Quality Evaluation of Coconut (Buko) Pancit Fortified with Shredded Shells

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ABSTRACT

This study was conducted to determine the acceptability of producing Pancit out of coconut. Experimental research was used in this study using the 9-point hedonic scale for evaluation of the product which was divided into two parts: personal profile and sensory evaluation score sheet. Mean, percentage, frequency and DMRT were the statistical tools used. The appearance, aroma, color and flavor of coconut pancit were very much liked while the mouth feel and texture were moderately liked. On the treatment A in categories of appearance, aroma, mouth feel, and texture were rated higher. Treatment B rated higher in categories of color and flavor. Treatment C rated as lowest among treatments in all categories. There was no significant difference existed among treatments in categories of appearance, texture and mouth feel. The best treatments are A and B in categories of appearance and mouth feel while only Treatment A was the best for texture category. No significant difference existed among treatments in categories of aroma, flavor and color.

Keywords: quality evaluation, bukopancit, fortified, shredded shells

INTRODUCTION

Background of the Study

Coconuts are one of the wonder foods on earth that amply provides for all human needs and have multiple health benefits... They can even save your life. Few people (even fewer doctors) understand how important the coconut is to stabilizing blood sugar; lowering cholesterol; healing; hydration; and even replacing blood plasma in an emergency. To give just one example of coconuts' life-saving properties, they were used extensively in the Pacific during World War II. Since blood plasma supplies were scarce, it was very common for medics to siphon pure coconut water from young coconuts to be used as emergency plasma transfusions for soldiers who were injured. Since coconut water is nearly identical to human blood, it was suitable for people of all blood types.

The Pacific Islanders believe that it is the cure for all illness, which is why the palm tree (from which coconuts are grown) is known as "The Tree of Life." Coconut oil is thought to possess healing properties above and beyond that of any other dietary oils. Eating coconuts are excellent for one's immunity. They are antiviral, antifungal, antibacterial, and anti-parasitic, meaning they kill harmful bacteria, viruses, fungi, and parasites. Because of that, if you consume coconut in any of its various forms (whether it be raw coconut, coconut oil, coconut milk, coconut butter, etc.), it can help treat some of mankind's worst and most resilient of illnesses such as influenza, giardia, lice, throat infections, urinary tract infections, tapeworms, herpes, gonorrhea, bronchitis, and numerous other ailments caused by microbial. Whether you're eating the meat, drinking the juice, or consuming it as oil, coconuts are a delicious and nutritious source of fiber, vitamins, minerals, and amino acids. Eating coconuts also supports the development of strong, healthy bones and teeth. It does this by improving the body's ability to absorb calcium and magnesium. It also prevents osteoporosis, a condition in which the bones become thin and fragile and lose their density. This makes coconuts a good, healthy alternative for those who are lactose intolerant, but still want to have strong bones and teeth. Those who prefer a vegan diet can benefit from it as a good source of protein and fatty acids.

In traditional medicine around the world coconut is used to treat a wide variety of health problems including the following: abscesses, asthma, baldness, bronchitis, bruises, burns, colds, constipation, cough,

dropsy, dysentery, earache, fever, flu, gingivitis, gonorrhea, irregular or painful menstruation, jaundice, kidney stones, lice, malnutrition, nausea, rash, scabies, scurvy, skin infections, sore throat, swelling, syphilis, toothache, tuberculosis, tumors, typhoid, ulcers, upset stomach, weakness, and wounds.[1]
Pancit is a Filipino noodle dish that comes in a dizzying array of incarnations. Many people consider it to be the national dish of the Philippines, since it is so common in this tropical nation. Many people outside the Philippines think of pancit when asked to visualize the cuisine of the Philippines, and this noodle dish is often the first introduction to the rich culinary tradition of this country, which has been influenced by both Asian and Spanish cooking traditions. It is difficult to point to one noodle dish and call it pancit. It may be made with rice noodles, wheat noodles, or noodles derived from another source of starch. It may be served with a dry sauce, a thick sloppy sauce, or even a broth or soup. Toppings are incredibly varied, including things like hard boiled eggs, shredded meat, and finely sliced vegetables, and the flavors of this dish are quite diverse.[2]

Statement of the Problem

This was conducted to determine the acceptability of producing pancit out of coconut.

Specific Objectives

a. To determine the acceptability of coconut pancit its general appearance, aroma, color, taste and texture.
b. To determine the significant differences in evaluation of the respondents as to: general appearance, aroma, color, mouth peel, taste and texture.

