

Current Status on Regulations and Standards for Food Contact Materials in ASEAN

Sumalee Tangpitayakul
Department of Science Service
Thailand
E-mail: sumalee@dss.go.th



MYANMAR



THAILAND



LAOS



PHILIPPINES



VIETNAM



CAMBODIA



MALAYSIA



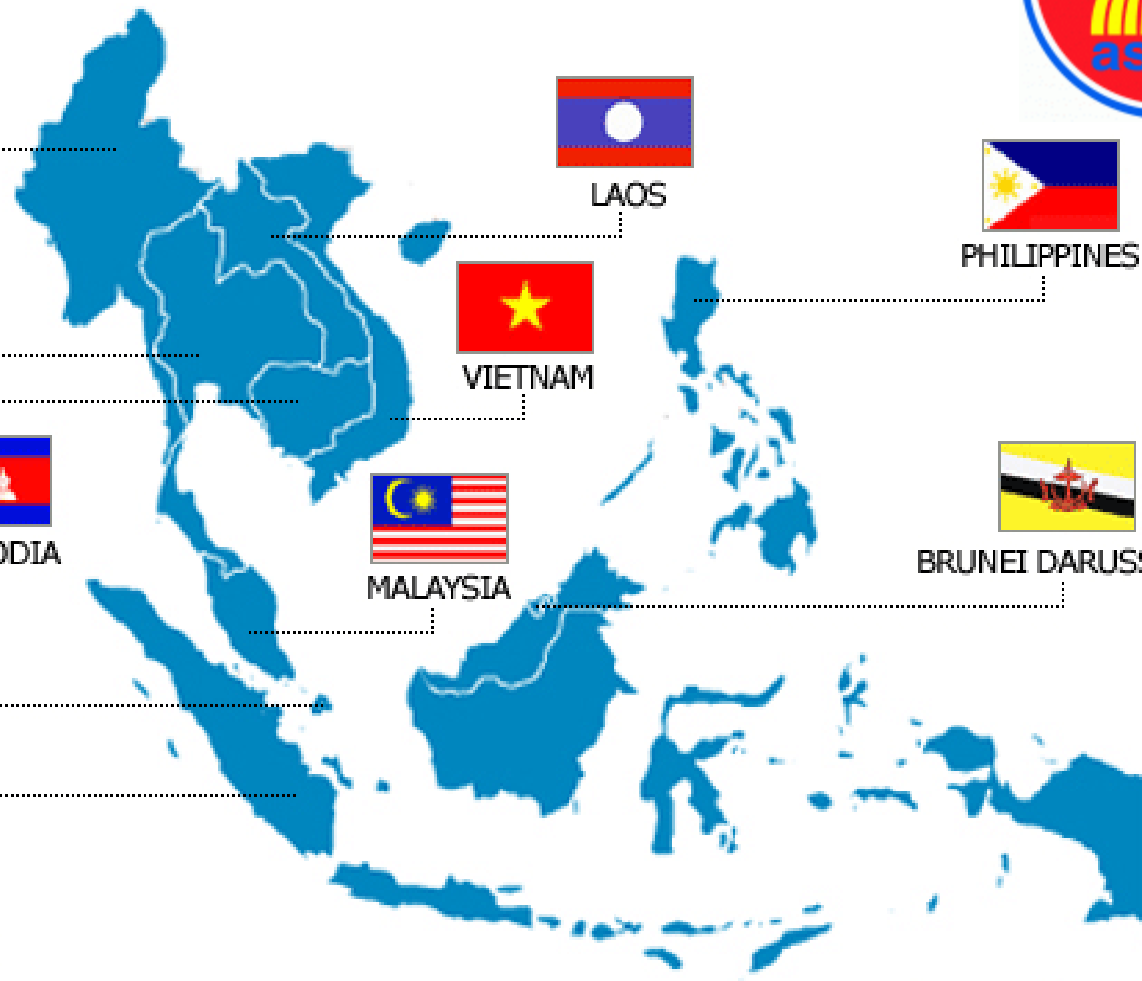
BRUNEI DARUSSALAM



SINGAPORE



INDONESIA



AMC (ASIAN Member Country)

