

**GIMDES Halal and Tayyib Workshops Program
24-25 October 2015, Istanbul, Turkey**

HALAL PHARMACEUTICALS



Dr. Mohammed Ali Alsheikh Wace

Universiti Sains Malaysia



Halal Pharmaceuticals



- The Halal pharmaceuticals means that the active pharmaceutical ingredients and excipients are permitted under the shariah law which means they 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 ([SIRIM, 2010](#)).



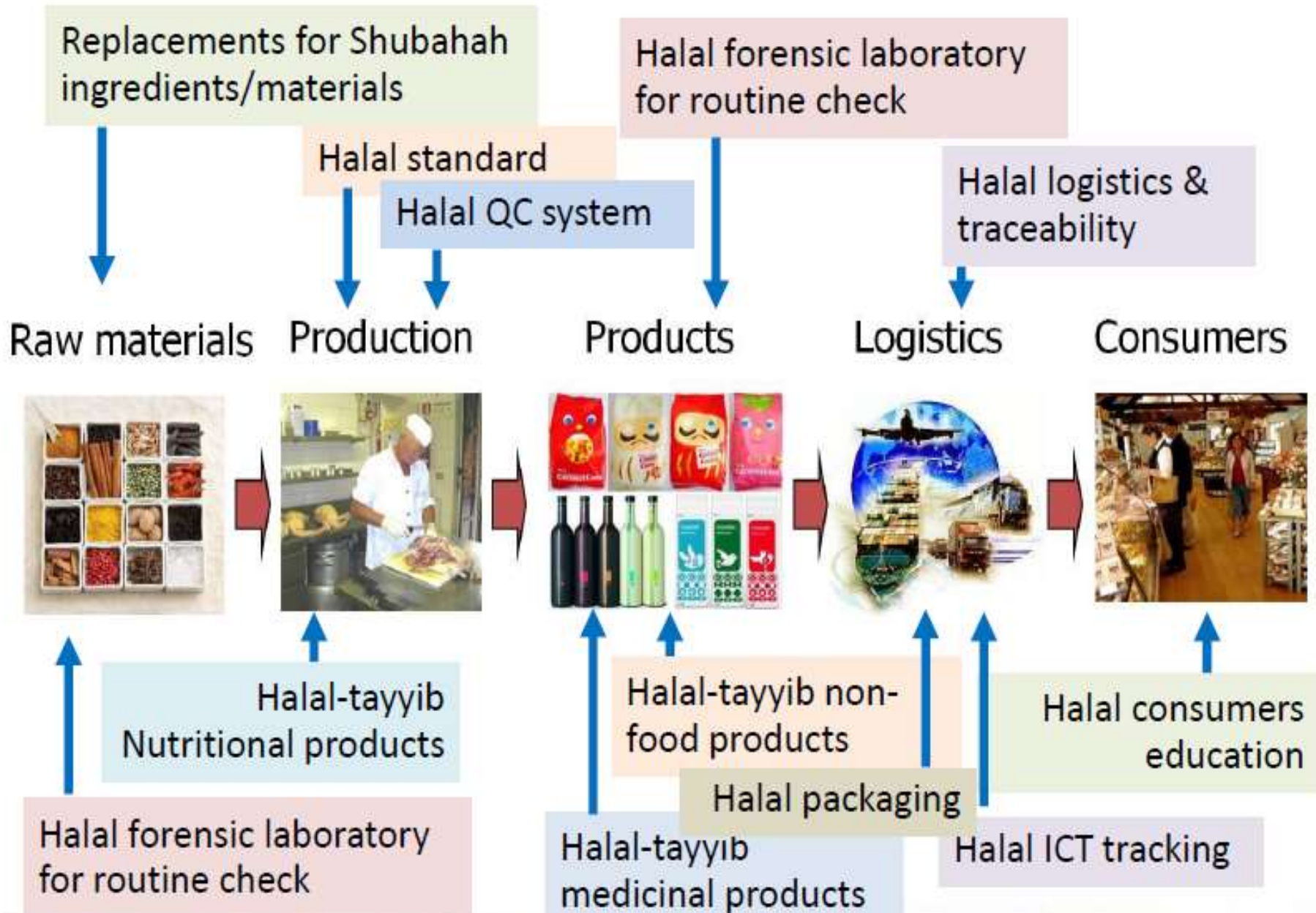
- **No more simple Halal or Haram products,** producing food and pharmaceuticals includes many chemical from different sources