Significance of the Study

The result of the study would be beneficial to the following:

Food manufacturer: The result of this study would give the local manufacturer a culinary in making pancit, this will give them information on how to manufacture or produce food out of coconut.

HRM Faculty: The result of the study would be beneficial to the faculty of Guimaras State College specialty in HRM department for they would have basis in encouraging students to further improve the products in order that they could come up with a delicious Coconut pancit.

Coconut Grower: The result of the study would be beneficial to the coconut Grower for they should improve the production of a coconut fruit in order to have good and productive coconut products.

HRM Students: The result of the study would be beneficial to the HRM students for they have another new technique to be added for making pancit.

Researcher: the result of the study would be beneficial to as the researcher, simply because it is one way of applying their knowledge and skills as HRM students and improved themselves to do things that are useful not only for us but also for the community.
Future Researcher: the result of this study would further enhanced to the ability of the future researchers to go into boarder study that they could be able to contribute knowledge to others and it would serve as their bases in further researches that is related to their study.

Scope of Limitation

This will determined if Coconut is acceptable in pancit making. The product was evaluated by the selected panel of evaluators composed of the students, faculty and staff of GSC-Main Campus. The statistical tools used were the mean, percentage, and frequency for descriptive statistics. DMRT is used to test the degree of difference among treatment. Analyzing mean is getting the entire mean and interpret based from the 9 point Hedonic Scale to determine the acceptability of cooking in terms of its appearance, aroma, mouth peel and texture.

[1]http://undergroundhealthreporter.com/coconut-health-benefits
[2]http://www.wisegeek.com/what-is-pancit.htm

REVIEW OF RELATED LITERATURE

This chapter presents the review of related literature which has bearing to the present study being conducted. Likewise, discusses the information and data related to the Coconut pancit such as its history, benefits and its definition according to the different references are stated.

History of Coconut

The coconut (cocosnucifera) is regarded as the jewel of the tropics. It is undoubtedly the most economically important palm (often called the tree of life) and is also one of the ten most important tree crops. The coconut contributes significantly to the economies of many countries and is of prime importance to the daily lives of millions of people. The word "coconut" did not appear until after the Portuguese explorers in the 15th century came after Columbus. When these explorers found this fruit growing on Indian Ocean islands, they described the coconut shell as a coco, or "grinning face" of a monkey because of its 3 dark holes at its base which look like a pop-eyed merry face. From then on, it was referred to as the "coconut".

Although its name was recorded in Sanskrit in the early beginnings of history, the coconut was unknown to the western world until the 6th century, when it was imported into Egypt from the Indian Ocean--and still made little impression, though Marco Polo recognized it as "Pharoah's nut" when he ran across it in India on his travels. In the Middle Ages, coconuts were so rare and so cherished that their shells were polished and mounted in gold. By the 19th century, however, new transportation routes made them common in European markets--and throwing objects ("coconut shies") at local side shows.[3]

Optimal Health of Coconut

Modern medical science is now confirming the use of coconut in treating many of the above conditions. Published studies in medical journals show that coconut, in one form or another, may provide a wide range of health benefits. Kills viruses that cause influenza, herpes, measles, hepatitis C, SARS, AIDS, and other illnesses. Kills bacteria that cause ulcers, throat infections, urinary tract infections, gum disease and cavities, pneumonia, and gonorrhea, and other diseases. Kills fungi and yeasts that cause candidiasis, ringworm, athlete's foot, thrush, diaper rash, and other infections. Expels or kills tapeworms, lice, giardia, and other parasites. Provides a nutritional source of quick energy. Boosts energy and endurance, enhancing physical and athletic performance. Improves digestion and absorption of other nutrients including vitamins, minerals, and amino acids. Improves insulin secretion and utilization of blood glucose. Relieves stress on pancreas and enzyme systems of the body. Reduces symptoms associated with pancreatitis. Helps relieve symptoms and reduce health risks associated with diabetes. Reduces problems associated with malabsorption syndrome and cystic fibrosis. Improves calcium and magnesium absorption and supports the development of strong bones and teeth. Helps protect against osteoporosis. Helps relieve symptoms associated with gallbladder disease.[4]