- **Brunei Darussalam**



- **Cambodia**



- **Indonesia**



- **Lao PDR**



- **Malaysia**



- **Myanmar**



- **Philippines**



- **Singapore**



- **Thailand**



- **Vietnam**



ASEAN & Single market

- **The ASEAN Economic Community (AEC) emanates from the ASEAN Leaders– vision to transform ASEAN into a single market and production base that is highly competitive and fully integrated into the global community by 2015**

ACCSQ-ASEAN Consultative Committee on Standard and Quality

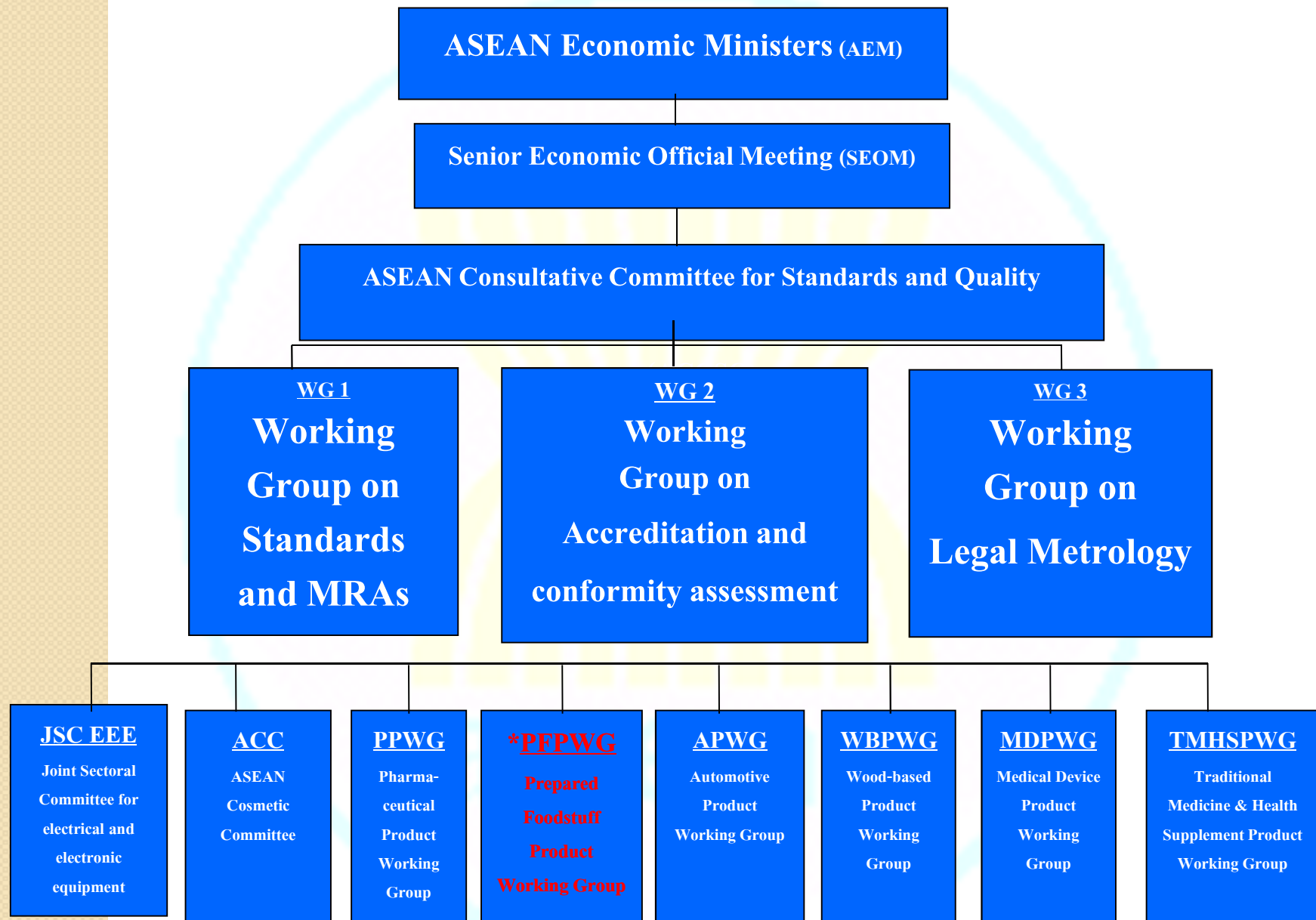
- **1992 - The ASEAN Consultative Committee for Standards and Quality (ACCSQ) formed to facilitate and complement the ASEAN Free Trade Area (AFTA)**
- **1997- ASEAN regulatory bodies authorized to achieve mandate of eliminating technical barriers to trade.**
- **1998- Efforts to harmonize regulatory requirements amongst ASEAN was initiated through the (ACCSQ)**

