

THE ACCEPTABILITY OF FIG (FICUS NOTA) FRUIT AND STEVIA MIXED BLEND AS TEA**Micha Y. Antonio**¹, **Faith C. Kis-ing**²,
Novelyn P. Lacaden³¹Mountain Province State Polytechnic College, kacayonlakhunacaryle@gmail.com²Mountain Province State Polytechnic College, sherienetorio56@gmail.com³Mountain Province State Polytechnic College, georgialp435@gmail.com**ABSTRACT**

Tea is one of the most popular beverages across the world that makes people to discover and develop other different kinds of teas. Therefore, this study aimed to assess the level of acceptability of fig fruit and stevia mixed blend as a tea and to determine the significant differences in terms of its color, aroma, taste and body. The researchers used a quasi-experimental research design with four distinct samples. Data were collected from a consumer-type panel consisting of 50 individuals in Bontoc, Mountain Province, using a scorecard with a 9-point Hedonic Scale to evaluate the level of acceptability. Statistical analysis, including measures of central tendency and Analysis of Variance (ANOVA), was utilized to analyze the data.

The results indicated that there was a very high significant difference between the control recipe and the treatments in terms of color and aroma, which indicates that the control recipe overpowered the treatments. However, in terms of taste, treatment 1 overpowers the control and the other two treatments. Therefore, the researchers suggest using other method or process in tea-making. And recommend an in-depth study for the refinement of the experimentation process to have a desired result. On the other hand, treatment 1 (15grams fig fruit and 0.5grams stevia leaves) has the highest frequency of consumer preferences on the tea samples of fig fruit and stevia mixed blend.

Keywords: tea, fig fruit, stevia leaves, acceptability testing, and product development

1. Introduction

Almost all around the world, tea is being consumed and it was even started in the ancient times. Drinking tea has a positive contribution to the health of the people because it contains medicinal benefits. According to the Tea Association of the USA (2022) and the study of Khan& Mukhtar (2013), tea is an ancient beverage and the most commonly consumed beverage in the world after water and has been considered a health-promoting habit. Tea consumption is also useful for the prevention of many human diseases that include maintenance of cardiovascular, aids the liver, destroy the typhoid germ, purify the body and preserve mental equilibrium.

There are different kinds of teas and each has its own benefits. Some of the teas can boost the immune system, protects the heart and helps to cure/prevent cancer. Numerous studies showed that these teas have medicinal benefits and have a lasting impact on the wellness of the consumers. In addition, teas can also be helpful in the betterment of the mental health since it contains calming effects.

Fig fruit is a wild berry that comes from the family of moraceae with its scientific name of ficus nota. The FAO- Food and Agriculture Organization (2023) stated that fig fruit (ficus nota) and its leaves are used in their primary and processed form to produce different traditional and industrial products (infusions, jams, wines, spirits, liqueurs, etc.).

Ficus Nota are not just helpful in the health but can also serve as a laxative for those who are having a problem in their bowel movements. However, even if it is helpful and a nutritious fruit, it can still be dangerous for taking a large amount of it. Anything that is too much is harmful for our health. A clinical study showed that fig fruit supplementation improved symptoms in patients suffering from functional

constipation, and it may be of help in weight reduction because figs provide more fiber (Badgujar, et al. 2014). It can be used as home remedy for constipation, but it may cause diarrhea or other digestive problems and since it is rich in vitamin K it can interfere with blood thinning medications and cause them to be less effective (Shoemaker, 2020).

The study was aligned to some of the sustainable development goals from the United Nations (2023), which were the SDG 8 “Decent work and economic growth”. Wherein, the product innovation of the fig tea can provide a livelihood opportunity to unemployed people. It would be a great help as a source of income if the study would be successful in developing the fig fruit and stevia mixed blend as a tea, especially that there are health benefits of the fig fruit therefore it has a possibility of being commercialized.