PLENTY OF AVAILABLE FOOD PRODUCTS NOT SUIT FOR HALAL MARKET

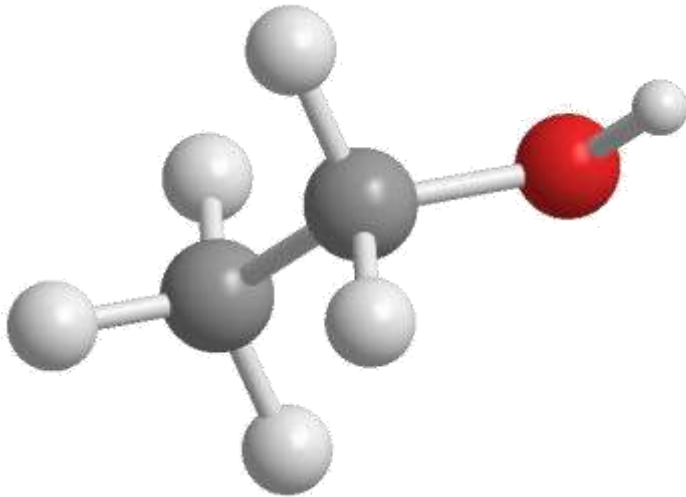


- ← L cysteine (E920) from human hair?
- ← Unslaughtered Animal tissue?
- ← Porcine gelatin/collagen?
- ← Blood derived enzyme?
- ← Porcine enzyme (DiNa 5'-Inositate, E631)?
- ← Brewer's yeast?
- ← GMO with human gene?
- ← Alcohol from spirit?
- ← Minerals from unslaughtered animal's bone?

RESEARCH IN S&T NEEDED FOR HALAL



Medicines Sources

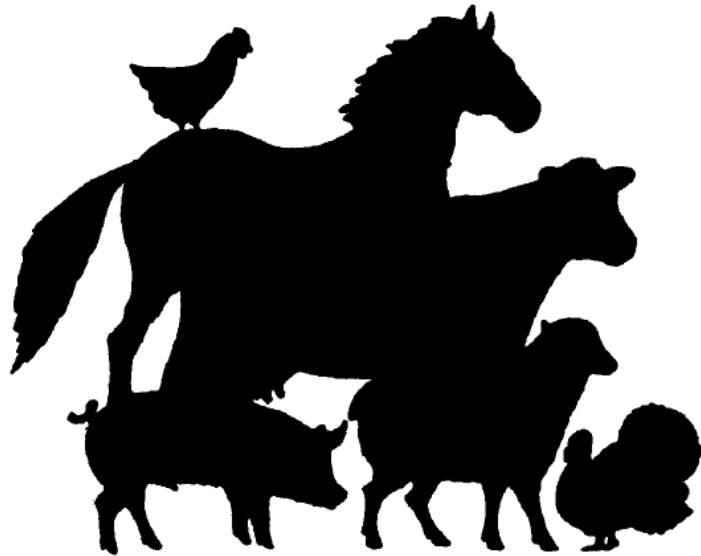


Chemicals



Plants

Medicines Sources



Animals



Biotechnology

Our duties



- Make the haram list
- Find the available alternatives
- Educate doctors and pharmacists
- Discover new alternatives



The right fatwa should have an appendix

- to write haram and mashbooh list within 1 year
- to find the available alternatives within 2 years
- to educate students in medicine and pharmacy schools about these lists
- to find alternatives or reduce the chemicals number in the list every year until finding halal alternatives for all medicines



Until now there are only 2 guidelines standards and the government concern still very limited or nonexistent



MALAYSIAN STANDARD

MS 2424:2012

Halal pharmaceuticals - General guidelines

ICS: 11.120.99

Discription: halal_pharmaceutical_products_preparation_handling_guidelines

© Copyright 2012

DEPARTMENT OF STANDARDS MALAYSIA



knowledge is the first and the most important step to solve all problems related to the Halal pharmaceuticals, with knowledge we can:

- List the critical Halal points for audit
- Educate doctors and pharmacists and other health professionals regard the haram medicines and its alternatives.
- Start research to find alternatives for the haram pharmaceuticals
- Start real Islamic pharmaceuticals industry which made by Muslim people and expert to get to the goal of medical security

Halal pharmaceuticals

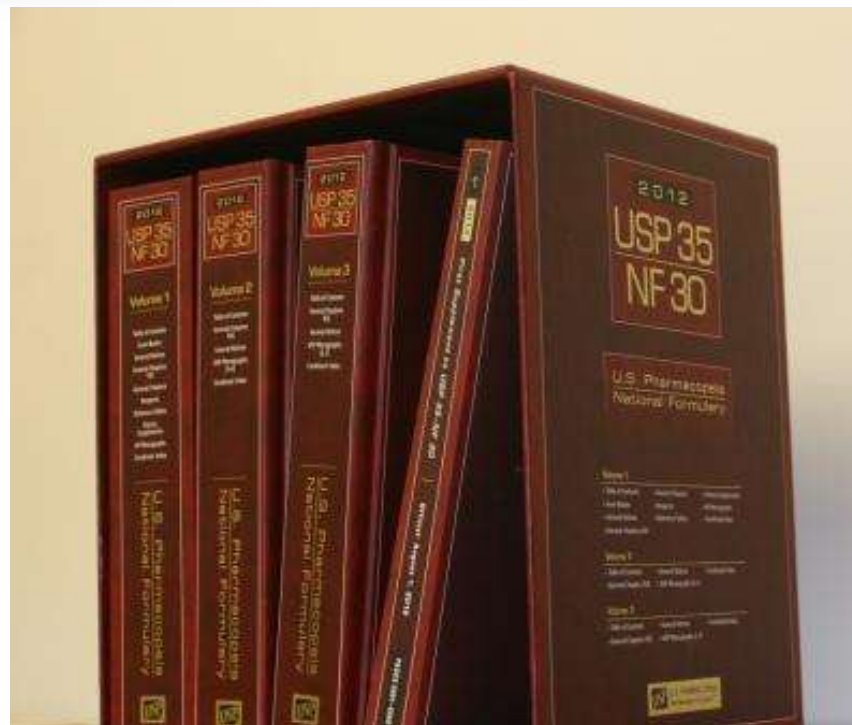
Drug information

resources





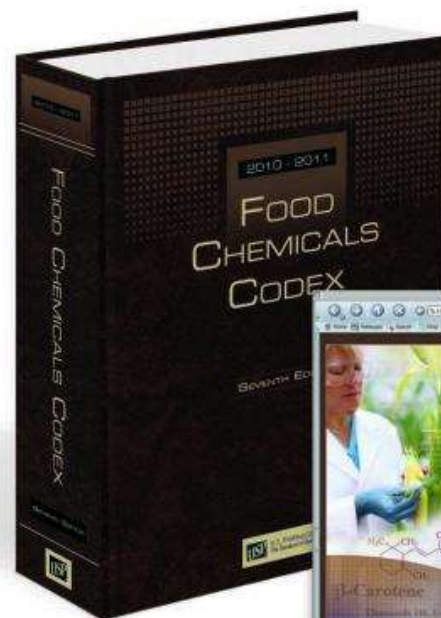
USP-DSC



USP-NF



USP-USAN



USP-FCC



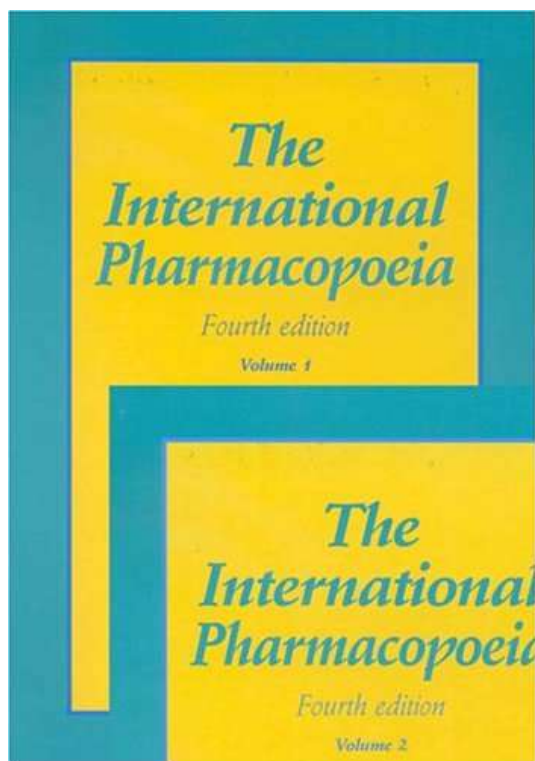
Ch.P



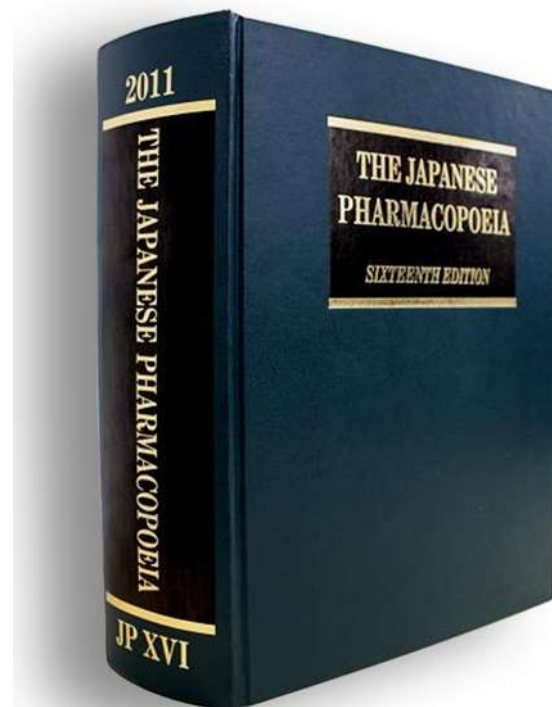
Eu.P



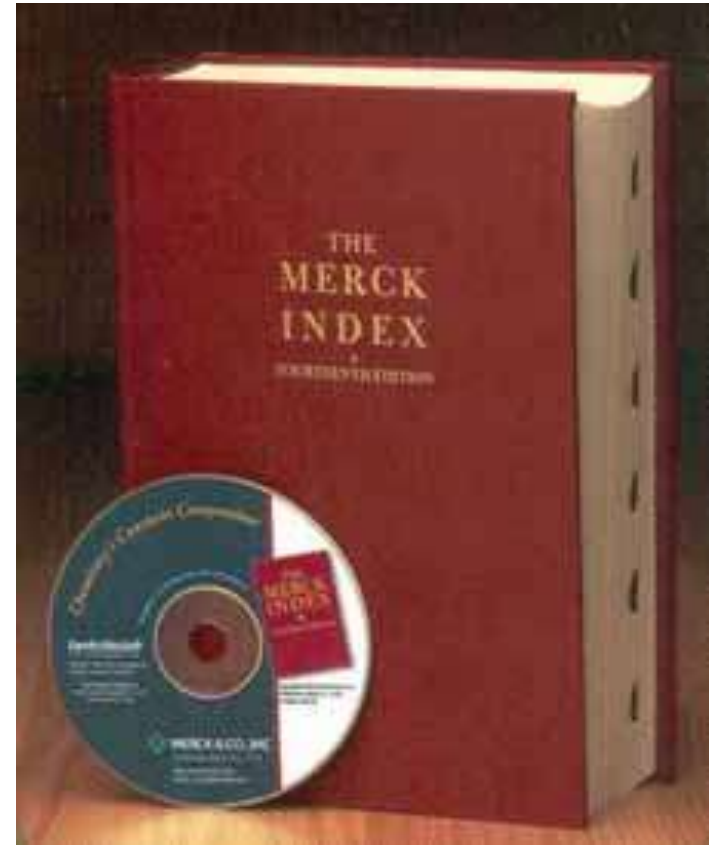
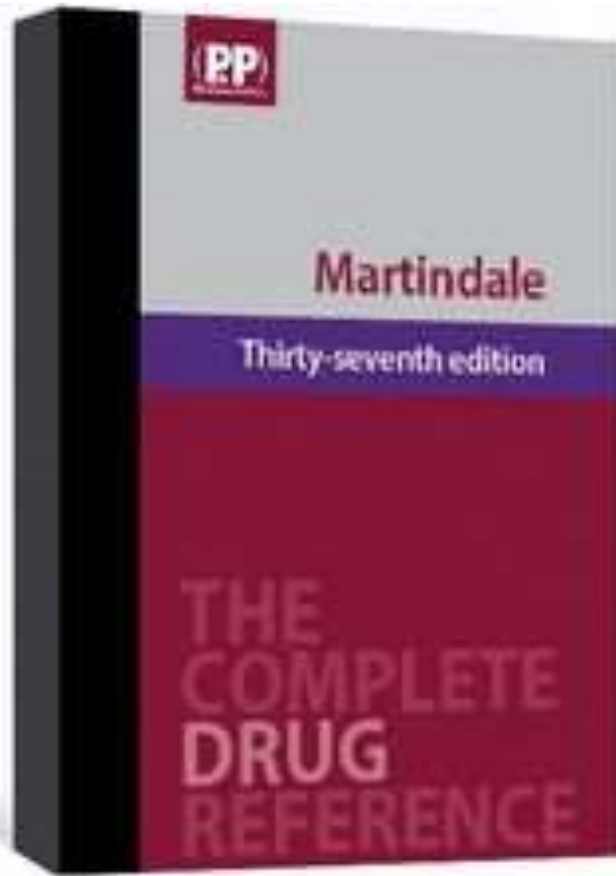
B.P



