



Overview of Food Sanitation Hygiene in the Canteen Muhammadiyah Palembang University During the Covid-19 Pandemic

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Abstract, Background: Healthy food is food that is free from contamination. The number of consumers makes food handlers not pay too much attention to the hygiene of the food and drinks they serve. The rise of food and drinks that are not suitable for consumption recently has led people to be more vigilant in choosing. The purpose of this study was to find out how the application of food sanitation hygiene in the Muhammadiyah University canteen during the COVID-19 pandemic in 2021. **Method:** This type of research is an observational descriptive study that will provide an overview to find out how to apply the principles of food sanitation hygiene in the Muhammadiyah University of Palembang canteen during the time of the covid-19 pandemic. **Result:** The results of observations that have been carried out are the principles of selecting 80% of food ingredients, 60% of storage of food raw materials, 70% of food processing, 70% of cooked food storage, and food transportation did not meet the requirements, 85% food presentation, Covid prevention facilities did not meet the requirements. **Conclusion:** The conclusion of the principle of selecting raw materials for food is that 16 canteens (80%) have met the requirements, storage of food ingredients has not met the requirements of 20 canteens, only 12 traders (60%) have met the aspect of requirements aspects, the principle of food processing has not met the requirements of 20 canteens 14 traders (70 %) that meet the requirements aspect, the principle of food storage does not meet the requirements, only 14 traders (70 %) meet the requirements aspect, the principle of food transportation 20 canteens do not meet the requirements.

Keywords: food, sanitation hygiene, principles of food sanitation hygiene

Background

The community's need for food and beverages provided by sellers out there is now increasing, so these food and beverage providers must guarantee the health and quality of the food they sell. Healthy food is food that is free from contamination. Hygiene sanitation is an effort to control the factors that cause contamination of food, both from food ingredients, handlers, or people who manage food, places, or the environment and equipment used to avoid contamination and are safe for consumption.[1]Canteens, especially in the area of hygiene and sanitation on campus, are not paid

much attention to by sellers or managers, starting from the food being sold, the food handlers, the environment in which the food is processed, and the food storage itself. A large number of consumers makes food handlers not pay too much attention to the hygiene of the food and drinks they serve. The rise of food and drink that is not suitable for consumption lately has led people to be more vigilant in choosing. During this pandemic, food hygiene is very important, considering that we are not completely free from Covid-19. In addition to maintaining the hygiene and sanitation of the food they sell, other facilities such as the availability of hand washing stations also need attention.[2]Contamination that occurs

in food causes the food to become a medium for transmitting a disease. According to some experts, low food sanitation hygiene efforts are caused by several things, namely the lack of facilities, the availability of funds or costs, and the behavior of food handlers.[3]Food that is attractive, delicious, and high in nutrition will not mean anything if it is not safe for consumption. For people to avoid food and drink that can endanger health, the government has set standards and requirements so that food and drink are proper and safe for consumption by the community.[4]The results of a preliminary survey at the Muhammdiyah University Palembang canteen show that the food handlers or sellers in the canteen pay little attention to the cleanliness and health of the food they sell, especially during a pandemic, the use of masks is mandatory, but food sellers often don't use masks, neither do the canteens. There is a place to wash hands or hand sanitizer that can be used by students. Because the large number of students who want to eat at this place often makes them jostle and no longer comply with health protocols to keep their distance. In 2018 BPOM RI reported food poisoning due to contamination of 33.93% of fast food and 30.35% in educational institutions.[5]

Method

This type of research is descriptive research which will provide an overview to find out how the principles of food sanitation hygiene are applied in the Muhammadiyah Palembang University canteen during the Covid-19 pandemic. The 6 principles to be studied are the selection of food raw materials, storage of raw materials, food processing, storage of finished food, food transportation, and food serving based on RI Minister of Health Regulation No.1096/MENKES/PER/2011.[6] The research design is included in the descriptive observational research with a cross-sectional approach to describe existing phenomena, both natural and man-made. This study does not provide treatment, manipulation, or alteration of the data studied. The population is 20 and the number of samples is the total population. The number of samples taken is the total of the population, namely as many as 20 samples. Data collection techniques through observation, interviews, and inspection of data collection.

