

Community Perception of Moringa Leaf Noodles in Babul Makmur Village, Simeulue Barat District, Simeulue Regency

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Abstract:

The benefits of the Moringa plant are many and almost all parts of the Moringa plant such as leaves, flowers, stems, fruit, and seeds can be used as a source of food, especially the leaves. The purpose of this study was to analyze (1) the introduction of respondents to Moringa, (2) Public Perceptions of Moringa processing and (3) Community Perceptions of Moringa Leaf Noodles. This research was conducted in Babul prosperous village, west Simeulue sub-district, Simeulue district. The time of the research was carried out in November 2021. The research was conducted by interviewing 50 respondents. Data collection used Likert Scale analysis. From the results of the study, it was found that the average score for the introduction of the community to the Moringa plant was 3.96. Where the score shows that the community agrees that they are familiar with the Moringa plant. The value of the average score of public perception of Moringa processing is 3.76. Where the score shows that people agree that Moringa can be processed into a variety of dishes. The value of the average score of public perception of Moringa leaf noodles is 4.05. Where the score shows that people agree that Moringa leaf noodles are delicious and the ingredients are easy to find.

Keywords:

perception; society; moringa leaf noodles

I. Introduction

Babul Makmur Village is one of the villages in West Simeulue District, Simeulue Regency. This village is a very potential area with various agricultural businesses such as Moringa plants which are easy to grow considering that Moringa plants are plants that can grow quickly, have a long life and withstand extreme conditions according to the climate in this area.

Moringa is a plant that grows a lot in Indonesia. This plant grows a lot in the lowlands and highlands (Kurniasih, 2013). In Babul Makmur village, many Moringa plants are found, the community grows a lot of Moringa plants because Moringa is used by the community as a vegetable for daily consumption and is trusted by the community to be used as medicine to expel jinn if someone is possessed. In this village, the community has known Moringa plants for a long time and the people of Babul Makmur village often refer to the Moringa plant as barunggai. Based on the results of a survey conducted, there are 26% of the public who do not know the benefits of Moringa leaves and the community has not used much processed Moringa leaves, especially the processing of Moringa leaf noodles.

Moringa plants have many benefits and properties that are found in all parts, from the leaves, stems, roots and seeds that can be used. Moringa leaf is one part of the Moringa plant that has been widely studied for its nutritional content and uses. Moringa leaves are very rich in nutrients such as calcium, iron, protein, vitamin A, vitamin B and vitamin C and Moringa leaves have a higher iron content than other vegetables at 17.2 mg/100 g.

Sangana et. al. (2016) found the power of Moringa leaves as one of the antioxidants and antiproliferations found in ethanol and water extracts. Yuliani & Dienina (2015) in their research showed the presence of antioxidant activity in Moringa leaf infusion. Likewise with the results of Suphachai's research (2014) which showed that Moringa leaves contain antioxidants and anti-cancer.

Table 1. Moringa's nutritional value content is compared to some other foods.

Nutrient content	Moringa	Other Food
Vitamin A	6780 mg	Carrot : 1,890 mg
Vitamin C	220 mg	Oranges: 30 mg
Calcium	440 mg	Cow's milk: 120 mg
Potassium	259 mg	Banana : 88 mg
Protein	6.6 g	Yogurt : 3.2 g

Source. Mahmood et al. (2010)

The people of Babul Makmur had not previously known Moringa leaf noodles and the benefits of Moringa leaves and had not consumed Moringa leaf noodles. However, after socialization and training to the community was carried out on October 21, 2021 by students from Teuku Umar University, the public already knew the benefits of Moringa leaves and were familiar with various processed Moringa plants, one of which was Moringa leaf noodles.

Moringa leaf noodles have a delicious taste and have a high nutritional content and have protein and calcium which are good for body health. Moringa leaf noodles can be used as an alternative to diversify food for consumption by the community.

This research was conducted to determine the perception of the village community according to Purwodarminto (1990), perception is a direct response from an absorption or a person's process of knowing things through sensing. Perception can affect the image or interpretation that is felt by the five senses and is manifested in the form of attitudes, opinions and actions.

People generally only use Moringa leaves as food that is processed into clear vegetables. Therefore, diversification of food processing needs to be applied which aims to increase the nutritional content and added value of food commodities so that they are more efficient for human needs (Ariani et al., 2013). One of them is Moringa leaf noodles.

The purpose of this study was to analyze: 1) Introduction of respondents to Moringa, 2) Public perception of Moringa processing and 3) Public perception of Moringa leaf noodles.

II. Research Methods

This research was conducted in Babul prosperous village, west Simeulue sub-district, Simeulue district. The time of the research was carried out in November 2021. The data collected was primary data. The study was conducted by distributing questionnaires to 50 respondents, the selection of respondents was done purposively because these respondents participated in the socialization event for making Moringa leaf noodles held by Teuku Umar University students in October 2021.

