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IMPLEMENTATION OF HAZARD ANALYSIS AND CRITICAL CONTROL POINT AT THE MARRIOTT MARQUIS QUEEN'S PARK HOTEL KITCHEN, BANGKOK

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Abstract

The Marriott Marquis Queen's Park Bangkok is renowned for the high quality of its services and products, particularly its food. Guests with high expectations naturally anticipate guaranteed food quality. Therefore, the implementation of the Hazard Analysis and Critical Control Points (HACCP) system is crucial in ensuring the safety and quality of the food offered. This study aims to analyze and evaluate the implementation of the HACCP system in the kitchen of the Marriott Marquis Queen's Park Bangkok to enhance food safety and reduce contamination risks. The research employs a qualitative descriptive method, with data collection through a checklist system designed based on the seven HACCP principles. Based on the conducted analysis, the Hazard Analysis reveals an average score of 4.5 out of 5, with 71% of respondents strongly agreeing, although 29% believe there is room for improvement. The Critical Control Points (CCP) achieved an average score of 4.6; however, 43% of respondents feel that enhancements are necessary. The Critical Limits have an average score of 4.5 and are expected to undergo periodic updates. Furthermore, the monitoring of CCP garnered an average score of 4.5, indicating the importance of consistent oversight. For Corrective Actions, the average score of 4.4 reflects that 64% of respondents strongly agree, but 36% emphasize the need for improvements in documentation. In terms of Verification Procedures, the average score is 4.4, with 50% of respondents strongly agreeing, highlighting the necessity for greater objectivity in the verification process. Lastly, in Documentation and Record Keeping, the average score of 4.5 indicates that 43% of respondents strongly agree; however, record-keeping needs to be more organized and easily accessible.

Keywords: HACCP, Kitchen Hotel, Food Quality

1. INTRODUCTION

The tourism industry is currently one of the largest sectors in the world, with Thailand being a major player due to its unique culture, lifestyle, and cuisine, which attract many tourists. Combined with a relatively low cost of living, the growth of tourism in Thailand has been steadily increasing (Ariesta, 2017). The rapid development of Thailand's tourism industry has also driven the hospitality sector, where many business owners see a great opportunity to meet the growing demands of tourists (Isdarmanto, 2020). One of the most renowned hotels in Thailand is the Marriott Marquis Queen's Park

Bangkok, a luxury hotel established in 1967, which holds an international reputation, (Fitri: 2022).

The kitchen department at Marriott Marquis Queen's Park Bangkok plays a crucial role in ensuring food safety by implementing the Hazard Analysis and Critical Control Points (HACCP) system, which guarantees the quality and safety of food served to hotel guests, by (Fitri: 2022). HACCP is a proactive food safety management system, unlike traditional methods, which tend to be more reactive. The consistent and disciplined implementation of HACCP is vital in maintaining the high food standards at this hotel.

Previous research has explored HACCP implementation in various contexts. Arisandi, Trianasari, and Parma (2019) studied the application of HACCP in raw material storage at Discovery Kartika Plaza Hotel, finding that although the procedures were followed, there were still operational issues. Raharja (2022) evaluated HACCP-based food storage at The Kayon Resort Ubud, highlighting two main processes used to maintain food quality. Sitorus (2022) examined the implementation of HACCP at Alam Hotel by Cordela Medan, which successfully improved the quality and safety of the food. Aristya (2022) assessed the implementation of the Brand Standard Audit (BSA) at Goji Kitchen+Bar at Marriott Marquis Queen's Park Bangkok, finding that while the implementation was quite good, there were some standards that had not been fully met. Vatria (2022) explained the steps of HACCP implementation in fishery product processing, emphasizing the importance of prerequisite programs before HACCP implementation.

Although many studies have evaluated HACCP implementation in various places, no research has comprehensively analyzed and evaluated HACCP implementation in the kitchen of the Marriott Marquis Queen's Park Bangkok. This study aims to fill that gap by providing an in-depth analysis of the effectiveness of HACCP control measures in this internationally standard luxury hotel kitchen, to enhance food safety and reduce contamination risks.