Results and Discussion

Table. 1 Frequency Distribution of Examination Results for the Application of the Principles of Canteen Hygiene at the University of Muhammadiyah Palembang in 2022

No	Component	Frequency	Percentage
1	Selection of food raw materials		
	a. Qualify	16	80%
	b. Not eligible	4	20%
2	Storage of food raw materials		
	a. Qualify	12	60%
	b. Not eligible	8	40%
3	Food processing		
	a. Qualify	14	70%
	b. Not eligible	6	30%
4	Cooked food storage		
	a. Qualify	14	70%
	b. Not eligible	6	30%
5	Food transportation		
	a. Qualify	0	0
	b. Not eligible	20	100%
6	Food serving		
	a. Qualify	17	85%
	b. Not eligible	3	15%

1. Food selection

Based on research the selection of food raw materials in the canteen is good, out of 20 traders in that location 80% of traders have met the requirements for selecting food raw

materials and 20% of traders in that location have not met the requirements because there is still food that is in poor condition. their physical condition is not good and there are still those who use food packaging made from materials

that can cause food contamination, for example, newsprint. From aspects that are not met, such as the selection of food ingredients that are not good, should be corrected by choosing food ingredients that are fresh and in packaging that meets standards. Because if you choose food ingredients that are not fresh or not good enough, they can become a source of food contamination which can cause the food to be contaminated. To ensure the quality of the food produced, all ingredients processed into food must be of good quality, fresh, and not rotten. If using processed materials in packaging to be processed into food, the processed materials must be registered, not expired, not defective, and not damaged.[7]

2. Foodstuff Storage

Storage of food ingredients in the Palembang Muhammadiyah University canteen does not meet the requirements, of the 20 traders in that location, there are 60% of traders meet the requirements, and 40% of traders do not meet the requirements. The storage of food ingredients carried out by each trader is the same, namely storage in a glass window where different ingredients and food are arranged per shelf, on shelf 1 the dry food ingredients are arranged such as noodles, eggs, and fruit, the next shelf is filled with cooked food which is placed in containers of various types according to the type, some aspects have not been fulfilled as a requirement for the application of principles in food storage, namely the raw material storage area is not closed and the environmental conditions of the surrounding area are poorly maintained, there were many stands could be said to be clean and met the requirements in terms of placing raw food and processed food separately, arranged on shelves and placed according to type, as well as storage areas for food raw materials which were quite clean. The things that need to be considered in terms of good storage and meeting the requirements in the warehouse are the density of insects and rats. The minimum height of the goods rack is 30 m from the floor surface, this is done to reduce humidity which can result in the growth of fungi that can damage goods, and also prevent insects and rats from hiding under the goods shelves. For storage of wet food, ingredients must be in the refrigerator and by the specified requirements. arranged in shelves and placed according to type as well as storage areas for food raw materials that are fairly clean. The things that need to be considered in terms of good storage and meeting the requirements in the warehouse are the density of insects and rats. The minimum height of the goods rack is 30 m from the floor surface, this is done to reduce

humidity which can result in the growth of fungi which can damage goods, and also prevent insects and rats from hiding under the goods shelves. For storage of wet food, ingredients must be in the refrigerator and by the specified requirements. arranged in shelves and placed according to type as well as storage areas for food raw materials that are fairly clean. The things that need to be considered in terms of good storage and meeting the requirements in the warehouse are the density of insects and rats. The minimum height of the goods rack is 30 m from the floor surface, this is done to reduce humidity which can result in the growth of fungi which can damage goods, and also prevent insects and rats from hiding under the goods shelves. For storage of wet food, ingredients must be in the refrigerator and by the specified requirements. this is done to reduce humidity which can lead to the growth of mold which can damage goods and also prevent insects and rats from hiding under goods shelves. For storage of wet food, ingredients must be in the refrigerator and by the specified requirements.[8]One example of a good food storage place is the refrigerator or freezer. Foods that spoil quickly such as meat, fish, milk, and eggs are stored in a special place according to the set temperature and air circulation/ventilation is attempted, for other materials, some places cannot be reached by rats, insects, and other disturbing animals.[9]

