

# GAYA HIDUP HALAL

**IRWANDI JASWIR**

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(INHART), International Islamic University Malaysia (IIUM)*

**NGOPI (NGOBROL PAKE ILMU) – PCIM**

**5 July 2020**



**?**  
**HALAL**

# Yang Mana Logo Halal Yang Betul?

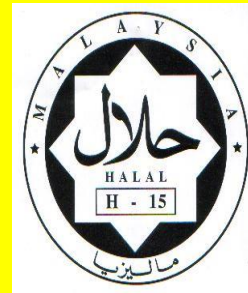
Which is the new Halal logo used by JAKIM?



A.



B.



C.



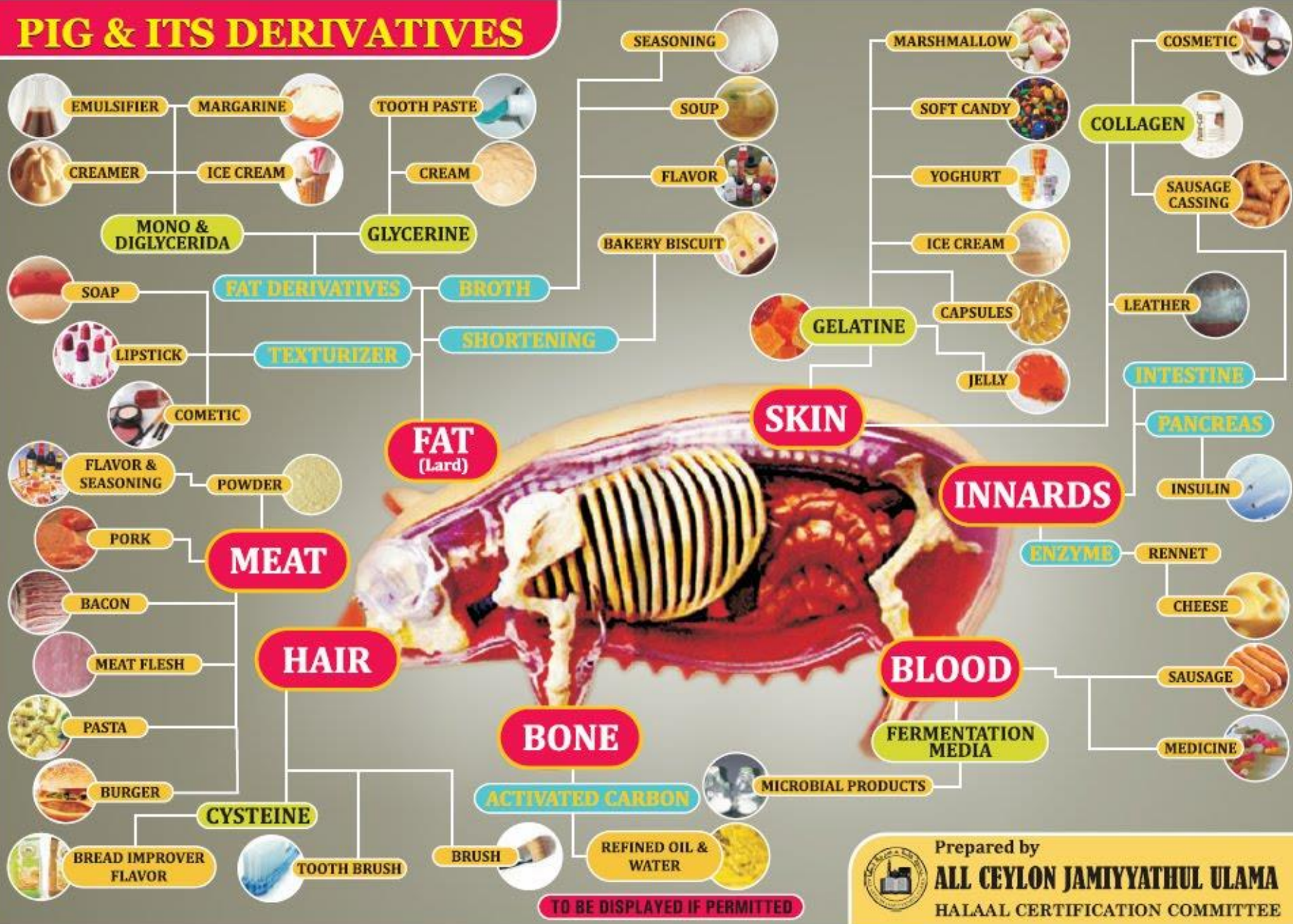
D.



**HALAL LOGO MUI**



# PIG & ITS DERIVATIVES



Prepared by  
**ALL CEYLON JAMIYYATHUL ULAMA**  
 HALAAL CERTIFICATION COMMITTEE

# Concept of Halal in Relation to Food Quality

- Halal is a Qur'anic/Arabic term meaning 'permitted, allowed or lawful'. Halal when used in relation to food and other consumer goods means 'permissible for consumption and used by Muslims'
- Haram is the opposite of halal.
- Shubhah or Mashbooh, means doubtful or suspected
- Halal and haram are serious matters in Islam

# Nas' from Al-Quran

- Ayat 168, surah al-Baqarah (2)
- Ayat 172-173, surah al-Baqarah (2)
- Ayat 3, surah al-Maidah (5)
- Ayat 87-88, surah al-Maidah (5)
- Ayat 114, surah al-Maidah (5)
- Ayat 32, surah Al-A'raaf (7)
- Ayat 114-115, surah al-Nahl (16)

# Al-Quran Surah Al-Baqarah:



يا أيها الناس كلوا مما في الأرض حلالا طيبا...

*“O ye people! Eat of what is on earth, Halal and Good; and do not follow the footsteps of the Evil One, for he is to you an avowed enemy.”*

**(Verse 168)**



Daripada Ibn 'Abbas melalui al-Awsat dengan lafaznya, beliau berkata: "Ayat al-Quran ini (surah al-Baqarah, ayat 168) dibaca oleh Nabi Muhammad SAW: Wahai manusia, makanlah daripada apa yang ada di bumi yang halal lagi baik. Lalu Sa'ad bin Abi Waqqas bangun dan berkata: Wahai Rasul Allah, tolonglah berdoa kepada Allah SWT dan pintalah supaya doa aku ini diterima. Maka, Baginda menjawab: Wahai Sa'ad, bersihkanlah makananmu dan percayalah doamu akan diterima oleh Allah SWT. Sesungguhnya jiwa Muhammad di tangan-Nya, seorang hamba yang makanannya daripada sesuap benda yang haram ke dalam perutnya. Sesungguhnya Allah tidak akan memakbulkan doanya selama empat puluh hari dan setiap daging yang tumbuh daripada makanan yang haram dan riba, maka api nerakalah yang layak baginya." (Riwayat al-Tabrani)

