



Aluisius P. E. Widodo
Department of Animal
Feed Nutrition and
Technology Papua
University
Manokwari, West
Papua, Indonesia

Sri Hartini
Department
Department of Animal
Feed Nutrition and
Technology Papua
University Manokwari,
West Papua, Indonesia



Hanike Monim
Department of Animal
Science, Papua
University,
Manokwari, West
Papua, Indonesia

Dwi Djoko Rahardjo
Department of Animal
Feed Nutrition and
Technology Papua
University Manokwari,
West Papua, Indonesia



Elfira K. Suawa
Department of Animal
Feed Nutrition and
Technology Papua
University
Manokwari, West
Papua, Indonesia

Sangle Y. Randa
Department of Animal
Science, Papua
University, Manokwari,
West Papua, Indonesia



Frandz R. Pawere
Department of Animal
Science, Papua
University,
Manokwari, West
Papua, Indonesia

Johan F. Koibur
Department of Animal
Science, Papua
University, Manokwari,
West Papua, Indonesia



COMMUNITY EMPOWERMENT THROUGH NUTRITION EDUCATION: THE ROLE OF EGG CONSUMPTION IN PREVENTING STUNTING IN KAMPUNG MEYES, NORTH MANOKWARI

Aluisius P. Edi Widodo, Sri Hartini, Hanike Monim, Dwi Djoko Rahardjo, Elfira K. Suawa, Sangle Y. Randa, Frandz R. Pawere, Johan F. Koibur
Husbandry Faculty, University of Papua, Manokwari, West Papua, Indonesia
Corresponding author: a.widodo@unipa.ac.id

Abstract:

Background. Stunting is a chronic form of malnutrition resulting in children being shorter than their age due to prolonged nutrient deficiency and frequent infections. It often begins before birth and continues through early childhood, caused by a lack of essential nutrients such as protein, iron, zinc, and vitamins. Eggs, as an affordable and highly nutritious source of animal protein, are recommended to help prevent stunting in vulnerable communities.

Aim. To increase the knowledge and awareness of the Kampung Meyes community about stunting and the importance of consuming eggs, as well as to provide practical education on safe egg preparation for pregnant women, breastfeeding mothers, and toddlers.

Methods. The activity was conducted on May 12, 2025, in North Manokwari District, involving 40 participants through leaflet distribution, interactive discussions, and egg provision.

Results. The program received enthusiastic responses from children, parents, and community leaders, confirming that combining nutrition education with direct interventions effectively improves understanding and supports national stunting reduction efforts.

Conclusions. The results highlight the effectiveness of culturally relevant, action-based learning and suggest the need for continued community guidance.

Implication. Integrating this educational model into local health posts, schools, and family welfare groups could ensure sustainable improvements in nutrition and family food security.

Keywords: Stunting, nutrition education, egg consumption, community service



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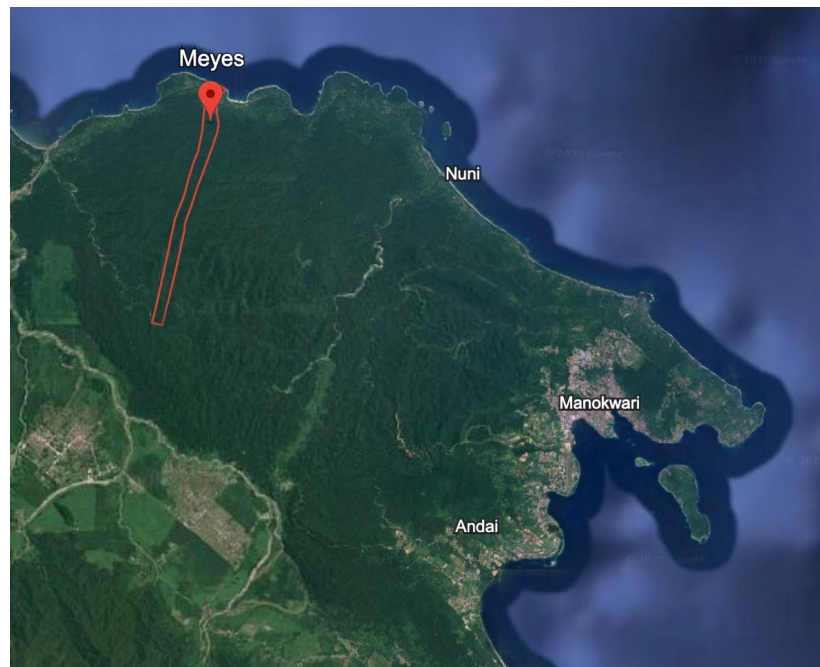
INTRODUCTION

Stunting is a chronic nutritional problem that remains a major challenge in Indonesia. This condition is characterized by children's height below the standard for their age due to long-term nutritional deficiencies (P2PTM Kemenkes RI., 2018). Stunting not only affects physical growth, but also has a serious impact on cognitive development, productivity, and the quality of human resources. The Indonesian Ministry of Health (2018) categorizes children as stunted if their height-for-age z-score is less than -2 standard deviations (SD). This issue is crucial because growth disorders are permanent if they occur during the first 1,000 days of life (HPK).

