PENGARUH LOGO HALAL DAN KESADARAN HALAL TERHADAP PREFERENSI KONSUMEN PRODUK *NUGGET* AYAM DI CIAWI BOGOR

THE INFLUENCE OF HALAL LOGO AND HALAL AWARENESS ON CONSUMER PREFERENCES CHICKEN NUGGET PRODUCTS IN CIAWI BOGOR

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ABSTRACT

Halal has become a lifestyle for Muslim consumers in the world. As the Muslim population grows, the awareness to consume halal food is also increasing. This study aims to determine how the effect of the halal logo and halal awareness on consumer preferences for chicken nuggets in Ciawi Bogor. Data collection was carried out using a questionnaire questionnaire which was filled in by 100 respondents and selected through purposive sampling method. Data analysis used quantitative descriptive analysis and multiple linear analysis. All statistical data analyzes were carried out using SPSS 22. Then the study was continued with qualitative testing of borax and formalin on 12 samples of chicken nuggets sold around the Ciawi area, Bogor. The results showed that the partial effect test of the halal logo variable and the halal awareness variable had a positive effect on the consumer preference variable. Simultaneous testing concluded that the effect of the halal logo and halal awareness on consumer preferences was proven to have a significant effect on consumer preferences. The effect given is 47%, the results are obtained from R square indigo. Based on the results of the borax and formalin content tests, there were no nuggets that contained borax and formalin in the 12 samples studied.

Keywords: Halal Logo, Halal Awareness, Consumer Preference, Chicken Nugget.

ABSTRAK

Halal telah menjadi gaya hidup konsumen muslim di dunia. Seiring meningkatnya populasi muslim, kesadaran untuk mengonsumsi makanan halal juga meningkat. Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh logo halal dan kesadaran halal terhadap preferensi konsumen pada produk nugget ayam di Ciawi, Bogor. Pengumpulan data dilakukan menggunakan angket kuesioner yang diisi oleh 100 responden dan dipilih melalui metode *purposive sampling*. Analisis data menggunakan analisis deskriptif kuantitatif dan analisis linear berganda. Seluruh analisis data statistika dilakukan menggunakan SPSS 22. Kemudian, penelitian dilanjutkan dengan menguji boraks dan formalin secara kualitatif untuk 12 sampel nugget ayam yang dijual di sekitar wilayah Ciawi, Bogor. Hasil penelitian menunjukan pada uji pengaruh parsial variabel logo halal dan variabel kesadaran halal berpengaruh positif terhadap variabel preferensi konsumen. Uji simultan menyimpulkan pengaruh logo halal dan kesadaran halal terhadap preferensi konsumen secara positif terbukti signifikan mempengaruhi preferensi konsumen. Pengaruh yang diberikan yaitu sebesar 47%, hasil tersebut diperoleh dari nila R *square.* Berdasarkan hasil uji kandungan boraks dan formalin, dari 12 sampel yang telah diteliti menunjukan bahwa tidak ada nugget yang mengandung Boraks dan formalin.

Kata kunci: Logo halal, Kesadaran Halal, Preferensi Konsumen, Nugget Ayam.

INTRODUCTION

The influence of the globalization era has had a very big impact on the circulation and availability of food products. Various kinds of processed food products are freely marketed in the community. The demand for halal food products is increasing along with the increasing Muslim population in the world. For Muslims themselves, consuming halal food is an obligation to fulfill the commands of Allah SWT, where it is written in Al-Qurán surah Al-Baqarah verse 168 which means "O people eat halal and good food found on earth And do not follow the steps of Satan, what a real enemy Satan is to you. "So eating halal and good food is the duty of Muslims.