# حلالاً طيباً

**Halal** - permissible based on Shariah rulings/Islamic law (religious, faith and spiritual)

**Thoyyiba** - Good or Wholesome (quality, safety, hygienic, clean, nutritious, security)

# What industry involve Halal?

## Traditional



Processed food and beverages



Organic and non-organic ingredients



Logistics services

## Emerging



Cosmetics, personal care and healthcare products



Tourism services



Modest Fashion

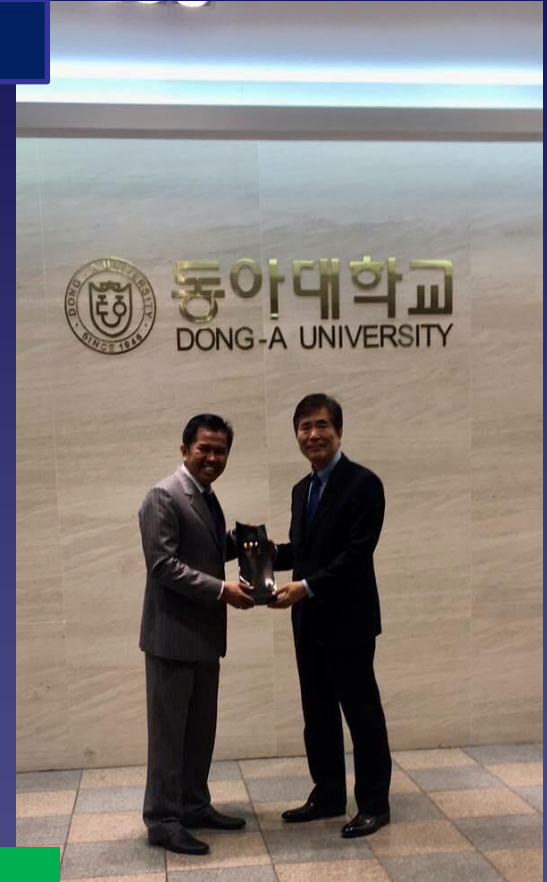
**Halal is about quality of life....**



**Halal concept is not just for Muslim. It is for everyone**

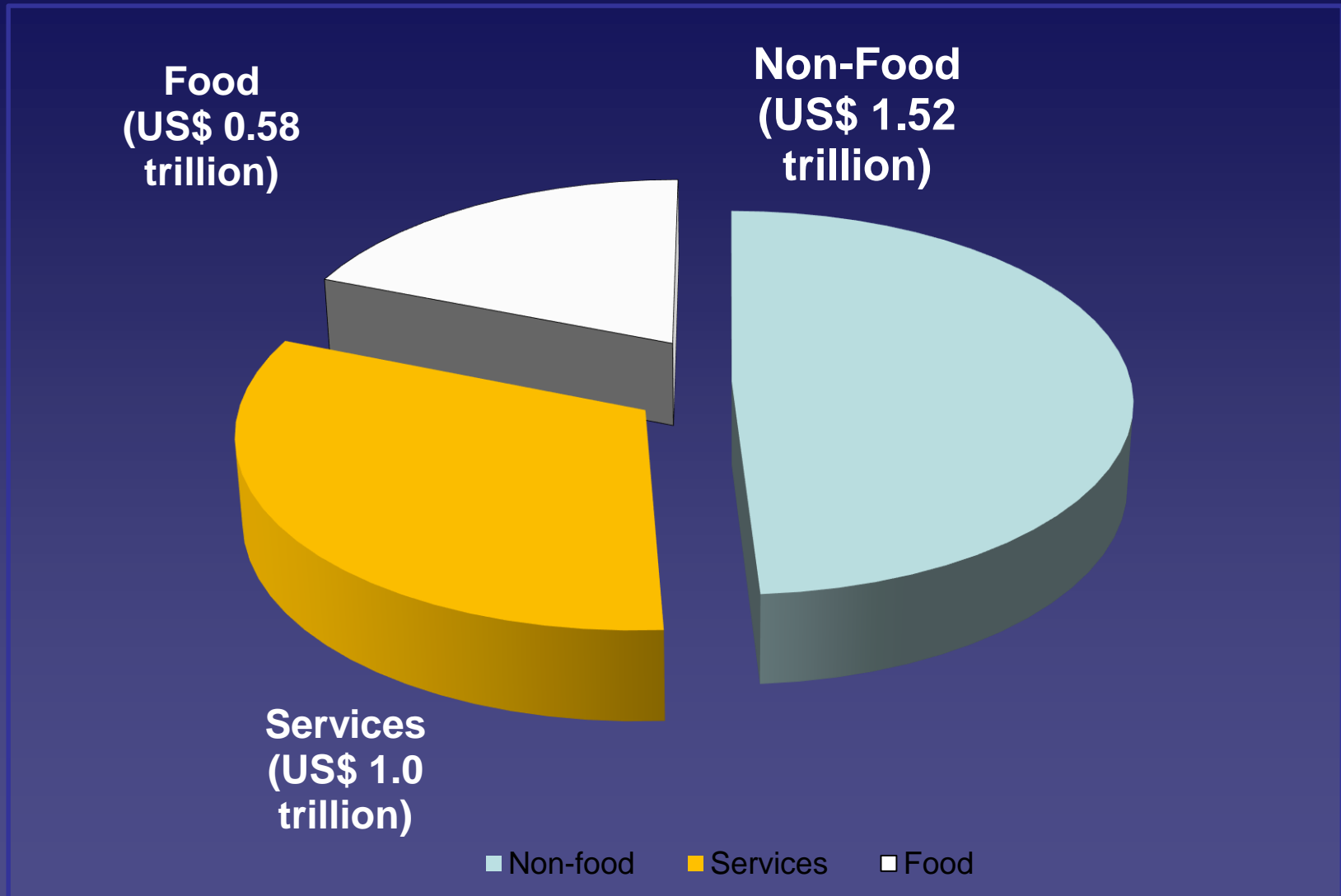


HALAL???



25<sup>th</sup> and 27<sup>th</sup> April 2018, South Korea

# Global Halal Market 2017~ US\$3.1 trillion/year



Source : Fourth Industrial Master Plan (IMP3)

# Global Halal Industry and Food Security

- Halal business - lucrative industry and huge opportunities for domestic and international trade, e.g. Nestle -154 halal-certified range stretches from culinary products to beverages, dairy, chocolates and sports and infants nutrition products
- Demand for halal food and other Islamic consumer goods is expected to proliferate in the coming years
- Currently, ~ 2.0 billion Muslims
- Growing demand not only from Muslims but also others wishing for extra security on food safety and quality (thoyyiba)

# Korean Cosmetics

2300 COMPANIES



My views on Korean cosmetic industry in Tempo (English Version).

Pandangan saya tentang industri kosmetik halal Korea yang ditulis Tempo.



TODAY.LINE.ME  
South Korean Cosmetic Industry Eyeing the Halal Industry







# MALAYSIA OFFERS A COMPLETE HALAL ECOSYSTEM

## Production



Halal food & beverages



Halal pharmaceutical



Halal cosmetics & personal care



Halal Ingredients

## Services



Halal logistic



Islamic banking & takaful



Islamic healthcare



Islamic tourism

## Infrastructure



Halal Industrial Parks



Halal R&D – testing lab



Traceability system



Standard & certification

## Government Support



**STANDARDS**  
MALAYSIA

## Human Capital

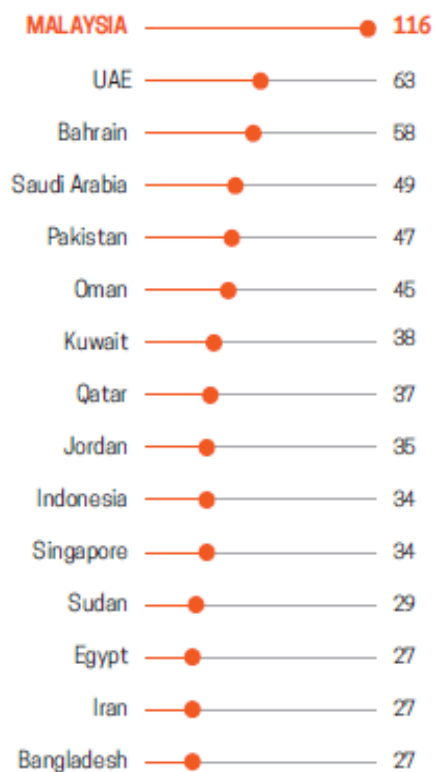


- Halal Knowledge Workers
- Halal Executives & Auditors
- Syllabus in universities & colleges

**“Halal as the new source of economic growth”**



## TOP 15 COUNTRIES GIE Indicator Score



## TOP 10 Halal Food

- 1 MALAYSIA
- 2 PAKISTAN
- 3 UAE
- 4 AUSTRALIA
- 5 OMAN
- 6 BRAZIL
- 7 JORDAN
- 8 AZERBAIJAN
- 9 EGYPT
- 10 QATAR



## TOP 10 Islamic Finance

- 1 MALAYSIA
- 2 SAUDI ARABIA
- 3 UAE
- 4 SAUDI ARABIA
- 5 OMAN
- 6 PAKISTAN
- 7 KUWAIT
- 8 QATAR
- 9 INDONESIA
- 10 SUDAN



## TOP 10 Halal Travel

- 1 MALAYSIA
- 2 UAE
- 3 SINGAPORE
- 4 THAILAND
- 5 JORDAN
- 6 MALDIVES
- 7 TURKEY
- 8 SAUDI ARABIA
- 9 QATAR
- 10 SAUDI ARABIA