Papua is one of the regions in Indonesia facing significant stunting challenges. Egg consumption is low in Papua due to limited access to information and misconceptions in the community, especially among young children. This condition is exacerbated by low nutrition literacy.

In Kampung Meyes, North Manokwari District, located approximately 33 km northwest of Manokwari City (Figure 1), stunting remains a concern. Limited access to accurate information about balanced nutrition, especially regarding the benefits of egg consumption, is one of the contributing factors. In addition, strong myths and misconceptions about nutritious foods for children and pregnant women also contribute to low egg consumption. As a result, suboptimal feeding practices can increase the risk of stunting in children in this region.

Nutrition education is an important intervention strategy to address the problem of stunting. Effective education is not only informative, but also practical and persuasive, so that it can change people's consumption behavior. Eggs, as a source of animal protein that is cheap, easily available, and rich in nutrients, have great potential in preventing stunting. Empowering the community through nutrition education about the benefits of eggs can increase the intake of protein and other important nutrients for children and pregnant women in Kampung Meyes.



Source: Google Earth.

Figure 1. Map of Kampung Meyes

METHOD

This community service activity was held on Monday, May 12, 2025, from 10:00 a.m. to 12:00 p.m. WIT, at the Stasi Catholic Church Hall, Kampung Meyes, North Manokwari

District. The location was chosen based on the high number of children in the area and its accessibility.

This activity was attended by approximately 40 people, consisting of children and the general public in Kampung Meyes (Figure 2).



Figure 2. Education on the importance of egg consumption by Prof. Sri Hartini

The method used in this community service activity was an educational campaign. An educational campaign is a strategic communication approach that aims to convey information in a structured manner to the target group, in this case the community of Kampung Meyes, in order to increase understanding and awareness and encourage behavioral change. In general, an educational campaign is defined as a form of public communication designed to disseminate specific messages by involving persuasion techniques and community participation, especially on issues related to health and social welfare (Indreani et al., 2025; Wijaya et al., 2023).

A campaign is a planned communication effort that uses various channels and communication methods in a coordinated manner within a certain period of time to influence the audience in understanding and overcoming certain problems. Similarly, (Wolon & Putri, 2024) states that an educational campaign is an organized communication action aimed at the target audience to achieve the desired behavioral change.

In the context of this activity, the educational campaign was aimed at building public awareness of the importance of animal protein consumption, especially eggs, as an effort to prevent stunting from an early age. The implementation of the educational campaign in this activity focused on a combination of informative education and concrete action. Education was carried out through the delivery of leaflet-based material that was simple and communicative so that it was easy for the general public to understand. The leaflets contain information about the nutritional content of eggs, the benefits of egg consumption for child growth and development, and safe feeding practices for pregnant women, nursing mothers, and toddlers. The materials are distributed directly to activity participants with interactive explanations from the team of lecturers.

In addition, the campaign also includes concrete action in the form of free egg distribution to children, as a practical representation of the message being conveyed. This action aimed to reinforce the educational message and provide the community with direct experience of the importance of animal protein. The action was also accompanied by a two-way question and answer session between the implementing team and the community, in order to explore perceptions, answer misconceptions, and encourage community involvement in balanced nutrition practices.

RESULTS AND DISCUSSION

The outreach team consisted of lecturers from the Faculty of Animal Husbandry at the University of Papua. The activity began with a brief welcome speech explaining the objectives of the program and the importance of nutrition in preventing stunting. Next, educational materials were distributed in the form of informative leaflets to all participants. The leaflets contained comprehensive information about the benefits of egg consumption, their nutritional content, and their role in supporting optimal child growth and development. After the written material was presented, the activity continued with an interactive dialogue session, where participants were given the opportunity to ask questions and discuss directly with the implementation team. This session was designed in a communicative and persuasive format, with the aim of not only answering questions, but also clarifying misconceptions and motivating behavioral change. The interpersonal communication techniques used included an empathetic approach, simple language, and the presentation of concrete examples relevant to the community's context. As a tangible implementation of the education provided, free eggs were distributed to the children in attendance (Figure 3). This activity was

enthusiastically welcomed by the participants, especially the children, and became a concrete symbol of the nutritional message conveyed. This concrete action was intended to provide direct experience and reinforce understanding of the importance of egg consumption as an inexpensive, nutritious, and accessible strategy for preventing stunting. The entire series of activities was carried out in an integrated and participatory manner, concluding with documentation in the form of photos and videos for reporting and reflection purposes.



