

## ANALYSIS OF THE DIFFERENCES IN CONSUMER PREFERENCES TOWARDS PURCHASING LOCAL ORANGES AND IMPORTED ORANGES IN THE MODERN MARKET OF MEDAN CITY

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### Abstract

*This research is motivated by the fact that citrus fruit is a fruit that is widely consumed and has high demand. Increasing consumer demand for citrus fruit cannot be avoided. The more imported citrus products on the national market, the more competition there will be between local citrus fruit and imported citrus fruit. Imported orange fruit is often found in various cities and districts in Indonesia, including Medan City, therefore this research is needed to determine the characteristics and behavior and preferences of consumers towards local and imported orange fruit in the Medan City Modern Market. This research aims to examine what attributes consumers prefer when buying local and imported oranges at the Medan City Modern Market and analyze which attributes consumers most consider when buying local and imported oranges at the Medan City Modern Market. The data used is primary data. The data analysis used was Chi-Square and Multiattribute Fishbein. The results of the research show that there are differences in consumer preferences for the attributes of local oranges and imported oranges, except for the taste attribute. The local orange fruit that is the preference of consumers at the Medan City Modern Market is that it has a sweet taste, the price of oranges is <Rp. 20,000/Kg, the orange packaging is not wrapped, the benefits of oranges as an embodiment of a healthy lifestyle, the skin color is greenish yellow, the skin texture is smooth with large pores, durability at room temperature, large variety of fruit, direct promotion on location, ease of obtaining based on stock availability, number of seeds 1-3 seeds, high water content, yellow-orange flesh color. Meanwhile, the preference for imported oranges is that they have a sweet taste, the price of oranges is IDR 30,001–IDR 40,000/Kg, the orange packaging is wrapped in plastic, the benefits of oranges are to fulfill nutritional needs, the color of the skin is orange-yellow, the texture of the skin is smooth with small pores, the resistance to temperature cooler, medium sized variety, direct promotion on location, ease of obtaining based on stock availability, no number of seeds, high water content, and orange flesh color.*

**Keywords:** Preference, Chi-square, Fishbein multiattribute

### 1. INTRODUCTION

The agricultural sector is an economic sector that has great potential for the formation of the national economy. The agriculture, livestock, forestry and fisheries sectors make an important contribution to development, especially in meeting people's food consumption and for agricultural progress and rural economic recovery through the development of agriculture-based businesses. Indonesia is a country that is fertile and rich in agricultural and plantation products. Indonesia is a producer of types of horticultural plants that have diversity and benefits. Horticultural plants are plants grown for ornamental, medicinal, or food purposes that produce fruit, vegetables, flowers, and spices. Horticultural plants can grow in various climatic and soil conditions, and can be planted both in open fields and in pots or containers (Jui, 2016). Fruit is a plant food, which comes from plants and also contains seeds. Scientifically, fruit is a source of nutritional fulfillment for humans, namely to fulfill the need for vitamins, fiber and minerals, as well as preventing vitamin deficiencies in order to prevent symptoms of disease that arise due to a lack of vitamins, fiber and minerals (Kusuma 2023). In this pandemic transition period, consuming fruit is important to maintain the body's immunity and reduce the risk of disease.

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Fruits are a type of plant that produces fruit that can be consumed by humans. Fruit contains nutrients that are good for health, such as fiber, vitamins, minerals and antioxidants. Fruit consumption is very important for human health because fruit contains many nutrients and fiber that the body needs. Several reasons why consuming fruit is very important is because it is rich in nutrients, where fruit contains various kinds of nutrients that the body needs such as vitamins, minerals, antioxidants and fiber. These nutrients help maintain body health and prevent various diseases. Can maintain heart health, where fruit consumption is linked to a reduced risk of heart disease, because fruit contains antioxidants and fiber which help maintain a healthy cardiovascular system. Maintaining digestive health, the fiber contained in fruit helps improve digestion and prevent constipation. Can maintain healthy skin: Vitamin C and antioxidants in fruit help maintain healthy skin, as they help reduce free radical damage and stimulate collagen production. Maintain a healthy weight because fruit is generally low in calories and high in fiber, so it can help maintain a healthy weight. Can increase the body's immunity, because the Vitamin C contained in the fruit helps increase the body's immunity, so the body is more resistant to disease. Therefore, it is highly recommended to make fruit consumption part of your daily diet to maintain a healthy body. It is recommended to consume a minimum of 2-3 servings of fruit every day, with a variety of fruit choices.

Every society or consumer makes various kinds of decisions regarding searching, purchasing, using various products and brands at any given period. Consumers make decisions every day or every period without realizing that they have made a decision. The discipline of consumer behavior seeks to study how consumers make decisions and understand what factors influence and are involved in making these decisions (Sunarwan 2002). Consumer behavior can be interpreted as behavior that shows consumers searching for, buying, using, evaluating and consuming products and services that they hope satisfy their needs (Andreansyah 2018). Fruit consumption behavior is influenced by the type of processed fruit, and also the type of fruit itself. People will be more interested in fruit that has an attractive presentation and a variety of fruit types (Nago et al., 2010). The fruit market in Medan is one of the markets that is quite busy and important in the distribution of fruit in Indonesia. In this market there are various types of imported and local fruit that consumers can find and buy. However, in this increasingly competitive market, the competitiveness between imported fruit and local fruit is becoming increasingly important to analyze based on consumer decision making in purchasing local oranges in the city of Medan, making Indonesia a potential market for marketing goods and services from various brands in the area. world.