## TOP 10 Modest Fashion

- 1 CHINA
- 2 UAE
- 3 ITALY
- 4 BURKINA FASO
- 5 SRI LANKA
- 6 SINGAPORE
- 7 TURKEY
- 8 TOGO
- 9 SENEGAL
- 10 FRANCE



## TOP 10 Halal Media and Recreation

- 1 SINGAPORE
- 2 UAE
- 3 LEBANON
- 4 UK
- 5 FRANCE
- 6 GERMANY
- 7 SAUDI ARABIA
- 8 USA
- 9 AUSTRALIA
- 10 CANADA



## TOP 10 Halal Pharma and Cosmetics

- 1 SINGAPORE
- 2 EGYPT
- 3 MALAYSIA
- 4 PAKISTAN
- 5 JORDAN
- 6 UAE
- 7 INDONESIA
- 8 OMAN
- 9 SAUDI ARABIA
- 10 YEMEN

# GLOBAL HALAL HUBS

The Positions

## STATE OF THE GLOBAL ISLAMIC ECONOMY REPORT 2015/16

Source: Thomson Reuters & Dinar  
Standard

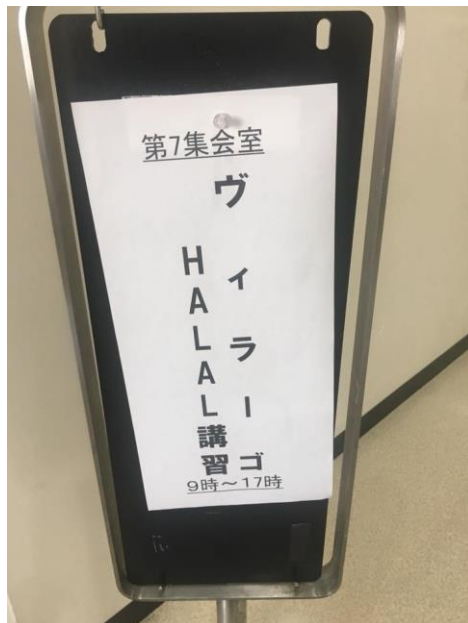


# Korea dan Makanan Sunnah





# ■ Olimpiade Tokyo dan Halal



**HALAL AWARENESS FOR MUSLIM FRIENDLY HOSPITALITY SERVICES PROGRAM for Japanese Industries, TOKYO, JAPAN**

# Bagaimana di Saudi?



Halal talk in Food  
Conference, Jeddah 2015



# Halal di Xinjiang



# Halal di China





# Halal di Taiwan

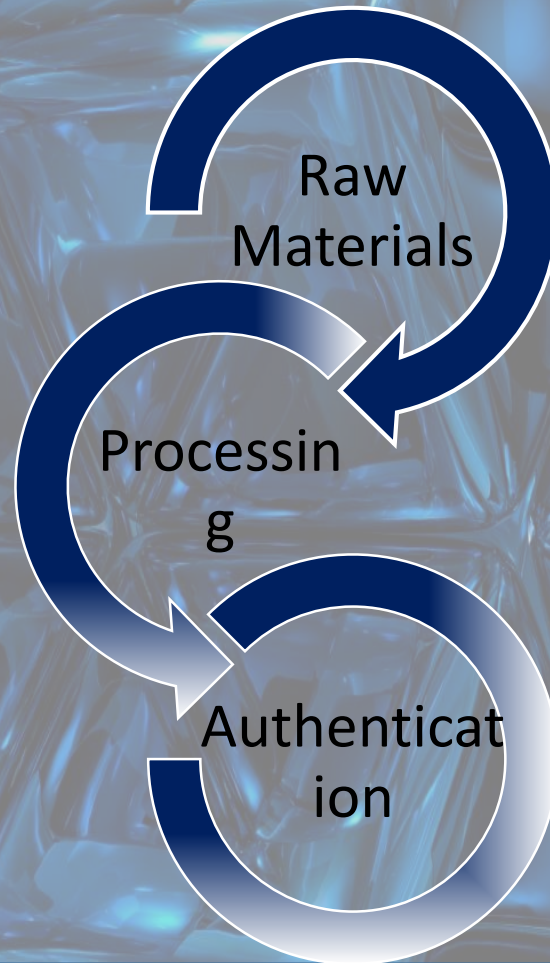




# Issues in Halal Industry

- Halal food concept is simple; however, the industry is becoming more complex
- Due to breathtaking technological development today and the diversification of sources acquired globally for food processing and production, numerous number of processed food are available in the market
- It is increasingly difficult for Muslims during this challenging times to ensure the halal status of food in the market
- This trend has raised concerns among Muslim consumers regarding new processed food and other consumer products

# Tiga Isu Halal Utama



# Potential Critical Areas

- Raw materials – animal or plant origin
- Slaughtering – stunning and thoracic sticking issues
- Processing operations/equipment – cross-contamination
- Packaging/Storage/Transportation (logistic issues)
- Food ingredients and additives
  - Pig and its by-products (e.g. pork, lard, gelatin)
  - Enzymes (e.g. rennet, pepsin)
  - Emulsifiers (e.g. E471/E472 or mono- & diglycerides)
  - Intoxicants (alcoholic beverages, drugs)
  - Blood
- Genetically modified food
- Safety and quality aspects

## COMMON CRITICAL INGREDIENTS IN PHARMACEUTICALS

- ✓ Placenta from human and animals
- ✓ Lard
- ✓ Gelatin and collagen (from pork or animal that was not slaughtered according to Shariah law)
- ✓ Emulsifiers (from lard or animal fat that was not slaughtered according to Shariah law)

## GELATIN - PHARMACEUTICALS AND COSMETICS

- Capsule (soft and two-piece hard capsule)
- Tablets (binding, moisturizing and coating agent)
- Lozenges and cough drops
- Excellent stabilizer and emulsifier in pharmaceutical emulsions
- External application of drugs to treat various skin disorder



# Placenta Halal?



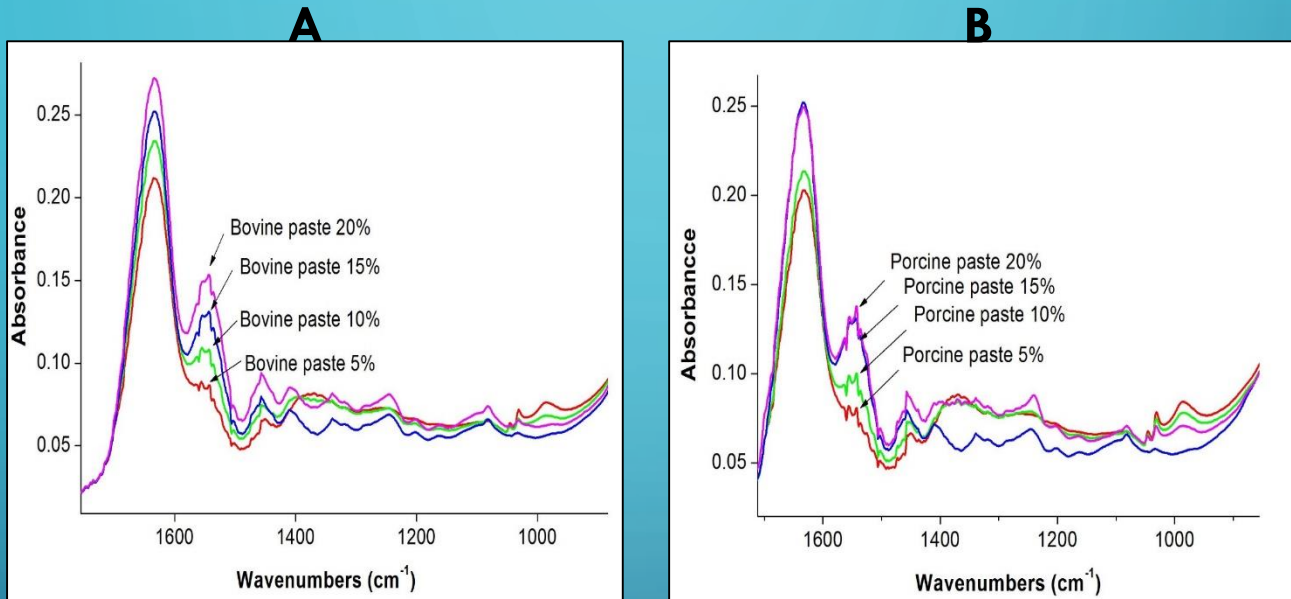
**Teknologi HPP**



## Past and Current Research on Gelatin

- Gelatin from local goat for pharmaceutical capsules (in Indonesia)
  - Fish gelatin (30 species)
    - Production of fish gelatin nano-particles
- Encapsulation of bioactive peptide using gelatin nano-particles
  - Production of plant-based gelatin replacers
- Development of portable device for rapid authentication of non halal gelatin
  - Determination of gelatins in dental materials
    - Camel gelatin project (with KSU)
    - Seaweeds projects

# Rapid Detection of Porcine Gelatin in Dental Materials



Concentration-dependent FTIR spectra of dental bovine paste (A)  
Concentration-dependent FTIR spectra of dental porcine paste (B).

