

Innovative Food Product of Moringa Oleifera Jelly Candy for Overcoming Stunting Problem

Sari Nuzullina Rahmadhani, Fitriani Tobing, Rana Fathinah Ananda

Abstract

Permen Jelly Daun Kelor (Moringa Oleifera Jelly Candy) Anti Stunting is an innovative food product designed to address the issue of stunting among children in Indonesia, a country facing a significant challenge in child malnutrition. This jelly-based snack is made from moringa leaves (*Moringa oleifera*), a plant known for its rich nutritional profile, including high levels of vitamins, minerals, and essential amino acids. The formulation leverages the functional benefits of moringa leaves, which are believed to contribute to improved growth, immune system support, and overall nutritional well-being. The product is designed to be both palatable and accessible for children, especially those in underserved communities, offering a convenient means of supplementing their diet with vital nutrients. The jelly is fortified with additional micronutrients, such as Vitamin A, Iron, and Zinc, which are critical for cognitive development, immune function, and growth. In addition, it is formulated to have a longer shelf life, ensuring widespread distribution and availability.

Keywords: Innovative Food Product, Moringa Leaves, Stunting, Children in Indonesia

Sari Nuzullina Rahmadhani

Department of Management, Faculty of Economics and Business, University of Medan Area, Medan, Indonesia

e-mail: sarinuzullina@staff.uma.ac.id

Fitriani Tobing, Rana Fathinah Ananda

Department of Management, Faculty of Economics and Business, University of Medan Area, Medan, Indonesia

e-mail: fitrianitobing@staff.uma.ac.id, rana@staff.uma.ac.id

1st International Conference on the Epicentrum of Economic Global Framework (ICEEGLOF)

Theme: Navigating The Future: Business and Social Paradigms in a Transformative Era.

<https://proceeding.pancabudi.ac.id/index.php/ICEEGLOF>

Innovative Food Product of Moringa Oleifera Jelly Candy

Introduction

This problem not only affects physical aspects, but also has the potential to affect children's cognitive development in the future. According to data from the Indonesian Ministry of Health (2022), the prevalence of stunting in children under five in Indonesia is still quite high, reaching around 24.4%. One of the main factors leading to stunting is chronic malnutrition, especially in the first 1,000 days of a child's life. Moringa leaves (*Moringa oleifera*) have been widely recognized as one of the most nutrient-rich plants in the world. that is rich in nutrients and has many health benefits. Moringa leaves contains various important nutrients such as vitamin A, vitamin C, iron, calcium, and protein. Its high nutritional content makes moringa leaves a very potential ingredient to overcome the problem of malnutrition in children, including stunting.

In children, including stunting. Research by Anwar et al. (2007) showed that Moringa leaves are rich in antioxidants and have a very high nutritional value, so they can contribute to the improvement of nutritional status and stunting. nutritional value, so it can contribute to the improvement of nutritional status and health.

Moringa leaf-based product innovation in the form of jelly candy comes as a a creative solution to increase nutritional intake in children, especially those prone to stunting. who are prone to stunting. Moringa leaf jelly candy offers a to deliver essential nutrients to children, especially since its chewy texture and sweet tastetend to be favored by them. In addition, jelly candies are easy to consume and could be a practical and affordable alternative to nutritional supplements for families who have difficulty in providing nutritious meals on a regular basis. This innovative approach is important as one of the challenges in stunting prevention is the low level of children's compliance in eating nutritious food. By introducing the product in jelly candy, it is hoped that children will be more interested in consuming essential nutrients that can help prevent stunting. This product can also be enriched with other micronutrients such as zinc and folic acid, which also play an important role in the growth and development process and folic acid, which also play an important role in the process of growth and development process.

In a broader context, the development of Moringa leaf jelly candy anti stunting does not only focus on stunting prevention, but also contributes to the improvement of the local economy, especially for farmers. contribution to the improvement of the local economy, especially for farmers who grow moringa. grow moringa. The increasing demand for moringa leaves along with the development of moringa-based with the development of moringa-based products can provide better economic opportunities for rural communities who grow moringa. economic opportunities for rural communities involved in moringa farming.

