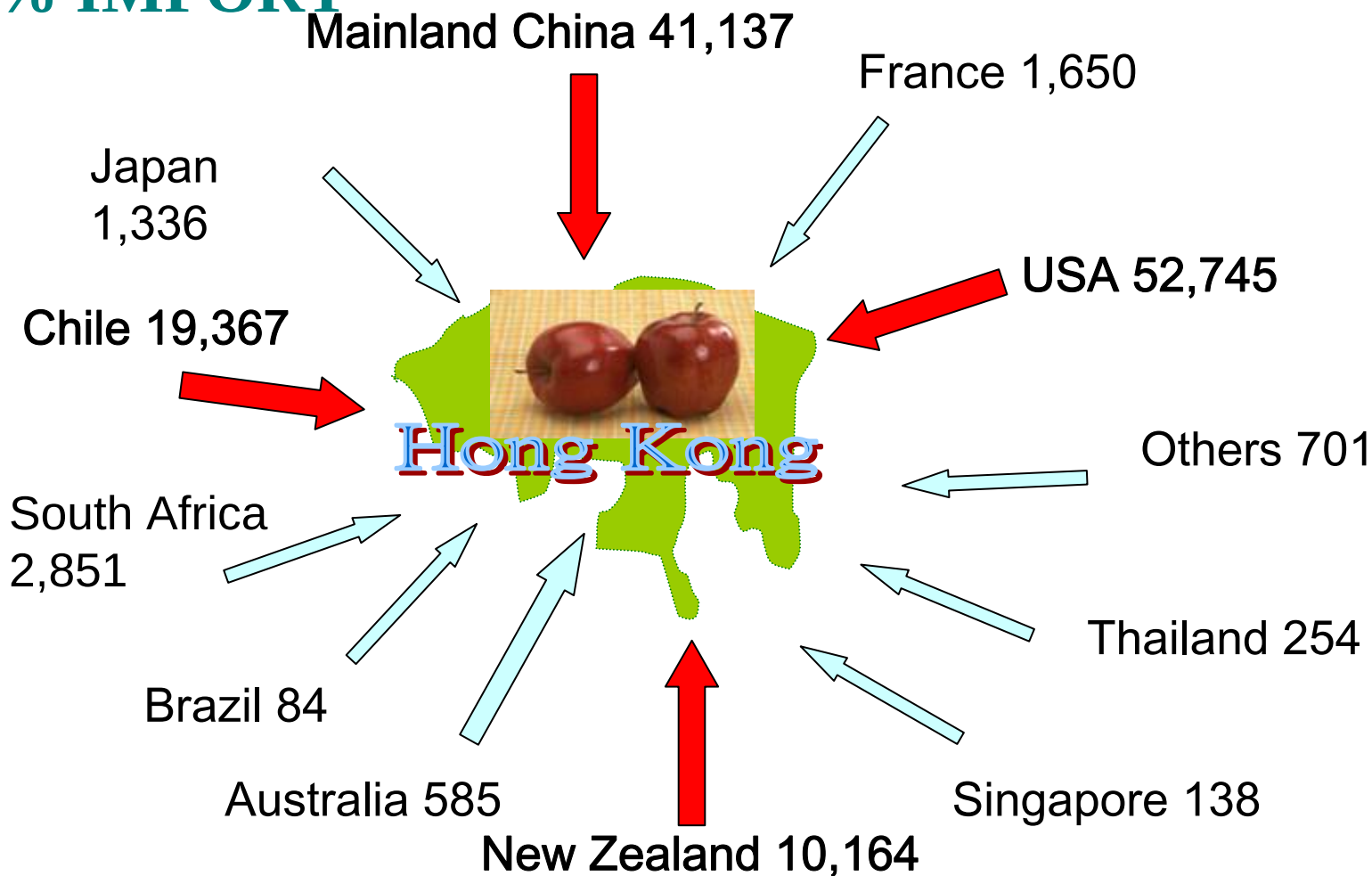
Local Situation

- Free port
- Densely populated international city (~7M)
- Little local food production
- Over 95% of food consumed is imported
- Large volume and variety of food from around the world



