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The Implementation of Halal Management in Food Company
Case study: Biscuits Production - KAMELO -

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Abstract

The increased demand for halal-certified products underscores the need for food companies to adopt effective halal management practices. This research aims to clarify how halal management can be applied effectively in the food industry with a specific focus on SARL KAMELO Food's experience in producing halal-certified cookies. A qualitative study has shed light on halal management's possibilities and challenges. This study has provided insights into the challenges and potential solutions for implementing halal certification in the food industry, which may have implications for producing halal-certified food products in collaboration with a Quality Manager and an Islamic and food science auditor, who possess extensive knowledge and experience in halal management practices. The findings highlighted the importance of collaboration, standardized processes, comprehensive training programs, internal audits, and the implementation of ISO or HACCP procedures in successfully managing halal requirements and meeting the growing demand for halal-certified products, with some deviations that need to be addressed.

Key-words: Halal management, halal certified products, effective halal management practices, food industry.

Résumé

La demande croissante de produits certifiés halal souligne la nécessité pour les entreprises alimentaires d'adopter des pratiques efficaces de gestion halal. Cette recherche vise à clarifier comment la gestion halal peut être appliquée de manière efficace dans l'industrie alimentaire, en mettant particulièrement l'accent sur l'expérience de SARL KAMELO Food dans la production de cookies certifiés halal. Une étude qualitative a mis en lumière les possibilités et les défis de la gestion halal. Cette étude a apporté des éclairages sur les défis et les solutions potentielles pour la mise en œuvre de la certification halal dans l'industrie alimentaire, ce qui pourrait avoir des implications pour la production de produits alimentaires certifiés halal, en collaboration avec un responsable qualité et un auditeur en sciences islamiques et alimentaires, possédant une connaissance approfondie et une expérience dans les pratiques de gestion halal. Les résultats ont souligné l'importance de la collaboration, des processus standardisés, des programmes de formation complets, des audits internes et de la mise en œuvre des procédures ISO ou HACCP pour gérer efficacement les exigences halal et répondre à la demande croissante de produits certifiés halal, avec quelques déviations qui nécessitent d'être traitées.

Mots-clés : Gestion halal, produits certifiés halal, pratiques efficaces de gestion halal, industrie alimentaire.

ملخص

مع التزايد في الطلب على المنتجات المصادق عليها بالحلال اعتمدت شركات الأغذية على تطبيق ممارسات فعالة لإدارة الحلال. من هنا تهدف هذه الدراسة إلى توضيح كيفية تطبيق إدارة الحلال بشكل فعال في صناعة الأغذية مع الاعتماد بشكل خاص على تجربة شركة SARL KAMELO Food في تصنيع المنتجات المعتمدة بالحلال، وذلك من خلال تسليط الضوء على إمكانيات وتحديات إدارة الحلال. ولتحقيق هدف الدراسة تم الإعتماد على المنهج النوعي من خلال الملاحظة و دراسة للملفات، إضافة إلى المقابلات الشفوية بالتعاون مع مدير الجودة ومدقق مختص في علوم الغذاء الإسلامي. قدمت هذه الأخيرة رؤى حول التحديات والحلول المحتملة لتنفيذ شهادات الحلال في صناعة الأغذية، و التي مكنتنا من الوصول الى استنتاج أن أهمية التعاون، تتبع المعايير، تخطيط برامج تدريب شاملة، تنفيذ عمليات التدقيق الداخلية و إجراءات ISO و HACCP من شأنها تطوير إدارة حلال فعالة في صناعة الأغذية مع وجود بعض الانحرافات الواجب العمل عليها.

الكلمات الرئيسية: إدارة الحلال، المنتجات المعتمدة الحلال، ممارسات إدارة الحلال الفعالة، صناعة الأغذية.

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Abbreviations

- AMLA.** : *administration of muslim law act*
- CIA.** : *Central Intelligence Agency*
- GCC.** : *Gulf Cooperation Council*
- GHP.** : *Good Hygiene Practices*
- GSO.** : *Gulf Standards Organization*
- HACCP.** : *Hazard Analysis and Critical Control Points*
- HalMQ.** : *Halal Quality Management System*
- HSC.** : *Halal Supply Chain*
- IANOR.** : *Algerian Institute for Standardization*
- IHC.** : *the Internal Halal Committee*
- ISO.** : *International Organization for Standardization*
- JAKIM.** : *Jabatan Kemajuan Islam Malaysia*
- JORA.** : *Official Journal of the Algerian Government*
- MS.** : *Malaysian Standard*
- MUIS.** : *Majlis Ugama Islam Singapura*
- OIC.** : *Organisation of Islamic Cooperation*
- RM.** : *Raw material*
- SMIIC.** : *Standards and Metrology Institute for Islamic Countries*
- SWOT.** : *Strengths, Weaknesses, Opportunities, Threats*

INTRODUCTION

Halal goods and services have constituted ‘niche’ markets like in Islamic Finance, Islamic Lifestyle, Islamic Tourism, and Halal Food; Based on concept of Halal which is all what's permitted in Islam. The Statistical, Economic and Social Research and Training Centre (2021), declared that the increased global awareness on issues like ‘sustainability, ‘ethical consumption’, ‘green growth’¹ and ‘digitisation’ helped the Halal industry to flourish in recent years both in OIC² countries and around the globe.

Besides, with the increase in the Muslim population, the halal industry continues to expand into lifestyle products, including halal tourism, fashion and hospitality (Mogran , et al., 2020).

With the increasing demand for halal products, standardization, guarantees, or certifications are needed to maintain the quality, hygiene and safety of halal products issued by authorized institutions or authorities. Halal certificates are important for Muslim and non-Muslim consumers because they protect religious principles and consumer rights while providing a sense of security and assurance in the health sector (Khasanah, et al., 2021).

DW documentary (2022), achieved an interview with Susamma Schoroeder from the Frankfurt Research Center on Global Islam, where she explained that people hope that whatever is certified will sell than something uncertified, so for sure there is finagling and cheating at these certification agencies, some take it very seriously and others take it less, and the necessity to look at who is doing the certification and what standards they're using,

On other hand, Halal certification is a guarantee of protection for Muslims to consume food products in accordance to Islamic dogma. Halal licensed merchandise are proven with the aid of the halal logo on the product packaging. Through halal certification, food producers can send claims on the market if what they sell is halal for Muslim shoppers and trusted by people who import and buy the product (Basri & Kurniawati , 2019).

Alzeer & Abou Hadeed (2020), Outlined that Health is a state of well-being, and maintaining strength and good health is a basic human right: “Your body has a right over

¹ Green growth means foresting economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies

² The Organisation of Islamic Cooperation, formerly the Organisation of the Islamic Conference

you” (Sahih al-Bukhari)³; food, safety, and hygiene laid down as the perception of quality of life of different societies.

Mukhtar and Mohsin (2012), explained that Muslims often have some difficulty defining what is allowed in a product category, so the final religious assessment is subjective for each Muslim. This trouble can be addressed via Halal labelling or certification (Hanamto & Rizkitysha, 2020).

Hence, the Standards and Metrology Institute for Islamic Countries (SMIIC)⁴ is one of the international bodies’ leaders, whom accordinate standardisation because of the difference requirements and certificates worldwide, Furthermore, the Statistical, Economic and Social Research and Training Centre (2021), mentioned that there are no worldwide-recognized scientific methodologies for determining the Halal status of food products.

As it appears, the food industry has been especially impacted by this trend; many companies are now seeking to cater specifically to the halal food market. Companies in the halal food logo, including those that do not traditionally sell products compliant with Islamic dietary requirements, have begun to cater to customers who looks for halal-certified foods. To remain competitive in that market; food companies must meet Muslim consumers’ expectations and ensure compliance with Islamic dietary laws by a process known as halal management. Additional interview by DW documentary ⁵ (2022), with Kemar Calik an editor in chief of Halal Weld said that a global halal economy is cropping, for example Nestle⁶ is number one in the Halal Market, the company has some 400 production facilities around the world and about 150 of them are halal, and those who don’t, will switch to halal in the future.

More recently, According to Bimp-eaga (2022), there are around 1.9 billion Muslims worldwide, in 2021 they spent 8.9 percent more money than in the previous year total sales for Islamic consumer goods were just reached two trillion dollars in addition the State of the Global Islamic Economy indicated a 4-year cumulative annual growth rate of 7.5

³ Sahih al-Bukhari is a hadith collection and a book of sunnah compiled by the Persian scholar Muḥammad ibn Ismā‘īl al-Bukhārī around 846

⁴ Standards and Metrology Institute for Islamic Countries is an intergovernmental and one of the 17 affiliated organizations of the Organisation of Islamic Cooperation

⁵ DW documentary gives us information beyond the headlines. Several, such documentaries from German broadcasters and international production companies, and a lot of interested subjects for example current affairs, global events, and more.

⁶ Nestlé S.A. is a Swiss multinational food and drink processing conglomerate corporation headquartered in Vevey, Vaud, Switzerland

percent; Plus, the Halal Food sector represented the second important market size in the Halal industry with a size of USD 922.7 billion in OIC countries in 2020.

Algeria, a new player in the international halal market, The Algerian halal market includes a wide range of products, from meat, poultry and dairy items to beverages and packaged foods; According to an interview with Ahriz (2017), Head of Consumer Protection Federation, Zaki Ahriz said that many of the food products that are manufactured in Algeria containing raw materials from unknown source, and therefore they must work with “Halal Labelling” to make sure that the ingredients and food additives for each product that is sold in the market for consumers is Halal.

Rizki, Mohd Noor & Ismail’s study (2016), cleared that Algeria is one of the countries that have a lower competitiveness of the halal industry in the Maghreb countries; thereby, the competitiveness of the national halal industry should be enhanced by the state and industry, in reason to stay concurrent in the international halal market. As well, the Algerian halal market offers significant opportunities for companies that are looking to expand their product offerings in this growing sector and capture the interests of consumers who seek high-quality, internationally recognized products.

The objective of this research is to understand the successfulness of applying a halal management in a food industry. This work is based on different researches previously established by many authors such as Hakim et al. (2022). The purpose of this research is to find answers to the following question:

How to successfully implement a halal management in a food industry?

A qualitative research approach was used to accomplish this goal, and semi-structured interviews with important industry stakeholders were conducted. The use of qualitative research made it possible to thoroughly examine the viewpoints and experiences of persons involved in halal management, giving important insights into the potential and obstacles related to successfully implementing this system.

The first chapter of this work explores the theoretical underpinnings and principles of halal management in the food business by delving into the literature in this field of study. The chapter also provides a conceptual framework for assessing the research findings, emphasizing the important factors and interactions that are essential to comprehending the

application of halal management. The research approach used in this study is described in depth in chapter two. The chapter gives in-depth descriptions of the data gathering and analysis techniques in addition to outlining the justifications for using a qualitative approach. The study's findings are provided in chapter three, together with the conclusions drawn from interviews with main players in the food sector. The primary themes and sub-themes that arose from the data are examined in detail, and the analysis of the data is in line with the conceptual framework created in chapter one. Last but not least, the conclusion chapter summarizes the key findings, restates the research's purpose and goals, and considers the study's contributions to the field of halal management in the food business.

Research interest

This research topic has an interest to clarify how halal management can be applied effectively in the food industry in order to understand the mechanism enforcement among consumers. It seems worthwhile, then, to study the enforcement of the implementation of management halal in an Algerian food industry.

CHAPTER I: THEORETICAL FRAMEWORK

Section one: Literature review

In aim to provide an overview of the current research on the implementation of halal management in the food industry. The literature has reported scientific articles, standards and academic works of many authors.

1. Halal food processing essentials

1.1 Halal Certification and concepts

Several such David (2022) and Praticto et al. (2020), agreed that Halal is an Arabic term used by Muslims on all what is authorized under Islamic Sharia, and the opposite called Haram. On the other hand, Bergeaud-Blackler & Bernard (2013), have indicated that, for market participants, halal is a sign of quality that marks a product of preference for consumption by Muslims. In the first case, the perimeter of the lawfulness is defined by that of the prohibited, while in the second case the halal is designed as an additional quality or guarantee.

Halal products are generally products that contain no pork, alcohol, blood, or ingredients of animal origin, and their manufacture does not include items considered unclean by Islamic law, including cleaning (Bashir, Anisa, & Aam Slamet, 2022); of which, Abd Kadir et al. (2016) and Praticto et al. (2020) touched on the subject of Halal compliance, and mentioned different associated criteria for control the cleanliness, hygiene and cross-contamination with non-Halal foods while in production, manufacturing, on-farm facilities and in slaughtering facilities. Stressing that the physical segregation is not only critical in the production phase but also along the supply chain to preserve its Halal status. In addition, to aid individuals who have Halal Certificates in keeping their Halal status. The system's guiding principles offer specific instructions for making sure that religious requirements are upheld along with the integrity and traceability of Halal practices by the right quality management system by IHC⁷ (Adam, Bahari, & Abdul Jalil, 2020).

Bashir et al. (2022), defined Halal certification as a religious obligation for Muslim customers according to Alserhan's definition (2010), while, other authors agreed that this last is important for both Muslim and non-Muslim consumers alike as it protects religious

⁷ IHC is the committee who is appointed officially and responsible for developing, implementing, monitoring and controlling HAS to ensure the effectiveness of HAS implementation

principles and consumer rights while providing reassurance and peace of mind for the healthcare industry (Khasanah, et al., 2021).

After all, Halal certification has been recognized as a benchmark of quality standards for product content, bringing significant value and benefits to consumers and producers, especially within the food industry (Rafiki & Abdul Wahab, 2016).

1.2 Halal Supply Chain Management

Peristiwo's study (2019), revealed that in the current era of halal food chains and halal science, the competition for halal food supplies is higher domestically (Malaysia in that case) than overseas. Consequently, halal food companies have to maintain production and other technology companies must respond to consumers more quickly. The study utilized a qualitative approach, generating descriptive data in the form of spoken and written words from people, as well as observing their behaviour, to create a comprehensive picture. Therefore, another important aspect of managing halal in the food industry is halal supply chain management. According to a study by Lukito & Islam (2020), HSC⁸ research is still in its early development stages. The study found five themes consisting of 24 different topics, including the engagement process, quality control assurance, critical success factors, the production and distribution process, and HSC operations support. The study suggests several main future research points to focus on. There have been several studies looking at the challenges of implementing halal supply chain management, including issues related to logistics, transportation, and storage. Take Mohd, Haleem and Khan's research (2018), as an example, they highlighted various issues related to supply chain management in the halal meat industry, such as preserving the integrity of the halal certification process throughout the entire supply chain.