It was also anchored to SDG 15 “Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss”, whereas the fig tree would be a great help for the restoration of biodiversity since the climate change is affecting our ecosystem. During summers, mountains and forests were set on fire that caused the deterioration of wild species and trees, that’s why fig trees can be an alternative to plant that can restore and save the source of water and animal habitats.

The study aims to develop a new product using the fig fruit and stevia leaves. Through this study, the fruit would be known in the community that it is not harmful but can be consumed with many health benefits. Since the fig tree was not given any importance and people are just looking at it, thinking that it cannot be eaten, and the insects and birds are just the one benefiting from it, which is why this study is conducted for the fig tree to be recognized. The study can be a starting point of creating other more products out of the fig fruit. With the created new product, it can be added in the market that may contribute for the betterment of the economy and helps to promote local products.

It is also to encourage people to plant more fig trees especially around the water shed since fig trees were considered as water bearing trees.

For the future researchers, this study would serve as their guidance to gather more information that can lead them to create a bigger study.

2. Literature Review

An over consumption of figs can cause calcium deficiency in the body because a huge quantity of oxalate is found in figs which absorbs the calcium present in the body (Lifestyle Desk, 2021).

Drying of figs is also nutritional and a way to preserve it. When figs are dried, either in the sun or during processing, they are allowed to dehydrate. Removing water from figs during the drying process, it prevents them from rotting while leaving behind all their nutrients. During the drying process, it is only the water content of figs that changes and the rest of their nutritional profile remains the same (Brady, 2021).

According to Guian (2020), *Ficus Nota* is a plant endemic to the Philippines commonly known as tibig/sacking tree. It is locally found in some provinces of Luzon, Visayas and Mindanao wherein it is originated from primary forests at low to medium elevations. The fruit of figs are edible and can be eaten raw when it is ripe, although they are rather having no taste, while the young leaves of “tibig” can be cooked as vegetable. Some locals in the Philippines usually eat it with sugar and cream. Its traditional uses include treatment of fever, muscle pain, urinary tract infections, hypertension and diabetes.

Figs are not just found internationally but it is also being grown in the Philippines and has its different local name. Its common name is “tibig/tibbeg”, while in some places of Mountain Province they call it “uplas”, “piwih”, “tibig/tibbeg/ liwliw”, “ballay”. In some parts of Ilocos Sur like in Cervantes, fig fruit is also called as “tibig/tibbeg/liyeg/liwliw”. It was also proven in the Philippines that figs are safe to be consumed and contains medicinal properties. It was even showed in one of the television programs that it was being planted and proven safe.

From the show being hosted by Gina Lopez she featured the fig fruits in Palawan and even added that fig leaves are good for diabetics (Celdran, 2017). It was considered both as food and traditional medicine as it contains laxative substance, flavonoids, sugar, vitamin A and C, acids, and enzymes (Ladilad et al., 2014). Internationally/locally figs are proven through the different studies that was conducted that it is safe, healthy and consumable.

These studies proved that fig fruit and its leaves are consumable as it can be made for different products and has many nutritional benefits. It contains many minerals that are needed for the body resistance.

Stevia was already being used for how many decades and it was considered a natural sweetener. Due to its healthy contents, it became an alternative for sugar. This diabetic-friendly sweetener is used to combine to beverages like coffee, tea blends and some health products. Using stevia as a substitute for sugar is healthier and is good for the well-being. Since it is way sweeter than sugar, only tiny amounts of it is needed for sweetening foods and drinks.

From the blog of Healthy Options (2023), there are many health benefits of using stevia. One is, it lowers blood pressure, blood sugar level and fights diabetes. It also reduces risk of pancreatic cancer and

reduces bacterial formation in the mouth preventing cavities and gingivitis. Stevia is a zero-calorie that is why it is best for a balanced diet and helps to prevent cancer.

Stevia (*Stevia rebaudiana* Bertoni) is a member of the largest family of plants, the Asteraceae which is also called the “sunflower family” (International Stevia Council, 2021). This is a natural sweetener and used to sweeten food and drink since the 16th century. It is currently gaining popularity as a sugar substitute due to its low calorie and carbohydrate content. It is currently gaining popularity as a sugar substitute due to its low calorie and carbohydrate content. Stevia powder can be a food enhancer, which is why GIDC (Glorious Industrial and Development Corporation) has been developing stevia-sweetened pastries and are currently trying to incorporate it into savoury dishes (Tan, 2022).

