

# Halal Standards Around the Globe: A Comparative Study



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## Outline



What is Halal?

Why Halal is important?

What is a Standard?

Halal Standards across the globe

Production plant and its cleaning

**Animal Slaughtering** 

Alcohol

Vinegar

**Insects** 

Conclusion





## What is Halal Food?

Halal food is any food that are **is permitted** for consumption by Muslims,
while Haram is the opposite.



#### **General Principle**

All things are permitted for consumption by Muslims, except what are specifically prohibited

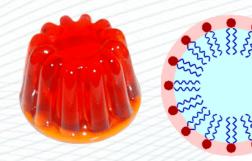




# Halal and Haram foods in practice



chicken, turkey, beef, lamb/mutton



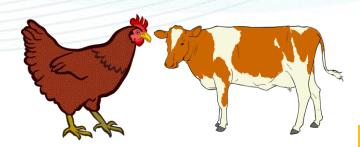
Pork and its derivatives, alcoholic beverages, narcotics

### Halal

Fruits and vegetables,
Fish and Seafood (Fresh),
Milk and Eggs, if there is
processing (check the
additives and
contamination during
processing)

#### Halal

with proper slaughtering



## **Doubtful**

gelatin, emulsifier (e471, e472,...), stabilator, flavor, colorant. (depend on the source)



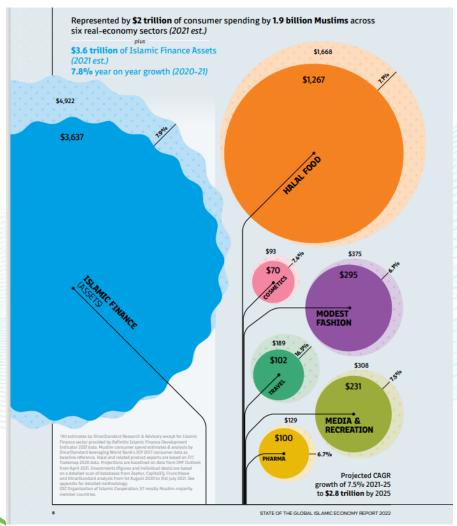








# Why Halal is important?



Halal food market in 2021 is \$ 1267 billion which is above **15 times** of Tesla's revenue

About 72,600,000 results (0.71 seconds)

Tesla / Revenue

81.46 billion USD

2022



Tesla's total revenue for 2022 exceeded \$81.4 billion, a 51% YoY growth.





## Halal food production in Poland





Halal food production poland











Notes From Poland

https://notesfrompoland.com > 2022/02/21 > poland-a...

#### Poland among Europe's leaders in kosher and halal meat, ...

Feb 21, 2022 — Over the last decade, **Poland** has become a major producer of kosher and **halal meat**. Yet, with its tiny Jewish and **Muslim** communities, only a ...



Euro Meat News

https://www.euromeatnews.com > Article-Poland-stand...



#### Poland stands as one of the EU' largest halal meat producer

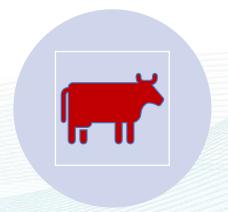
Feb 22, 2023 — In 2020, **Poland** exported **meat** and **meat products** worth about €5 billion, of which almost a third was kosher and **halal meat**. "**Poland**, as one ...





# Ritual slaughter (including Halal) in Poland









**40+ SLAUGHTERHOUSES** 

350.000 + EMPLOYEES

UP TO 1.7 BILLION USD ANNUALLY





International

Organization for

Standardization

## Standard and Halal Standard

- Standard is a document developed **by an authority** contains technical **specification** or/and requirement that **have to be complied** by a product(s) or service(s).
- ISO 9001, ISO 22000, FSSC 22000, etc
- Halal food standards refer to the set of dietary guidelines and regulations published by (most of the case) Muslim countries' authority, that govern the preparation, handling, and consumption of food

