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THE USE OF MANGOSTEEN IN MOUSSE AND NO-BAKE CHEESECAKE

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ABSTRACT

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Mangosteen is a fruit that grows in tropical regions, commonly found in Indonesia. It has a unique sweet and tangy taste and holds numerous health benefits, making it a fruit often used for medical purposes. Mangosteen is rarely featured in dessert dishes, prompting this research with the aim of discovering a good combination of mangosteen in desserts and to introduce the mangosteen desserts to the generation Z. This research focuses on desserts originating from the European continent, specifically mousse and no-bake cheesecake. This research was conducted with organoleptic tests using hedonic test and hedonic quality test. The results and validity of the research are determined through class intervals and mean tests. It is hoped that this research can add

insight into the discovery of the new flavors of European desserts, allowing people to enjoy desserts with new flavors. The results of the research are that mangosteen can be enjoyed in desserts which the sweet and tangy taste of the mangosteen makes a good combination in soft texture of mousse and the creaminess in no-bake cheesecake desserts.

Keyword: Mangosteen; Mousse; No-bake Cheesecake; European Continent; Desserts

INTRODUCTION

Indonesia is known for its exceptional biodiversity including tropical fruit, such as mango, jackfruit, rambutan, durian, and notably mangosteen (Ningrum & Schreiner, 2017). In Indonesia, the production of mangosteen is quite stable that make mangosteen easily found from Sabang to Merauke and this fruit is very popular with consumers, both nationally and internationally. Mangosteen fruit has a dark purple round exterior with deep purple rind encases with sweet and tangy snow-white flesh like a mixture of strawberry, peach, and citrus. Mangosteen fruit is sold as nutritional supplements (Ovalle-Magallanes et al., 2017).

The production of mangosteen in Indonesia from the data provided by Badan Pusat Statistik shown that in 2022, there are 343.664 ton of mangosteen. The total production of mangosteen increased 12,5 percent from 2021 which are 303.934 ton. Mangosteen is a seasonal fruit which the tree only produces fruit once a year usually in November until March (Gemaharjo, 2018). The production of each region in



Indonesia is massive which it is accessibility to purchase on market for 8 months in a year (Tiofani & Aisyah, 2022a). A good quality of mangosteen is its smooth dark purple exterior, without any spot or sap, and feels heavy (Sutanto, 2023).

Table 1. Generation Z Questionnaire Test Result

<i>Apakah anda pernah mengonsumsi buah manggis?</i>	
Yes	16.7%
No	83.3%

Based on the provided data from a questionnaire that has been distributed to the panelists, most of the panelists from the generation Z haven't tried mangosteen fruit and are still unfamiliar with the taste of mangosteen. Besides that, there is limited research about mangosteen in desserts. In this research with the purpose of introducing the taste of mangosteen in European dessert, mousse and no-bake cheesecake to generation Z and to discover the good combination of mangosteen in mousse and no-bake cheesecake. European desserts have gained popularity in Indonesia as more and more European desserts found in Indonesia such as gelato, crème brûlée, tiramisu and many more (Prita, 2020).

Table 2. European Dessert

Desserts	Origin	References
Gelato	Italy	(Shingh et al., 2020)
Mousse	France	(Stratton, 2021)
Cheesecake	Greece	(Bovbjerg & Iggers, 1989)
Tiramisu	Italy	(Hernandez, 2021)
Crème brûlée	France	(Stratton, 2021)
Madeleine	France	(Stratton, 2021)
Macarons	France	(Stratton, 2021)
Pannacotta	Italy	(Saulsbury, 2007)

Mousse is a popular dessert that is made from a combination of basic ingredients such as chocolate or fruits with cream, sugar, and gelatine. Mousse has a soft, airy, and creamy texture that makes it enjoyed by lots of people among many other desserts (Gusnadi et al., 2021b). Mousse is a dessert that can be customized from the several types of flavors to the presentation of its shapes (LIANNA TEDESCO, 2021), making it a choice to use mangosteen.

Besides that, cheesecake is a globally renowned dessert, and it has also gained popularity in Indonesia (Fauziyah, 2021), often serving as a signature delicacy in cafes (Eka, 2023). The early exploration of cheese desserts paved the way for the rich and varied history of cheesecake, eventually leading to the development of modern versions such as no-bake cheesecake that has been enjoyed nowadays. No-bake cheesecake is a choice of dessert that can used infusion of tropical fruit flavors, like mangosteen.