3. Research Method

This chapter explains the methodology that was used in gathering data and analysis that would be used to conduct the research. The methodology will include areas such as the research design, locale and population of the study, data gathering tools, data gathering procedure and treatment of data.

A. Research Design

The researchers used a quasi-experimental research design to develop a fig fruit tea. Quasi-experimental research includes variables that can be measured, calculated, compared, and can be manipulated by the researchers. There were three treatments and one control recipe that was used in the study.

B. Locale and Population of the Study

The study was conducted at Mountain Province State Polytechnic College, HM Hall and HM Kitchen located at Bontoc, Mountain Province. The 50 respondents were selected, including students and staffs of MPSPC ranging from 18-50 of age because they were able to understand the instrument used in the study. People who are older may have problems in their deteriorating senses which make them not suitable as a respondent for the study.

The respondents served as an evaluator for the acceptability of the fig fruit and stevia mixed blend as a tea according to color, aroma, taste, and body.

Purposive sampling was used to select the respondents. Purposive sampling, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys (Alchemer, 2021).

C. Data Gathering Tools

The researchers gave an evaluation form to the respondents as an instrument in collecting data. They were given fig fruit tea samples and answered the acceptability form with the use of the 9-point hedonic scale wherein 9 corresponds to "like extremely" and 1 to "dislike extremely".

D. Data Gathering Procedure

The researchers prepared a letter of request to conduct the study that was approved by the Department Chairperson. The study was conducted at Mountain Province State Polytechnic College, HM Hall, and HM Kitchen. A tea tasting was conducted and a scorecard was distributed to the respondents to rate and test the developed fig and stevia mixed blend tea. The development of fig fruit and stevia mixed blend tea had undergone certain experiment trials to come up with the acceptable treatment recipe for the tea.

