



## Alternative Ingredients in Halal Cosmetics and Medicine

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## المكونات البديلة في مستحضرات التجميل الحلال والأدوية

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  - Animal Sources
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## Introduction

- The halal cosmetics and medicine industry is expanding and so the problems of integrity in the halal supply chain
- Ensuring **integrity** in the entire halal value chain is very important for **consumer confidence**...need **Standards**
- Ingredients have a critical bearing on whether a cosmetic or medicinal product is halal or not.
- Today's Muslim consumers are/have:
  - Knowledgeable and discerning
  - Information on cosmetics, healthcare and halal matters are accessible on the internet
  - Rising disposable income and are able purchasers
  - Health conscious
  - Beauty conscious

# The Muslim consumers want ...

Cosmetics and medicinal products which are:

- halal, and
- sanitary and safe in application.

“Chemicals used in cosmetics and medicine that is hazardous to health then it is haram based on verse 195, Surah Al-Baqarah (2:195): “Do not throw yourself into destruction”.



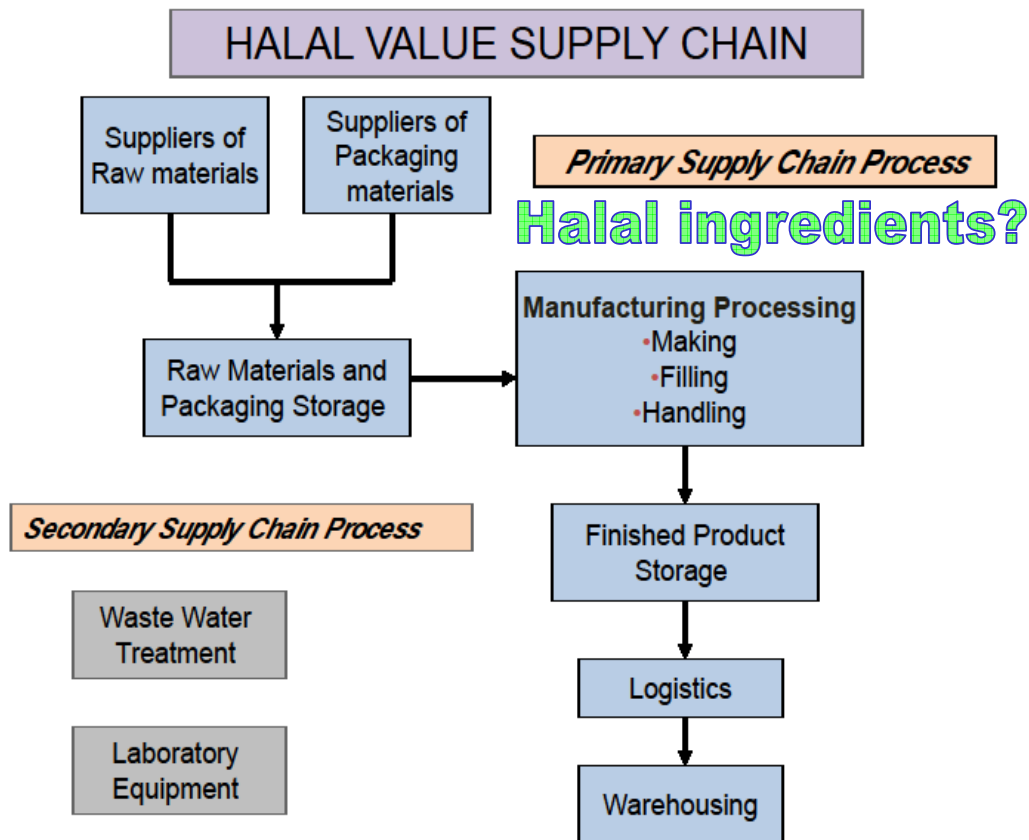
## Haram Sources/Ingredients

- He has only forbidden to you **dead animals, blood, the flesh of swine**, and that which has been dedicated to other than Allah. But whoever is forced [by necessity], neither desiring [it] nor transgressing [its limit], there is no sin upon him. Indeed, Allah is Forgiving and Merciful.

(Al-Quran 2:173)

- They ask you about **strong drink** and gambling. Say: "In them is great sin, and some profit, for men; but the sin is greater than the profit..."