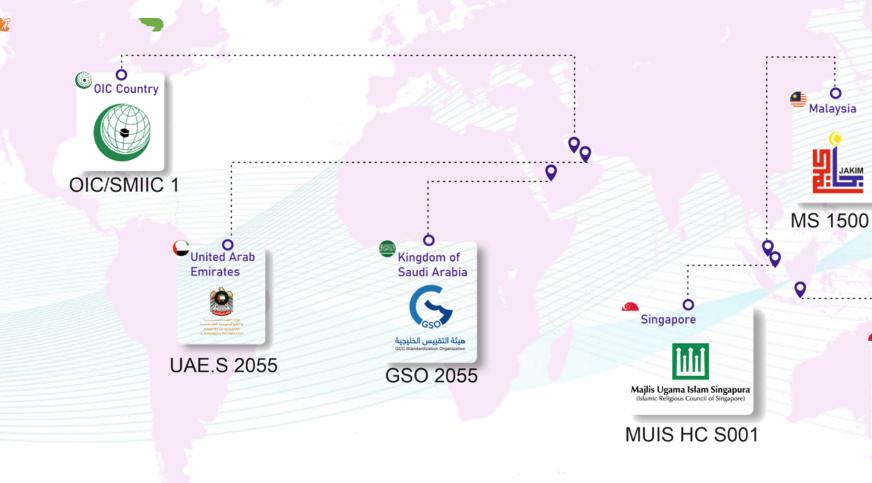




O Indonesia

HAS 23000

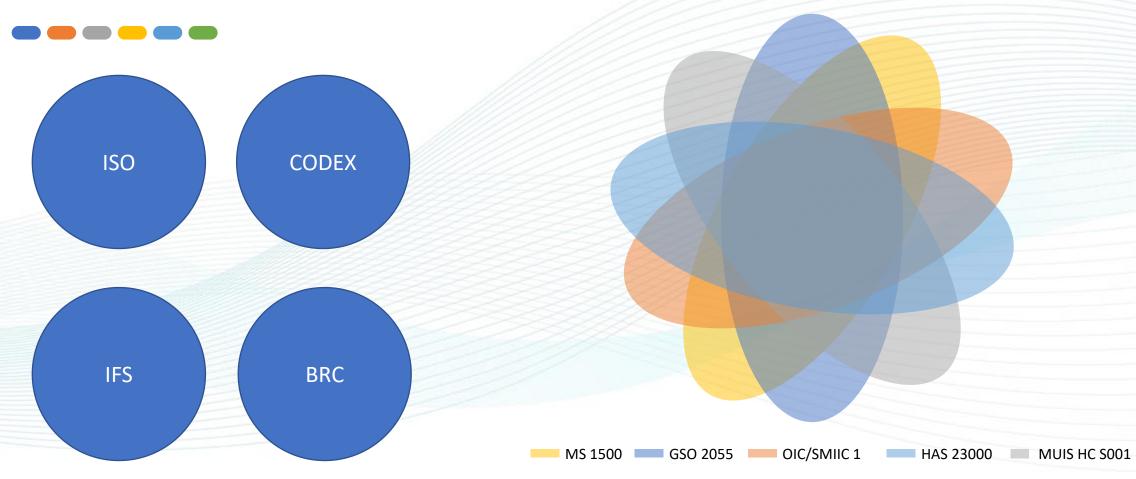
# Global Halal Standards







## Halal Standards issue



**Global Food Standards** 

**Halal Food Standards** 





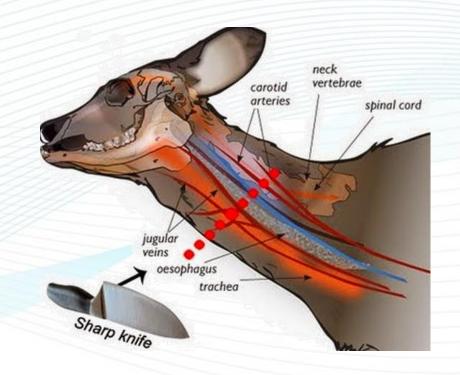
# Production plant and its cleaning

Requirements	MS 1500 [1]	GSO 2055 [2]	HAS 23000 [3]	MUIS HC S001 [4]	OIC/SMIIC 1 [1]	
Halal product must be separated from non-Halal products	<b>√</b>	✓	✓	✓	✓	
All Halal products must be Halal tagged to be easily segregated	✓	✓	not mandatory	✓	✓	
General cleaning is a must when transforming from non-Halal to	<b>√</b>	✓	✓	✓	✓	
Halal production						
Soil must be used to clean heavy najis	✓	not required not required		✓	✓	
Shifting from non-Halal to Halal production is not allowed in regular	✓	✓ ✓ allowed if it is pork		✓	$\checkmark$	
basis			free			
Chemical agents including cleaning substances, greases or fats shall	✓	✓	✓	$\checkmark$	$\checkmark$	
not contain non-Halal materials						
Hygiene, sanitary and food safety are prerequisites in the Halal food	✓	✓	✓	✓	$\checkmark$	
production						
The production facility must be segregated and well insulated from	$\checkmark$	✓	✓	$\checkmark$	$\checkmark$	
pig farm or its processing						