The primary objective of this study is to analyze and evaluate the implementation of Hazard Analysis and Critical Control Points (HACCP) in the kitchen of Marriott Marquis Queen's Park Bangkok. This evaluation aims to identify potential hazards that may occur during food preparation, storage, and serving processes, including microbiological, chemical, and physical hazards that can affect food quality and safety. Understanding these potential hazards allows for the design and implementation of more effective preventive measures.

However, empirical data regarding the kitchen operations at Marriott Marquis Queen's Park Bangkok have not been presented adequately. For instance, while the hotel's HACCP protocols may be documented, specifics on their daily application, staff training related to food safety, and compliance monitoring mechanisms are often lacking. This omission can hinder the assessment of how well the HACCP principles are integrated into daily kitchen operations. A study by Silva et al. (2019) highlights that many hotel kitchens do not systematically document their HACCP implementation, which can lead to gaps in food safety practices. The absence of empirical data on the actual occurrence of food safety incidents or violations within the hotel's kitchen raises concerns. Research by Kanaga et al. (2021) emphasizes that monitoring and reporting systems are crucial for identifying and mitigating risks associated with food handling. Without it, it is challenging to ascertain the effectiveness of the HACCP measures in practice and to identify areas for improvement.

Additionally, empirical studies conducted in similar settings suggest that hotels often face challenges in adhering to HACCP guidelines due to staff turnover and inconsistent training, which may affect compliance rates (Iglesias et al., 2020). Thus, a thoroughgoing into the HACCP implementation at Marriott Marquis Queen's Park Bangkok would require a more detailed examination of these aspects, including direct observations, interviews with kitchen staff, and review of incident reports.

The objectives of this research are to identify potential food safety hazards in the kitchen of Marriott Marquis Queen's Park Bangkok, evaluate the effectiveness of HACCP control measures already in place, assess staff training and compliance with HACCP standards, and provide recommendations to enhance HACCP implementation to minimize contamination risks.

By evaluating and improving the existing control measures, it is expected that the risk of food contamination can be minimized, ensuring food safety is well maintained at the Marriott Marquis Queen's Park Bangkok. This research is anticipated to contribute significantly to food safety practices in the luxury hotel industry, particularly in hotels with international standards.

2. LITERATURE REVIEW

The present research delves into the implementation of Hazard Analysis and Critical Control Points (HACCP) within the kitchen of Marriott Marquis Queen's Park Bangkok, building upon a rich foundation established by previous studies in the hospitality and food industry. Notably, the work of Arisandi (2019) sheds light on the operational challenges associated with HACCP compliance, particularly in the context of raw material storage at the Discovery Kartika Plaza Hotel. Their findings reveal that adherence to HACCP standards is insufficient without robust operational capabilities to sustain them. Similarly, Raharja's (2022) exploration of HACCP processes at The Kayon Resort Ubud emphasizes the critical need for effective mechanisms to maintain food quality, indicating that the mere existence of HACCP procedures does not guarantee their effective application.

These studies lay the groundwork for the current research, which seeks to expand upon these themes by providing a comprehensive analysis of HACCP practices in a luxury hotel setting. While previous research has often concentrated on specific contexts—such as storage or food processes, this investigation aims to fill a significant gap by examining the overall implementation of HACCP within a high-standard kitchen environment. The insights gathered from Sitorus (2022), who demonstrated the potential of HACCP to enhance food quality at Alam Hotel by Cordela Medan, further inform this study, as does Aristya's (2022) evaluation of the Brand Standard Audit (BSA) at Marriott Marquis Queen's Park Bangkok. Aristya's findings revealed unmet standards, underscoring the relevance of addressing challenges related to HACCP implementation in this prestigious hotel.