Helps Prevent Obesity by speeding up metabolism, providing an immediate source of energy with fewer calories than other fats. People who consistently use coconut products, report a stronger ability to go without eating for several hours with no affects of hypoglycemia. Improves Heart Health by providing healthy short chain and medium chain fatty acids (MCFA) that are essential to good health. Close to 98% of all fatty acids consumed are composed of long-chain fatty acids (LCFA), which are very different from MCFA that have no negative effect on cholesterol ratios and help to lower the risk of atherosclerosis and protect against heart disease. Studies have shown that populations in Polynesia and Sri Lanka, where coconuts are a dietary staple, do not suffer from high serum cholesterol or heart disease. Unlike other fats, the unique properties of coconut also contain a large amount of lauric acid, which is the predominant fatty acid found in mother's milk. Since the body cannot digest the dietary fiber in coconut, no calories are derived from it and it has no effect on blood sugar. Low Glycemic Index (GI) measures how fast available carbohydrates in food raise blood sugar levels. Coconut fiber slows down the release of glucose, therefore requiring less insulin to utilize the glucose and transport it into the cell where it is converted into energy. Coconut also assists in relieving stress on the pancreas and enzyme systems of the body, in

[3]http://www.coconutrepublic.org/coconut_story.php
[4]Mary Luciano, "The Raw Food Trainer," is a Healthy Living and Raw Food Educator

turn, reducing the risks associated with Diabetes. Coconut Nectar and Crystals have a very low GI of only 35 (compared to honey with a GI of 55-83, and sugar with a GI of 65-100.) Reduces Sweet Cravings and improves insulin secretion and utilization of blood glucose. The healthy fat in coconut slows down any rise in blood sugar and helps to reduce hypoglycemic cravings. Improves Digestion and many of the symptoms and inflammatory conditions associated with digestive and bowel disorders, by supporting absorption of other nutrients including vitamins, minerals, and amino acids while also providing beneficial dietary fiber.

Quick Energy Boost that provides a super nutritious source of extra energy. Coconut is utilized by the body to actually produce energy, rather than to store it as body fat. It supports improved endurance during physical and athletic performance. As well, it promotes healthy thyroid function and helps to relieve the symptoms of chronic fatigue. In addition, coconut contains No Trans-Fats, is Gluten-Free, Non-Toxic, Hypoallergenic, and also contains Antibacterial, Antiviral, Antifungal, and Anti parasitic healing properties. Coconut helps to aid and support overall Immune System functions

Pancit is a Filipino noodle dish that comes in a dizzying array of incarnations. Many people consider it to be the national dish of the Philippines, since it is so common in this tropical nation. Many people outside the Philippines think of pancit when asked to visualize the cuisine of the Philippines, and this noodle dish is often the first introduction to the rich culinary tradition of this country, which has been influenced by both Asian and Spanish cooking traditions. It is difficult to point to one noodle dish and call it pancit. It may be made with rice noodles, wheat noodles, or noodles derived from another source of starch. It may be served with a dry sauce, a thick sloppy sauce, or even a broth or soup. Toppings are incredibly varied, including things like hard boiled eggs, shredded meat, and finely sliced vegetables, and the flavors of this dish are quite diverse. The origins of pancit probably lie in China. Food historians suspect that the Chinese introduced the concept of noodles to the Philippines at some point, along with a few dishes which could be made with them. The influences of Chinese noodle dishes can be clearly seen, especially in dishes like pancit Canton, which is named for a city in China. The name for the dish itself is believed to be derived from pian i sit, which means "something cooked conveniently and quickly."[5]

RESEARCH METHODOLOGY

Research Design

In this approach the researcher intentionally and systematically controls and manipulates a certain stimuli, treatment and conditions and observes how the conditions or behaviour of the object is affected or changed (Ardales, 2000).

Experimental Research has gained the reputation of being the most prestigious method of advancing scientific knowledge, because it is the only hypothesis for establishing cause-and-effect relationship and for discovering and developing an organize body of knowledge. This Experimental Research Design will be used to determine the acceptability of Coconut Pancit.

Respondents of the Study

The respondents of the study will be the selected 15 students and 15 faculty and staff members of Guimaras State College -Main Campus. They will determine the acceptability of the materials used and appropriateness of its ingredients or substitute suitable in creating a delightful and unusual pancitfavorable to the taste of everyone.

Instrumentation

The most widely used scale for measuring food acceptability is the 9-point hedonic scale. David Peryam and colleagues (ref) developed the scale at the Quartermaster Food and Container Institute of the U.S. Armed Forces, for the purpose of measuring the food preferences of soldiers. The scale was quickly adopted by the food industry, and now is used not just for measuring the acceptability of foods and beverages, but also of personal care products, household products, and cosmetics.