Data analysis was carried out quantitatively to calculate (1) the introduction of respondents to Moringa, (2) Public Perceptions of Moringa processing and (3) Public Perceptions of Moringa Leaf Noodles. Data analysis was carried out quantitatively using Likert scale analysis (Sugiono, 2012), through a score approach, as follows:

$$\text{Score value of each box} = \frac{\sum ni \cdot si}{Ni}$$

Description:

Ni = Number of respondents who stated (person) in column i ($i=1,2, 3,\dots$)

si = Score i statement ($i=1,2, 3,\dots$)

Ni = Number of respondents (person P in row i ($i=1,2, 3,\dots$))

III. Discussion

3.1 Introduction of Respondents to Moringa

Based on the results of the research of the Babul Makmur village community, the Moringa plant has existed for quite a long time in Babul Makmur village and the Moringa plant has long been known by the community. Moringa plants are often found in Babul Makmur Village because many people plant Moringa plants so that Moringa is easy to find, considering that Moringa plants are plants that can grow quickly and have a long life.

Moringa plants are widely used by the community as vegetables, for mothers who are breastfeeding to facilitate and increase milk production and relate to mystical things such as expelling jinn if someone is possessed. The following table introduces Moringa to the people of Babul Makmur Village.

Table 2. Community Introduction to Moringa Plants

No	Description	Strongly agree			Agree			Neutral			Do not agree			Strongly Disagree			Total Score
		Person	%	Score	Person	%	Score	Person	%	Score	Person	%	Score	Person	%	Score	
1	I have known Moringa for a long time.	21	42	2.1	29	58	2.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.42
2	Moringa is widely found in my area.	4	8	0.4	41	82	3.28	5	10	0.5	0.00	0.00	0.00	0.00	0.00	0.00	3.98
3	I plant Moringa on the land that I own.	3	6	0.3	45	90	3.6	0.00	0.00	0.00	2	4	0.08	0.00	0.00	0.00	3.98
4	People plant Moringa because they know its benefits.	5	10	0.5	27	54	2.16	5	10	0.5	15	30	0.32	0.00	0.00	0.00	3.48
Average																	3.96

Source: primary data (processed), 2021

Based on the results of the study, it can be seen in Table 2, there are 42% strongly agree, 58% agree that Moringa is well known by the public. Because Moringa is a plant that has always existed in Babul Makmur village, West Simeulue District, Simeulue Regency. There are 8% strongly agree and 82% agree that Moringa is mostly found in Babul Makmur Village, Simeulue Barat District, Simeulue Regency. There are 6% strongly agree and 90% agree that most of them have also planted Moringa on their land because it has many benefits and uses.

From Table 2, it can also be seen that 10% strongly agree, 54% agree that people plant Moringa because they know the benefits of Moringa plants. Meanwhile, 26% stated that people grow Moringa but do not know its benefits and uses. So based on the results of the research above, it is very clear that the people of Babul Makmur village are well acquainted with the Moringa plant. The average score for the introduction of the community to the Moringa plant is 3.96. Where the score shows that the community agrees that they are familiar with the Moringa plant.

3.2 Public Perception of Moringa Leaf Processing

Moringa can be processed into various types of dishes and has a delicious taste. not only can it be processed as raw material for vegetables, but also can be processed into other foods that are delicious to eat. Moringa has many benefits and uses for body health and has economic value if it is processed as food and can increase family income by selling processed Moringa leaves.

Based on the results of the study, the people of Babul Makmur village before the socialization and training were carried out, they did not know much about the processing of Moringa leaves. People only know about Moringa leaf preparations through media such as television, YouTube but have never directly practiced the Moringa leaf preparations. People often process Moringa leaves to be used as vegetables for daily consumption. Besides being used for its fresh leaves, Moringa is used by the community for medicine which is believed to be the expulsion of the jinn if someone is possessed.

Table 3. Public Perception of Moringa Processing

No	Description	Strongly agree			Agree			Neutral			Do not agree			Strongly Disagree			Amount
		Person	%	Score	Person	%	Score	Person	%	Score	Person	%	Score	Person	%	Score	
1	Moringa leaves can be processed into various dishes.	10	20	1	31	62	2.48	6	12	0.36	3	6	0.12	0.00	0.00	0.00	3.96
2	Processed Moringa tastes good to eat.	6	12	0.6	40	80	3.2	3	6	0.18	1	2	0.04	0.00	0.00	0.00	4.02
3	I like processed foods made from Moringa.	5	10	0.5	26	52	2.08	16	32	0.96	3	6	0.12	0.00	0.00	0.00	3.66
4	I like to cook Moringa as a vegetable.	24	48	2.4	24	48	1.92	0.00	0.00	0.00	2	4	0.08	0.00	0.00	0.00	4.4

Source: primary data (processed), 2021

Based on the results of the study, it can be seen in Table 3, 20% of people strongly agree, 62% agree that Moringa leaves can be processed into various dishes and can be useful innovation products. Of the 50 people who were given a questionnaire, 12% strongly agreed, 80% agreed that processed Moringa tasted good for consumption and 6% were neutral, 2% disagreed that Moringa preparations tasted good to eat because the smell of Moringa was very strong and pungent.

