

## Analysis of Restaurant Sanitation Hygiene in The Working Area Of Sempaja Community Health Center, Samarinda City

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### ABSTRACT

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Hygiene and sanitation greatly affect food safety so that food is not contaminated, while sanitation of sales places is carried out to control environmental conditions from the handling of raw materials to the distribution process. This study aims to analyse how trash cans, handwashing facilities, and the personal hygiene of food handlers work. This study used a qualitative method with a phenomenological approach and was carried out in a restaurant in the working area of the Sempaja Health Centre, Samarinda City. The method of data analysis involves collecting data, reducing data, presenting data, and verifying it. The results showed that of the four restaurants with trash cans, there were two that met the requirements, namely PM and WBS restaurants, and there were two restaurants that did not meet the requirements, namely ABS and C. requirements. Personal hygiene has not fully met the requirements for restaurant sanitation hygiene, and for the implementation of complete personal protective equipment, the four restaurants have not met the requirements. It is suggested that trash bins need to be provided with organic and inorganic containers that are closed and made of waterproof material lined with plastic bags for ABS and restaurant C restaurants, while for handwashing places it is necessary to provide liquid soap, running water, wipes, and tissues for the four houses. Food and sewerage must be a closed channel for restaurants ABS, C, and WBS. Personal hygiene requires the four restaurants to wear complete personal protective equipment such as aprons, head coverings, and masks, as well as short nails, and wear neat work clothes and clean.

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## 1. INTRODUCTION

The problem of food safety is a global issue that has a significant impact on public health. The World Health Organization (WHO) estimates that around 70% of the approximately 1.5 billion food-borne illnesses are the result of illnesses caused by consuming unsafe food. Food poisoning is the main cause of diarrheal disease and has a fatal impact, especially in children under 5 years of age [1]. Food poisoning cases are also common in various countries, including the United States and Japan. In Indonesia, food safety issues are also a serious concern, with many cases of food poisoning resulting in illness and death [2].

Factors contributing to this problem include the low implementation of hygiene and sanitation practices in food processing, especially in developing countries. Good food processing methods (Good Manufacturing Practices/GMP) have been widely implemented in developed countries, but in developing countries, such as Indonesia, they have not been fully implemented. This results in the risk of pathogenic and toxigenic microbial contamination in food, which harms public health [3].

Laws and regulations related to health and food safety have an important role in maintaining hygiene and sanitation in the food industry. However, restaurant entrepreneurs in Indonesia often pay less attention to hygiene and sanitation requirements, focusing more on commercial aspects. Therefore, enforcing regulations and policies related to sanitation in public places, including restaurants, is important to prevent health problems due to the consumption of unsafe food [4].

This research aims to analyze three important aspects of restaurant hygiene and sanitation: trash cans, hand washing facilities, and personal hygiene of food handlers [5]. From the preliminary survey,

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it was found that several restaurants still do not meet sanitation standards, especially regarding inappropriate trash cans, lack of hand washing facilities, and the habits and knowledge of food handlers that still need to be improved.

## 2. METHOD

The research was conducted in four restaurants in the working area of the Sempaja Community Health Center, Samarinda City, namely Pecel Mediun, Ayam Bakar Sakera, Cobek, and Warung Simple in the South Sempaja and West Sempaja areas. The research period takes place from 10 to 14 November 2022.

Research subjects are sources of information that are relevant to the problem being studied. The informant selection technique used the purposive sampling method, where there were three groups of informants: main informants (4 restaurant employees), key informants (1 community health centre environmental health officer), and supporting informants (4 regular restaurant customers).

Data was obtained through observation, interviews and documentation. The research instrument involved an interview guide, observation sheet, recording device (cellphone), and documentation. Data collection techniques include observation to gather information about sanitation facilities, trash cans, hand washing places, personal hygiene of handlers, and knowledge. Interviews were conducted through direct communication with various informants, both restaurant employees, consumers, and community health centre environmental health officers. Documentation, in the form of photos or drawings, is also used to strengthen information from observations and interviews [6].

Data analysis involves steps such as data collection, data reduction to summaries and focus on important things, presenting data through brief descriptions, charts and diagrams, and drawing conclusions and verification. The initial conclusions drawn are still preliminary and will be re-examined at the next stage of data collection. A credible conclusion will be made if it is supported by valid and consistent evidence. Qualitative data analysis is directed at understanding and informing others of the findings.