Int.P



J.P





International Pharmaceutical Abstracts



A division of the American Chemical Society



- All pharmaceuticals are categorized into three lists
- Red list which contain products from haram sources only
- Grey list which contain products which have halal and haram sources
- Green lists which contain products from halal sources



Medicines from animal origin in the British Pharmacopoeia.





BP 2012 contains around 3200 monographs.

Only 129 considered as haram substances.

Most vaccine, blood preparations, and homeopathic preparations considered as Mushboh.





27 monographs prepared from porcine or pig only (red list).





13 monographs prepared from Bovine.

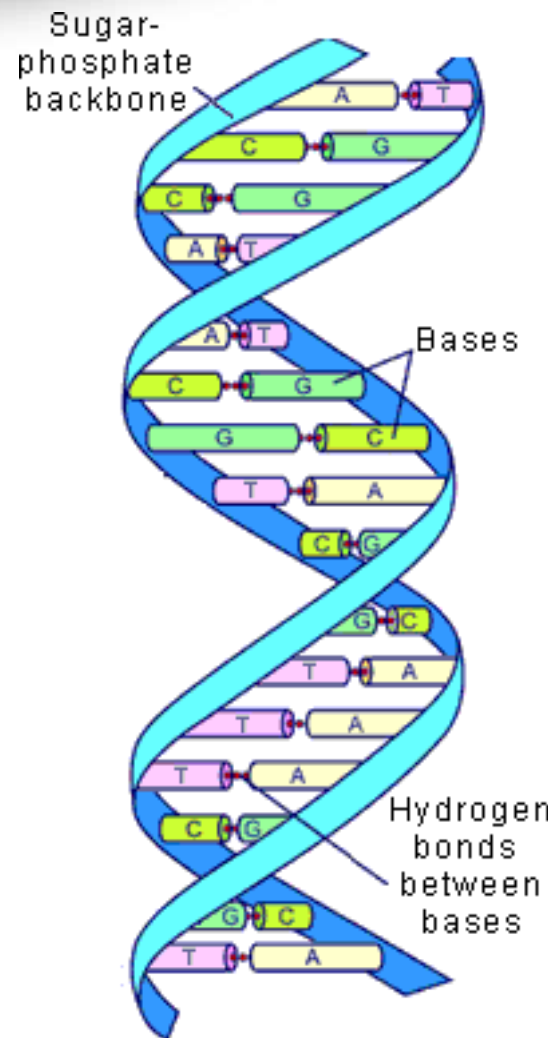
55 monographs prepared from animal sources (all mammalian and include porcine and bovine).