1.3 Halal Auditing and Inspection

Halal auditing is a crucial element in halal management in the food industry, as it helps to ensure the validity and reliability of information, people, organizations, processes, and systems. It provides reasonable assurance for the production and provision of Halal food. Given the complexities of modern food production, it can be difficult to know exactly what

⁸ The halal supply chain is a network of supply that gives special attention and endorsement to the products and services to ensure halal integrity throughout the network.

goes into the food we eat, which makes proper halal auditing even more essential (Farooqui, 2013).

Halal auditing practices have been a topic of interest in many studies, with several areas identified for improvement. For instance, Hanim Yusuf et al. (2017), conducted a study in Malaysia and found that the auditing process has some weaknesses, such as a lack of standardization and inconsistency in interpreting halal requirements. As part of their research, Mohd et al. (2018), also looked into the halal inspection process and emphasized its importance in a HC system where the end product is issued in the form of a halal certificate and logo. To further validate this notion, they collected data from interviews and observations to highlight the reality of HI, revealing that it is an important issue in the HC field. In addition to this, they spilled that the halal virtual inspection is a worthwhile topic to explore as it can significantly improve the quality of services in the HC sector in the future. Yet, the problem is that industry representatives can manipulate their justifications, making it impossible for auditors to determine the truth. Such deficiencies could seriously harm the halal authority's reputation (Muhammad, Elistina, & Ahmad, 2020).

1.4 Halal Training and Education

Adequate training and education regarding halal are fundamental for successful halal management in the food industry. Various studies have highlighted the significance of imparting training on halal to employees in the food industry along with the requirement to educate consumers towards the halal certification process. For instance, a study conducted by Sherwani et al. (2018), elucidated that the employees in the food industry in Pakistan lacked pertinent knowledge pertaining to halal requirements, and consequently, there was an imperative need for enhancing training and educational programs in this domain.

Likewise, one of the challenges facing halal trainers is language and educational background, according to a study conducted by Harun et al. (2021). The study, which aimed to analyze the challenges faced by trainees, used a qualitative method of collecting data through interviews, and revealed that there are several bumps and hindrances that need to be overcome.

2. The implementation of Halal certification in different countries

Halal's certification created a clear disagreement between the public and researchers with their different opinions about its pros and cons. Hakim et al. (2022), took this topic as important to them in their scientific article on the analysis of the sense of halal certificate, to

examine the halal certificate in the scope of the economy, based on the views of Twitter users as a reference, and they had used the qualitative method. Sentiment analysis results showed that the positive perceptions of halal testimony in the opinion of Twitter users are the highest at 41.8%, neutral feelings at 30.8%, and negative emotions at 27.4%. Asserting that getting this diversity in the results of emotions is caused by the merits and demerits of the vitality of halal certification. The next important information is **Malaysia** “the religious order of the Federation is Islam” was the second most location with 846 tweets and **Singapore** “Homogeneous in religion” the fifth with 450 tweets (Hakim, Syahidah Mujahidah, & Slamet Rusydiana, 2022); they were among the first major participants in halal certifying countries.

2.1 Malaysia

As soon as we recall the in-depth study of Abdul Majid et al. (2015), they shed light on the intuitive truth that halal food is pervasive in Malaysia, has been recognized as a place where halal food and products are readily available and accessible, as a result of its Government's objective to establish that country as an international halal centre to promote the development of halal products and services for the global community, Reinforcing the idea by mentioning Zakaria's (2008) words about the fact that the country's Government sees this logo not as a religious aspect, but as a model for industry in other countries, describing it as a very ambitious goal. The only halal logo that is permitted by JAKIM⁹ is the one that has the word Malaysia. That study illustrated Malaysia's halal concept and current situation with a focus on Malaysia's issues and challenges.

In addition, they linked the Malaysian halal certificate to other qualifications for instance MS1500¹⁰ and general guidelines on the production, preparation, handling and storage of halal foods which.

Malaysian standards for halal food, MS1500:2009 developed as a standard for the global halal food quality system.

In their study, Che Din & Daud (2014), addressed the critical success factors of implementing MS1500:2009 based on several previous studies, including Jamil, Yakoob and

⁹ The official abbreviation of “Jabatan Kemajuan Islam Malaysia” which is the Department of Islamic Development Malaysia.

¹⁰ HALAL FOOD - PRODUCTION, PREPARATION, HANDLING AND STORAGE - GENERAL GUIDELINES “Malaysian Standard”

Niza (2007), they agreed with their idea that Malaysia's guiding MS1500:2009 should be used as a criterion for halal food quality because the concept and specific requirements are comprehensive, covering the entire food production process. It starts at the farm and continues during the next stages of the production process until the product reaches the customer's hand. Experts such as academics, industry practitioners, consultants and liquidators were brought together to conduct the said study. The results showed that the key success factors of MS1500:2009 implementation for halal food producers, and for stakeholders in the halal food industry in general, are of deep concern. They added that there are eleven critical success factors that MS1500:2009 producers or liquidators must focus on. It can be understood that these factors serve as guidelines for all MS1500:2009 enforcers to allow them to provide high quality halal products.

2.2 Singapore

Singapore is not a Muslim-majority country; however, it is one of the world's halal campaigners. In addition, the total number of halal certified premises have increased by MUIS¹¹ to 5000 in 2015, hand to hand, with the development of the halal industry in Singapore (Rokshana , 2019).

According to Baharudin et al.'s research (2016), through library researches, the halal certification procedures in the ASEAN sector are linked to authority certifying bodies, laws, standards and guidelines, certification process, referral and legal issues, and logo.

Since 1978, the MUIS has been the one officially recognized entity in Singapore to offer halal certificates. It is based on Article 88A paragraph (1) of AMLA¹². MUIS has the authority to select and annul provisions, norms, and requirements that are appropriate for the relevant conditions, in addition to issuing halal certificates.

Otherwise, the regulations in Singapore that require halal certificates for food and beverage goods, medicines, and cosmetics are voluntary (Rokshana , 2019).

Baharudin et al. (2016), subdivided the basic Standards for halal certification into religious and technical parts:

¹¹ The official abbreviation of «Majlis Ugama Islam Singapura» which is the Religious Council of Singapore

¹² Singapore statute that pertains to regulation of Muslim religious affairs, establishing the creation of a religious council to offer advice on matters related to the Muslim religion, and the creation of a Syariah Court in Singapore.

- 1) Religious component includes Singapore MUIS Halal Standard (MUIS-HC-S001): General Guidelines for the Handling and Processing of Halal Food; and
- 2) The technical component includes Singapore MUIS Halal Standard (MUIS-HC-S002); General Guidelines for the Development and Implementation of a Halal Quality Management System (HalMQ¹³).

Furthermore, the halal certification process was carried out by MUIS in four stages: application submission, processing, certification, and post certification. MUIS offers seven Halal certification programs for diverse industry sectors.

Consequently, the halal certification process in Singapore is carried out in accordance with the Quran and Sunnah, adhering to specific standards, procedures, certification requirements, and even the Fatwa. Ultimately, the halal logo in Singapore is represented by a single unified symbol

2.3 Middle east countries

The Gulf countries in the Middle East led by Saudi Arabia, have come up with very sophisticated standards for meat and prepared foods, called “Gulf standards” which include guidelines and requirements related to foodstuffs (Mian N & Muhammad M, 2004). Those standards were established by the GCC¹⁴ (Heggum, C, 2016).

Ali et al. (2021), defined the GSO¹⁵ 2055-2:2015 standard as a set of guidelines developed by the GSO to provide a framework for halal certification bodies operating in Gulf countries. The standard set out the requirements and guidelines for halal certification bodies to ensure that they are operating in a transparent, consistent, and credible manner.

According to Jawad & Khaled (2020), the certification process in those countries has developed to assure the cleanness, safety, and conformity of the made product with Shari’ah¹⁶, also to carry out the site audit, which can be divided into three stages: documentation review, physical/ on-site audit and lastly revies/ closing meeting.

¹³ A set of systems-based Halal requirements that is benchmarked against international known standards such as ISO and HACCP.

¹⁴ A political and economic alliance of six countries located in the Arabian Peninsula: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

¹⁵ The organization is responsible for developing and promoting standardization activities in various sectors to facilitate trade and ensure consumer protection within the GCC region.

¹⁶ Shari’ah is the legal practice derived from the teachings of the Quran, Islam's holy book, and the teachings of the Prophet Muhammad, or Sunnah.

2.4 Algeria

Based on the world Factbook¹⁷ statistics by CIA¹⁸ (2015), Algeria is a predominantly Muslim country, with nearly 100 percent of its population practicing Islam.

The official webpage of the Halal Accreditation Agency of the Republic of Turkey, it has been reported that IANOR¹⁹, in accordance with the provisions outlined in Articles 2 and 4 of the Council of Ministers Decree dated 14 June 2016, has taken the initiative to establish a halal brand. The primary objective behind the creation of this brand is to ensure the safety and welfare of consumers by providing them with access to halal-certified products. In addition, the brand seeks to open up new avenues for Algerian businesses by enabling them to tap into the lucrative global halal food market.

As stated by Yun, Lee and Kim (2020), and in accordance with GAIN Report No. AG2022-0013 (2022), Algeria applied food safety regulations to both domestically produced and imported food items, which governed specifications for various types of food, the technical specifications for halal food, non-halal food, and the processing requirements for halal food, in addition to the international standards used are outlined in the Order published in JORA²⁰ No. 15 on March 19, 2014. While, consumer information requirements were mapped out in Decree 13-378 of November 9, 2013 (published in JO No.58 on November 18, 2013). Likewise, on December 8, 2016, an inter-ministerial meeting (published in JO No. 70 on June 14, 2016) established the conditions and procedures for labeling food products as "halal".

According to the General Director of the Algerian Institute for Standardization (2017), Algeria faces difficulties exporting its products to several Islamic countries, including Malaysia and Saudi Arabia, due to the lack of Halal certification. The Algerian Ministry of Trade and Export Promotion issued a statement in Central government news (2017), declared that the Halal label for food products was officially launched in June of that year. The

¹⁷ The World Factbook, is an annual publication of (CIA) that provides information and statistics about countries and territories around the world. It covers a range of topics including geography, demographics, government, economy, communications, and military.

¹⁸ A civilian foreign intelligence service of the federal government of the United States. Its primary function is to collect, analyse, and disseminate foreign intelligence to support national security objectives and foreign policy of the United States.

¹⁹ IANOR is the Algerian Institute for Standardization which elaborate the reference systems requested by the economic actors, help the actors to access the normative reference systems, help the actors to apply the normative reference systems and propose a certification offer

²⁰ JORA is the official journal of the Algerian government, which publishes legal and administrative texts, including laws, decrees, regulations, and official announcements

National Committee for Monitoring Certification, which comprises representatives from the Ministry of Trade, Agriculture, Industry, Health, Religious Affairs, and other public institutions, is responsible for all matters related to Halal food products. The Algerian Institute for Standardization has been assigned the task of determining the specifications of the Halal label and the conditions for its issuance, serving as the certification body for national products in general.

Later, certain foods have been required to have halal certification in June 2017 (Kim, Yun, & Lee , 2020).

To access international markets that require a Halal certificate, the Algerian Minister of Trade, Rezig (2021), announced in an interview with Afrigate News Berkane (2021) that significant efforts have been made to develop and qualify quality facilities. He emphasized that the establishment of the National Committee responsible for monitoring promotion and implementing the Halal label in January 2021 was a critical step in this direction.

Furthermore, the local products are certified by the Algerian Institute for Standardization (IANOR) (Nabila, 2022).

Additionally, The Algerian Consumer Protection Organization has confirmed that the first Halal product certificate was issued in Algeria in 2023, indicating that the National Institute for Standardization grants the certificate to any operator who meets the necessary requirements for its use in export operations (Eldine, 2023).





3. Cross-referencing of countries' experiences

The implementation of halal certification in food industry involves a number of steps and considerations. These have been grouped into six main components: understanding Halal certification requirements, certification Procedure, understanding laws and standards, securing certification, implementing processes and labelling. Table 1 summarises the different drivers identified in the literature.

Table 1: Cross-referencing of countries' experiences

	Malaysia	Singapore	Middle East countries	Algeria
steps that can be taken to implement halal management in the food industry	<ul style="list-style-type: none"> - Training - Supplier verification - Facility design - Documentation - Certification - Audits and inspections - Continuous improvement 			
The Halal certification requirements	<ul style="list-style-type: none"> - Adoption of « GHP²¹ ». - Adoption of a suitable management system to the Islamic measures, with the purpose of hygiene and health safety. 			
Certification Procedure	<ul style="list-style-type: none"> 1-Voluntary pre-audit 2-Certification audit 3-Annual reviews 4-Re-certification every three years. 			
Laws and standards	- MS1500:2009 Halal Food - Production, Preparation, Handling and Storage – General Guidelines (Second version)	<ul style="list-style-type: none"> - Religious: (MUIS-HC-S001): General Guidelines for the Handling and Processing of Halal Food. - Technical: (MUIS-HC-S002); General Guidelines for the Development and Implementation of a Halal Quality Management System (HalMQ). 	- GSO 2055-2:2015 standard “Halal foods. Part 2: Guidelines for halal foods certification bodies.	<ul style="list-style-type: none"> - JO No. 15 on March 19, 2014 - Decree 13-378 of November 9, 2013 (published in JO No.58 on November 18, 2013) - Inter-ministerial meeting (published in JO No. 70 on June 14, 2016)
Authority certification bodies	Department of Islamic Development Malaysia “JAKIM”	the Religious Council of Singapore “MUIS”	- The Gulf Cooperation Council “GCC”.	- Algerian Institute for Standardization “IANOR “

²¹ GHP refers to a set of guidelines and behaviors that individuals and communities should follow in order to maintain cleanliness, limit disease spread, and promote general health.