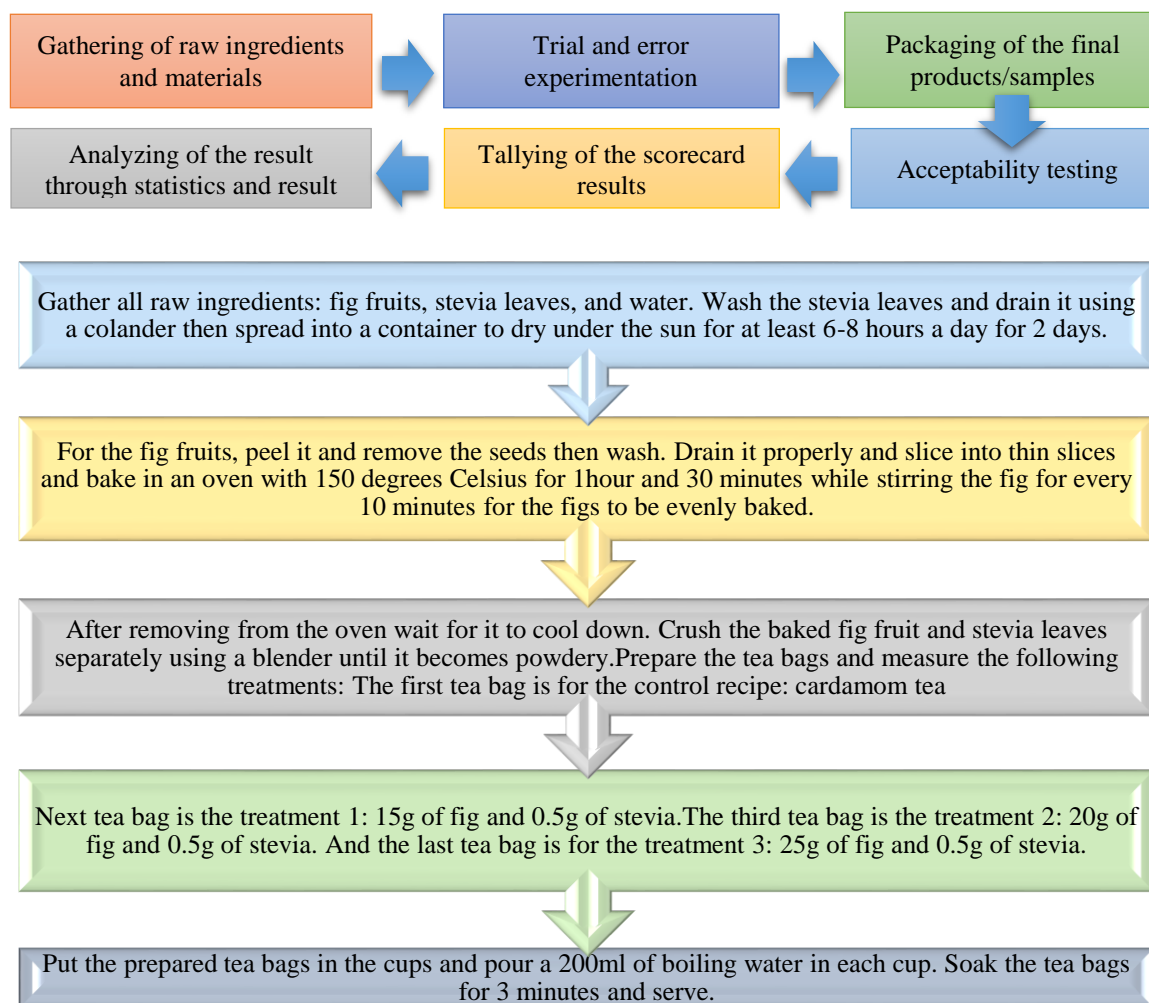


Figure 3. *Research study process flow*

Food and Health Procedure

Before handling and preparing foods, make sure that the materials used are properly clean and no moulds to avoid contamination. Do not mix the materials used in experiments to the other materials. During the process experimentation, make sure that there are no insects that would land on the ingredients.

The following are the proper health procedures to observe based on the article of WebstaurantStore, Inc. (2022).

A. Hand washing

For optimal food safety, it is fundamental that all employees wash their hands before preparing and handling food and when shifting between tasks. Be sure that your staffs are familiar with the proper hand-washing practices to help prevent the spread of germs and bacteria.

B. Sanitation

Sanitizing and cleaning all surfaces, including preparation areas, cutting boards, equipment, storage areas, trash cans, and floor drains, is an important part of your food safety regimen. This process removes food residue, dirt, and invisible germs from surfaces that may come in contact with food.

Cleaning and sanitizing surfaces regularly help prevent pests from inhabiting them. Pests can spread harmful diseases, such as Salmonella and Listeria, to the food in your kitchen.

C. Wash Fruits and Vegetables

Wash all your ingredients thoroughly to remove any bacteria and dirt that may be on their surface. The only exception to this guideline is produce that is pre-packaged and labelled as pre-washed. Follow these produce cleaning tips to enforce food safety in your restaurant:

D. Cross Contamination

Cross-contamination occurs when harmful bacteria, allergens, or other microorganisms transfer from one object to another unintentionally. Though often invisible to the human eye, the results of this process can be extremely dangerous or deadly to unsuspecting consumers.

Treatment of Data

Purposive sampling was used to select the respondents. Purposive sampling, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys (Alchemer, 2021).

The one-way analysis of variance (ANOVA) was used to determine whether there were any statistically significant differences between the means of three or more independent (unrelated) groups. It compares the means between the groups you were interested in and determined whether any of those means were statistically significantly different from each other. It tests the null hypothesis where μ = group mean and k = number of groups. If, however, the one-way ANOVA returns a statistically significant result, we accept the alternative hypothesis (HA), which is that there are at least two group means that are statistically significantly different from each other (Laerd Statistics, 2018).

