



## Acceptance of Kencur Rice Mochi Filled with Asam Turmeric Ice Cream

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### ABSTRACTS

Mochi is a cake that is liked by many people. In Japan, mochi is included in the Wagashi or also known as sweet dishes that have been consumed since ancient times and are made in a traditional way for the traditional Mochitsuki celebration or known as New Year's celebration. Mochi cake can be modified by using other ingredients or substitutions to increase its functional value. The liquid used in making mochi can be replaced with milk, coconut milk, or other liquids. Rice kencur is a traditional drink that is popular among the people. This traditional drink can be used as an ingredient for liquid in making mochi products. This is included in the development of mochi products, namely Kencur Rice Mochi. The general aim of this research is to determine the acceptability of the kencur rice mochi product filled with sour turmeric ice cream. The method that will be used in this research is an experimental method which is included in the quantitative research method. The research that will be carried out by the author is considered a true experiment. The acceptability or level of liking for this kencur rice mochi product filled with sour turmeric ice cream is very favorable in terms of appearance, color, taste, texture and overall impression because it can be seen from the percentage of acceptability produced, which is >85%. Meanwhile, in terms of aroma, the acceptability percentage value is 83%, which means that people like the product. It can be concluded that kencur rice mochi filled with sour turmeric ice cream is accepted among the public as an innovative product.

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## 1. INTRODUCTION

Mochi is a cake that originates from East Asia and is liked by many groups. Countries that are popular with mochi are China and Japan. In Japan, mochi is included in Wagashi or sweet dishes that have been consumed for a long time and are made in a traditional way. Mochi is also a special dish made for the traditional Mochitsuki celebration or known as the Japanese New Year celebration and is usually a side dish at tea time (New World Encyclopedia, 2020).

Mochi cake can be modified by using other ingredients or substituting for increasing its functional value (Lungga, et al, 2016). The liquid used in making mochi can be replaced with milk, coconut milk, or other liquids (Binus University, 2019).

Indonesia has traditional drinks that are popular among the people, these traditional drinks are herbal medicine. It is recorded on the Jember Portal page that in 2020 the herbal medicine that is popular among the community is in first place, namely Jamu Kunyit Asam and then galangal rice. This traditional drink can be used as an ingredient for liquid in making mochi products. This is included in the development of mochi products, namely Kencur Rice Mochi.

Mochi is made from glutinous rice flour and has various types, namely mochi daifuku or known as red bean mochi, ichigo daifuku or red beans and whole strawberries, kusa mochi or green mochi, and ice cream mochi. Ice cream is a frozen food product made through a combination of freezing and agitation processes using ingredients consisting of milk and milk products, sweeteners, stabilizers, emulsifiers and flavor enhancers (Harris, 2011).

Researchers will create an innovative mochi ice cream product using a typical Indonesian drink with mochi made from kencur rice herbs and filled with ice cream made from tamarind turmeric herbs.

Based on the things above, it is important to research the acceptability of the kencur rice mochi product filled with sour turmeric ice cream in terms of appearance, aroma, taste, color, texture and overall impression of the kencur rice mochi product filled with sour turmeric ice cream.

## 2. METHODS

The method that will be used in this research is an experimental method which is included in the quantitative research method. The research that will be carried out by the author is considered a true experiment. Writer Also used the QDA (Quantitative Descriptive Analysis) test to determine the product innovation formula for kencur rice mochi filled with sour turmeric ice cream and a liking test for product acceptability. The author will conduct an acceptability test on 30 untrained panelists or general consumers using questionnaires or questionnaires.

Participants in this research were 3 expert panelists for the Quantitative test Descriptive Analysis (QDA), and 30 untrained panelists, namely the general public who like herbal medicine, nasi kencur and sour turmeric.

The instruments used for the QDA test are descriptive test sheets and acceptability tests using a questionnaire with a hedonic scale. The questionnaire consists of 5 hedonic scales, namely:

Score 1 = really don't like

Score 2 = don't like

Score 3 = quite like

Score 4 = like

Score 5 = really like it.

The research period starts from June 2022 to August 2022. The place for experimental trials and acceptability tests is carried out at the researcher's home.