			- Gulf Standards Organization “GSO”	
Certification process	<p>1-HAS « Halal assurance system » manual</p> <p>2-Halal police</p> <p>3-Halal executive</p> <p>4-JKHD « Jawatankuasa Halal Dalman » means Dalman Halal Committee</p> <p>5-Inan Halal Audit</p> <p>6-Halal Risk control</p> <p>7-Raw material control</p> <p>8-Halal exercise</p> <p>9-Traceability</p> <p>10-HAS Review</p> <p>11-Macmal Analysis</p> <p>12- Sertu</p> <p>13-documentations and Records.</p> <p>14- certification audit (Write, 2020)</p>	<ul style="list-style-type: none"> - Application submission - Processing - Certification, - Post certification. 	<ul style="list-style-type: none"> - Documentation review - Physical/ on-site audit - Reviess/ closing meeting. 	<ul style="list-style-type: none"> - Audit request - An audit conducted by a team of two auditors (experts in food safety and good manufacturing & Islamic auditor) practices from IANOR. - take samples to be submitted for analysis to a laboratory commissioned by IANOR. - Audit report - Certification
Labeling	 <p>Source: (Baharudin , Sharifuddin , & Arsiah, 2016)</p>	 <p>Source: (Baharudin , Sharifuddin , & Arsiah, 2016)</p>	 <p>Source: http://en.gulftic-icsc.com/</p>	 <p>Source: https://www.ianor.dz/certification/la-marque-halal/</p>

Source: developed by ourselves

This portion's table presents a comprehensive summary of the demands and processes for halal certification in a number of territories, including Malaysia, Singapore, Middle East countries and Algeria. The table gives additional information on the organizations in charge

of halal certification in each nation, as well as the requirements that must be satisfied for a goods to be classified as halal. The table also offers information on the certifying bodies responsible for enforcing each nation's halal labeling laws as well as the laws themselves, and the necessary actions. This table's content is crucial for companies looking to enter new halal markets since it provides insightful information on the particular standards and procedures needed to gain halal certification in various nations.

Section two: Conceptual framework

1. Definition of Halal goods

As stated by JORA N° 15 (2014)²², Halal product is: « *Any product that satisfies the requirements below and is authorized to ingest in accordance with Islamic law:*

-There should be no "non-halal" components or ingredients in it.

-It shouldn't have been handled using equipment or facilities that don't follow the guidelines in this technical standard when being prepared, processed, transported, or stored.

-During its preparation, processing, transport, or storage, it should not have come into direct touch with food that does not adhere to the requirements of the two (2) criteria mentioned above».

Similar definitions of halal item are used by **Codex Alimentarius**²³, **SMIIC**²⁴, **JORA** standard-setting entities, which seek to encourage adaptation to Islamic law.

2. Halal requirements

2.1 International regulations “Codex Alimentarius”

The following is mentioned in the standard's purpose and scope, the Agenda Item 12 CX/NE (2019)²⁵: « *The purpose of this work is to develop a global standard on the general requirements for Halal food*²⁶ *products depending on the compliance to principles and rules*

²² JORA (Journal officiel de la République algérienne démocratique et populaire) The official journal of the democratic and popular Algerian Republic

²³ The Codex Alimentarius is a collection of internationally recognized standards, codes of practice, guidelines, and other recommendations published by the Food and Agriculture Organization of the United Nations

²⁴ SMIIC Standards and Metrology Institute for Islamic Countries

²⁵ CX/NE 19/10/15: DISCUSSION PAPER ON THE DEVELOPMENT OF A STANDARD FOR HALAL PRODUCTS

²⁶ Definition of Halal food Food and drinks in CX/NE 19/10/15: that are allowed to be consumed according to (Islamic Sharia) rules and comply with the requirements mentioned in this standard

(of Islamic Sharia) accepted by Islamic Schools of thoughts among countries all over the world. It aims to guarantee the safety and quality of Halal Food Products in the framework of international trade. This proposal defines the basic requirements that shall be followed at any stage of the food chain²⁷, including receiving, preparing, processing, sorting, packaging, labelling, marking, controlling, handling, transporting, distributing, storing and servicing of Halal food and its driven products based on Islamic rules (Islamic Sharia). »

2.1.1 The Codex Alimentarius' requirements for using the term "HALAL"

This set of guidelines outlines the fundamental prerequisites that must be adhered to throughout the entire food supply chain, from receiving and preparation to processing, sorting, determination, packaging, labelling, marking, controlling, handling, transportation, distribution, storage, and service of halal food and its derivatives, all of which must comply with Islamic Sharia law (Table 2).

Table 2: Agenda Item 12 CX/NE 19/10/15 Codex Alimentarius' REQUIREMENTS FOR HALAL FOOD

	Issues	REQUIREMENTS
A	Meat and meat products	<p>1/Meat and meat products derived from the carcasses of animal: Domesticated animals such as cattle, buffalos, sheep, goats, camels, rabbits and equivalent animals.</p> <p>Non-predatory wild animals such as deer, antelope, chamois, wild cattle and equivalent animals.</p> <p>All kinds of fish and fishery products are halal except all poisonous water animals that are harmful to health.</p> <p>And birds: Chickens, geese, ducks, turkeys and non-predatory birds such as pigeons, sparrows, quails, starlings, and ostriches and equivalent birds. Shall satisfy the legal requirements of Islamic Sharia.</p> <p>2/ Food Additives²⁸ such as preservatives used in meat and meat products shall not contain any nonhalal ingredients.</p>

²⁷ Definition of Food chain in CX/NE 19/10/15: All food stages involved in the production of food from raw material until distribution and market display

²⁸ Definition of food additives in CX/NE 19/10/15: Substances added to food to preserve or improve taste, smell, appearance or texture or ... etc.).

B	Milk and dairy products	1/Milk and dairy products derived from animals defined in section « A » are Halal ²⁹ 2/ Food ingredients such as gelatin or any food additives shall not be produced from non-halal ³⁰ products and any material such as rennet, which shall be produced from halal source and taken from slaughtered animal according to Islamic Sharia
C	Eggs and egg products	1/ Eggs and egg products obtained from halal birds as defined in section « A » are Halal 2/ Egg products shall not contain any non-halal ingredients
D	Cereal and cereal products	vegetable and animal oils and fats, fruit and vegetables and their products, sugar and confectionery products shall be produced from halal origin using halal processes.
E	Beverages	1/All kinds of water and non-alcoholic beverages are halal except those that are poisonous, intoxicating or hazardous to health. 2/All products or beverages containing alcohol are prohibited according to the (Islamic Sharia) even for cooking purposes or in filling candies. 3/ Food additives such as colorants, preservatives, etc. used in beverages shall not be produced from non-food grade and non-halal ingredients.
F	Honey and its by products	1/ Bee keeping products (honey, bee pollen, royal jelly) derived from excrements collected by honey bees are halal. 2/ The honeybees falling parts in the honey and the non-avoidable parts are considered halal.
G	Dietary supplements³¹	Dietary supplements shall be produced or originated from halal sources such as plant or animals shall not contain any non-halal ingredients.

²⁹ Definition of Halal CX/NE 19/10/15: Islamic term which indicates what is may or permissible to be used or contacted or consumable in accordance with the provisions of (Islamic Sharia).

³⁰ Definition of non-Halal in CX/NE 19/10/15 : Islamic term that indicates what is not permissible to be used, contacted, or consumed in accordance with the provisions of (Islamic Sharia).

³¹ Definition of Dietary supplements Product in CX/NE 19/10/15 : that can be added to food as supportive substances such as vitamins, minerals, amino acids and ...etc.

H	Genetically modified food (GMF)³²	1 / The genetic material shall be used from a plant, animal and microbiological halal sources 2/ GMFs that are produced by the transfer of genes of other living species to a plant, animal and microbiological source by genetic modification technologies can be used for halal food production if both the source of the genetic material and final GMF product are halal.
I	Food additives	All food additives (emulsions - colored materials - enhancers) must be from a Halal source
J	Enzymes	Enzymes used as raw material, processing aid or final product shall be originated from halal sources
K	Microorganisms	Microorganisms such as bacteria, fungi, yeast are halal except those that are poisonous and/or hazardous to health and produced using halal culture medium.
L	Packaging materials	1/ The packaging materials shall not be made from any materials that are non-halal. 2/ The packaging materials shall not be prepared, processed or manufactured using equipment that is contaminated with non-halal materials. 3/ During its preparation, processing, storage or transportation; materials shall be physically separated from any other food that does not meet the requirements stated in the above item (1) or (2) or any other non-halal materials.
M	Other halal products	Any halal products are not mentioned when referring to that standard shall be produced from halal ingredients.
N	Food service and facilities	All food services and facilities are halal if they meet the following requirements: 1/ If they deal only with halal products when referring to that standard 2/ If the tools and utensils used during the service and sale of products are in total isolation and only be in use for halal food.

³² Definition of Genetically Modified Food (GMF) in CX/NE 19/10/15 : Food and drinks containing products (and/or by-products) of genetically modified organisms (GMO) and which may be of animal, plant or microbiological origin.

		<p>3/ If a plant normally produces non-halal food, but intends to switch to halal production, it should go through cleaning process according to (Islamic Sharia) before commencing halal production. Repetition in converting the production to non-halal and back to halal production is not permitted.</p> <p>4/ Alcoholic beverages are not permitted to be served at all.</p>
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Source: developed by ourselves according to the Agenda Item 12 CX/NE, (2019)

Clarify: It cited the OIC SMIIC: 1:2011 "General Guidelines on Halal Food" and Codex Standard No. 24/1997 (Revised 1999) "General guidelines for usage of the term Halal" as references.

2.2 The Standards and Metrology Institute for Islamic Countries « OIC/SMIIC 1: 2019 »

The introduction to the standard SMIIC (2019), mentions the following: « *the standard was formulated based on the concept of halal that integrates the requirements of halal food products as part of the overall management and control systems to ensure that the halal food products are produced in accordance to Islamic Rules³³. In this standard, Islamic Rules refer to those commonly accepted rules and beliefs of Islam, regardless of variations in different countries. Given the fact that non safe foods would not be considered Halal, therefore the quality standards including food safety³⁴ and traceability (to guarantee the claims), should be made prerequisite of this standard »*

2.2.1 The OIC/SMIIC 1: 2019' requirements for using the term "HALAL"

This standard sets forth the fundamental criteria that must be adhered to throughout the entire food chain, spanning from the procurement of raw materials to the final production of goods. This includes the manufacturing, processing, distribution, storage, and handling of food items and ingredients, from their initial creation to the consumption of Halal food and its associated products in accordance with Islamic laws. The requirements outlined in this standard are universal in nature and are intended to be applied to all food chain organizations, irrespective of their size and complexity. This encompasses organizations that are directly

³³ Definition of Islamic Rules according to SMIIC : what ALLAH legislates for Muslims which derive its rules from the Holy Quran and the honorable Prophet Mohammed (peace be upon him), practices (Sunnah)

³⁴ Definition of food safety according to SMIIC : concept that food is safe for consumption, non-poisonous, non-intoxicating or nonhazardous to health when it is prepared and/or consumed according to its intended use

involved in one or multiple stages of the food chain. The guidelines for the implementation of this standard across all organizations are detailed in the standard for Halal food certification regulations (**Table 3**).

Table 3: General Requirements for Halal Food OIC/SMIIC 1: 2019' REQUIREMENTS

	Issues	REQUIREMENTS
A	Sources of food	<p>1/Food of animal origin:</p> <p>Halal animals Halal refers to everything that is not specified in the next mention.</p> <p>Non-Halal animals Pigs, dogs and their descendants/Animals not slaughtered in the name of Allah, or according to Islamic Rules/Dead animals (Al Maita)³⁵/Land animals with long pointed teeth or tusks which are used to kill prey or defend themselves/Predatory birds with sharp/Pests and venomous animals/Animals which are considered repulsive like lizards, snails, insects and their larva stages and other similar animals/Animals (including birds and insects) that are forbidden to be killed in Islam such as woodpecker, hoopoe, ants and honeybees, Donkeys and mules/Suffocated animals, animal which is eaten by beast of prey³⁶, butted animals (Nateehah)³⁷, falling animals (Motaradiah)³⁸, fatally beaten animals (Mawqouza)³⁹/Farmed Halal animals which are intentionally and continually fed with harmful substances that are not suitable for their nature, or najis feed.</p> <p>Aquatic animals⁴⁰</p>

³⁵ According to SMIIC dead animals (Al Maita) animal which has died prior to slaughtering

³⁶ According to SMIIC eaten by beast of prey animal eaten by a beast of prey or a predatory bird of those not marked for hunting, which dies before being slaughtered

³⁷ According to smiic butted animals (Nateehah) animal which dies as a result of butting

³⁸ According to SMIIC falling animals (Motaradiah) animal which dies as a result of falling from a high place or falling into a hole, etc

³⁹ According to SMIIC fatally beaten animals (Mawqouza) animal which dies by beating

⁴⁰ According to SMIIC aquatic animals animals which live in water and cannot survive outside

		<p>Fish with scales, shrimp, fish eggs with scales, and their by-products are Halal. Non-scaled fish, all other aquatic animals and their by-products are also permissible except for poisonous water animals. If toxins are removed from poisonous water animals, they can be considered Halal.</p> <p>Amphibious animals⁴¹</p> <p>All amphibious animals are non-Halal.</p> <p>Food of plant origin</p> <p>Plants and their products are Halal except poisonous and harmful plants, unless the poisonous and harmful materials are removed.</p> <p>Blood and other materials of human or animal origin</p> <p>All blood and its by-products are non-Halal. Any substances discharged from human or animal orifices, including urine, excrement, vomit, pus, sperm, and ova are non-Halal as well. It is important to note that any part of the human body is considered non-Halal for consumption.</p>
<p>B</p>	<p>Rules of slaughtering</p>	<p>1/Requirements of the animals to be slaughtered:</p> <p>To ensure humane treatment during slaughter, guidelines must be followed. The animal must be Halal and have a veterinary certificate of good health. Slaughter should cause no torture, amputation, or unnecessary pain. Only properly fed animals that have undergone veterinary procedures can be slaughtered. Animals that have traveled far must rest first. Feeding unsuitable materials or components of other animals is not allowed. Following these guidelines ensures humane and ethical slaughtering.</p> <p>2/Slaughterer</p> <p>The slaughterer must be a mentally sound adult Muslim with a certificate of Halal slaughtering issued by a</p>

⁴¹ According to SMIIC amphibious animals animals that live both on land and in water

