

A FRAMEWORK ON PROHIBITION OF ANIMAL
PLASMA IN HALAL SURIMI PRODUCTS

BY

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ABSTRACT

The process of intentionally adding animal plasma additive into surimi products as a cheaper protein alternative is regarded as a critical halal issue. According to Shariah perspective, intentionally adding any blood derivatives into any products is prohibited because it is a part of filthy (*najs*) sources. However, some opinions stated that the prohibition is subjected to spilled-out blood and not the animal plasma additive since the two have different physical characteristics. To refute this opinion, the researcher selects the issue of intentionally adding animal plasma additive into surimi products as the scope of research. To carry out this research, four main objectives are highlighted. The main objective is to establish a framework on prohibition of animal plasma in halal surimi products. Meanwhile, there are three sub-objectives have been highlighted. Firstly, to analyse '*illah* and *hikmah* of prohibition spilled-out blood and permissibility of non-spilled out blood. Secondly is to justify prohibition' reasons of intentionally adding animal plasma in halal surimi products. Thirdly, to explore other Shariah principles as supportive arguments on the prohibition of animal plasma in halal surimi products. The researcher applies library research and interviews as means of data collection. Numerous library sources from electronic and non-electronic sources such as *fiqh* books, academic journals and trusted websites in Malay, Arabic and English are used by the researcher to collect information related to the research. Meanwhile, semi –structured interviews have been conducted among 9 experts including shariah experts, halal executive and food technologists from different backgrounds to establish rigorous arguments through e-mailing and virtual face to face medium. The researcher applies content analysis and thematic analysis to analyze the collected data. For the first objective, the result shows that '*illah* prohibition of animal plasma due to its impurities (filthy) that clearly stated in Islamic legal texts. In fact, its utilization also threatened consumers' safety which part of the wisdom behind of its prohibition. Compared to non-spilled out blood is categorized as tolerable filth materials (*ma'fu an'hu*) and it's a part of *umum al-balwa* matter. It's utilization safe for the consumers as proven scientifically. For the second objective, the results demonstrate that intentionally adding of animal plasma into halal surimi products leads to imperfect dilution (*Istihlak fasidah*) due to several reasons; it involves human intervention, animal plasma properties remain at the end product and the prohibition of spilled-out blood attributes to all blood components. For the third objective, the prohibition is in line with the principle of *Istishab* (presumption of continuity) and *Maslahah al- Mursalah* (preservation of public interests). The answerable objectives are applied by the researcher to develop a framework on prohibition of animal plasma in Halal surimi products based on the relationship between these identified objectives. The findings contribute to novelty of research in the Contemporary Fiqh Consumerism field to clarify the issue of intentionally adding animal plasma in Halal surimi products since there is no comprehensive study has been conducted to highlight of its prohibition.

