

Ministry of Education on Healthy School Canteen's Management Towards Quality of Life in Malaysia

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ABSTRACT

School canteen plays an important role and has gained an increasing responsibility concerning the food and nutrient intakes of children and young people. Because of that, it is important and closely linked to have clean and better school canteen for their comfort, get a safe food and increase healthy people towards a better quality of life. Therefore, effective management of school canteens and human health with the enforcement, adoption legislation, non legislation as well as guidelines then ensure a perfect human health to address the problem of food safety in school canteens and cause food poisoning. For the realization of effective and efficient management, the Ministry of Education has taken the initiative to publish the Healthy School Canteen's Management Handbook as guidance and reference to all schools in Malaysia. Daily Self-Check Report on School Canteen is one of school canteen management requirements under the responsibility of the school canteen committee comprising school principals and school canteen teachers. This Self-check report is one of the important strategies to ensure a cleanliness school canteen for a better quality of food.

Keywords: Food Hygiene, Healthy School Canteen's Management, School Canteen

INTRODUCTION

Food should be nourishing and attractive. It must clean and free from noxious materials. These harmful substances may consist of poisonous chemical or chemicals that are harmless in small amounts, but damages in large quantities (Hobbs & Roberts 1987). Hygiene and food safety are main factors in providing appropriate food to obtain a safe food and nutritious food. Food safety can be considered as an important public safety issue. In industrial countries, 30% of the population suffer from a disease caused by food every year. The high incidence of diarrhea cases in developing countries as stated in the World Health Organization (WHO) data have shown that food safety can be considered as a very serious issue (Association of Standards Users Malaysia 2008).

The school canteen plays an important role and has gained an increasing responsibility concerning the food and nutrient intakes of children and young people

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(Rocha et al. 2013). Students are captive customer who is usually incompetent to purchase food from external sources during six hours they are at school (Saidatul Afzan & Hayati 2013). School canteen also the place where students, teachers and school staff buy and consumes their food, and do other related activities. Because of that it is important and closely linked to have clean and better school canteen for their comfort, get a safety food and increase healthy people towards a better quality of life in line with Agenda 21, Chapter 6, the health sector cannot meet basic needs and objectives on its own, it is dependent on a healthy environment, including sanitation and promotion of a safe food supply and proper nutrition.

Food poisoning can be defined as a situation where consuming a contaminated food or ingestion of contaminated food which can cause diarrhea, vomiting, nausea, discomfort, headache, dizziness and abdominal pain (Norhayati 2000; Crosby 1981). According to (Fatan 2005), food poisoning usually caused by food contamination affected by bacteria or toxin bacteria that is happens frequently. Referring to the example that has been stated by Crosby (1981), 45% of all meats and 60% of poultries were contaminated by bacteria that known as *Salmonella* spp. The same bacteria were also found in meat served to the victims in Germany via beef and about 59 persons of the victims get gastro intestinal affected (Hobbs & Roberts 1987). This is also supported by Tartakow & Vorperian (1981), whereby, gastrointestinal infection caused by a variety of toxic agents and bacteria, viruses, protozoa, parasites, fungi and other related causes when a person swallows contaminated food. A foodborne disease caused by lapses in food safety or emerging pathogens has provided vivid reminders that food only nourishes and sustains us, but if handled unsafely, can be a major threat to health and well-being (Carol et al. 2013). A balanced diet needs vitamins, iron, carbohydrates, calcium, protein and others. Students are exposed to a culture of unhealthy foods and health threatening, but it is certainly an impact on students' thinking and the student's performance. In spite of food handlers having the skills and knowledge to handle food safety, yet human handling errors have been associated with the most incidences of food poisoning (Ehiri & Morris 1996). Hence to reduce the risk of cross-contamination, food poisoning and other food borne diseases, serious attention should be given training and supervise food handlers from time to time. Therefore, effective management of school canteens and human health with the enforcement, adoption legislation, non legislation as well as guidelines then ensure a perfect human health to address the problem of food safety in school canteens and cause food poisoning cases.

GUIDELINES ON HEALTHY SCHOOL CANTEEN'S MANAGEMENT

Canteen practically a place where wide activities have been done, comprises of the sale and purchase activities, beverages preparation, food storage, serving and consumption, resting and other leisure activities among students, teachers and school staff. In fact, the function of school canteen is effective promoting food ranging from the primary level to the secondary level of education. The Ministry of Education always concerned about hygiene, safety and quality of all food sold in the

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school canteen premises in Malaysia. Related management and monitoring need to be implemented to enhance the school canteen services further cultivating a healthy and balanced diet among the school community. For the realization of effective and efficient management, the Ministry of education has taken the initiative to publish the Management Handbook as guidance and reference to all schools in Malaysia. Entire chapters contained in this handbook are five chapters, there are Building and Canteen Facilities, Food Handlers, Hygiene Control and Canteen Safety, and School Canteen Management. Daily Self-Check Report on School Canteen is also entire in this handbook and it is one of school canteen management requirements under the responsibility of the school canteen committee comprising school principals and school canteen teachers. This Self-check report is one of the important strategies to ensure a cleanliness school canteen for a better quality of food.