Table 4. *Statistical Limits*

8.12- 9.00	Like Extremely
7.23- 8.11	Like Very Much
6.34- 7.22	Like Moderately
5.45- 6.33	Like Slightly
4.56- 5.44	Neither Like nor Dislike
3.67- 4.55	Dislike Slightly
2.78- 3.66	Dislike Moderately
1.89- 2.77	Dislike Very Much
1.00- 1.88	Dislike Extremely

Ethical Consideration

The study ensured that its purpose is to determine the acceptability of fig fruit as a tea. The researchers distributed the consent form to the respondents if they were willing to participate in the study and have the right to refuse. The protection of the privacy of the respondents would be ensured. The researchers gave an oral and written explanation to the respondents on the purpose of the research. All data gathered would be kept confidential and for research purposes only.

4. Results and Discussion

This chapter contains the tabulations and presentation of the gathered data that was showed through statistical treatment, analysis, and interpretation to be able to understand more the study. These include the level of acceptability of the fig fruit and stevia mixed blend as a tea. It also includes the significant difference of the tea in terms of color, aroma, taste and body.

Table 5. *Level of acceptability of the fig fruit and stevia mixed blend as a tea and significant difference in terms of color*

Treatments	Mean	Descriptive Equivalent	F- Value	P- Value
Control	7.10	Like Moderately		
Treatment 1	6.26	Like Slightly	6.313	.000
Treatment 2	6.22	Like Slightly		
Treatment 3	5.92	Like Slightly		

The data showed that in terms of color, the control recipe which is the Cardamom tea has the highest mean of 7.10, interpreted as like moderately. While the other three treatments were interpreted as like slightly. Since the F-value is 6.313 and the P-value is 0.000, it means that there is a very high significant difference between the control and the 3 treatments in terms of color.

Based on the post-hoc analysis, in terms of color, the control (cardamom tea) has a very high significant difference on the 3 treatments. Treatment 1 has a high significant difference on the control but there is no significant difference on the treatment 2 and 3. Treatment 2 has a high significant difference on the control but there is no significant difference on the treatment 1 and 3. Lastly, treatment 3 has a high significant difference on the control but there is no significant difference on the treatment 1 and 2.

Therefore, the control recipe overpowered the other treatments in terms of color. It was moderately liked because of having the darkest brown color. The cardamom tea has undergone a curing method that affects its color.

From the article of Vikaspedia (2024), curing of cardamom is the process by which moisture of freshly harvested capsules is reduced through indirect heating. Curing temperature influences the color and quality of processed cardamom. During curing, if the temperature exceeds the threshold level, it will develop brownish streaks. And based on the article of Inflibnet Centre, a drying chamber helps to reduce color loss

and to produce high quality pods.

While the 3 treatments were slightly liked because of their colors that vary from a darker brown to lightly brown. The fig fruit used in the 3 treatments were oven-baked that makes the fig to be lighter brown. According to the results of the study of Gao et al. (2022), it was indicated that the baking process promoted the formation of colored macro-molecules which affected the color of tea infusion. It also indicated that the baking process significantly darkened the color of tea infusion.

Table 6. Level of acceptability of the fig fruit and stevia mixed blend as a tea and significant difference in terms of aroma

Treatments	Mean	Descriptive Equivalent	F- Value	P- Value
Control	7.56	Like Very Much		
Treatment 1	5.96	Like Slightly	13.763	.000
Treatment 2	5.70	Like Slightly		
Treatment 3	5.68	Like Slightly		

In terms of aroma, the control recipe (Cardamom Tea) has the highest mean of 7.56, interpreted as like very much. While the other 3 treatments were interpreted as like slightly. The F-value of 13.763 with P-value of 0.000 resulted to a very high significant difference.

From the post-hoc analysis, in terms of aroma, the control recipe has a very high significant difference on the three treatments. Treatment 1 has a high significant difference on the control but there is no significant difference on the treatment 2 and 3.

Treatment 2 has a high significant difference on the control but there is no significant difference on the treatment 1 and 3. Lastly, treatment 3 has a high significant difference on the control but there is no significant difference on the treatment 1 and 2.