By combining mangosteen into European desserts, specifically mousse and no-bake cheesecake, authors hope to add insight in discovering the mangosteen flavors in European desserts. Mousse has an airy and soft texture and no-bake cheesecake has creamy texture that makes both complement with the refreshing, sweet and sour taste of the mangosteen.

LITERATURE REVIEW

Mangosteen is a tropical fruit that is known as “queen of the fruits” because the mangosteen habitat grows beside “king of the fruits” called durian. Mangosteen growth in tropical forest in Southeast Asia, such as Indonesia, Malaysia, and Thailand, which it can be easily found in Indonesia from Sabang to Merauke. This plant has spread to another tropical area such as Sri Lanka, Malagasi, Karibia, Hawaii, North Australia, and Central America. Mangosteen has dark purple to red purple rind with edible pulp which is white, soft, and juicy with sweet and sour combination taste that makes itself popular with the consumers, both in national and international markets.

Mangosteen consists of sepals, peel, rind, pulp, and seeds. The sepals are located under the mangosteen and relate to the pulps which means that if there are six sepals then there are six pulps in one fruit and each of the pulps consists of one seed (Tiofani & Aisyah, 2022b). Some of the mangosteen parts contain health benefits and can be processed for medical purposes or even can be used into healthy beverages (Daulae, 2013).

The mangosteen rind is rich in a variety of water-soluble antioxidants, compounds that have been scientifically validated for their robust antioxidant capabilities. The rind is known to possess strong antioxidant activity, which means they can effectively neutralize harmful free radicals in the body, thereby potentially contributing to overall health and well-being (Tjahjani et al., 2014).

Mangosteen is an edible tropical fruit which the pulp can be made into puree. Puree is a modification of fresh fruit that is often used for other processed products in which the texture is soft, thick, and sticky. The mangosteen puree can turn into jam, sauces, ice creams, and drinks (Pornchaloempong et al., 2022).

There exist two primary methods for producing purées from fresh fruits. The first method involves the use of a pulper finisher or centrifugal machines, harnessing centrifugal force through sieves to effectively separate the pulp, seeds, and peel. The second approach employs a food cutter, necessitating the prior separation of pulp and seeds before introducing the pulp into a spinning tank fitted with a cutter mechanism (Pornchaloempong et al., 2022).

The composition of purées incorporates an array of components, including sugars, acids, starch, pectin, water, and dietary fiber, all of which exert direct or indirect influences on the desserts. These attributes encompass texture, pH levels, water activity, viscosity, density, coloration, specific heat, thermal conductivity, and diffusivity. Some of the characteristics play a significant role in determining how well the fruit product can be incorporated into desserts like mousse and no-bake cheesecake while maintaining their structural integrity and quality (Pornchaloempong et al., 2022).

Dessert is a course sweet dish that is typically served at the end of a meal in the form of pastry, cake, ice cream, pudding, or even sweet soup. The word of “dessert” derived from the French verb “desservir” means to clear the table. In the early Middle Ages, Europeans used sugar to produce desserts, until the demand for sugar increased, that made sugar became expensive and can be enjoyed at certain events only. As time passed by, with revolution industry in America and Europe, dessert is produced massively then processed, preserved, and packed. European desserts are

diverse and encompass a wide range of delicious treats from various countries across the continent (Gershon, 2019). Two of the European desserts are mousse and no-bake cheesecake. Mousse originally from French, and the origins of No-Bake Cheesecake is from Greece.

The term “mousse,” originating from the French word for “foam,” that described its airy texture, which is achieved by incorporating air bubbles evenly. Sweet mousses are typically crafted using whipped cream, offering a wide variation of flavours, including chocolate, vanilla, and strawberry (Mousse, n.d.).

Although chocolate mousse has been enjoyed in the United State since at least 1896, it became widely popular in the 1950s when it was featured. For a few decades afterward, chocolate mousse was a trendy dessert choice at stylish dinner parties during the lively 60s and the fashionable 70s (Neman, 2015).