خلاصة البحث

عملية تعمد خلط بلازما الحيوان مع منتجات حلال سوريمي (لحم مفروم) كمصدر بديل ورخيص للبروتين تعتبر مسألة حرجة للمنتج الحلال. فمن منظور الشريعة، نجد أن تعمد إضافة أي من مشتقات الدم إلى أي من المنتجات يجرمها لأنها جزء من النجس. ومع ذلك، هناك نظرات تقول بأن الحرام مرتبط بالدم المسفوك وليست بإضافة بلازما الحيوان لأن الاثنين لهما خصائص فيزيائية مختلفة. فمن أجل الرد على هذا الرأي، اختارت الباحثة مسألة إضافة بلازما الحيوان عمداً إلى منتجات حلال سوريمي كمحور لهذا البحث. ولإجراء هذا البحث، تمّ تسليط الضوء على أربعة أهداف رئيسية. فالهدف الرئيسي هو وضع إطار لمحرمة بلازما الحيوانات في منتجات حلال سوريمي. وفي الوقت نفسه، تمّ تسليط الضوء على أهداف فرعية. أولاً، تحليل علة وحكمة تحريم تسرب الدم وجواز عدم تسرب الدم. ثانياً، لتبرير أسباب حرمة إضافة بلازما الحيوانات عمداً في منتجات حلال سوريمي. ثالثاً، استكشاف مبادئ أخرى للشريعة كحجج داعمة بشأن تحريم إضافة بلازما الحيوانات في منتجات حلال سوريمي. ويطبق الباحث البحوث والمقابلات المكتبية كوسيلة لجمع البيانات. ويستخدم الباحث العديد من مصادر المكتبة من مصادر إلكترونية وغير إلكترونية مثل كتب الفقه والمجلات الأكاديمية والمواقع الشبكية الموثوق بها بلغة الملايو والعربية والإنجليزية لجمع المعلومات المتعلقة بالبحث. وفي الوقت نفسه، أُجريت مقابلات شبه هيكلية بين 9 خبراء من بينهم خبراء في الشريعة، وأخصائيو تنفيذيون في الحلال، وأخصائيو في تكنولوجيا الأغذية من خلفيات مختلفة لإقامة حجج صارمة من خلال البريد الإلكتروني والوجه إلى الوسط الافتراضي. ويطبق الباحث تحليل المحتوى والتحليل المواضيعي لتحليل البيانات المجمعة. بالنسبة للهدف الأول، تظهر النتيجة أن علة تحريم البلازما الحيوانية بسبب شوائبها (القدرة) الذي ورد بوضوح في النصوص الشرعية الإسلامية. والواقع أن استخدامه هدد أيضاً سلامة المستهلكين التي تشكل جزءاً من الحكمة الكامنة وراء تحريمه. ومقارنة بالدم غير المسفوح يتم تصنيفه على أنه مواد قدارة مقبولة (معفو عنه)، وهو جزء من مسألة عموم البلوى. إنها آمنة للاستخدام للمستهلكين كما ثبت علمياً. وبالنسبة للهدف الثاني، فإن النتائج تثبت أن إضافة بلازما الحيوانات عمداً إلى منتجات حلال سوريمي تؤدي إلى تخفيف غير كامل (استهلاك فاسدة) لأسباب عديدة؛ وهو ينطوي على التدخل البشري، وتبقى خصائص البلازما الحيوانية في المنتج النهائي، وحرمة تسرب الدم تسري على جميع مكونات الدم. وبالنسبة للهدف الثالث، يتماشى الحرام مع مبدأ الاستصحاب (افتراض الاستمرارية) ومبدأ المصالح المرسل (الحفاظ على المصالح العامة). وتطبق الباحثة الأهداف المسؤولة لوضع إطار لتحريم بلازما

الحيوانات في منتجات حلال سوريي استناداً إلى العلاقة بين هذه الأهداف المحددة. وتسهم النتائج في تجديد البحوث في مجال الاستهلاكية في الفقه المعاصر لتوضيح مسألة إضافة البلازما الحيوانية عمداً في منتجات حلال سوريي نظراً لعدم وجود أو إجراء دراسة شاملة لإبراز تحريمها أو حرمتها.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion; it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master of Halal Industry Management.

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DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Siti Jamilah Mohd Sukri

Signature

Date

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GLOSSARY

Ad-dam. Spilled out blood or the blood in flowy condition.

Albumin. A part of animal plasma protein's component.

Al-Quran. The words of Allah s.w.t revealed to the prophet Muhammad (the last messenger of Allah s.w.t) and transmitted from one generation to other generations through chain's narrator (mutawatir).

Al- Mudawwanah. The main reference of Jurists from Maliki school of thoughts.

Animal plasma. Refers to the plasma component that generally derived from collected blood at slaughterhouse. The plasma component is separated through centrifuge process and dried through spray dried method to obtain a dry, stable, end product in powder form and cream in color. The plasma in the context of this research is plasma additive used in surimi products.

Authenticity. A scientific method to test the food ingredients.

Binding agent. A material used to provide structural stability.

Bidayatul Mujtahid wa Nihayatul Muqtasid. Islamic jurisprudence' book written by a prominent classical jurist scholar; Ibn Rusyd from Maliki School of Thought

Bovine Plasma. Refers to the plasma component obtain from cow.