Thus, it means that the control recipe dominated the other treatments in terms of aroma. The control was very much liked due to its more aromatic scent and with a hint of spiciness/minty. It has a strong aroma because curing method was used. Based on the study of Mishra et al. (2022), cardamom capsules are usually dried using curing chambers. Drying methods and conditions significantly affect the aroma and color of cardamom. Also, from the article of Infilibnet Centre, in order to achieve longer storage life and also to bring out the cardamom's aroma, it has to be dried through curing to reduce the moisture content.

Compared to the treatment 1, 2 and 3, they were slightly liked because of having a roasted scent that makes it undesirable for the consumers. The fresh fig fruit that was used in the three treatments has a sweet-scent and fruity aroma, however it was changed into light roast-smell after it was baked. The study of Gao et al. (2022), indicates that the baking process transformed the aroma from sweet to roast. On the other hand, the tea treatments after the oven-baked process have an aroma of strong to light bittersweet. As what the result of the study of Qui et al. (2017), it indicates that the aroma components of tea were increased after baking that makes the flavor more prominent and persistent.

Having an aromatic tea was still based on the different methods and on what kind of tea used as the main ingredients. Based on the study of Ho et al. (2015), aroma compounds differ largely depending on the manufacturing process, even from the same categories of different origins.

The aroma of tea also depends on its compound contents that are affecting the aroma during the process. Every tea has its own characteristics that make them differ from one another. As stated on the study of Zheng et al. (2016), volatile compounds are important components of tea aroma wherein the volatile composition is differentiated between various kinds of tea resulting in variation of aromatic characteristics. Volatiles are the key contributors to tea aroma and each type of tea has its own specific aroma-active volatiles.

Table 7. Level of acceptability of the fig fruit and stevia mixed blend as a tea and significant difference in terms of taste

Treatments	Mean	Descriptive Equivalent	F- Value	P- Value
Control	6.00	Like Slightly		
Treatment 1	6.46	Like Moderately		
Treatment 2	5.86	Like Slightly	1.503	.215
Treatment 3	5.66	Like Slightly		

Table 7 shows the obtained mean of the different treatments in terms of taste. Treatment 1 (15grams fig fruit) has the highest mean of 6.46, interpreted as like moderately. The remaining treatments are interpreted as like slightly. It has an F-value of 1.503 and P-value of 0.215 which means that there is no

significant difference among the treatments. Hence, the consumer has the same perception on the tea samples given. However, treatment 1 still dominates the other samples in terms of taste.

Treatment 1 was moderately liked as it contains the least fig powder and 0.5grams stevia leaves that makes it slightly sweeter compared to the other treatments. While the control recipe has no sweetener like stevia and the other treatments contains more fig that overpowers the stevia making it tasteless and bitter. Having different taste in tea can be based on the adding of flavors or blending of other ingredients, like herbs and plants. For instance, the 3 treatments have the stevia as its natural sweetener that adds to the flavor of the tea samples that makes the treatment 1 sweeter. From the article of Ignite Grow Media-LinkedIn (2023), flavored tea refers to any type of tea that has been infused with additional ingredients, such as fruits, herbs, flowers or spices to enhance its taste and aroma. According to Jarvis (2024), blended tea combines different tea leaves, herbs or spices to create a unique and harmonious balance of flavors.

Additionally, sweeter taste was also one reason why treatment 1 was moderately liked, since people tend to prefer sweeter foods and beverages. As stated on the study of Kaisu et al. (2007), humans have an innate preference for sweet taste, but the degree of liking for sweet foods varies individually. Sweet tastes are also genetically predisposed to human for them to prefer sweet taste because sweet foods are naturally good and are safe sources of energy and nutrients.

