

LEVEL OF TRADER'S KNOWLEDGE WITH RHODAMIN B CONTAMINATION OF SHRIMP PASTE IN THE GEDONG KUNING MARKET YOGYAKARTA

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Abstract

Background. Food additive is a substance that is added to food to change the nature and shape of food. The use of food additives is set by food safety laws. However, the misuse of food additives often found in the field. One cause of irregularities in the use of food additives is less knowledge of food additives. Some Research was discovered contamination dangerous food additives in various types of food products, like crackers, snack foods, and instant seasoning. Based on observations made researchers found the characteristics of shrimp paste in the Gedong Kuning market Yogyakarta has a striking reddish-brown color. Striking colors found in the paste is a screening to determine initial Rhodamine B contamination in shrimp paste. The purpose of this study to determine the relationship Level of trader's Knowledge with Rhodamine B contamination in shrimp paste in the Gedong Kuning market Yogyakarta.

Methods. The research was in cross sectional study with 35 person traders of shrimp paste. Sampling technical with total population traders of shrimp paste in Gedong Kuning Market, Yogyakarta. Level of knowledge was measured with kuesioner, and Rhodamin B measured with Thin Layer Chromatography (KLT).

Result. The result showed 68.6 % shrimp paste contain Rhodamin B. Level of trader's knowledge showed 48.8% was not good knowledge. Statistic examination with chi square showed there is correlation about level of traders knowledge with rhodamin B contamination in shrimp paste in Gedong Kuning market Yogyakarta.

Conclusion. There is correlation about level of trader's knowledge with rhodamin B contamination in shrimp paste in Gedong Kuning Market Yogyakarta.

Key words : Rhodamin B, chromatography, food addition

1. Introduction

Food Safety is currently a hot discussion. In the era of globalization where the food industry is growing rapidly, food safety becomes a very important issue to be considered. Some surveys indicate the discovery of hazardous materials in food, although Indonesia has food legislation. People still do not get enough food security guaranteed quality due to the lack of consumer understanding of the nature, and how to determine the food so that he became healthy individuals, productive, creative and innovative.¹

The test results of 273 samples were performed by BPPOM Yogyakarta, found 125 samples were ineligible based on the type of samples studied were out, wet noodles, shrimp paste, sauce / chili, syrup, crackers and meatballs. Based on the results of monitoring food list 9 of 40 or 22.5% were examined by BPPOM paste Uncategorized not qualify because it contains Rhodamine B. Rhodamine B is very harmful to the body so that no matter how small the amount, the

presence of these compounds in foods is strictly prohibited.²

Paste is the main ingredient sauce or flavoring foods are black or reddish and characteristic odor. Paste is one of processed fishery products as fish or shrimp for utilization of low quality. Condiment much sought after by the housewives and consumed in the form of processed chili.³

Research in Bringharjo market found 2 of 9 brand-colored paste that is sold in the market is positive containing dye Rhodamine B. Results of interviews about the existence paste containing hazardous materials Rhodamine B, 4 merchants do not know that they sell paste containing hazardous materials Rhodamine B, do not know what it is Rhodamine B, do not know the use of dye Rhodamine B and do not know the characteristics of paste containing rhodamine B.⁴

Astuti (2010) in his study mentions a significant relationship between the level of knowledge producers to use the dye Rhodamine B and there is also a significant relationship between the attitude of manufacturers with the use of

Rhodamine B dye in the paste.⁵

Preliminary observations made on February 27, 2014 at Gedung Kuning Market. The results of the observation of basic food vendors selling encountered paste blackish brown colored, reddish brown and black colored. Paste is sold in the Gedung Kuning market has the potential to contain a rhodamine B which are harmful to health that need further investigation regarding the existence of the dye rhodamine B. The public is less aware that Rhodamine B is used in food can cause health problems their bodies.

Based on the above, the authors are interested in studying the relationship Knowledge and Attitudes about the existence of Rhodamine B Merchant on shrimp.

2. Methods

The design used in this study were divided cross-sectional in which the independent variables and the dependent variable under study is taken and measured at the same time and only observed once.⁶ The method used in the survey is by interview using a questionnaire which is equipped with a laboratory test. The sample in this research are all trader's paste in gedung kuning market Yogyakarta. Examination of Rhodamine B was analyzed using thin layer chromatography. Instruments used in determining the level of knowledge that is the questionnaire that has been tested for validity and reliability.

3. Research Results

3.1. Description Location Research

Gedung kuning market is one of the traditional market is located on the road Kusumanegara, Umbulharjo, Yogyakarta, including the area of technical implementation unit (UPT) Kotagede.

Gedung kuning market has a building area of 58,500 square meters with a number of vendors in the component (in los) 38 people, 83 people (outside of los) so that the total number of merchants as much as 121 people.

