



Implementation of HACCP (Hazard Analysis and Critical Control Points) in Hotels and Restaurants: The Crucial Role of Semarang Royale Golf Employees' Knowledge and Implementation in Ensuring Food Safety

Septa Intiar¹, Shella Gherina Saptiany², Mahda Sevhi Wijaya³, Fransiska Ayu⁴
STIEPARI Semarang, Semarang, Indonesia

Article Info

Article history:

Received: 31,May,2024

Accepted: 05,June,2024

Published: 30,June,2024

Keywords:

F&B

HACCP

Hotel

Restaurant

Food safety

ABSTRACT

In the world of Food & Beverages (F&B), ensuring the safety of the food products produced is very important. Knowledge of Hazard Analysis and Critical Control Points (HACCP) is very important for hotels and restaurants in an effort to ensure food safety. HACCP is a food safety management system based on a preventive approach, by identifying, evaluating and controlling hazards that are significant to food safety. The implementation of HACCP in hotels and restaurants helps prevent food contamination, provides food safety assurance for consumers, and increases customer trust and satisfaction. In addition, HACCP implementation also helps hotels and restaurants meet applicable food safety regulations and standards. Thus, HACCP knowledge for hotels and restaurants is very important to maintain the quality and safety of the food served, as well as maintaining the reputation and sustainability of the business.

Corresponding Author:

Septa Intiar,

Email: intiarsepta@gmail.com

1. INTRODUCTION

With the times, delicious food and beverages alone are not enough for hotel and restaurant guests. Nowadays, food and beverages that fulfil nutritional needs and are safe for consumption are considered paramount. Unfortunately, the awareness of food safety among Indonesians is still quite low. Meanwhile, almost 90% of diseases related to food consumption factors are caused by microbiological contamination which can result in various diseases and food poisoning.(Prasetyanto and Ratri 2021).

To minimise the problems mentioned above, each hotel and restaurant has a procedure for handling food and beverages. Some hotels and restaurants have used the Hazard Analysis and Critical Control Point (HACCP) system to ensure food quality and safety for guests. HACCP is a means of assessing a hazard and then establishing a hazard control system that focuses on preventing the identified hazard and does not rely largely on testing the final product (Sugiono, 2013). Where this system focuses on supervision from the

beginning of the food produced until the moment the food is consumed by guests as a precaution so that food is not contaminated with hazards.

The application of HACCP aims to ensure that food is not contaminated and can be ensured safe for consumption by guests. HACCP is applied thoroughly, starting from the personal hygiene and health of employees, the cleanliness of the work area as well as cooking equipment and food processing until it is ready to be eaten by guests.

However, problems are often related to the lack of awareness of the importance of health, the safety of the stages from raw materials to the final product ready for consumption must be guaranteed to minimise risks and ensure product quality, as well as a lack of knowledge and understanding of the ins and outs of HACCP and its implementation. Food hygiene and safety will affect customer satisfaction which will have a positive impact on Semarang Royale Golf Restaurant, and will minimise the incidence of customer complaints. From the background description above, the problems in this research can be formulated as follows:

1. How is the implementation of HACCP in Semarang Royale Golf Restaurant?
2. What are the obstacles and problems of HACCP in Semarang Royale Golf Restaurant?
3. What solutions can be sought in dealing with problems related to HACCP at Semarang Royale Golf Restaurant?

Hazard Analysis and Critical Control Points

Hazard Analysis and Critical Control Points or commonly abbreviated to HACCP, can be interpreted as Hazard Analysis and Critical Control Points. HACCP is a systematic approach to identifying, assessing and controlling food safety hazards throughout the food supply chain. It focuses on prevention rather than detection and correction, helping to ensure that food products are safe for consumption.

The main concept of HACCP is to identify critical points in the production process where food safety hazards may occur. These critical points are then closely monitored and controlled to ensure that such hazards do not occur.(Corlett and Pierson 1992).

The principles of HACCP consist of seven steps: (Cullor 1997)(Charnarongkul et al. 2007)

1. Conduct a hazard analysis: Identify all potential hazards that could occur at any stage of the food supply chain.
2. Determine critical control points (CCPs): Identify points in the process where hazards can be effectively controlled.

