

## Analysis of Food Sanitation in the Kitchen (Installation) of the Subulussalam City Nutrition Hospital

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### Abstract

Food is a basic need for human life. Food sanitation supports the prevention of food poisoning. Hygiene Food sanitation is an effort to control factors in food, people, places and equipment that can or may cause disease or health problems. Nutrition services in hospitals are appropriate services that take into account the patient's clinical condition, nutritional status and body metabolism. There are several sanitation requirements that are not met, namely the knives used are rusty, and some handlers do not wear mouth coverings, and do not wear gloves when processing food. The aim of this research is to analyze food sanitation in the Gizi kitchen (installation) of Subulussalam City Regional Hospital. The research method used is descriptive with a descriptive qualitative approach. The results of the research show that 90 percent of food handlers meet the hygiene requirements for snack food handlers in the Subulussalam City Hospital's Nutritional Kitchen (Installation), only 10 percent do not meet the food handler requirements, this is because there are still a few workers. who still have minimal knowledge about food hygiene. Food serving sanitation in the Subulussalam City Hospital's Nutritional Kitchen (Installation) shows that serving sanitation meets the requirements. Sanitation of facilities in the Subulussalam City Hospital's Nutritional Kitchen (Installation) shows that facility sanitation meets the requirements. The researcher explained that the sanitation service in the Subulussalam City Hospital's Nutritional Kitchen (Installation) meets the service sanitation hygiene requirements, this is because the workers have paid attention to serving containers such as covering food and maintaining cleanliness around it. The conclusion of this research is that the process of organizing food in the Subulussalam City Hospital's Nutritional Kitchen (Installation) shows that all food handling meets the requirements and equipment sanitation meets the requirements. Food serving sanitation meets the requirements and facility sanitation meets the requirements. This research suggests increasing the number of waste bins that can be sorted so that the environment in the nutrition installation room becomes better.

**Keywords:** Controller Hygiene; Equipment Sanitation; Food Serving Sanitation; Vendor Facilities Sanitation

### Introduction

Hospital nutrition services are part of the health services carried out by a work unit called a nutrition installation. One of the efforts made in order to achieve optimal health status for patients is the provision of food and drinks that meet health requirements. The emergence of diseases caused by food, one of which is due to negligence or carelessness of food processors when working or processing food. According to the World Health Organization (WHO), every year there are 1500 million incidents of foodborne illnesses with the number of sufferers dying as many as 3 million. (WHO, 2019)

According to the Decree of the Minister of Health of the Republic of Indonesia Number 1096/Menkes/Per/VI/2020 concerning food sanitation hygiene, food handlers are people who are directly in contact with food and equipment starting from the preparation, cleaning, processing, transportation to serving stages which pose a risk to food. . One of the hospital's medical support units is the nutrition installation. The nutrition installation is a unit that has a work team with special abilities to provide quality nutrition services to patients and employees so as to speed up the patient's healing process and shorten the length of stay. (Minister of Health of the Republic of Indonesia Number 1096/Menkes/Per/VI/2020).

According to the management of the nutrition installation at Subulussaalam City Regional Hospital, there are several problems that do not meet the standards of hygiene and sanitation requirements, even though the hospital has established the principles of food hygiene and sanitation. However, the implementation was not as expected, due to a lack of awareness of the importance of hygiene and sanitation in food handling. Knowledge and attitudes towards food processing and all parties responsible for health are needed to create hygiene and sanitation standards in the handling of food in the nutrition installation of the Subulussaalam City Regional Hospital.

Food management in hospitals is carried out in order to provide quality food according to the patient's condition. The availability of safe and healthy food fiber is related to the implementation of hygiene by food processing personnel. If a food processing worker does not implement one of the hygiene requirements, it can have an impact on the health of patients who consume food touched by the processing worker. In the process aspect of food processing, information was obtained that the food processing activities were carried out in accordance with the guidelines requirements, namely the availability menu, menu guidelines, menu cycle, food ingredients to be cooked, cooking utensils, cooking assessment, availability of cooking SOPs, and regulations for the use of food additives. In the process aspect of food distribution, information was obtained that food distribution activities did not comply with these guidelines.

