

Housewife's Income Development Program Through Improving Nutrition by Consuming Moringa Vegetable Porridge as an Effort to Overcome Stunting

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ABSTRACT

This service activity was carried out in Mentoro Village, Sokosari District, Tuban Regency, East Java Province on September 5 2023. The method used in this activity was community education and training. This service activity reflects the comprehensive objectives of the community service program which covers nutritional and economic aspects of the Mentoro village community. This includes nutrition education, training in making Moringa vegetable porridge, developing a Moringa vegetable porridge business, impact measurement, and community development. This program can be developed even better by combining socio-cultural elements in its implementation, such as cooking competitions, question-and-answer quizzes about nutrition, and so on.



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INTRODUCTION

Currently, cases of stunting (short toddlers) have become a common thing that we often hear and encounter in our lives. Based on data from the Asian Development Bank, in 2022 the percentage of prevalence of stunting among children under 5 years of age in Indonesia will be 31.8 percent. This number causes Indonesia to be in 10th place in the Southeast Asia region. Furthermore, in 2022, based on data from the Ministry of Health, Indonesia's stunting rate has decreased to 21.6 percent.

Following up on President Joko Widodo's words at the BKKBN National Working Meeting, Wednesday, January 25 2023, "Therefore, the target I convey is 14% in 2024. We must be able to achieve this, I am sure that with our strength together everything can move. "That number is not a difficult number to achieve as long as everyone works together." This vegetable porridge consumption program could be the right choice that can support reducing stunting rates and improving the nutrition of Indonesian people.

Consuming Moringa vegetable porridge also provides education to the public about the importance of balanced nutrition and the benefits of Moringa vegetable porridge as a good source of nutrition. "The Moringa vegetable in the porridge also contains high fiber and is rich in antioxidants. High fiber can facilitate digestion and is good for the digestive system. Not only nutritional content, vegetable porridge can introduce the taste of vegetables to the fetus when consumed by pregnant women. Because what a mother eats can be felt by her child in

the womb. "So, if a mother usually eats vegetables, her child will already know the taste of these vegetables, and the child will also know the taste in the womb," said Ahmad Sulaeman, lecturer at the Faculty of Human Ecology, Bogor Agricultural Institute (IPB). Apart from being consumed as food to improve nutrition for children and mothers, vegetable porridge can also be a business opportunity for housewives to increase their family income. It is proven that the contribution of housewives' income from the business of selling moringa vegetable porridge to the total family income is 12.82% with a range of 1.58% to 52.56%. Even though the contribution is not very large, selling activities are considered to play quite an important role in increasing family income.

Through the training program for making vegetable porridge, it is hoped that people will become more aware of the nutrition of toddlers and will become accustomed to consuming foods with high nutrition such as Moringa vegetable porridge. Apart from that, with this program it is also hoped that housewives will be motivated to build a business. And with this program, it is hoped that the bond between housewives can become stronger and enable the formation of a community to continue this program.

METHOD

This service activity was carried out in Mentoro Village, Sokosari District, Tuban Regency, East Java Province on September 5 2023 at 08:00-15:00 WIB. The activity was carried out in one of the residents' houses, namely Mrs. Juariyah, followed by the housewife and also small children and toddlers in the RT. 05 Mentoro Village.

The methods used in this activity are community education and training. Community education is carried out through outreach to housewives about the importance of balanced nutrition. Socialization was carried out by the Chief Executive by conveying the condition of stunting in Indonesia, the benefits of the training were that it was hoped that residents would have awareness of the importance of stunting.

The training was carried out with direct explanation and practice on how to make Moringa vegetable porridge. The training was carried out with Mrs. Juariyah as a resource person, where Mrs. Juariyah has expertise in the field of cooking. Then Mrs. Juariyah explained to the housewife and also the community service group how to make Moringa vegetable porridge properly and deliciously. Documentation is carried out by taking pictures and recording activities during the activity. The tool used in the documentation process is a cellphone camera.

This activity is carried out through several series, namely training and practice, main event, and eating together. The training began with an explanation by the resource person to the training participants regarding how to make Moringa vegetable porridge. The practice was carried out by the training participants who helped and tried to make Moringa vegetable porridge according to the resource person's directions. The main event consisted of a speech by the Chief Executive as well as explaining the condition of stunting in Indonesia, the purpose of holding the service, and the importance of nutrition that must be possessed by a mother and child. After the presentation by the Chief Executive, the event was opened by saying basmalah together. The activity continued with a meal together by service groups, residents and resource persons which began with a joint prayer led by the Event MC. After the meal

together was finished, the event closed by saying hamdalah together. This activity as a whole is carried out technically by students as a team/service group and accompanied by the course lecturer as the director of the implementation of the activity. As well as Mrs. Juariyah who was also a resource person in this activity.