3. Establish critical limits for each CCP: Establish acceptable limits for each CCP to ensure food safety.
4. Establish a monitoring system for each CCP: Continuously monitor CCPs to ensure that critical limits are met.
5. Establish corrective actions: Determines the actions to be taken if critical limits are exceeded.
6. Establish a verification system: Verifies that the HACCP system is working properly.
7. Creating documentation: Document all steps in the HACCP process..

Benefits of implementing HACCP in hotels and restaurants

The implementation of Hazard Analysis and Critical Control Points (HACCP) in hotels and restaurants brings many benefits to consumers, businesses, and the government.

Benefits for Consumers:

1. Improves food safety: HACCP helps identify and control hazards associated with food, thereby minimising the risk of food poisoning and food-borne illness. (Sujaya 2011)
2. Increase consumer confidence: Consumers will be more confident and trust the quality and safety of food served in hotels and restaurants that implement HACCP.
3. Increase consumer satisfaction: Consumers who feel safe and confident about the food they consume will feel more satisfied with their dining experience at hotels and restaurants.

Benefits to Business:

1. Improves image and reputation: The implementation of HACCP demonstrates the commitment of hotels and restaurants to food safety, thereby enhancing the image and reputation of the business in the eyes of consumers and other stakeholders.
2. Improves operational efficiency: HACCP helps identify and prevent potential food safety issues, thereby minimising waste and costs associated with product recalls, lawsuits and reputational damage.
3. Opens up new market opportunities: HACCP implementation can be a requirement for entering new markets, both domestic and international.

Benefits to the Government:

1. Improves public health: HACCP implementation helps reduce the risk of food poisoning and food-borne illnesses, thus contributing to better public health.
2. Improves industry competitiveness: The hotel and restaurant industry that implements HACCP will be more competitive in the global market.

3. Facilitates food safety monitoring: HACCP implementation provides a documented and standardised system for food safety supervision, thus easing the government's task of ensuring food safety for the public.

Employee Role in HACCP implementation

Knowledge of Hazard Analysis and Critical Control Points (HACCP) is essential for hotel and restaurant employees for the following reasons: (Medeiros et al. 2011)

1. Improving Food Safety:

HACCP is an internationally recognised system for identifying, assessing and controlling hazards associated with food safety. By implementing HACCP, hotel and restaurant employees can help ensure that the food served to guests is safe for consumption.

2. Preventing Food Poisoning:

Food poisoning can have serious consequences for guests' health, even being fatal in some cases. By understanding the principles of HACCP, employees can help prevent cross-contamination, bacterial growth, and other hazards that can lead to food poisoning.

3. Meet Regulatory Standards:

Many countries have regulations that require hotels and restaurants to implement HACCP. Employees who are knowledgeable about HACCP will be better equipped to help their businesses comply with these regulations.

4. Improving Business Reputation:

Serving safe and healthy food can help improve the reputation of hotels and restaurants. Employees who are knowledgeable about HACCP can contribute to this effort by ensuring that safe food handling practices are properly followed.

5. Improves Employee Motivation and Performance:

When employees understand the importance of their role in ensuring food safety, they may be more motivated to do their jobs well. This can lead to improved performance and overall productivity.

Some ways that can be done to improve hotel and restaurant employees' HACCP knowledge include:

1. HACCP training

HACCP training is the best way to provide employees with the knowledge and skills needed to implement HACCP effectively. This training can be conducted by trained HACCP consultants or by hotel or restaurant staff who have attended HACCP training.

2. HACCP Learning Materials

Various HACCP learning materials are available that can be used to improve employee knowledge. These materials can include books, manuals, videos, and websites. Some reliable sources of HACCP learning materials include:

1. Food and Drug Administration (BPOM): <https://www.pom.go.id/>
2. World Health Organisation (WHO): <https://www.who.int/>
3. Food and Drug Administration (FDA): <https://www.fda.gov/>
4. Coaching and Supervision

It is important to coach and supervise employees in implementing HACCP. This can be done by observing employee work, providing feedback and coaching, organising regular HACCP meetings, conducting regular HACCP audits.

4. HACCP culture

Building a HACCP culture in a hotel or restaurant is very important to ensure that HACCP is applied consistently. This can be done by:

1. Leading by example by management
2. Emphasising the importance of HACCP to all employees.
3. Rewarding employees who demonstrate good HACCP performance .
4. Make HACCP part of the company culture.