**2. LITERATURE REVIEW****2.1 Orange Commodity**

Oranges (*Citrus* sp.) are annual fruit plants originating from Asia. Since hundreds of years ago, oranges have been growing in Indonesia either naturally or cultivated. The types of local oranges cultivated in Indonesia are tangerines (*Citrus reticulata/nobilis* L.), Siamese oranges (*C. microcarpa* L. and *C. Sinesis* L.) which consist of Siam Pontianak, Siam Garut, Siam Lumajang (Kemenristek, 2000). According to Balitjestro (2016), overall Siamese oranges and tangerines have almost the same characteristics, for ordinary people it will be difficult to differentiate them. Tangerines or *Citrus sinensis* (L) Osbeck are very popular with the public because they have a sweet, slightly sour and fresh taste, attractive skin color and are easy to peel. The weight of a tangerine is 125-274 grams, the shape of the tangerine fruit is generally round, some are flat, the characteristic is that it has a bun, the surface texture is slightly rough, the skin color in the highlands can reach orange. It has thick fruit walls with a stiff outer skin layer. Skin thickness 3.13-4.63 mm.

## 2.2 Theoretical basis

### 2.2.1 Consumer Behavior Theory

According to Swasta and Handoko (in Adnan, 2019), consumer behavior is the activity of individuals who are directly involved in obtaining and using goods and services, including the decision-making process and preparation for determining these activities. According to Peter and Olson (2013) consumer behavior is the process a person/organization goes through in searching for, buying, using, evaluating and disposing of products or services after consumption to meet their needs. Consumer behavior will be shown in several stages, namely before purchase, purchase and after purchase. In the pre-purchase stage, consumers will search for information related to products and services. At the purchasing stage, consumers will purchase the product, and at the post-purchase stage, consumers will consume (use the product), evaluate product performance, and finally discard the product after use, or individual activities that directly This theory includes various factors that influence consumer behavior, such as personal preferences, social environment, psychological factors, and economic factors.

### 2.2.2 Preference

Consumer preferences according to Simatupang and Ariani in Mardiyah Hayati et al (2009:451-452) are an abstract conception that describes a map of increasing satisfaction obtained from a combination of goods and services as a reflection of their personal tastes. In other words, consumer preferences are a description of the combination of goods or services that consumers would prefer if they had the opportunity to obtain them. A consumer is assumed to be able to differentiate between all types of commodities he encounters, which commodities he chooses, which commodities are the same when chosen as other commodities, or in other words, in consumer preference theory it is assumed that every consumer is able to make a list of the order or rank of preferences for all the commodities he uses. faced him.

### 2.2.3 Understanding Attitude

Attitude is an expression of feelings (inner feelings), which reflects whether someone is happy or unhappy, likes or dislikes, and agrees or not with an object. In the opinion of William G. Nickels in Basu Swasta and Hani Handoko (2013:94) stated that attitude is a learned tendency to react to product offers in good or bad ways consequently. Citing the opinion of (David, 2012) suggests that an attitude describes good or bad cognitive assessments, emotional feelings and tendencies to act that persist for a certain time towards several objects or ideas.

### 2.2.4. Factors That Influence Purchases

Consumer characteristic factors that are related to purchasing decisions, namely consumer purchases are related to consumer characteristics. For the most part, marketers cannot control such factors, but they must take them all into account.

### 2.2.5 Product attribute

Attributes can be interpreted as real and intangible characteristics (tangible and intangible) of a product that provide subjective satisfaction or satisfaction of needs for consumers. In measuring consumer satisfaction, product attributes or features play an important role, therefore there are several ways that researchers can use to determine product attributes, one of which is by asking consumers what attributes or features are considered important (Erna, 2005).

### 2.2.6 Product quality

Quality is an important factor in the business and non-business world where the good and bad performance of a company can be measured by the quality of the goods produced. In the Big Indonesian Dictionary (KBBI), quality is defined as the level of good or bad something, degree or quality. Kotler and Armstrong (2004:347) state that product quality is the ability of a product to perform its functions. If a product can carry out its functions, it can be said to be a product of good

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quality. According to Kotler (2004:330), most products are provided at one of four quality levels, namely: low quality, average quality, good quality and very good quality. Some of the attributes above can be measured objectively. However, from a marketing perspective, quality must be measured in terms of the buyer's perception of the quality of the product.

**2.2.7 Previous Research**

According to Januarti, et al (2015) in their journal entitled "Analysis of consumer decisions to buy fruit at the Modern Market in Medan City" it was found that the characteristics of buyers who bought fruit in the research area were housewives and also professionals (entrepreneurs, private employees, civil servants). State ), aged < 25-55 years, highly educated (high school, diploma, bachelor and postgraduate), has 2 family dependents and income ranging from Rp. 3,000,000 - < Rp. 5,000,000. The factors that cause consumers to decide to buy fruit in modern markets are price, quality, promotion, location, service and psychology, while packaging is not a factor that causes consumers to buy fruit in modern markets.