# Detection of Ethanol in Mouthwash using Portable E-Nose





## Camel Gelatin Project



# Pilot Plant of Gelatin and Derivatives



# BROMME

## CREAM CHEESE



Perfect for Baking!

# BROMME

## CREAM CHEESE







**A**



**B**



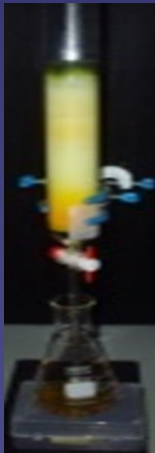
**C**








**D**



**E**



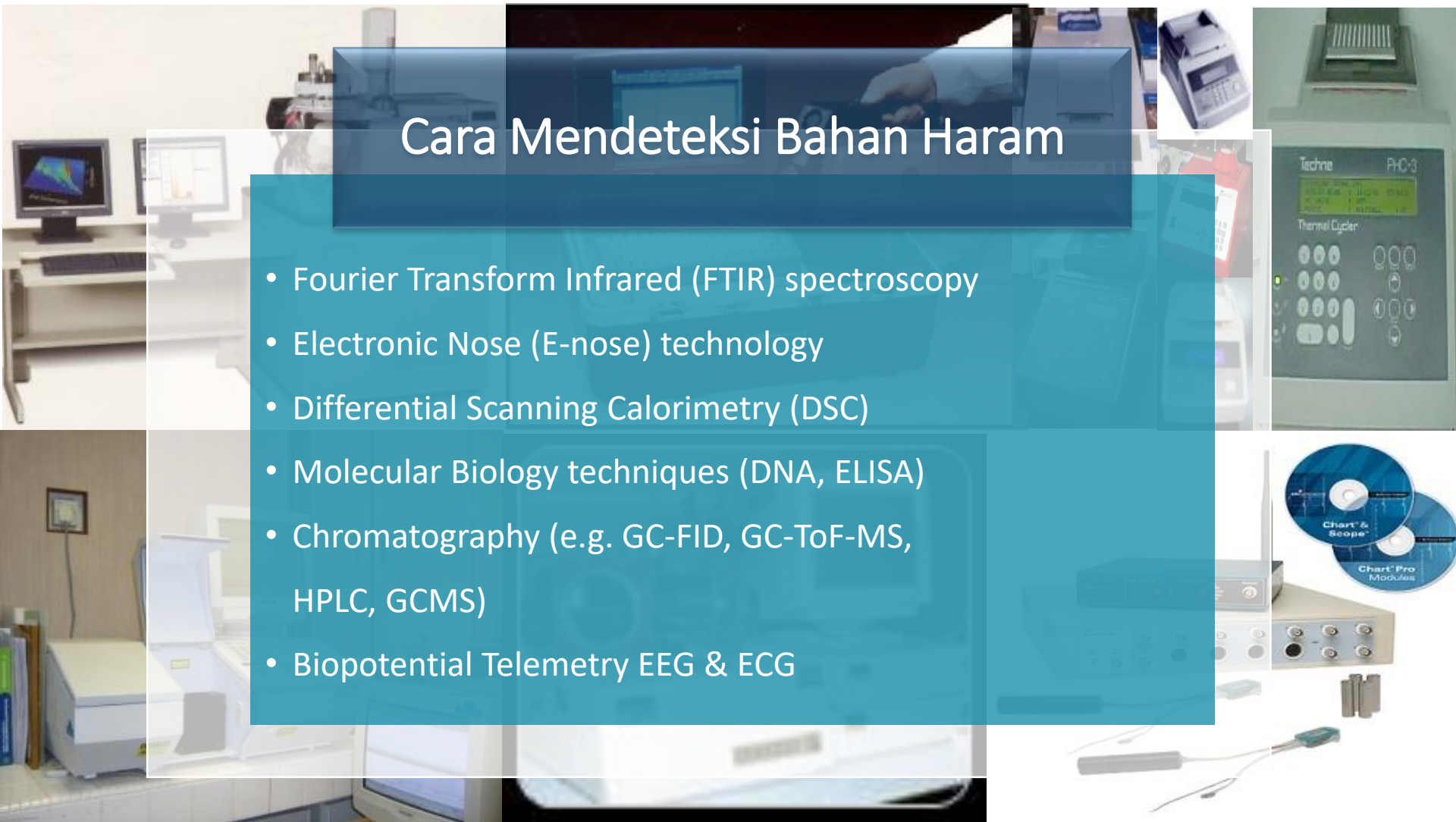


-  Antioxidant
-  Anti-cancer
-  Anti-diabetic
-  Anti-inflammatory
-  Anti-obesity



# Cara Mendeteksi Bahan Haram

- Fourier Transform Infrared (FTIR) spectroscopy
- Electronic Nose (E-nose) technology
- Differential Scanning Calorimetry (DSC)
- Molecular Biology techniques (DNA, ELISA)
- Chromatography (e.g. GC-FID, GC-ToF-MS, HPLC, GCMS)
- Biopotential Telemetry EEG & ECG

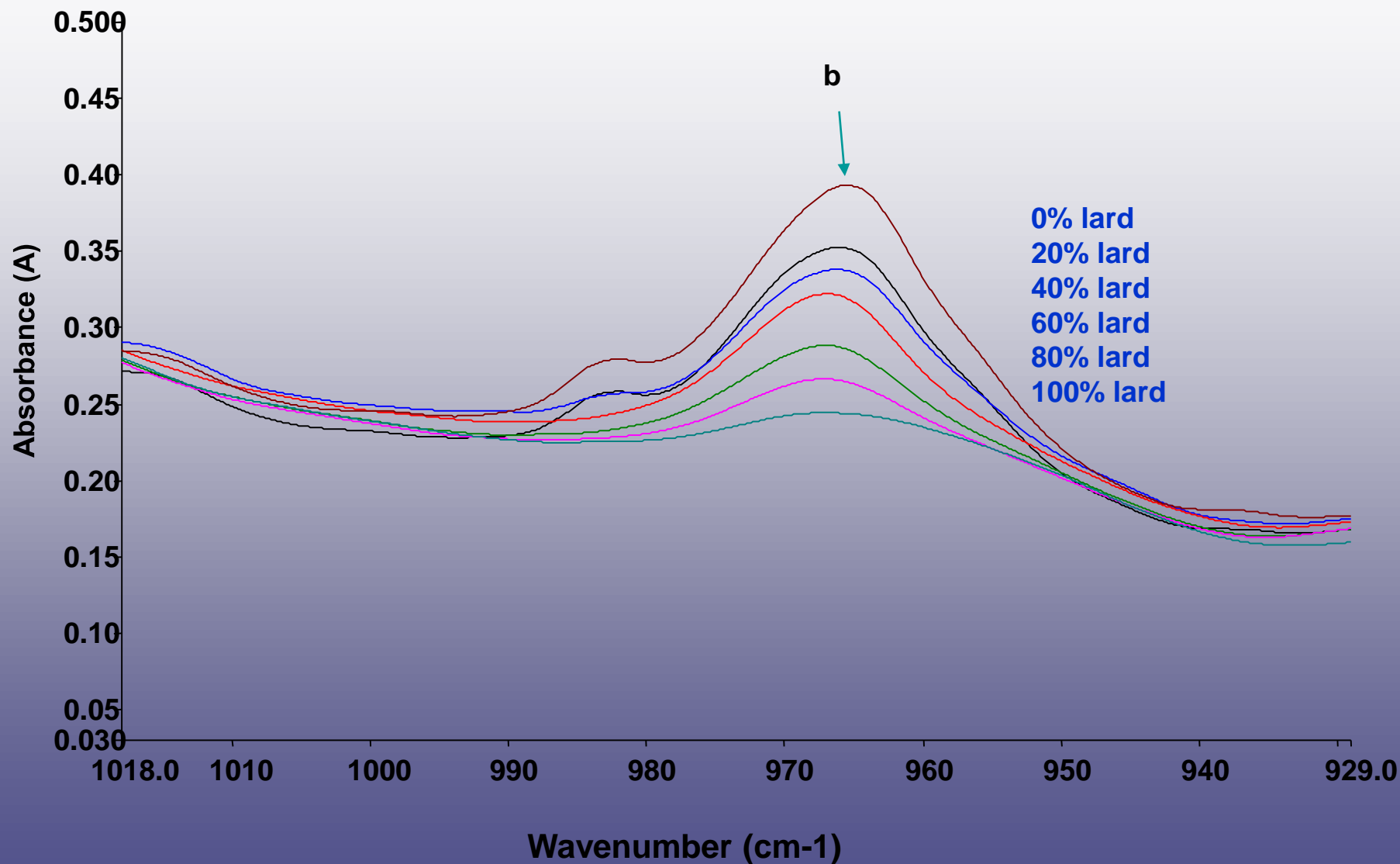


# FTIR SPECTROSCOPY





# Expended view of region 990-950 $\text{cm}^{-1}$



# Electronic Nose (E-nose) Technology

- An instrument, which comprises an array of electronic chemical sensors and appropriate pattern recognition system, capable of recognizing simple or complex odor or smell
- This technique is applied to monitor the presence of haram or unsafe ingredients (e.g.lard, pork, , melamine, etc in food samples)