## 3. RESULT AND DISCUSSION

### Hygiene Sanitation of Restaurants in the Working Area of the Sempaja Community Health Center, Samarinda City

#### 1) Trash Facility

Researchers conducted interviews and took documentation of research results from restaurant employees, restaurant consumers, and community health centre environmental health officers, as stated by the following informants:

Quote 1:

*"There's a big plastic bin that has big rubbish in it, right? There's something like that next to it. When it gets bigger, plastic can be put in it. Don't put plastic in it, what's the matter? What's the smell of our food? We're a restaurant, so we have to keep the smell clean. What's the name of the smell? "It's not delicious, so we have to do something about cleaning the trash can so it's comfortable for people to eat and there's no smell." (W.A.N.33)*

Based on the description above, it can be concluded that trash cans must be lined with plastic so that they do not cause odors

Quote 2:

*"Plastic is available, so our trash can use plastic" (W.A.J.25)*

Based on the description above, it can be concluded that trash cans must be lined with plastic

Quote 3:

*"Hey, we always separate dry waste and different types of wet waste." (W.A.D.22)*

Based on the description above, it can be concluded that dry waste and wet waste are always separated

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Quote 4:

*“eee, maybe it's like that, it's covered in plastic, eee, at least it's thrown away every night so it doesn't pile up like that, isn't rubbish, especially food waste like this, right? If it's been two or three days, the smell is no longer pleasant, there's a lot of it, sometimes what's the name of that, the flies attract second-hand flies? waste”*( W.A.A.21)

Based on the description above, it can be concluded that the trash can is lined with plastic, and must be thrown away every night so that it does not accumulate and does not attract flies

Quote 5 :

*“Yes, it's coated in plastic, so even though this is the case at least, you shouldn't use plastic, because there are people who use it for whatever it is, it's just simpler, it's more clean for the restaurant itself, right? If you throw it away, sometimes it's especially wet rubbish. "It's for its own place, that's what it's for, and when throwing it away we definitely have to use plastic”*( W.B.V.11)

Based on the description above, it can be concluded that the trash can must be lined with plastic, and for wet waste there must be its own place and when throwing away the rubbish it must be lined with plastic.

Quote 6:

*““In my opinion, it should be, sis, because it's important for us to ensure that the waste doesn't get mixed up with wet waste and dry waste”* (W.B.Y.10)

Based on the description above, it can be concluded that dry waste and wet waste should not be mixed

Quote 7:

*““We have to because it's not only outside that can provide wet and dry waste bins, but in restaurants we have to provide them so that we can sort dry waste from wet waste and we can sort it out.”*(W.B.E.8)

Based on the description above, it can be concluded that dry and wet waste bins must be available and restaurants must provide rubbish bins and must sort dry waste from wet waste.

Quote 8:

*“mmm, in my opinion, it is necessary, sis, so that we can get into this habit, it is good because we can also know where the organic and inorganic waste can be and that the environment where we eat is clean. Sometimes many sellers put organic and inorganic waste together, so the restaurant must provide it. organic and inorganic waste bins”* (W.B.A.4)

Based on the description above, it can be concluded that restaurants must provide organic and inorganic waste bins and the environment in the restaurant must be clean.

Quote 9:

*“It's closed and the opening is stepped on because it's not allowed to touch hands and there's plastic. That's the requirement for the trash can to be closed and the capacity is full and it's thrown out frequently, meaning when it's full it's tied straight away and not deposited, meaning it's not spent the night in a restaurant, so it's thrown away every day.”* ( W.C.K.3)

Based on the description above, it can be concluded that the trash can must be covered with plastic and thrown away when the trash is full.

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**Figure 1** Trash facilities in each restaurant

## 2) Hand washing facilities

Researchers conducted interviews and took documentation of research results from restaurant employees, restaurant consumers, and community health center environmental health officers, as stated by the following informant:

Quote 1 :

*“Yes, there's running water, there's soap, there's tissue, what's the name of that sanitizer?”( W.A.N.39)*

Based on the description above, it can be concluded that the place for washing hands must be provided with running water as well as soap, tissue and hand sanitizer

Quote 2:

*“Yes, there must be soap available” (W.A.J.20)*

Based on the description above, it can be concluded that hand washing places must provide soap

Quote 3 :

*“Yes, the proper ones are the ones that should have tissue, but if it's tissue, it's going to be rubbish, sometimes the buyers just throw it away carelessly, yes, it's the same, eh, we also give them what's called a hand wipe, so after that we wash it again and then we're done in the afternoon. “Hey, when the shop closes, we wash it” ( W.A.D.27)*

Based on the description above, it can be concluded that the place for washing hands must have tissue, but if you use tissue, the waste is thrown away carelessly by consumers

Quote 4 :

