

Acceptability of loaf bread with *guyabano* leaves powder and its marketability

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ABSTRACT

This study aimed to determine the acceptability of loaf bread with guyabano leaves powder and marketability.

*More specifically, it sought answers to the following questions: 1. How do teenagers, young adults, and adults respondents evaluate the level of acceptability of loaf bread with guyabano leaves powder (*Annona Muricata*) in terms of the following criteria: Appearance, Aroma, Color, Texture, Marketability 2. Are there significant differences in the evaluation of loaf bread with guyabano leaves powder from the three groups of evaluators? 3. What are their comments and suggestions to improve the product?*

The study used the experimental method of research. It involved 90 respondents grouped into three and selected through purposive sampling. The loaf bread with three different proportions of guyabano leaves powder was evaluated using the 9-point Hedonic Rating Scale. The data were personally gathered and statistically treated using the weighted mean, and One-Factor ANOVA.

The salient findings of the study revealed that: 1. respondents rated the loaf bread with three different proportions of 5g, 10g, and 15g as very agreeable. 2. there is no significant difference in their evaluation on the acceptability of loaf bread with guyabano leaves powder and its marketability as regards to criteria. 3. the respondents suggested that: (a) More guyabano leaves be added to improve the loaf bread flavor and aroma. (b) The uniformity of the shape of the loaf bread be improved for better appearance; and (c) The loaf bread be made more spongy or foamy.

Keywords

Good Food, Good Health, Longer Life, Loaf bread, Guyabano Leaves Powder

Introduction

Some people do not know that guyabano leaves can be eaten; hence, the researcher put the leaves in loaf breads. Research reveals that the Guyabano leaves, which can be added in the loaf bread, contain properties which can help in fighting against cancer. Moreover, it has found that many biologically active compounds in the Guyabano leaves can destroy cancer cells. For these reasons, the researcher did this study to determine the acceptability of loaf bread with guyabano leaves powder and its marketability. Nutritionist, dietician, and food

experts can possibly encourage everyone to make eating habit something that must be enjoyable and healthy. According to Gascon (2012: 63), simple matters arise such as eating right, staying fit, managing weight and dealing with stress, while maintaining a good body through proper diet.

Irlandez (2011) held that since recorded history of human existence, medicinal plants have been the only means of people for medication and innovation on its extraction has made it popular and easier to be included and mixed in foods without noticing its after taste. Several medicinal

plants with either the use of its leaves, stems, roots, fruits or any of its part were even recorded in books with specific instructions on how they can aid in fighting diseases or lessening the effect of specific disease and one of which is the use of Guyabano leaves.

The study tested this hypothesis: There are no significant differences in the evaluation of the three groups of respondents on the acceptability of Guyabano leaves (*annona muricata*) powder and its marketability in terms of the presented criteria.

Method

The study made use of the experimental method of research using in three (3) proportions (5g, 10g and 15g). In preparing, loaf bread with Guyabano leaves powder, combine water, bread flour, sugar, milk powder, yeast, salt and shortening in a bowl. Mix until gluten slightly develops. Knead the dough adding the remaining shortening, until the dough is soft and smooth; transfer dough in a greased bowl, then cover it with plastic sheet to prevent from drying. Let it rest for about 30 minutes at room temperature. Punch down dough, then let it rest for another 30 minutes. Divide the dough into pieces weighing 350 grams per piece .Put in the greased loaf pan. Proof the dough for about 30 minutes. Brush the dough with egg wash and bake for 20 minutes or until brown.

According to Cordova (2011: 117) experimental research, or a quasi experiment, is research where the scientist actively influences something to observe the consequences. Found to be effective in identifying a problem and finding solutions to it, the study presented to the respondents and make realization that solutions and improvement based on their first hand experiences and acceptability. It is the study of relationship among variables which are manipulated and measured as well as improve conditions under observation in arriving at a better result.

It was chosen mainly in the present study to evaluate the acceptability of loaf Bread with Guyabano leaves powder and its marketability in its 5g, 10g and 15 g value per loaf bread. Furthermore, the researcher wanted to identify if there is a significant difference in the evaluation of the three groups of respondents on the acceptability of loaf bread with Guyabano leaves and its marketability in terms of the presented criteria.

Results

Table 1
Summary of the Evaluation of Teenagers on the Loaf Bread with Guyabano Leaves Powder in Three Proportions.

Criteria	Three Proportions of Guyabano Leave in Loaf Breads					
	5grams		10grams		15grams	
	WM	VI	WM	VI	WM	VI
Appearance	7.87	VA	7.99	VA	8.36	VA
Aroma	7.07	MA	7.11	MA	7.43	MA
Taste	7.53	VA	7.75	VA	7.93	VA
Texture	7.63	VA	8.03	VA	8.40	VA
Color	7.53	VA	8.03	VA	8.51	EA
Marketability	7.47	MA	7.85	VA	8.35	VA
General Weighted Mean	7.52	VA	7.79	VA	8.16	VA

Table 1 sums up the evaluation of teenagers on the level of acceptability of loaf bread with guyabano leaves powder and marketability in proportions of 5g, 10g, and 15g.