Given the importance of halal food for Muslims as the majority population in Indonesia. The Majelis Ulama Indonesia (MUI) in 1989 established the Lembaga Pengkajian Pangan Obat dan Makanan (LPPOM). The tasks assigned by the MUI to the LPPOM include conducting investigations, classifications and assessments of food, medicines and cosmetics circulating in the community, reviewing and compiling concepts relating to regulations regarding the operation of restaurants, hotels, dishes in shipping or flight of various types of materials for food processing, medicine and cosmetics used by the community, especially Muslims to be guaranteed halal.

Halal legalization in the form of Halal Certificate for a packaged food product is not only a guarantee of consumer peace, but also a guarantee that the product will be increasingly needed by consumers. Community efforts to get halal packaged food, require protection from the government. The government issued Law Number 18 of 2012, article 97 states that every person who produces food in the country for trade must put a label on the package including a halal label or halal mark for those required. And Law No. 8/1999 regulates consumer rights. Article 4 letter a states the consumer's right to comfort, security and safety in consuming goods and / or services. In connection with Article 4 letter a, Muslim consumers are entitled to products that provide a safe, comfortable and peaceful feeling.

BPOM is an authorized institution in conducting audits on product safety in terms of health, while LPPOM MUI is an institution tasked with researching, reviewing, analyzing and deciding whether products that are good food and medicines are safe for consumption both in terms of health and in terms of Islam which is halal or permissible and good for consumption for Muslims in Indonesia. In addition, providing recommendations, formulating provisions and guidance to the community (Anosa, 2018).

Furthermore, the Majelis Ulama Indonesia has issued Haram Fatwa Number 43 of 2012 concerning Misuse of Formalin and Other Hazardous Materials, emphasizing that "the use of formaldehyde, borax and other hazardous substances is prohibited from being added to food ingredients". Safe and healthy food packaging products are foods that can meet human needs from the aspect of inner health and comfort. Indonesia as a country with a Muslim majority population, the government is responsible for maintaining halal food products.

Processed food categories that are vulnerable in terms of halality and vulnerable to using hazardous food additives (BTP) are processed chicken products such as nuggets. Nugget is a processed chicken ready-to-eat product that has been developed and is in great demand by the public at large. The high demand from the public in the consumption of processed chicken meat products makes various kinds of nugget brands widely sold in traditional markets and supermarkets. But not all nuggets in the package have been labeled halal and guaranteed safety. On the other hand the community is still not selective in choosing to buy processed chicken products such as the people of Ciawi District, Bogor Regency.

Bogor Regency and City are densely populated areas with the largest number of Muslims in West Java, reaching 96.67% of the total population (BPS, 2010). The large number of Muslim residents in the city of Bogor is expected to increase the awareness of the population to know the importance of consuming halal food so that it can increase the interest in buying halal food. Ciawi is one of the sub-districts in Bogor regency that has a fairly dense population and the majority are Muslims, who should have realized the importance of consuming halal processed chicken products that are safe for health. Therefore this research needs to be done to determine the relationship of the halal logo with community preferences and test the content of borax and formalin in chicken nugget products in Ciawi Bogor.

MATERIAL AND METHODS

Material and Tools

The materials used include chicken nugget products of various brands, borax test kits (Lab Test), formalin test kits (Fast Test), sterile aquades, borax solutions and formalin. The tools used include questionnaires, analytical scales, spatulas, test tubes, mortar and pestle, dropper pipettes, mohr pipettes, knives, basins, and tissues.

Place and Time of Research

Research was carried out in the food laboratory, Food Technology and Nutrition Technology Study Program, Faculty of Halal Food Science, Djuanda University, Bogor, and in Ciawi District, Bogor Regency, in April-June 2019.

Methode

This research is divided into 2 parts. The first stage is the survey method carried out by distributing questionnaires (Figure 1). The second step is testing the content of borax and formalin (Figures 2 and 3).