Treatment 1 was moderately liked because the taste of tea can also change due to the amount being used and the right balance is important. Since the treatment 1 contains less fig powder that's why it was slightly sweeter and blended well with the stevia. Even if the other treatments contain sweetener, if the amount was not well balanced it will result to undesirable taste. Based on the article of Kanellos (2023), the proper tea-to-water ratio is crucial for a well-balanced flavor without excessive bitterness. Using too much tea can result in an imbalanced taste with excessive bitterness.

The method used was also one of the factors that affect the taste of the tea. The fig fruit used was oven-baked that makes it to be roasted lightly which causes its taste to have some bitterness. From the study of Gao et al. (2022), it was indicated that baking process remarkably increased the thickness, sweet aftertaste and bitterness of the tea. It also indicated that the sugars and amino acids of baked foods was reduced due to the baking process which produces a series of flavor compounds and changes the sensory properties that can cause bitterness and other aftertastes.

Table 8. *Level of acceptability of the fig fruit and stevia mixed blend as a tea and significant difference in terms of body*

Treatments	Mean	Descriptive Equivalent	F- Value	P- Value
Control	6.52	Like Moderately		
Treatment 1	6.34	Like Moderately		
Treatment 2	6.10	Like Slightly	.935	.425
Treatment 3	5.98	Like Slightly		

In terms of body, the data showed that control recipe (Cardamom tea) has the highest mean of 6.52 while treatment 1(15grams fig fruit) is 6.34 and both are interpreted as like moderately. While treatment 2 and 3 were like slightly. The F-value of 0.935 with P-value of 0.425 means it has no significant difference among the treatments in terms of the body. It means that the consumers have the same perception on the body of the samples.

The control recipe was moderately liked since it has unique body of minty/gingery that slightly lingers on the tongue with light bitterness and spiciness. Cardamom came from the family of ginger that's why it was gingery and minty. From the article of Segrest (2024), cardamom is a special spice belonging to the same family as ginger. It has tasting notes of mint, herbal bitterness, cloves, and hints of citrus. It also brings a comforting spice effect. Treatment 1 was also moderately liked because it has a sweeter light weight on the mouth especially that it was blended with stevia as its sweetener.

While the treatment 2 and 3 were slightly liked as they are a bit strong that makes them lingers on the mouth with bitter aftertaste. The compounds content found in teas can be one of the factors that causes bitter aftertaste. As stated in the article of Staff (2023), tannins are naturally occurring polyphenol compound found in tea, plants, fruits, seed and roots. It was the one causing astringency/bitterness that dries out the mouth.

Another reason that the treatment 2 and 3 were slightly liked in terms of body is due to having large amount of fig powder that was used. This caused to have an unbalanced ratio of tea that makes it bitter and strong in the mouth-feel. Based on the article of Kanellos (2023), the proper tea-to-water ratio is crucial for a well-balanced flavor without excessive bitterness. Using too much tea can result in an imbalanced taste with excessive bitterness.

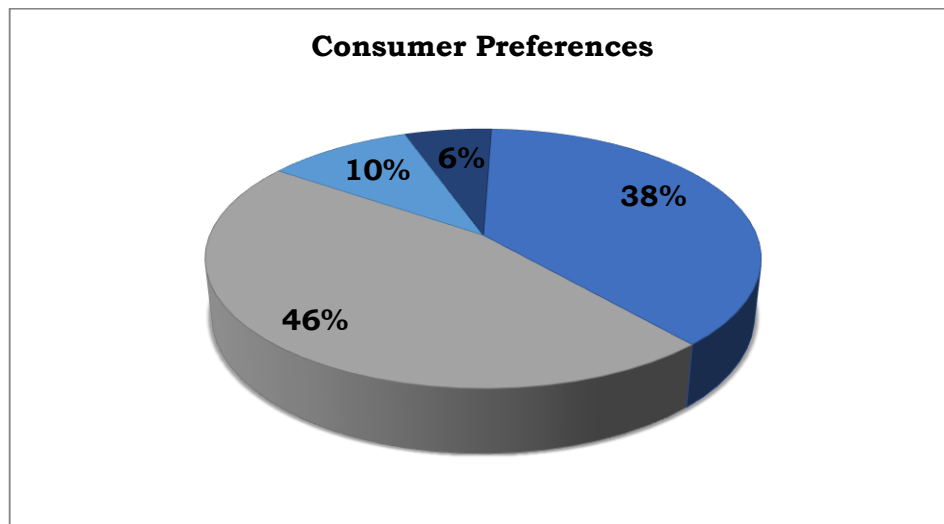


Figure 5. Consumer preferences on fig fruit and stevia mixed blend as a tea sample