In modern times, mousse is a popular dessert in pastry shop or restaurants and even mousse often used as main ingredients in ‘The Great British Baking Show Challenges’ (Nancy Mock, 2023). The delightful dessert offers an inventive approach to savouring fruit, introducing a twist to traditional fruit consumption. With its soft texture, which is similar to the texture of ice cream, mousse has established itself as a preferred dessert choice, inviting both culinary exploration and pleasure (Hesthiati et al., 2021).

Mousse is crafted by combining three fundamental elements: chocolate or fruit puree, water, and eggs or whipped cream, resulting in a texture that has both firmness and a smooth consistency. The art of mousse preparation further involves the infusion of flavours, with chocolate or fruit puree serving as the main essences. To enhance the taste experience, the subtle yet distinct essence of various fruits can be introduced (Panji et al., 2019). In this research, the author would like to discover the flavour that is produced from mangosteen.

Mousse made with tropical fruits offers a delightful fusion of flavours and textures, combining the rich and creamy texture of mousse with the refreshing taste of tropical fruits. The incorporation of tropical fruits like mango, pineapple, passion fruit, or coconut adds a refreshing and tangy taste to the mousse, making it a popular choice for those seeking a taste of the tropics in a dessert (Jovita, 2022). The natural sweetness and unique flavour of tropical fruits complement the smooth and airy mousse texture, creating a good combination for a dessert.

However, there is limited research on mangosteen mousse, a potential new variant of this dessert. Given the limited research on mangosteen mousse, the creation of mangosteen mousse presents an opportunity for culinary and flavour exploration.

Cheesecake has a long history that can be traced back to ancient civilization. The fundamental idea of melding fresh cheese, eggs, and flour, followed by baking the mixture with heated stones, can be traced to ancient times. Remarkably, there is evidence suggesting that the Greeks may have served a dessert similar to cheesecake to athletes during the inaugural Olympic Games in 776 BCE. As eras rolled on, this culinary concept continued to transform, giving rise to distinct versions in medieval Europe (Straw, 2013).

While cheesecake recipes began appearing in American cookbooks by the late 19th century, it wasn't popular until the American-style cheesecake came into being. Cream cheese is an essential ingredient in both New York and Chicago-style cheesecakes, two iconic variations of American cheesecake. Various types of cheesecakes can be found globally, from New York and Chicago-style cheesecakes to cheesecakes from different regions in Europe and even Japan (BRESLER, 2020).

As the cheesecake's journey through time has shown, its adaptability and enduring popularity have led to diverse interpretations. Authors find innovative variations like no-bake cheesecakes that cater to modern tastes and culinary experimentation. These no-bake creations offer a unique twist to the classic, providing a lighter, airier texture and making them a good choice for those with a sweet tooth (RIKER, 2023).

No-Bake cheesecake involves a straightforward blend of cream cheese, whipped cream, and sweeteners, provides an adaptable foundation for infusing tropical fruit flavours. This inherent flexibility allows for the seamless integration of fruit purees, juices, or extracts, elevating the overall taste and flavour of the dessert. No-Bake Cheesecake helps maintain the authentic essence of fruits like mangosteen. Because of the light and airy texture, No-bake cheesecake complements the refreshing and exotic profiles of tropical fruits (Jenn, 2015). This creates a balance in both taste and mouthfeel, making it a good combination for fruits like mangosteen.

METHOD

In academic journals, development research plays an important role in the continual progress of knowledge and its practical application (Prof. Dr. Ir. Raihan, 2017).

Product research was conducted to discover the acceptance of mangosteen desserts in generation Z and to discover the good combination of mangosteen in dessert. This was achieved through a series of experiments designed to evaluate the possibility and good combination of mangosteen in the products. The results from the first experiment of both mangosteen mousse and mangosteen no-bake cheesecake are the flavor of the mangosteen are not as strong as desired because of the amount of the mangosteen puree used in the recipe and it continues with the second and third experiment with the same problem where in the second experiment there are some additional of mangosteen essence but turns out the flavor are too artificial. Lastly in the fourth experiment, the use of mangosteen puree is 100 percent, it means there is no combination of water in the puree itself.