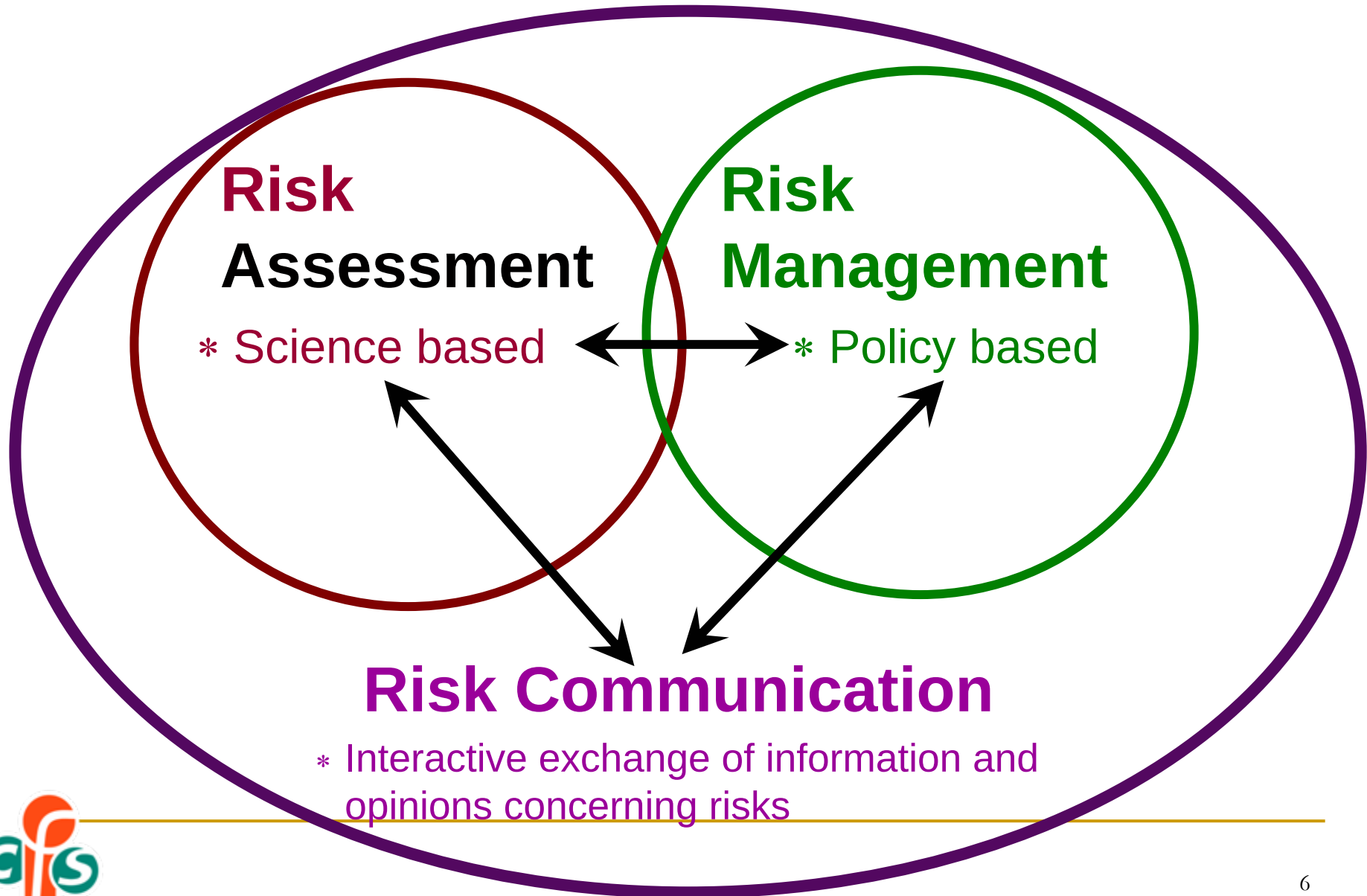
WHERE DO OUR APPLES COME FROM?

>99% IMPORT



Being a free port, the Hong Kong population is able to enjoy food from around the world (Figures for 2010, in tonnes)

Risk Analysis Framework



Food Incident Management and Regulatory Food Standard

- **Risk Management:** Key role at the beginning of the risk analysis process in identifying food safety problems and considering the best ways to manage them
- **Risk Management Options:** One or more to deal with food incident (e.g. step up surveillance, recall, hold-and-test, suspension of import, setting regulatory food standards)
- **Regulatory food safety standards:**
 - In line with international food standards
 - forms the legal basis for effective risk management actions

World Trade Organisation (WTO) and International Standards

The WTO agreements

- The WTO is the only international body dealing with the rules of trade among states and separate customs territories 
- The WTO agreements provide the legal ground-rules for international commerce
- They are essentially contracts, binding governments to conduct their trade and trade policies according to principles and rules
- Hong Kong is one of the WTO members

World Trade Organisation (WTO) and International Standards: Food Safety Related

The WTO Sanitary and Phytosanitary Measures Agreement (SPS Agreement)