**2.2.8 Framework**

The distribution of fruit in Indonesia is influenced by climate, soil type, and the geographical location of each region. Several regions in Indonesia have advantages in the production of certain fruits, such as North Sumatra for citrus, mangosteen and rambutan. Fruit consumption has a very important role in meeting people's nutritional needs. Fruit is a source of vitamins, fiber and minerals which are very important for body health. In Medan, there are many types of fruit that can be found in traditional and modern markets. Consumer behavior in choosing and buying fruit has also changed during the COVID-19 pandemic. Many consumers tend to prefer to buy fruit that lasts a long time and is easy to store, such as apples, oranges and bananas, compared to fruit that is more easily damaged and needs to be consumed immediately, such as berries or papaya. Based on the existing background and problems, a framework of thought was prepared as follows: Analysis of differences in consumer preferences begins by identifying general consumer characteristics and stages of the purchasing process using descriptive analysis.

Grouping of consumer characteristics includes age, gender, marital status, type of job, highest level of education, and income level. The data analysis methods used are Chi square analysis and the Fishbein Multiattribute model. To find out the differences in consumer preferences for local and imported citrus fruit and to find out what attributes are consumer preferences in this research, Chi square analysis was used. This analytical method can be used to examine significant differences between the observed number of objects or answers that fall into each category and the expected number. The Fishbein Multiattribute Model in this research is used to determine the most dominant attributes considered by consumers. The attributes used in this research are taste, price, packaging, benefits, skin color, texture, durability, variety, promotion, ease of obtaining, number of seeds, water content and flesh color. Then, for ease of obtaining data, purchases of local oranges and imported oranges were carried out at the Modern Market in Medan City using Descriptive Analysis, Chi Square Analysis and the Fishbein Multiattribute model.

**2.2.9 Research Hypothesis**

Based on the formulation of the problem, the research objectives and research framework of the hypothesis can be formulated as follows:

1. There are differences in consumer preferences for local citrus fruit and imported orange fruit in Medan City. The attributes that consumers prefer or like when buying local citrus fruit at the Medan City Modern Market are the sweet, slightly sour taste of the fruit, the benefits of the fruit for realizing a healthy lifestyle, greenish yellow skin color, price below IDR 20,000/kg, smooth skin texture with large pores, ease of obtaining due to stock availability, durability at room temperature, large water content, variety of large size oranges, direct promotion on location, yellow-orange flesh color, number of seeds 1-3 seeds, unwrapped

orange packaging. Meanwhile, imported orange fruit has a sweet fruit taste, price IDR 30,001/kg – IDR 40,000/kg, orange packaging is wrapped, benefits of fruit for nutritional needs, orange fruit color, smooth skin texture with small pores, resistance to cold temperatures, variety of medium sized oranges, direct promotion on location, easy to obtain due to stock availability, no number of seeds, high water content, orange flesh color.

2. The attribute of local and imported citrus fruit that is most considered by consumers is fruit taste.

### 3. IMPLEMENTATION METHOD

#### 3.1 Method for Determining Research Areas

The research area was chosen purposively, that is, the research area was taken by taking into account the known reasons for the research area (Nurmelly, 2014) where this research was based on the largest population and also very large population heterogeneity. This research was conducted in Medan City, North Sumatra Province.

#### 3.2 Sample Determination Method

According to Sugiono (2013), the definition of a sample is part of the number and characteristics of the population. The sampling method in this research is non-probability sampling with accidental sampling technique. Respondents in this study were consumers who happened to buy oranges at the modern market and bought oranges and were willing to be interviewed.

#### 3.4 Method of collecting data

The data used in this research is data. The data used in compiling this research is primary data and secondary data. Primary data was obtained by conducting direct interviews and direct observations in the field with respondents using questions (questionnaires) which were distributed directly in the field. Secondary data is data obtained from literature studies and other books related to the discussion and documents that are in accordance with the discussion in the research.

#### 3.5 Data analysis method

This research uses descriptive analysis methods, chis-square data analysis and Fishbein multiattribute analysis methods. Descriptive analysis to describe the distribution of respondent data on a particular variable. In this research, descriptive analysis was used to determine consumer characteristics and the purchasing process of local and imported citrus fruit at the Medan City Modern Market. This analysis was chosen because it is able to describe and describe consumer characteristics and the ongoing purchasing process when the research was conducted. The dominant answers in the questionnaire will indicate consumer characteristics and purchasing decision behavior. Descriptive analysis is used to examine the characteristics of consumers who consume oranges and analyze the stages of the purchasing decision process.

## 4. RESULTS AND DISCUSSION

### A. Description of Research Area

#### 1. Geographical Location and Conditions

The city of Medan is located between 3°.27' - 3°.43' North Latitude and 98°.35' - 98°.44' East Longitude with an altitude of 2.5 – 37.5 meters above sea level. Medan City has an area of 26,510 hectares (265.10 km<sup>2</sup>) or 3.6% of the total area of North Sumatra. Based on the sub-district, the smallest area is Medan Perjuangan District, namely 4.09 Km<sup>2</sup>, while the sub-district with the largest area is Medan Labuhan District, namely 36.67 Km<sup>2</sup>. The area of sub-districts in Medan City can be seen in the following table:

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**Table 4. 1 Area of Medan City by District in 2017**