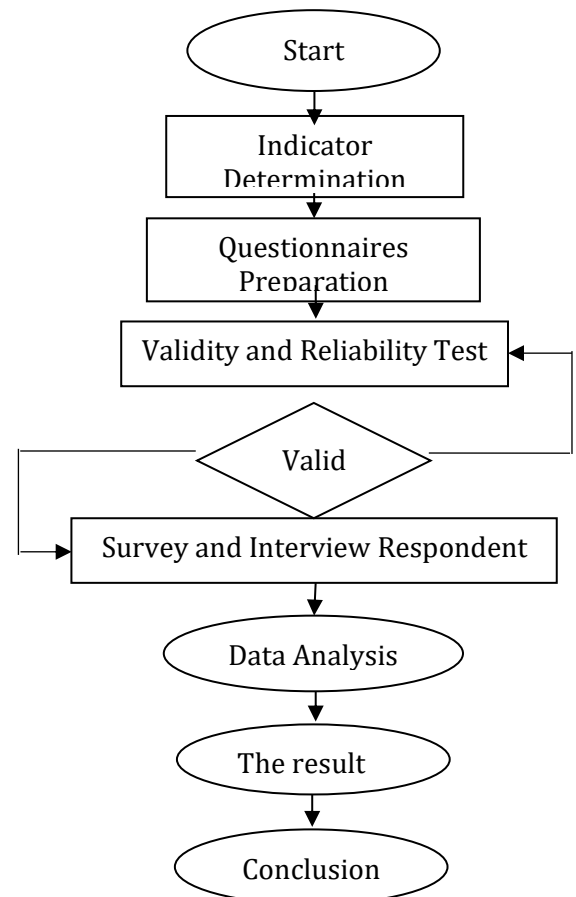Figure 1. Stage 1 researh flow chart
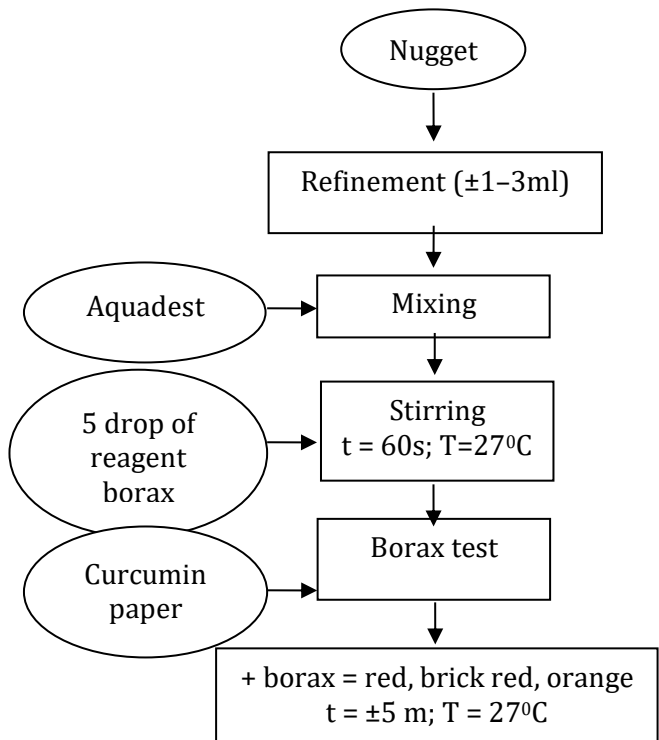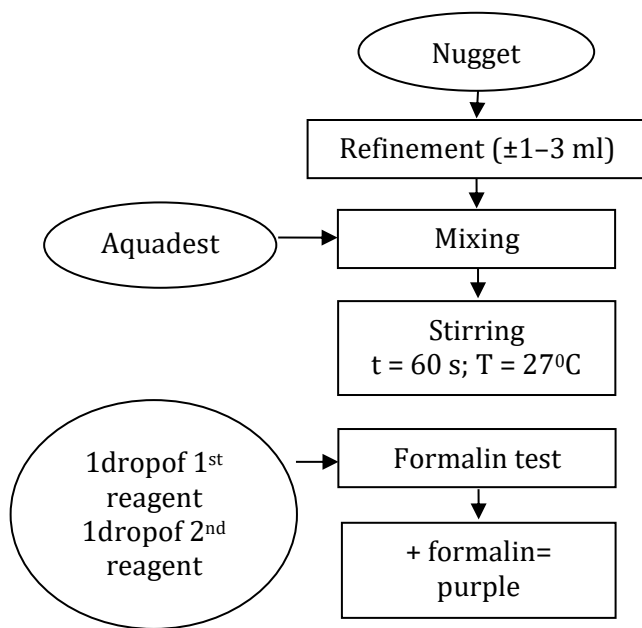