- Allows members to set their own food safety standards
- But it must be based on science
- Applied only to the extent necessary to protect human, animal or plant life or health
- Members are encouraged to use international standards, guidelines and recommendations where they exist



SPS Agreement: Article 3

Standard-setting organizations

food safety
Codex



animal health
OIE



plant health
IPPC



Codex = joint FAO/WHO Codex Alimentarius Commission
OIE = World Organization of Animal Health
IPPC = International Plant Protection Convention (FAO)

The «3 sisters»

International Standards

Codex Alimentarius Commission (Codex)

- The international standard-setting body in the area of food safety established jointly by the Food and Agriculture Organization and the World Health Organization of the United Nations



International Standards

Food standards adopted by Codex:-

- 1). Supported by comprehensive scientific research
 - 2). Generally represent a global consensus on what is regarded as safe or unsafe
- **Adoption:** Protect public health and facilitate international food trading



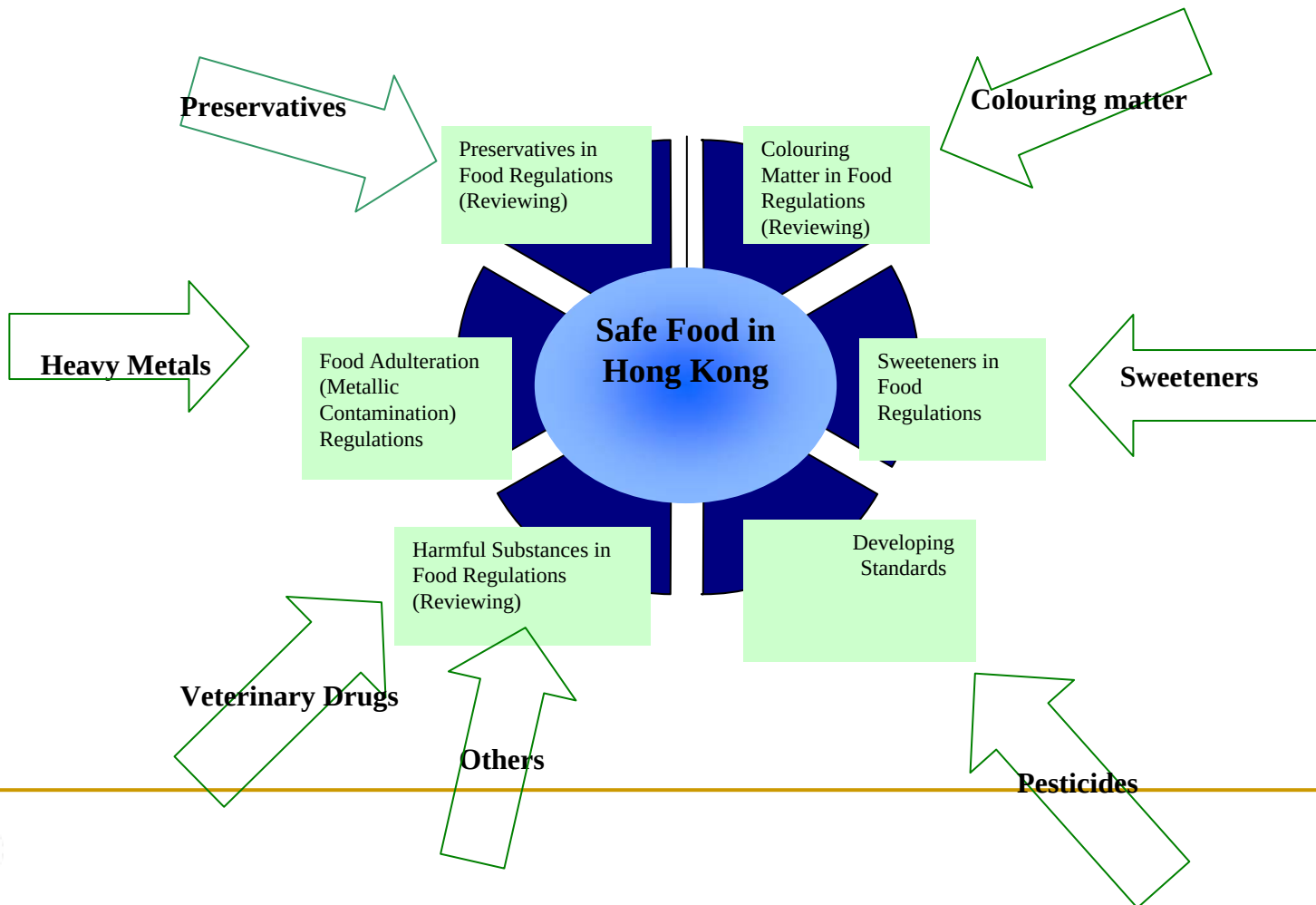
Local Regulatory Food Safety Standards

Local Legislation

- Mainly contains in the Public Health and Municipal Services Ordinance (Cap 132) and its subsidiary legislation
- Stipulates local food safety standards
- Control the presence and permissible level of hazardous substances in food