Organoleptic test is a scientific method used to assess and evaluate the sensory properties of products, particularly related to taste, smell, texture, color, and overall consumer perception that is conducted by an individual or group as becoming the instrument or tool that called as panelist(Gusnadi et al., 2021). The panelist has to assess products with a type of measurement scale which is the Likert Scale. The test using hedonic test and hedonic quality test are referred to several individuals to do a hedonic experiment that is focused on the preference through taste, texture, smell, and color to determine the satisfaction level in the products which are mangosteen mousse and no-bake cheesecake ranging from "strongly dislike" to strongly like" (Johnson, 2021). The data from the panelists' answers are gathered by a form test

consisting of the product characteristics and qualities measured by a scale of one to five. Statistic descriptive is a type of statistic methodology used to describe, display, and summarize a set of data that helps to reveal the data's characteristics and helps in understanding the data without making predictions or inferences about the future (revou.co, 2023). The data that is used in descriptive analysis for this research is obtained from an organoleptic test survey in a form test of hedonic test and hedonic quality test. The results of both tests will be calculated using the mean test.

A sample consists of a group of individuals selected from a population and serves as a representative subset of the entire population. An ideal sample should reflect the characteristics and diversity of the population. If the sample is inadequate in mirroring the entire population, regardless of its size, the results from that sample cannot be considered representative of the entire population (Hutami, 2021). Sampling techniques are a part of statistical methodology that focuses on the process of sample selection. It involves various methods and strategies used to obtain a representative sample from a larger population (Prof. I WAYAN SUSILA, n.d.).

The first sampling method employed was purposive sampling, which involves selecting a sample based on characteristics of the target population, for the research objectives or questions (Hutami, 2021). Trained panelists as the sample are required to understand the process, evaluate the characteristics and quality of the texture, color, smell, and taste of the product. The criteria of the trained panelists are experienced panelists with a minimum of two years of expertise, consisting of:

Table 3. Trained Panelist

No	Name	Job Position
1	Stallone Liaunardo	CDP Pastry in Dear Clio Hachi Group
2	Vena Meitasari	Demi Chef Pastry in Le Meridien Jakarta
3	Jessica Ilene	Business Owner of Ourdough

The second sampling method employed was convenience sampling, which involves selecting participants or data points readily accessible or available instantly (Hutami, 2021). The untrained panelists' selection criteria were determined based on age and preference for desserts. Participants chosen via convenience sampling fell within the age range of Generation Z, specifically aged between 11 and 26. The selection criteria for participants in this research were carefully chosen to align with the objectives of the study. By focusing on individuals within the Generation Z age range, specifically the year of 1997 until 2012 (Beresford Research, 2023), the author aimed to gain insights into a demographic with distinct taste preferences and experiences with desserts where there are 87 percent think about eating dessert at least once a day, 47 percent have a favorite restaurant they frequently visited just for dessert and three out of four think every special occasion needs a special dessert (Slagel, n.d.).

This demographic choice is particularly relevant to the investigation of mangosteen-flavored desserts as it allows the author to understand their perceptions and evaluations. Such insights are invaluable for assessing the market potential and the level of acceptance the creations may receive (10EQS, 2023). Furthermore, this focused age range ensures consistency and comparability in the research results, ultimately enhancing the research's credibility.

In this research, it was focused on the mangosteen flavor in European desserts such as mousse and no-bake cheesecake. This selection of methods was driven by the specific needs of this research to ensure effective evaluation of sensory attributes.

A variable is a characteristic that can be controlled by the researcher to find the relationship between variable and the outcomes of the research (Hassan, 2023). There are two types of variables that are used in this research which are dependent variable and independent variable (Salmaa, 2023). A Likert scale is used in this research for assessment in a form test that distributed to the panelists. The Likert scale is typically used to allow respondents to express their level of agreement or disagreement with statements about the products being evaluated. The Likert scale comprises five categories, which are: 1) Strongly dislike, 2) Dislike, 3) Quite Like, 4) Like, and 5) Strongly Like and 1) Very Poor, 2) Poor, 3) Quite Good, 4) Good, 5) Very Good (Bhandari Pritha & Nikolopoulou, 2023).

RESULTS AND DISCUSSION

The research resulted in an optimal recipe of mangosteen desserts, which are mangosteen puree, mangosteen coulis, mangosteen mousse, and mangosteen no-bake cheesecake. The method in producing mangosteen puree is firstly cut the mangosteen in two and separate the pulp from the rind. Then, turn on the blender or chopper and process the mangosteen flesh until smooth. This process will separate the mangosteen seeds from the puree. After that, strain using a fine sieve to achieve a smooth mangosteen puree. Lastly, Store the mangosteen puree in an airtight container and keep it in the refrigerator.