		<p>competent authority. This ensures that the slaughterer understands the fundamental rules and conditions and can conduct the procedure in accordance with Islamic principles.</p> <p>3/Slaughtering tools and utensils</p> <p>Slaughtering lines, food grade tools and utensils shall be clean and used for the purpose of Halal slaughter only/ Slaughtering tools used for cutting shall be sharp and made of steel. / Slaughtering tools shall cut by sharpness of their edge, not by weight or pressure/ Bones, nails and teeth shall not be used as slaughtering tool</p> <p>4/Slaughtering places</p> <p>Slaughter places must meet specific requirements for the slaughtering of Halal animals, including adhering to prerequisite programs defined in Codex CAC/RCP 1⁴² or ISO 22000⁴³ or ISO/TS 22002⁴⁴ (all parts). These ISO standards provide guidelines for food safety management systems and prerequisite programs that help ensure the safety and quality of food products. The physical conditions of the slaughterhouse must comply with national legal requirements, and all disinfectant and antiseptic liquids used in the facility must be suitable for use in the Halal food sector.</p> <p>5/Stunning</p> <p>Halal standards prohibit all forms of stunning that result in loss of consciousness. The use of electric shock is only allowed when necessary, and the allowed period and current value must follow Annex A of the standard. If stunning is used, animals must remain alive before and after slaughtering, and it's prohibited to knock them out with needle guns, axes, hammers, or by inflating them.</p>
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⁴² Codex Alimentarius CAC/RCP 1, General principles of food hygiene

⁴³ ISO 22000, Food safety management systems - Requirements for any organization in the food chain

⁴⁴ ISO/TS 22002 (all parts), Prerequisite Programmes on Food Safety,

		<p>6/Slaughtering procedure</p> <p>Slaughtering procedure of animals</p> <p>In addition to (1) in above the following requirements are applied: Health checks of animals before slaughtering, cleaning animals, Prevention of mixing of different animals, Leading animals to slaughtering area, and the Procedure mentioned in the standard, Post mortem inspection of carcass and giblets, Washing and stamping the carcass.</p> <p>Slaughtering procedure of poultry</p> <p>Mechanical slaughtering must follow the guidelines</p> <p>Slaughtering of other than poultry</p> <p>Fish in Halal practices are not slaughtered but taken out of water while still alive and left to die outside. Dead and floating fish during catching, as well as those that are diseased or poisoned, are considered non-Halal.</p> <p>Others</p> <p>Animals hunted by Muslims with weapons are considered Halal if Tasmiya is stated before throwing the weapon and the animal is hit by the sharp edge. Animals hunted by trained hunting animals or birds are Halal if the hunting animals/birds are safe and trained, Tasmiya is stated before releasing them, and they do not eat the hunted animals. If caught alive, the animal should be slaughtered according to Islamic rules.</p>
C	Meat and meat products	<p>Meat from Halal animals in compliance with section « A »and « B »meets legal requirements when referring to that standard. Food additives used in meat and meat products should not have non-Halal ingredients or use processing methods that violate Islamic rules. Any ingredient derived from non-Halal animals is not considered Halal.</p>

D	Milk and dairy products	<p>1/Milk and dairy products derived from animals defined in section « A » are Halal.</p> <p>2/Food additives such as rennet and gelatine shall not be produced from non-Halal sources.</p> <p>3/Human milk and its derivatives shall not be used in food production.</p>
E	Eggs and egg products	<p>1/Eggs and egg products obtained from Halal animals as defined in section « A » are Halal.</p> <p>2/Egg products shall not contain non-Halal ingredients.</p> <p>3/Eggs derived from animals like fish which do not need to be slaughtered are Halal as long as they are safe to be consumed. Eggs shall not be processed with any non-Halal products.</p>
F	Cereal and cereal products, vegetable and animal oils and fats, fruit and vegetables and their products, sugar and confectionery products	<p>All food shall be produced from Halal origin using Halal processes.</p>
G	Beverages	<p>1/All kinds of water and non-alcoholic beverages are Halal except those that are poisonous, intoxicating or hazardous to health or containing non-Halal substances.</p> <p>2/All products or beverages containing alcohol are prohibited according to Islamic Rules even for cooking purposes or in filling in candies.</p> <p>3/Food additives such as colorants, preservatives, etc. used in beverages shall not have been produced from non-food grade and non-Halal ingredients.</p>

H	Honey and its by-products	1/Bee keeping products (honey, bee pollen, royal jelly) derived from excrements collected by honey bees from plants that are not harmful to health are Halal. 2/The honeybees falling parts in the honey and the non-avoidable parts are considered to be Halal.
I	Dietary supplements⁴⁵	Dietary supplements shall be produced or originated from Halal sources such as plant or animals and shall not contain any non-Halal ingredients.
J	Genetically modified food (GMF)⁴⁶	Food and beverages containing products and/or by-products of genetically modified organisms (GMOs) or ingredients made by the use or manipulating of genetic material of animals and plants that are non-Halal according to Islamic Rules, are not Halal.
K	Food additives And Processing Aids⁴⁷	Food additives are regarded as food. Food additives which are derived from non -Halal ingredients are not Halal. All food additives and processing aids used for the production of Halal food shall be free of any non-Halal component; including its manufacturing process and its packaging.
L	Enzymes⁴⁸	Enzymes used as raw material, processing aid or final product shall be originated from Halal sources and shall be listed on the label.

⁴⁵ According to SMIIC dietary supplements product that contains substances like vitamins, minerals, foods, botanicals (e.g. herbs) amino acids and protein and substances such as enzymes, organ tissues, glandulars, and metabolites which is intended to supplement the usual intake of these substances

⁴⁶ According to SMIIC genetically modified food GMF food and drinks containing products (and/or by-products) of genetically modified organisms (GMO) Note 1 to entry: Genetic modification is the transfer of gene of other living species to a plant, animal and microbiological source by genetic modification technologies and the modifications which are made in DNA of the food.

⁴⁷ According to SMIIC processing aids Substances that are added to a food for their technical or functional effect in the processing, but are either: 1) removed in some manner before the food is packaged in its finished form; 2) present in the finished food at insignificant levels and do not have any technical or functional effect in the finished food 3) converted into constituents normally present in the food, and do not significantly increase the amount of the constituents naturally found in the food

⁴⁸ enzymes naturally occurring proteins or conjugated proteins produced by living organisms and functioning as biochemical catalysts to promote desirable chemical reactions in food Note 1 to entry: Enzymes are commonly used as processing aids in the making of various food products, for example, rennet, which is an enzyme used to form the curd in cheese making.

M	Packaging materials	In order to ensure that food products are Halal-compliant, it is necessary to pay attention not only to the meat sourcing and processing, but also to the packaging and food contact materials. The packaging materials must be made only from Halal materials, and should not be processed or manufactured using equipment contaminated with non-Halal materials. Additionally, during preparation, processing, storage, and transportation, Halal food products must be physically separated from non-Halal materials. Finally, the food contact materials used in the packaging must be food grade and free from any hazardous or non-Halal materials. These guidelines must be strictly followed to ensure that the final product is Halal-compliant.
N	Other products	Products which are not included in the above section « A » shall not have been produced from non-Halal ingredients and shall not be processed with alcohol and alcohol products.
O	Food service and facilities	All food services and facilities can be considered Halal if they adhere to certain requirements. Firstly, they must only deal with products and materials that conform to section « A ». Secondly, tools and utensils used for food service and sales must be dedicated solely for Halal food. Thirdly, if a facility that usually produces non-Halal products wishes to switch to Halal production, it must undergo a thorough cleaning process as outlined in the standard of the Islamic Rules. Finally, it is strictly prohibited to serve any alcoholic beverages in these facilities.

Source: developed by ourselves in accordance with SMIIC Standard: General Requirements for Halal Food (2019)

Clarify: It cited CODEX STAN 1, General standard for the labelling of pre-packaged foods/ CAC/RCP 1, General principles of food hygiene/ CAC/RCP 58, Code of hygienic practice

for meat/ ISO⁴⁹ 22000, Food safety management systems - Requirements for any organization in the food chain/ ISO/TS 22002 (all parts), Prerequisite Programs on Food Safety/ ISO 22005, Traceability in the feed and food chain - General principles and basic requirements for system design and implementation; As references.

2.3 The Algerian JORA

The Interministerial decision of 15 Jomada El Oula 1435 corresponding to March 17, 2014, adopting the technical regulation establishing rules regarding "halal" food products JORA N° 15 (2014) declared in its Legitimate objectives to achieve part the information below:

- *« To control and strengthen the monitoring of "halal" food products*
- *To meet the legitimate expectations of Muslim consumers regarding the origin of food products consumed as well as their ingredients, in accordance with the Muslim religion. »*

2.3.1 The Algerian JORA’ requirements for the Halal goods

The aim of this technical regulation is to lay down guidelines governing the production and consumption of food items that conform to the requirements of halal (**Table 4**).

Table 4: The Algerian JORA’ requirements for the Halal goods

	Issues	REQUIREMENTS
A	Unhalal product	<p>1/Animal-origin products Pigs and wild, boars, animals found dead, Blood, Mules and domestic donkeys, Carnivorous animals with claws or fangs; Dogs, snakes, and monkeys; Terrestrial animals that are dangerous, such as rats, centipedes, and scorpions; Venomous and dangerous aquatic animals; Animals that are recommended not to be killed in the Muslim religion; Animals that are intentionally fed continuously with non-halal</p>

⁴⁹ ISO, is a non-governmental worldwide organization that creates and publishes standards to enhance consistency, quality, and safety in a variety of businesses and areas.

		<p>food; Any other animal slaughtered in ways that do not conform to the Tadhkiya⁵⁰.</p> <p>2/products of plant origin</p> <p>Toxic or dangerous plants, except in cases where the toxin or danger can be eliminated during processing.</p> <p>3/Beverages</p> <p>Intoxicating and/or dangerous beverages.</p> <p>4/Food ingredients and additives</p> <p>All food ingredients and additives obtained from the food products listed in points "1, 2, and 3"</p>
B	Processing of food products	<p>To qualify as halal, processed food products must adhere to strict guidelines. Firstly, every ingredient used in the food must be free from non-halal components. Secondly, the food must be processed and manufactured in facilities that are free from any potential non-halal contamination. Finally, to avoid any risk of contamination, the food must be kept separate from any non-halal materials at every stage of preparation, processing, storage, and transport.</p> <p>Equipment and Utensils</p> <p>The machinery, utensils, and manufacturing lines used in the process must be free of any non-halal elements in order for the food products to be deemed halal. Any oils used for maintenance on equipment and gadgets that come into touch with food directly must also be free of any non-halal components.</p>

⁵⁰ As it mentioned in JORA Tadhkiya: Dhabh, Nahr, or Aaqr of the halal terrestrial animal according to the Muslim religion and which is carried out in accordance with a methods and conditions.

		<p>Conditions for the transformation of "halal" food</p> <p>As long as precautions are followed to avoid cross-contamination, halal food can be cooked, processed, or stored separately in a facility where non-halal food is also handled. With thorough cleaning, equipment and materials that have previously been used for non-halal food can be employed to ensure that the halal status is maintained.</p>
C	Hygiene	<p>Animal and plant health</p> <p>In accordance with the norms and laws in effect in the area of animal and plant health, all halal food items must be hygienic, safe, and fit for consumption.</p> <p>Hygiene</p> <p>All "halal" food products must abide by the rules and specifications for quality and safety, including those pertaining to cleanliness, the cold chain, as well as the circumstances of storage, packaging, and transportation.</p> <p>The microbiological requirements established by the present standards must be met by "Halal" food products.</p>
D	Commercial	<p>Packaging</p> <p>Halal food goods must be packaged in materials that have not come into touch with non-halal materials or equipment in order to comply with commercial regulations. Cleanliness and hygienic practices must be followed during the packaging process. The packaging materials must also abide by all applicable laws.</p>

		<p>Labelling</p> <p>only if the food goods match the specifications outlined in the regulation may they have the "halal" designation. The use of the label must neither convey superiority or better nutritional value, nor should it cast safety into question. This goes beyond the usual specifications for consumer information on food labels.</p> <p>Storage and transportation</p> <p>To prevent mixing or contamination, halal products must be kept apart from non-halal items when being transported, stored, or displayed. According to current law, the vehicles used to transport food goods must adhere to hygienic and sanitary standards.</p>
E	Slaughtering	All land animals whose consumption is permitted by Islam must be slaughtered in accordance with the guidelines and conditions listed in the technical regulation's annex that mentioned in the standard.
F	Conformity evaluation procedures	<p>To evaluate the conformity of "halal" food products covered by this technical regulation, reference should be made to the conformity evaluation procedures described in the current Algerian standards, namely NA 15505 and NA 15080.</p> <p>In the absence of Algerian standards, reference should be made to internationally recognized standards in this field.</p>

Source: developed by ourselves according to JORA N° 15 (2014)

Clarify: It cited the general guidelines of the Codex Alimentarius for the use of the term 'HALAL': CAC/GL 24-1997; Guidelines for Halal food: OIC/INMP 1: 2011; Standard NA

15080: "Code of Practice for hygiene in meat"; Standard NA 15505: "Recommended International Code of Practice-General Principles of Food Hygiene"; As references.

2.4 Comparison

The three standards—Codex Alimentarius CX/NE 19/10/15, The Interministerial decision of adopting the technical regulation establishing rules regarding "halal" food products JORA, and General Requirements for Halal Food SMIIC (2019), share a number of requirements, such as the need for halal certification from a reputable certification body and the establishment of a halal conformity assessment system to ensure compliance. The SMIIC focused more on slaughtering regulations and provided more information about the sources of halal and non-halal food, while the JORA presented more details about food processing, hygiene, the slaughtering process, and even conformity evaluation. It is obvious that the Codex Alimentarius provided requirements for halal items in the halal chain as a whole. However, the requirements vary amongst the standards in terms of their level of precision and detail. It is important to note that whereas JORA is peculiar to Algeria, Codex Alimentarius CX/NE 19/10/15 and General Standards for Halal Food SMIIC 2019 are international standards.

3. Assessments of the product

3.1 Ingredients

A process for making a biscuit that involves making both dough and a cream filling using certain ingredients (**Table 5**).

Table 5: Biscuits' ingredients

Dough	Cream
Principal ingredients	
Flour, Vegetable fat	Vegetable fat
White sugar	Cocoa
Water	White sugar
Salt	
Yeast	
Milk powder	
Starch	

Additives	
Citric acid, Sodium metabisulfite	Soya lecithin
Sodium hydrogen carbonate	Artificial flavour (butter flavour, double concentrated hazelnut flavour, hazelnut flavour, vanilla flavour)
Disodium diphosphate	
Ammonium hydrogen carbonate	
Ammonium acid pyrophosphate	Dried whey
Dried whey	

Source: developed by ourselves according to company's' information

3.1.1 Principal ingredients

White sugar

According to CODEX STAND 212-1999, the white sugar is « *Purified and crystallised sucrose (saccharose)* »

Salt

«*Food grade salt is a crystalline product consisting predominantly of sodium chloride. It is obtained from the sea, from underground rock salt deposits or from natural brine*»
CODEX STAND 150-1985.