Several key issues and ideas have emerged from the literature review that will guide the current research. First, the operational challenges identified in previous studies suggest that while HACCP procedures exist, consistent implementation remains a formidable challenge. This research aims to investigate these operational barriers in greater depth, particularly in the context of a luxury hotel kitchen that adheres to stringent standards.

Moreover, the literature highlights the critical role of staff training in ensuring compliance with HACCP (Sitorus: 2022). The current research will focus on evaluating

the effectiveness of training programs in place and their impact on staff's ability to uphold HACCP standards. Additionally, the study will emphasize the need for rigorous oversight to mitigate contamination hazards, stressing the importance of disciplined and consistent HACCP implementation to prevent microbiological, chemical, and physical contamination in high-end hotel kitchens.

It is also noteworthy that some references used in the review are over a decade old, raising concerns about their contemporary relevance. To address this, the research incorporates more recent literature to ensure its findings are grounded in the current state of the industry. Recent studies, such as Galanakis (2020), who discusses the evolving role of HACCP in modern food safety management, and Shabana (2019), which examines current trends in HACCP implementation, are instrumental in shaping the research context. Moreover, the empirical data provided by Karaman et al. (2021) on HACCP effectiveness in hotels and restaurants will allow for direct comparisons with the practices observed in luxury hotel kitchens. Lastly, Evans (2020) offer insights into the food safety knowledge and practices of kitchen staff, which aligns closely with the current research focus on training and compliance.

In conclusion, this research is strategically positioned within the existing literature, addressing previously identified gaps while effectively engaging with recent peer-reviewed findings. Through this comprehensive approach, the study aspires to contribute valuable insights into the challenges and best practices of HACCP implementation in a luxury hotel kitchen, thereby enhancing food safety and quality standards in the hospitality industry.

3. RESEARCH METHODS

This research provides a thorough examination of the methodology employed to assess the implementation of Hazard Analysis and Critical Control Points (HACCP) in the kitchen of Marriott Marquis Queen's Park Bangkok. A qualitative research design was utilized, integrating both primary and secondary data sources. The detailed distribution of questionnaires to kitchen staff encompasses all critical elements of the seven HACCP principles, from hazard identification to documentation and record-keeping (Pettit & McCarthy, 2018; Valero & Mena, 2015).

The study employs a checklist specifically formulated based on the seven HACCP principles, serving as a structured tool for data collection. Each procedural stage, including the gathering of primary data through questionnaires and checklists and the acquisition of secondary data from the hotel's internal documents, is described comprehensively to ensure the replicability and verifiability of the research process (Kumar, 2020; De Boer et al., 2021).

The methodological choices made in this study are thoroughly justified concerning the research objectives. The specially designed questionnaire allows for an effective evaluation of the HACCP principles' implementation within the hotel kitchen, providing direct insights from staff engaged in daily operations (Mason et al., 2016). Additionally, the collection of secondary data through internal documents—such as procedure manuals, inspection reports, and training records—enhances the contextual understanding of the HACCP implementation process (Scherer et al., 2019).

Furthermore, quantitative analysis techniques are employed through checklist coding and descriptive statistics, facilitating a clear illustration of the staff's compliance levels with HACCP principles. The logical and detailed explanation of the coding and

statistical analysis processes reinforces the appropriateness of the chosen methods in addressing the research questions (Johnson & Christensen, 2019).

Despite the strengths of this research, certain limitations must be acknowledged. One potential limitation is the risk of response bias in the questionnaires, where kitchen staff might provide inaccurate answers due to apprehensions about performance evaluations (Oppenheim, 2000). Additionally, the use of secondary data may not entirely represent the current state or all facets of HACCP implementation; some documents could be outdated or lack the necessary detail to cover the HACCP processes comprehensively (Ropkins & Sutherland, 2016). Moreover, while quantitative methods can provide valuable insights, they may not capture the complete complexity of HACCP implementation, especially regarding qualitative aspects related to staff compliance or operational subtleties that numerical measures might overlook (Mason, 2020). Acknowledging these limitations offers a more nuanced understanding of the research findings' scope and validity.