Figure 2. Borax test Flow Chart

Figure 3. Formalin test flow chart

Population And Sample

The population of Ciawi, Bogor is 117,427 (BPS, 2017). While the samples were 100 respondents by using purposive sampling technique. The criteria used in this study are the population of Ciawi, muslim, and aged over 18 years.

HYPOTHESIS

H1: Halal logo (X1) has a positive effect on consumer preferences (Y).
H2: Halal awareness (X2) has a positive effect on consumer preferences (Y).
H3: Halal logo (X1) and halal awareness (X2) simultaneously have a positive effect on consumer preferences (Y).

Data Collection Technique

Data collection techniques in this study using a questionnaire / questionnaire in the form of questions that have been prepared relating to the three variables, namely the halal logo, halal awareness, and consumer preferences. The scale used in this study is a Likert scale with a range of scores 1-5 as shown in Table 1.

Table 1. Likert scale questionnaire answer score.

Statement	Score
Strongly agree	5
agree	4
Neutral	3
disagree	2
Strongly disagree	1

Source: Sugiyono (2008)

Research Instruments

To make it easier to conduct research, researchers set indicators of problems in setting statements on the questionnaire. Problem indicators for each variable can be seen in Table 2.

Table 2. Problem Indicators for Each Variable.

Variable	Indicator
Halal logo (X_1)	1. Knowladge of the halal logo 2. Trust 3. Rating of the halal logo
Halal awareness (X_2)	1. Concern about consuming halal food 2. Understanding of halal food 3. Realizing halal food is mandatory
Consumer preferences (Y)	1. Introduction to the problem 2. Search for information 3. Alternative evaluation 4. Consumption decisions 5. Post-consuming behavior

Data Analysis Technique

Descriptive Analysis

The tendency of each variable is identified using the mean (M) and standard deviation (SD) of all objects in each variable. From the mean and standard deviation, identification is grouped in the categories as in Table 3 (Sutrisno, 2002).

Table 3. Variable score categorization guidelines.

No.	Categori	Score
1	high	$X \geq M + SD$
2	medium	$M - SD \leq X < M + SD$
3	low	$X < M - SD$

information:
M (Mean Ideal) = ½ (the highhest + the lowest score)

SD (Ideal Standard DeviationIdeal) = 1/6 (the highest –the lowest score)
X = score achieved by respondents

Classic assumption test

Normality test to test whether in the regression model, all variables have a normal distribution. Criteria can be stated normally is if the value of sig> 0.05 (Imam, 2009).

Hypothesis test

The data analysis technique used is multiple linear regression analysis. Multiple linear regression is used if the independent variable consists of two or more (Sugiyono, 2014). The multiple regression formula is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Information :

Y	: Consumer preferences
α	: Constant
β_1, β_2	: Regression coefficient
X_1	: Halal logo
X_2	: Halal awareness
ε	: Residual

T test is used to determine the effect of each independent variable on the dependent variable. If the sig t value $<\alpha$ 0.05 then there is an influence (partial)

F test is used to determine whether there is an effect of one or more independent variables on the dependent variable. If the sig value F $<\alpha$ 0.05 then there is an influence (simultaneous).

The coefficient of determination to measure how far the model's ability to explain the variation of the dependent variable. If R^2 = 100% means the independent variable perfectly influences the dependent variable (Sarwono, 2006).