Table 2
Summary of Acceptability of Evaluations on the three proportions of Guyabano Leaves Powder in Loaf Bread by the group of Young Adults.

Criteria	Three Proportions of Guyabano Leave in Loaf Breads					
	5grams		10grams		15grams	
	WM	VI	WM	VI	WM	VI
Appearance	7.80	VA	7.73	VA	7.66	VA
Aroma	7.42	MA	6.90	MA	6.73	MA
Taste	7.92	VA	7.26	MA	7.25	MA
Texture	7.63	VA	7.34	MA	7.46	MA
Color	7.95	VA	7.54	VA	7.74	VA
Marketability	7.79	VA	7.40	MA	7.21	MA
General Weighted Mean	7.75	VA	7.36	MA	7.34	MA

Table 2 summarizes the acceptability of evaluations on the three proportions of Guyabano Leaves Powder in Loaf Bread by the group of Young Adults.

Table 3
Summary of Acceptability of Evaluations on the three proportions of Guyabano Leaves in Loaf Bread by the group of Adults.

Criteria	Three Proportions of Guyabano Leave in Loaf Breads					
	5grams		10grams		15grams	
	WM	VI	WM	VI	WM	VI
Appearance	8.32	VA	8.70	EA	8.54	EA
Aroma	7.47	MA	7.87	VA	7.87	VA
Taste	7.77	VA	8.01	VA	8.08	VA
Texture	7.81	VA	8.35	VA	8.12	VA
Color	7.93	VA	8.35	VA	8.31	VA
Marketability	8.09	VA	8.30	VA	8.36	VA
General Weighted Mean	7.90	VA	8.26	VA	8.21	VA

Table 3 shows the acceptability of evaluations on the three proportions of Guyabano Leaves in Loaf Bread by the group of Adults.

*Table 4
Level of Evaluations of the Respondents on the
Marketability of the Loaf Bread with Guyabano Leaves
Powder.*

Criteria	Three Proportions of Guyabano Leave in Loaf Breads					
	5grams		10grams		15grams	
Marketability	WM	VI	WM	VI	WM	VI
1. The price of the loaf bread with guyabano leaves powder is cheaper than the other brands in the market.	8.17	VA	8.13	VA	8.33	VA
2. The loaf bread with guyabano leaves powder can be sold easily.	7.93	VA	8.27	VA	8.30	VA
3. It is affordable	8.13	VA	8.45	VA	8.40	VA
4. It is reasonable	8.17	VA	8.40	VA	8.40	VA
5. It is economical	8.07	VA	8.23	VA	8.37	VA
General Weighted Mean	8.09	VA	8.30	VA	8.36	VA
Over all weighted mean: 8.25 (VA)						

Table 4 presents the level of evaluations of the respondents on the marketability of the loaf bread with guyabano leaves powder.

Discussion

It can be seen in the table 1 that the teenagers rated all criteria on Guyabano Leaves in Loaf Breads which are the 5g, 10g and 15g as Very Agreeable (VA).

These findings imply that Guyabano Leaves in Loaf Breads with 5g, 10g and 15g of Guyabano Leaves rated by the teenagers as Very Agreeable (VA), prefer the Guyabano Leaves in Loaf Breads with 50g rated with the highest overall general weighted mean of 8.16 (VA)

Also the young adults rated all criteria on Guyabano Leaves in Loaf Bread in 5g, 10g and 15g as Very Agreeable (VA).

These findings imply that the Guyabano Leaves in Loaf Bread with the 5g, 10g and 15g as rated by the young adults as Very Agreeable (VA) but they more prefer 50g rated with the highest general weighted mean of 7.75 (VA).

It can be gleaned from the table 3 that 5g and 75g Guyabano Leaves in Loaf Bread were rated Very Agreeable (VA), as evidenced in the weighted mean of 7.90 for 5g and 8.26 for 10g while 15g was rated 8.21 as Very Agreeable (VA).

More specifically, all the criteria under 5g and 10g loaf bread received a rating of Moderately Agreeable (VA) except the appearance of 15g rated as Very Agreeable (VA). Furthermore, loaf bread with 15g of guyabano leaves was rated Very Agreeable (VA) in terms of Appearance, Aroma, Color, Texture and Marketability.

These findings imply that though they vary in ratings, overall, the adult group considers the guyabano leaves loaf bread as Very Agreeable (VA).

Table 4 also reveals that all the indicators under production cost of the loaf bread with Guyabano leaves was rated Very Agreeable (VA) by the teenagers and young adults, while adult respondents rated the indicators under production cost as Very Agreeable (VA).

These findings imply that the loaf bread with three proportions of guyabano leaves has been rated by the respondents as

Very Agreeable (VA) overall. But it is very clear that the highest rating of 8.36 or Very Agreeable (VA) was given by the young adult group.

Conclusions

Based on the findings of the study, the following are the conclusions:

1. The three different proportions of guyabano leaves powder utilized in the preparation of Loaf bread are all Extremely Agreeable.
2. The three groups of respondents positively accepted the acceptability of guyabano leaves powder as ingredient in loaf bread.

Recommendations

Based on the findings and conclusions of the study, it is recommended that:

1. Further experimental study should be conducted to determine the marketability and shelf life of the loaf bread with guyabano leaves.

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