The ingredients used to make kencur rice mochi filled with sour turmeric ice cream are Japanese glutinous rice flour, vanilla powder, salt, kencur rice herbs, liquid milk, cream, sour turmeric herbs, egg yolks, granulated sugar, cornstarch and powdered milk.

Meanwhile, the tools needed are scales, bowls, measuring cups, pans, stoves, rubber spatulas, strainers, spoons, freezers, blenders and plates.

Research procedures are below to clarify in detail the steps or stages that will be carried out in this research.

1. Analyzing recipes for mochi, kencur rice herbal medicine, and sour turmeric ice cream.
2. Carry out starting trials recipe.
3. Carrying out QDA tests on starting recipe.
4. Carrying out trials on product development for kencur rice mochi filled with sour turmeric ice cream.
5. Carrying out QDA tests on kencur rice mochi products filled with sour turmeric ice cream.
6. Assessing the acceptability of kencur rice mochi filled with sour turmeric ice cream.

### **3. FINDING AND DISCUSSION**

#### **3.1. Product Innovation Results**

##### **3.1.1. Milk Bread Reference Recipe**

The reference recipe used in this experiment went through a recipe analysis process. Researchers collected 10 recipes from various sources and then analyzed them to get a reference recipe that would be used. This reference recipe consists of a mochi recipe, a recipe for galangal rice herbal medicine and a sour turmeric ice cream recipe.

3.1.2. Trials for making kencur rice mochi products filled with sour turmeric ice cream were carried out twice get best formula, here is the best kencur rice mochi formulation:

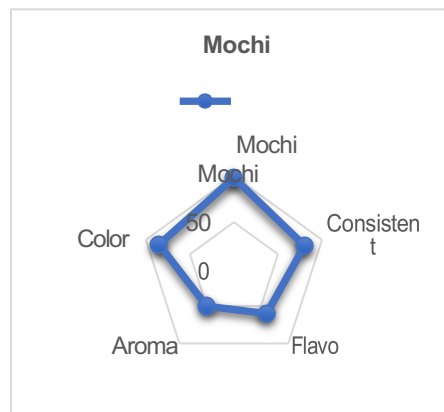
Kencur Rice Mochi Formula:

- 300 g Japanese Glutinous Rice Flour
- 350 ml Jamu Beras Kencur
- 2 g vanilla powder
- 2 g salt

3.1.3. The quality of the kencur rice mochi product filled with sour turmeric ice cream has a dark white color which comes from the kencur rice herbal liquid, has a sweet and slightly warm taste created by the addition of ginger to the kencur rice herbal liquid, has a fairly strong kencur aroma, and has elasticity. just like mochi in general.

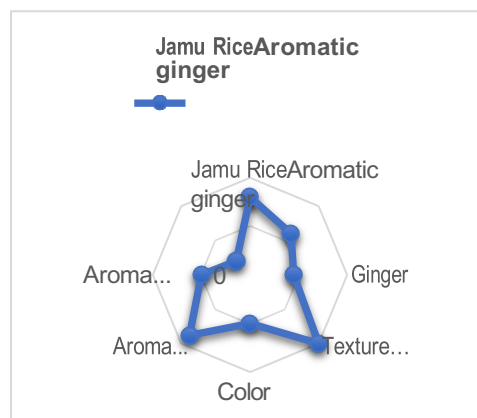
3.1.4. The QDA test was carried out on 3 expert panelists with the data results below

The QDA test was carried out on 3 expert panelists with the data results below the Figure 1.



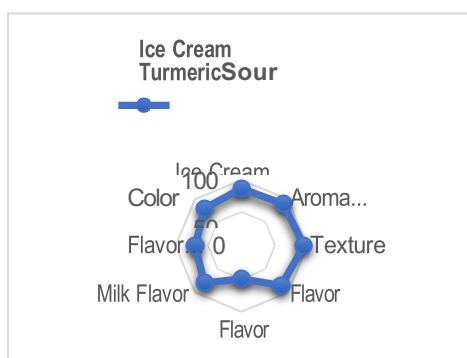
**Figure 1.** The QDA test mochi was carried out on 3 expert panelists

The mochi texture criteria has a value of 100, which means the mochi has a smooth surface texture. In terms of elastic consistency, the starting mochi recipe has a value of 80. The sweetness criterion for this mochi has a value of 60, the vanilla aroma that can be smelled in the mochi product has a value of 50 and the color criterion has a value of 85. The QDA test jamu rice aromatic ginger was carried out on 3 expert panelists can see the Figure 2.