(Al Quran 2:219)



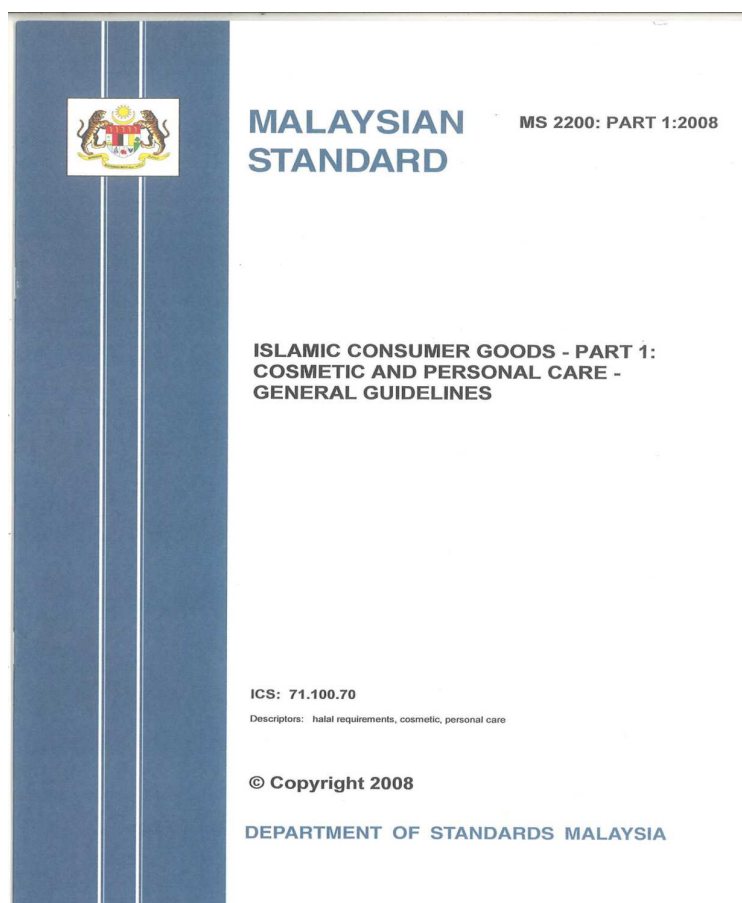
## Potential Critical Ingredients

- The main sources of halal cosmetics and medicine for human are:
  - Animal sources – land and water/aquatic
  - Plants
  - Natural substances
  - Chemical substances
 .....of which some are halal and some are not.
- **Critical Ingredients and additives include:**
  - Pig and its by-products (eg: lard, collagen, gelatine)
  - Oleochemicals
  - Biotechnology and GMO (genetically modified organism)

# Common Haram/non-halal Ingredients

Critical Ingredients	Function	Sources
<b>Gelatine</b>	Capsules, emulsifier, filler	1. Skin, bones, joints (bovine, porcine). Collagen derivatives. 2. Vegetables
<b>Glycerine Glycerol</b>	Diluent, antibacterial, sweetener, preservatives (found in syrup, toothpaste, soaps, shampoo)	1. Lard 2. Vegetables 3. Byproducts of biodiesel productions
<b>Alcohol</b> (ethanol - drinks) (methanol-reagent)	Solvent, Antiseptic	1. Fermentations 2. Chemicals
<b>Stearates</b> e.g Magnesium, Stearic acid, calcium	Lubricants Binder	1. Animal Fats, Lard or fatty acids from pig's stomach) 2. Vegetable (palm oil. Coconut, soybean, castor oil, sunflower)
<b>Enzymes</b> e.g. Trypsin <b>ACTH</b>	Media for microbial growth (TSB) Hormones, corticotrophin	1. Pig's Pancreas 2. Pig's Pituitary Gland
<b>Heparin</b>	Anti-Clotting Agent Also used in 'coating' in medical devices e.g. catheter, heart transplant devices	1. Pig's intestine 2. Bovine

## MS 2200: 2008 Halal Cosmetic



## Definition: Halal Cosmetics

Cosmetics permitted under the Shariah law and fulfill the following conditions:

- a) No human parts or ingredients derived from there of;
- b) do not comprise of or contain any parts or substances derived from animals forbidden to Muslims by *Shariah* law, to use or to consume or from *halal* animal which are not slaughtered according to *Shariah* law;
- c) do not contain any materials or genetically modified organisms (GMO) which are decreed as *najs* according to *Shariah* law;
- d) is not prepared, processed, manufactured or stored using any equipment that is contaminated with things that are *najs* according to *Shariah* law;
- e) during its preparation, processing or manufacturing the product is not in contact and shall be segregated from any materials that do not meet the requirements stated in items a), b) or c); &
- f) do not harm the consumer or the user.

## Definition: Najs

- things that are themselves not permissible such as dog and pig (*khinzir*) and all its derivatives, blood and carrion;
- things that are contaminated with things that are *najs*;
- things that come into direct contact with things that are *najs*;
- any liquid and objects discharged from the orifices of human beings or animals such as urine, placenta, excrement, blood, vomit, pus, sperm and ova of pigs and dogs (milk, sperm and ova of human and other animals are not *najs*); and
- carrion or *halal* animals that are not slaughtered according to *Shariah* law.