Table 1. HACCP Implementation Questionnaire

No	7 HACCP Principles	
1	Hazard Analysis	<ul style="list-style-type: none"> a) The hotel kitchen routinely identifies potential hazards in the food production process. b) All types of hazards (biological, chemical, physical) are considered in the analysis. c) Hazard analysis is conducted at each stage of production, from the receipt of raw materials to serving.
2	Determination of Critical Control Points (CCP)	<ul style="list-style-type: none"> a) Critical Control Points (CCPs) have been clearly identified in the kitchen. b) Each CCP has a clear rationale as to why it is considered critical. c) All kitchen staff understand the location and importance of CCPs.
3	Establishment of Critical Limits	<ul style="list-style-type: none"> a) Each CCP has clear and measurable critical limits. b) Critical limits are well communicated to all relevant staff. c) Critical limits are reviewed and updated regularly.
4	CCP Monitoring System	<ul style="list-style-type: none"> a) There is a clear monitoring system for each CCP. b) Monitoring is conducted consistently according to a set schedule. c) Staff responsible for monitoring have been well trained.
5	Corrective Actions	<ul style="list-style-type: none"> a) Corrective actions have been established for each deviation from critical limits. b) Staff understand when and how to apply corrective actions. c) Corrective actions are well documented whenever they are implemented.
6	Verification Procedures	<ul style="list-style-type: none"> a) There are clear verification procedures in place to ensure the effectiveness of the HACCP system. b) Verification is conducted regularly by competent personnel. c) Verification results are used to improve the HACCP system.
7	Documentation and Record-Keeping	<ul style="list-style-type: none"> a) All HACCP-related documents are available and easily accessible. b) CCP monitoring records are well maintained and updated regularly. c) There is an effective system for reviewing and updating HACCP documentation.

Source: Carter (2010)

In this study, an evaluation was conducted on the implementation of the seven principles of Hazard Analysis and Critical Control Points (HACCP) in the hotel kitchen being studied. For this purpose, a questionnaire related to the application of these principles was prepared and distributed to all kitchen staff members. A total of 14 staff members served as respondents for this study.

The research methodology employed a closed-ended questionnaire designed to assess the implementation of each HACCP principle in detail. A Likert scale with five levels of response was used to gauge the respondents' answers. The scale consisted of: "1" indicating strong disagreement, "2" for disagreement, "3" for a neutral assessment, "4" for agreement, and "5" indicating strong agreement.

This approach provides a systematic way to evaluate staff attitudes and perceptions regarding the implementation of each HACCP principle. The Likert scale allows for a nuanced assessment of how well these principles are applied and understood within the hotel's kitchen environment. By collecting data from all kitchen staff members, the study aims to provide a comprehensive overview of the effectiveness of HACCP implementation in the hotel.

The results from this questionnaire are expected to offer in-depth insights into the strengths and weaknesses of HACCP implementation, as well as identify areas requiring improvement. Thus, this research not only contributes to the academic understanding of HACCP application in the hospitality industry but also provides practical information that can be used to enhance food safety standards in the hotel kitchen.

4. FINDINGS AND DISCUSSION

Marriott Marquis Queen's Park Bangkok is one of the leading hotels in Bangkok, Thailand, known for its high standards in service and the quality of the food served. One of the keys to maintaining food quality and safety at this hotel is the implementation of the Hazard Analysis and Critical Control Points (HACCP) system. HACCP is a systematic approach to identifying, evaluating, and controlling significant hazards in the food production process, aiming to ensure food safety from production to consumption. Below are the results of the data filled out by the kitchen staff of the hotel:

Table 2. Scoring Kitchen Staff Responses at Marriott Hotel

Respondent Number Code	Questionnaire																				
	7 HACCP Principles																				
	Principle 1			Principle 2			Principle 3			Principle 4			Principle 5			Principle 6			Principle 7		
1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3	3	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5
4	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	4	4	5	5
5	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	4	4
6	4	4	5	4	5	5	4	4	4	4	5	5	4	5	5	3	3	4	5	4	3
7	5	5	4	4	4	4	5	5	4	4	5	5	5	4	4	4	5	5	5	4	4
8	5	5	4	4	4	4	5	5	4	4	5	5	4	4	4	5	4	4	4	4	4
9	5	5	4	5	5	5	4	5	4	5	5	5	5	4	5	5	5	5	5	5	4
10	3	4	3	3	4	4	4	3	4	3	4	3	3	3	4	3	4	3	4	3	3
11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
12	5	5	4	4	4	5	4	4	4	4	4	4	4	5	5	4	4	4	4	4	4
13	4	5	5	4	4	4	4	4	5	4	3	4	4	4	4	5	5	3	4	4	4
14	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
14 Respondents	4	5	4	4	5	5	5	5	5	4	5	5	5	5	5	5	5	4	5	4	4
	4,5			4,5			4,5			4,5			4,5			4,4			4,4		

Source: Results (2023)

4.1 Conducting Hazard Analysis

The analysis of the data collected from the kitchen staff at the Marriott Marquis Queen's Park Bangkok reveals a high level of satisfaction with the implementation of Principle 1 of HACCP, which is Hazard Analysis. A significant majority of respondents (71%) strongly agreed that hazard analysis is effectively conducted in the kitchen, as reflected by an average score of 4.5 out of 5. This indicates a strong belief in the effectiveness of hazard analysis practices among the staff. The high score suggests that the kitchen staff not only understands the concept of hazard analysis well but also applies it effectively in their daily operations. According to Mortimore and Wallace (2013), effective hazard analysis is a critical foundation for the overall HACCP system, allowing the kitchen team to proactively identify and manage potential food safety risks.

While the results are very positive, with 29% of respondents not providing the highest score, there is room for improvement. It is recommended, in line with FDA (2017) guidelines, that the hotel consider periodic refresher training and regular internal audits to ensure consistent understanding and implementation of effective hazard analysis.

The importance of hazard analysis as the initial step in developing an effective HACCP system is emphasized by the Codex Alimentarius Commission (2003). The high score in this principle at the Marriott Marquis Queen's Park Bangkok indicates a strong foundation for their overall food safety system. Wallace et al. (2018) highlights that comprehensive hazard analysis is key to managing food safety across the global supply chain, suggesting that the hotel's achievement in this aspect benefits not only their internal operations but also contributes to broader industry food safety standards. Cusato et al. (2012) further explains that effective HACCP implementation, starting with proper hazard analysis, impacts not only food safety but also environmental aspects, indicating that the hotel's commitment to good hazard analysis could provide wider benefits beyond just food safety.

4.2 Determining Critical Control Points (CCP)

The evaluation of Critical Control Points (CCP) implementation at Hotel Marriott Marquis Queen's Park Bangkok reveals a high level of effectiveness and consistency. The average score of 4.6 out of 5, with 57% of respondents strongly agreeing with the identification and control of CCPs, indicates a robust understanding among kitchen staff regarding the critical points in the cooking process.

This high rating reflects the fact that most of the staff not only comprehend the concept of CCPs but also feel confident in their application in daily operations. According to Mortimore and Wallace (2013), accurate CCP identification is crucial within the HACCP system, as CCPs are points where control measures can prevent, eliminate, or reduce food safety hazards to acceptable levels.

The consistent high ratings suggest that Hotel Marriott Marquis Queen's Park Bangkok has successfully fostered a uniform understanding among kitchen staff about where critical points are in their food production process. As emphasized by the FDA (2017), proper CCP determination is fundamental to effective hazard control in HACCP systems. Despite these positive results, it is noteworthy that 43% of respondents did not give the highest rating, presenting an opportunity for further improvement. As Codex Alimentarius Commission (2003) suggests, CCP determination should be based on thorough risk assessments and reviewed regularly to ensure its relevance with changes in processes or raw materials.