Bovine Spongiform Encephalopathy (BSE). Refers to a progressive neurological disorder affected cattle that result from infection by an unusual transmissible agent called a prion.

Fibrinogen. Refers to one of the plasma's components.

Fiqh. Literally means deep understanding. Technically, it refers to the body of Islamic law to obtain the knowledge of Islam through jurisprudence.

Fish ball. Among the popular dishes in Southeast Asian countries made with fish paste which generally prepared in broth soup or deep fried.

Fish oils. Dietary supplements enriched in omega 3- fatty acids which are important for your health.

Fiqh At'imah. A part of Islamic jurisprudence field focuses on food and beverages as subject matters.

Framework. A Suggestion to formulate a basic structure underlies a system, concept, or text.

Food Act 1983. A part of Malaysia's Law to legislate the food safety, rules and regulations related to food production and food sources in order to preserve consumers' security.

Food Grade. Refers to materials used in food processing activities. The materials should be non-toxic and must guarantee its safety for consumption.

Food Safety. Food safety refers to any activities related to preparation, handling and storage of food in order to prevent consumers' security from any harmfulness.

Fuqaha'. Refers to Muslim scholars who are expert in field related to Islamic Jurisprudence.

Gelling agent. Gelling agent refers to the gel-forming instrument to encourage gelling activities of mixtures. They derived from organic hydrocolloids or hydrophilic inorganic substances.

Good Hygiene Practice. Refers to the set of requirements to prevent food contamination through hygiene practices and proper sanitation regulations.

Good Manufacturing Practice. Refers to a system to ensure the products are consistently produced and controlled according to determined quality standards in order to minimize any possible risks involved in any production sectors.

Globulin. A part of plasma protein component.

Hadith. Attributes to the tradition of Prophet Muhammad p.b.u.h in terms of sayings, acts, tacit approval or characters of the prophet Muhammad.

Hajiyyah. A part of human being's needs to alleviate human' hardships and difficulties. However, the need is not reach the level of necessity.

Hanafiyyah. Refers to the opinion belongs to Hanafi school of thought pioneered by Imam Abu Hanifah.

Halal. An act which is lawful for Muslim as approved by Islamic legal texts.

Halal Certificate. An official certificate issued by recognized Halal Certification. Bodies that fulfilling Halal Standards or requirements which complies to Shariah.

Halalan Tayyiban. The products or lifestyle which is fulfilling physical and spiritual quality as required from Shariah.

Haram. An act which is unlawful for Muslim as approved by Islamic legal texts.

Hasyarat. Insects and its derivatives.

Hifz al- A'ql. A part of necessities in objective of shariah which means preservation of mind.

Hifz al- Mal. A part of necessities in objective of shariah which means preservation of property.

Hifz al- Nasb. A part of necessities in objective of shariah which means preservation of progeny.

Hifz al-Nafs. A part of necessities in objective of shariah which means preservation of life.

Ijtihad. Refers to an independent reasoning of a jurist after went through a thorough effort to find out solution on any arising legal issues.

'Illah. Legal causes lead to deducing of Islamic legal rulings

Istihalah. The process of transformation through chemical and physical transformation or involving both of transformation.

Istihalah Sahihah. Perfect transformation at the end of product.

Istihalah Fasidah. Imperfect transformation at the end of product.

Istihlak Sahihah. Perfect dilution process.

Istihlak Fasidah. Imperfect dilution process.

Istishab. Presumption of continuity as stated according to Islamic legal texts.

Jahiliyyah. It refers to pre-Islamic period, before the coming of Prophet Muhammad p.b.u.h that synonymously with the acts of shirk, infanticide, tribal strife and etc.

JAKIM. Refers to Department of Islamic Development Malaysia that functions as Halal Certification Body in Malaysia.

Jumhur U'lama'. Refers to opinion of majority Muslim scholars.

Khabaith. Refers to animals which are disgusting and unpleasant according to human inclination.