Despite of the control recipe overpowering the tea samples used, treatment 1 still has the highest frequency of consumer preference on the fig fruit and stevia mixed blend as a tea. Out of the 50 respondents, there were 23 who preferred the treatment 1 (15grams of fig fruit and 0.5grams stevia leaves. Treatment 1 was ranked first as the most preferable sample out of the other treatments.

Summary of Findings

There was 1 control recipe and 3 treatments that were produced as samples. All samples contain 200ml of water and the 3 treatments contain 0.5grams of stevia leaves. The control recipe is a Cardamom Tea, treatment 1 has 15grams fig fruit, treatment 2 has 20grams fig fruit and treatment 3 has 25grams fig fruit. The produced samples were assessed by 50 evaluators using the hedonic scale that serves as their guide.

Based on the statistical findings, there was a very high significant difference between the control recipe to the 3 treatments in terms of color and aroma resulting to the control to have the highest mean that dominates the three treatments. There was no significant difference between the control and the treatments in terms of the taste and body. In terms of the taste, the treatment 1 has the highest mean, while in terms of body the control over powers the other treatments.

From the data gathered, it shows that in terms of taste, treatment 1 was only the one that has a significant difference to the other samples while the control recipe dominated all the treatments in terms of the color, aroma and body. With the treatment 1 being the most preferred was due to having a sweeter taste among the samples whereas, people tend to choose food/beverages that have a desirable/sweeter taste.

Treatment 1 (15grams fig fruit and 0.5grams stevia leaves) has the highest frequency in terms of being preferable by the respondents. Also, from the 50 participants, 48 were in favor of this product to be out in the market. Based on the cost computation of the tea product, it has a suggested retail pricing of

5. Conclusion and Implications

This chapter presents the conclusions based on the findings and results of the study and the recommendations from the respondents and the researchers of the study.

Conclusion

1. Based on the findings of the study, the researchers conclude that from the statistical data of the fig fruit and stevia mixed blend as a tea, the control recipe (Cardamom Tea) has a very high significant difference towards the 3 treatments in terms of the color and aroma. In terms of the body and taste, there is no significant difference among the tea samples, however, the control recipe still has the highest mean in terms of the body while the treatment 1 dominates in terms of the taste.
2. Treatment 1, which consists of 15grams fig fruit and 0.5grams stevia leaves, came out to have the highest frequency of consumer acceptability on the tea samples provided. It has a sweeter taste compared to the other treatments. So even though, the control recipe turns out having the highest acceptability towards the other treatments but treatment 1 overpowers it in terms of the taste.
3. Having a sweeter taste of tea makes the participants to choose the treatment 1 since it contains smaller amount of fig that blended well with the stevia as the natural sweetener. For this right amount of measurement in tea it creates a balance and desirable taste.
4. The researchers also concluded based on the cost computation and suggested retail pricing that the developed product can be sold at a retail price of Php.60.00 for 7 teabags with a mark-up of

Php.13.72, therefore it was a profitable livelihood for those who wants to use the blended fig fruit and stevia leaves as a tea.

Implications

Based on the findings and conclusions arrived at, the researchers recommend the following:

1. A thorough study must be done for the refinement of the tea samples to come up with a better result of the treatments. Since there was no significant difference among the treatments in terms of the taste and body, and the control recipe has the highest acceptability in terms of aroma and color. Also, try to use different method or process in making tea samples.
2. Conduct a further study regarding the fig fruit to be able to produce other possible products aside from tea.
3. Blend other natural herbs or spices in the tea to produce an aromatic, pigmented and flavorful tea.

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