# Electronic Nose



Raw /  
Processed  
meats sample

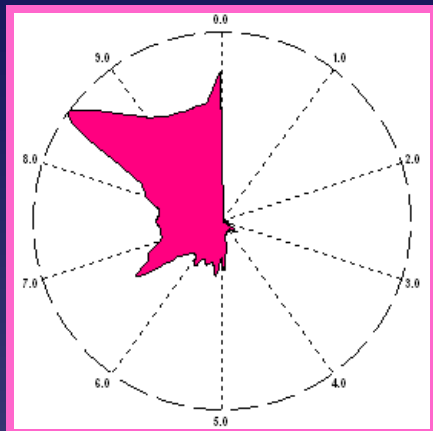


Principle  
component  
analysis  
(Data  
interpretation)

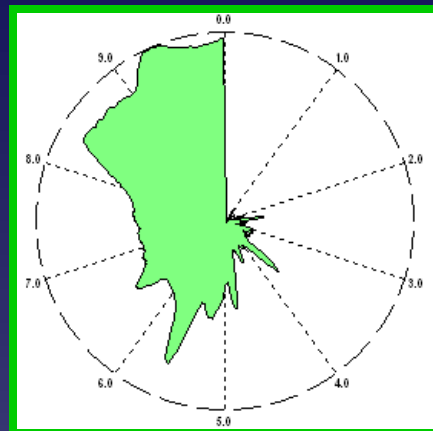
Electronic nose  
analysis

Array of electronic chemical sensors  
+  
Appropriate pattern recognition system  
↓  
Recognizing odors

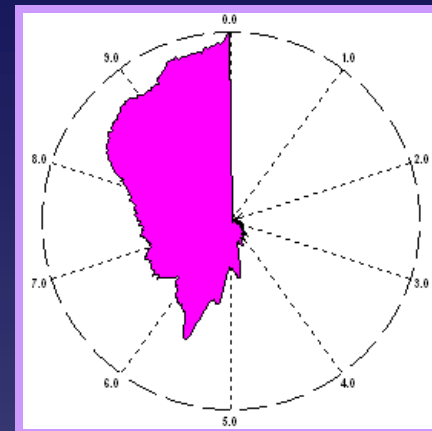
# VaporPrint™



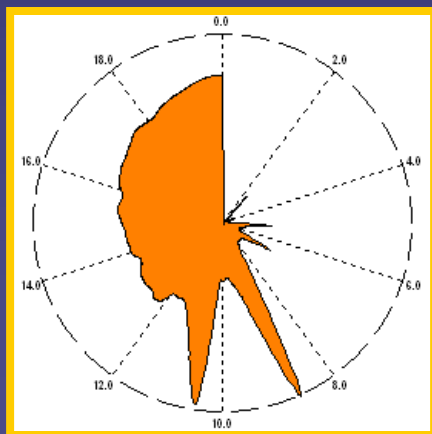
CORN OIL



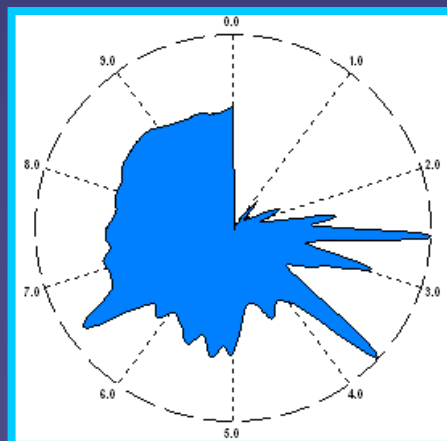
PEANUT OIL



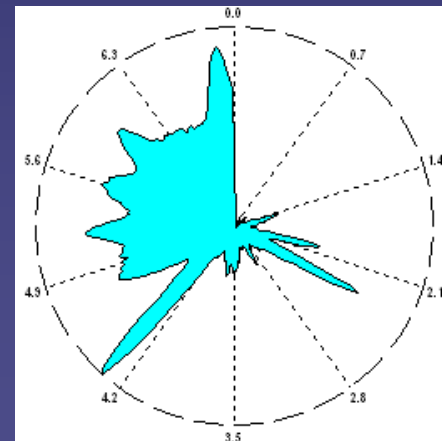
PALM OLEIN



COCONUT OIL



SESAME OIL

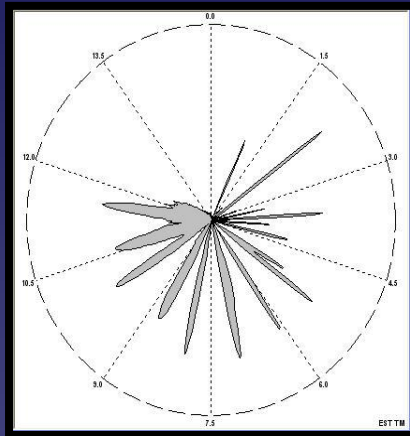


LARD

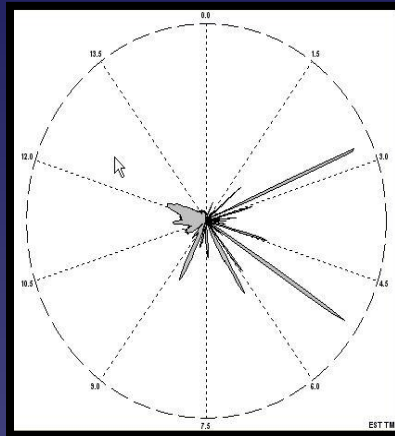


# Rapid Detection of Haram Meat (pork) by Electronic Nose

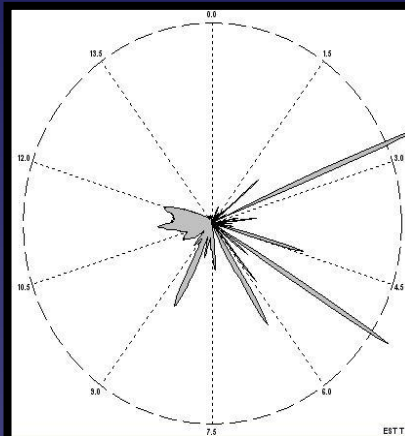
## VaporPrint™



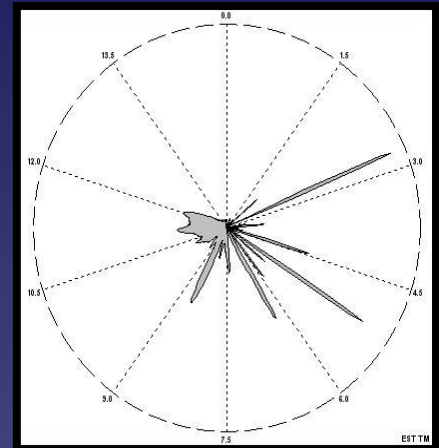
**Pork**



**Chicken**



**Beef**



**Mutton**

Typical chromatograms of four different types of meat. Pork showed more aromatic compound corresponding to the number of peaks.