Yeast

Yeast is defined in CODEX ALIMENTARIUS CAC/44 CRD/5 «*yeast: it refers to yeast foods or food ingredients, with the function of producing carbon dioxide and alcohol or increasing food flavour and nutrition or others*»

Starch

CODEX STAN 192-1995 definition «*Starch is a glucose polymer occurring in granular form in certain plant species, notably seeds (e.g., cereals, pulses, corn, wheat, rice, beans, peas) and tubers (e.g., tapioca, potato). The polymer consists of linked anhydro-alpha-D-glucose units. Native starch is separated by processes that are specific for each raw material*».

Cocoa powder

Based on CODEX STAND 105-1981 «*Cocoa powder is the product obtained from cocoa cake transformed into powder*».

3.1.2 Additives

« *Food additive means any substance not normally consumed as a food by itself and not normally used as a typical ingredient of the food, whether or not it has nutritive value, the intentional addition of which to food for a technological (including organoleptic) purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food results, or may be reasonably expected to result (directly or indirectly), in it or its by-products becoming a component of or otherwise affecting the characteristics of such foods. The term does not include contaminants or substances added to food for maintaining or improving nutritional qualities* » (Codex Alimentarius Procedural Manual)

Table 6: list of added additives

Name	Code	Functional Class
<i>Citric acid</i>	<i>INS 330</i>	<i>Acidity regulator, Antioxidant, Colour retention agent, Sequestrant</i>
<i>Sodium metabisulfite</i>	<i>INS 223</i>	<i>Antioxidant, Bleaching agent, Flour treatment agent, Preservative</i>
<i>Sodium hydrogen carbonate</i>	<i>INS 500(ii)</i>	<i>Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener</i>
<i>Disodium diphosphate</i>	<i>INS 450(i)</i>	<i>Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener</i>
<i>Ammonium hydrogen carbonate</i>	<i>INS 503(ii)</i>	<i>Acidity regulator, Raising agent</i>
<i>Lecithin</i>	<i>INS 322(i)</i>	<i>Antioxidant, Emulsifier, Flour treatment agent</i>
<i>Flavour contains propylene glycol</i>	<i>INS 1520</i>	<i>Carrier, Emulsifier, Glazing agent, Humectant</i>
<i>Flavour contains Triacetin</i>	<i>INS 1518</i>	<i>Carrier, Emulsifier, Humectant</i>
<i>Flavour contains Silicon dioxide</i>	<i>INS 551</i>	<i>Anticaking agent, Antifoaming agent, Carrier</i>

Source: CODEX STAN 192-1995 (General Standard for Food Additives)

Dried whey

As it is mentioned in the CODEX STAN 289-1995 «*whey is the fluid milk product obtained during the manufacture of cheese, casein or similar products by separation from the curd after coagulation of milk and/or of products obtained from milk. Coagulation is obtained through the action of, principally, rennet type enzymes* », while « *whey powders are milk products obtained by drying whey or acid whey* ».

3.2. Production process

The biscuit production process (**Annex A**), includes the following successive operations:

- Raw material (RM) and ingredients reception and control
- Mixing of RM and ingredients
- Skimming
- Kneading
- Baking of biscuits in 4 zones
- Biscuit cooling
- Preparing the cream
- Fodder and packaging
- Boxing and palletizing

4. Halal food processing essentials

4.1 Halal certification and concepts

Halal certification is a method that certifies that products have been prepared and handled in accordance with Islamic dietary regulations. This certification is issued by an impartial third-party agency that examines the entire manufacturing process and ensures that the finished product fits the halal requirements (Riaz & Chaudry, 2004)

According to SMIIC 3:2019 - Halal Food - General Requirements: "*certification is an official confirmation that the food or other products meet the requirements of Halal standards and other relevant standards and specifications. The certification process includes inspection and evaluation of the manufacturing process, production facilities, and storage facilities to ensure that the products comply with the Halal requirements, and to ensure the segregation of Halal products from non-Halal products*".

4.2 Halal supply chain management

Halal supply chain management involves the coordinated and coordinated control of operations, procedures, and resources throughout the supply chain, ensuring that goods and services adhere to Halal standards and laws. It includes obtaining halal raw materials, implementing halal procedures during production and processing, implementing suitable handling and storage procedures for halal items, and accurately labeling and verifying halal products throughout the distribution process. (Rahman & Kaynak, 2016)

The administration and coordination of all activities, procedures, and resources during the product's sourcing, manufacture, handling, storage, and distribution constitutes the Halal Supply Chain administration process. In order to do this, Halal sourcing, manufacturing, shipping, and quality control must all be seamlessly integrated with other aspects of the supply chain. The goal is to make sure that consumers receive Halal-compliant goods. (Abdul TALib & Rahman, 2018)

4.3 Halal auditing and inspection

Halal Auditing involves the methodical examination, evaluation, and validation of processes, practices, and products within the Halal supply chain to ensure conformity with Halal standards and regulations. It encompasses comprehensive inspections, reviews of documents, and on-site assessments to determine the compliance of operations and products with Halal principles, guidelines, and applicable regulatory frameworks (Uthmankhel & Johnson, 2019).

Halal Auditing is a structured and independent evaluation process designed to assess the adherence of products, processes, and facilities to Halal requirements. It entails the examination of the entire supply chain, from the sourcing of raw materials to the distribution of the final product, to ensure compliance with Halal principles and guidelines. The auditing process includes document reviews, inspections, and on-site assessments to validate compliance with Halal standards and provide assurance to consumers and stakeholders (Ali & Hudaib, 2020).

4.4 Halal training and education

Halal Training encompasses the structured process of educating and empowering individuals with the necessary knowledge, skills, and comprehension pertaining to Halal principles, practices, and guidelines. Its objective is to enhance the awareness and

competence of personnel engaged in the Halal industry or supply chain, equipping them to effectively implement and uphold Halal standards throughout their respective roles and responsibilities (Muhammad, Omar, & Abdulah, 2018).

Halal Training involves the systematic provision of knowledge, skills, and attitudes to individuals involved in the Halal industry or Halal supply chain. Its aim is to offer a comprehensive understanding and proficiency in Halal principles, regulations, and best practices. This training equips participants with the necessary expertise to ensure the appropriate handling, processing, and distribution of Halal products while adhering to Halal standards and requirements (Ahmad & Ismail, 2017).

4.5 Certification process

4.5.1 Application for Halal Certification

4.5.1.1 Rights and obligations of applicants and holders

The right to acquire information, report to IANOR, contest an audit or analysis report, and appeal against unfavourable judgments is guaranteed to applicants and holders. Additionally, they must assist the audit team, welcome interns, consent to unforeseen audits, stop using or making reference to the Halal mention, and pay the expenses associated with the award and usage of the Halal mention.

4.5.1.2 Procedure for granting the halal mention

A request for halal mention must be made to IANOR along with a questionnaire and supporting documentation. A food safety auditor, experts in Islamic affairs and the Supreme Islamic Council, and a technical expert make up the audit team. In agreement with the auditor, the applicant chooses the day for the preliminary visit and certification. The number of certifications already issued to the applicant must be considered when determining the audit's duration. The applicant must suggest corrective actions and when they should be implemented, and the audit team must conduct the audit in accordance with the guidelines given by IANOR. The IANOR must make a determination regarding the ability to utilize the Halal Mention and, if favorable, issue a Halal certificate of conformity.

4.5.1.3 Processing of complaints and appeals

The applicant/holder has the right to appeal to IANOR for review and advice; the final judgment will be mailed to the applicant/holder.

4.5.1.4 Period of validity of the right of use of the Halal mention

The validity period of the right to use the Halal mention is three (3) years can be renewed at the request of the owner.

4.5.2 Following the Halal Certification

4.5.2.1 Retention of the right to use the Halal mention

Prior to the expiration of the right to use the Halal mention, IANOR performs a renewal audit in addition to two yearly monitoring audits. The certification will be suspended if this deadline is not met.

4.5.2.2 Delay of a follow-up audit or renewal of the mention Halal

Requests for postponements must be made four weeks prior to the planned date, and the right to mention halal will be suspended.

4.5.2.3 Suspension or withdrawal of the right of use of the halal mention

If the owner no longer complies with the requirements outlined in the General Rules and Special Regulations, the IANOR may suspend or revoke the license to use the Halal mention. If the suspension or withdrawal is made known to the holder, all references to the Halal certification must end immediately. Any usage of the Halal certification following its suspension or revocation is regarded as abuse and subjects the holder to the guidelines in standard of The Process (Halal Certification Procedure).

**CHAPTER II: ORGANIZATIONAL
CONTEXT & METHODOLOGICAL
FRAMEWORK**

Section one: Organizational Context

1. The presentation of the company PALMARY

1.1 History and strategy of the company PALMARY

PALMARY FOOD company with its industrial entity SOBCO SARL was established in 2007, It is a 100% Algerian company. The growth of PALMARY has been ongoing since 2008, when its first production facility in El-KHARROUBA (Boudouaou Industrial Zone in the wilaya of Boumerdes) was inaugurated. It has established a little more of a foothold in Algerian households' spending patterns by launching brands like Maxon in 2012. PALMARY has become a historic economic player in the wilaya of Boumerdes and intends to remain so in the future.

In the wilaya of Boumerdes, PALMARY has established itself as a significant economic force, and it aims to do so going forward. It operates in the field of biscuit, chocolate and confectionery production in compliance with the technical requirements and regulations.

PALMARY's activities are well-structured and efficient. The organization maintains clear hierarchies and departmental collaboration, allowing for efficient processes and effective communication (**Annex B**). As well, the General Management of SOBCO SARL must make sure that their goals are consistent with its strategic orientation while also taking into account the following:

- Its problems both inside and outside
- Expectations and requirements of the parties who matter
- Providing the resources required for the policy's implementation and ongoing improvement of the quality management system.
- Rely on every employee of the business to work together to adhere to the policy and please the interested parties.

Table 7: PALMARY's identity card

Full name of the company	PALMARY FOOD (SOBCO SARL)
Head office	El-KHARROUBA, Boudouaou Industrial Zone in the wilaya of Boumerdes
Mission	Offering goods that abide by all relevant legal and regulatory standards, as well as the expectations of its clients and other interested parties.
Product types	<ul style="list-style-type: none"> - Real Chocolate and Vegemite - Biscuits: dry, filled and wafers - Sponge cake - Spreads - Confectionery and sweets
Email	contact@palmaryfood.com
Tel	+21324989409
Site web	www.palmaryfood.com

Source: developed by ourselves

1.2 PALMARY's diagnosis

The internal strengths and limitations of PALMARY SARL as well as the external opportunities and challenges it faces must all be fully understood. Consequently, a SWOT⁵¹ analysis has been performed to assess and determine these crucial variables. We may identify the areas in which PALMARY SARL thrives by looking at its assets, such as its well-established reputation and skilled personnel. Weaknesses that need to be addressed and improved upon include a limited market reach and a lack of technical integration. Additionally, PALMARY SARL can continue to expand and succeed by investigating prospects like market expansion and product innovation. However, it is important to remain mindful of potential threats, including a competitive market and changing customer preferences.

⁵¹ SWOT analysis is a strategic planning tool used to evaluate and assess the internal and external factors that can impact an organization, business, or project.

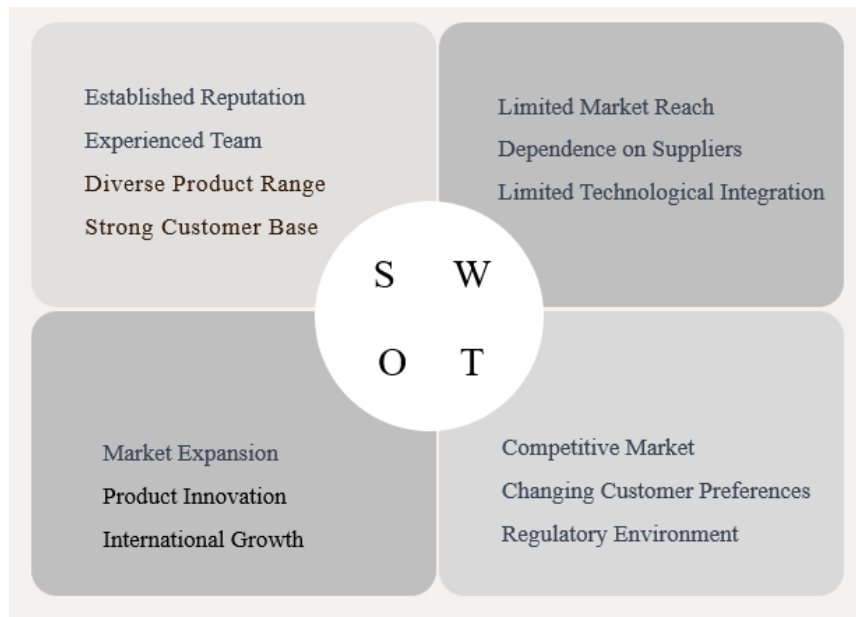


Figure 1: PLAMARY's SWOT analysis

Source: developed by our care according company's documentation

1.2.1 Strengths

Established Reputation: PALMARY SARL has a strong reputation in the industry, known for its quality products and services.

Experienced Team: The company has a skilled and experienced team that brings expertise and knowledge to the operations.

Diverse Product Range: PALMARY SARL offers a wide range of products, catering to various customer needs and preferences, such as: Real Chocolate and Vegemite, Biscuits: dry, filled and wafers, Sponge cake, Spreads, and Confectionery and sweets

Strong Customer Base: The company has a loyal customer base and maintains strong relationships with clients.

1.2.2 Weaknesses

Limited Market Reach: PALMARY SARL's market presence is primarily focused on a specific region, limiting its exposure to broader markets.

Dependence on Suppliers: The company may face challenges if there is a reliance on a limited number of suppliers for raw materials or components.

Limited Technological Integration: There might be a lack of advanced technological systems and processes, potentially hindering operational efficiency.

1.1.3 Opportunities

Market Expansion: PALMARY SARL can explore opportunities to expand its market presence and reach new customer segments.

Product Innovation: Investing in research and development can lead to the introduction of new and innovative products, catering to evolving customer demands.

International Growth: Exploring international markets can provide avenues for business growth and diversification.

1.1.4 Threats

Competitive Market: The industry is highly competitive, and PALMARY SARL may face challenges from existing competitors and new entrants.

Changing Customer Preferences: Evolving customer preferences and trends could impact the demand for PALMARY SARL's products.

