

UTILIZATION OF LEMONGRASS AS A MAIN INGREDIENTS IN PREPARATION OF CANDY

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INTRODUCTION

Today, the global demand for a healthier diet is increasing, consumers attention is in the connection of their diet and health, they become very demanding in seeking products of their wants. This result for the candy developer to look for a new product that will fit to the needs and wants of the consumers.

A new Product Development is the term used to describe the complete process of bringing a new product to market. A new product is one that is totally new or different version of something already on the market. New products are developed because of demand enthused by changing lifestyles, convenience, health or fitness.

Developing new product is a challenge to the developer, especially that there are more new existing products are constantly being design and developed.

Candy (also called as sweets or lollies) is made by dissolving crystallized sugar in water or milk to form a syrup, which is boiled until it reaches the desired concentration or starts to caramelize. Candy comes in a wide variety of textures, from soft and chewy to hard and brittle. The texture of candy depends on the ingredients and the temperatures that the candy depends primarily on the sugar concentration. As the syrup is heated, it boils, water evaporates, the sugar concentration increases and the boiling point rises. A given temperature corresponds to a particular sugar concentration.

Lemongrass, commonly called "tanglad" in Tagalog, is a plant that is commonly used in Asian cuisine but which may provide therapeutic and medical benefits. It is a good source of Vitamin A, B, and C which are very potent antioxidants; lemongrass is a very good quencher of unstable free radicals that can react with and

damage molecules that cause aging. Antioxidants reduces the appearance of wrinkles and fine lines. Easily available from any ethnic store, health food store, online merchant or in the aisle of the supermarket, its anti-bacterial, anti-microbial, and therapeutic properties make lemongrass a useful alternative or complementary remedy for a wide spectrum of common ailments.

However, this plants have not really been used beyond the traditional purposes it has served for most consumers. Their consumption has mainly been to be a part of a dish but not for their sole usage.

Therefore, the researchers encouraged to conduct a study of producing the lemongrass candy is to develop a new flavour of candy that the consumers will delightfully enjoy the taste, and aside from the nutritional benefits it could give, it will be therapeutic application preventing gastrointestinal problems, stomachaches, diarrhea, bowel spasms, vomiting, fever, flu headaches, infectious illness, colds, rheumatism and can kill cancer cells.

STATEMENT OF THE PROBLEM

The primary concern deals on the utilization of lemongrass as a main ingredient in the preparation of candy.

Specially, it seeks to answer the following:

1. What are the common flavours to be mixed in producing candy?
2. How do the two groups of respondents assessed the lemongrass candy on the quality characteristics in terms of:
 - 1.1. Appearance;
 - 1.2. Flavour;
 - 1.3. Taste; and
 - 1.4. Texture?
3. Is there a significant difference between the lemongrass candy brands x and y in terms of appearance, texture, flavour, and taste?
4. Is there a significant difference the lemongrass of the two groups of respondents as to lemongrass candy's quality characteristics?
5. Is there a significant relationship among the quality characteristics of lemongrass candy?

METHODOLOGY

The researchers used the descriptive and experimental method. The descriptive method of research attempts to describe and explain conditions of the present by using subjects and questionnaires to fully describe a phenomenon and experimental method is this design is most appropriate

in controlled settings such as laboratories and it attempts to explore cause and effect relationships where causes can be manipulated to produce different kinds of effects. (Airasian, P., et al. (2006).

Evaluation Method

SUMMARY OF FINDINGS

Criteria	Students	Professor	Community	Composite Mean	VI	Rank
1. Functionality	3.97	4.07	4.07	4.03	VS	2
2. Usability	4.35	4.05	3.90	4.10	VS	1
3. Reliability	3.95	4.05	4.05	4.02	VS	3
4. Efficiency	4.00	4.03	3.77	3.93	VS	4
5. Maintainability	3.93	4.00	3.57	3.83	VS	5
Over all Composite				4.0	VS	

The following are the specific problems and their summarized findings:

1. The common flavours to be mixed in producing lemongrass candy are orange has 26 or 52%, calamansi has 12 or 24% lemon has 10 or 20%, and dalandan has 4 or 8%. The researchers decided to produce highest flavours which is the orange flavour branded as x and calamansi flavour as brand y for the experimental research.
2. The two groups of respondents do assessed the quality characteristics of lemongrass candy as in Brand X has a =7.08 with the verbally interpretation of Like Moderately while in Brand Y has a 7.83 with the verbally interpretation of Like Very Much

3. There is no significant difference between the lemongrass candy brands x and y in terms of appearance, texture, flavour, and taste, is in general, the computed t-value of 1.314 which is lower than the critical value of 1.684 at 0.05 level of significance and was interpreted as not significant therefore the hypothesis is accepted.

4. There is no significant difference between the assessments of the two groups of respondents as to lemongrass candy's quality characteristics, the computed t-value of 1.314 which is a lower than the critical value of 1. 684 at 0.05 level of significance and was interpreted as not significant therefore the hypothesis is accepted

5. There is no significant relationship among the quality characteristics of lemongrass candy of the obtained overall t-value is 0.0125 with 3 degree of freedom fell lower than the critical value of 1. 943, at 0.05 level of significance and were interpreted as not significant therefore the hypothesis is accepted.

CONCLUSIONS

From the cited findings, the researchers arrived at the following conclusion:

1. Lemongrass can be mixed with the different fruit flavours such as orange and calamansi.
2. Brand Y is most preferred fruit flavour of lemongrass both students and employees.
3. The two fruit flavours can be marketable to both employees and students.
4. Students want the brand X which is the orange flavour because of the sweetness.
5. Lemongrass candy can be produced with a distinct feature.

RECOMMENDATION

1. Explore with other fruit flavours that has nutrients side from orange and calamansi.
2. Developed a marketing plan or feasibility study to find out the viability and profitability of lemongrass candy.
3. Market the brand y for the employees and brand x for the students, specifically in EARIST.
4. Present the lemongrass candy to the DOST and FDA for the product testing.