Treatment Used in Coconut Pancit

Treatment A	Treatment B	Treatment C
4c shredded coconut	4c shredded coconut	4c shredded coconut

[5]http://www.wisegeek.com/what-is-pancit.htm

Controlled (no shells)	2c Diwal shredded	2c Nylon shredded
1c plain water	1c plain water	1c plain water
120g sliced pechay	120g sliced pechay	120g sliced pechay
130g carrot strips	130g carrot strips	130g carrot strips
80g Baguio beans	80g Baguio beans	80g Baguio beans
20g green union	20g green union	20g green union
bell paper	bell paper	bell paper
20g tbsp salt	20g tbsp salt	20g tbsp salt
1 tbsp oil	1 tbsp oil	1 tbsp oil
1 tbsp onion crushed	1 tbsp onion crushed	1 tbsp onion crushed
1 tbsp garlic crushed	1 tbsp garlic crushed	1 tbsp garlic crushed

List of materials used and their functions

Equipments	Functions
Mixing bowl	Used to hold ingredients or batter mixture
Wooden spoon	Use to mix the ingredients well, used to cream or beat cakes by hand, to mix batter or dough
Measuring spoon	Used to measure small amounts of ingredients
Measuring cups	Used to measure large amount of ingredients
Sifter	Used to sift flour and all dry ingredients
Knife	Used to cut or slice ingredients into desire shape
Chopping board	Used to hold ingredients when slicing
Spatula	Used to level off the surface of the ingredients
Rubber scraper	Used to scrape drip of batter or meringue out of a bowl

The table 1 presents the list of materials and the function of materials in relation to the preparation of Coconut Pancit.

Tasting Evaluation Procedure

This research was utilized the 9 point Hedonic Scale for evaluation of the product divided into two parts. Part I was on personal profile of the respondents that includes their name, age, civil status, gender, highest educational attainment, year and course. Part II deals with the sensory evaluation score sheet that was used based on the 9 Point Hedonic Scale provided for the evaluation as to: 9; extremely liked, 8; very much liked, 7; moderately liked, 6; slightly liked, 5; neither liked nor disliked, 4; slightly disliked, 3; moderately disliked; 2; very well disliked, 1; extremely disliked.

Statistical Data Analysis

The data was subjected to descriptive analysis such as mean, percentage, and frequency for descriptive statistics. DMRT was used to test the degree of difference among treatment. Analyzing mean is getting the entire mean and interpret based from the 9 point Hedonic Scale.

RESULTS AND DISCUSSIONS

Acceptability of Coconut Pancit

Table 2 presents the data on the acceptability of the appearance of coconut pancitas rated by the respondents. Results revealed that the overall appearance of coconut pancit was interpreted as "very much liked" or had a mean score of 7.25. As to mean obtained by individual treatments, treatment A (Controlled (no shells)) was noted to have the highest mean (7.56) followed by treatment B (Diwal shredded) with (7.42) and treatment C (Nylon shredded) with the lowest mean of (6.78).

This implies that the appearance of coconut pancit finished product was very much acceptable when applying different treatments. Further, all treatments were observed to have little difference on its looks which probably the pancit were made nicely when cooked in different kinds of seafood.

Table 2.Appearance of Coconut Pancit

Treatment	Replication			Mean	Interpretation
	I	II	III		
Treatment A (controlled)	7.57	7.83	7.27	**7.56**	Very Much Liked
Treatment B (Diwal shredded)	7.4	7.33	7.53	**7.42**	Very Much Liked
Treatment C (Nylon shredded)	6.7	7.1	6.53	**6.78**	Moderately Disliked
Mean	**7.22**	**7.42**	**7.11**	**7.25**	**Very Much Liked**

Scale: 1.00 – 1.88 (Extremely Disliked), 1.89 – 2.77 (Very Much Disliked), 2.78 – 3.66 (Moderately Disliked), 3.67 – 4.55 (Slightly Disliked), 4.56 – 5.44 (Liked nor Disliked), 5.45 – 6.33 (Slightly Liked), 6.34 – 7.22 (Moderately Liked), 7.23 – 8.11 (Very Much Liked), 8.12 – 9.00 (Extremely Liked)

Data in table 3 shows the ANNOVA result to determine if there is a significant difference among treatments used that affect the appearance of a pancit. Results revealed that there is a significant difference occurred among treatments (F=10.342*, sig=.026) set at .5 level of significance.