<b>Subdistrict</b>	<b>Area (Km2)</b>	<b>Percentage (%)</b>
1. Field of Benefits	20.68	7.8
2. Medan Johor	14.58	5.5
3. Sandpaper Field	11,19	4.22
4. Denai Field	9.05	3.41
5. Terrain Area	5.52	2.08
6. Medan City	5.27	1.99
7. Medan Maimun	2.98	1.13
8. Polonia Field	9.01	3,4
9. New Terrain	5.84	2,2
10. Medan Selayang	12.81	4.83
11. Medan Sunggal	15.44	5.83
12. Helvetia Field	13,16	4.97
13. Medan Petisah	6.82	2.57
14. West Medan	5.33	2.01
15. East Medan	7.76	2.93
16. Field of Struggle	4.09	1.54
17. Medan Tembung	7.99	3.01
18. Medan Deli	20.84	7.86
19. Medan Labuhan	36.67	13.83
20. Medan Marelan	23.82	8.99
21. Medan Belawan	26.25	9.9
<b>Medan</b>	<b>265.1</b>	<b>100</b>

*Source: Medan in Figures 2018*

**2. State of the Population**

**Table 4. 2 Population by Age Group and Gender in Medan City in 2022**

<b>Age group (Age Group)</b>	<b>Man Male (Soul/Person)</b>	<b>Woman Female (Soul/Person)</b>	<b>Total</b>
0 – 4	103657	98934	202591
5 – 9	99796	95554	195350
10 – 14	96664	91477	188141
15 – 19	97998	92265	190263
20 – 24	101921	96608	198529
25 – 29	105494	103214	208708



30 – 34	104321	102811	207132
35 – 39	100585	101306	201891
40 – 44	93029	96248	189277
45 – 49	85748	89260	175008
50 – 54	74081	77484	151565
55 – 59	59613	63879	123492
60 – 64	45979	51060	97039
65 – 69	34515	38727	73242
70 -74	22125	25999	48124
75+	16787	27373	44160
<b>Total</b>	<b>1242313</b>	<b>1252199</b>	<b>2494512</b>

Source: Medan City BPS 2023

From table 4.2 it can be seen that the population of Medan City in 2022 will be 2,494,512 people, consisting of 1,242,313 men and 1,252,199 women.

### 3. Sample Characteristics

#### a. Sample Age

**Table 4.3 Respondents Based on Age**

Age (Year)	Number of Respondents		Total (Soul)	Amount (%)
	Orange fruitLocal	Imported Orange Fruit		
≤ 20	2	1	3	3.13
21-30	9	15	24	25
31-40	10	35	45	46.87
41-50	3	14	17	17.71
≤ 50	2	5	7	7.29
<b>Total</b>	<b>26</b>	<b>70</b>	<b>96</b>	<b>100</b>

Source: Primary Data Analysis, 2024 (Appendix 1)

The age of consumers used as respondents in this research is that consumers who shop at modern markets (supermarkets/supermarkets) in the city of Medan are mostly aged 31-40 years, 45 consumers (46.87%). There were 10 respondents who chose local fruit and 35 consumers who chose Mandarin oranges. There were 24 consumers aged 21-30 years (25%), of which 9 consumers chose local oranges and 15 consumers chose imported oranges. At the age of 41-50 years there were 17 consumers (17.71%) of which 3 consumers chose local oranges and 14 consumers chose imported oranges. Ages over 50 years were 7 consumers (7.29%), namely 2 consumers who chose local oranges and 5 consumers who chose mandari oranges, and under 20 years of age there were 3 consumers (3.13%) who chose local oranges. 2 consumers and 1 consumer who chose imported oranges.

#### b. Gender

**Table 4.1 Respondents Based on Gender**

Gender	Number of Respondents		Amount (Soul)	Amount (%)
	Orange fruitLocal	Imported Orange Fruit		
Man	11	23	34	35.42
Woman	15	47	62	64.58
<b>Total</b>	<b>26</b>	<b>70</b>	<b>96</b>	<b>100%</b>

Source: Primary Data Analysis, 2024 (Appendix 1)

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In Table 4.4 it can be seen that the largest number of consumers who shop in modern markets (self-service/supermarkets) in the city of Medan are women, 62 consumers (64.58%), of which 15 consumers choose local oranges and 47 consumers choose imported oranges. Meanwhile, there were 34 male consumers (35.42%) who chose local oranges and 11 consumers chose imported oranges. Thus, it can be said that the majority of consumers in this research are women.

**c. Level of education**

**Table 4. 5 Respondents Based on Education Level**

Level of education	Number of Respondents		Amount (Soul)	Amount (%)
	Orange fruitLocal	Imported Orange Fruit		
elementary school	0	0	0	0
JUNIOR SCHOOL	0	1	1	1.04
SENIOR SCHOOL	3	10	13	13.54
Diploma (D3)	5	9	14	14.58
Bachelor degree)	15	35	50	52.08
Postgraduate (S2)	3	15	18	18.75
<b>Total</b>	<b>26</b>	<b>70</b>	<b>96</b>	<b>100</b>

*Source: Primary Data Analysis, 2024 (Appendix 1)*

In Table 4.5. It can be seen that, the majority of consumers who shop in modern markets (self-service/supermarkets) in Medan City are at Bachelor's level (S1) as many as 50 consumers (52.08%) with 15 consumers choosing local oranges and 35 consumers choosing imported oranges. . There were 18 consumers at the Postgraduate Education (S2) level (18.75%), 3 consumers chose local oranges and 15 consumers chose imported oranges. There were 14 consumers with a Diploma (D3) education level (14.58%), 5 consumers chose local oranges and 9 consumers chose imported oranges.