Wallace et al. (2018) stresses the importance of a team-based approach in determining CCPs, involving diverse expertise and perspectives. The hotel may need to consider conducting brainstorming sessions or cross-departmental training to strengthen CCP understanding and identification further. Cusato et al. (2012) further explains that effective CCP determination not only impacts food safety but can also enhance production efficiency and product quality. Thus, a solid understanding of CCPs at Hotel Marriott Marquis Queen's Park, Bangkok potentially offers broader operational benefits. Yiannas (2009) highlights the importance of building a food safety culture where every staff member understands their role in controlling CCPs. The high average score suggests that the hotel has successfully established such a culture, though continuous reinforcement through ongoing communication and training is essential. Sperber and Stier (2009) remember that while CCP determination is a key component of HACCP, over-identifying CCPs can lead to overly complex and unmanageable systems. The hotel needs to ensure that they focus on truly critical CCPs.

Overall, the results indicate that Hotel Marriott Marquis Queen's Park Bangkok has achieved a high level of excellence in implementing Principle 2 of HACCP. However, as suggested by Panisello and Quantick (2001), food safety is an ongoing improvement process. The hotel should continue to evaluate and update their understanding of CCPs to ensure that their HACCP system remains effective and relevant.

4.3 Establishing Critical Limits

The assessment of respondents regarding the establishment of Critical Limits (Principle 3 HACCP) at the Marriott Marquis Queen's Park Bangkok shows a high level of understanding and implementation. With an average score of 4.5 out of 5, the data indicate that kitchen staff have a solid grasp of critical limits and their importance in ensuring food safety. This score, consistent with the evaluation of Critical Control Points (Principle 2), highlights a strong correlation between these two interconnected principles within the HACCP system.

The high scores suggest that the staff are effectively identifying and maintaining the critical parameters that distinguish acceptable from unacceptable conditions in food production. Mortimore and Wallace (2013) assert that such consistency reflects a comprehensive understanding of both the locations of Critical Control Points (CCPs) and the limits that must be adhered to at each point. As emphasized by the FDA (2017), a good understanding of critical limits is essential to prevent, eliminate, or reduce food safety hazards to an acceptable level.

However, despite the positive results, there remains room for improvement. Codex Alimentarius Commission (2003) underscores the necessity of regularly reviewing and updating critical limits to keep them relevant with current scientific and technological advancements. The hotel may consider implementing advanced training sessions or group discussions to address the determination and application of critical limits in complex or rare situations.

Wallace et al. (2018) highlights the importance of ensuring that critical limits are not only understood but also effectively measurable and monitored. Therefore, it is crucial for the hotel's practices to reflect this understanding in daily monitoring activities. Cusato et al. (2012) further explain that accurate determination of critical limits not only impacts food safety but also affects operational efficiency and product quality. Thus, a strong understanding of critical limits at Marriott Marquis Queen's Park Bangkok could lead to

broader benefits, including improved operational efficiency and consistency in food quality.

Overall, the results demonstrate that the hotel has established a robust foundation in the application of Principle 3 HACCP. Nevertheless, as Yiannas (2009) suggests in his work on food safety culture, it is vital to continuously nurture a culture that supports adherence to critical limits, making them a core value in kitchen operations rather than just a rule to follow.

4.4 Monitoring CCPs

The assessment of respondents regarding the monitoring of Critical Control Points (CCPs) in Principle 4 of HACCP at the Marriott Marquis Queen's Park Bangkok reflects a high level of implementation and effectiveness. With an average score of 4.5 out of 5, the data indicates that the kitchen staff have a strong belief in the effectiveness of CCP monitoring within their operations.

The high score signifies that the staff not only understand the importance of CCP monitoring but have also implemented it effectively in their daily routines. According to Mortimore and Wallace (2013), effective CCP monitoring is crucial for ensuring consistent food safety. It allows the kitchen team to proactively detect deviations from established critical limits and take timely corrective actions.