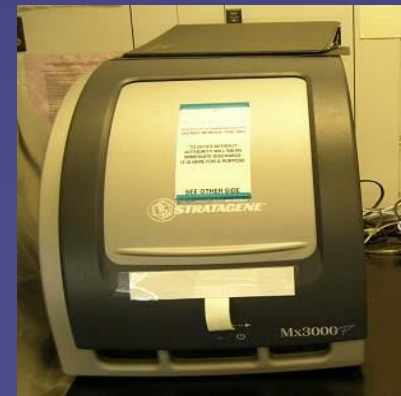
*Nurjuliana, et. al. Meat Sc (2010)*

# Differential Scanning Calorimetry

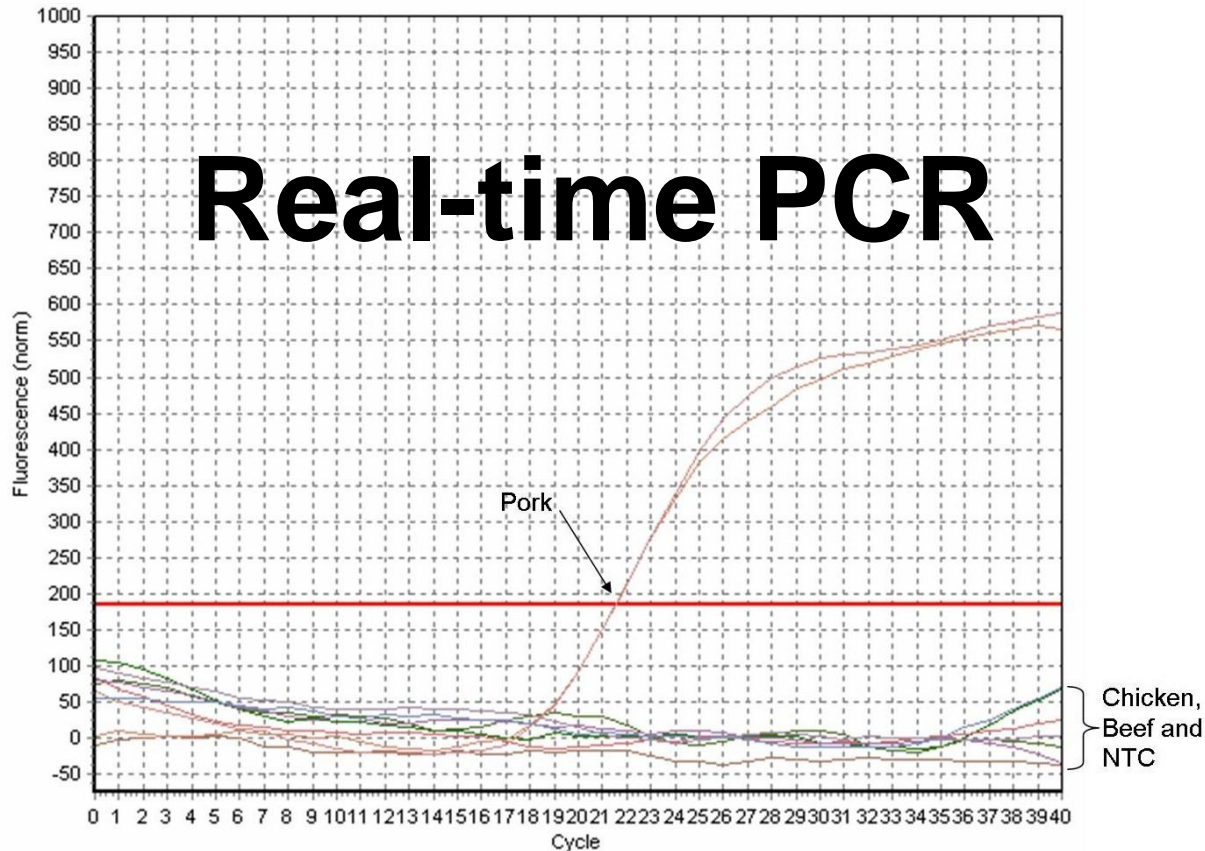




# Molecular Biology Techniques



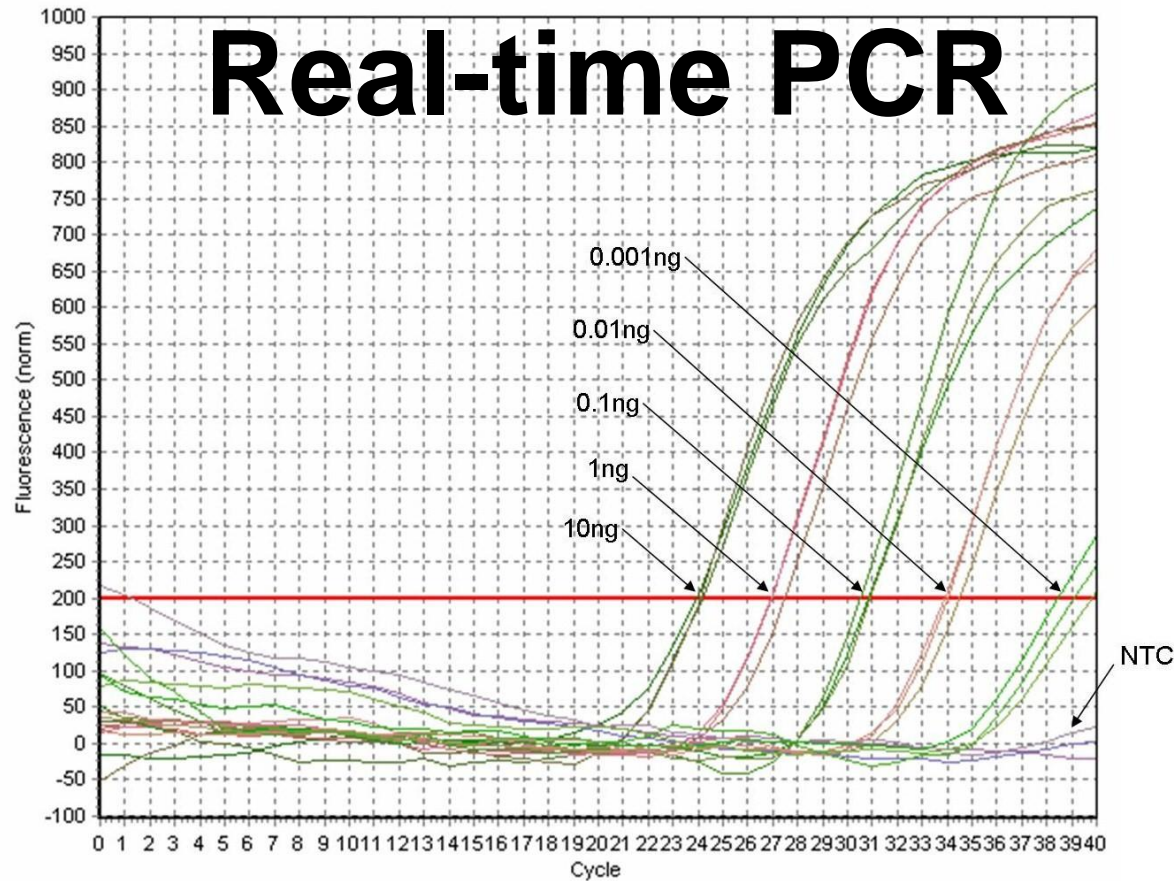
# Real-time PCR



Specificity test on pork primer designed against other meat species (beef and chicken).



# Real-time PCR



## Sensitivity test of pork primer with 10-fold serial dilutions

Detection - 0.001ng of pork DNA. This is an essential discovery in terms of Halal identification of food products

# Alcohol VS Khamr



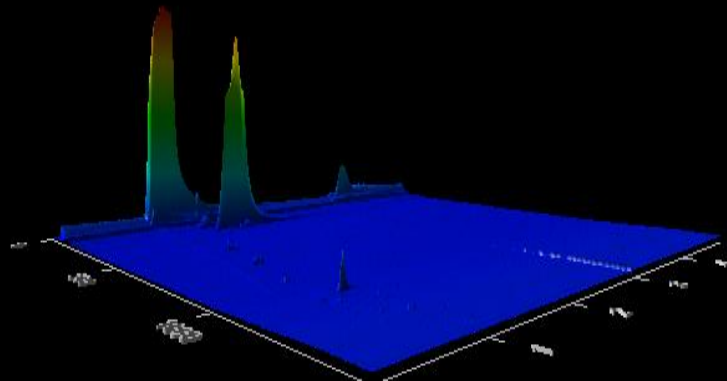
≠  
or  
=



# Distinguishing industrial alcohol and alcoholic beverage using GCxGC-ToF-MS

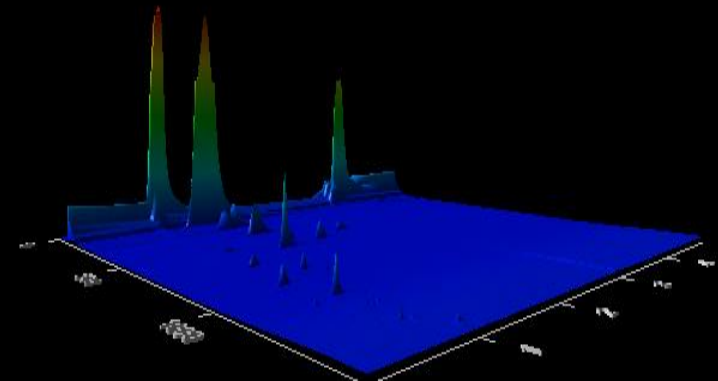
Masses: TIC

industrial alcohol (95%)