**d. Income Per Month**

**Table 4. 6 Respondents Based on Monthly Income (Rupiah)**

Income Per Month (Rupiah)	Number of Respondents		Amount (Soul)	Amount (%)
	Orange fruitLocal	Imported Orange Fruit		
≤1,000,000	4	4	8	8.32
1,000.001- 3,000,000	8	23	31	32.29
3,000,001 – 5,000,000	10	19	29	30.21
≥ 5,000,001	4	24	28	29,17
<b>Total</b>	<b>26</b>	<b>70</b>	<b>96</b>	<b>100</b>

*Source: Primary Data Analysis, 2024 (Appendix 1)*

Table 4.6. shows that the largest amount of monthly income for consumers is IDR 1,000,000 – IDR 3,000,000 as many as 31 consumers (32.29%) and those who choose local oranges are 8 consumers and those who choose imported oranges are 23 consumers, consumers with income of IDR 3,000,001- IDR 5,000,000 was 29 consumers (30.21%) who chose local oranges as many as 10 consumers and 19 consumers who chose imported oranges. For consumers with a monthly income of more than IDR 5,000,001, there were 28 consumers (29.17%) who chose local oranges and 24 consumers who chose imported oranges.





## e. Marital status

**Table 4. 7 Respondents Based on Marital Status**

Status Wedding	Number of Respondents		Amount (Soul)	Amount (%)
	Orange fruitLocal	Imported Orange Fruit		
Marry	14	45	59	61.46
Not married yet	12	25	37	38.54
<b>Total</b>	<b>26</b>	<b>70</b>	<b>96</b>	<b>100</b>

Source: Primary Data Analysis, 2024 (Appendix 1)

In Table 4.7. It can be seen that consumers who shop at the modern market in the city of Medan are married rather than unmarried with a total of 59 married consumers (61.46%) and 14 people who choose local oranges and 45 people who choose imported oranges. consumer. Meanwhile, there were 37 unmarried consumers (38.54%) with 12 consumers choosing local oranges and 25 consumers choosing imported oranges. Thus, it can be said that the majority of research consumers are married (married).

## f. Work

**Table 4. 8 Respondents Based on Type of Work**

Livelihoods	Number of Respondents		Amount (Soul)	Amount (%)
	Orange fruitLocal	Imported Orange Fruit		
Private employees	13	26	39	40.63
Businessman	0	6	6	6.25
Government employees	3	14	17	17.71
BUMN	0	7	7	7.29
Doctor	1	2	3	3.13
Lecturer	0	4	4	4.17
Student	2	0	2	2.08
Teacher	5	4	9	9.37
Retired	0	2	2	2.08
IRT	2	5	7	7.29
<b>Total</b>	<b>26</b>	<b>70</b>	<b>96</b>	<b>100</b>

Source: Primary Data Analysis, 2024 (Appendix 1)

Table 4.8. shows that the largest number of people's jobs are private employees, 13 consumers who choose local oranges and 26 consumers who choose imported oranges, so the largest total is in private sector jobs, 39 consumers (40.63%). For Civil Servants, 3 consumers chose local oranges and 14 consumers chose imported oranges so that 17 consumers (17.71%) had jobs as Civil Servants. Furthermore, BUMN had 7 consumers (7.29%) and domestic households also had 7 consumers (7.29%), of which 2 consumers chose local oranges and 5 consumers chose imported oranges.

## B. Consumer Purchasing Behavior

### a. Purchase Frequency

**Table 4. 9 Distribution of Respondents According to Purchase Frequency in the Medan City Modern Market**

No	Purchase Frequency	Local Oranges		Imported Oranges	
		Number of Respondents (people)	Percentage (%)	Number of Respondents (people)	Percentage (%)

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1	Every day	0	0	0	0
2	Once a week	17	17.71	15	15.63
3	Once every two weeks	25	26.04	29	30.21
4	Once a month	31	32.29	18	18.75
5	Uncertain				
	Once every 2-3 months	9	9.38	12	12.50
	once every 6 months	6	6.25	7	7.29
	When there's an event	8	8.33	15	15.63
	Amount	96	100	96	100

*Source: Primary Data Analysis, 2024 (Appendix 2)*

Based on Table 4.9 above, it can be seen that the frequency of respondents purchasing oranges a month is once a month with the number of respondents being 31 people or 32.29 percent. This purchase time shows that consumers do not consume local citrus fruit very often or only occasionally. The frequency with which respondents often purchase local citrus fruit is once every two weeks a month, as many as 25 respondents or 26.04 percent. This is because consumers not only use citrus fruit as a source of vitamins but also want a variety of other types of fruit to complement their vitamin needs.

**b. Purchase Amount**

**Table 4. 10 Distribution of Respondents Based on Number of Purchases of Local Oranges and Imported Oranges at the Modern Market in Medan City**

No	Purchase Frequency	Local Oranges		Imported Oranges	
		Number of Respondents (people)	Percentage (%)	Number of Respondents (people)	Percentage (%)
1	< 1kg	4	4.16	10	10.42
2	1-2 kg	86	89.58	66	68.75
3	> 2kg	6	6.25	20	20.83

*Source: Primary Data Analysis, 2024 (Appendix 2)*

Based on Table 4.10 above, it can be seen that the majority of respondents who bought local oranges purchased 1 kg to 2 kg, 86 respondents or 89.58 percent. The amount of this purchase is influenced by the number of family members, where the greater the number of family members, the greater the amount of the purchase itself.

