

# Perceptions of Muslim Youth on Halal Animal Feed and its Importance in Food Production

Nurulaina Saidin<sup>1</sup>, Mohd Syahir Aiman Mohd Safri<sup>2</sup>, Mohd Ashrof Zaki Yaakob<sup>3\*</sup>

<sup>1,3</sup>Academy of Contemporary Islamic Studies, University Technology MARA, 40450 Shah Alam, Selangor, Malaysia

<sup>2</sup>Halal International Selangor Level G, Bangunan Darul Ehsan, No.3, Jalan Indah, Seksyen 14, 40000 Shah Alam, Selangor

\*Corresponding author

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.905000269>

Received: 09 May 2025; Accepted: 13 May 2025; Published: 11 June 2025

## ABSTRACT

Halal animal feed is essential in animal-based food production to ensure compliance with Islamic dietary laws and to maintain the integrity of the halal food supply chain. This study explores the perceptions of Muslim youth, specifically final-year students from the Academy of Contemporary Islamic Studies (ACIS), UiTM Shah Alam, regarding the importance of halal animal feed in food production. A survey of 92 students revealed a high level of awareness and understanding, with 72.8% agreeing they understood halal feed requirements and 83.7% recognizing differences between halal and non-halal feed. While 71.7% credited their academic background for this knowledge, only 61.9% felt confident in explaining the concept to others, indicating areas for educational enhancement. Although over half believed sufficient public information is available, 48.9% expressed uncertainty or disagreement, reflecting a divided perception. Importantly, 75% of respondents acknowledged that halal animal feed is essential for producing halal meat, and 76.1% emphasized its prioritization in food production. The findings underscore the effectiveness of Islamic studies education in cultivating halal literacy among students and highlight the need for broader public awareness initiatives. Overall, the study affirms the critical role of halal animal feed in the halal industry and the importance of youth engagement in upholding halal standards.

**Keywords:** Halal Animal Feed, Muslim Youth, Halal Food Production, Perception, Islamic Education

## INTRODUCTION

Animal feed constitutes a foundational element in the Halal food supply chain, functioning as the initial Halal Critical Control Point (HCCP) to ensure the integrity of animal-based food products such as meat, milk, and eggs. Any uncertainty surrounding the Halal status, safety, or quality of animal feed may compromise the overall *halal* and *ṭayyib* (permissible and wholesome) status of the end products. Islamic teachings place significant emphasis not only on the method of animal slaughter but also on the conditions under which animals are raised, particularly the nature of the feed they consume.

Empirical evidence indicates that inappropriate feeding practices can have substantial implications for public health and religious compliance. For instance, the outbreak of Bovine Spongiform Encephalopathy (BSE), commonly known as Mad Cow Disease, has been directly associated with the use of unsuitable feed ingredients (Brown et al., 2001). In the Malaysian context, public concern has been triggered by documented cases involving the use of non-Halal substances, such as pig intestines, carcasses or fecal matter, as aquaculture feed (Nazli Ibrahim, 2013; Saifullah Ahmad & Nurul Mazwana Hamdan, 2014), besides the use of blood meal and pig bone as feed ingredients (Leman et al., 2017). Besides, a fish farm in Masjid Tanah, Melaka was found feeding catfish with non-halal and unsanitary waste such as chicken carcasses, rotten eggs, and chicken blood, aiming to accelerate growth for higher profits. This irresponsible practice not only caused

severe river pollution, killing aquatic life and producing foul odours, but also led to a RM12,000 compound under the Melaka Water Resources Enactment 2014 (Amir Mamat, 2021). Such incidents have raised both legal and ethical questions regarding the Halal validity of products derived from animals reared under these conditions.

Given the increasing demand for integrity and traceability in the Halal supply chain, especially in countries with significant Muslim populations like Malaysia, it is essential to assess the level of knowledge and awareness regarding Halal animal feed—particularly among future industry players. This research, therefore, aims to evaluate the knowledge, awareness, and perceptions of students at the Academy of Contemporary Islamic Studies (ACIS), UiTM, regarding the importance of Halal animal feed in food production. The survey results presented in this study provide insights into their academic exposure, conceptual understanding, and perceived public access to information on the subject.