3. Food Processing

Food processing is quite good but has not been able to meet the requirements of 20 food traders, 70% of traders meet the requirements and 30% of traders do not meet the requirements. The food processing process includes receiving raw materials, manufacturing or processing, and container or packaging. Many food processing facilities in the canteen do not meet the requirements because food handlers pay little attention to sanitary hygiene in food processing, such as the use of aprons and gloves. A food handler is someone who prepares, transports, and serves food. At food processing sites that do not meet the requirements for sanitation hygiene, several parts do not meet the requirements, namely there is no warehouse to store food ingredients, there is no special equipment washing place available they only use one tub for washing equipment, there are

no toilets or latrines. but sometimes when processing food, the equipment they use is only rinsed with water after cooking the noodles and will be used for cooking again.

4. Cooked food storage

Storage of cooked food or prepared food in the canteen of the University of Muhammadiyah Palembang, 70% of traders have met the requirements and 30% have not met the requirements. For food storage, do not use closed containers it is feared that it could cause food contamination caused by disease vectors and food that is not covered can become a medium for disease transmission and there is no temperature and time regulation in storage. The proper storage of cooked food is that the food container is closed and protected from nesting sites for disease-causing vectors. Good food is food that is not contaminated by physical, chemical, and biological because if the food is contaminated it can become a medium for disease transmission and can even cause food poisoning.[10]

5. Food transportation

In the Palembang Muhammadiyah University canteen, all the stand owners do not have special means of transporting food, however, there are aspects that they have fulfilled, such as the use of equipment or ready-to-eat food containers with strong and non-hazardous materials. Good food transportation techniques, namely that food does not become dirty/contaminated during transit, and the equipment or containers used are strong, clean, and adequate. Serving food with the equipment used is clean, and serving tools are protected from contamination by consumers and other intermediary objects.

6. Food serving

Serving food in the Muhammadiyah University canteen 17 (85%) traders have met the requirements and 3 (15%) have not met the requirements. As for the aspects that they have fulfilled, among others, the presenter does not have direct contact with food, the presenter also maintains the cleanliness of his body parts such as hair, nails, and hand hygiene. However, there are still presenters who do not wash their hands when they have handled food and have contact with buyers and presenters who do not keep their nails, hair, and limbs clean.

Conclusion

1. Principles Selection of food raw materials in the Palembang Muhammadiyah University canteen has met the requirements 16 (80%) traders out of 20 traders have fulfilled the aspects of the requirements for selecting raw materials and 4 (20%) traders in these locations have not met the requirements
2. Principles Storage of food raw materials in the Palembang Muhammadiyah University canteen does not meet the requirements, out of 20 traders in that location there are 12 (60%) traders who meet the requirements and 8 (40%) traders who do not meet the requirements.
3. The principle of food processing is quite good but not yet able to meet the requirements of 20 food traders, 14 (70%) traders fulfill the requirements and 6 (30%) traders do not meet the requirements.
4. The principle of storing cooked food or prepared food in the Muhammadiyah Palembang University canteen did not meet the requirements for storing cooked food, 14 (70%) traders had fulfilled the requirements aspect and 6 (30%) traders did not meet the requirements.
5. The principle of transporting food in the Muhammadiyah Palembang University canteen has not met the requirements for food transportation, all stand owners do not have special food transport equipment, even though there are aspects that they have fulfilled such as the use of equipment or ready-to-eat food containers with strong materials and not made of non-sticky materials. dangerous.
6. The principle of serving food in the Palembang Muhammadiyah University canteen has fulfilled the food serving requirements, 17 (85%) traders have fulfilled the aspects and 3 (15%) traders have not met the requirements.

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