Thus, innovation in the development of moringa leaf jelly candy as an anti-stunting product is a strategic step in preventing and handling of stunting in Indonesia. The combination of ease of consumption, flavor that children like, and high nutritional content make moringa jelly candy a potential solution to help prevent stunting in Indonesia. Moringa leaf jelly candy as one of the potential solutions to help reduce the reduce stunting rates in the future. Based on these situations and conditions, we finally want to provide contribution to Community Service as a form of the Tridharma of Education entitled "Moringa Leaf Jelly Candy Anti Stunting".

Implementation Method

The workflow of this community service activity is adapted from Vincent II, J. W. (Jack) (2009). The method of implementing the International Community Partnership Program activities at USIM Alamiyyah to overcome partner problems is introduction, environmental observation and socialization training, namely as follows:

Step	Activity	Result
(1)	(2)	(3)
Introduction	Introduction moringa leaf candy	Moringa leaf-based product innovation in the form of jelly candy comes as a creative solution to increase nutritional intake in children, especially those prone to stunting, who are prone to stunting.
Environmental Observation	moringa leaf candy	Sharing knowledge moringa leaf candy
Socialization	Training and counseling on moringa leaf candy	Moringa leaf jelly candy offers an to deliver essential nutrients to children, especially since its chewy texture and sweet taste are likely to be favored by them.

Results and Discussion

After implementing the agricultural commodity marketing education program through digital marketing in Patumbak I Village, some of the expected results and impacts can be explained as follows:

1. Increased Knowledge: A total of 85% of participants stated that knowledge about stunting and its prevention increased after attending this socialization. following this socialization.
2. Interest in Stunting Products: A total of 90% of participants expressed interest to use Menjedor as a healthy snack for their children.
3. Ability to Make Menjedor: Most participants felt capable to make their own moringa leaf jelly candy at home after participating in the making demonstration.
4. Follow-up Plan: Some participants planned to socialize to make moringa leaf jelly candy in their respective areas, and encourage people to consume healthy snacks based on local ingredients ingredients.

Conclusions

This socialization went smoothly and achieved the expected goals, namely increasing community knowledge about stunting and introducing healthy snacks made from moringa leaves. It is expected that can continue to be carried out periodically to expand the reach and increase public awareness in stunting prevention efforts. increase public awareness in stunting prevention efforts.

References

- World Health Organization (WHO). (2021). Stunting in a Nutshell. Diakses dari <https://www.who.int>.
- Kementerian Kesehatan Republik Indonesia. (2022). Pedoman Pencegahan dan Penanganan Stunting. Jakarta: Kementerian Kesehatan RI.
- FAO (Food and Agriculture Organization). (2020). Moringa oleifera: A Food Plant with Multiple Medicinal Uses. Diakses dari <http://www.fao.org>.
- Muthulakshmi, S., & Ponnusamy, P. (2019). Nutritional Composition and Health Benefits of Moringa oleifera Leaves: An Overview. *International Journal of Scientific Research*, 8(2), 76-81.
- Riyadi, B., & Wicaksono, A. (2023). Potensi Daun Kelor Sebagai Alternatif Pencegahan

Innovative Food Product of Moringa Oleifera Jelly Candy

- Stunting. *Jurnal Gizi dan Pangan*, 18(1), 45-52.
- Murray-Kolb, L. E., & Beard, J. L. (2007). Iron Treatment Normalizes Cognitive Function in Young Women. *The American Journal of Clinical Nutrition*, 85(3), 778-787. doi:10.1093/ajcn/85.3.778
- Nugroho, H. D., & Santoso, I. (2021). Daun Kelor: Sumber Gizi dan Manfaatnya dalam Kesehatan. *Jurnal Pangan dan Gizi*, 12(3), 124-131.
- Adhikari, D., & Mehta, R. K. (2020). Utilization of Moringa Oleifera for Nutritional Supplements in Anti-Stunting Efforts. *Journal of Nutrition Science*, 32(4), 134-142.