Analyzing further, using Duncan Multiple Range Test (DMRT) treatment C varies in treatment A and B which does not differ from each other. This means that treatment A and B have the same outcome when compared to treatment C. This implies that treatment C needs more improvement while treatment A and B needs a little enhancement to be highly accepted product as to appearance.

Table 3. Analysis of Variance (ANOVA) for Appearance of Coconut Pancit

Source of Variation	df	Sum of Squares	Mean Squares	F	Sig.
Treatment	1.041	2	.520	10.342*	.026
Replication	.148	2	.074	1.467	.333
Error	.201	4	.050		
Total	1.390	8			

*p<.05

Table 4 presents the differences in the aroma of Coconut Pancit. Results revealed that the Coconut Pancit made as rated by the respondents was "very much liked" or with mean of 7.43. The highest mean obtained was 7.53 of treatment A (controlled), followed by treatment B (Diwal shredded) with 7.43 and the lowest was treatment C (Nylon shredded) with 7.33. All treatments were described as "very much liked". As to overall assessment of Coconut Pancit in terms of aroma it was observed that the respondents were liked its aroma very much especially with treatment A plain Coconut Pancit without any shell. This implies that Coconut Pancit with no shells differs from other treatments and it affects its aroma. In this case as rated by the respondents, the Coconut Pancit with seafood has unpleasant aroma which depend on the kinds of seafood.

Table 4. Aroma of Coconut Pancit

Treatment	Replication			Mean	Interpretation
	I	II	III		
Treatment A (controlled)	7.03	8.00	7.57	7.53	Very Much Liked
Treatment B (Diwal shredded)	7.43	7.90	6.97	7.43	Very Much Liked
Treatment C (Nylon shredded)	7.47	7.90	6.63	7.33	Very Much Liked
Mean	**7.31**	**7.93**	**7.06**	**7.43**	**Very Much Liked**

Scale: 1.00 – 1.88 (Extremely Disliked), 1.89 – 2.77 (Very Much Disliked), 2.78 – 3.66 (Moderately Disliked), 3.67 – 4.55 (Slightly Disliked), 4.56 – 5.44 (Liked nor Disliked), 5.45 – 6.33 (Slightly Liked), 6.34 – 7.22 (Moderately Liked), 7.23 – 8.11 (Very Much Liked), 8.12 – 9.00 (Extremely Liked)

Table 5 shows the difference among treatments as to aroma, ANOVA results revealed that there is no significant difference occurred among treatments applied (F=.232, sig.=.803) set at .05 level of significance. This means that all treatments applied were the same outcome of its aroma. Since it is very much like by the respondents it simply implies that the Coconut Pancit has an aromatic quality.

Table 5. Analysis of Variance (ANOVA) for Aroma of Coconut Pancit

Source of Variation	df	Sum of Squares	Mean Squares	F	Sig.
Treatment	.060	2	.030	.232	.803
Replication	1.221	2	.611	4.714	.089
Error	.518	4	.130		
Total	1.799	8			

*p<.05 level of significance

In terms of color, data in table 6 presents the color of Coconut Pancit as rated by the respondents. Results revealed that the Coconut Pancit was "very much liked" by the respondents with the mean of (7.38). It was noted that Treatment B (Diwal shredded) was rated as the highest with the mean of 8.08 followed by treatment A (controlled) with (7.29) and treatment C as the lowest mean with (6.78). As to the whole assessment of color the respondents liked it very much. This implies that there is a similarity in color of the coconut pancit when cooked in different kinds of seafood.

Table 6.Color of Coconut Pancit

Treatment	Replication			Mean	Interpretation
	I	II	III		
Treatment A (controlled)	7.03	7.70	7.13	**7.29**	Very Much Liked
Treatment B (Diwal shredded)	7.70	8.23	8.30	**8.08**	Very Much Liked
Treatment C (Nylon shredded)	6.37	7.33	6.63	**6.78**	Very Much Liked
Mean	**7.03**	**7.75**	**7.35**	**7.38**	**Very Much Liked**

Scale: 1.00 – 1.88 (Extremely Disliked), 1.89 – 2.77 (Very Much Disliked), 2.78 – 3.66 (Moderately Disliked), 3.67 – 4.55 (Slightly Disliked), 4.56 – 5.44 (Liked nor Disliked), 5.45 – 6.33 (Slightly Liked), 6.34 – 7.22 (Moderately Liked), 7.23 – 8.11 (Very Much Liked), 8.12 – 9.00 (Extremely Liked)

Table 7 shows the difference among treatments as to color, ANOVA results revealed that there is no significant difference occurred among treatments applied (F=27.269, sig. = .005) set at .05 level of significance. This means that all treatments applied were the same outcome of its color. It is very much like by the respondents which implies that the Coconut Pancit have the same color though it cooked in different kinds of seafood.