**c. Consumer Characteristics of Local Oranges and Imported Oranges**

**Table 4. 11 General Characteristics of Local and Imported Orange Consumers**

No	Characteristics	Amount	Percentage (%)
1	Age	<20	3.13
		21-30	25
		31-40	46.87
		41-50	17.71

		>50	7	7.29
2	Gender	Man	34	35.42
		Woman	62	64.58
3	Last education	elementary school	0	0
		JUNIOR HIGH SCHOOL	1	1,042
		SENIOR HIGH SCHOOL	13	13.54
		DIPLOMA	14	14.58
		S1	50	52.08
		S2	18	18.75
4	Income	< 1,000,000	8	8.32
		1,001,000 - 3,000,000	31	32.29
		3,001,000 - 5,000,000	29	30.2
		> 5,000,000	28	29.17
5	Marital status	Marry	59	61.46
		Not married yet	37	38.54
6	Work	Private employees	39	40.62
		Businessman	6	6.25
		Government employees	17	17.71
		BUMN	7	7.29
		Doctor	3	3.13
		IRT	7	7.29
		Student	2	2.08
		Retired	2	2.08
		Lecturer	4	4.17
Teacher	9	9.38		

Source: Primary Data Analysis, 2024 (Appendix 1)

In Table 4.9. It can be seen that consumers who visit the Medan City Modern Market and buy local and imported oranges are aged 31-40 years, namely 45 consumers (46.87%). This is because at this age consumers pay more attention to health by consuming local or imported oranges.

#### d. Consumer Preferences for Attributes of Local Oranges and Imported Oranges

**Table 4. 12 Number of Respondents Who Choose Each Attribute Category (fo) and Expected Respondents in the Local Orange Fruit Attribute Category (fe)**

Attribute Local Orange Fruit	Local Citrus Fruit Attribute Category	Observed (fo)	Expected (fe)
Flavor	Slightly sweet and sour	3	32
	Sweet, slightly sour	55	32
	Sweet	38	32

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Price	Oranges with a price of <Rp. 20,000/Kg	66	32
	Oranges at a price of IDR 20,000/Kg – IDR 30,000/Kg	27	32
	Oranges are priced at IDR 30,001 – IDR 40,000/Kg	3	32
	Oranges with a price of >Rp 40,001/Kg	0	0
Packaging	Oranges wrapped in plastic	0	0
	Oranges wrapped in plastic net	0	0
	Oranges are not wrapped	96	96
Benefit	Fulfillment of nutritional needs	24	32
	The embodiment of a healthy lifestyle	70	32
	Social class symbol	2	32
Skin color	Green	4	24
	Yellowish Green	16	24
	Greenish Yellow	47	24
	Orange	29	24
Fruit Texture	Rough Spotted	8	24
	Large Porous Coarse	12	24
	Small Porous Smooth Skin	10	24
	Large Porous Smooth Skin	66	24
Durability	Hold at room temperature	57	48
	Withstands cold temperatures	39	48
Fruit Diversity	Big	50	32
	Currently,	33	32
	Small	13	32
	Very small	0	0
Promotion	Advertisements on TV	5	32
	Newspaper	4	32
	Directly on Location	87	32
Ease of getting	Strategic location	32	32
	Stock availability	45	32
	Lots of choices	19	32
Number of Seeds	No Seeds	1	32
	1-3 seeds	67	32
	>from 3 seeds	28	32
Water Content	Lots	76	32
	Currently	19	32
	A little	1	32
Fruit Flesh Color	Yellow – Orange	56	48
	Orange	40	48

*Source: Primary Data Analysis, 2024 (Appendix 3)*

From the frequency of consumers who chose each category of local fruit attribute, analysis was then carried out using Chi Square analysis. The following is a table of Chi-Square analysis calculations on local citrus fruit attributes.



e. Consumer Preferences for Attribute Categories of Local Oranges and Imported Oranges

**Table 4. 13 Consumer Preferences for Local Orange Fruit in the Medan City Modern Market**

No	Attributes of Orange Fruit	Category	Number of respondents	Percentage	Category
1	Flavor	Sour	3	3.13	Sweet, slightly sour
		Sweet, slightly sour	55	57.29	
		Sweet	38	39.58	
2	Price	Oranges with a price of <Rp. 20,000/Kg	66	68.75	Oranges with a price of <Rp. 20,000/Kg
		Oranges at a price of IDR 20,000/Kg – IDR 30,000/Kg	27	28.12	
		Oranges are priced at IDR 30,001 – IDR 40,000/Kg	3	3.13	
		Oranges with a price of >Rp 40,001/Kg	0	0	
3	Packaging	Oranges wrapped in plastic	0	0	Oranges are not wrapped
		Oranges wrapped in plastic net	0	0	
		Oranges are not wrapped	96	100	
4	Benefit	Fulfillment of nutritional needs	24	25	The embodiment of a healthy lifestyle
		The embodiment of a healthy lifestyle	70	72.92	
		Symbol of social class	2	2.08	
5	Skin color	Green	4	4.17	Greenish Yellow
		Yellowish Green	16	16.67	
		Greenish Yellow	47	48.96	
		Orange	29	30.21	
6	Fruit Texture	Rough Spotted	8	8.33	Large Porous Smooth Skin
		Large Porous Coarse	12	12.50	
		Small Porous Smooth Skin	10	10.42	
		Large Porous Smooth Skin	66	68.75	
7	Durability	Hold at room temperature	57	59.38	Hold at room temperature
		Withstands cold temperatures	19	19.79	
8	Fruit Diversity	Big	50	52.08	Big
		Currently	33	34.38	
		Small	13	13.54	
		Very small	0	0	
9	Promotion	Advertisements on TV	5	5.21	Directly on Location
		Newspaper	4	4.17	
		Directly on Location	87	90.63	
10	Ease of getting	Strategic location	32	33.33	Stock availability
		Stock availability	45	46.88	