ASEAN Consultative Committee on Standard and Quality of Product – Prepared Food Product Working Group

- **Established by ASEAN Economic Ministers**
- **The Objective ACCSQ**
 - **Implementation of the ASEAN Framework Agreement on Mutual Recognition Arrangements;**
 - **Harmonization of standards;**
 - **Enhancement of standards and conformity assessment infrastructure in Member Countries;**
 - **Transparency of standards, technical regulations and conformity assessment regimes in the region.**

ASEAN Consultative Committee on Standard and Quality of Product – Prepared Foodstuff Product Working Group

- **9 working Groups of products under ACCSQ**
 - **JSCEE (Joint Sectoral Committee for AHEEERR)**
 - **ACC (ASEAN Committee on Cosmetic)**
 - **PPWG (Pharmaceutical Product Working Group)**
 - **PFPWG (Prepared Foodstuff Product Working Group)**
 - **APWG (Automotive Product Working Group)**
 - **RBPWG (Rubber-based Product Working Group)**
 - **MDPWG (Medical Devices Product Working Group)**
 - **TMHSPWG (Traditional Medicine & Health Supplement Product Working Group)**



Key Activities of ASEAN Reference Laboratory

1. Provide training and technical advise and service to ASEAN member countries (AMC)
2. To become resource and information centers
3. To coordinate inter-laboratory comparisons or proficiency testing in the ASEAN region
4. To become resource centers for Certified Reference Materials (CRMs) or Reference Materials
5. Upon request, serve as reference lab when there are dispute between analytical result