Pest control program must be implemented	<b>√</b>	not stipulated	not stipulated	not stipulated	not stipulated	
Tools or elements of religious worship are not allowed in the	✓	not stipulated	not stipulated	not stipulated	not stipulated	
production facility						
Muslim praying room must be available	✓	not stipulated	not stipulated	not stipulated	not stipulated	



# Slaughtering

- Animal slaughtering is the act or process to kill animals to obtain meat and offal's for human consumption (Fuseini et al., 2016).
- To slaughter the animal, sticking (neck cutting) is carried out using sharp knife to sever major blood vessels involving the esophagus, two jugular veins and pharynx of the animal ensuring rapid and complete blood loss(Fuseini et al., 2016).



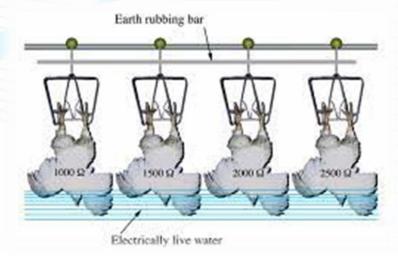




## Stunning

- Stunning is a method to make the animals unconscious with or without killing them to improve the efficiency of the slaughtering (Yardimci, 2019).
- Several studies mentioned that stunning might eliminate the fear or pain in the animal. However, this conclusion is still debatable since many researcher also against it and reported that stunning magnifies animal suffering and stress during slaughtering process (Nakyinsige, Fatimah, et al., 2014; Nakyinsige, Sazili, et al., 2014; Yardimci, 2019).







