

FOOD SAFETY EDUCATION BY EVALUATING GOOD MANUFACTURING PRACTICES FOR THE HOME INDUSTRY OF PROCESSED PALM FRUIT IN HENDROSARI GRESIK

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ABSTRACT

Hendrosari village has great potential to develop business activities, especially in food and beverage of processed palm fruit as regional characteristic business from the Lontar Sewu Tourism Village area. The government through the Food and Drug Supervisory Agency stipulates a guideline or regulation on Good Food Production Methods for Home Industries usually called Good Manufacturing Practices (GMP) so that the quality of the food products produced not only has good nutritional value, but also safe and suitable for consumption. This study aims to educate the implementation of GMP in home industry that producing processed palm fruit. The method used to deliver the material was a focus group discussion consisting of entrepreneurs and village officials. The material presented was about food product regulation and food safety, food control, product packaging and storage and how to use safe additive. Thirty participants took part in the education activities. After participating in the activity, participants' knowledge increased. Participants were better able to identify the shortcomings of implementing food safety from their businesses. Most of the entrepreneurs have not implemented good manufacturing practices perfectly considering that their businesses are classified as small businesses. Entrepreneurs found it difficult to provide standard buildings and facilities according to GMP guidelines because they required large fund. A non-standard place of labor will affect the flow and production process that the possibility of contamination of raw materials and finished products is still high. The way to minimize the presence of contaminants, participants were willing Participant committed to improving maintenance and sanitation programs and carrying out monitoring process. Entrepreneurs and stakeholders were aware of the importance of implementing GMP as a consumer right and being able to increase product competitiveness. They were committed to improving food safety practices by forming a village food safety supervisory team. Participants hope that food safety education and monitoring activities can be carried out regularly.

Keywords : food, safety, GMP

1. INTRODUCTION

Food safety is a condition that need to prevent food form potential contamination. The presence of contamination in food products can endanger health until death. Food contamination is not desired by producers or consumers. Contamination in food occurs from small/home to large industries [1]. In an article from the “Pemikiran Rakyat”, in 2013 there were 10,700 cases of food poisoning that resulted in death in Indonesia. In addition, in 2016 there were data that showed around 14.9% of the 26,537 food samples did not meet the requirements [2]. Therefore, to reduce contamination in the production process in an industry, this must be considered properly, namely by implementing GMP (good manufacturing practices) so that cases of food poisoning can be reduced. [1]

Hendrosari village is known as a tourist spot for palm fruit (lontar sewu) because that place is dominated by the palm tree garden which produces flower juice and palm fruit which can be processed into various types of commercial product. Hendrosari Village has great potential to develop business activities, especially in food and baverage of processed palm fruit as regional characteristic business from the Lontar Sewu Tourism.[3] One of the efforts to encourage and develop home industry of processed food products that can compete with the larger food and beverage industry is Implementing Good Manufacturing Practices (GMP) so they can have good quality, safe for consumption, available sustainably, and highly competitive economically. [4] In food processing, an effective quality management system can ensure product quality and safety. [5]

Several home industries (small scale) in the food and beverage sector have been operating in Hendrosari Village. The biggest problems in small and medium-sized enterprises in general are the lack of resources, the condition of work infrastructure, the layout of the space that is not in accordance with the sequence of processes, inadequate work facilities, employee hygiene, quality and safety of raw materials and sanitation so it is very difficult to meet good food quality standards. The implementing of food safety have not been optimal for the home industries in Hendrosari were due to lack of knowledge and awareness of the importance of food safety.

Based on the analysis of the situation, in order to overcome the obstacles in order to grow and be highly competitive in order to create products that are safe for consumption and have a long-term goal of becoming superior products, it is necessary to conduct quality management system training by applying good food processing production methods. This study aims to educate the implementation of GMP in home industry that producing processed palm fruit.

2. RESEARCH METHODS

The implementation of the activity was divided into two stages, they are preparation (basic data collection) and implementation of education. This activity was carried out at the Hendrosari village hall, Menganti sub-district in October-November 2021.

a. Preparation (Basic data collection)

In the first stage, a survey was conducted with interviews with business actors processing palm fruit in Hendrosari Village. This activity aims to determine the condition, location and how the implementation of food safety that has been carried out is in accordance with GMP guidelines. Interviews with business owners in the production process to find out the extent of understanding about products, processes and the importance of quality control in production.

b. Training and Counseling

This training activity is carried out to provide an understanding of the importance or benefits of implementing good food production methods, then teach and guide directly in the assessment of aspects of GMP, as well as give examples of the correct but practical application of GMP and the practice of assessing the application of GMP by using processing facility inspection form.

The method used to deliver the material was a focus group discussion. Thirty participants took part in the education activities consisting of entrepreneurs, village Apparatus, head and members of family welfare development. The material presented was about food product regulation, food safety, food control, product packaging and storage and how to use safe additive.

c. Data collection techniques and data analysis

This education activity focused on the output target of entering The enterprises of processed palm fruit understanding the importance of GMP in the processing of food products and being able to independently evaluate the implementation of GMP in their respective businesses.

The data collection was intended to determine knowledge before and after being given education regarding the application of GMP in the home industry, responses, and suggestions from partners for the sustainability of activities

This activity also aimed to enable enterprises to independently identify the implementation of GMP in their businesses. The GMP points that are assessed were the state of the processing room, the state of the production site, production equipment, water supply, personal hygiene and so on. From each of these elements, an assessment is carried out in relation to the standard parameters set. Assessment of these parameters is done by scoring method.