# Sources of halal cosmetic

## Land and aquatic animals

- Sources derived from halal land animals and slaughtered according to Shariah law are halal. Sources derived from land animals' fur, hair and related material which were harvested whilst the animals are still alive are halal.
- Sources derived from eggs that are from the animals which are not najis, are halal.
- All aquatic animals that are halal for consumption can be the sources for cosmetic and personal care.

## Continue....

### Plants and microorganism

- Sources derived from plants and microorganisms on land, air and water, are all halal for use except those that are hazardous and/or mixed with najis.

### Soil and water

- All sources from the soil and water and its by products (including minerals) are halal for use except those that are hazardous and/or mixed with materials that are decreed as najis.

### Alcohol

- Materials for cosmetic and personal care that contain alcohol excluding alcoholic drinks (khamr) are permissible

### Synthetic

- Materials for cosmetic and personal care produced synthetically are halal except those that are hazardous and/or mixed with materials that are decreed as najis.





## Why Halal Medicine?



What is the sources for these gelatin capsules?



What is the source for these vaccines, insulin?



# Why Halal Medicine?

**“Patients have a right to demand the highest standard of care from healthcare professionals”**

*Dept. of Health: The Patient's Charter. London: DOH 1999*

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## Religious views on Halal Medicine

Medicines which are made from haram materials or najis are haram according to the consensus of the Muslim jurists, because the Prophet SAW said:

**“Allah does not put your cure in that which He has forbidden for you.”** (Reported by Al-Bukhari).

Abu Hurairah narrates that the Prophet SAW said:

**“There is no disease that Allah has created except that He also created its remedy”.** (*Bukhari 7.582*)



## **MS 2424:2012 – Halal Pharmaceuticals - General Guidelines**

1. Scope
2. Normative references
3. Terms and definitions
4. Requirements
5. Compliance
6. Halal Certificates
7. Halal Certification Mark

# Terms and definitions

## 3.1 Pharmaceuticals

- Pharmaceutical products in finished dosage forms, includes both prescription and non-prescription medicinal products for human use (ie. biopharmaceuticals, radiopharmaceuticals, traditional medicines and investigational medicinal products) which is registered with the Drug Control Authority, Ministry of Health Malaysia

## **Definition: Halal pharmaceuticals**

Pharmaceutical products that contain ingredients permitted under the Shariah law and fulfill the following conditions:

- a) do not contain any parts or products of animals that are non-halal by Shariah law or any parts or products of animals which are not slaughtered according to *Shariah* law;
- b) do not contain najis according to Shariah law;
- c) safe for consumption, non-poisonous, non-intoxicating or non-hazardous to health according to prescribed dosage;
- d) not prepared, processed or manufactured using equipment contaminated with *najis* according to *Shariah* law;
- e) do not contain any human parts or derivatives that are not permitted by Shariah law; and
- f) during its preparation, processing or manufacturing the product is not in contact and shall be segregated from any materials that do not meet the requirements stated in items a), b) or c); and



Spirulina pills



Bee pollen



Bilberry



Kacip Fatimah



Evening primrose



Garlic

## Alternative Animal Ingredients

- Gelatine is an animal ingredient, never from plants
- Collection Centre for Halal bone, hides and tendons
  - Halal Certified Bovine Gelatine from slaughtered cows
- Production Centre for fish skins
  - Halal Gelatine from Fish Skins
- Gelatine substitutes from plant gums:
  - Agar-Agar and carrageenan from Sea Weed
  - Plant Gums, Guar, Tara, Acacia, Arabic
  - Pectin
  - CMC Carboxymethyl Cellulose
  - Xanthan gum from Microorganisms

# Alternative Plant Sources

All plant types and their products are deemed halal **except** for those which are poisonous, intoxicating, pose a danger to human health and biotechnology produced plants using DNA derived from forbidden substances.