Serving food to patients is one of the duties of the nutrition department in hospitals. Hospital nutrition services are services provided and adapted to the patient's condition based on clinical condition, nutritional status and body metabolism. The nutritional condition of the patient greatly influences the healing process of the disease, conversely the course of the disease can influence the nutritional condition of the patient.

According to Law of the Republic of Indonesia Number 36 of 2009 concerning Health, it is stated that environmental health efforts are aimed at realizing healthy environmental quality, both physical, chemical, biological and social, which enables everyone to achieve the highest level of health. A healthy environment as intended in this law includes residential environments, workplaces, as well as public places and facilities, must be free from elements that cause health problems, including waste (liquid, solid and gas), waste that is not processed in accordance with requirements. determined by the government, animals carrying 2 diseases, dangerous chemicals, noise that exceeds the threshold, radiation, polluted water, polluted air, and contaminated food.

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Based on Minister of Health Regulation Number 7 of 2019, regarding hospital environmental health, it is an effort to prevent disease and/or health problems from environmental risk factors to create a healthy environmental quality from physical, chemical, biological and social aspects within the hospital environment. The quality of a healthy hospital environment is determined by achieving or fulfilling environmental health quality standards and health requirements for water, air, land, food, facilities and buildings, vectors and disease-carrying animals.

There are several environmental health requirements in hospitals, one of which is sanitation in the preparation of food in hospitals. Food is an important source for human survival, and is a basic human need that must be met to maintain health. Food can also be a source of disease transmission if hygiene and sanitation in the administration of food in hospitals are not maintained properly. Food that meets the requirements, not only meets the nutritional requirements, is attractive, tastes good, has an appropriate texture, but must also be free from various microorganisms that can cause food to become damaged, or can produce substances that are dangerous to human health, for this a system is needed. good food management in terms of personal hygiene, sanitation of food equipment and food processing environment.

Penyelenggaraan makanan yang higienis dan sehat menjadi prinsip dasar organizing food in hospitals because hospital food services are intended for sick people with a high threat of spreading pathogenic germs. Food that is not managed properly and correctly by food handlers can cause negative impacts such as disease and poisoning due to chemicals, microorganisms, plants or animals, and can also cause allergies. (RI Ministry of Health. 2021).

Food that does not meet health requirements can cause food to be contaminated. Supervision of food and beverage sanitation hygiene needs to be carried out to obtain food and beverages that meet the requirements, one aspect of maintaining food safety which must be implemented in a structured and measurable manner with clear activities, targets and performance measures, one of which is by creating a Food Management Place (TPP). who meet health requirements. The 2021 Indonesian Health Profile shows that the percentage of TPPs that meet the requirements according to national standards is 52.4%. This achievement has met the 2021 Strategic Plan target for TPPs that meet the requirements according to standards, namely 44%. (RI Ministry of Health 2021).

Based on the results of surveys and research observations in the nutrition kitchen (installation) at the Subulussalam City Regional Hospital, information was obtained that food management still has problems in the process aspect which can be seen from the planning section, then from that the food sanitation hygiene of the Subulussalam City Regional Hospital's nutritional kitchen (installation) is still lacking. Well, this can be seen from the form of presentation, namely the plate that is placed on food for sick patients is still wet or watery. This shows that the plate used is just ready to be washed without being wiped with a cloth. This shows the level of knowledge regarding the safety of food consumed. still not enough. Thus, there needs to be more

attention to the hygiene practices of snack food sanitation, which includes handler hygiene, equipment sanitation, serving sanitation, and sanitation of vending facilities in the Subulussalam City Hospital Nutrition Kitchen (installation) to ensure the safety of the snack food consumed.

For research regarding the description of food sanitation in the Subulussalam City Hospital's Nutrition Kitchen (Installation), which includes handler hygiene, equipment sanitation, serving sanitation and vendor facilities sanitation in the Subulussalam City Hospital's Nutrition Kitchen (Installation) environment. The aim of this research is to analyze food sanitation in the kitchen (installation) of nutrition at Subulussalam City Regional Hospital.