*“That's a good place to wash. For example, there's soap. Usually there's soap and make sure the water is running, so the water flows through and our hands are clean too.” ( W.A.A.20)*

Based on the description above, it can be concluded that the place for washing hands must be available with soap and running water

Quote 5 :

*"Hey, wash your hands once, wash your hands in one stream, so the water goes straight to the sink, okay?" (W.B.V.14)*

Based on the description above, it can be concluded that hand washing facilities must be single use and disposal must be a single stream

Quote 6:

*"In my opinion, the hand washing place has soap, sis, and there are tissues provided for us to wipe, that's all, sis" (W.B.Y.19)*

Based on the description above, it can be concluded that the place for washing hands must be available with soap and tissue

Quote 7:

*"Um, we must and should provide a place for washing hands with running water, not a hut like that." (W.B.E.11)*

Based on the description above, it can be concluded that the place for washing hands must have running water, not a hut

Quote 8:

*"Yes, you have to, sis, because a lot of people who eat here come from outside, so every time you come you have to wash your hands because before eating you have to wash your hands, even if you use a spoon and the place where you wash your hands has to have running water." (W.B.A.6)*

Based on the description above, it can be concluded that restaurants must provide a place for washing hands and the place for washing hands must have running water

Quote 9:

*"There's running water available and the sewage system also flows into the household drain. There's also hand washing soap and disposable cloths, like tissues, so if it's a hand towel, we usually advise you to replace it." (W.C.K.4 )*

Based on the description above, it can be concluded that the place for washing hands must have running water and the disposal must be in the household sewer and provide tissue, not using hanging cloths.



**Figure 2** Hand washing facilities in each restaurant

### 3) Personal hygiene of handlers

#### a) Food handler habits

Researchers conducted interviews and took documentation of research results from restaurant employees, restaurant owners, and community health center officers to ask about the habits of food handlers, as stated by the following informant:

Quote 1:

*"Wash taa, if we don't wear gloves, we wash our hands with soap"* (W.A.N.10)

Based on the description above, it can be concluded that the habit of handlers before handling food is to wear gloves and wash their hands first

Quote 2:

*"Yes, wash your hands first"* (W.A.J.9)

Based on the description above, it can be concluded that the habit of handlers before processing food is to wash their hands first

Quote 3 :

*"Yes, we keep it clean. Yes, we take care of it. So, what do we keep clean?"* (W.A.D.7)

Based on the description above, it can be concluded that the habit of handlers before processing food is always to wash their hands

Quote 4 :

*"Ooh yes, that's right, I come home from the market and immediately take a shower, shower three times a day, especially when clothes often have to be washed, right?"*(W.A.A.12)

Based on the description above, it can be concluded that the habit of handlers before returning from the market is to always shower three times a day and their clothes must be washed frequently so that when preparing food, they remain clean.

Quote 5 :

*“For personal hygiene, first of all, the PPE that is worn is appropriate to the respective place, meaning that if he is in the kitchen, what is he wearing, he doesn't always have to wear gloves, gloves for example, if he is doing something else, the one wearing PPE is an apron, which is clearly PPE. Don't smoke when handling food, his nails are short, clean, that doesn't mean he doesn't have a cough or a cold, he doesn't have a fever or is sick, his skin looks clean, there are no traces of scabs or itching like that.”(W.C.K.6)*

Based on the description above, it can be concluded that the habits that a handler must have are always using PPE and maintaining personal hygiene

**b) Handlers' knowledge about the use of PPE (personal protective equipment)**

Researchers conducted interviews and took documentation of research results from restaurant employees, and casual officers to ask about the knowledge of the handlers, as expressed by the following informant:

Quote 1 :

*“Because so that our clothes don't get dirty and every time we do cooking, we have to be neat, right? You don't have to put your hands in a blanket, what do you mean by keeping them clean? Just keep them neat, okay?”(W.A.N.15)*

Based on the description above, it can be concluded that the use of PPE is to prevent clothes from getting dirty and must remain neat and maintain cleanliness. Quote 2:

*“It's like using an apron like that, it's important, so the clothes don't get dirty, because when we cook, the spices sometimes splatter, right? So that's the point so they don't get dirty.”(W.A.J.14)*

Based on the description above, it can be concluded that the use of PPE is very important so that clothes do not get dirty when cooking

Quote 3 :

*“Let's keep her hair neat so that it doesn't fall out”((W.A.D.10)*

Based on the description above, it can be concluded that the use of PPE is to prevent hair from falling into food and to keep it neat

Quote 4 :

*“Actually, PPE is very important, if we wear a mask, it protects ourselves and other people, aprons are sometimes related to oil, sometimes aprons protect clothes so they don't get dirty, what else, mmm, that's it.”(W.A.A.14)*

Based on the description above, it can be concluded that the use of PPE is very important, such as masks to protect us and others, and the use of aprons to prevent clothes from getting dirty with oil.