In addition there are also 10% strongly agree, 52% of the people agree to like food made from Moringa-based ingredients. And there are 48% of people who strongly agree, 48% agree that Moringa is widely used as a vegetable for daily consumption because it is easy to make and has a good taste.

On the point of cooking Moringa as food, 2% strongly agree and 32% agree that people like to cook Moringa into various foods other than being used as vegetables, while 56% disagree or have never cooked Moringa as food other than vegetables due to people's ignorance in processing various foods from moringa plant. The value of the average score of public perception of Moringa processing is 3.76. Where the score shows that people agree that Moringa can be processed into a variety of dishes.

3.3 Public Perception of Moringa Leaf Noodles

Based on the results of research, public awareness in consuming foods that have nutritional content and various types is currently increasing, one of which is Moringa leaf noodles. People say Moringa leaf noodles are one of the innovative products as an effort to prevent stunting which is made from Moringa leaves. Moringa leaf noodles have very good and high nutritional content because Moringa leaves have very high protein and calcium. Moringa leaves contain vitamin C and beta carotene (Tahir et al., 2016) in addition it is proven that Moringa leaves that have gone through the drying method contain iron and calcium (Irwan, 2020).

The main ingredients for making Moringa leaf noodles are quite easy and are often found in the Babul Makmur area. Moringa leaf noodles can be one of the innovative products in an effort to prevent stunting and fulfill nutrition for pregnant women and children. People say processed Moringa has a good taste. People also say that Moringa leaf noodles are favored by adults and children because Noodles are one of the foods that have many devotees.

Table 4. Public Perception of Moringa Leaf Noodles

No	Description	Strongly agree			Agree			Neutral			Do not agree			Strongly Disagree			Amount
		Person	%	Score	Person	%	Score	Person	%	Score	Person	%	Score	Person	%	Score	
1	Moringa leaf noodles are delicious and nutritious.	18	36	1.8	30	60	2.4	1	2	0.06	1	2	0.04	0.00	0.00	0.00	4.3
2	Moringa leaf noodles as an effort to prevent stunting.	15	30	1.5	35	70	2.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.3
3	The tools and ingredients for making Moringa leaf noodles are easy to find.	5	10	0.5	39	78	3.12	2	4	0.12	4	8	0.16	0.00	0.00	0.00	3.9
4	Moringa leaf noodles are loved by adults and children.	4	8	0.4	36	72	2.88	9	18	0.54	1	2	0.04	0.00	0.00	0.00	3.86
5	Moringa leaf noodles can be sold to increase family income.	4	8	0.4	38	76	3.04	7	14	0.42	1	2	0.04	0.00	0.00	0.00	3.9
Average																	4.05

Source: primary data (processed), 2021

From the results of the study, it can be seen in Table 4. There are 36% strongly agree and 60% agree with the assumption that Moringa leaf noodles are delicious and nutritious. There are 30% strongly agree, 70% of the community agree that Moringa leaf noodles can be an effort to prevent stunting because Moringa leaf noodles are good for consumption by pregnant women and can be used as ingredients to provide nutrition for stunting sufferers. The community also said 10% strongly agreed, 78% agreed that the tools and materials for making Moringa leaf noodles were easy to obtain and find because making Moringa leaf noodles was very easy.

In addition, there are 8% strongly agree, 72% of the public agree that Moringa leaf noodles are favored by various groups such as adults and children because noodles are one of the favorite foods of Indonesian people. Next, 8% strongly agree, 76% of the community agree that Moringa leaf noodles can be sold to increase family income. Moringa leaf noodles can be one of the innovative products that can be sold because it has a very high and good nutritional content, although there are 14% neutral or doubt that Moringa leaf noodles can not necessarily be used as an addition to family income.

The value of the average score of public perception of Moringa leaf noodles is 4.05. Where the score shows that people agree that Moringa leaf noodles are delicious and the ingredients are easy to find.

IV. Conclusion

From the results of research that has been done, several conclusions can be drawn that (1) The average score for the introduction of the community to the Moringa plant is 3.96. Where the score shows that the community agrees that they are familiar with the Moringa plant. (2) The value of the average score of public perception of Moringa processing is 3.76. Where the score shows that people agree that Moringa can be processed into a variety of dishes. (3) The value of the average score of public perception of Moringa leaf noodles is 4.05. Where the score shows that people agree that Moringa leaf noodles are delicious and the ingredients are easy to find.

It is hoped that the people of Babul Makmur Village, West Simeulue District, Simeulue Regency can increase family income from processed Moringa leaves, especially from making Moringa leaf noodles.

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