THE RESULT AND DISCUSSION

Data Analysis

Descriptive Analysis

Halal logo

The categorization for the halal logo variable is presented in Table 4.

Table 4. Halal Logo Variable Categorization

category	Score interval	Frequency	Percentage
High	X≥34,643	15	15%
Medium	29,897>X≥34,643	74	74%
Low	29,897>X	11	11%
Total		100	100%

From table 4 it can be seen that of the 100 respondents giving ratings of halal logos in the medium category as many as 74 people (74%). So it can be concluded that the majority of respondents simply use the halal logo to choose to consume halal food.

Halal awareness

Categorization for halal awareness variables is presented in Table 5.

Table 5. Categorization of Halal Awareness Variables.

Kategori	Interval Skor	Frekuensi	Presentase
High	X≥36,271	14	14%
Medium	29,549>X≥36,271	69	69%
Low	29,549>X	17	17%
Total		100	100%

From table 5 it can be seen that 69 people (69%) gave an assessment of halal awareness in the medium category. So it can be concluded that the majority of respondents simply use halal awareness to choose to consume halal food.

Consumer preferences

Categorization for consumer preferences variable served on Table 6.

Table 6. Kategorisasi Variabel preferensi Konsumen

category	Score interval	Frequency	Percentage
High	X≥57,045	12	12%
Medium	48,755>X≥57,045	78	78%
Low	48,755 >X	10	10%
Total		100	100%

Table 6 show that from 100 respondents who provide an assessment of consumer preferences, as much 78 people (78%)in medium category. The conclussion is most of the respondents have enough consumer preferences and consume halal food.

Classic asumption test

Classic asumption test carried out in this research was normality test (Table 7).

Table 7. the result of normality test

Variable	N	Asymp. Sig.	information
Unstandardized Residual	100	0,200	Normal

From table 7 it can be seen that the value of Asymp. Sig. the unstandarized residual variable of the regression results stated 0.200> 0.05, it can be concluded that the residual value is normally distributed.

Hypothesis Test

Multiple linear regression analysis aims to examine how the influence of each of the independent variables of the halal logo (X1) and halal awareness (X2) on the dependent variable of consumer preferences (Y) in this study (Table 8).

Tabel 8. Results of Multiple Regression Analysis

Model	B (Koefisien Regresi)
Constant	17,043
Halal logo (X_1)	0,594
Halal awareness (X_2)	0,507

From the results of the regression analysis, it can be seen that the multiple regression equation is as follows:

$$\hat{Y} = 17{,}043 + 0{,}594\ X_1 + 0{,}507\ X_2$$

T test

Based on the results of the t test in table 10, the t value is greater than t table and the significance value is less than 0.05 (p <0.05), it can be concluded that the independent variable partially has a significant effect on the dependent variable and the H1 and H2 hypotheses declared accepted. T test results for each independent variable are shown in Table 9.

Tabel 9. The result of T test

Variable	t_{tabel}	t_{hitung}	t Sig.
Halal logo (X_1)	2,371	3,445	0,001
Halal awareness (X_2)	2,371	4,168	0,000

F test

Based on the f test results in table 10 obtained a significance value of 0,000 less than 0.05 (p <0.05). Then the hypothesis H3 is accepted (Table 10).

Table 10. F test results

Model	F table	F arithmetic	Sig F
Regression	3,09	43,042	0,000

The result of hypothesis test served on table 11.

Table 11. Summary of result hypothesis test

Hypothesis	Result
H1 : Halal logo (X1) has a positive effect on consumer preferences (Y).	Supported
H2 : Halal awareness (X2) has a positive effect on consumer preferences (Y).	Supported
H3 : Halal logo (X1) and halal awareness (X2) simultaneously have a positive effect on consumer preferences (Y).	Supported

Coefficient Determination (R^2)

In the ANOVA R^2 table calculation obtained is 0.47. This explains that the independent variables are able to explain the dependent variable by 47%.