Quote 5:

*“Eee, in the sanitation form there is actually no question about knowledge. It's just a requirement that the employee has already done it, like a kind of training, and his knowledge is assessed by the way he does it...observation means not asking what this is or what, no, but looking at it. “Oh, if he has sufficient knowledge, we can conclude from, for example, whether he wears appropriate PPE and how he stores food, for example raw food, cooked food.”( W.C.K.7)*

Based on the description above, it can be concluded that knowledge is seen through observation, and the use of PPE must be appropriate.

## Discussion

Based on the research results obtained by researchers regarding "Hygiene Sanitation Analysis of Restaurants in the Working Area of the Sempaja Health Center, Samarinda City" the results obtained were:

### Trash Facility

In this research, trash facilities in restaurants in the working areas of the South Sempaja and West Sempaja Community Health Centers were the focus. The results of observations and interviews show variations in compliance with sanitation hygiene standards. One positive example is Pecel Mediun on Jalan Wahid Hasyim 1, which has complied well with standard requirements. On the other hand, the Ayam Bakar Sakera restaurant on Jalan Wahid Hasyim 1 and the Cobek restaurant on Jalan Perjuangan still do not fully meet the criteria for sanitary cleanliness. This can be seen from the mismatch in organic and inorganic waste bins, the lack of covers on the rubbish bins, and the absence of rubbish bins in every room that produces waste. Requirements for trash cans as stipulated by KEPMENKES RI number 1098 of 2003 include waterproof materials, covers, special plastic bags, and regulation of the volume of trash cans [7].

### Handwashing Facilities

Hand washing facilities in restaurants are also an important concern. Observations and interviews show that several restaurants do not meet sanitation hygiene standards regarding hand washing facilities [8]. For example, the Pecel Mediun restaurant on Jalan Wahid Hasyim 1 does not provide tissue for drying hands, and the Cobek restaurant on Jalan Perjuangan does not have a cover for the waste disposal channel. The standards stipulated in Minister of Health Regulation No. 1098 of 2003 include the number of hand washing stations appropriate to seating capacity, the presence of liquid soap, tissue containing alcohol, and closed waste disposal [9].

### Handler's Personal Hygiene

This study also evaluated the personal hygiene practices of food handlers. The habit of washing hands before processing food generally complies with the standards set out in Minister of Health Regulation No. 1098 of 2003. However, it was found that the use of personal protective equipment (PPE) such as aprons, head coverings and work clothes is still not optimal in several restaurants [10]. The quality of knowledge and application of personal hygiene principles also needs to be improved according to standards. There is potential for improvement through training and mentoring to increase the competency of food handlers [11].

To improve the quality of sanitary hygiene, it is recommended to take steps such as providing regular training to food handlers, ensuring the availability of facilities that meet standards, and strengthening the enforcement of sanitary hygiene rules in restaurants [12]. This will have a positive impact on the safety of the food served and will ultimately provide better protection for the health of consumers [13].

## 4. CONCLUSION

From the results of the analysis and discussion related to the research "Analysis of Hygiene Sanitation of Restaurants in the Working Area of the Sempaja Health Center, Samarinda City," the following conclusions can be drawn: Trash Facility, In the working area of the Sempaja Community Health Center, Samarinda City, there are still deficiencies in fulfilling hygiene and sanitation requirements regarding trash facilities in restaurants. Even though Pecel Mediun has complied with good sanitation hygiene standards, the Ayam Bakar Sakera restaurant has not met the requirements because it does not provide adequate waste bins, including the lack of separation between dry and wet waste and the unavailability of rubbish bins in rooms that produce waste. This also applies to Cobek restaurants that do not meet hygiene sanitation criteria, such as not having covers on trash cans, not sorting waste before disposal, and lacking protection from nuisance animals. Handwashing Facilities, In the same area, hand washing facilities in restaurants also do not fully meet sanitation hygiene standards. Pecel Mediun complies with the criteria for hand washing facilities, but there are still shortcomings such as not providing cloths or tissues to dry hands. The Ayam Bakar Sakera restaurant has several inconsistencies, including the unavailability of clothes or tissues in the hand washing area and uncovered waste disposal. Meanwhile, the Warung Simple restaurant has fulfilled the requirements even if it only requires cloth wipes that are used repeatedly. In Cobek restaurants, there