There are some medicines we called them red to green medicine which have a halal alternative now but we still have the haram source. The halal source come from chemical synthesis and analogues (44 monographs)

And from recombinant DNA technology (11 monograph)





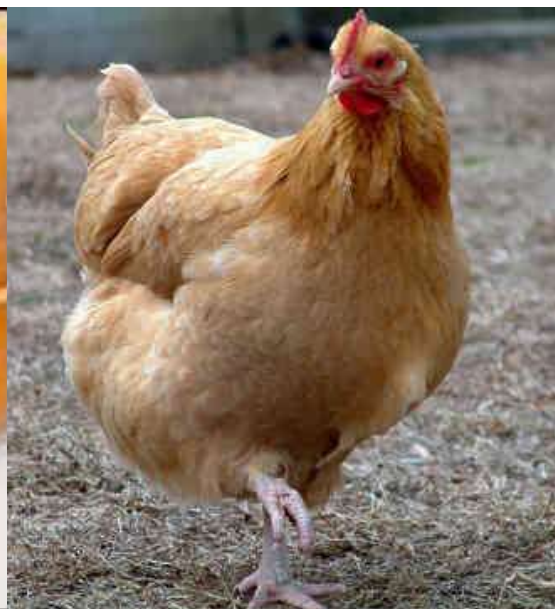
2 monographs from insects.

13 monographs from animals without killing the animal (bear, horse, rabbit).





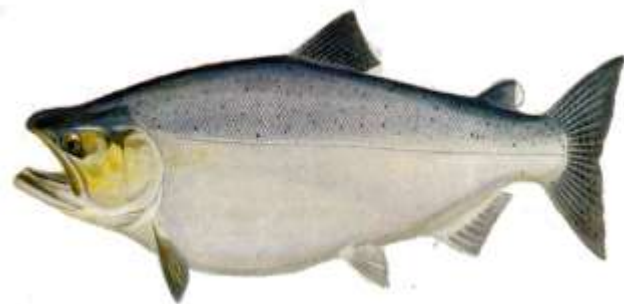
13 monographs from human (woman urine and blood plasma).
1 monograph from bird and chicken.