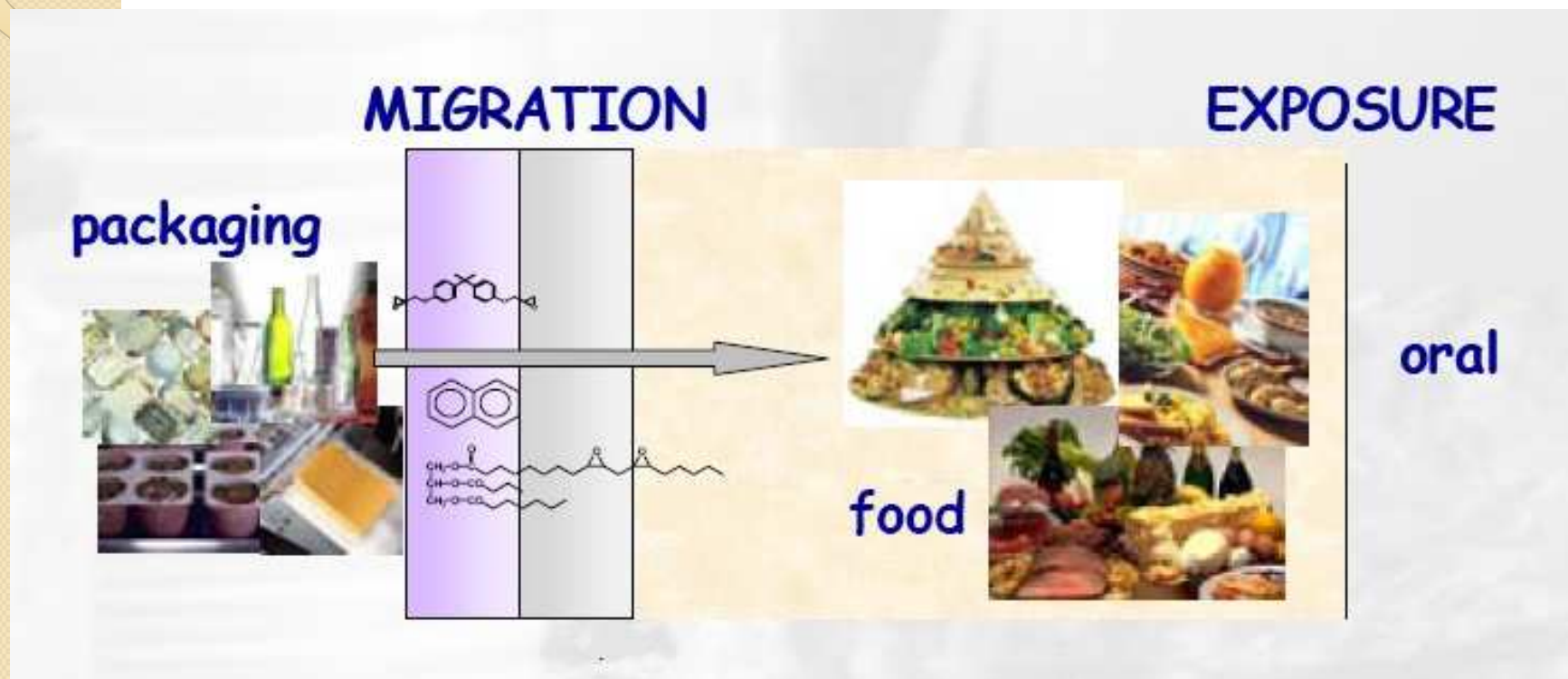
ASEAN Reference Laboratories-PFPWG

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- **Singapore** - ARL for mycotoxin and pesticide residues in fruit and vegetable
 - **Malaysia** - ARL for GMO
 - **Thailand** - Veterinary drug residue in fish and fishery product
 - heavy metal in food product
 - **Vietnam** - ARL for microbiology