## LITERATURE REVIEW

### Halal and Its Importance in Islam

In Islamic terminology, what is permissible is commonly referred to as *halal*, *jaiz*, or *mubah*. The word *halal* is derived from the Arabic root *halla*, *yahillu*, *hillan*, which signifies something that is allowed or lawful. Scholars such as Qal'ahji (1996) and Ibn Manzur (1990) define *halal* as that which is permitted, in contrast to *haram*, which denotes prohibition. Al-Qaradawi (2013) further clarifies that *halal* refers to anything allowed by Shariah and not subject to any form of prohibition. Kamali (2011) explains that *halal*, *jaiz*, and *mubah* describe acts or items that are neither obligatory nor forbidden, and are viewed as neutral choices permitted by the Lawgiver to the *mukallaf* (a person accountable under Islamic law). The concept of *halal* is crucial in the daily life of Muslims, especially concerning food, as it reflects not only legal permissibility but also spiritual cleanliness and ethical responsibility.

### Concept of Halal Animal Feed

From the theoretical aspect, animals are not subjected to or bound to any Shariah injunction. This simply means that animals are not subjected to any religious obligations as do human beings and *jin*, who are *Mukallaf*. Due to this reason, things or actions that are prohibited to humans are not necessarily prohibited to animals. With regards to animal feed, the Shariah rulings connected to animal feed only come into discussion when they become connected to human beings.

That being so, it is important to highlight the 'Halal feed' term utilised in this study. As mentioned earlier, nutrition for animals is not necessarily *halal* for the animal's consumption because the ruling of *halal*, *mustahab*, *mubah*, *makruh* and *haram* is only bound to Muslims. Nevertheless, this research combines the term 'halal' with the word 'feed' to give the meaning of feed and feed additives that do not contain *najs* (impurity or uncleanness—specifically things that are considered impure in Islam) and any parts or products of animals that are non-halal by Shariah law. This 'halal feed' term should also fulfil the following conditions as specified below (Saidin, 2019);

- i) does not contain any parts or products of animals that are non-halal by Shariah law;
- ii) does not contain *najs* according to Shariah law;
- iii) safe for animal consumption, non-poisonous, non-intoxicating or non-hazardous to animal health and human consuming the animal-based food products;
- iv) not prepared, processed or manufactured using equipment contaminated with *najs* according to Shariah law;
- v) during its preparation, processing, handling, packaging, storage and distribution, the feed is physically separated from any other feed that does not meet the requirements stated in items I), II), III), and IV) or any other things that have been decreed as *najs* by Shariah law.

## Halal Assurance and Certification of Feed

Halal assurance in animal feed is not merely a religious obligation; it is a comprehensive quality and ethical standard that safeguards consumer trust, public health, and the credibility of the halal industry as a whole. This is so because animal feed is a vital component in ensuring the healthy development of livestock, and its cleanliness, safety, and quality directly affect the production of safe, high-quality food. However, beyond physical quality, the *halal* status of feed is equally critical in upholding the integrity of halal food production. Recognizing this, Malaysia's Director-General of Veterinary Services once recommended that halal requirements be incorporated into the Feed Act 2009 to ensure not only clean and safe diets for animals but also the use of halal-certified inputs such as growth hormones (Bernama, 2010). This is also supported by reports that the Penang Consumers Association (CAP) has called on Putrajaya to amend the Feed Act 2009 to also include elements of halal in the preparation, processing, production, and handling of animal feed (Sajida Ansarullah Khan, 2019).

In the halal food supply chain, halal assurance must be treated as a built-in, comprehensive approach—starting from the feed stage all the way to market distribution (Nurulaina Saidin, 2019). This is because the status of feed has a direct impact on whether an animal remains halal for Muslim consumption. Even halal species can become non-halal if fed on impure or prohibited substances, as mentioned by the Fatwa Committee of the National Council for Islamic Religious Affairs Malaysia (MKI) [Jabatan Kemajuan Islam Malaysia (JAKIM), 2021]. For example, animals that consume waste, carrion, or pig derivatives and exhibit changes in odor, color, or behavior are classified as *al-Jallalah*, and are not permissible for consumption unless they undergo a purification process (*istihalah*) (JAKIM, 2021). Unfortunately, verifying whether such animals have gone through this process is nearly impossible for consumers due to limited knowledge and resources. Moreover, halal feed is important not only for consumer confidence but also for the practices of Muslim workers, farmers, and livestock owners who are involved in feed handling and production.