## **Methods**

This type of research is direct observation with a descriptive approach, namely analyzing the condition of food in the Subulussalam City Hospital's nutrition kitchen (installation) in terms of sanitation. Location This research was carried out in the Gizi kitchen (installation) of the Subulussalam City Regional Hospital, by observing the kitchen at that location. Time This research was conducted in November-December 2022. The research instrument used was a checklist sheet for conditions of food processing places, conditions of food processing equipment, conditions of food processing processes, and hygiene of food processing handlers. Data analysis was carried out univariately to obtain information about the sanitation of food processing places, sanitation of food processing equipment, sanitation of food processing processes, and hygiene of food handlers. The data is presented in tabular form and described in sentence form based on existing descriptions so that it can be seen what the hygienic, sanitary conditions of food processing are in the Nutritional Installation of Subulussalam City Hospital.

## **Results**

Subulussalam City Regional General Hospital is a hospital owned by the Subulussalam City Regional Government which is located at Jln. Hamzah Fansuri DusunRahmah Kampong West Subulussalam, Simpang Kiri District, Subulussalam City. In order to improve the implementation of health services, especially for the people of Subulussalam City and generally for the people in the districts located on the West Coast of Aceh, the Subulussalam City Government has adopted a strategic policy in the health sector by seeking to build a Regional General Hospital RSUD in Subulussalam City where the existence of It is hoped that the Regional General Hospital will be able to optimize services to all levels of society.

The Subulussalam City Regional General Hospital has an area of 72,545 M2 and only 75 of the land has been used for hospital buildings and facilities, while the remaining empty land is then used for hospital development. As time goes by, Subulussalam City Hospital continues to develop services which are expected to meet the needs of the people of Subulussalam City for the best health services.

The vision of the Subulussalam City Regional General Hospital is: "Center for superior quality and

Islamic health services". To realize this vision, the Subulussalam City Regional General Hospital has a mission: 1. To provide the best, easy, fast and precise service to the community; 2. Improve hospital facilities and infrastructure; 3. Uphold service professionalism through scientific and spiritual approaches; 4. Keep up with developments in science, technology and skills; 5. Become an accredited and independent hospital.

The types of services provided at the Subulussalam City Regional General Hospital Nutrition Installation are 1. Outpatient nutrition services; 2. Inpatient nutrition services; 3. Food management. Patient Food Distribution Hours: 1. Breakfast: 07.00 to 08.00; 2. Lunch: 12.00 to 13.00; 3. Dinner: 17.00 to 18.00. Hygiene of food handlers in the kitchen (installation) of nutrition at Subulussalam City Regional Hospital.

**Table 1.** Results of Food Sanitation Analysis in the Subulussalam City Hospital Nutrition Kitchen (installation).

No	Variable	Value	%	Category
1.	Food Handler Hygiene	10	90	Qualify
2.	Sanitize equipment in the kitchen	5	100	Not eligible
3.	Serving Sanitation	12	100	Qualify
4	Sanitation of Food Vendor Facilities	10	100	Qualify
<b>Total</b>		<b>37</b>		

Source: Primary Data 2024

Based on the results of research on the hygiene of food handlers, it is known that they have met the requirements with a score of 90%. The number of food handlers who carry out food processing at this nutritional installation is 11 people. Food processing is carried out in three shifts, namely morning processing starting at 07.00-08:00 WIB, afternoon processing 12.00 to 13.00 WIB, afternoon processing starting at 17.00-18.00 WIB.

Efforts to maintain the cleanliness of all equipment that is free from dirt used in the food preparation and cooking process include knives, pots, pans, spatulas, cutting boards, basins in the Nutrition Installation at the Subulussalam City Regional General Hospital. From Table 1.1 it is known that 100% of food processing equipment meets the requirements. Researchers can explain that the sanitation of equipment in the Nutrition Kitchen (Installation) of Subulussalam City Regional Hospital meets the hygiene requirements for equipment sanitation, this is because they have paid attention to the need to maintain cleanliness of the equipment used.