For the mangosteen mousse, the ingredients are 100 gram of mangosteen puree, 20 gram of sugar, 140 gram of whipping cream, and 20 gram gelatine base. The method of mangosteen mousse is firstly boiling the mangosteen puree with sugar until it reaches a boiling point, then let it cool. While waiting for the mangosteen puree to cool down, whipped the whipping cream until soft peak. Mix the mangosteen puree into the whipped cream using a folding technique. Then, add the melted gelatine base into the mousse mixture. Use pipping bag to pipe in a silicon mold until $\frac{3}{4}$ of the mold. Add the frozen mangosteen puree into the mousse, do not let it sink until the bottom, so it will maintain at the middle of the mousse when it freezes and freeze into freezer for 3 hours. After 3 hours take it out and garnish the product.

For the mangosteen no-bake cheesecake, the ingredients are 80 gram of mangosteen puree, 100 gram of cream cheese, 25 gram of icing sugar, 100 gram of whipping cream, and 35 gram of gelatine base. The method of mangosteen no-bake cheesecake is firstly whip the whipping cream until soft peak. Then whip the cream cheese and icing sugar until soft and smooth. Add the mangosteen puree into the cream cheese mixture and mix it only until it is combined well. Using a folding technique to mix the whipped cream and cream cheese mixture. Add the melted gelatine base and use the folding technique to mix it well. Pipe it to a cup and place it in the refrigerator.

For the mangosteen coulis, the ingredients are 160 gram of mangosteen puree, 20 gram of sugar, 20 gram of water, and 4 gram of cornstarch. The method of

mangosteen coulis is mix the ingredients into a pot then bring it to boil and thickening. Pipe the mangosteen coulis on top of the set no-bake cheesecake, and mint leaf for the garnish.

The test used the Likert Scale with various degrees of numbers, Very Poor (1), Poor (2), Quite Good (3), Good (4), and Very Good (5). The categories of the test are calculated using class intervals formula. The formula of class interval:

Class Width = Range of Data / Number of Class Interval

Range of Data = Maximum Score – Minimum Score

= 5 – 1

= 4

The class width is $4/5 = 0,8$. From the class interval above that has been calculated, resulting the categories of scoring:

Table 4. Class Interval Category

No	Class Interval	Categories
1	1,00 – 1,79	Very Poor
2	1,80 – 2,59	Poor
3	2,60 – 3,39	Quite Good
4	3,40 – 4,19	Good
5	4,20 – 5,00	Very Good

Source: Processed Data (2023)

Table 5. Hedonic Test Mangosteen Mousse

Score	Mangosteen Mousse			
	Taste	Smell	Texture	Color
Strongly Dislike	0.0%	0.0%	0.0%	0.0%
Dislike	0.0%	0.0%	0.0%	0.0%
Quite Like	0.0%	23.3%	0.0%	0.0%
Like	10%	56.7%	43.3%	30%
Strongly Like	90%	20%	56.7%	70%

Source: Processed Data (2023)

Table 6. Hedonic Test Mangosteen No-bake Cheesecake

Score	Mangosteen No-bake Cheesecake			
	Taste	Smell	Texture	Color
Strongly Dislike	0.0%	0.0%	0.0%	0.0%
Dislike	0.0%	0.0%	0.0%	0.0%
Quite Like	0.0%	20%	0.0%	3.3%
Like	23.3%	53.3%	3.3%	50%
Strongly Like	76.7%	26.7%	96.7%	46.7%

Source: Processed Data (2023)

Table 7. Hedonic Mean Test

Score	Mangosteen Mousse	
	Mangosteen Mousse	Mangosteen No-bake Cheesecake
Taste	4,90	4,77
Smell	3,97	4,07
Texture	4,57	4,97
Color	4,70	4,43
Total Mean	4,53	4,56

Source: Processed Data (2023)

Based on the class interval that has been calculated, the result of the total mean in mangosteen mousse shows the number of 4,53 which categories as a very good product. Besides that, the result of total mean in mangosteen no-bake cheesecake shows the number of 4,56 which categories as a very good product. The result of both products in the hedonic test gains the number of scores above 4,20 which is “very good”, it means mangosteen in mousse and no-bake cheesecake well accepted in society.