Local Regulations and Food Safety Standards



Local Food Standard Setting

Regular review on food standards

- To protect public health and keep the local food standards in line with International development (e.g. Codex) and advancement of food science and technology

Factors to be considered in review

1. Public health concern;
2. Local food standards;
3. International standards;
4. Stakeholder concern



Local Food Standards reviewed 2008 to 2010

- **1). Preservatives in Food Regulations:** More preservatives and antioxidants permitted, adoption of Codex GSFA Food Category System, etc
- **2). Colouring Matter in Food Regulations:** Removed Red 2G from the permitted list
- **3). Food and Drugs (Composition and Labelling) Regulations:** Introduced a “1+7” Nutrition Labelling System and regulation of nutrition claims
- **4). Harmful Substances in Food Regulations:** Addition of Melamine as one of controlled harmful substances
- **5). Sweeteners in Food Regulations:** Addition of two permitted sweeteners: Neotame and Steviol glycosides



Local Food Standard Setting

Harmonisation with International Standards (Codex)

- Adopts as far as possible standards set by the Codex
- **Reasons:** Regarded as sufficient protection to public health and facilitate international food trading

World Trade Organisation



Codex



Local Food Standard Setting

Makes reference to standards of:

- **Codex:** fundamental principle in setting food standards in HK
- **Major food-exporting partners:** Mainland China, USA, EU, Thailand, Brazil, Australia where appropriate
 - **Reasons:**
 - 1). Absence of relevant Codex standard and/or
 - 2) Trade facilitation provided that scientific justification is available and public health is not compromised



Local Food Standard Setting

Risk assessment

- Scientifically assess the dietary exposure to the hazard of concern and possible adverse health effects on the local community, taking local food consumption into consideration
- Local standards set should not compromise public health



Local Food Standard Setting

Risk Communication

- Recognises tripartite collaboration between Government, the trade and consumers
- Communicating with Stakeholders in food safety standard setting
- Seek Advice from Food Safety Experts



Local Food Standard Setting

Trade and Public

- Trade Consultation Forum
- Consumer Liaison Group
- Public Consultation
- Technical Meeting with Trade
- **Publication:** Food Safety Focus (<http://www.cfs.gov.hk/>), Guides for Consumer and Food Trade

Expert

- Expert Committee on Food Safety
- Working group



Preparation for Future Challenges

Continuous review and updates of Local standards

- To keep abreast of international development and advancement in food technologies
- **Goals:** To Protect Public Health and Facilitate International Food Trading
- **At present: Food Standard Exercises under Review:**
 - ❑ Pesticide Residues,
 - ❑ Veterinary Drug Residues;
 - ❑ Natural Toxins (Shellfish toxins and mycotoxins),
 - ❑ Heavy Metals in food
 - ❑ Microbiological Guidelines for Ready-to-eat food



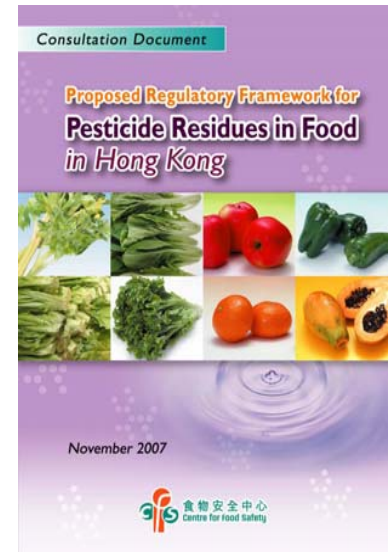
Pesticide Residues in Food

Current Regulation

- **Cap. 132:** All food on sale must be wholesome, unadulterated and fit for human consumption

Limitations

- Absence of specific legislation to regulate pesticide residues in food
- No regulatory action could be taken unless food is proved to be unfit for human consumption



Pesticide Residues in Food

Proposed Approach

- Proposed two-step approach to set the standards for Hong Kong

First step

- Proposed to adopt the standards of individual pesticides recommended by Codex as the **backbone**
- **Supplemented** by related standards of the Mainland and other major exporting countries, notably Thailand and the USA