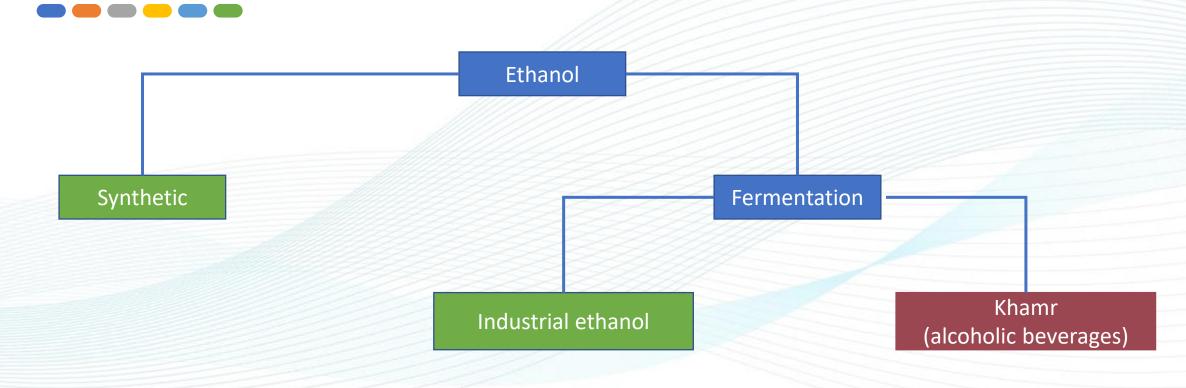


# Slaughtering

Requirements	MS 1500 (DSM, 2019)	UAE.S 993: 2022 (GSO, 2022)	GSO/UAE.S 993:2015 (GSO, 2015b)	HAS 23103 (LPPOM MUI, 2012)	MUIS HC S001 (MUIS, 2005)	OIC / SMIIC 1 (OIC/SMIIC, 2019)
Stunning is not recommended	not stipulated	<b>√</b>	✓	not stipulated	not stipulated	<b>√</b>
Stunning that results in death or heart stop of the animal is strictly forbidden	✓	✓	<b>√</b>	✓	✓	<b>√</b>
The stunning operator is preferably a Muslim	✓	X	X	X	✓	X
Stunning on poultry is not permitted	X	X	✓	X	X	X
The blood flow of the stunned animal should be monitored, if less than normal amount of blood observed the carcass is treated as	X	✓	X	X	X	X
non-Halal						
The Slaughtermen shall be Muslim	✓	X	X	✓	✓	✓
The bleeding period shall be at least 180 seconds	✓	X	X	✓	✓	✓



# Ethanol/Alcohol





Halal in certain condition



Haram





# Permissible alcohol/ethanol content

Criteria	HAS 23000	MS 1500	GSO 2538	MUIS HC S001
Beverages dedicated for khamr	Strictly prohibited	Strictly prohibited	Strictly prohibited	Strictly prohibited
Intentionally added non-khamr ethanol in food and beverages.	No limit and safe	<0.5%	Not allowed	Not allowed
Non-khamr beverages	<0.5%	<1%	<0.1%	0.1%
Unintentional alcohol	End product <0.5% for beverage and no limit for food if it is medically safe.	<1%	Depending on the products 0.02% - 1.00%	0.1%
Flavor and colorants	End product <0.5% for beverage and no limit for food if it is medically safe.	End product <0.5%	Depending on the products 0.02% - 1.00%	0.5%, end product 0.1%
Fermented dairy (solid/paste)	No limit if it is medically safe	<1%	<0.3%	0.1%





## Vinegar



• Vinegar is a product of two steps fermentation process i.e., alcoholic fermentation and acetic acid fermentation







# The critical Halal point of vinegar



Halal Standard	Vinegar from khamr	Maximum ethanol concentration in vinegar
MS 1500	Halal with natural fermentation	1.0%
GSO 2538	Haram	0.5%, except grape vinegar 1.0%
HAS 23000	Halal	0.5%
MUIS HC S001	Haram	0.1%
OIC/SMIIC 1	Haram	Not determined





## Permissible Insects



Requirements	MS 1500 [1]	GSO 2055 [2]	HAS 23000 [3]	MUIS HC S001 [4]	OIC/SMIIC 1 [1]
Grasshopper	✓	✓	✓	✓	<b>√</b>
Insects that are forbidden to be killed	X	X	X	X	X
Poisonous insects	X	X	X	X	X
Locust	✓	✓	✓	✓	<b>√</b>
Nonpoisonous worm	X	X	✓	X	X
Nonpoisonous land carb	✓	X	✓	<b>√</b>	X
Cochineal colorant (E120)	<b>√</b>	X	✓	✓	X





## Conclusion

The increasing demand of the Halal products drives the food manufacturer to comply the Halal standards. However, there is no single universal Halal standards accepted worldwide. There are some specific differences of the requirements in each Halal standard which generates confusion to food manufacturers. Surprisingly, the differences between the Halal standards are not limited to nonprinciple requirements; rather, they extend to fundamental criteria, where one standard may accept something that another standard strictly **prohibit**. There is a need to develop harmonized Halal standards in the future