Table 7. Analysis of Variance (ANOVA) for Color of Coconut Pancit

Source of Variation	df	Sum of Squares	Mean Squares	F	Sig.
Treatment	2.574	2	1.287	27.269*	.005
Replication	0.781	2	.390	8.271	.038
Error	0.189	4	.047		
Total	3.544	8			

*p<.05 level of significance

In terms of the mouth feel of Coconut Pancit, data in table 8 reveals that the mean scores obtained was 7.09 or described as "moderately liked". Analyzing each treatment, treatment A got the highest mean of 7.50, followed by treatment B with 7.39 and treatment C who got lowest mean of 6.38. All treatments were described as "like moderately". This means that respondents were moderately liked the mouth feel of coconut Pancit without any seafood on it.

Table 8.Mouth feel of Coconut Pancit

Treatment	Replication			Mean	Interpretation
	I	II	III		
Treatment A (controlled)	7.40	8.13	6.97	**7.50**	Very Much Liked
Treatment B (Diwal shredded)	7.67	7.70	6.80	**7.39**	Very Much Liked
Treatment C (Nylon shredded)	6.40	6.97	5.77	**6.38**	Moderately Liked
Mean	**7.16**	**7.60**	**6.51**	**7.09**	**Moderately Liked**

Scale: 1.00 – 1.88 (Extremely Disliked), 1.89 – 2.77 (Very Much Disliked), 2.78 – 3.66 (Moderately Disliked), 3.67 – 4.55 (Slightly Disliked), 4.56 – 5.44 (Liked nor Disliked), 5.45 – 6.33 (Slightly Liked), 6.34 – 7.22 (Moderately Liked), 7.23 – 8.11 (Very Much Liked), 8.12 – 9.00 (Extremely Liked)

Data in table 9 presents the differences in the mouth feel of Coconut Pancit, ANOVA results revealed that there is a significant difference occurred among treatments (F=32.728, sig.= .003)set at .05 level of significance. In this study, treatments A and treatment B have similarities when rated as to mouth feel which makes them differ from treatment C were evaluated. This implies that the Coconut Pancit was very particular when it comes to its mouth feel as observed by the respondents.

Table 9.Analysis of Variance (ANOVA) for Mouth feel of Coconut Pancit

Source of Variation	df	Sum of Squares	Mean Squares	F	Sig.
Treatment	2.287	2	1.143	32.728	.003
Replication	1.791	2	.896	25.638	.005
Error	.140	4	.035		
Total	4.218	8			

*p<.05 level of significance

Data in table 10 presents the result of an overall evaluation of the respondents as to the texture of Coconut Pancit. Results revealed that the Coconut Pancit as to texture was described as "moderately like" with mean of 7.22. This means that the respondents were moderately liked the product considering its texture. Analyzing each treatment means, it was observed that treatment A obtained the highest with the mean of 7.54 followed by treatment B with 7.49 and the last was treatment C with 7.37. This implies that the texture of all treatments were acceptable to the respondents.

Table 10. Texture of Coconut Pancit

Treatment	Replication			Mean	Interpretation
	I	II	III		
Treatment A (controlled)	7.43	8.03	7.17	7.54	Very Much Liked
Treatment B (Diwal shredded)	7.57	7.83	7.07	7.49	Very Much Liked
Treatment C (Nylon shredded)	6.73	6.93	6.23	6.63	Moderately Liked
Mean	**7.24**	**7.60**	**6.82**	**7.22**	**Moderately Liked**

Scale: 1.00 – 1.88 (Extremely Disliked), 1.89 – 2.77 (Very Much Disliked), 2.78 – 3.66 (Moderately Disliked), 3.67 – 4.55 (Slightly Disliked), 4.56 – 5.44 (Liked nor Disliked), 5.45 – 6.33 (Slightly Liked), 6.34 – 7.22 (Moderately Liked), 7.23 – 8.11 (Very Much Liked), 8.12 – 9.00 (Extremely Liked)

Data in table 11 presents the ANOVA results of Coconut Pancit as to its texture. Data results revealed that there is a highly significant difference among treatments used (F=65.450, sig. = .001) set at .05 level of significant. Analyzing further using DMRT, when applying different treatments, the texture of Coconut Pancit varies. The best treatment was treatment A because of highest mean obtained followed by treatment B, and last was treatment C. This implies that treatment A would be the best treatment among others because ingredients were proportions and properly cooked.