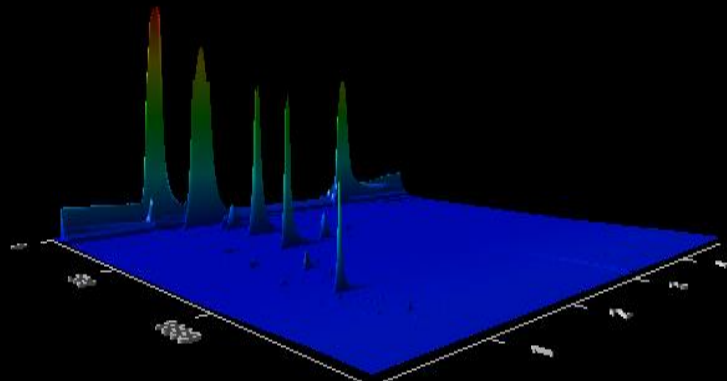
Masses: TIC

red wine



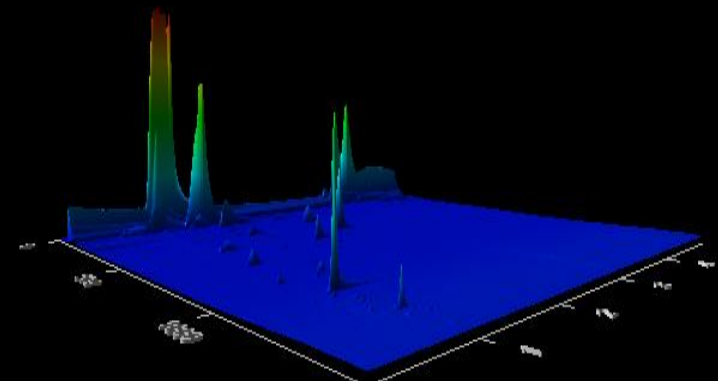
Masses: TIC

white wine



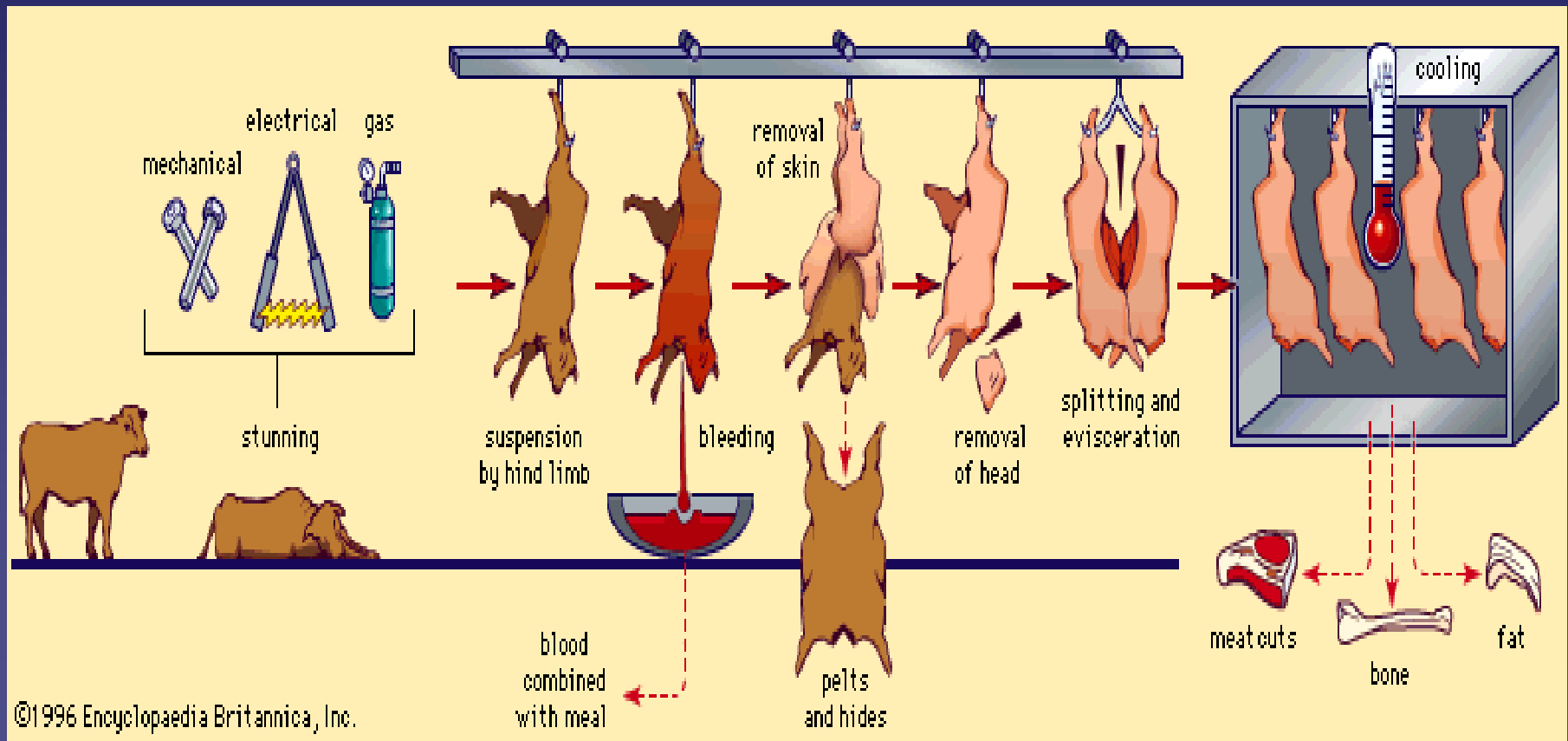
Masses: TIC

cooking wine



# TYPES OF STUNNING

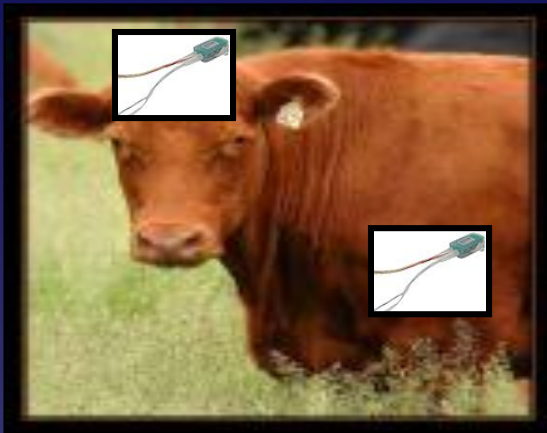
1. Mechanical stunning
2. Electrical stunning
3. Chemical stunning (gas)
4. Pneumatic Stunning





# Biopotential Telemetry EEG & ECG

Stunning/Non-stunning



Transmitter



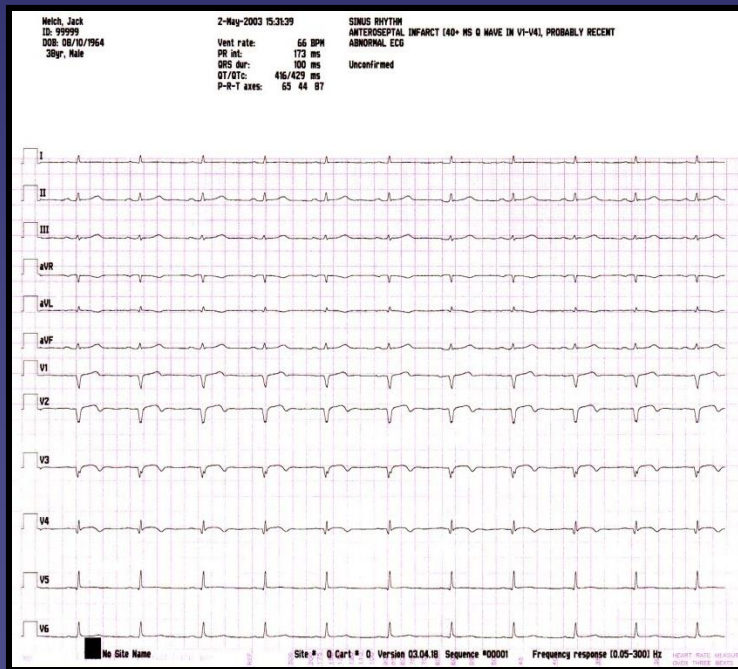
Receiver



PowerLab



Computer



EEG and ECG results

# Some of OUR PARTNERS



할랄 코리아 주식회사  
HALAL KOREA CO., LTD



**al hamra**  
management & consultancy services



**JINGHAI GROUP Co., Ltd.**  
Truth-seeking pragmatic trustworthy pioneering



**TQCS International**  
International certification of management systems



**MIH**  
MYINNOHUB



**YAYASAN PEMBANGUNAN BUKU NEGARA**  
National Book Development Foundation

FROST & SULLIVAN

# HALAL PURIFICATION PRACTICE



## THE OUTCOME - HYGIENIC ENVIRONMENT



# 7x WASH

### Airbone Test

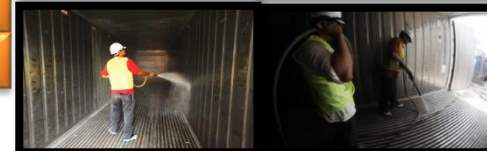
Parameter	Pre Sertu	Post Sertu
Total Bacterial Count	1433 Cfu / m3	186 cfu / m3
Total Fungus Count	1433 cfu / m3	186 cfu / m3