Table 8. Hedonic Quality Test Mangosteen Mousse

Score	Mangosteen Mousse			
	Taste	Smell	Texture	Color
Strongly Dislike	0.0%	0.0%	0.0%	0.0%
Dislike	0.0%	0.0%	0.0%	0.0%
Quite Like	0.0%	33.3%	33.3%	0.0%
Like	66.7%	66.7%	33.3%	0.0%
Strongly Like	33.3%	0.0%	33.3%	100%

Source: Processed Data (2023)

Table 9. Hedonic Quality Test Mangosteen No-bake Cheesecake

Score	Mangosteen No-bake Cheesecake			
	Taste	Smell	Texture	Color
Strongly Dislike	0.0%	0.0%	0.0%	0.0%
Dislike	0.0%	0.0%	0.0%	0.0%
Quite Like	0.0%	33.3%	0.0%	33.3%
Like	33.3%	66.7%	33.3%	33.3%
Strongly Like	66.7%	0.0%	66.7%	33.3%

Source: Processed Data (2023)

Table 10. Hedonic Quality Mean Test

Score	Mangosteen Mousse		Mangosteen No-bake Cheesecake
	Mangosteen Mousse	Mangosteen No-bake Cheesecake	
Taste	4,33		4,67
Smell	3,67		3,67
Texture	4,00		4,67
Color	5,00		4,00
Total Mean	4,25		4,25

Source: Processed Data (2023)

Based on the class interval that has been calculated, the result of the total mean in mangosteen mousse shows the number of 4,31 which categorizes as a very good product. Besides that, the result of total mean in mangosteen no-bake cheesecake shows the number of 4,38 which categorizes as a very good product. The result of both products in the hedonic quality test gains the number of scores above 4,20 which is “very good”, it means mangosteen in mousse and no-bake cheesecake well accepted in pastry expertise.

Based on the data collected from a form that has been distributed to untrained panelists, the result of total mean test of the hedonic test of mangosteen mousse and mangosteen no-bake cheesecake is above 4,20 in “very good” categories. In terms of taste, mangosteen mousse with an average score of 4,90 and for the mangosteen no-bake cheesecake with an average score of 4,77. Both products have gained “very good” in categories. In terms of smell, mangosteen mousse with an average score of 3,97 and for the mangosteen no-bake cheesecake with an average score of 4,07. Both products have gained “good” in categories. In terms of texture, mangosteen mousse with an average score of 4,57 and mangosteen no-bake cheesecake with an average

score of 4,97. Both products have gained “very good” in categories. In terms of color, mangosteen mousse gained an average score of 4,70 and mangosteen no-bake cheesecake with an average score of 4,43. Both products have gained “very good” in categories.

Based on the data collected from a form that has been distributed to trained panelists, the result of total mean test of the hedonic quality test of mangosteen mousse and mangosteen no-bake cheesecake is above 4,2 in “very good” categories. In terms of taste, mangosteen mousse with an average score of 4,50 and for the mangosteen no-bake cheesecake with an average score of 4,75. Both products have gained “very good” in categories. In terms of smell, mangosteen mousse and mangosteen no-bake cheesecake with an average score of 3,75. Both products have gained “good” in categories. In terms of texture, mangosteen mousse with an average score of 4,00 and mangosteen no-bake cheesecake with an average score of 4,75. Mangosteen mousse has gained “good” in categories and mangosteen no-bake cheesecake has gained “very good” in categories. In terms of color, mangosteen mousse gained an average score of perfect 5,00 and mangosteen no-bake cheesecake with an average score of 4,25. Both products have gained “very good” in categories.

The result of the mean test from hedonic test and hedonic quality test reach very good category in which both desserts are well-accepted for the generation Z. Besides that, the taste of mangosteen in mousse and no-bake cheesecake complements each other and becomes a good combination of more balanced taste.

CONCLUSIONS

This research aims to discover acceptance of mangosteen dessert to the generation Z and the good combination of mangosteen in mousse and no-bake cheesecake. Through organoleptic test using hedonic test and hedonic quality test, it has been distributed to panelists using a form paper, in the result of both products are well-received in generation Z. Although the concept of using mangosteen in desserts is new, most of the panelists who tried these desserts rated score in the range of quite like to strongly like the product in color, texture, taste, and smell.