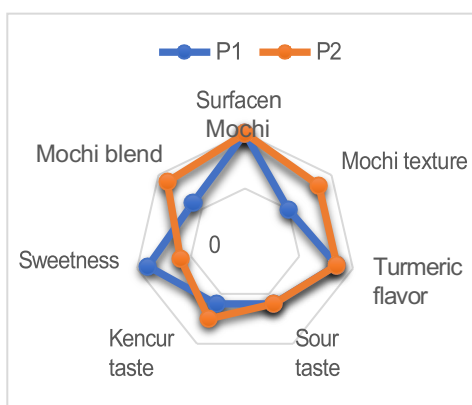
**Figure 2.** The QDA test jamu rice aromatic ginger was carried out on 3 expert panelists

The criteria for the taste of kencur is 80, the taste of rice is 60, the taste of ginger has a value of 45. In the criteria for smoothness of texture, rice has a value 100. The color criteria for this kencur rice herbal medicine has a value of 50, and in terms of aroma starting from the aroma of kencur has a value of 88, the aroma of ginger has a value of 50. For the viscosity of the kencur rice herbal medicine or what can also be called the consistency of the herbal medicine, it has a value of 20 which means that the kencur rice herbal medicine has a liquid consistency. The QDA ice cream turmeric sour was carried out on 3 expert panelists can see the Figure 3.



**Figure 3.** The QDA ice cream turmeric sour was carried out on 3 expert panelists

Data obtained from the QDA test on the starting sour turmeric ice cream recipe has a value for the aroma ranging from the milk aroma in the weak to strong range, namely 87, and the turmeric aroma has a value of 90. This ice cream has a soft texture as seen from the value obtained, namely 95 The taste created by the sour turmeric herbal medicine makes the turmeric taste quite strong, as seen from the score obtained at 85 and the sour taste at 50. The milk taste in this product has a score of 80, which means the milk in the ice cream is very strong. The sweet taste has a value of 70 and the color criteria in the pale to light range has a value of 80. The QDA test from 3 expert panelists was carried out 2 times so that a product could be created that met the criteria can see the Figure 4.



**Figure 4.** The QDA test from 3 expert panelists was carried out 2 times

The QDA test from 3 expert panelists was carried out 2 times so that a product could be created that met the criteria. Both product trials had a value on the mochi surface criteria of 100 which means that kencur rice mochi has a smooth surface. Mochi texture criteria in the range of not chewy to chewy in P1 have a value of 50 while P2 has a value of 85. Criteria for taste in the range of weak to very strong starting from turmeric taste has a value of 85, sour taste has a value of 60, kencur taste in P1 has a value of 60 and P2 has a value of 75, and the sweet taste of product P1 has a value of 90 while product P2 has a value 60. The experimental product kencur rice mochi filled with sour turmeric ice cream in P1 has a combination with a value of 60 while P2 has a value of 90.

The visible difference between products P1 and P2 lies in the chewy texture of the mochi, this is caused by rice which has starch which forms a soft and non-sticky texture when cooked. Rice starch also makes the product not clear after going through the cooking process.

#### 4. ACCEPTANCE TEST

The acceptability test was carried out using a hedonic scale instrument to determine the panelists' level of preference for the kencur rice mochi product filled with sour turmeric ice cream.

The acceptability test was carried out on Wednesday, August 17 2022, at home and was carried out on 30 untrained panelists. The data was processed using Microsoft Excel and the following results were obtained:

##### 4.1. Appearance

Table 1. Appearance of Filled Kencur Rice Mochi *ice cream* Sour Turmeric

	Scale	Amount	Score	%
Apperance	1	0	0	0%
	2	0	0	0%
	3	1	3	2%
	4	16	64	43%
	5	13	65	43%
<b>Total</b>			<b>132</b>	<b>88%</b>

It is known that in the display criteria it has the highest percentage on a scale of 4 (like) and 5 (like very much), both scales have the same percentage, namely 43%, and then on scale 3 (quite like) it has a percentage of 2%, while for the 1 (strongly dislike) and 2 (dislike) were not selected by the panelists.