FINDINGS AND DISCUSSION

In this service there were 20 Housewives (IRT) and 9 small children/toddlers who were native residents of RT.05 Mentoro village. Apart from that, it was also attended by a resource person, namely Mrs. Juariyah. And attended by 6 members of the service group. From the observations that have been made, most of the participants involved in this service really like Moringa vegetable porridge so that when the Moringa vegetable porridge is eaten there are no leftovers. Furthermore, during the training process the training participants also quickly understood the steps for making Moringa vegetable porridge and practiced well.

Moringa vegetables or Moringa leaves (*Moringa oleifera*) have many health benefits, here are some of them:

- a) Facilitate breast milk production: Moringa leaves contain compounds that can stimulate breast milk production.
- b) Strengthens the body's immune system: Moringa leaves are rich in vitamin C which can increase immunity.
- c) Maintain healthy skin: Moringa leaves are good for maintaining healthy skin.
- d) Control blood sugar levels: Several studies have found that Moringa leaves can regulate blood sugar levels and regulate the work of the insulin hormone.
- e) Reduces inflammation in the body: Moringa leaves contain isothiocyanates which are anti-inflammatory.
- f) Prevents Cancer: Moringa leaves are known to prevent cancer.
- g) Treats Herpes: Moringa leaves can be used to treat herpes.
- h) Treats Eye Diseases: Moringa leaves can be used to treat eye diseases.
- i) Treats Mouth Diseases: Moringa leaves can be used to treat mouth diseases.
- j) Maintains healthy skin and helps heal wounds: Moringa leaves can be used to maintain healthy skin and help heal wounds.

Moringa leaves are also known to be rich in nutrients such as protein, vitamin A, vitamin B2, vitamin B6, iron, calcium, magnesium and antioxidants. Apart from the benefits obtained from consuming Moringa vegetable porridge, of course there are also impacts from consuming excessive amounts of Moringa vegetables or Moringa leaves over a long period of time which can cause several side effects, here are some of them:

- a) Digestive disorders: One of the side effects of Moringa leaves that can occur is digestive disorders, such as stomach ache and diarrhea.
- b) Accumulation of iron in the blood: Several studies show that excessive intake of Moringa leaves can cause a buildup of iron in the blood. Excessive levels of iron in the blood are characterized by joint pain, fatigue, and decreased sexual desire.
- c) Blood sugar levels drop too low: There are several studies that show that consuming Moringa leaves together with diabetes medication can cause blood sugar levels to drop too low (hypoglycemia).

- d) Blood pressure is too low: Apart from diabetes medication, consuming Moringa leaves is also not recommended if you are taking medication for blood pressure. This is because the effects of Moringa leaves can cause blood pressure to drop too low (hypotension).
- e) Damage to internal organs: If you consume Moringa leaves long term, this can cause liver and kidney damage.

To avoid the side effects of Moringa leaves, you are advised to consume these leaves in moderation, namely no more than 50-70 grams per day or the equivalent of around 10-15 teaspoons of Moringa leaf powder.

From the information above, it can be integrated with the service program that has been carried out by the community service team, that the program to socialize the virtues of consuming Moringa vegetable porridge can provide extraordinary benefits if it is processed correctly and according to its concentration. However, if the method of processing Moringa vegetable pulp is not in accordance with the levels recommended by nutritionists, it will certainly have quite a risky impact.

The socialization of this Moringa vegetable porridge service activity provided education to the residents of RT.05 Mentoro village about the high rate of stunting in Indonesia, providing an understanding of the importance of quality nutrition to prevent stunting in toddlers. The cooking training in this Moringa vegetable porridge service activity provides opportunities for housewives in RT.05 Mentoro village to develop skills in cooking Moringa vegetable porridge so that they can set up a business based on Moringa vegetable porridge. Eating together or gathering together at this service activity makes the bonds of friendship between residents become stronger, resulting in the creation of bonds, new associations, or communities to continue the program of eating together.

CONCLUSION

This service activity reflects the comprehensive objectives of the community service program which covers nutritional and economic aspects for the residents of RT.05 Mentoro village, Sokosari sub-district, Tuban regency. This includes nutrition education, training in making Moringa vegetable porridge, developing a Moringa vegetable porridge business, impact measurement, community development, and group eating events. This program can be developed even better by combining socio-cultural elements in its implementation, such as cooking competitions, question and answer quizzes about nutrition, and so on.

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