The data suggests that the hotel has successfully developed and implemented a reliable monitoring system. As highlighted by the FDA (2017), effective CCP monitoring should include what is monitored, how it is monitored, the frequency of monitoring, and who is responsible. The high average score indicates that the hotel has successfully integrated these aspects into their operational procedures.

Despite the positive results, it is important to remember that CCP monitoring is an ongoing process requiring high consistency. Codex Alimentarius Commission (2003) emphasizes that CCP monitoring should detect any loss of control and provide timely information for corrective actions. Therefore, the hotel needs to continually ensure that this level of performance is maintained and even improved over time.

Wallace et al. (2018) stresses the importance of using appropriate technology and tools for CCP monitoring. The hotel may need to periodically evaluate and update their monitoring methods to ensure they remain effective and efficient. Cusato et al. (2012) further explains that effective CCP monitoring not only impacts food safety but can also enhance operational efficiency and reduce waste. Thus, the effectiveness of CCP monitoring at Marriott Marquis Queen's Park Bangkok has the potential to provide broader benefits for overall hotel operations. Yiannas (2009) highlights the importance of building a strong food safety culture where CCP monitoring is an integral part of every staff member's daily routine. The high average score indicates that the hotel has successfully built such a culture; however, it is important to continue strengthening it through ongoing training and effective communication.

Overall, the results demonstrate that Marriott Marquis Queen's Park Bangkok has achieved a high level of excellence in implementing Principle 4 HACCP. Nonetheless, as Sperber and Stier (2009) suggest, food safety is a continuous journey, not a final destination. The hotel must continue to strive to maintain and enhance these high standards to ensure consistent and sustainable food safety.

4.5 Establishing Corrective Actions

The assessment of respondents regarding corrective actions in Principle 5 of HACCP at the Marriott Marquis Queen's Park Bangkok reveals a high level of implementation and effectiveness. With an average score of 4.4 out of 5, and 64% of respondents strongly agreeing with the effectiveness of corrective actions, the data indicates that the kitchen staff have a strong confidence in the corrective measures applied when critical limits are exceeded.

The high rating reflects that most of the kitchen staff not only understand the importance of corrective actions but also feel confident in their implementation in real situations. According to Mortimore and Wallace (2013), effective corrective actions are crucial within the HACCP system, as they enable prompt control of deviations and prevent unsafe products from reaching consumers.

The fact that 64% of respondents strongly agree with the effectiveness of corrective actions suggests that the hotel has successfully established a robust response system for critical limit deviations. As emphasized by the FDA (2017), effective corrective actions should include not only immediate corrections but also the identification and elimination of root causes to prevent recurrence. Despite the positive results, there is room for improvement, given the average score of 4.4 and 36% of respondents who did not provide the highest rating. Codex Alimentarius Commission (2003) highlights that corrective actions should be well-documented and periodically reviewed to ensure their effectiveness.

Yiannas (2009) emphasizes the importance of building a food safety culture where every staff member feels responsible and empowered to take necessary corrective actions. The high percentage of respondents who strongly agree indicates that the hotel has successfully built such a culture, but it is important to continue reinforcing it. Sperber and Stier (2009) remind us that while corrective actions are a key component of HACCP, it is important not to rely on them excessively. The primary focus should remain on prevention, with corrective actions serving as a safety net.

Overall, the results indicate that the Marriott Marquis Queen's Park Bangkok has achieved a high level of excellence in implementing Principle 5 of HACCP. However, as Panisello and Quantick (2001) suggest, food safety is a continuous improvement process. The hotel needs to continuously evaluate and enhance the effectiveness of their corrective actions to ensure that their HACCP system remains responsive and effective in addressing deviations.

4.6 Establishing Verification Procedures

The assessment of respondents regarding the verification process in Principle 6 of HACCP at the Marriott Marquis Queen's Park Bangkok shows a high level of implementation and effectiveness. With an average score of 4.4 out of 5, and 50% of respondents strongly agreeing with the verification process, the data indicates that the kitchen staff have a strong confidence in the effectiveness of the verification measures applied to ensure compliance with HACCP procedures.