Challenges in HACCP Implementation Despite its advantages, the implementation of HACCP in the hospitality industry can pose some challenges, such as:

1. Lack of knowledge and training among staff (Baş, Ersun, and Kıvanç 2006)
2. Resistance to change and organisational cultural barriers
3. Inadequate resources and financial constraints
4. Complexity of the food production process and high variability 4.
5. Lack of management commitment and support.

Strategies for Successful HACCP Implementation To overcome these challenges and ensure effective HACCP implementation, hospitality establishments should consider the following strategies:

1. Provide comprehensive HACCP training and education for all staff (Egan et al. 2007)
2. Develop a strong food safety culture and leadership commitment
3. Allocate adequate resources, including personnel, equipment, and infrastructure

4. Implement effective monitoring, verification and record-keeping systems
5. Regularly review and update the HACCP plan based on changes in operations or regulatory requirements

2. RESEARCH METHOD

The method used is using a qualitative descriptive method. Sugiyono (2009) states that the descriptive method is "a method used to describe or analyse a research result but is not used to make broader conclusions". In this study, researchers conducted direct observations and interviews with restaurant employees.

Information data collection techniques in the form of data needed to analyse the object of this research are:

1. Observation

Mahadewi and Utama (2012) observation is "a way of collecting data by systematically observing and recording the symptoms being investigated". The author directly observes all activities related to Hazard Analysis and Critical Control Point (HACCP) at Semarang Royale Golf Restaurant, from the smallest impact to the greater impact.

2. Interview

Mahadewi and Utama (2012) interview is "a question and answer process in research that takes place orally". The author conducted a question and answer interview directly to the chef and main kitchen staff at Semarang Royale Golf Restaurant.

3. Documentation

Mahadewi and Utama (2012) documentation is "data collection obtained through documents". The author documents things that are considered necessary and can be evidence of research. Such as photos of the chiller, preparation table, food storage warehouse.

4. Literature Study

Nazir (2011) Literature study apart from looking for secondary data sources that will support research, is also needed to find out where the science related to research has developed. The author takes data through books related to the field under study, one of which is a book on Hazard Analysis and Critical Control Point (HACCP).

3. RESULTS AND DISCUSSIONS

3.1. Application of Hazard Analysis and Critical Control Point (HACCP) in raw material storage at Semarang Royale Golf Restaurant.

Storage in general is an activity carried out or applied in all activities related to goods such as food raw materials or other goods. In this case there are several regulations that govern how to store food ingredients properly, storage with appropriate procedures will have an impact on food quality. As in Semarang Royale Golf Restaurant, supervision of storage is very important because food or food ingredients will be very vulnerable or easily damaged if the storage method is not appropriate. The following are the storage procedures in Semarang Royale Golf Restaurant:

1. Receipt of goods from Purchasing All food raw materials needed by the restaurant, will go through the purchasing department first. Purchasing will check the food raw materials that have been ordered from suppliers according to company standards or not, if the food or goods ordered are not in accordance with what was ordered or not in accordance with company standards the purchasing department will return or reject the goods to the supplier. If it meets the standard requirements, purchasing will inform the main kitchen if the food ingredients ordered have arrived as needed. The main kitchen will take the food ingredients that have been ordered and must store the ingredients properly and correctly so that the food ingredients are not easily damaged. Before storing food ingredients such as vegetables and fruit must be cleaned first and separated according to their type. After cleaning and separating according to the type, it is then put into the refrigerator or chiller. Food ingredients such as meat, fish, poultry and seafood are also separated according to their type.

2. Storage temperature. Each food raw material has different storage specifications, depending on the type, quantity, size and place of storage. Some food raw materials can be grouped into:

- a. Raw food ingredients such as meat, fish poultry or seafood. These food ingredients are included in cold food storage, usually stored at temperatures below 40 F. Food ingredients stored at temperatures below 40 F have a storage period of 7 days from storage.

- b. Vegetable and fruit raw materials. In the storage of vegetables and fruits must be separated to prevent the process of decay. Vegetable and fruit raw materials are also separated according to their type. The average storage of this food ingredient is 1 week.