The composition of mangosteen used to create a good combination of mangosteen in the dessert involve using 100 percent mangosteen puree made from the flesh itself. Using 100 percent mangosteen puree provides the authentic flavor and characteristics of mangosteen fruit. Adding water to the mangosteen puree can reduce the intensity of mangosteen flavor in the dessert. Therefore, choosing to use mangosteen puree without adding water helps maintain the mangosteen flavor in the desserts.

Instead of using additional mangosteen essence to make the smell and taste stronger, use 100 percent mangosteen puree in desserts because the taste of the mangosteen essence makes these desserts taste artificial. Besides that, whipping the cream has to be done until it reaches soft peak to avoid the runny structure of the mangosteen mousse.

Storing mangosteen puree in chiller can make the color change. Through this research, authors find out that mangosteen puree turns into deeper pink when

stored it in chiller for longer than one hour. The natural color change of mangosteen puree helps to boost the desserts color to make the desserts not so pale in color.

REFERECE

- 10EQS. (2023). How To Conduct A Market Assessment For A New Product. *10EQS*. <https://www.10eqs.com/knowledge-center/how-to-conduct-a-market-assessment/>
- Beresford Research. (2023). Generations defined by name, birth year, and ages in 2023. *Beresford Research*. <https://www.beresfordresearch.com/age-range-by-generation/>
- Bovbjerg, D., & Iggers, J. (1989). *The Joy of Cheesecake*. B.E.S. Publishing.
- BRESLER, A. (2020). *7 Decadent Global Cheesecake Styles You Need To Try*.
- Daulae, A. H. (2013). LIMBAH BUAH MANGGIS (*Garcinia mangostana*L.) PENUH KHASIATBERPOTENSI JADI KEWIRAUSAHAAN DI SUMATERA UTARA. *Jurnal Pengabdian Kepada Masyarakat*.
- Eka, A. (2023). *15 Makanan Penutup Ala Cafe yang Mudah di Recook*.
- Fauziah, R. N. (2021). *10 ide Usaha Makanan di Tahun 2022*.
- Gemaharjo. (2018, September 16). Musim Panen Buah Manggis. *Gemaharjo-Watulimo.Trenggalekkab.Go.Id*.
- Gershon, L. (2019). The Invention of Dessert. *Daily.Jstor.Org*.
- Gusnadi, D., Taufiq, R., & Baharta, E. (2021). UJI ORANOLEPTIK DAN DAYA TERIMA PADA PRODUK MOUSSE BERBASIS TAPAI SINGKONG SEBEGAI KOMODITI UMKM DI KABUPATEN BANDUNG. *Jurnal Inovasi Penelitian*.
- GUSNADI, D., TAUFIQ, R., & BAHARTA, E. (2021). *UJI ORGANOLEPTIK DAN DAYA TERIMA PADA PRODUK MOUSSE BERBASIS TAPAI SINGKONG SEBAGAI KOMODITI UMKM DI KABUPATEN BANDUNG*.
- Hassan, M. (2023). Variables in Research – Definition, Types and Examples. *Researchmethod*.
- Hernandez, J. (2021, October 31). *Ado Campoel, the man known as the “father of tiramisu,” has died*. NPR.
- Hesthiati, E., GS Sukartono, I., Waluyo, T., & Hanifah, N. (2021). *Characteristics of Vegetable Canistel Mousse Dessert (*Pouteria campechiana*) Using Polysacaride Stabilizer*. <https://ieomsociety.org/proceedings/2021monterrey/634.pdf>
- Hutami, W. F. (2021). *POPULASI DAN SAMPEL DALAM PENELITIAN*.
- Jenn. (2015). *DOLE CANNED FRUIT HAWAIIAN NO BAKE CHEESECAKE RECIPE*. <https://therebelchick.com/dole-canned-fruit-tropical-cheesecake-recipe/>
- Johnson, M. (2021). The 9-point Hedonic Scale. *Sensorysociety.Org*.
- Jovita. (2022). *Passion Fruit and Mango Mousse*. <https://yummyaddiction.com/passion-fruit-mango-mousse/>