The high rating reflects that most of the kitchen staff not only understand the importance of verification but also believe that this process is conducted thoroughly and effectively. According to Mortimore and Wallace (2013), verification is a critical component of the HACCP system that ensures the entire system is functioning as intended and remains effective in controlling food safety hazards. The fact that 50% of respondents strongly agree with the verification process indicates that the hotel has successfully

established a verification system that is trusted by half of its kitchen staff. As emphasized by the FDA (2017), effective verification should include initial validation of the HACCP plan, ongoing verification that the HACCP system is operating as planned, and periodic revalidation.

However, despite these positive results, there is room for improvement, given the average score of 4.4 and the 50% of respondents who did not provide the highest rating. Codex Alimentarius Commission (2003) highlights that verification should be conducted by someone other than the person responsible for monitoring and corrective actions to ensure objectivity in the process.

Yiannas (2009) emphasizes the importance of building a food safety culture where verification is viewed as a tool for continuous improvement rather than a means to penalize non-compliance. The high percentage of respondents who strongly agree indicates that the hotel has successfully built a positive perception of the verification process.

Overall, the results indicate that the Marriott Marquis Queen's Park Bangkok has achieved a good level of excellence in implementing Principle 6 of HACCP. However, as Panisello and Quantick (2001) suggest, food safety is an ongoing improvement process. The hotel needs to continuously evaluate and enhance the effectiveness of their verification process to ensure that their HACCP system remains robust and effective in controlling food safety hazards.

4.7 Establishing Documentation and Record-Keeping

The assessment of respondents regarding Documentation and Record-Keeping under Principle 7 of HACCP at the Marriott Marquis Queen's Park Bangkok reveals a high level of implementation and understanding. With an average score of 4.5 out of 5 and a balanced distribution of responses (43% strongly agree and 43% agree), it is evident that the kitchen staff value the role of documentation and record-keeping in the HACCP system highly.

This high rating reflects that the staff not only appreciate the importance of thorough documentation and record-keeping but also consider them essential for traceability and audit purposes. As Mortimore and Wallace (2013) highlight, effective documentation and record-keeping form the foundation of a verifiable and auditable HACCP system, enabling organizations to demonstrate compliance with their stated practices.

The balance between respondents who strongly agree and agree indicates a strong consensus among the staff regarding this principle. According to FDA (2017), good documentation allows tracking of HACCP compliance, identification of trends, and proof of due diligence to auditors and regulators. While the average score of 4.5 suggests high satisfaction with the existing documentation and record-keeping system, there is still room for improvement, as 14% of respondents did not give the highest rating. Codex Alimentarius Commission (2003) emphasizes that documentation should be comprehensive yet simple and accessible to ensure effective use by personnel.

Overall, the results indicate that the Marriott Marquis Queen's Park Bangkok has achieved a high level of excellence in implementing Principle 7 of HACCP. However, as Panisello and Quantick (2001) suggest, food safety is an ongoing process of improvement. The hotel should continue to evaluate and enhance their documentation and record-keeping systems to ensure they remain effective, efficient, and supportive of food safety and continuous improvement.

5. CONCLUSION

The implementation of HACCP in the kitchen of Hotel Marriott Marquis Queen's Park Bangkok demonstrates a high commitment to food safety. The kitchen staff are actively involved in hazard analysis, monitoring CCPs, and taking corrective actions when necessary. Good documentation ensures that all steps are followed according to procedures.

Based on the questionnaire results, it can be concluded that HACCP implementation in the kitchen of Hotel Marriott Marquis Queen's Park Bangkok is functioning well. High ratings across all principles indicate that the kitchen staff have a strong understanding and commitment to food safety, which is a crucial factor in the hospitality industry.

This data was obtained from a questionnaire analysis conducted with the kitchen staff at Hotel Marriott Marquis Queen's Park Bangkok and processed and analyzed to provide an overview of HACCP implementation at the hotel.

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