Table 11. Analysis of Variance (ANOVA) for Texture of Coconut Pancit

Source of Variation	df	Sum of Squares	Mean Squares	F	Sig.
Treatment	1.577	2	0.788	65.450*	.001
Replication	.899	2	0.450	37.332	.003
Error	.048	4	0.012		
Total	2.524	8			

*p<.05 level of significance

In terms of flavor, data in table 12 presents the flavor of Coconut Pancit. Results revealed that the respondents rated the flavor of Coconut Pancit as "very much liked" or with mean of 7.70. Treatment B noted as the highest mean obtained with 7.93 described as "very much like", followed by treatment A with mean of 7.88 described as "very much like", and treatment C got lowest mean with 7.28 described as "very much like". As to the whole assessment of flavor the respondents were liked it very much. This implies that the flavor of a Coconut Pancit is savory, perfectly taste and the seafood overpower the taste of the coconut likewise, it was a well-cooked Pancit.

Table 12.Flavor of Coconut Pancit

Treatment	Replication			Mean	Interpretation
	I	II	III		
Treatment A (controlled)	7.83	8.43	7.37	**7.88**	Very Much Liked
Treatment B (Diwal shredded)	8.40	8.03	7.37	**7.93**	Very Much Liked
Treatment C (Nylon shredded)	8.10	7.40	6.33	**7.28**	Very Much Liked
Mean	**8.11**	**7.95**	**7.02**	**7.70**	**Very Much Liked**

Scale: 1.00 – 1.88 (Extremely Disliked), 1.89 – 2.77 (Very Much Disliked), 2.78 – 3.66 (Moderately Disliked), 3.67 – 4.55 (Slightly Disliked), 4.56 – 5.44 (Liked nor Disliked), 5.45 – 6.33 (Slightly Liked), 6.34 – 7.22 (Moderately Liked), 7.23 – 8.11 (Very Much Liked), 8.12 – 9.00 (Extremely Liked)

Data in table 13, presents the ANOVA results that determine if the treatments applied were significantly different among others. The data results revealed that there is no significant difference among treatments (F=2.528, sig.= .195) set at .05 level of significance. Analyzing further with use of DMRT, all treatment were same flavor although it cooked in different kinds of seafood. This implies that the taste of Coconut Pancit cooked in different treatment is highly acceptable and brings delicious since it was very much liked by the respondents.

Table 13. Analysis of Variance (ANOVA) for Flavor of Coconut Pancit

Source of Variation	df	Sum of Squares	Mean Squares	F	Sig.
Treatment	.794	2	.397	2.528	.195
Replication	2.07	2	1.035	6.588	.054
Error	.629	4	.157		
Total	3.493	8			

*p<.05 level of significance

Conclusions:

Based on the results of the study, the following conclusions were advanced:

1. Based on the respondents' evaluation, the appearance, aroma, color, and flavour of Coconut Pancit were very much liked and as to mouth feel and texture it was rated as moderately liked. Analyzing further, respondents' rated higher on the treatment A in categories of appearance, aroma, mouth feel, and texture while treatment B rated higher in categories of color and flavor. Treatment C rated as lowest among treatments in all categories.
2. That there is a significant difference existed among treatments in categories of appearance, texture and mouth feel. The best treatments are A and B in categories of appearance and mouth feel while only treatment A were the best for texture category. No significant difference existed among treat ments in categories of aroma and flavour and color.

Recommendations:

1. Further studies should be conducted using different experiments to discover new products most especially Coconut as one of the ingredients.
2. Instructors might suggest other treatments that could combine to a Coconut Pancit making. Hence, further studies not only in making quality pancit but also abundant of health benefits to the con sumers.
3. Food instructors should encourage the utilization of correct processing and discovering of Coconut product for it is one of the biggest productions in Guimaras Island.
4. Consumer should also practice and apply this activity for a healthy lifestyle and economical product for the family.

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