Regulatory Environment: Compliance with evolving regulations and standards related to the industry can pose challenges for the company.

1.3 KAMELO Food group

SARL KAMELO food, is an agri-food industry that produces biscuits. The brand KAMELO FOOD is well-known for their cookies. It is the market leader in many biscuit segments and subcategories, but sandwich biscuits are its specialty.

In Algeria, the company we represent, KREMALI, has grown significantly in popularity and status. The second brand under KAMELO Food is PALMARY, the industry leader in mosaic cookies with significant room for expansion.

Other goods and brands, like PALMITO and MAXON, are easily accessible, demonstrating the qualities of KAMELO FOOD in providing high-quality goods with simple accessibility. Being able to serve a variety of markets in Algeria and export to other countries thanks to the large selection of products and brands allows it to successfully achieve a variety of goals.

Section two: Research Methodology

1. Method

This section will cover the research approach that was used to complete this project. In order to gain an overview of the implementation of the Halal management system in accordance with SMIIIC, Codex Alimentarius, and Algerian normalization within the Algerian company of PALMARY.

This study adopts a qualitative research methodology. This approach draws on the research conducted by various authors, including Haziq Hassan et al. (2015) in their article on Knowledge and Practice for Implementing Internal Halal Assurance System among Halal Executives, as well as a review by Baharudin et al. (2016). Additionally, we were inspired by the work of Alharbi (2015). Our study is primarily based on the collection of qualitative data, facilitated through three key techniques.

2. Data collection

Document studies, participant observations, and semi-structured interviews are the most often employed data gathering techniques (Baharudin et al., 2016; Haziq Hassan, Arif and Sedik 2015; Alharbi, 2015). These data were gathered at various stages of the Halal management implementation process (**table 8**) (Alharbi, 2015).

Table 8: The data collection tools

Adopted data collection tools	Description
Document studies	<p>The term "document study" describes the researcher's examination of written sources. These can be both private and public records including diaries, annual reports, guidelines, policy documents, archives, and correspondence.</p> <p>During our internship, we looked over the company's website as well as internal records, which are regarded as a valuable source of accurate information.</p> <p>In alignment with the review conducted by Baharudin et al. (2016) titled "The Potential of ASEAN in Halal Certification Implementation," we have utilized this tool.</p>

Participant observations	In a limited sense, observation can be described as a method for gathering visible and audible primary data. However, observation can also be explained in a more general sense as a specific method of interacting with the environment (Marie-Laure, David, Christophe, & Alain, 2008).
Semi-structured interviews	Interviews are used to obtain insights into a person's subjective experiences, attitudes, and goals. A semi-structured interview is conducted by using an interview guide (or grille, or even canvas), or sort of list of themes/topics to discuss with each respondent. The questions are planned out in advance (Marie-Laure, David, Christophe, & Alain, 2008). We have developed our interview guide based on the article about “Knowledge and Practice for Implementing Internal Halal Assurance System among Halal Executives” written by Haziq Hassan, Arif and Sedik (2015), and another one prepared by Alharbi (2015) (Annex C).

Source: developed by ourselves

3. Sample

Sample selection fundamentally encompasses the process of choosing the appropriate participants or sources for our study question. The selection of suitable interview’s questions or interviewees was primarily based on the research conducted by Haziq et al. (2015).

In order to see the procedures, they have adopted in the company and to offer accurate information, we interviewed managers who were either directly or indirectly involved in the deployment of the Halal management system within the PALMARY's organization, it is summarized in **Table 9**.

Table 9: The interviewed actors

N°	Name of the interviewee	Function	Gender	Date	Duration of the interview
01	Mr. S. DAKHLI	Quality Manager	M	April 2023	1 hour
02	Mrs. H. HALIT	Islamic and food science auditor	F	May 2023	1h 50 min

Source: Developed by our care

CHAPTER III: RESULTS & DISCUSSION

Section one: Results

1. Diagnosis of PALMARY's company

After gaining a comprehensive understanding of the operation and numerous sectors of activity inside PALMARY's organization, focused on the KAMELO's unit. The next stage in implementing Halal management is to obtain every necessary document to ensure that goods and services are permissible for Muslims to use or consume and that they correspond to Islamic norms.

As a trainee for a project to implement a Halal management certification, we began with a review of the documents of the host organization's existing food ingredients and production process. We were also advised to go on a site visit, where we examined the complete production process, from raw materials to finished product, and used interview guidelines (the main goal of the interviews is to collect answers to the current status).

2. Knowledge and Attitude of Halal Certification

After conducting our internship at the "KAMELO" food industry and interviewing several industry experts, according to the results of our study, not all executives have a thorough understanding of how to implement halal certification; instead, many do so using their general knowledge and understanding rather than their specific expertise of the practical applications. Producing goods that were halal-certified by IANOR and other certification bodies was the main objective of halal certification implementation. Aside from experts who have had the opportunity to establish a Halal system, they pointed out that the objective is to create 'safe' products that do not contain any non-Halal ingredients, manufactured and processed using equipment that has not been contaminated by non-Halal elements, under strict hygienic conditions and in accordance with Islamic ritual practices; and Halal certification is essential for food establishments, as it certifies the production of high-quality food that meets stringent quality control standards. It distinguishes food establishments with it from those without it and is a powerful force in the market, making it a strategic move.

3. Efficient of halal Resources

According to this research, the KAMELO food group began by appointing an internal Halal Committee (IHC), which is tasked with ensuring compliance with Halal laws and monitoring the use of Halal procedures. In this regard, the IHC was aiming to achieve a

successful halal certification, the committee started by acquired ingredients from certified Halal suppliers who adhered to Halal standards. Additionally, the IHC made verified that every other item used in the manufacturing process complied with Halal regulations. It also includes manufacturing procedures that adhere to Halal regulations, such as separating Halal and non-Halal items throughout production and ensuring that all manufacturing equipment is clean (implementation of HACCP⁵² system).

To certify that the entire production process complies with Halal regulations, this entails going through an audit, the company acquired a halal certification from a halal certification agency, suitably this last labelled their food products. Furthermore, every worker involved in the manufacturing process was educated on the significance of conforming to Halal principles and their requirements. Lastly, to guarantee continued adherence to Halal regulations, the organisation was regularly inspected and tested food products (case of chocolate factory MOMENT).

In the case of KAMELO food group, they are currently in the process of implementing various systems, including the HACCP system, and fulfilling the necessary requirements to obtain certification. These procedures align with the ones followed in the chocolate factory as described in **Annex D**.

4. Cleanliness and hygiene

The food industry has undertaken several initiatives to enhance cleaning procedures and uphold optimal hygiene standards. Among these initiatives is the establishment of a comprehensive cleaning program.

In this case, the effectiveness and execution of the cleaning program are critical factors. The management of the halal company has planned a continuous manufacturing equipment cleaning program as part of their commitment to producing safe and hygienic food.

Ensuring cleanliness and the production of safe food involves various measures to prevent contamination of prepared biscuits. One aspect is reducing the risk of accidental contact between the biscuits and chemical products, such as cleaner solutions, stored within the food premises. To address this risk, dangerous goods are kept separate from the

⁵² HACCP, is a method of managing food safety that finds, analyses, and controls dangers across the food production and handling processes.

areas where the biscuits are manufactured, packed, and stored, reducing the possibility of exposing the food to hazardous substances.

In addition to these measures, promoting cleanliness among employees and maintaining a high standard of hygiene during food processing is paramount. They enforce certain dress code requirements for employees handling food. This includes wearing gloves, a hair net, and an apron. Furthermore, the installation of alcoholic gel dispensers at every entry and exit point has been implemented to further support hygiene practices within the facility.

Moreover, to ensure the cleanliness and adherence of final products to the desired standards, they have required for suppliers to provide microbiological analysis sheets for the raw materials. Besides, they have established a permanent control process for manufactured biscuits, conducting regular microbiological analyses (**Annex E**).

5. Compliance with Standard requirements

Table 10 summarizes the adherence to Standard requirements.

Table 10: Compliance with Standard requirements

Compliance with standard requirements	Compliance in Industry Documentation	Compliance Observed in Industry
General Requirements	Falling short of requirements	Yes
Transformation of foodstuffs	Partially compliant	Yes
Machines, Tools, Production Chains	Yes	Yes
Storage, Display, Service, and Transport	Yes	Yes
Hygiene, Sanitation, and Food Safety	Yes	Falling short of requirements
Validation and Verification	Yes	Yes
Identification and Traceability	Falling short of requirements	Yes
Packaging and Labelling	Yes	Yes
Legal Requirements	Yes	Yes

Source: Elaborated by our care.

6. The consensus list

- Employees' varying levels of familiarity and comprehension with halal certification.
- The majority of local suppliers do not have halal certification (halal requirement).
- Two of our international suppliers do not possess halal certification.
- A few of the suppliers without the halal label do not mention the ingredients on the product specification sheet.

Section 2: Discussion

A thorough understanding of halal certification concepts, halal auditing and inspections, and halal education and training are necessary for the implementation of halal certification in the food business. Our consensus list shows that there are considerable challenges in safeguarding the integrity of the halal supply chain due to employees' differing levels of awareness and understanding with halal certification. The bulk of local vendors also lack halal certification, which makes the implementation procedure more challenging,

Also, two of our suppliers from outside do not have halal certification, making them a possible risk to the integrity of halal. To prevent misconceptions and to make sure that the certification procedure complies with legal standards, it is essential to take into account the halal criteria of each nation.

For example, the study conducted by Che Din & Daud (2014) highlighted the critical success factors for implementing MS1500:2009 in their nation, which were identified through previous studies and the involvement of experts in the field. The comprehensive nature of MS1500:2009 was emphasized, as it covers the entire food production process from farm to consumer, providing guidelines for producers to ensure high-quality halal products. Baharudin et al. (2016) further discussed the subdivision of halal certification standards into religious and technical components, highlighting the specific guidelines for handling, processing, and implementing a halal quality management system.

It is challenging for us to confirm the halal status of a few vendors who do not have the halal mark since they do not list the ingredients on the product specification sheet. To reduce the possibility of contamination, it is crucial to stress the significance of recognizing and tracking halal ingredients.

Overall, the application of halal certification in the food industry is fraught with difficulties that call for thorough familiarity with halal regulations, good coordination with

suppliers, and enough employee training. To safeguard the integrity of the halal supply chain, the implementation process should also take regulatory frameworks into account and cross-reference experiences from various countries.

According to Haziq, Arif & Sidek (2015)'s study, it was found that not all executives possess a precise understanding of IHAS, and only a limited number of them have sufficient knowledge and skills regarding IHAS. Most executives were unable to provide accurate responses regarding the objectives and meaning of IHAS. In this case, it appears that IHAS implementation is based on their general knowledge and understanding, lacking specific knowledge about the actual practices of IHAS. The primary focus of implementing IHAS was to ensure the use of raw materials certified as halal by JAKIM, JAIM, and other accredited certification bodies.

And based on the findings of our study, it is evident that there is a lack of comprehensive understanding among executives regarding the implementation of halal certification. This lack of knowledge can have several detrimental effects, such as the acquisition of invalid halal certificates or the inability to obtain them altogether.

Furthermore, insufficient knowledge also contributes to non-compliance with halal requirements, resulting in a compromised integrity of the certification and giving rise to ethical and religious concerns among consumers.

Hence, it is necessary for responsible to invest in acquiring the essential skills to effectively implement halal certification, thus mitigating these effects. This can entail attending training sessions, contacting halal certification organizations for advice, speaking with business leaders, and keeping up with the most recent advancements and industry best practices in halal certification. They can safeguard the integrity of halal certification and adhere to regulations.

Abd Kadir et al. (2016) and Praticto et al. (2020) both discuss the importance of Halal compliance and highlight various criteria associated with controlling cleanliness, hygiene, and cross-contamination in different stages of production, manufacturing, on-farm facilities, and slaughtering facilities. They emphasize that maintaining physical segregation is crucial not only during the production phase but also throughout the entire supply chain to uphold the Halal status of products.

On the other hand, Jawad & Khaled (2020) focus on the certification process in these countries, emphasizing its role in ensuring the cleanliness, safety, and conformity of products with Shari'ah principles. They outline the three stages of the site audit, which include documentation review, physical/on-site audit, and a final review/closing meeting. This comprehensive certification process aims to guarantee adherence to Halal standards and the principles of Islamic law.

Overall, these studies highlight the significance of maintaining cleanliness, hygiene, and physical segregation throughout the production and supply chain processes to ensure Halal compliance. The certification process plays a crucial role in verifying and affirming the adherence of products to Halal requirements, providing assurance to consumers and stakeholders alike.

When it comes to maintaining cleanliness, the management of the KAMELO's company encountered difficulties in ensuring employee compliance with the designated cleaning schedule. Despite implementing all the necessary hygiene procedures, it was challenging to guarantee that every employee consistently followed these practices. Thus, it is imperative to put severe punishments for breaking the rules.

CONCLUSION

This thesis has investigated how halal certification is used in the food sector, and it comes to a conclusion. It is clear from a thorough analysis of the literature and case studies that halal certification is vital to both food producers and consumers globally. Implementing halal certification can have a big impact, opening up new markets, boosting customer confidence, and enhancing food safety and hygiene procedures.

To ensure the successful adoption of halal certification standards, the implementation process calls for careful planning, education, and communication. In order to facilitate the adoption of halal certification, it is advised that stakeholders in the food industry collaborate to establish standardized halal certification processes and create thorough training programs. Halal certification, when properly implemented, can give enterprises in the food industry a competitive edge and help the halal industry expand globally.

Plus, Internal audits needs to be implemented within the organization to make sure that practices and procedures comply with the standards.

Furthermore, putting in place ISO or HACCP procedures can be very helpful in successfully implementing halal management. By putting these important principles into practice, the food industry can make sure that high-quality halal products are produced that satisfy halal consumers' preferences and adhere to halal certification regulations “SMIIC”, “Codex Alimentarius” and “JORA”.

However, as we shall discuss below, our study did have certain limitations.

Sample size is small since only two professionals from various departments within PALMARY and the certification organization participated in semi-structured interviews for the study. This small sample size could limit the findings' ability to be representative of the full business. It's possible that the conclusions from this sample cannot be applied to the full business.

Subjective bias: Because participants' opinions and replies are based on their personal experiences and perceptions, semi-structured interviews are prone to subjective bias. The validity and reliability of the results could be impacted by the introduction of individual biases and variability in answers as a result.