- LIANNA TEDESCO. (2021, February). *You're Probably Not Ready For The Most Popular Desserts In The World, But Here They Are*. The Travel. <https://ieomsociety.org/proceedings/2021monterrey/634.pdf>
- Mousse. (n.d.). Tasteatlas.
- Nancy Mock. (2023). *What is Mousse?*
- Neman, D. (2015). Chocolate mousse an oldie but goodie. *The Providence Journal*. <https://www.providencejournal.com/story/lifestyle/food/recipes/2015/05/27/chocolate-mousse-oldie-but-goodie/34475462007/>
- Ningrum, A., & Schreiner, M. (2017). Review: Extensive Potentiality of Selected Tropical Fruits from Indonesia. *Indonesian Food and Nutrition Progress*, 14(2), 85. <https://doi.org/10.22146/ifnp.28427>
- Ovalle-Magallanes, B., Eugenio-Pérez, D., & Pedraza-Chaverri, J. (2017). Medicinal properties of mangosteen (*Garcinia mangostana* L.): A comprehensive update. *Food and Chemical Toxicology*, 109, 102–122. <https://doi.org/10.1016/j.fct.2017.08.021>
- Panji, D. D., Octaviany, V., & Gusnadi, D. (2019). *PEMANFAATAN BUAH NANGKA SEBAGAI SUBSTITUSI GULA DAN LEMAK NABATI PADA MOUSSE 2019*. <https://ieomsociety.org/proceedings/2021monterrey/634.pdf>
- Pornchaloempong, P., Sharma, S., Phanomsophon, T., Srisawat, K., Inta, W., Sirisomboon, P., Prinyawiwatkul, W., Nakawajana, N., Lapcharoensuk, R., & Teerachaichayut, S. (2022). Non-Destructive Quality Evaluation of Tropical Fruit (Mango and Mangosteen) Purée Using Near-Infrared Spectroscopy Combined with Partial Least Squares Regression. *Agriculture*, 12(12), 2060. <https://doi.org/10.3390/agriculture12122060>
- Prita. (2020, July 10). *10 Dessert Populer di Eropa Rasanya Lumer di Mulut*. Gotravelly.Com.
- Prof. Dr. Ir. Raihan, M. S. (2017). *Metodologi Penelitian*.
- Prof. I WAYAN SUSILA. (n.d.). *TEKNIK PENGAMBILAN SAMPEL*.
- revou.co. (2023). *Analisis Deskriptif*. Revou.Co.
- RIKER, M. (2023). *BAKE VS NO-BAKE CHEESECAKE: EVERYTHING YOU NEED TO KNOW*. <https://thehappierhomemaker.com/bake-vs-no-bake-cheesecake-everything-you-need-to-know/>
- Saulsbury, C. V. (2007). *Panna cotta : Italy's elegant custard made easy*. Nashville, Tenn. : Cumberland House.
- Shingh, S., Rani, R., & Kanse, S. (2020). A review on Gelato: An Italian delicacy. *Emergent Life Sciences Research*, 06(02), 74–81. <https://doi.org/10.31783/elsr.2020.627481>
- Slagel, M. (n.d.). Three ways to feed Gen Z and Millennials' dessert obsession. *HERSHEY*. Retrieved November 28, 2023, from https://www.thehersheycompany.com/en_us/home/newsroom/blog/three-ways-to-feed-gen-z-and-millennials-dessert-obsession.html
- Stratton, M. (2021, January 1). *The Best French Desserts*. Thespruceeats.Com.

- Straw, K. (2013). *The History of Cheesecake*.
- Sutanto, A. (2023, July 25). *Ciri Ciri Manggis: Mengenal Buah yang Kaya Manfaat untuk Kesehatan*. Ciri.or.Id.
- Tiofani, K., & Aisyah, Y. (2022a). Kapan Musim Manggis Tiba? *Kompas.Com*.
- Tiofani, K., & Aisyah, Y. (2022b, January 5). 9 Fakta Menarik Seputar Manggis, Buah Tropis Asli Indonesia. *Kompas.Com*.
- Tjahjani, S., Widowati, W., Khiong, K., Suhendra, A., & Tjokropranoto, R. (2014). Antioxidant Properties of *Garcinia Mangostana* L (Mangosteen) Rind. *Procedia Chemistry*, 13, 198–203. <https://doi.org/10.1016/j.proche.2014.12.027>