DAILY SELF-CHECK REPORT ON SCHOOL CANTEEN

Based on the Healthy School Canteen's Management Guidelines focusing on school canteen management, there are twelve types of control need to be aware and self-check by school canteen teachers to promote a clean and better school canteen for better quality of life. These twelve types of control as mentioned in list of Daily Self-check Report on School Canteen by Ministry of Health in Healthy School Canteens' Management Guidelines book. All responsibilities are assisted by daily school canteen teachers in order to observe the school canteen every day. Then, the daily school canteen teacher will do weekly reports and submitted to the school principle. The reports will be sent to the District Education Office under the Ministry of Education in Malaysia montly. These report have demerit marks for each of control types that reflected to the food safety status. List of the control types that have been mentioned in this report stated as Food Handlers Clean, Healthy and Appropriate Uniform, Food Handling Practices, Raw Food, Water Supply, Store or Storage and Refrigerator, Tools or Equipments, Toilets and Sink Hand Washing, Dustbin and Control of Insects and Other Animals and other.

Food Handlers Clean, Healthy and Appropriate Uniform

All food handlers must be healthy and not exposed to any injuries. In other words, food handlers should get typhoid vaccination three times a year and only food handler who had examined the health and well recognized by medical doctor can engage in any works in canteen. This is also stated in Part IV, The Food Hygiene Regulations 2009, respect to food handlers, Regulation 30, that is food handler training and Regulation 31 of the medical examination of food handlers and health conditions. Food handlers need to wear clothing, head scarf, aprons and shoes that are clean and fit also have short claws. Moreover, the application of jewelry, rings, watches and other jewelry should be avoided by food handlers because they can become a breeding ground for germs.

Food Handling Practices

Best practices by food handler is wash hands before handling food or after using the toilet. Take off the apron before when into the toilet, not coughing or sneezing over the food and not directly touch the food by hand. Moreover, washing hands with soap and water is the most convenient and efficient way of removing pathogens from hands (Rachelle et al. 2013). Therefore, food safety education as a part of general food education or separately, should be encouraged because it leads to more positive attitudes toward hand hygiene. General food handling mistakes besides serving contaminated raw food also includes inadequate cooking, heating, or reheating of food consumption from unsafe sources. Those errors might lead to food poisoning (Saidatul Afzan & Hayati 2013). Food handler's hands can be the vector to spread harmful microorganism through cross contamination (Noor Azira et al. 2013). Best practices also mentioned the use of mask to cover the nose and mouth (Tan et al. 2013). Besides that, food handlers also should have excellent hygiene practices to ensure cross contamination can be reduced, thus protecting the consumers from foodborne diseases (Noor Azira et al. 2013).

Raw Food

The selection of raw food by food handlers should be clean, fresh, not rotten, not damaged also suitable to use. Good preparation and storage of food need to emphasis with existence of knowledge and education on food handling by each of food handler. Moreover, cooked food must separate from raw food and cooked food need to stored or served with cover also not stored at room temperature more than four hours.

Water Supply

Food handlers need to ensure the water supplied is clean and adequate with sealed storage. These hygiene and sanitation effort need to prevent large outbreaks in school food services and public restaurants, which are the most common places for outbreaks (Jin et al. 2010)

Store or Storage and Refrigerator

Each of school canteen premises need to ensure the storage and store in their school canteen is clean, properly organized and free from any chemicals or pesticides. For refrigerator, mentioned that the suitable cooler temperature must be between 0°C to 4°C and a freezer temperature is less than -18°C.

Tools or Equipments

Good characteristics of equipment or tools including clean, easy to clean, waterproof and perfect. Food handlers must use different equipment for raw food

and food that ready to eat also need to ensure clean cutting boards and knives in their kitchen. Clean tools or equipments such as crockery and other tools are washed at high places that are more than 1 meter from the floor. Moreover, all equipment and appliances such as dishwashers, spoon, fork, gas stoves, pots, knives must keep in good condition, clean, no rust, cracked or chipped. The cross contamination between food and equipment is considered as a main factor of outbreaks, according to the Centers for Diseases Control and Prevention (Oliveira *et al.* 2014).

Toilets and Sink Hand Washing

Toilets and sink hand washing are clean and can categories as perfect if it also provide liquid soap and tissue paper. But, knowledge seems to be an important factor in shaping student's attitudes regarding general and bacterial safety. Therefore, better nutritional knowledge leads to more positive attitudes toward hand washing. Nutrition education and food safety education should be encouraged among the school community (Rachelle *et al.* 2013).

Dustbin and Control of Insects and Other Animals

All dustbins in the canteen premises must have plastic bags with sealed. Some pest control such as cockroaches, flies, and mice must function properly. Each of hole parts that allows the cockroaches to hide and breed should be closed. This is to avoid the toxicity threat of the food that contributed by breeding animals such as flies, cockroaches, rats and other. Besides that, no dogs, cats and other pets were allowed in school canteen premises.

Other

Environment of school canteen premises must be in a clean condition to prevent the occurrence of negligence, immunity and accident to food handlers and consumers in the school canteen premises. Floors, walls, ceilings, taps and door handles must clean and safe. Moreover, the cesspool and drainage must well maintain.

CONCLUSION

Canteen is an important place for students to get a nutritional and safe food in school and to promote a good health and toward a better quality of life. Therefore, food safety in school canteen is the responsibility of every person who involved in food service operation especially the food handlers. Canteen environment is one of the major factors to ensure the hygienity of food provided to students at the school. Therefore, effective management of school canteens and human health with the enforcement, adoption legislation, non legislation as well as guidelines then ensure a perfect human health to address the problem of food safety in school canteens and

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cause food poisoning cases. Daily Self-Check Report on School Canteen is one of school canteen management requirements under the responsibility of the school canteen committee comprising school principals and school canteen teachers enforced by Malaysia Ministry of Education. This Self-check report is one of the important strategies to ensure a cleanliness school canteen for a better quality of food.

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