3.2. Characteristics of Respondents

Based on Table 1 it can be seen that of the 35 respondents surveyed, female. Most traders in Gedung Kuning market is female.

Table 1. Characteristics of Respondents by Gender in Gedung Kuning market Yogyakarta 2014

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Women | 35 | 100 |
| Man | 0 | 0 |
| Jumlah | 35 | 100 |

Table 2. Characteristics of Respondents by Age in Gedung Kuning Market Yogyakarta 2014

| Age | Frequency | Percentage (%) |
|-------|-----------|----------------|
| 21-30 | 1 | 3 |
| 31-40 | 5 | 14 |
| 41-50 | 15 | 43 |
| >50 | 14 | 40 |
| Sum | 35 | 100 |

Based on Table 2 it can be seen that most of the traders are in the age group 41-50 years (43%)

Table 3. Identification of rhodamine B in paste in Gedung Kuning Market Yogyakarta 2014

| Rhodamine B | Frequency | Percentage (%) |
|-------------|-----------|----------------|
| Positif | 24 | 68,6 |
| Negatif | 11 | 31,4 |
| Sum | 35 | 100 |

Based on Table 3 we can see about paste of shrimp that containing Rhodamine B is 24 (68.6%). It is very dangerous because Rhodamine B is unsafe for human consumption.

Table 4. Level Of Knowledge trader of paste of shrimp in Gedung Kuning Market Yogyakarta 2014

| Rhodamine B | Frequency | Percentage (%) |
|-------------|-----------|----------------|
| Not Good | 17 | 48,6 |
| Good | 18 | 51,4 |
| Sum | 35 | 100 |

Table 5. Level of knowledge Relations About Rhodamine B with the existence of Rhodamine B In Terasi sold in Gedung Kuning Market in Yogyakarta in 2014.

| Level of Knowledge | Rhodamin B | | | | Sum | | RP (95% CI) | P Value |
|--------------------|------------|------|---------|------|-----|------|----------------------|---------|
| | Positif | | Negatif | | | | | |
| | N | % | N | % | N | % | | |
| Not Good | 8 | 22,9 | 9 | 25,7 | 17 | 48,6 | 4,765 (1,197-18,965) | 0,021 |
| Good | 16 | 45,7 | 2 | 5,7 | 18 | 51,4 | | |
| Sum | 24 | 68,6 | 11 | 31,4 | 35 | 100 | | |

Based on Table 3 it can be seen that there is a correlation between level of knowledge with kontamination Rhodamin B in paste with p Value 0.021. The Prevalence Ratio is 4.765. That means the traders with a bad level of knowledge by 4.765 fold risk selling paste shrimp with contamination Rhodamin B.

4. Discussion

This research show there is a correlation between level of knowledge with kontamination Rhodamin B in paste with p Value 0.021. This study found that respondents are less of knowledge to sell of positive paste containing rhodamin B. They do not know the characteristics of paste containing rhodamine B also did not know the dangerous of rhodamine B. This study also showed that as many as 68.6% positive paste Rhodamine B. his is particularly worrying because the impact of rhodamine B is not good for health. Rhodamine B is a dye that is very dangerous. if consumed in the long run will lead to the risk of cancer and liver damage.⁷

These findings are consistent with the theory if knowledge related to practice.⁸ The use of food additives is very difficult to avoid, given the material is very useful in food processing. However, the public should have knowledge about food additives before using them.⁹ The number of food additives in the form of a more pure and commercially available at relatively low prices will encourage the increased use of food additives which means increasing the fuel consumption for each individual.¹⁰

Based on this research that has been done said most traders paste does not know about the harmful dye. So related their practice to sell paste that contamination of Rhodamine B. This research is in line with research Kurniawati, which says that there is a correlation between the level of knowledge of traders with the use of Rhodamine B on ground red chili in the traditional markets lampung city.¹¹ The difference with this study is on the object under study. In Kurniawati study investigated is the use of rhodamine B on ground red chillies. This study is also in line with murtiyanti research, which says that there is a correlation between knowledge and practice the use of dyes.¹² Research djarismawati et al also suggested a correlation between knowledge and practice the use of Rhodamine B in the dry red chillies in traditional markets in Jakarta.¹³

In this research can know the motivations merchants selling condiment containing

Rhodamine B partly because the price of the product. The use of Rhodamine B can reduce the selling price of shrimp paste and add shrimp to be a better appearance.

The results of this study contradict with pudjiastuti. She Found there are not relation about level of knowledge with additive food using.¹⁴ The difference with this research that the subject under study. Pujiati research using research subjects cracker manufacturer.

5. Conclusion

There is correlation about level of trader's knowledge with rhodamin B contamination in shrimp paste in Gedong Kuning Market Yogyakarta.

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