For the time being, animal feed is still not eligible for halal certification in Malaysia, because there is no scheme or specific standard introduced for this product. Existing products and services that are applicable for halal certification include food products, food premises, slaughterhouses, pharmaceuticals, cosmetics, consumer goods, logistics, medical devices and OEM (JAKIM, 2020). Animal feed was once included as a product that could not be certified halal, according to the previous Manual Procedure for Halal Certification (MPPHM) (Domestic) 2014. However, in 2020, the new applicable MPPHM (Domestic) 2020 has excluded animal feed as products that are not eligible for halal certification, according to the manual, which signifies that animal feed may, in the future, be certified halal.

Key challenges in assuring Halal compliance in animal feed include the risk of contamination, the prevalence of fraudulent practices, and insufficient transparency concerning feed composition. In fact, from a Shariah perspective, animals that consume impure or prohibited substances may fall under the category of *jallālah* and are deemed impermissible for consumption until a proper purification process is undertaken (Noordin et al., 2023). Therefore, maintaining the Halal integrity of animal feed is indispensable for preserving consumer confidence, protecting public health, and upholding Islamic dietary standards.

## Muslim Youth and Religious Consciousness

The concept of halal extends beyond the slaughtering process to encompass the entire lifecycle of food production, including the sourcing and composition of animal feed. While Muslim youth in Malaysia exhibit a high level of awareness regarding halal food products, there is a noticeable gap in understanding the significance of halal compliance in animal feed. Studies have shown that young Muslims' intention to consume halal food is predominantly influenced by positive attitudes and behavioural control, rather than subjective norms (Khalek et al., 2015). However, the specific aspect of halal animal feed remains underexplored in existing literature. This oversight is critical, as the use of non-halal feed can compromise the halal status of the end products, thereby affecting the overall integrity of the halal food supply chain (Iqbal et al., 2020). Given the increasing demand for halal-certified products and the pivotal role of youth as both consumers and future industry leaders, it is imperative to investigate their perceptions and awareness of halal animal feed. Such

research would not only fill a significant gap in halal studies but also contribute to the development of comprehensive halal standards that encompass all facets of food production.

## METHODOLOGY

### Data analysis

This research used SPSS version 27 (Statistical Package for the Social Sciences) to analyze the collected data. SPSS is a widely used statistical software that allows for comprehensive analysis of various data types, including survey responses and research findings. It supports a range of structured data formats and enables the creation and editing of spreadsheets, text files, and database formats such as SQL and SAS. In this study, SPSS was utilized to perform descriptive and bivariate statistical analyses to identify trends, summarize respondent perceptions, and support meaningful interpretation of the findings.

### Sampling

This research employed purposive sampling to collect data, a technique also known as judgment sampling, where participants are selected based on specific characteristics relevant to the study. In this case, the researcher identified and selected individuals who possess relevant knowledge and experience, in particular, students from the Academy of Contemporary Islamic Studies (ACIS) at UiTM Shah Alam. The targeted sample consisted of 120 respondents, but based on the Krejcie and Morgan sampling table, the number was narrowed down to 92. The selected participants were Semester 7 students majoring in Halal Industry Management, chosen because they have foundational knowledge of the halal ecosystem. This criterion ensured more accurate and meaningful insights into their understanding of the importance of halal animal feed.

### Pilot Test and Reliability Analysis

A pilot test was conducted to assess the reliability of the questionnaire used in this study. Reliability analysis was performed using Cronbach's Alpha, a statistical measure used to evaluate the internal consistency of the scale items. The value of Cronbach's Alpha ranges from 0 to 1, where a value above 0.7 is generally considered acceptable, indicating good reliability. The result of the reliability analysis for the items in the questionnaire showed a Cronbach's Alpha value of **0.848**, demonstrating a high level of internal consistency. This indicates that the questionnaire items are reliable and suitable for measuring the perceptions of Muslim youth regarding halal animal feed.