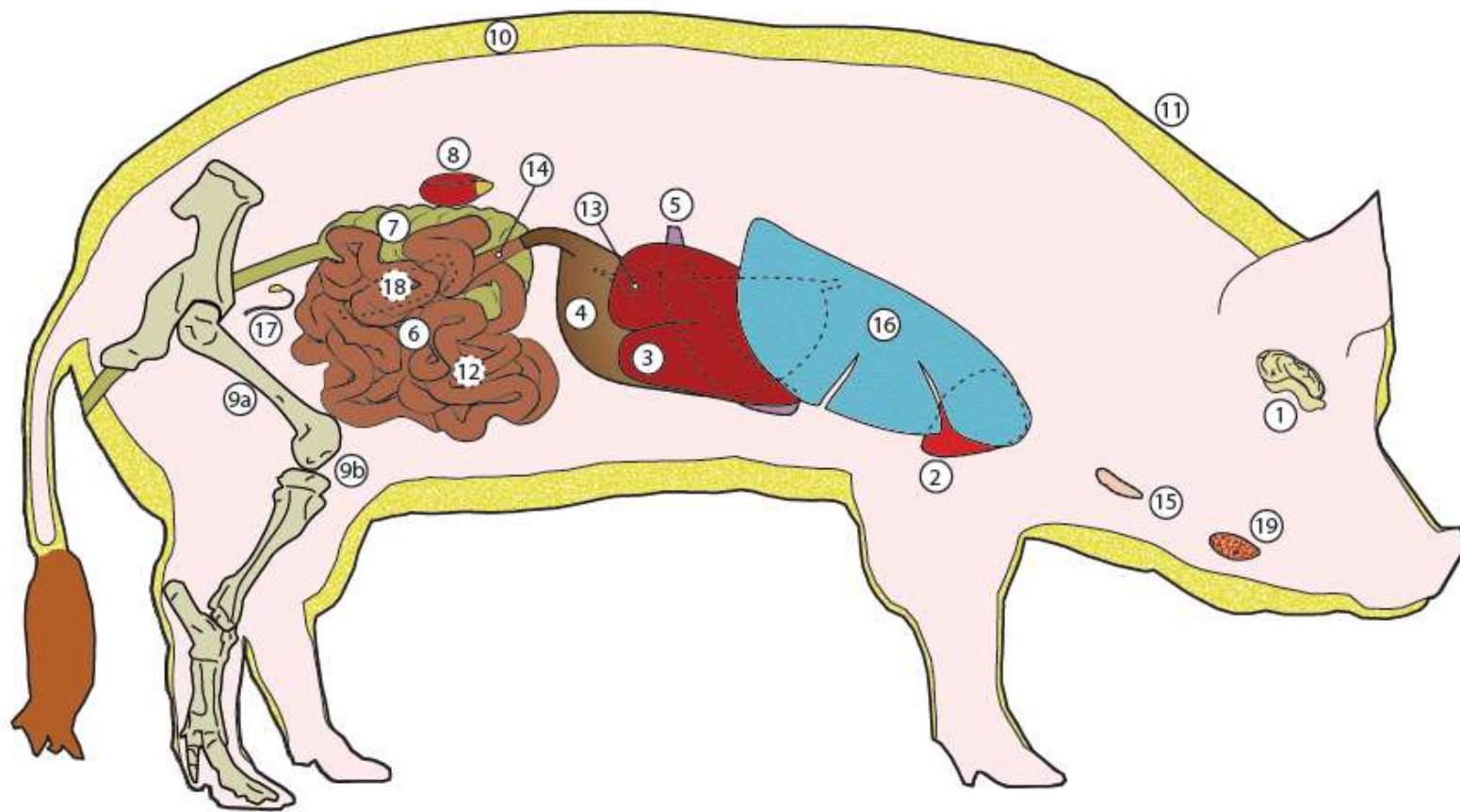
There are few monographs from halal sources and we mention here because it's from animal sources:

16 monographs from marine sources (fish, salmon, shark, shrimp, and crab).

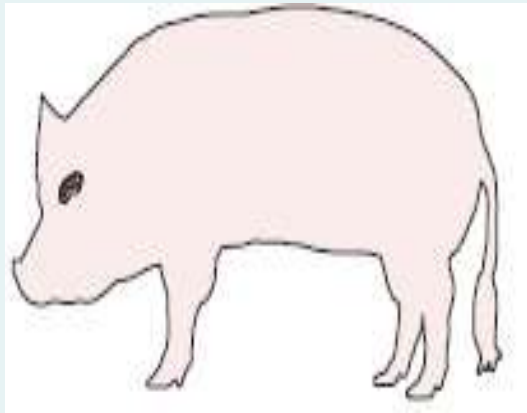


The most important Pig based pharmaceuticals







Pig part	Drug derived	picture
Brain	ACTH Brain Natriuretic Peptide Follicle-stimulating hormone LH-RH Luteinizing hormone Lypressin Oxytocin Prolactin Somatostatin Somatotropin TRH Vasopressin Cephalins	

HALAL PHARMACEUTICALS STANDARDS





Haram substances usually from animal sources while the plant, mineral, and synthetic chemicals considered as Halal.

From around 7000 monographs

- 140 red list
- 260 grey list
- Others are halal



Even the number of the haram and masbooh pharmaceuticals are small but the number of the haram or masbooh pharmaceuticals is more than 3000

Gelatin for example is found in 60% of all pharmaceutical products

Project Objectives



- To list and find the halal status of the most used chemicals in food, pharmaceuticals, and cosmetics industries.
- To design the databases software which allow producing many specialized databases
 1. Food chemicals database
 2. Pharmaceuticals database
 3. Cosmetics database
 4. Animal-based chemicals database
 5. Media cultures database
 6. Biotechnology products database



- To create software to find the halal status for the compound products and brand name products.
- To list and find halal critical points in the main manufacturing process used in food, pharmaceuticals and cosmetics industries.
- To design general halal SOPs to be applied for different factories in each sector.
- To design the basic database to be used in phone application later.



- List and monograph example

THANK YOU