Kamaboko. Among of the surimi products that made up from all natural ingredients such as fish pastes, egg whites hites, salt, sugar, fish sauce and other ingredients. Generally, the surimi producers prefer not to include artificial coloring to preserve its natural taste.

Ma'fu an'hu. The filth materials which are tolerable according to Islamic perspectives.

Mafsadah. Harmfulness or any evil acts that should be avoided or prohibited among the Muslims.

Maqasid Shariah. Refers to objectives of Shariah in order to preserve of order achievement of prosperity and prevention of harm that leads to disorder among the Muslim community.

Maslahah. Consideration to preserve prosperity and eliminate any causes leads to harmfulness.

Maslahah Al- Mulgha. Discredited of maslahah as a result not in line with achievement of objectives of Shariah.

Maslahah Al- Mursalah. Consideration of public interest as intended by Allah s.w.t for the sake of objectives' Shariah achievement.

Muharramat lizatihi. Prohibited sources due to its natural characteristics (ayn).

Mujmal. General interpretation of quranic verses.

Muqayyad. Specific interpretation of quranic verses.

Mutanajjis. The food or any products contaminated by filth materials.

Najs. Any materials which recognized as impurities elements according to Shariah Laws.

Non- spilled out blood. Refers to the blood in non-flowing condition such as the blood accumulated in meat and the blood from insects' species.

Plasma protein. Protein extracted from plasma component.

Porcine Plasma. The plasma component extracted from pig that usually transformed into food additive.

Polymerase Chain Reaction (PCR). A part of authenticity instrument to detect specific species of DNA sample.

Principles. A fundamental truth or proposition serves a basic foundation for a system of belief.

Products. Any materials that have been manufactured or refined for selling purposes

Qawaid Fiqhiyyah. Refers to the instruments applied by jurists in Usul al- Fiqh related field.

Qiyas. Analogical reasoning applied by the jurists to deduce Islamic legal rulings from Al- Quran and Sunnah of the Prophet.

Rijs. Any materials which are unpleasant and disgusting according to human inclination.

Seafood-based products. The food products processed from seafood –based sources.

Shafiiyyah. Any related opinions according to Shafii school of thought.

Spray-dried plasma. Protein based products obtained from plasma component. The blood is generally centrifuged to separate the blood cells.

Surimi. Derived from Japanese term refers to minced fish paste or other meat –type based. It has been mixed with other ingredients such as sugar, sorbitol and sweetener.

Tafsir Al- Azhar. Quranic exegesis written by Prof. Dr. Abdul Malik Karim Amrullah or prominently known as Hamka.

Tafsir Al- Jalalain. Quranic exegesis written by Imam Jalaluddin Al- Sayuti and Imam Jalaluddin Al- Mahalli.

Tafsir Al- Misbah. Quranic exegesis written by Muhammad Quraish Shihab.

Tahsiniyyat. Refers to any matters to complement human’s life as preferable.

Taharah. Any related to cleanliness matters.

Taysir. Any matters to facilitate human activities.

Umum Al- Balwa. A situation that hardly avoided by mukallaf and will put the muslim in extreme difficulties if ignore it.

U’rf. Something which is known and normally practice by people.

Waqi’. Consideration of contemporary situation in deducing Islamic legal rulings.

Zahiriyyah. Any related opinions attributes to Abu Sulayman Dawud bin Ali bin Khalaf al Zahiri school of thoughts.

THE TRANSLITERATION OF ARABIC TERMS

The transliteration and spelling of the Arabic script for Arabic terms used in the thesis are summarized as below:

Table A
Transliteration of Arabic Terms

Terms	Transliteration	Arabic Words
<i>Ad-dam</i>	<i>Ad-dam</i>	الدَّم*
<i>Al-Quran</i>	<i>Al-Qurān</i>	الْقُرْآن
<i>Al- Mudawwanah</i>	<i>Al- Mudawwanah</i>	المُدَوَّنَة
<i>Bidayatul Mujtahid wa Nihayatul Muqtasid</i>	<i>Bidāyatul Mujtahid wa Nihāyatul Muqtasid</i>	بِدَايَةُ الْمُجْتَهِدِ وَالنِّهَايَةُ الْمُقْتَصِدُ
<i>Fiqh</i>	<i>Fiqh</i>	فِقْهٌ
<i>Fiqh At'imah</i>	<i>Fiqh al- Aṭ'imah</i>	فِقْهُ الْأَطْعِمَةِ
<i>Fuqaha'</i>	<i>Fuqahā'</i>	فُقَهَاءٌ
<i>Hadith</i>	<i>Hadīth</i>	حَدِيثٌ
<i>Hajiyyah</i>	<i>Hājiyyat</i>	حَاجِيَّاتٌ
<i>Hanafīyyah</i>	<i>Hanafīyyah</i>	حَنْفِيَّةٌ
<i>Halal</i>	<i>Halāl</i>	حَلَالٌ
<i>Halalan Tayyiban</i>	<i>Halālān Tayyībān</i>	حَلَالًا طَيِّبًا
<i>Haram</i>	<i>Harām</i>	حَرَامٌ
<i>Hasyarat</i>	<i>Hasyarat</i>	حَسْرَاتٌ
<i>Hifz al- A'ql</i>	<i>Hifz al-A'ql</i>	حِفْظُ الْعَقْلِ
<i>Hifz al- Mal</i>	<i>Hifz al-Māl</i>	حِفْظُ الْمَالِ

<i>Hifz al- Nasb</i>	<i>Hifz al-Nasb</i>	حِفْظُ النَّسْبِ
<i>Hifz al-Nafs</i>	<i>Hifz al-Nafs</i>	حِفْظُ النَّفْسِ
<i>Ijtihad</i>	<i>Ijtihad</i>	إِجْتِهَادٌ
<i>'Illah</i>	<i>'Illah</i>	عِلَّةٌ
<i>Istihalah</i>	<i>Istihālah</i>	إِسْتِحَالَةٌ
<i>Istihalah Sahihah</i>	<i>Istihālah al- Sahīhah</i>	إِسْتِحَالَةُ الصَّحِيحَةِ
<i>Istihalah Fasidah</i>	<i>Istihālah al- Fāsīdah</i>	إِسْتِحَالَةُ الْفَاسِدَةِ
<i>Istihlak Sahihah</i>	<i>Istihlāk al- Sahīhah</i>	إِسْتِهْلَاكُ الصَّحِيحَةِ
<i>Istihlak Fasidah</i>	<i>Istihlāk al- Fāsīdah</i>	إِسْتِهْلَاكُ الْفَاسِدَةِ
<i>Istishab</i>	<i>Istishāb</i>	إِسْتِصْحَابٌ
<i>Jahiliyyah</i>	<i>Jahilīyyah</i>	جَاهِلِيَّةٌ
<i>Jumhur U'lama'</i>	<i>Jumhūr al- 'ulamā'</i>	جُمْهُورُ الْعُلَمَاءِ
<i>Khabaith</i>	<i>Khabāiṭh</i>	خَبَائِثٌ
<i>Ma'fu an'hu</i>	<i>Ma'fū a'nhu</i>	مَغْفُورٌ عَنْهُ
<i>Mafsadah</i>	<i>Mafsadah</i>	مُفْسَدَةٌ
<i>Maqasid Shariah</i>	<i>Maqāsid Šhari'ah</i>	مَقَاصِدُ الشَّرِيعَةِ
<i>Maslahah</i>	<i>Maslāḥah</i>	مَصْلَحَةٌ
<i>Maslahah Al- Mulgha</i>	<i>Maslāḥah al-Mulgha</i>	مَصْلَحَةُ الْمُلْغَى
<i>Maslahah Al- Mursalah</i>	<i>Maṣlahah al- Mursalah</i>	مَصْلَحَةُ الْمُرْسَلَةِ
<i>Muharramat lizatihi</i>	<i>Muḥarramat liḏhātihi</i>	مُحَرَّمَاتٌ لِذَاتِهَا
<i>Mujmal</i>	<i>Mujmal</i>	مُجْمَلٌ
<i>Muqayyad</i>	<i>Muqayyad</i>	مُقَيَّدٌ
<i>Mutanajjis</i>	<i>Mutaṇajjis</i>	مُتَنَجِّسٌ
<i>Qawaid Fihiyyah</i>	<i>Qawā'id al- Fiḩhīyyah</i>	قَوَائِدُ الْفِئْهِيَّةِ
<i>Qiyas</i>	<i>Qīyās</i>	قِيَاسٌ