Qualitative study offers insights into the halal certification procedures used by KAMELO, but it may fall short of the precision and rigor of quantitative methodologies.

| CONCLUSION

The conclusions could be subjective and open to different interpretations by different scholars.

Lack of comparison research: The study did not compare KAMELO's practices with those of other organizations of a similar nature. This limits our ability to evaluate how distinctive or effective KAMELO's methods are in compared to those of other organizations.

Confidence in the data presented: The study's findings are supported by information gleaned through semi-structured interviews. Participants' information may affect the accuracy and reliability of the results if it is incomplete, erroneous, or prejudiced.

To sum up, it is important to understand that ensuring halal compliance entails a substantial responsibility that extends beyond mere market considerations; and that the importance of meticulously adhering to the requirements step by step cannot be overstated, given the sensitivity and religious implications associated with halal practices, which affect the beliefs of thousands of individuals.

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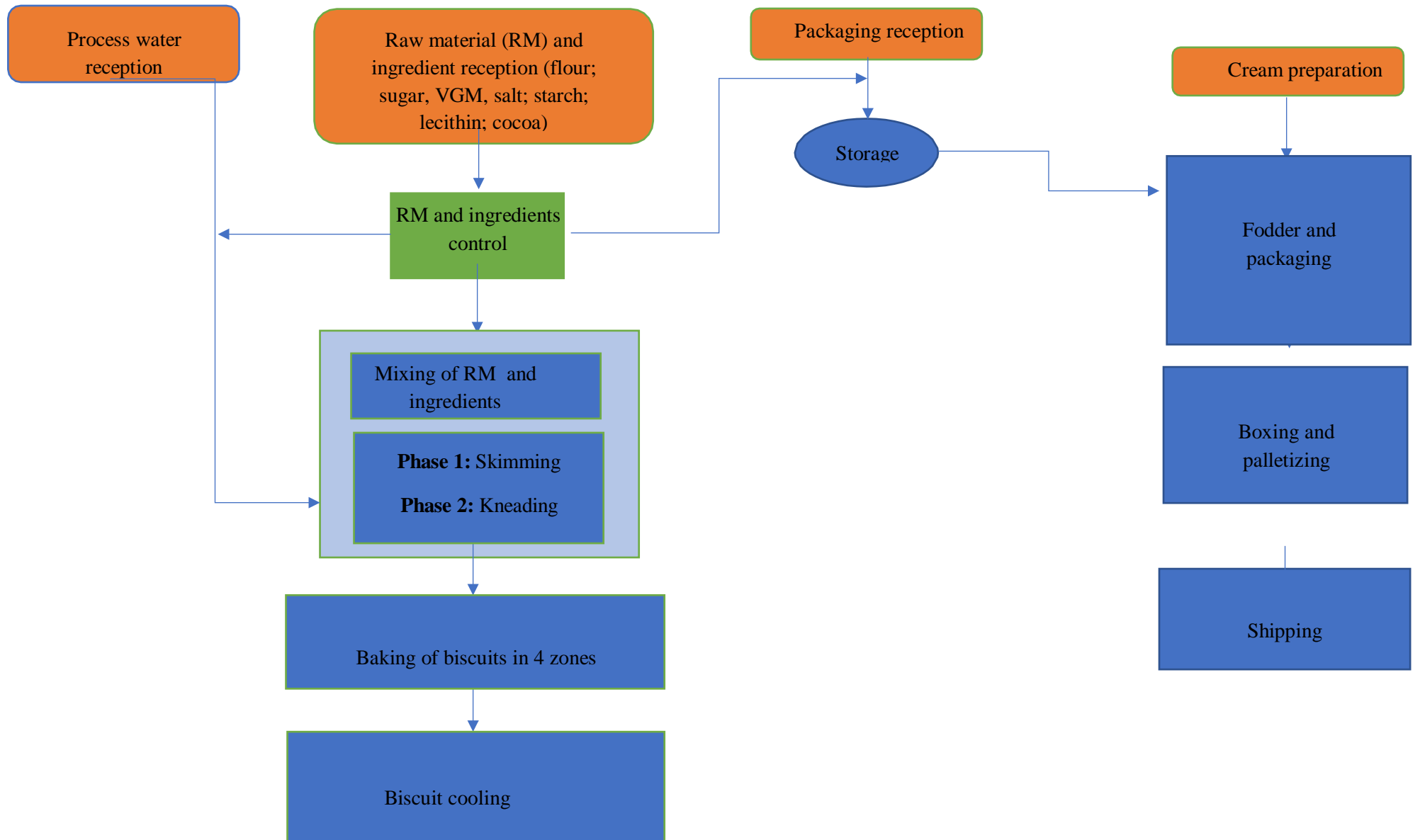
ANNEXES

ANNEX A
PRODUCTION PROCES



SARL KAMELO FOOD

Biscuit preparation and production flow chart



ANNEX B
PALMARY'S ORGANISATION CHART



SARL PALMARY FOOD

PALMARY Food Organisation



ANNEX C

AN INTERVIEW GUIDE

AN INTERVIEW GUIDE

This is intended for Experts in the Agri-food sector

Introduction

Greetings, Madam/Sir. kindly allow us to say hello. At the National School of Management (ENSM), Koléa, I'm Isra NOUIOUAT and my colleague Yassamina MILOUD HOCINE, second-year master's students studying quality management. We would like to speak with you in a brief interview to discuss our study on the application of halal management in the food business. We have selected the agribusiness sector, and more specifically the role played by halal certification in this sector. Please be aware that your answers will be kept completely secret and presented anonymously.

Objectif

In order to comprehend the mechanisms enforcing halal management among consumers, our work aims to investigate and clarify how halal management can be used successfully in the food business.

Table 1: Mapping between the categories and Interview Questions

Categories	Interview Questions
Basic inquiries	<ul style="list-style-type: none">- Please describe your present position, including your duties and responsibilities.- What qualities are most crucial for your job, in your opinion?- Normally, how do you keep up with current breakthroughs in your field?- What prior experience do you have with the subject of this study?
Main questions	<ul style="list-style-type: none">- What does the concept of Halal mean?- Do you think it's important that halal certification is being used in the food industry?- What are the general steps to follow for obtaining halal certification?- What are some of the main obstacles to implementing halal in your work, in your knowledge?

	<ul style="list-style-type: none"> - Can you give a list of any effective tactics or techniques you have adopted to deal with these problems? - What changes to your organization's halal management do you think would be most fruitful? - Which external bodies are involved in this certification process? - What is external control, and is it necessary? - At what stage does external control come into play, and why?
Concluding Questions	<ul style="list-style-type: none"> - What are the key factors which might help the food industry to successfully apply halal management, in your opinion?

Acknowledgements

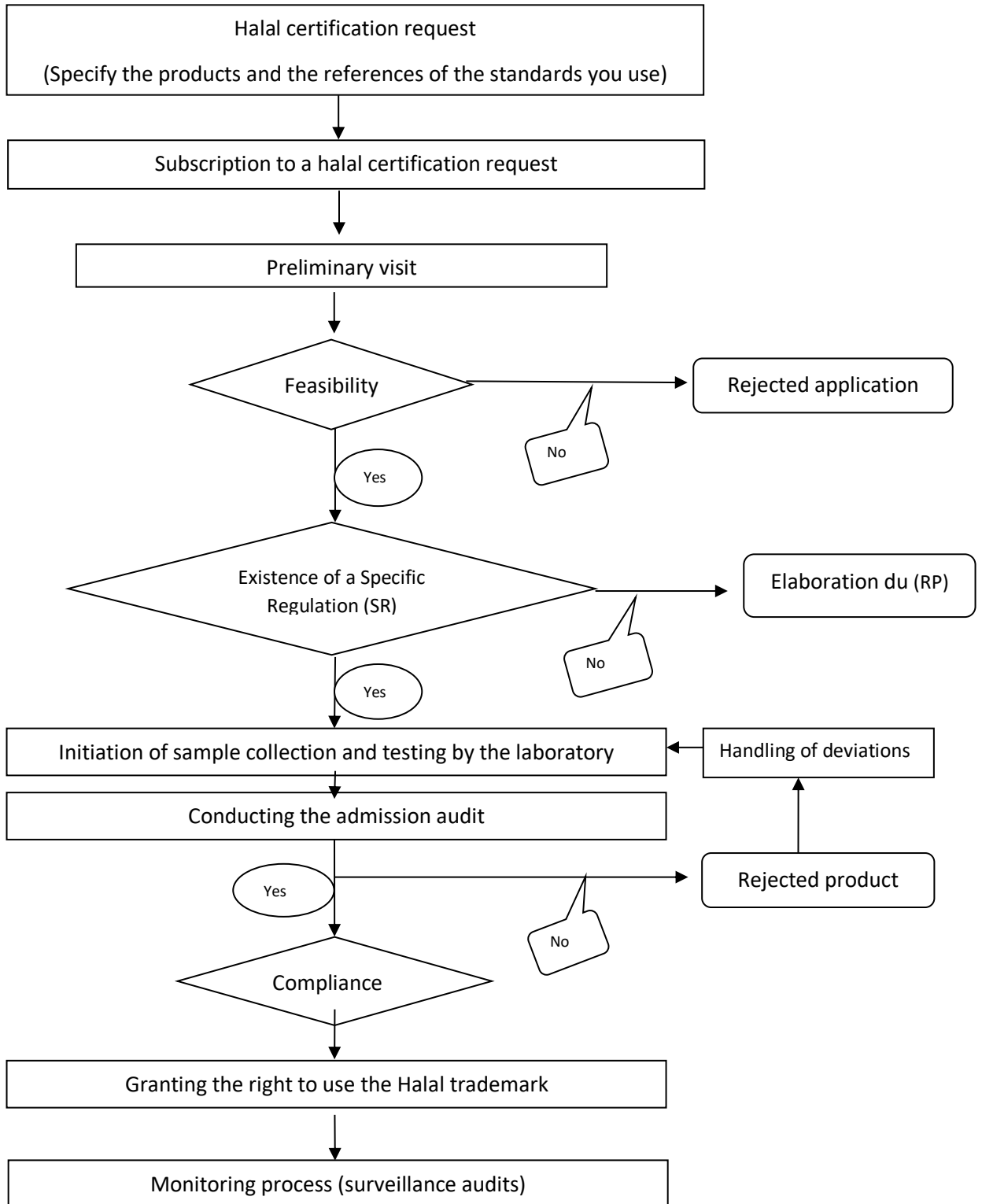
We are grateful for your willingness to participate in this interview and for generously sharing your time and insights with us. We will certainly keep you informed of the findings of our research. Thank you, and goodbye!

Guide references

We have developed our interview guide based on the article about Knowledge and Practice for Implementing Internal Halal Assurance System among Halal Executives written by Haziq Hassan, Arif and Sedik (2015), and another one prepared by Alharbi (2015).

ANNEX D

HALAL CERTIFICATION PROCESS



ANNEX E

MICROBIOLOGICAL ANALYSIS



FICHE TECHNIQUE



NOM ET REFERENCE DU PRODUIT : Arôme Beurre 5668

DÉSCRIPTION :

Produit aromatique industriel, non destiné à la consommation directe.

DOMAINE D'UTILISATION :

Produit conçu à des fins alimentaires, destiné à être utilisé en biscuiterie, pâtisseries, confiserie et glace.

CARACTÉRISTIQUES PHYSICO-CHIMIQUES

- **Goût** : Goût beurre.
- **Aspect** : Liquide jaune translucide.
- **Densité à 20°C** : 0,910 – 0,955
- **pH à 20°C** : 5,0 – 6,0

COMPOSANTS :

- Substances Aromatiques.
- Support : Huile végétale.

CRITÈRES MICROBIOLOGIQUES :

Germes	Normes
• Coliformes totaux : 00	< 10 ²
• Germes aérobies à 30°C : 00	< 10 ⁴
• Escherichia-Coli : 00	< 10
• Levures et Moisissures : 00	< 10 ³
• Staphylocoques à coagulases : 00	< 10
• Salmonella : Absence	Absence

DOSAGE RECOMMANDÉ : < 1 g/L.

CONSERVATION ET STOCKAGE : Vingt quatre mois à partir de la date de fabrication, le produit doit être stocké dans un lieu frais à l'abri de la chaleur et de la lumière.

Département recherches et analyses



SARL FAROMCOL, UNITE DE PRODUCTION ET DE RECHERCHE.

CAPITAL : 44 700 000.00 DA

RC: 98 B 0102527 - Art fiscal: 31070102091 - NIF: 099831010252798

Adresse : ZONE INDUSTRIELLE N°2- ES - SENIA. B.P 156. 31100 – ORAN - (ALGERIE) .

Siege Social : 92 RUE DE MOSTAGANEM - ORAN - (ALGERIE).

Tel : 041 61 77 76/61 77 82 - MOB : 05 55 08 24 67/70/71 -Email : commercial@faromcol.com / laboratoire@faromcol.com

Site web : www.faromcol.com



FICHE TECHNIQUE



NOM ET REFERENCE DU PRODUIT : Arôme Noisette double concentré

DÉSCRIPTION :

Produit aromatique industriel, non destiné à la consommation directe.

DOMAINE D'UTILISATION :

Produit conçu à des fins alimentaires, destiné à être utilisé en biscuiterie ; pâtisseries et Chocolaterie.

CARACTÉRISTIQUES PHYSICO-CHIMIQUES

- **Goût** : Goût noisette.
- **Aspect** : Liquide translucide.
- **Densité à 20°C** : 1,015 – 1,040
- **pH à 20°C** : 5,0 – 6,0

COMPOSANTS :

- Substances aromatiques identiques aux naturelles
- Support : Propylène Glycol USP (SIN-1520)

CRITÈRES MICROBIOLOGIQUES :

Germes	Normes
• Coliformes totaux : 00	< 10 ²
• Germes aérobies à 30°C : 00	< 10 ⁴
• Escherichia-Coli : 00	< 10
• Levures et Moisissures : 00	< 10 ³
• Staphylocoques à coagulases : 00	< 10
• Salmonella : Absence	Absence

DOSAGE RECOMMANDÉ : 1 à 2g/L.

CONSERVATION ET STOCKAGE : Vingt quatre mois à partir de la date de fabrication, le produit doit être stocké dans un lieu frais à l'abri de la chaleur et de la lumière.

Département recherches et analyses



SARL FAROMCOL, UNITE DE PRODUCTION ET DE RECHERCHE.

CAPITAL : 44 700 000.00 DA

RC: 98 B 0102527 - Art fiscal: 31070102091 - NIF: 099831010252798

Adresse : ZONE INDUSTRIELLE N°2- ES - SENIA. B.P 156. 31100 – ORAN - (ALGERIE).