Figure 3. Free egg distribution by Fapet Unipa faculty staff

Based on the implementation of educational activities in Kampung Meyes, several important findings were obtained: Children's Enthusiasm: Children showed a positive response to the activities, especially during the egg distribution. They appeared very happy and excited, as seen from their active participation in singing together. This shows that a hands-on educational approach has its own appeal for children.

Appreciation from Community Leaders: The head of the Kampung Meyes Catholic Church expressed his appreciation and hope that similar activities would continue in the future. This indicates that the involvement of local leaders can strengthen the impact of activities and support the sustainability of educational programs.

Need for Nutritional Guidance: The community expressed their need for more educational activities that provide practical and applicable information related to child and family nutrition. Lack of access to accurate information is often an obstacle to implementing healthy eating patterns.

The results of this activity reinforce findings in the literature that nutrition education combined with direct interventions, such as the provision of nutritious food, can increase community understanding and involvement (Siswati et al., 2023). Eggs, as an inexpensive and nutritious source of animal protein, have been well received by the community. In terms of methodology, the use of educational campaigns through print media and direct action has proven effective in conveying important messages to the community, especially in the context of local cultures that prefer visual and direct approaches (Wolon & Putri, 2024). These findings are in line with the national program to accelerate stunting reduction, which emphasizes the importance of collaboration between academics and the community in educating families about balanced nutrition during the first 1,000 days of life.

CONCLUSION

Based on the implementation of community service activities through an educational campaign on the role of eggs in preventing stunting in Kampung Meyes, it can be concluded that:

1. Educational campaigns have proven to be an effective approach in increasing public understanding and awareness of the importance of consuming animal protein, especially eggs, in preventing stunting. The strategy of combining written information, persuasive communication, and concrete action through the distribution of eggs created an interactive and educational atmosphere.
2. The community response was very positive, marked by the children's enthusiasm for the activities and the appreciation of local community leaders. This reflects that the community needs educational interventions that are not only informative but also touch on practical aspects of daily life.
3. The active involvement of participants in question and answer sessions and discussions shows that a dialogical communication approach is more effective than one-way methods such as lectures. This activity provides space for the community to clarify their understanding and convey the obstacles they face in meeting their families' nutritional needs.

IMPLICATION

The implementation of community service activities through an educational campaign on the role of eggs in preventing stunting in Kampung Meyes has several important implications, both in social, academic, and public policy aspects, as follows:

1. Social and Public Health Implications

This activity shows that an educational approach combined with concrete actions such as egg distribution can increase awareness and animal protein consumption behavior in the community. The enthusiasm of children and the support of local leaders indicate great potential for sustainable nutritional behavior change. Thus, this activity has implications for increasing community nutritional literacy and strengthening early stunting prevention efforts at the community level.

2. Academic and Scientific Development Implications

This program reinforces the role of universities, particularly the Faculty of Animal Husbandry at the University of Papua, as agents of change in the application of nutritional science and community development communication. The participatory and dialogic educational campaign approach can serve as a model for future community service activities and as a reference for applied research in the fields of public nutrition, health communication, and village empowerment.

3. Policy and Development Program Implications

The findings of this activity support the national policy to accelerate stunting reduction, especially those emphasizing the importance of cross-sector collaboration between academics, village governments, and health institutions. The success of this education model can be used as a basis for replicating similar programs in other areas with high stunting prevalence, while strengthening community-based intervention strategies relevant to the local context of Papua.

4. Program Sustainability Implications

The positive results of this activity indicate the need for long-term assistance and periodic evaluation of changes in community nutrition consumption behavior. If integrated into posyandu (integrated health service posts), schools, and PKK (Family Welfare Movement) mother groups, this educational approach has the potential to become a

sustainable model for strengthening family food security and improving child nutrition status.

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4. All participants in the community service activity, for their enthusiasm and active participation in each session of the activity (Figure 4).
5. As well as all other parties who cannot be mentioned one by one, who have contributed in various ways so that this activity could run successfully.



Figure 4. Group photo with the children and residents of Kampung Meyes

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