- c. Egg and milk type foodstuffs. Food storage for one week should be below -5 C with a maximum temperature tolerance of 8 C.

- d. Dry foodstuffs such as flour, grains are stored in a dry store at room temperature.

3. Storage of dry foodstuffs

- a. Dry store must be properly dry
- b. Storage shelves must be easily accessible
- c. Placement and retrieval of goods is arranged with the FIFO system (First In First Out)
- d. Make a check list of stock items to make it easier to check the inventory of goods

3.2. Application of Hazard Analysis And Critical Control Point (HACCP) in Serving at Semarang Royale Golf Restaurant.

Food serving is the final stage of all processes in the kitchen, this is where the food will be put on a serving device and served to guests. In serving food, important things need to be considered, such as the safety of the serving place, cleanliness and feasibility of the following aspects that are considered in serving at Semarang Royale Golf Restaurant:

1. Cleanliness of Serving Tools. The most important thing in serving is the cleanliness of serving utensils, this is because food will interact directly with serving utensils. To maintain the cleanliness of serving utensils, it is necessary to pay attention to the storage of serving utensils.
2. Staff Cleanliness and Appearance. The thing that does not escape in the presentation is the cleanliness and appearance of the staff on duty. It is ensured that a staff's personal hygiene (nails, hair, neatness of uniforms, to body odour) must be considered.
3. Storage of serving utensils Serving utensils must be stored in a dry and not humid place, this is to prevent the emergence of mould and other parasites that can cause contamination of the food to be served.

3.3. Problems at Semarang Royale Golf Restaurant

1. If the restaurant is having a lot of events, the number of items needed will be very large, here the availability of storage space is usually a problem.
2. Negligence that often occurs in storage or FIFO that is not carried out in accordance with procedures, this is also a problem, for example when storing food ingredients. Foodstuffs that arrive first or old foodstuffs should not be at the bottom should be on top or in front of new foodstuffs. This prevents food ingredients from expiring or spoiling due to prolonged storage.
3. Dry stores do not have sufficient lighting and ventilation.
4. Lack of food hazard control in accordance with HACCP, resulting in frequent contamination of other foodstuffs. For example, the storage of raw materials such as meat, poultry, fish or seafood is only put into the plastic alakadarnya, not transferred into a clean box or food plastik. And the date of storage is not written. It is better to put the food ingredients into a clean storage box. After being put into a clean box, write the storage date

on the outside of the box so that all employees know which food ingredients must be used first to avoid damage to food ingredients due to too long storage.

5. The high turnover rate of Semarang Royale Golf Restaurant staff, waiters lack of training to understand the personal appearance of a good waiter.

3.4. Efforts to Overcome Problems at Semarang Royale Golf Restaurant

To overcome the existing problems, Semarang Royale Golf Restaurant makes efforts to overcome these problems, the forms of efforts made are:

1. If there are many items coming, then the way to overcome it is by removing the old items from storage and trying to use the old items for all forms of cooking activities at Semarang Royale Golf Restaurant.
2. To overcome the problem of negligence in carrying out procedures, what is done is to emphasise the dangers of negligence in storage that is not in accordance with procedures.
3. To overcome this, HACCP training will be given to every employee or staff who feels less understanding about the importance of hazard control in accordance with HACCP principles.
4. The problem that actually often occurs in most hotels and restaurants in general is the decline in food quality at Breakfast, Lunch and Dinner Buffet, this can be overcome by always checking the heater on the serving dish and replacing food that has begun to show signs of deterioration with new food.

4. CONCLUSION

Based on the research results described in the previous chapter, the following conclusions can be drawn:

1. Semarang Royale Golf Restaurant has storage procedures that are in accordance with the Hazard Analysis and Critical Control Point (HACCP) system, which include: a. The process of receiving food ingredients in the kitchen that will be stored. b. Storage temperature settings. c. Storage methods that are in accordance with the Hazard Analysis and Critical Control Point (HACCP) system. d. Placement and retrieval of goods according to the FIFO (First In First Out) system. e. Use of adequate storage areas such as meat and fish freezer, vegetable freezer, vegetable freezer, vegetable freezer. Placement and retrieval of goods according to the FIFO (First In First Out) system. e. Use of adequate storage areas such as meat and fish freezer, vegetable chiller, dry store.