Siege Social : 92 RUE DE MOSTAGANEM - ORAN - (ALGERIE).

Tel : 041 61 77 76/61 77 82 - MOB : 05 55 08 24 67/70/71 -Email : commercial@faromcol.com / laboratoire@faromcol.com

Site web : www.faromcol.com



AROMATECH ALGERIE
PRODUCTION D'AROMES ALIMENTAIRES
Baba Ali - Zone d'activité Oued el Kerma, Lot N°38
Saoula - 16095 Alger - ALGERIE

Page : 1/2

FRM-LCQ0001

**BULLETIN D'ANALYSE
CERTIFICATE OF ANALYSIS**

Identification du produit / Product Identification

Nom du produit / Product Name : AROME BEURRE
AROME BEURRE
Référence / Code Number: 7.19373
Numéro de Lot /Batch number : 012308017
Date de fabrication /Manufacturing date : 28/02/2023
DDM (Date Durabilité Minimale) / Best before date : 28/02/2024

Analyses organoleptiques/Sensorial analysis

	Results	Specifications	Interpretation
Aspect / Appearance	Liquide		Conforme/Conform
Couleur / Color	Jaune		Conforme/Conform
Odeur / Odour	Conforme/Conform	caractéristique/characteristic	Conforme/Conform
Goût / Taste	Conforme/Conform	caractéristique/characteristic	Conforme/Conform

Analyses physico-chimiques/Physico chemical analysis.

	Results	Specifications	Interpretation
Densité / Specific gravity 20/20°C	1.096	1.082 - 1.112	Conforme/Conform
Indice de Réfraction / Refractive index 20°C	1.433	1.420 - 1.450	Conforme/Conform
pH 20°C		0.000 - 0.000	Conforme/Conform
Point éclair / Flash point (±2°C)		0.000 - 0.000	Conforme/Conform
Degré Brix / Brix 20°C			Conforme/Conform
Extrait sec / Dry matter 100°C (%)			Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/kg)			Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/l)			Conforme/Conform
Densité Optique/Optical density			Conforme/Conform

Analyses microbiologiques/Microbiological analysis

Nos produits sont stabilisés microbiologiquement. Au regard de leur faible charge microbienne, nous n'effectuons pas d'analyses.
Our products are microbiologically stable. Due to their low microbial load, we do not perform any analysis.

Code Client /Customer Code: 4110002138 SARL KAMELO FOOD

Date édition : 28/02/2023 Date création : __/__/__ Date révision: __/__/__ Version :



AROMATECH ALGERIE
PRODUCTION D'AROMES ALIMENTAIRES
Baba Ali - Zone d'activité Oued el Kerma, Lot N°38
Saoula - 16095 Alger - ALGERIE

Page

2/2

FRM-LCQ0001

BULLETIN D'ANALYSE
CERTIFICATE OF ANALYSIS

Identification du produit / Product Identification

Nom du produit / Product Name : AROME BEURRE
AROME BEURRE
Référence / Code Number: 7.19373
Numéro de Lot /Batch number : 012308017
Date de fabrication /Manufacturing date : 28/02/2023
DDM (Date Durabilité Minimale) / Best before date : 28/02/2024

Informations complémentaires/ Additional informations

VALIDATION / APPROVAL	OUI / YES
DATE	28/02/2023
QUALITY CONTROL DEPARTEMENT	



Code Client /Customer Code: 4110002138 SARL KAMELO FOOD

Date édition : 28/02/2023

Date création : _/_/

Date révision: _/_/

Version :

Date 27/02/2023

BULLETIN D'ANALYSES BP2023/00028

Désignation : AROME NOISETTE
Référence : VIDA10030
Quantité Produite : 100Kg
N° Lot : BP2023/00028
Date de fabrication : 27/02/2023
DLUO : 27/02/2024
Client : KAMELO FOOD

	Mesures	Min	Max	Méthode
Aspect :	Liquide	/	/	/
Couleur :	Marron Claire	/	/	/
Odeur & Goût :	Caractéristique	/	/	/
Densité (20°C) :	1,052	1,031	1,061	NFT75-111
Brix (20°C) :	46	39	53	NFT75-112
Indice de réfraction (20°C) :	1,412	1,397	1,427	NFT75-112
pH (20°C) :	/			FCC III
Acidité (acide citrique monohydraté) :	g/Kg	/		FCC III
	g/L	/		
Indice formol :	/			
Densité optique (20°C) :	/			
Extrait sec (% - 100°C) :	/			
Microbiologie :				
Levures (nb/g) :	/			
Moisissures (nb/g) :	/			
Flore totale (nb/g) :	/			

Contrôles physicochimiques et organoleptiques : Conformes



Service Qualité
MK

SARL VIDAROME
Adresse : Route de OUED ALLAYEG GRP 118 SEC 04
BENI MERED - BLIDA - ALGERIE
Tél : +213 25 48 54 97 / Mobile : +213 550 225 225
rd.khelifi@vidarome.com
WWW.VIDAROME.COM

**BULLETIN D'ANALYSE
CERTIFICATE OF ANALYSIS**

Identification du produit / Product Identification

Nom du produit / Product Name : AROME CREME VANILLE
AROME CREME VANILLE
Référence / Code Number: 7.48583
Numéro de Lot /Batch number : 012249011
Date de fabrication /Manufacturing date : 07/12/2022
DDM (Date Durabilité Minimale) / Best before date : 07/12/2023

Analyses organoleptiques/Sensorial analysis

	Results	Specifications	Interpretation
Aspect / Appearance	Liquide		Conforme/Conform
Couleur / Color	Jaune pâle		Conforme/Conform
Odeur / Odour	Conforme/Conform	caractéristique/characteristic	Conforme/Conform
Goût / Taste	Conforme/Conform	caractéristique/characteristic	Conforme/Conform

Analyses physico-chimiques/Physico chemical analysis.

	Results	Specifications	Interpretation
Densité / Specific gravity 20/20°C	0.933	0.910 - 0.940	Conforme/Conform
Indice de Réfraction / Refractive index 20°C	1.478	1.458 - 1.488	Conforme/Conform
pH 20°C		0.000 - 0.000	Conforme/Conform
Point éclair / Flash point (±2°C)		0.000 - 0.000	Conforme/Conform
Degré Brix / Brix 20°C			Conforme/Conform
Extrait sec / Dry matter 100°C (%)		0.000 - 0.000	Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/kg)		0.000 - 0.000	Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/l)		0.000 - 0.000	Conforme/Conform
Densité Optique/Optical density			

Analyses microbiologiques/Microbiological analysis

Nos produits sont stabilisés microbiologiquement. Au regard de leur faible charge microbologique, nous n'effectuons pas d'analyses.
Our products are microbiologically stable. Due to their low microbial load, we do not perform any analysis.

Code Client /Customer Code: 4110002138 SARL KAMELO FOOD

Date édition : 06/12/2022

Date création : _/_/___

Date révision: _/_/___

Version :



AROMATECH ALGERIE
PRODUCTION D'AROMES ALIMENTAIRES
Baba Ali - Zone d'activité Oued el Kerma, Lot N°38
Saoula - 16095 Alger - ALGERIE

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FRM-LCQ0001

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CERTIFICATE OF ANALYSIS**

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Informations complémentaires/ Additional informations

VALIDATION / APPROVAL	
DATE	
QUALITY CONTROL DEPARTEMENT	



Code Client /Customer Code: 4110002138 SARL KAMELO FOOD

Date édition : 06/12/2022

Date création : _/_/

Date révision: _/_/

Version :



ACG SIM SPA
Filiale du Groupe SIM S.P.A



Date : 28/05/2022

Contrôle Qualité Certificat D'analyse

Type d'huile : Raffinée 100% Soja

Date D'analyse : 28/05/2022

Client : KAMELO

NUMERO DE CAMION : 000374-516-16

NUMERO DE CITERNE : 03706-809-06

Teste	Standards	Resultats
Couleur L5 (Y / R / B)	Max 20Y/2R	3.2/0.2/ 0,01
Indice De Peroxyde (meq O2/Kg)	Max 1	0.35
Acidité Oléique (%)	Max 0.1	0.06
Eau et Matières Volatiles (%)	Max 0.1	0.02
Phosphore (ppm)	Max 5	1
Savon (ppm)	Negatif (-ve)	0
Impuretés	Negatif (-ve)	0
Goût / Odeur	Neutre / Neutre	Ok / Ok
Densité	/	0.9161 g/cm ³
Durée de validité	Une année	Production Date 25/05/2022

Numéro de scellées : 057651-057652-057653-057654

Département Contrôle Qualité



Address : Groupe de Propriété 69 et 67 El- Hamoul Section 13 31110 Oran – Algérie

Tel : 0560 90 82 29

N° RC 31/00-0809244B16 Numéro d'identification Fiscales 001609080924405

	FICHE DE CONTRÔLE DES CAMIONS DE TRANSPORT DES PRODUITS FINIS DE LA MARGARINERIE	N° Réf :	F-MRG-102
		Date de révision :	14 Mars 2018
		Version :	9

N° d'immatriculation de la cellule frigorifique: **00560-81516**
 N°BA : **CCBES2207747** Date et heure d'expédition : **03/07/2022**

Désignation du produit : **SHORTENING 38/40**

État de la cellule frigorifique		Conforme	Non conforme
1.	Humidité	<i>C</i>	
2.	Propreté de la cellule	<i>C</i>	
3.	Absence d'odeur désagréable	<i>C</i>	

État hygiénique de la remorque		Conforme	Non conforme
1.	Intégrité de la remorque (absence de trous et de corrosion.....)		
2.	Propreté du plateau (absence d'huile, eau, boue et débris divers)		
3.	Absence d'odeur désagréable (Cas d'un conteneur)		
4.	Présence de bâche		

Température de la cellule avant chargement (MRG)	Température de la cellule en fin de chargement (MRG)	Température de la cellule au déchargement (CLR)
<i>06°C</i>	<i>06°C</i>	

Le chef de quai et le chauffeur doivent contrôler la conformité du chargement des produits en quantité et qualité (vérification de l'intégrité des palettes)

NB : Les températures de chargement et du transport des produits margarinerie sont :

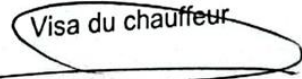
- Margarines de table : 12°C
- Margarine de feuilletage, graisse végétale et Smen : max 25°C
- Beurre MDN : -18°C
- Beurre tendre gourmand : Max 6°C

NB : La température de chargement et transport du beurre tendre gourmand de la margarinerie vers le dépôt TEMZRIT est de 0°C

*Le chargement n'est autorisé que si toutes les conditions de conformité (quantité et qualité) sont réunies.

Visa du chef de quai



Visa du chauffeur


Visa du chef CLR



N° inscription: 292/2023 (11029)
Prélevé le: 22-03-2023
Réceptionné le: 22-03-2023
Date d'analyse: 22-03-2023
Nbre Echantillon: 5
Poids - 36 g
N° lot: 3079

Demandeur: EURL KAMELO FOOD
Adresse: RUE FEHAS MOHAME RTE OUEDI ELAIK CENTRE ZAOUA
Produit: PRODUITS DE BISCUITERIE
(Biscuit MAXON GOLDEN fourré à la crème cacao)
Date fabrication: 20-03-2023
Date preemption: 20-09-2024

- prélevement fait par les soins du laboratoire
- ce rapport d'analyse est délivré en un seul exemplaire original et reste valable uniquement que pour le lot ou l'échantillon soumis à l'essai

Bulletin d'analyse Microbiologique

Examen préliminaire :

- Aspect et Couleur : Biscuit rond de couleur beige fourré à la crème cacao
- Odeur : Absence d'odeur étrangère au produit
- L'étiquetage et Emballage : Conforme selon le décret exécutif n°13-378 du 16 novembre 2013
- Examen microscopique : Absence de matière étrangère au produit

Résultats :

Paramètres recherchés	E1	E2	E3	E4	E5	m	M	Réf/Method
Germe aérobies à 30°C - UFC/g	inf 100	inf 100	inf 100	inf 100	inf 100	1000	10000	NA 1207
Staphylococcus à coagulase ++ UFC/g	inf 10	inf 10	inf 10	inf 10	inf 10	100	1000	ISO 6898
Salmonelles - UFC/25g	abs	abs	abs	abs	abs	/	Absence	NA 1203
Escherichia coli- UFC/g	inf 1	inf 1	inf 1	inf 1	inf 1	3	30	NA 6803
Moisissures- UFC/g	inf 10	inf 10	inf 10	inf 10	inf 10	100	1000	NA ISO 21527-2

Conclusion :

la qualité du produit est: **SATISFAISANTE** selon: Arrêté interministériel du 04 octobre 2016
fixant les critères microbiologique des denrées alimentaires (JORA n°39 juillet 2017)

Bulletin établi le: 27-03-2023
le responsable:



N° inscription: 185/2023 (10009)

Prélevé le: 19-02-2023

Réceptionné le: 19-02-2023

Date d'analyse: 19-02-2023

Nbre Echantillon: 1

Volume - 750 ml

N° lot:

Demandeur: EURL KAMELO FOOD

Adresse: RUE FEHAS MOHAME RTE OUEDI ELAIK CENTRE ZAOUIA

Produit: EAU DE CONSOMMATION HUMAINE

(Eau de process)

Date fabrication: 19-02-2023

Date peremption: 22-02-2023

- prélèvement fait par les soins du laboratoire

- ce rapport d'analyse est délivré en un seul exemplaire original et reste valable uniquement que pour le lot ou l'échantillon soumis à l'analyse

Bulletin d'analyse Microbiologique

Examen préliminaire :

- Aspect et Couleur : Liquide incolore
- Odeur : Absence d'odeur étrangère au produit
- Etiquetage et Emballage : Absence d'étiquetage
- Examen microscopique : Absence de matière étrangère au produit

Résultats :

Paramètres recherchés	E1	E2	E3	E4	E5	m	M	Réf/ Méthode
Anaérobies sulfite-réducteurs à 46 °C - UFC/50ml	ABS					Absence		NA 15527-2
Escherichia coli- UFC/250ml	ABS					Absence		NA 764
Entérocoques - UFC/250ml	ABS					Absence	Absence	NA 766

Conclusion :

la qualité du produit est: **SATISFAISANTE** selon: Arrêté interministériel du 04 octobre 2016 fixant les critères microbiologique des denrées alimentaires (JORA n°39 juillet 2017)