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are still discrepancies regarding waste disposal and the unavailability of hand-drying wipes. Handler's Personal Hygiene, Regarding the personal hygiene of food handlers in restaurants, there is compliance with the habit of washing hands before activities, which is by established standards. However, there are deficiencies in the use of personal protective equipment (PPE), such as aprons, masks and head coverings, which have not been fully adopted by all restaurant by regulations. Although the knowledge of handlers is quite good, there is potential for improvement through training and mentoring to ensure better implementation of sanitation hygiene principles. Overall, there needs to be steps to improve and ensure compliance with hygiene and sanitation requirements in restaurants, including increasing the use of PPE and improving facilities such as trash bins and hand washing facilities. This is important to maintain the health and cleanliness of the food served to consumers

#### REFERENCES

- [1] H. Annas, M. Fauziah, Ernyasih, and N. Lusida, "Overview of the Implementation of Food Processing Hygiene and Sanitation at the Padang 'X' Pamulang Restaurant, South Tangerang in 2020," vol. 2, pp. 49–58, 2021.
- [2] K. Anwar, D. Navianti, and S. Rusilah, "Hygiene Sanitation Behavior of Food Handlers in Padang Restaurants in the Basuki Rahmat Health Center Working Area, Palembang City," vol. 9, pp. 512–520, 2020, doi: <https://doi.org/10.33024/jdk.v9i4.3302>.
- [3] T. P. H. Atmoko, "Improving Sanitation Hygiene as an Effort to Maintain Food Quality and Customer Satisfaction at the Dhamar Palembang Restaurant," *J. Khasanah Ilmu*, vol. 8, no. 1, pp. 1–9, 2017, [Online]. Available: <https://journal.unsika.ac.id/index.php/barometer/article/view/905>
- [4] G. Ayu and D. Nomia, "Effectiveness of Hygiene Sanitation Requirements for Restaurant and Restaurant Businesses," pp. 420–434, 2016.
- [5] J. Brier and Lia Dwi Jayanti, "Hand Washing Habits, Condition of Hand Washing Facilities and the Presence of E. Coli on the Hands of Food Handlers in Restaurants in the Oebobo Kupang Health Center Working Area," pp. 1–9, 2020, doi: <http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203>.
- [6] S. Priadana and D. Sunarsi, *QUANTITATIVE RESEARCH METHODS*. 2021. [Online]. Available: <https://books.google.co.id/books?hl=id&lr=&id=9dZWEAAAQBAJ&oi=fnd&pg=PR2&dq=Jenis+penelitian+yang+digunakan+adalah+kuantitatif+dengan+pendekatan+cross+sectional.+Penggunaan+desain+penelitian+cross+sectional+dalam+penelitian+ini+karena+pengukuran+variabel+di>
- [7] I. Permatasari, S. Handajani, S. Sulandjari, and M. Faidah, "Food Sanitation Hygiene Behavior Factors among Street Vendor Food Handlers," pp. 223–233, 2021.
- [8] R. Alfian and A. Phelia, "Evaluation of the Effectiveness of the Waste Transport and Management System at the Sarimukti Landfill, Bandung City," *JICE (Journal Infrastructural Civ. Eng.*, vol. 2, no. 01, p. 16, 2021, doi: [10.33365/jice.v2i01.1084](https://doi.org/10.33365/jice.v2i01.1084).
- [9] D. Simbolon, "Hygiene Sanitation of Restaurants and Restaurants Based on Quality Levels (Grades A, B, and C) in Pematangsiantar City in 2019. Hygiene Sanitation of Restaurants and Restaurants Based on Quality Levels (Grades A, B, and C) in Pematangsiantar City 2019," 2019.
- [10] T. Lestari, "Food Safety as an Effort to Protect People's Rights as Consumers," pp. 57–72, doi: <https://doi.org/10.46807/aspiration.v1i1i1.1523>.
- [11] D. Suryani and F. Dwi Astuti, "Hygiene and Sanitation among Angkringan Traders in the Malioboro Area of Yogyakarta," p. 70, 2019, doi: <https://doi.org/10.24853/jkk.15.1.70-81>.
- [12] S. R. Pulungan and M. Irnawati, "Hygiene and Sanitation at Roro Port Terminal, Dumai City 2," pp. 306–314.
- [13] N. Nildawati, H. Ibrahim, F. Mallapiang, M. Afifah, and E. Bujawati, "Application of Personal Hygiene to Food Handlers in Islamic Boarding Schools in Biring Kanaya District, Makassar City," pp. 68–75, 2020, doi: <https://doi.org/10.47718/jkl.v10i2.1164>.