2. Serving food that pays attention to all aspects in accordance with Hazard Analysis and Critical Control Point (HACCP), such as paying attention to the cleanliness of serving utensils, storage of serving utensils and cleanliness of waiter tidiness.
3. In carrying out the activities of Semarang Royale Golf Restaurant, there are many problems, such as: a. Availability of food storage. b. Negligence towards the FIFO storage system. c. Lack of food hazard control according to HACCP. d. Lack of employee understanding of the importance of HACCP. Lack of employee understanding of the importance of HACCP.
4. To overcome the existing problems, Semarang Royale Golf Restaurant makes efforts to overcome these problems, the efforts made include: a. The use of old goods first FIFO b. Emphasising the dangers of negligence in storage that is not in accordance with procedures. c. Providing training on Hazard Analysis and Critical Control Point (HACCP) to every restaurant employee. d. Periodic checks of every food that is stored in the restaurant. Periodic checks on any food that shows a decrease in food quality

REFERENCES

- Baş, Murat, Azmi Şafak Ersun, and Gökhan Kıvanç. 2006. "Implementation of HACCP and Prerequisite Programs in Food Businesses in Turkey." *Food Control* 17(2):118–26. doi: <https://doi.org/10.1016/j.foodcont.2004.09.010>.
- Charnarongkul, Somachai, Chuchat Nimsiri, Niracha Wongchinda, Ronachai Juangphanich, Chavaratana Thubthimthai, and Chuensuke Methakulwat. 2007. "Hazard Analysis and Critical Control Point (Haccp) System and Guidelines for Its Application." 6.
- Corlett, Donald A., and Merle D. Pierson. 1992. "HACCP: Definitions and Principles BT - HACCP: Principles and Applications." Pp. 6–7 in, edited by M. D. Pierson and D. A. Corlett. Boston, MA: Springer US.
- Cullor, James S. 1997. "HACCP (Hazard Analysis Critical Control Points): Is It Coming to the Dairy?" *Journal of Dairy Science* 80(12):3449–52. doi: 10.3168/jds.S0022-0302(97)76322-7.
- Egan, M. B., M. M. Raats, S. M. Grubb, A. Eves, M. L. Lumbers, M. S. Dean, and M. R. Adams. 2007. "A Review of Food Safety and Food Hygiene Training Studies in the Commercial Sector." *Food Control* 18(10):1180–90. doi: <https://doi.org/10.1016/j.foodcont.2006.08.001>.
- Medeiros, Caroline Opolski, Suzi Barletto Cavalli, Elisabete Salay, and Rossana Pacheco C. Proença. 2011. "Assessment of the Methodological Strategies Adopted by Food Safety Training Programmes for Food Service Workers: A Systematic Review." *Food Control* 22(8):1136–44. doi: <https://doi.org/10.1016/j.foodcont.2011.02.008>.

Nazir, Moh.; Risman Sikmumbang. (2009.). *Metode penelitian / Moh. Nazir ; editor, Risman Sikumbang*. Bogor :: Ghalia Indonesia,

Prasetyanto, Hermawan, and Yosephine Bayu Ratri. 2021. “Analisis Penerapan Hazard Analysis Critical Control Point (Haccp) Pada Pengolahan Makanan Di Mainkitchen Hyatt Regency Yogyakarta.” *Media Wisata* 16(2). doi: 10.36276/mws.v16i2.281.

Sujaya, I. Nyoman. 2011. “APLIKASI SISTEM HACCP PADA RUMAH MAKAN/RESTORAN DI KECAMATAN DENPASAR SELATAN TAHUN 2011 I Nyoman Sujaya 1 , I Wayan Suarta Asmara 2 , I Nyoman Purna 3.” 79–83.

Sugiono. (2013). *Petunjuk Praktis Penerapan Sistem Jaminan Keamanan Pangan Berbasis HACCP di Rumah Makan dan Restoran*. Jakarta: LIPI Press

https://bsn.go.id/main/berita/berita_det/6737/Pentingnya-Regulasi--GMP-dan-HACCP-Dalam-Hotel-Dan-Restoran-Untuk-Meningkatkan-Daya-Saing