An effort to control food factors seen from processing places, processing equipment, processing processes, and food handlers which can or may cause disease and health problems in the Nutrition Installation of the Subulussalam City Regional General Hospital. Based on Table 1.1, it is known that 100% Serving Sanitation meets the requirements. Based on the results of research conducted on the hygiene of food handlers in the kitchen of the Subulussalam City Hospital Nutrition Installation, it shows that the hygiene of the food handlers is good, as seen from wearing clean work clothes, wearing aprons, not wearing jewelry, handlers' nails cut short and clean, washing hands before processing food, don't talk when processing food, don't suffer from wounds or ulcers, don't scratch your limbs when processing food, don't spit anywhere, always use utensils when handling finished food and behave in a healthy manner.

In the 2024 Sanitation of Food Vendor Facilities in the Subulussalam City Hospital Nutrition Installation, based on Table 1.1, it is known that 100% of food handlers have met the requirements. Based on the results of observations made regarding the Sanitation of Food Vendor Facilities in the Subulussalam City Hospital's Nutrition Kitchen (installation), it shows that the sanitation of the facilities meets the requirements, namely 100%. This can be seen from the serving staff who always keep their nails clean, cover their hair with a headscarf and use gloves when delivering food to patients.

## **Discussion**

### **Hygiene of Food Handlers in the Subulussalam City Hospital Nutrition Kitchen (installation).**

Based on the results of research conducted on the hygiene of food handlers at the Subulussalam City Regional General Hospital Nutrition Installation, it shows that the hygiene of food handlers is known to have met the requirements with a score of 90%. The number of food handlers who carry out food processing at this nutritional installation is 11 people.

According to the researcher's assumption, the hygiene of the handlers' personnel is good, which can be seen from wearing clean work clothes, wearing an apron, not wearing jewellery, handlers' nails cut short and clean, washing hands before processing food, not talking when processing food, not suffering from wounds or ulcers, don't scratch your body parts when processing food, don't spit anywhere, always use utensils when handling finished food and behave healthily. However, there were 2 handlers who did not wear masks, did not wear gloves, and had never received training regarding food hygiene. The personal hygiene of the handlers was not good, namely 2 food handlers did not use gloves when processing food.

Based on the data above, this is as per the research conducted by the results of this research in line with the research results of Vioni Syahlan (2018) regarding hygiene, sanitation, food management and the number of germs on food equipment (plates) in the Nutrition Installation of the Pancaran Kasih Gnim General Hospital, Manado City, that in food handlers do not suffer from infectious diseases as evidenced by the existence of a valid health certificate and every 6 months food handlers undergo a health check. When handling food, handlers are wearing complete PPE.

According to the Indonesian Ministry of Health (2006), it is recommended to always wash your hands before and after touching raw or contaminated food. Washing your hands is also recommended after using your hands for scratching, coughing or sneezing and after eating or smoking. Washing hands is important for food handlers who are tasked with carrying out food preparation and processing activities, especially in hospital nutrition installations. If hands are left dirty, they can become a medium for food contamination and have the potential to cause disease. Hands are one part of the body that is very important for doing things in preparing food. Food is also contaminated through the hands, because the hands are a medium that can transfer bacteria to food, therefore when processing food it is recommended to use gloves because human skin is never free from bacteria, even clean skin still carries bacteria. However, if the skin is not clean, the number and

types of organisms will increase. To improve health, wear gloves when processing food. Gloves are only used once because the gloves used will get dirty and may be damaged resulting in contact between the outside and the inside of the glove. Therefore, hand hygiene needs to be given a high priority. Handlers should pay attention to wearing gloves and masks as part of their equipment so that in the food processing process there is no cross-contamination between the food handlers' body parts and it does not cause other sources of disease so that the quality and nutritional value of the food in the serving process is clean and safe for consumption by hospital patient. (Teffo and Tabit, 2020).

### **Sanitation of equipment in the kitchen (installation) of Subulussalam City Hospital**

Based on the results of research conducted on the hygiene of food handlers at the Subulussalam City Regional General Hospital's Nutrition Installation, it shows that the sanitation of the equipment in the Subulussalam City Hospital's Nutrition Kitchen (Installation) meets the hygiene requirements for equipment sanitation, this is because they have paid attention to the need to maintain cleanliness. equipment used.