##### 4.2. Aroma

Table 1. Aroma of Kencur Rice Mochi Filled with Turmeric Sour ice cream

	Scale	Amount	Score	%
Aroma	1	0	0	0%
	2	0	0	0%
	3	16	18	12%
	4	14	56	37%
	5	10	50	33%
<b>Total</b>			<b>132</b>	<b>83%</b>

The results of product acceptability in terms of aroma criteria have the highest percentage on scale 4 (like) which is 37%, while scale 5 (like very much) has a percentage of 33%, and scale 3 (quite like) by 12%. For scales 1 (very dislike) and 2 (don't like) none of the panelists voted so both have a percentage of 0%.

##### 4.3. Flavor

Table 3. Flavor of Filled Kencur Rice Mochi *ice cream* Sour Turmeric

	Scale	Amount	Score	%
Flavor	1	0	0	0%
	2	0	0	0%
	3	4	12	8%
	4	13	52	35%
	5	13	65	43%
<b>Total</b>			<b>132</b>	<b>86%</b>

The product acceptability of kencur rice mochi products filled with turmeric and sour ice cream in terms of taste criteria has the highest percentage value on a scale of 5 (Very like) which is 43%, for a scale of 4 (like) has a percentage of 35%, and scale 3 (quite like) has a percentage value of 8% while for scale 1 (strongly dislike) and 2 (dislike) which is 0% because it was not chosen by the panelists.

#### 4.4. Color

Table 4. Color of Kencur Rice Mochi Filled with Turmeric Sour ice cream

	Scale	Amount	Score	%
Color	1	0	0	0%
	2	0	0	0%
	3	1	3	2%
	4	13	52	35%
	5	16	80	53%
<b>Total</b>			<b>135</b>	<b>90%</b>

Data on the acceptability of color criteria has the highest percentage at score 5 (like very much), namely 53%, while scale 4 (like) has a percentage of 35%, and for scale 3 (quite like) has a percentage value of 2%, for scale 1 (strongly dislike) and 2 (dislike) none of the panelists voted so both have a percentage of 0%.

#### 4.5. Texture

Table 5. Texture of Kencur Rice Mochi Filled with Turmeric Sour ice cream

	Scale	Amount	Score	%
Texture	1	0	0	0%
	2	0	0	0%
	3	0	0	0%
	4	7	28	19%
	5	23	115	77%
<b>Total</b>			<b>143</b>	<b>95%</b>

The texture criterion has the highest percentage value on scale 5 (like very much), namely 77%, and for scale 4 (like) it has a percentage value of 19%. For scales 1 (very dislike), 2 (don't like), and 3 (quite like) have a value of 0% because there were no panelists who chose that scale.

#### 4.6. Overall Impression

Tabel 5. Overall Impression Mochi Beras Kencur Isi ice cream Kunyi Asam

	Scale	Amount	Score	%
Overall Impression	1	0	0	0%
	2	0	0	0%
	3	1	3	2%
	4	12	48	32%
	5	17	85	57%
<b>Total</b>			<b>136</b>	<b>91%</b>

The overall impression of the kencur rice mochi product filled with sour turmeric ice cream has the highest score on a scale of 5 (like it very much), namely 57%, while scale 4 (like it) has a value of 32% and scale 3 (quite like it) has a value of 2%. scales 1 (very dislike) and 2 (don't like) none of the panelists voted so both have a percentage of 0%.

## 5. CONCLUSIONS

The development of this mochi product was carried out by replacing the liquid ingredients used in making mochi with a traditional Indonesian drink, namely herbal medicine nasi kencur. The starting recipe used as a reference in this experiment was made by collecting 10 recipes from various sources, then analyzing them to find 1 recipe that would be tested to produce a good product for QDA testing on expert panelists. Testing of the kencur rice mochi product was carried out 2 times. P1 produces mochi that is less chewy due to the rice content contained in the kencur rice herbal medicine, in P2 the researchers added 100 ml of kencur rice herbal liquid so that the kencur rice mochi has the right elasticity according to the reference product/starting recipe that has been made. The acceptability or level of liking for this kencur rice mochi product filled with sour turmeric ice cream is very favorable in terms of appearance, color, taste, texture and overall impression because it can be seen from the percentage produced, namely >85%. Meanwhile, in terms of aroma, the percentage value is 83%, which means that people like the product.

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