<i>Rijs</i>	<i>Rijs</i>	رَجْسٌ
<i>Shafii 'yyah</i>	<i>Syāfiī 'yyah</i>	شَافِعِيَّةٌ
<i>Tafsir Al- Azhar</i>	<i>Tafsīr Al-Azhār</i>	تَفْسِيرُ الْأَظْهَارِ
<i>Tafsir Al- Jalalain</i>	<i>Tafsīr Al- Jalālayn</i>	تَفْسِيرُ الْجَلَالَيْنِ
<i>Tafsir Al- Misbah</i>	<i>Tafsīr Al- Misbāḥ</i>	تَفْسِيرُ الْمِصْبَاحِ
<i>Tahsiniyyat</i>	<i>Taḥsīnīyyat</i>	تَحْسِينِيَّاتٍ
<i>Taharah</i>	<i>Ṭahārah</i>	طَهَارَةٌ
<i>Taysir</i>	<i>Taysir</i>	تَيْسِيرٌ
<i>Umum Al- Balwa</i>	<i>U mūm al- Balwā</i>	عُمُومُ الْبَلْوَى
<i>U'rf</i>	<i>U'rf</i>	عُرْفٌ
<i>Waqi'</i>	<i>Waqi'</i>	وَأَقِعٌ
<i>Zahiriyyah</i>	<i>Zahirīyyah</i>	ظَاهِرِيَّةٌ

Transliteration of Arabic terms according to the spelling as found in Table B.1 and the vowel spellings are as in Table B.2

ا	A	ح	H	ز	Z	ط	Ṭ	ق	Q
ب	B	خ	H	س	S	ظ	Z	ك	K
ت	T	د	D	ش	SH	ع	'	ل	L
ث	Ṭ	ذ	DH	ص	Ṣ	غ	GH	م	M
ج	J	ر	R	ض	DH	ف	F	ن	N
هـ	H	ي	Y						
لا	LA	ى	Ā						
ء	A								

Table B.2
Use of Vowels

Short Vowel			Extended vowel	
◌َ	A		◌َ◌َ	ā
◌ِ	I		◌ِ◌ِ	ī
◌ُ	U		◌ُ◌ُ	ū

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter provides the thesis overview and structure to assist the researcher in completing the writing process within the planned framework. The background of the research, problem statement, research objectives, research questions, research scope, expected outcomes, significance of the study, definition of terms and lastly thesis chapterization are the main components that will be discussed in this chapter. The first chapter will be a guideline for the researcher to ensure the thesis flow is in line with the research scope and reflects the proposed research topic.

1.2 BACKGROUND OF THE RESEARCH

The advanced development in the field of science and technology had a great impact on the food industry. Manufacturers must ensure that the process of food production runs smoothly from selecting the raw materials until the products are finally distributed to the consumers. Despite this being a positive development, it is a great dilemma to Muslim consumers in terms of the halal status of food products (Mamat, 2019) particularly those that are not stamped by the Halal logo (Fadzillah et al., 2020). In fact, the current trend of the food processing industry promotes the use of waste materials from slaughterhouses as an alternative food source for human beings in the present and the future. Some food manufacturers, mainly among the non-Muslim, claim that this practice is a sustainable effort to minimize environmental problems resulting from ineffective waste materials management (Toldrà et al., 2019 ; Lynch et al., 2017).

One of the demanded waste materials is animal blood because it functions as an alternative cheap protein source in numerous food products (Fu et al., 2018). It is approximated that around 30 % of the food industry are utilizing animal blood for various purposes (Gandhi, 2017). Animal plasma is the most preferable component