The 11th ACCSQ –PFPWG meeting at Manila, Philippines July 2010

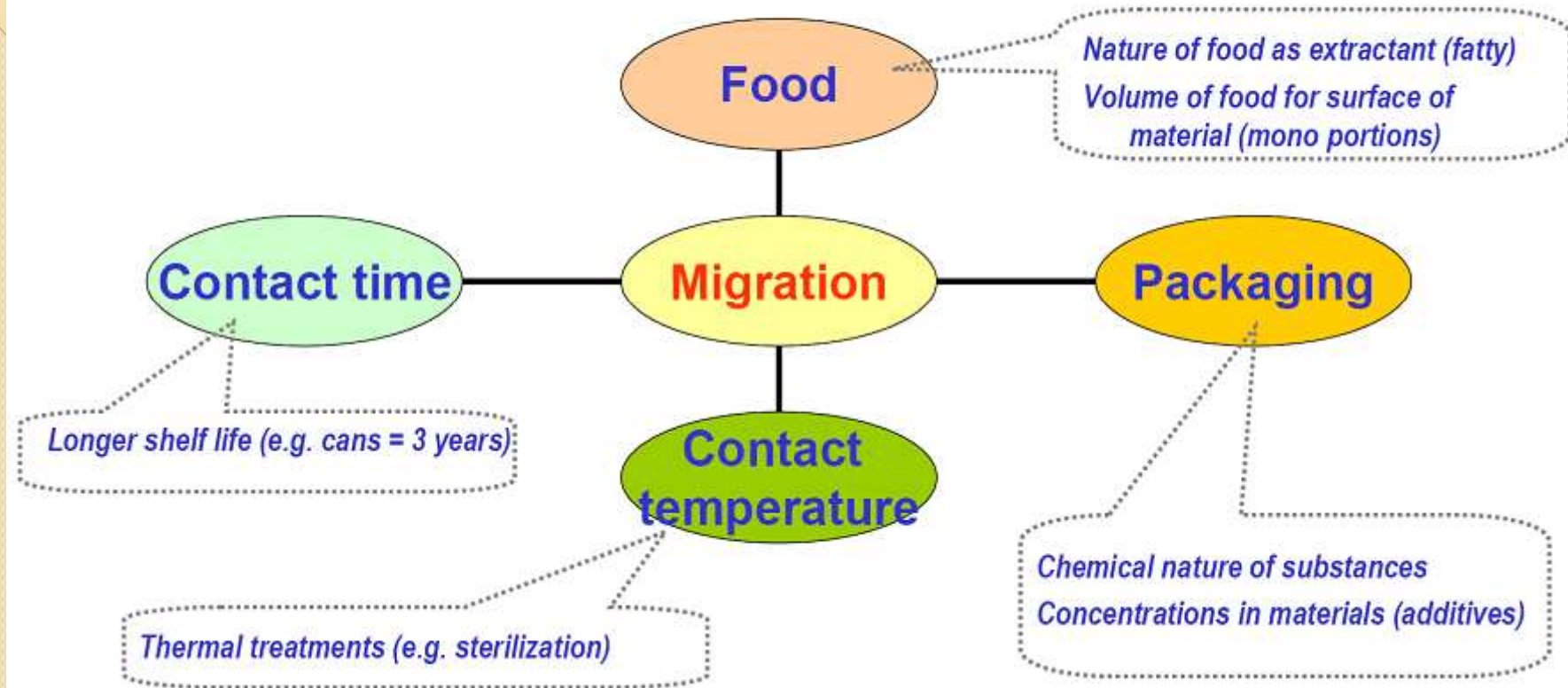
- **The meeting agree in principle for the establish of
ARLs for Food Contact Materials by Department
of Science Service, Ministry of Science and
Technology, Thailand**
- **Request Thailand to survey of Food Contact
Materials standard and legislation among ASEAN
member countries**

Packaging & Migration



Food Packaging-Plastic

The actors of migration



BPA use as a raw material for the manufacture

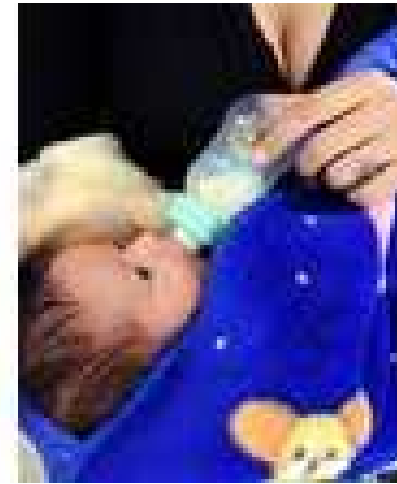


Polycarbonate 80%

Epoxy compounds 18%



Bisphenol-A free products



- **EU**



- **China**



- **Malaysia**



- **Canada**



- **South Africa**



- **Denmark**



- **France**



- **Austria**



- **Sweden**



- **Belgium**



GO BPA FREE™
BABY BOTTLE SAMPLER





Thailand

National Economic and Social Advisory Council, NESAC



Prime minister

The policy to regulate milk
bottle by mandatory label





1. Thai FDA announced a ban on the use of BPA in infant food containers will regulate milk bottle under Food Act.

2. Office of the Consumer Protection Board require a mandatory warning label on infant and children tableware containing BPA.