## FINDING & DISCUSSION

The production of halal animal feed and the proper feeding of animals are crucial to ensure that the entire halal food supply chain complies with Islamic dietary laws. Animal feed must be free from haram ingredients and impurities, and the feeding process must align with Shariah requirements to preserve the halal status of the animals. This practice not only supports ethical and safe farming but also builds consumer trust in the food derived from these animals. As the global demand for halal products continues to grow, ensuring the integrity of animal feed and feeding practices is increasingly important for the halal industry.

This section presents the study's findings, including respondents' demographic information such as age and gender, which are analyzed using frequency and percentage.

For Sections B and C, mean scores are used to evaluate respondents' levels of agreement with the statements. The interpretation of mean scores is based on five levels of agreement, as outlined in Table 1:

**Table 1: Mean Score Interpretation**

Mean Score	Interpretation
1.00–1.80	Very low (strongly disagree)

1.81–2.60	Low (disagree)
2.61–3.20	Moderate (neutral)
3.21–4.20	High (agree)
4.21–5.00	Very high (strongly agree)

**Table 2: Demographic characteristics of respondents**

Characteristic	Frequency	Percentage
Gender		
Male	<b>40</b>	<b>43.5</b>
Female	<b>52</b>	<b>56.5</b>
Age		
21 - 23	<b>30</b>	<b>32.6</b>
24 – 26	<b>61</b>	<b>66.3</b>
27 - 29	<b>1</b>	<b>1.1</b>

The demographic data of the 92 respondents indicate a slightly higher number of female participants (56.5%) compared to male participants (43.5%), which reflects the general gender composition at the institution, where female students typically outnumber male students. In terms of age, the majority of respondents fall within the 24–26 age group (66.3%), followed by those aged 21–23 (32.6%), with only 1 respondent (1.1%) in the 27–29 age range. These distributions suggest that the findings of the survey are primarily influenced by female respondents and individuals in their mid-20s, which should be taken into account when interpreting the overall results.

**Table 3: Mean Score of Knowledge and Awareness of Halal Animal Feed**

Knowledge and Awareness of Halal Animal Feed	N	Mean	SD
I understand the requirements for animal feed to be considered Halal	92	3.88	1.015
I understand the differences between Halal and non-Halal animal feed	92	4.08	0.986
I have learned about Halal animal feed in my studies at ACIS	92	3.89	1.043
I feel confident in explaining the concept of Halal animal feed to others	92	3.62	1.137
There is sufficient information available to the public about Halal animal feed	92	3.49	1.163

Based on Table 3, the analysis of students' knowledge and awareness regarding Halal animal feed reveals generally positive outcomes. The highest mean score ( $M = 4.08$ ,  $SD = 0.986$ ) was recorded for understanding of the differences between Halal and non-Halal animal feed, indicating strong conceptual knowledge in this area. Similarly, respondents showed a good understanding of the requirements for animal feed to be considered Halal ( $M = 3.88$ ), and acknowledged learning about Halal animal feed through their studies at ACIS ( $M = 3.89$ ). However, the mean score for confidence in explaining the concept of Halal animal feed to others was slightly lower ( $M = 3.62$ ), suggesting that while students possess the knowledge, their ability to communicate it effectively may need improvement. The lowest score ( $M = 3.49$ ) was related to the availability of public information on Halal animal feed, indicating a perceived lack of accessible resources for the general public.



Overall, the findings suggest that while students have a solid foundation of knowledge, efforts to enhance their communication skills and public awareness initiatives could further strengthen understanding and outreach.

**Table 4: Mean Score of The Perceptions on the Importance of Halal Animal Feed in Food Production**

Perceptions on the Importance of Halal Animal Feed in Food Production	N	Mean	Std. Deviation
I understand the requirements for animal feed to be considered Halal	92	3.88	1.015
I understand the differences between Halal and non-Halal animal feed	92	4.08	0.986
I have learned about Halal animal feed in my studies at ACIS	92	3.89	1.043
I feel confident in explaining the concept of Halal animal feed to others	92	3.62	1.137
There is sufficient information available to the public about Halal animal feed	92	3.49	1.163

The data in Table 4 reflects respondents' perceptions regarding the importance of Halal animal feed in food production. The highest mean score ( $M = 4.08$ ,  $SD = 0.986$ ) indicates that respondents generally understand the differences between Halal and non-Halal animal feed. This is followed closely by their acknowledgment of learning about Halal animal feed during their studies at ACIS ( $M = 3.89$ ,  $SD = 1.043$ ), and understanding the requirements for animal feed to be considered Halal ( $M = 3.88$ ,  $SD = 1.015$ ). However, their confidence in explaining the concept to others is relatively lower ( $M = 3.62$ ,  $SD = 1.137$ ), and the lowest perception is regarding the sufficiency of public information about Halal animal feed ( $M = 3.49$ ,  $SD = 1.163$ ). This suggests that while academic exposure is strong, there is a need for improved public dissemination and confidence-building among individuals when discussing Halal feed.