Second step

- Evaluate the proposed standards by conducting risk assessment
- Assess adequacy to protect public health in the local setting



Veterinary Drug Residues in Food



Current Regulation

- **Harmful Substances in Food Regulations (HSFRs):**
Controlled certain veterinary drugs in food

Current limitations

- The types of food covered by the Harmful Substances in Food Regulations (HSFRs) are limited
- The current regulatory framework adopts a non-positive list approach, which is difficult to control veterinary drugs not listed in the legislation
- Certain veterinary drug residues regulated by the existing regulation is not in line with international standards
- Marker residues of the veterinary drugs are not stipulated in the current legislation



Veterinary Drug Residues in Food

Proposed Approach

- Codex standards as backbone
- Supplement with Mainland and other national authorities, including USA, Canada, European Union, Australia and Brazil
- Mainland China, Brazil, European Union, USA, Canada and Australia >85% of imported food of animal origin (2009)
- Conduct risk assessments to ensure that the standards adopted would not compromise public health



Natural Toxins (Shellfish Toxins and Mycotoxins) in Food

Current Regulation

- **Harmful Substances in Food Regulations (HSFRs):** Controlled natural toxin in food

Current Limitations

- Under the HSFRs, currently only one group of mycotoxin, aflatoxin (AFT), is specifically regulated but no specific provisions to regulate shellfish toxins and other mycotoxins
- **Standards Not in line with Codex:** max levels for AFT between local and Codex standards in peanuts are different.



Natural Toxins (Shellfish Toxins and Mycotoxins) in Food

Proposed Approach

Make reference to the relevant Codex Standards:-

- 1) Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008) for shellfish toxins
- 2) Codex General Standard for Contaminants and Toxins in Food (CODEX STAN 193-2005) for mycotoxins (Aflatoxins, patulin and ochratoxin A)



Heavy Metals in Food

Current Regulation

- **Food Adulteration (Metallic Contamination) Regulations (FA(MC)Rs):** Control 7 Heavy Metals

Current Limitations

- Under the FA(MC)Rs, coverage of standards for different metals in different food categories is very limited
- **Standards Not in line with Codex:-**
 - Some local standards are more stringent and some are laxer than Codex:- Example: Lead in Food
 - Codex: 0.01 – 2mg/kg
 - HK: Solid: 6mg/kg; liquid: 1mg/kg)



Heavy Metals in Food

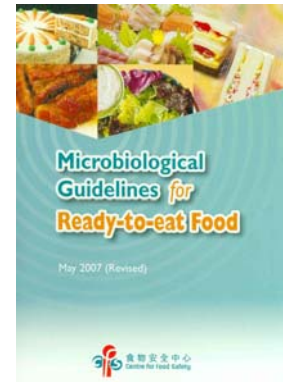
Proposed Approach

Make reference to the relevant Codex Standards:-

- Codex General Standard for Contaminants and Toxins in Food (CODEX STAN 193-2005) for Heavy metals
- In the absence of Codex standards, make reference to standards set by major trade partners
- Evaluate proposed standards by risk assessment



Microbiological Guidelines



Current Regulation/Guidelines

- **Frozen Confection Regulation:** TBC and Coliform in frozen confection
- **Milk Regulation:** TBC and Coliform in milk and milk beverage
- **Food Business Regulation:** *E. coli* and pathogenic organism in fish tank water and microbiological criteria for non-bottled drink (licensing condition of non-bottled drink permit)
- **Microbiological Guidelines for Ready-to-eat Food:** Microbiological criteria for ready-to-eat food

Review of Microbiological Guidelines

Current Limitations

- **Categorisation of food for aerobic colony count assessment**
 - Table containing list of food items
 - Problem with mixed food or food not included in the table
- **Terminology of microbiological results is confusing to the public**
 - Difference between “Unsatisfactory” and “Unacceptable”
- **Codex microbiological criteria not Included**
 - e.g. *Cronobacter* spp. (*Enterobacter sakazaki*) in infant formulae, *E. coli* in live and raw bivalve molluscs



Microbiological Guidelines

Proposed Approach

Review of microbiological guidelines by making reference to:-

- Microbiological criteria in relevant Codex Standards/guidelines
- UK Health Protection Agency “Guidelines for Assessing the Microbiological Safety of Ready-to-Eat Foods Placed on the Market” (Nov 2009)



Conclusion

Strategies

- Continue to review the local food safety standards based on science
- Harmonise local standards with international standards
- Observe the WTO rules

Ultimate Goals

- Enhance local public health and facilitate international food trade
- To be prepared for future challenges

Thank You