3. RESULT AND DISCUSSION

a. Characteristics and responses of participants to training activities

The training activity was attended by 30 participants consisting of entrepreneurs, village Apparatus, head and members of family welfare development. The results of the questionnaire show that most of the participants have never attended GMP training. Only 10% of the participants had received education on food safety.

Before the education was held, only very few participants knew about food safety. the knowledge possessed was limited to physical contamination of food due to the carelessness of the producer and sanitation of the production site. after the education session, participants more understand and realized the importance of implementing food safety.

The results of the pre- and post-test knowledge evaluation showed that the participants' knowledge of GMP had increased. The results of the pre test showed that only 10% of participants got good scores (>60). The posttest showed the opposite, that 90% of the participants got good grades. this number has increased significantly. This showed a significant increase in knowledge before and after being educated (Figure 1)

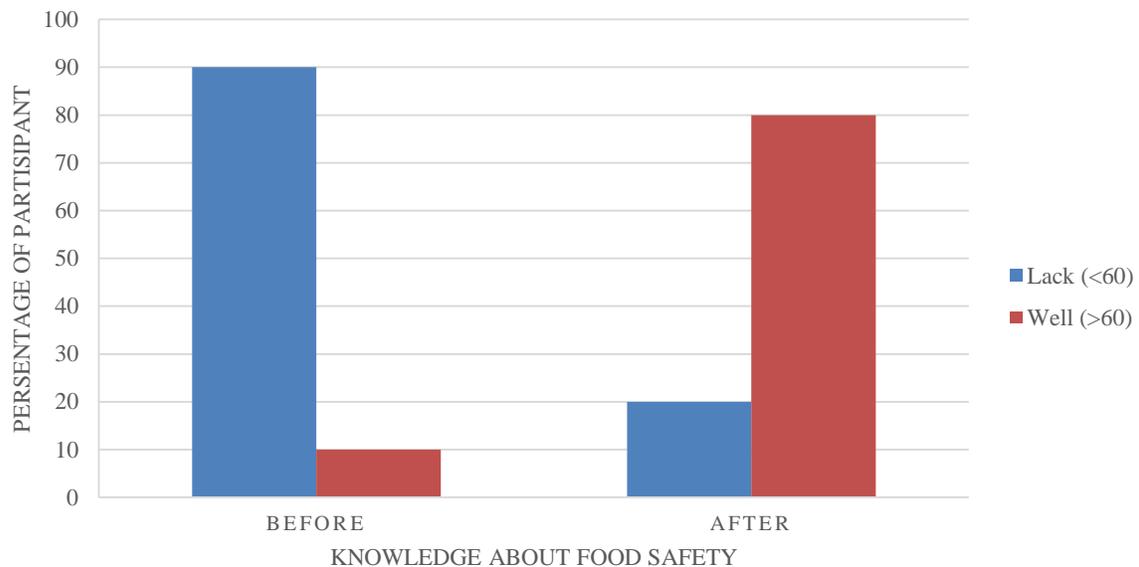


Figure 1. The result of pre-test and post-test about GMP

During the GMP training activities, the responses of the participants were very enthusiastic in following and listening to the explanations given by the resource persons. After the material delivery activity, participants showed their interest in implementing GMP in the processing of their production units. The high enthusiasm of participants in this training activity shows the effectiveness of GMP training activities so that the ability of participants can develop from before the training. The success of the training implementation is closely related to the increase in the knowledge and abilities of the participants. [5] According Aqmala, D., (2007) states that there are five variables that most influence the success of sales training are clear goals, relevant content, appropriate techniques, the ability of trainers, and who is training. [5]

b. Self-assessment of GMP aspects

Participants who had received GMP lessons were asked to practice their understanding in assessing aspects of GMP in their respective business units. There were nine points that need to be assessed (Appropriate or not appropriate) (Table 1). Based on the evaluation results, there were still many aspects that do not meet the processing standards.

Table 1. Self-assessment of GMP at home industry of processed palm fruit

GMP's Points	Appropriate (%)	not Appropriate (%)
Processing environment and location	20	80
Building and Facilities Unit	20	80
Processing Equipment	80	20
Sanitation Facilities	20	80

Employee hygiene	20	80
Process control	20	80
Supervision management	10	90
Maintenance and sanitation program	40	60
documentation	0	100

In terms of level of complexity, almost all participants stated that implementing GMP was complicated/difficult. This was due to the strict requirements contained in the GMP provisions. Most of the entrepreneurs could not implement good manufacturing practices perfectly because that their businesses are classified as small businesses. Entrepreneurs find it difficult to provide standard buildings and facilities according to GMP guidelines because they require large funds.

The role of stakeholders in developing a home industry is very important in developing a home industry such as in product development includes directions of quality development, Management Development, Support for Activities Research (R) & Development (D), quality testing services etc. [13] This also acts to control on food safety implementation.

Stakeholder participation in food safety education activities was very important to be able to support and monitor palm fruit processed entrepreneurs to be more orderly and willing to gradually implement GMP in their respective industries. This was evidenced by the mutual agreement between the village government and entrepreneurs to form a team that aims to ensure the sustainability of GMP implementation in the palm fruit processing business.

4. CONCLUSION

1. Participants' knowledge and awareness about food safety increased after the education session of GMP.
2. The implementation of GMP cannot be implemented perfectly at home industry in Hendrosari due to limited costs and resources but food safety practices can still be implemented gradually.
3. Stakeholder support is able to increase the realization of food safety control.

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