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		Lots of choices	19	19.79	
11	Number of Seeds	No Seeds	1	1.04	
		1-3 seeds	67	69.79	1-3 seeds
		>from 3 seeds	28	29.17	
12	Water Content	Lots	76	79.17	
		Currently	19	19.79	Lots
		A little	1	1.04	
13	Fruit Flesh Color	Yellow - Orange	56	58.33	Yellow - Orange
		Orange	40	41.67	

Source: Primary Data Analysis, 2024 (Appendix 5)

Based on Table 4.13, it can be seen that the local oranges that are the favorite of consumers at the Medan City Modern Market are oranges which have a sweet, slightly sour taste, the price of local oranges is <Rp. 20,000/Kg, unwrapped orange packaging, the benefits of oranges as an embodiment of style. healthy life, greenish yellow skin color, smooth fruit texture with large pores, durability at room temperature, variety of fruit shapes with large sizes, promotions that can be carried out directly at the location, ease of obtaining due to stock availability, number of seeds 1-3 seeds, high water content, and the color of the fruit flesh is yellow – orange.

**f. Consumer Trust and Evaluation of the Attributes of Local Oranges and Imported Oranges**

**Table 4. 14 Trust Level Scores for Local Orange Fruit**

No	Attribute	Frequency at each scale value					Trust score (bi)
		1	2	3	4	5	
1	Fruit Flavor	0	0	10	48	38	4.29
2	Fruit Prices	0	0	21	40	35	4.15
3	Packaging	0	5	51	31	9	3.46
4	Benefits of Fruit	0	0	12	48	36	4.25
5	Skin color	0	0	22	30	41	4.07
6	Fruit Texture	0	0	22	41	33	4.11
7	Fruit Durability	0	0	31	46	19	3.88
8	Fruit Diversity	0	2	38	52	4	3.60
9	Promotion	0	0	24	46	26	4.02
10	Ease of Obtaining	0	0	29	51	16	3.86
11	Number of Seeds	0	9	52	31	4	3.31
12	Water Content	0	0	11	58	27	4.17
13	Fruit Flesh Color	0	0	40	50	6	3.65

Source: Primary Data Analysis, 2024 (Appendix 6)

Table 4.14 shows that the value of the level of consumer confidence in the attributes attached to local orange fruit. In the table above, it can be seen that the taste attribute is an attribute that consumers believe based on what the consumer feels. This attribute gets the largest trust score compared to other attributes with a value of 4.29. Furthermore, the fruit benefit attribute is 4.25, then the water content attribute that consumers trust is 4.17. The next attribute that consumers trust is the price attribute with a score of 4.15. Followed by the fruit texture attribute of 4.11, then the skin color attribute of 4.07. Next, the promotion attribute with a score of 4.02, the durability attribute with a score of 3.88, the ease of obtaining attribute with a score of 3.86, the fruit flesh

color attribute with a score of 3.65, then the fruit diversity attribute with a score of 3.60, then the packaging attribute with score 3.46. The attribute of the number of seeds in the fruit obtained the smallest score at the confidence level, namely 3.31.

## 5. CONCLUSION

1. There are differences in consumer preferences for the attributes of local oranges and imported oranges. The local orange fruit that is the preference of consumers at the Medan City Modern Market is that it has a sweet, slightly sour taste, the price of oranges is <Rp. 20,000/Kg, the orange packaging is not wrapped, the benefits of oranges as an embodiment of a healthy lifestyle, the skin color is greenish yellow, the skin texture is smooth large pores, durability at room temperature, large variety of fruit, direct promotion on location, easy to obtain based on stock availability, number of seeds 1-3 seeds, high water content, yellow-orange flesh color. Meanwhile, the preference for imported oranges is that they have a sweet taste, the price of oranges is Rp. 30,001–Rp. 40,000/Kg, the packaging of oranges is wrapped, the benefits of oranges to fulfill nutritional needs, orange-yellow skin color, smooth skin texture with small pores, durability at refrigerated temperatures, medium sized variety, direct promotion at the location, ease of obtaining based on stock availability, no number of seeds, high water content, and orange flesh color.
2. The attribute that consumers consider in their decision to purchase local and imported oranges at the Medan City Modern Market is taste.

## 6. SUGGESTIONS

From the results of the research and analysis that has been carried out, several suggestions can be written as follows:

1. Local orange marketers should take post-harvest actions such as better storage, packaging, labeling and distribution so that the quality, availability and appearance of local orange fruit are guaranteed so that they do not compete with imported orange fruit.
2. The modern market as a marketer for citrus fruit needs to pay attention to the condition of citrus fruit attributes that consumers perceive as unfavorable.
3. The government should encourage agricultural research institutions to produce quality citrus fruit products, as well as control the volume of outreach about the advantages of local fruit.