Influence of halal logo on consumer preferences

The halal logo variable is declared significant with a significance value of 0.001. This means that the inclusion of halal logos on chicken nuggets products has an important role in people's preferences to decide to consume these products. Regression coefficient of 0.594 shows that the halal logo variable has a positive effect on people's preferences.

In this study the halal logo has a positive effect on people's preferences in making purchasing decisions. This is in accordance with the research of Bulan (2016) which states that the halal label has a positive and significant influence on sausage purchase decisions in Kualasimpang, Aceh Tamiang

Regency by 33.5%. Whereas in the research of Alfian et al. (2017) found that halal labels became the third consideration of purchasing decisions in Medan after brand and price considerations. This in his research concluded that Muslim consumers in Medan when they did not fully pay attention to the halal logo both at the outlet of the store and product packaging. However, this study contrasts with research Khoerunnisa et al. (2016) which shows that the halal logo has no influence on purchasing decisions. In his research stated that the awareness of halal food brands in the city of Malang is still low, so that consumer attention to the halal logo is also still low.

The positive and significant influence of the halal logo indicates that the inclusion of the halal logo on product packaging can increase consumer confidence in the product for consumption. Thus, to increase consumer preferences in buying chicken nuggets products, it is necessary to include the halal logo. This means that products that do not yet have a halal logo can register a halal certification first.

Influence of halal awreness on consumer preferences

Halal awareness variable is declared significant with a significance value of 0,000. This means that the halal awareness of each consumer has an important role in preferences. Regression coefficient of 0.251 indicates that the halal awareness variable has a positive effect on consumer preferences.

In this study, consumer's halal awareness has a positive effect on people's preferences in purchasing decision making. This is consistent with Nofianti's research (2019) that halal awareness has a positive and significant effect on buying interest. The positive influence of halal awareness also supports Mutmainah's research (2018) which states that Muslim 's halal awareness has increased in purchasing decisions. Awareness raising is in line with data on the increase in the results of certification of halal products conducted by LPPOM MUI by 300 percent from 2011 to 2018.

Influence of halal logo and halal awareness on consumer preferences

From the test results obtained the calculated F value of 43.042 with a significance of 0,000 with a significance value of less than 0.05 (p <0.05), then this means that the halal logo and halal awareness jointly affect consumer preferences. Seen in table 7, the value of the coefficient of determination (adjusted R square) is 0.47. This explains that the independent variables are able to explain the dependent variable by 47%. The remaining 53% explains other variables not examined in this study.

The result of borax and formalin test

The study was conducted because borax and formalin are often used as food additives, even though borax and formalin are not permitted for use in foods that are adjusted to the Minister of Health Regulation No. 033 of 2012 concerning materials that are prohibited from being used as Food Additives (BTP). The sample consisted of 12 nugget products with different brands taken from several traders or kiosks around the Ciawi District area.

Borax Test

The effect of borax on food can improve the structure and texture of food. For example, if borax is given to meatballs it will make the meatballs very chewy and durable, but food that has been given borax with no or still natural, difficult to distinguish if only with the five senses, but must be carried out special tests of borax in the Laboratory (Ministry of Health, 1993) .

In this study borax analysis was carried out using the Borax Test Kit with the Lab Test brand consisting of reagents and curcumin paper. The principle of borax rapid testing is the formation of red rososianin compounds from boron and curcumin (BPOM, 2015). Samples are declared to contain borax if the curcumin

paper changes color to orange, red or brick red with a minimum detection of 2 ppm. Following are the results of borax samples which were tested using a borax test kit and produced a brick red color used as standard (Figure 4).

Figure 4. Borax Test Standards

The results of borax content tests on chicken nuggets can be seen in Table 12.

Table 12. The result of borax test in chicken nugget product.