## Seaweeds

- Worldwide 145 species of red, brown or green seaweed are used as food
- About 50% of world production is cultivated.
- 42 countries are involved in the commercial seaweed activity
- Excellent sources of components with biological activities - antioxidants, soluble dietary fibers, proteins, minerals, vitamins
- Shown to have therapeutic properties (prevention such as anticancer, anti-obesity, Antihypertensive, Antioxidant, anticoagulant, Antibacterial ) for health and diseases (Suhaila et al. 2012)

# Herbs

- The World Health Organization(WHO) estimates that over 80% of the world’s population uses some form of herbal medicine
- Medicinal herbs – use as health benefits
- Herbs are perceived to be safe and healthy, with relatively few side effects in contrast to synthetic drugs.
- The global herbal supplement and remedies market is expected to reach \$93 billion by 2015 (San Jose,2011)
- *Centella asiatica (pennywort)* - traditional herbal medicine in Malaysia, Indian Ayurvedic medicine, China and other part of Asia for hundreds of years. Its benefit as a natural antioxidant extracts which helps in wound healing, anxiety, eczema, ulcers, colds, hepatitis and fatigue

# Palm Oil

Ingredients	Potential use
<b>Functional</b> <ul style="list-style-type: none"> <li>• Lycopene</li> <li>• Beta Carotene</li> <li>• Tocotrienols</li> </ul>	Cosmetics, Nutraceuticals
<b>Enzymes</b> <ul style="list-style-type: none"> <li>• Lipase</li> <li>• Coenzymes Q10</li> </ul>	Cosmetics
<b>Chemicals</b> <ul style="list-style-type: none"> <li>• Glycerin</li> <li>• Mono and Di glycerides</li> <li>• Sodium Laureth Sulphate</li> </ul>	Soaps, lotions and creams Emulsifiers Bath showers and shampoos (RTS Resources)



## Natural Substances

All natural substances such as water, minerals and others are permissible **except** polluted by sewage, are toxic, intoxicating and dangerous to health.

### Malaysian Fatwa on 14 -16.7.2011:

**Medicines** and **perfumes** that contain alcohol as a solvent is **not *najs***, and if the **alcohol** is not taken through the **process of wine making**.



## Moving Forward

More R&D and technology commercialization on ingredients mentioned in the Quran and the Hadith

- Olive oils
- Honey
- Ajwa Dates
- Fig
- Habbatus Saudah
- Manna
- Melons

# Summary

- **Halal Cosmetic and medicine** are not only complying to Shariah requirement but are also safe and with good quality.
- **Halal Certification** is important to verify the halal status of a product based on the standard
- Integrity of Halal products from farm to fork is important and made possible by certification
- Product traceability is crucial to ensure all ingredients used are of Halal origin.
- Developing the Halal Industry through standards and certification together is the way forward!



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# FSQ UNIT, UMS - Halal Training Modules

<b>UNDERSTANDING HALAL FOOD (HF)</b>	<b>HALAL FOOD INDUSTRY DEVELOPMENT (FI)</b>	<b>HALAL TRAINING PACKAGE (HTP)</b>
HF01 - Basics of Halal Food (1 day)	FI01 - Basics of Halal Food Industry Development (1 day)	HF01 + HF02 + MeSTI Halal and Thoyyib Food (2 days)
HF02 - Intermediates of Halal Food (1 day)	FI02 - Intermediates of Halal Food Industry Development (1 day)	FI01 + FI02 + GMP Halal Executive (2 days)
HF03 - Advanced Level of Halal Food (1 day)	FI03 - Advanced Level of Halal Food Industry Development (1 day)	FI03 + HACCP Professional Halal Auditor (3 days)



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Mariam Abdul Latif obtained her Diploma in Agriculture from University Pertanian Malaysia in 1977 and in 1990, graduated in Nutrition (Hon) from King's College, University of London. She did her Post Graduate Diploma in Community Nutrition at University Indonesia, Jakarta in 1992 and completed her Masters study in Food Service Management at University Putra Malaysia, specializing in Halal food management in 2004. She began her career in 1979 as a lecturer in agriculture and food processing at the Institute of Agriculture Air Hitam, Johore and later at the Institute of Agriculture Serdang, Selangor (1990-1993). She joined the Ministry of Health Malaysia (MOH) in 1994 as a Food Technologist in Negeri Sembilan heading the state food safety programmes. In 1996, she was transferred to the Food Quality Control Division of MOH and established the office of Codex Contact Point Malaysia under MOH, taking over from SIRIM, after the latter was corporatized in 1995. Being the country Liaison Officer (Codex Contact Point Malaysia), she had participated in many Codex meetings, defending many issues related to food standards, including the adoption of the General Guidelines for Use of the Term "Halal" in 1997. She was appointed as a Consultant to Codex Secretariat at the Food and Agriculture Organization (FAO) of the United Nations in Rome, Italy in 2001 and 2005. She headed the Halal certification programme under the Department of Islamic Development Malaysia (JAKIM) from 2004 to 2006, and was the Vice President (Halal Integrity) of the Halal Industry Development Corporation (HDC) Malaysia from 2007 until July 2010. She was back with MOH as the Selangor State Deputy Director of Health (Food Safety) and was retired in 2011. She is currently lecturing Halal food and human nutrition at Universiti Malaysia Sabah, Kota Kinabalu.