Based on the results of the interview with the processing officer, he explained that he always kept the equipment clean because clean equipment would make it easier to process food. He said that food processing here is different from processing in other places, here food is processed for sick people so if the equipment is not kept clean it is the same as adding disease to the food being processed, therefore the cleanliness of the equipment must always be paid attention to. To sanitize kitchen equipment, we provide a dishwasher equipped with soap and towels/tissues as a means of drying both hands and plates. This is in accordance with the results of research conducted by Rande (2021) regarding the Hygiene Description of Food Handlers and Sanitation of Equipment at the Kendari City Regional General Hospital, that according to observations, cooking equipment such as pots, pans, cauldrons, etc. are stored on shelves. which are open and easily accessible to insects, and some are stored on the serving table like cutlery. Most of the tools stored in the tool storage warehouse are still not fulfilled and the tools that are stored are simply placed on the floor without using a base, such as pots, pans, spoons, steamers, and buckets, basins, plates and so on.

Harahap, (2017) revealed that food handlers' knowledge of hygiene and sanitation can be a factor in good or bad food safety in the application of hygiene and sanitation in food processing. The health of food handlers is very important. Inadequate hygiene and sanitation at the production stage can cause the growth and development of spoilage microorganisms and pathogens in food..

### **Sanitation for serving food in the kitchen (installation) of Subulussalam City Regional Hospital**

Based on the results of research on Food Serving Sanitation in food processing at the Nutrition Installation at the Subulussalam City Regional General Hospital in 2024, the food processing sanitation hygiene conditions are in the qualifying category, namely (100%). This condition can be seen in terms of sanitation of food processing places, sanitation of food processing equipment, sanitation of food processing processes, and hygiene of food handlers. The results of Titis Jiasuti's research (2022) on Sanitation Hygiene, Food Management and the Presence of Bacteria in Prepared Food at RSUD dr. Harjono Ponorogo, that in food

processing areas in the kitchen, waste should be put in rubbish bins lined with rubbish plastic, closed and watertight, separated between wet waste and dry waste, each of which has its own place, pay attention to the time for transporting waste to other holding places. Don't let it splatter or cause dirt. Based on research conducted on food processing areas at the Subulussalam City Regional General Hospital Nutrition Installation, the kitchen floor in the food processing area meets the requirements, namely that the floor is made of strong, waterproof, non-slip, light-coloured, easy to clean and free of puddles. . The walls in nutritional installations are strong, bright in color, use paint that does not fade, have adequate ventilation and lighting. The walls and ceiling are well made and have no holes, before and after food processing activities they have been cleaned with antiseptic. However, in the food processing room, trash cans were found that did not have lids, the trash bins had been lined with plastic but had not been separated between dry waste and wet waste. The kitchen door does not open outwards and the door cannot close itself. The kitchen does not have a chimney and the corner where the floor meets the wall is not conical and has the shape of a dead angle. Apart from that, the hospital does not have a class B Catering Services certificate.

So it would be better if the food processing place is in the Nutrition Installation at Dr. Rasidin Padang Regional General Hospital, in the nutrition installation building where the corner of the wall meets the floor in a curved (conical) shape so that it is easy to clean and does not store dust/dirt in the corner area. The kitchen must have a chimney that is equipped with a filter, so that there is no accumulation of smoke in the kitchen where the smoke contains dangerous chemicals so that it cannot contaminate food. In addition, the trash can in the room must be equipped with a lid and the trash can be covered in plastic and separated. between wet waste and dry waste, each of which has its own place..

### **Sanitation of food vending facilities in the kitchen (stallation) of Subulussalam City Regional Hospital**

Based on the results of research on the food processing process, it is known that it meets the requirements with the score obtained being 92.9%. According to Irianto (2021), processed food ingredients, especially meat, milk, eggs and fish, must be good, fresh and not damaged or change shape, color and taste, and should come from officially supervised places. In this process, cleaning should be carried out so that no food rots. During the preparation process, sufficient clean and flowing water should be available, the water taps and pipes in the preparation room should be clean. Processed food is food that is packaged with a registered brand label and has a registration number, the packaging is not damaged/broken/has not expired. Finished food, food that is not damaged, rotten or stale, characterized by odor, moldy, protected from insect infestation.