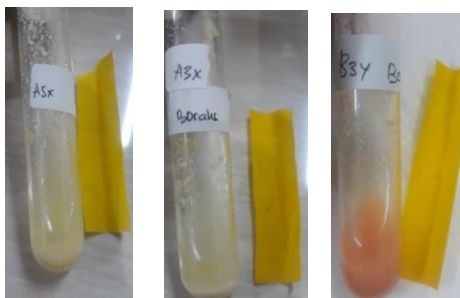| sampel code	Result of test	
	repeat 1	repeat 2
A1	Negative	Negative
A2	Negative	Negative
A3	Negative	Negative
A4	Negative	Negative
A5	Negative	Negative
B1	Negative	Negative
B2	Negative	Negative
B3	Negative	Negative
B4	Negative	Negative
B5	Negative	Negative
B6	Negative	Negative
B7	Negative	Negative

Figure 5. The result of borax test

Table 13 shows that chicken nugget samples with different brands in the Ciawi region were not detected to contain borax. In the observations (Figure 5) the yellow curcumin paper did not change color to red or brick red, which means the test of the borax content was negative. This can be caused by the producers being aware of the dangers of borax. According to Widyaningsih (2006),

Frequent consumption of maximal foods will cause brain, liver, fat, and kidney disorders. In large quantities, borax can cause anuria (formation of urine), coma, causing depression, cyanosis, drop in blood pressure, kidney damage, fainting and even death.

Formalin test

Formalin test is used in the Formalin Test Kit (Fast Test) which consists of reagent solution 1 and reagent 2. Basically, the working principle of formalin test kit is the reaction of the formation of purple complex compounds from the reaction between formaldehyde and 4-amino-3-hydrazino-5mercapto-1,2,4-Triazole. The sample solution containing formalin will turn purple after adding the Formalin Test Kit. Formalin will be detected with a minimum content of 0.5 ppm. The following is a sample of formaldehyde solution that was tested using formalin test kits (Figure 7).
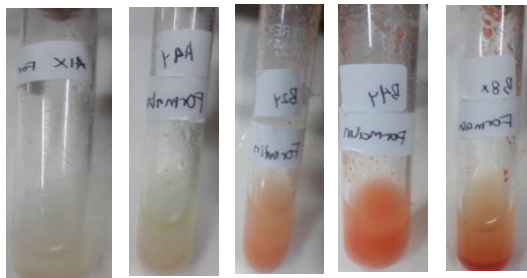
Figure7. Formalin Test Standards

The results of the formaldehyde test on chicken nugget samples are in Table 13.

Table 13. The result of formalin test on chicken nugget product.

Sample Code	Test Results	
	Repetition 1	Repetition 2
A1	Negative	Negative
A2	Negative	Negative
A3	Negative	Negative
A4	Negative	Negative
A5	Negative	Negative
B1	Negative	Negative
B2	Negative	Negative
B3	Negative	Negative
B4	Negative	Negative
B5	Negative	Negative
B6	Negative	Negative
B7	Negative	Negative

Figure 6. The result of fornalin test

In table 14 the results of observations on the test formalin content in chicken nugget samples have negative results. Of all the samples tested there were no dangerous substances detected, namely formaldehyde. Side effects from the use of formaldehyde are not immediately visible but only seen cumulatively, unless someone experiences formalin poisoning with high doses. Formalin poisoning can cause stomach irritation and allergies. Formalin is also a carcinogen (causing cancer) and mutagen (causing changes in cell function). In very high levels of formalin can cause circulatory failure which leads to death. (Saparinto, 2006).

CONCLUSSION

Based on the results of the study, it can be concluded that partially the halal logo has a significant influence on consumer preferences. Halal awareness also has a significant positive effect on consumer preferences. Halal logo variables and halal awareness simultaneously have a positive effect on consumer preference variables. Halal logo and halal awareness affect consumer preferences by 47%, and the remaining 53% is influenced by other variables not examined in this study. Whereas in the research test of borax and formalin content, all nugget samples were declared free of borax and formalin.

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