EU Guidelines is according to draft – USP Chapter 1116

and EU Guide to CRITICAL GOOD MANUFACTURING PRACTICE-(cGMP)

Clean Room Performance Test CPT:

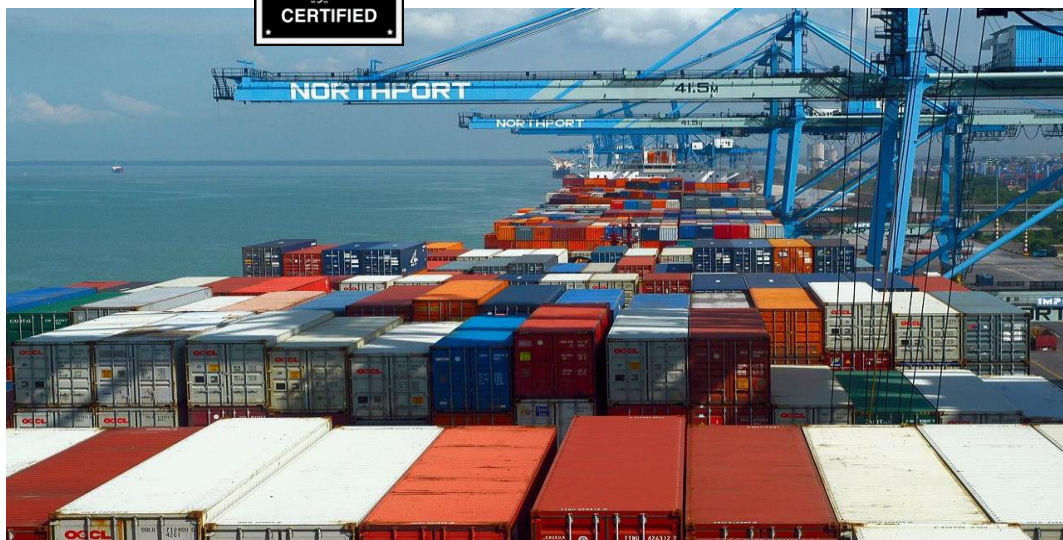
- 1) Grade A : < 1 cfu/m3
- 2) Grade B : 10 cfu/m3
- 3) Grade C : 100 cfu/m3
- 4) Grade D : 200 cfu/m3





HALAL ASSURANCE SYSTEM  
**HPP**  
 Halal Purification Practice  
 ماليزيا  
**CERTIFIED**

**7x WASH**

**OPHL HOLDINGS (M) SDN BHD**

Co. NO. 65370E

Norm Davidson, Jr. 3630 21st Avenue

MS ISO/IEC 17025  
TESTING  
SAMM NO. 6

ANALYTICAL	HAEMATOLOGY	IMMUNOLOGY	MICROBIOLOGY
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CERTIFICATE OF ANALYSIS

Cust. Ref. No. : NP300615  
Lab. Ref. No. : L1-00600615  
Issue Date : 13 Jul 2015

Specimen submitted by  
Nippon Express (MALAYSIA) Sdn Bhd  
on 30 Jun 2015 with the following details :

Facility : North Port (Malaysia) Berhad  
User/Client : Nippon Express (Malaysia) Sdn Bhd  
Authorized Serutu Provider : Global Dibagh Sdn Bhd  
Bill to : Global Dibagh Sdn Bhd  
ID : B (Pre-Serutu)  
ID : A (Post-Serutu)  
Sample Type : Environmental Swabs (20' Footer Dry Type Container)  
Date of Sampling : 30 Jun 2015

Parameter	Results		Test Method
	B (Pre-Sertu)	A (Post-Sertu)	
Total Bacteria Count	$4 \times 10^6$ (400,000 colony forming units/50cm sq)	5 (5 colony forming units/50 cm sq)	[Spread Plate Method, CFU/50 cm [APHA 3.5.1, 37°C, 48h, PCA]

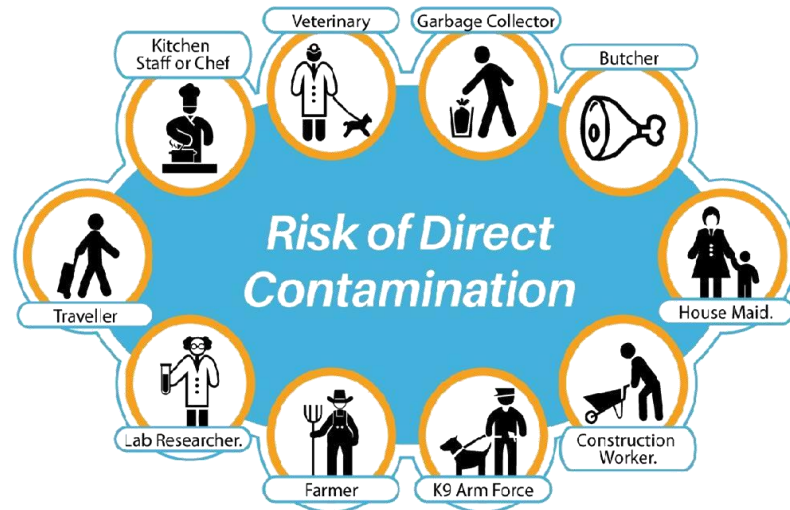
**Rahmah Ab. Rahman**  
Managing Director  
OPHL HOLDINGS (M) SDN BHD

*This report refers to the tested sample only. Sampling is not carried out by our organization. All analysis is carried out to the best of our knowledge and ability and our responsibility is limited to the correctness of the results. This report shall not be reproduced except in full without written approval of the laboratory.*

14

Microbiology Lab : 42-2-2B, Jalan Medan PE2B, Seksyen 9, 43650 Bandar Baru Bangi, Selangor Darul Ehsan. Tel: 0389263577 Fax: 0389263758  
Website: [www.rphl.com.my](http://www.rphl.com.my)

## SERTU LIQUID DETERGENT – PERSONAL CARE USAGE



**tahra**<sup>TM</sup>



Shipper's Name:  
Global Dibagh Sdn. Bhd  
Container No:  
ABCD 1234567  
DATE:  
01 January 2017  
Compliant For:  
MS 2400(1): 2010 (Outbound Container)  
Port of Origin:  
Port Klang, Malaysia

IHP ID No:  
5555800001  
QR Code



Certified  
ihp.com.my



- Third Party Halalan Toyyiban Process Verification
- Guarantee Halal Supply Chain From Farm To Fork
- Contamination Avoidance

Container Sanitation & Sertu Station – Internal view

## KNAPSACK SPRAYER / BACK PACK SPRAYER.







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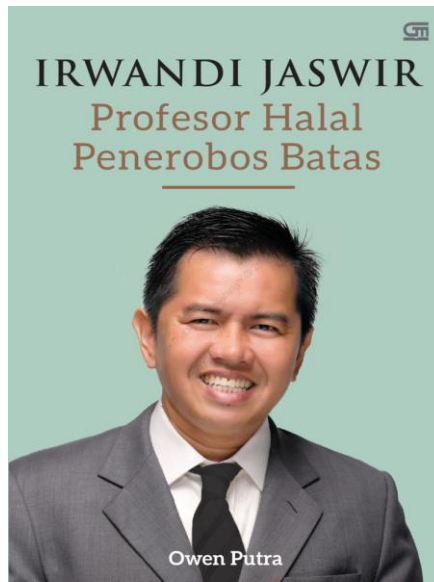
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[Focus and Scope](#)

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[Editorial Team](#)

---





2018



1980



1997



2011



2015





THANK YOU