## REFERENCES

- Andreansyah, A., Salmiah, S., & Sebayar, T. ANALYSIS OF CONSUMER BEHAVIOR IN DECISIONS TO PURCHASE ORGANIC RICE. *JOURNAL ON SOCIAL ECONOMIC OF AGRICULTURE AND AGRIBUSINESS*, 10(2).
- Arianty, N. (2013). The Influence of Promotions on Customer Decisions to Use Mentari Cards at PT. Indosat Tbk. Medan. *Economist: Journal of Economics and Development Studies*, 13(1).
- Bartezzaghi, G., Cattani, A., Garrone, P., Melacini, M., & Perego, A. (2022). Food Waste Causes in Fruit and Vegetables Supply Chains. *Transportation Research Procedia*, 67, 118-130.
- Habib, Akbar., and Risnawati. (2018). Analysis of Factors Affecting Demand for Imported Papaya Fruit in Medan City. *Agrium Journal ISSN 0852- 1077*, vol 21 No.2.
- Kotler, P., and Armstrong, G. (1999). *Marketing Principles*. Jakarta: Erlangga.
- Kotler, P., and Armstrong, G. (2006). *Marketing Principles*, Twelfth Edition. Jakarta: Erlangga.
- Kotler, P., and Keller, K Lane. (2009). *Marketing Management*, Thirteenth Edition, Volume 1. Jakarta: Erlangga.
- Kotler., and Keller. (2009). *Marketing Management*. Thirteenth edition. Volume 2. Jakarta: Erlangga.

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- Lestari, SP and M. (2017). Benchmarks of Competitiveness Between Local Orange Fruit and Imported Orange Fruit are seen from Consumer Attitudes in the City of Semarang. Proceedings of the National Seminar and Call for Papers: Optimizing Organizational Governance in Efforts to Increase Competitiveness and Organizational Climate. Faculty of Economics and Business UNTAG Semarang, 15 pages.
- Loh, Yun Z Yong, 2001. The Quest for Global Quality, Pustaka Delapratasa, Jakarta.
- Priyambodo, CS, Sastryawanto, H., & Hermawati, DT (2019). Analysis of consumer preferences for orange fruit at Keputran Utara Market, Surabaya. *Agribusiness Socio-Scientific Journal*, 19(1).
- Rahayu, JN, Fauziyah, E., & Ariyani, AH (2012). Consumer preferences for imported apples at the Hokky fruit shop and Ampel traditional market in Surabaya. *Agrieconomics*, 1(1), 52-67.
- Rangkuti F., 2009, *Measuring Customer Satisfaction: Measuring Techniques and Strategies to Increase Customer Satisfaction*, PT. Gramedia Pustaka Utama, Jakarta
- Rompas, Jui., et al. 2015. Potential of the Agricultural Sector and its Influence on Labor Absorption in South Minahasa Regency. *Manado: Efficiency Scientific Periodical Journal*. Vol. 15 No. 04
- Rosalina, D., & Zati, MR (2019). Analysis of the Competitiveness of Local Oranges Against Imported Oranges in Tanah Karo Regency. *Journal of Samudra Economics*, 3(1), 26-33.
- Sangadji, Mamang, E., Sopiah (2013). *Practical Approach Consumer Behavior*, Yogyakarta: CV. Andi Offset.
- Schiffman., and Kanuk. (2004). *Consumer Behavior*, Seventh Edition. Jakarta: PT. Index.
- Schiffman., and Kanuk. (2011). *Perception of Quality, Consumer Behavior*. New Jersey: Persona Prestice Hall.
- Selvaggi, R., Zarbà, C., Pappalardo, G., Pecorino, B., & Chinnici, G. (2023). Italian consumers' awareness, preferences and attitudes about Sicilian blood oranges (Arancia Rossa di Sicilia PGI). *Journal of Agriculture and Food Research*, 11, 100486.
- Simamora, B., 2008, *Consumer Behavior Research Guide*, PT. Gramedia Pustaka Utama, Jakarta.
- Private and Handoko, 2008, *Marketing Management, Consumer Behavior Analysis*, first edition, fourth printing, Publisher: BPF, Yogyakarta.
- Puji, S., Lestari, Muchayatin 2017. Benchmarks of Competitiveness between Local Orange Fruit and Imported Orange Fruit as Seen from Consumer Attitudes in Semarang City [Peper]. Faculty of Economics and Business University 17 August 1945 Semarang
- Tambun, HA, Sihombing, L., Lubis, SN, (2016). Consumer Preferences for Imported Fruit in Medan City. *JOURNAL ON SOCIAL ECONOMIC OF AGRICULTURE AND AGRIBUSINESS*, 5(12).
- Widiyanti, W. (2019). Consumer Attitudes towards Multi-Attribute Domino Pizza Products Using the Fishbein Method in Depok. *Horizon*, 19(1), 107–112.
- Widiyanto, NA, Adhi, AK, & Daryanto, HK (2016). Attributes That Influence Consumer Attitudes and Preferences in Buying Apples in the City of Surabaya and Malang City, East Java Province. *Journal of Family & Consumer Sciences*, 9(2), 136-146