3. Thai Industrial Standards Institute enforce milk bottle as mandatory standard

Concentration of BPA in baby milk bottles

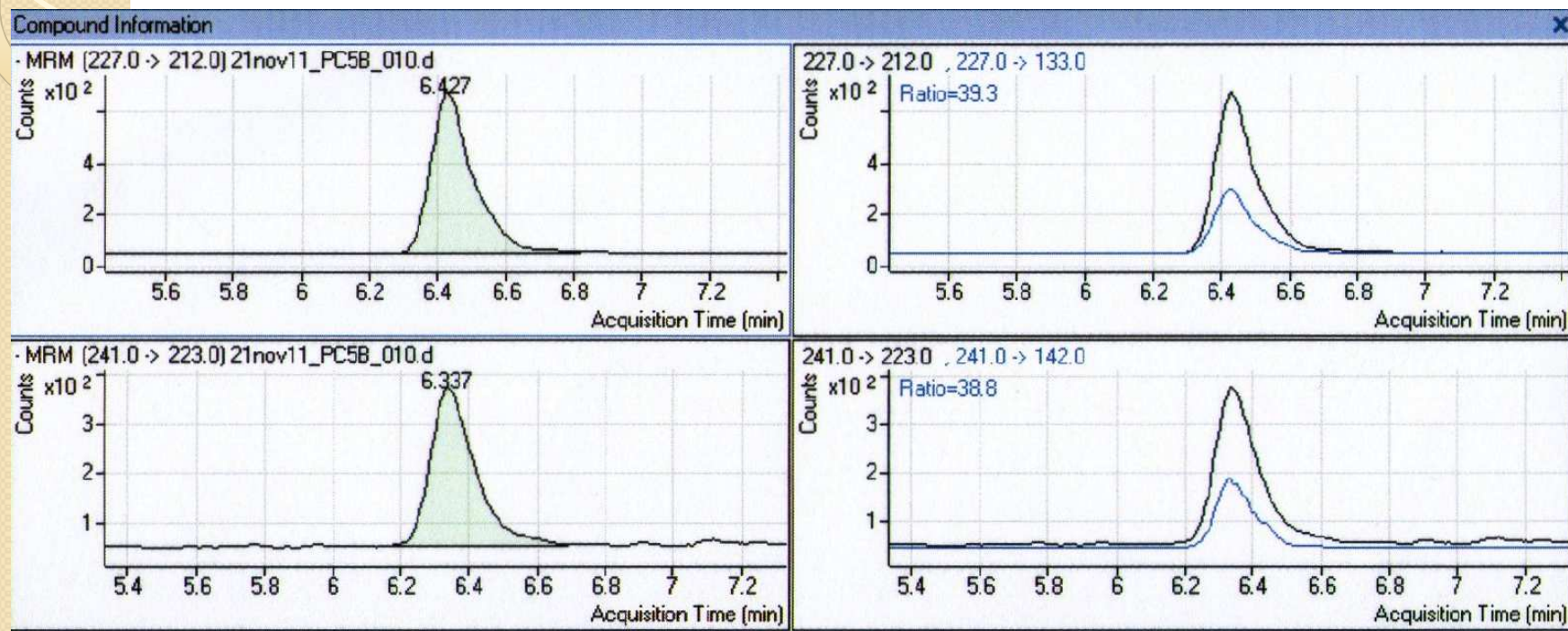
Sample	condition	BPA ($\mu\text{g/l}$)
new infant feeding bottle	70 $^{\circ}$ C 2 hrs.	ND-1.22
new infant feeding bottle	80 $^{\circ}$ C 30 mins	1.19-11.8
used infant feeding bottle (1-2 years)	80 $^{\circ}$ C 20 mins	12.9-188.6
	80 $^{\circ}$ C 30 mins	65.3-208.6

ND: not detected, LOD = 0.2 $\mu\text{g} / \text{L}$

Concentration of BPA leaching from can

Sample	BPA ($\mu\text{g}/\text{dm}^2$)	LOD ($\mu\text{g}/\text{dm}^2$)	LOQ ($\mu\text{g}/\text{dm}^2$)
Round can (2 pieces)	4.78 ± 0.15	0.05	0.1
Square can (2 pieces)	7.89 ± 2.02		
Round tin (2 pieces)	3.88 ± 2.97		