## CONCLUSION

This study affirms that students at ACIS exhibit a generally strong level of knowledge and awareness concerning Halal animal feed, particularly in distinguishing between Halal and non-Halal feed and understanding the core requirements aligned with Shariah principles. Despite their solid theoretical knowledge, students show relatively lower confidence in explaining the concept to others and perceive that public access to information on this matter remains limited. These gaps highlight the need for educational strategies that not only strengthen technical understanding but also foster communication skills and promote wider dissemination of information. Moving forward, efforts should focus on enhancing both academic and public engagement with the principles of Halal animal feed to support the integrity of the Halal food supply chain and promote consumer trust.

## REFERENCES

1. Ibn Manzur, M. M. (1990). *Lisan al-'Arab*. Beirut: Dar Sadir Iqbal, A., et al. (2020). A review—Halal animal nutrition perspective to the halal meat production. *Malaysian Journal of Halal Research*, 3(1), 17–23. <https://sciendo.com/article/10.2478/mjhr-2020-0003>
2. Jabatan Kemajuan Islam Malaysia. (2020). *Manual prosedur pensijilan halal Malaysia (MPPHM) 2020*. Bahagian Pengurusan Halal, JAKIM.
3. JAKIM. 2021. *Kompilasi Pandangan Hukum Jawatankuasa Muzakarah Majlis Kebangsaan Bagi Hal Ehwal Ugama Islam Malaysia (MKI)*. Shah Alam: Reka Cetak Son. Bhd
4. Kamali, M. H. (2011). *The Principles of Halal and Haram in Islam*. In *The Essence of Halal* (1st ed., pp. 19–27). Petaling Jaya: HDC

5. Khalek, A. A., Syed Ismail, S. H., & Ibrahim, H. M. (2015). A study on the factors influencing young Muslims' behavioural intention in consuming halal food in Malaysia. *Journal Syariah*, 23(1). <https://jupidi.um.edu.my/index.php/JS/article/view/7851Academia+2JuPiDi+2Monash University+2>
6. Mamat, A. (2021, February 24). *Ikan keli jijik*. *Harian Metro*. <https://www.hmetro.com.my/utama/2021/02/675146/ikan-keli-jijik>
7. Qal'ahji, M. R. (1996). *Mu'jamLughahal-Fuqaha'*. Beirut: Dar al-Nafa'is
8. Saifullah Ahmad, & Nurul Mazwana Hamdan. (2014). Penemuan Ikan Tilapia Diberi Makan Babi. *Sinar Harian*. Retrieved from <http://www.sinarharian.com.my/nasional/penemuan-ikan-tilapia-diberi-makanbabi-1.338612>
9. Nazli Ibrahim. (2013, November 15). Usus Babi Jadi Makanan Ikan Sebelum Dijual. *Selangorku*. Retrieved from <https://selangorkini.my/2013/11/usus-babi-jadimakanan-ikan-sebelum-dijual/>
10. Noordin, W. N. M., Rosman, A. S., Azmi, M. F., Mustappa, K., Sari, M. D., & Huda, N. (2024). Islamic jurisprudence on the use of animal-derived ingredients in aquaculture feed. *Aquaculture International*, 32(3), 3441-3459.
11. Sajida Asarullah Khan. (2019, February 20). Bentuk undang-undang makanan halal untuk haiwan. *Utusan Online*. Retrieved from <https://www.utusan.com.my/berita/nasional/bentuk-undang-undang-makananhalal-untuk-haiwan-1.844888>
12. Saidin, N. (2019) Halal animal feed in Malaysian aquaculture industry: Malaysian regulatory framework and Shariah perspective / Nurulaina Saidin. PhD thesis, University Technology MARA.