Based on research conducted on the food processing process at the Subulussalam City Regional General Hospital Nutrition Installation, the raw materials used are in good condition, fresh and not damaged, the food ingredients to be used are cleaned and washed with running water before cooking, the preparation of food ingredients (rice , animal, vegetable, vegetable side dishes, etc.) are washed with clean, running water, and food ingredients are separated from inedible parts (skin, roots, seeds, etc.). However, in the food

processing process, washing food ingredients does not use hot water. It is best to wash food ingredients (animal side dishes, vegetables, etc.) first with hot water because it can naturally remove dirt from food ingredients and prevent contamination by microorganisms or chemicals.

Based on the results of observations made by researchers, the application of food sanitation in the nutrition kitchen (installation) of Subulussalam City Hospital is as follows: Storage of food ingredients is separated between wet food ingredients and dry food ingredients. Wet food ingredients that have not been used are washed first by the cook before being stored in The place for storing wet food ingredients to maintain freshness is closed using plastic warping cling: a. These are fresh food ingredients such as meat, poultry, vegetables and fruit; b. For eggs, fruit and processed products and cooked food, store them in the refrigerator at a temperature ranging between 5-70C, for fresh vegetables, fruit and drinks, around 10-150C, (Fresh storage / fresh cooling); c. For meat, fish or poultry, it is stored at a temperature between (-5) -00C. This temperature is required for storing fish or poultry meat for no more than three days. (meat storage); d. For long-term storage of meat and poultry, store it at ambient temperature (-5-100C, (freezer/freezer storage; e. Forsanitation, such as hand washing facilities and bathrooms in the kitchen are equipped with soap and cleaning towels/tissues.

Based on the data above, it shows that the sanitation of the food processing work environment in the nutrition installation room is in accordance with the Decree of the Minister of the Republic of Indonesia NUMBER 1204/MENKES/SK/X/2004 concerning hospital environmental requirements, namely, the location of the kitchen, light ventilation, kitchen walls, floors, ceilings. -sky, door In terms of the location of the kitchen, the nutritional installation room has clear boundaries, is equipped with a strong fence and does not allow people or pets to enter and leave freely, the area of the kitchen building is adjusted to the total land, so that adequate parking space is available and is equipped with parking signs, the nutritional installation processing room is free from flooding and free from cigarette smoke.

The nutritional installation processing room has natural ventilation so that the air flow in the room remains well regulated. The natural ventilation area is 15% of the floor area. Kitchen walls with a strong, even surface, light color and use paint that does not fade and do not use paint that contains heavy metals. The processing room floor is made of a strong material, flat surface, non-slip, light colored, and easy to clean. The ceiling of the nutritional installation processing room is light colored and easy to clean with a height of 2.70 meters from the floor and a strong ceiling made of anti-termite cotton. The door to the nutritional installation processing room is very strong, made of iron, and is high and wide enough to prevent the entry of insects, mice and other animals

This is in accordance with Srinawati, (2018) who said that good nutritional quality will influence hospital service quality indicators. The better the quality of hospital nutrition services, the higher the patient's recovery rate, the shorter the length of stay and the lower the cost of hospital care. Sanitary facilities, bro.

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## Conclusion

Based on the research results above, researchers can conclude that Sanitation of food processing places meets the requirements of 90%, Sanitation for food handlers meets the requirements of 100%, Sanitation of equipment in the kitchen meets the requirements of 100%, Sanitation Food serving meets food requirements 100%, Sanitation of food vending facilities has met the requirements at the Subulussalam City Regional General Hospital Nutrition Installation in 2024.

For nutritional installations, it is recommended to distinguish between dry trash cans and wet trash cans, and the available trash cans must have lids, and install a chimney equipped with a smoke hood. Food processing equipment is stored in a special equipment storage area that is clean, closed and rust-proof so that the equipment is protected from sources of contamination, dirt and nuisance animals. It is best to wash food ingredients (animal side dishes, vegetables, etc.) with hot water first because it can naturally remove dirt on food ingredients and prevent contamination with microorganisms or chemicals. For future researchers, the author suggests that future researchers can research the influence of sanitation hygiene in food processing on food quality.

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