Chromatogram of BPA and BPA-d₁₆

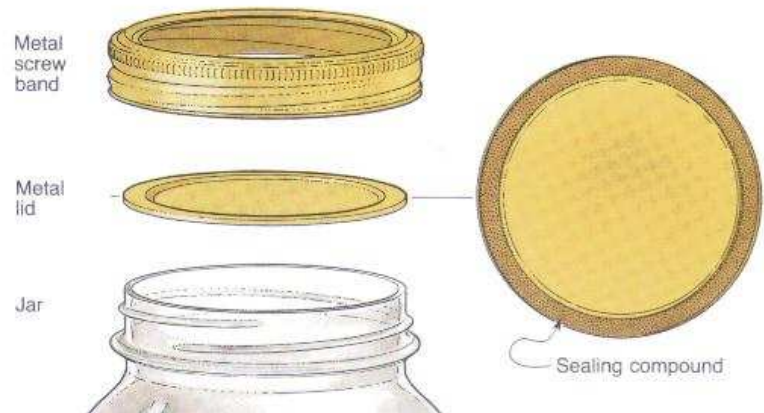


- LOD = 0.01 $\mu\text{g}/\text{dm}^2$
- LOD = 0.2 $\mu\text{g}/\text{kg}$



Bisphenol A

- **Prohibit the manufacture of infant feeding bottles with BPA from 1 March 2011**
 - **A full ban placing on market and the importation in to the economic bloc of the bottles on 1 June 2011**
 - **EU& Switzerland - SML of Bisphenol A = 0.6 ppm (canned food)**
 - **Singapore - SML of Bisphenol A = 0.6 ppm (canned food)**





Using phthalates in food packaging

- Phthalates belong to a group of chemicals called 'phthalic acid diesters'. These are found in many household items and in some food packaging.

Specification of plasticizer

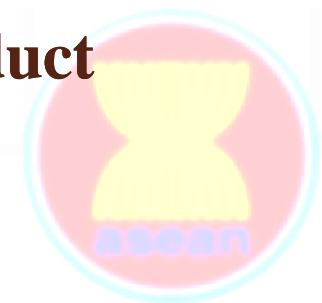
- **Phthalates**

- DEHP & DBP: not allowed to used in lids for all foods
- BBP, DINP & DIDP: not allowed to used in lids for fatty food
 - In case aqueous food or dry they have to respect the migration limits:
 - BBP: **30 mg/kg**
 - DINP & DIDP: **9 mg/kg**

Global Food Contact materials Regulaions & Standards

- US.FDA.
 - Food Contact Substance Notification Program
 - Code of Federal Regulation (CFR.)
- EU
 - Regulation No. 10/2011-plastic
- Japan
 - Nation's Food Sanitation Laws
 - voluntary Standard - Japanese Industrial Standard (JIS), Japan Hygienic Olefin and Styrene Plastics Association (JHOSPA)

ASEAN Consultative Committee on Standard and Quality of Product – Prepared Food Product Working Group



- **Eight data from ten countries response the questionnaire except**
 - Cambodia
 - Myanmar



Conclusion

- Brunei Darussalam – do not have any mandatory requirement for packaging
- Indonesia – Regulation No. HK. 03.1.23.07.6664 Year 2011 on Food Packaging Control (plastics based on JETRO, 2011, 21 CFR part 176, 177 and EU regulation 10/2011.
- Laos PDR.– No specific standard for food packaging

Conclusion

- Malaysia - does not have specific standard for certain type of food but regulate VCM in PVC and heavy metal leaching from enamel or glazed earthenware
- Philippines - Based on Japanese Standard, JETRO, 2008 and US.FDA
- Singapore – Own regulation to regulate BPA leaching from metal container and plasticizer in metal lid for glass jar

Conclusion

- Thailand – there are 3 Notifications under Food Act(1979)
 1. - Notification No. 92 – enameled cookware and ceramic
 2. - Notification No.117 – milk bottle
 3. -Notification No. 295 – plastics 11 types
 4. - Thai Industrial Standards (TISI) has developed more than 20 food packaging standards

based on Japanese Standard, JETRO, 2008, JIS , and EU regulation
- Viet Nam – National Technical Regulation (QCVN 12-1:2011/BYT) to regulate plastic and metal packaging based on Japanese Standard, JETRO, 2008

What is the next step ?

- Harmonised the regulations and standards of AMC
- Develop the standard of food contact materials for ASEAN

**Thank you for your
attention!**

