

BALANCED NUTRITION GUIDELINE (PGS) AND ITS IMPLEMENTATION IN CREATING HEALTHY FOOD BUSINESS OPPORTUNITIES

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ABSTRACT

The people of West Jakarta City, particularly in South Meruya, faces various complex health and nutrition problems, similar to those found in other major urban areas. These include issues such as undernutrition and stunting, overnutrition (obesity), and unhealthy eating habits. Although South Meruya is known for its abundance of culinary options, unfortunately, many of these food and beverage choices are unhealthy, often containing high levels of sugar, salt, trans fats, and harmful food additives. On the other hand, healthy food options remain limited, leading people to prefer fast food or easily accessible snacks. Additionally, many business owners still lack an understanding of the principles of healthy and balanced food, resulting in a low availability and limited choices of healthy food circulating in South Meruya. One of the root causes of these nutritional problems is the lack of public knowledge about nutrition science and the principles of a balanced diet as outlined in the Balanced Nutrition Guidelines (Pedoman Gizi Seimbang or PGS). The purpose of this Community Service Program is to increase public understanding of the importance of PGS principles and their application in daily life as well as in starting a healthy food business. The main targets of this activity are PKK women, posyandu cadres, and small business owners (MSMEs). Through seminars, training, and mentoring, participants received education on PGS and how to create opportunities in the healthy food business and strategies for marketing them. The program was successfully held on April 24, 2025, at RPTA Menara, South Meruya, with over 30 participants. The attendees were attentive and enthusiastic throughout the event. MSME participants also expressed their intention to develop new or alternative healthy food products. Evaluation results showed that 90% of participants stated the material was highly relevant to their daily lives and easy to understand. Additionally, 78% felt motivated to start or improve their healthy culinary business, and 80% reported gaining new awareness about applying balanced nutrition in their households.

Keywords: Nutrition, Balanced Nutrition Guidelines (BNG/ PGS), Food and Beverage (F&B), Healthy Food Business, Micro, Small, and Medium Enterprises (MSMEs).

1. INTRODUCTION

Balanced Nutrition Guidelines (PGS) play a crucial role in maintaining health and improving the quality of life of the community. PGS is not just a rule about diet, but also includes a balance between food consumption, physical activity, and a healthy lifestyle. PGS adheres to the principle of balanced nutrition which consists of four pillars which are a series of efforts to balance between nutrients that come out and nutrients that come in by monitoring body weight regularly. The four principles include recommendations to: (1) Consume a variety of foods; (2) Practice clean and healthy living behaviors; (3) Do physical activity, and (4) Monitor Body Weight regularly to maintain normal body weight (Kementrian Kesehatan RI, 2014).

The people of West Jakarta City, especially South Meruya, face various complex health and nutrition problems like problems in big cities in general, ranging from malnutrition and stunting, overnutrition (obesity), to unhealthy eating habits. This condition is influenced by several factors such as social, economic, and lifestyle factors of urban communities (barat.jakarta.go.id; merdeka.com).

Although Jakarta is a metropolitan city with broad access to food, stunting (chronic malnutrition) remains a persistent public health issue, particularly among low-income populations (Ernawati et al., 2021; Sutriyawan et al., 2020). Data indicate that certain areas of Jakarta continue to exhibit a high prevalence of stunting (Riskesdas DKI Jakarta, 2018), primarily due to unbalanced dietary patterns and insufficient nutrition education. These factors contribute significantly to impaired physical growth and cognitive development in children. As of July 2023, official records show that 39,793 children under five years old in Jakarta experienced nutritional problems. This includes 5,753 underweight children, 9,191 children with moderate malnutrition, 2,026 children with severe malnutrition, and 22,823 children categorized as stunted (Jakarta Provincial Government, 2023; jakarta.go.id).

On the other hand, a sedentary lifestyle combined with a high-calorie diet has contributed to a rise in obesity cases (kemkes.go.id). The frequent consumption of fast food, sugar-sweetened beverages, and lack of physical activity are

the primary contributing factors to obesity among both children and adults, which in turn increases the risk of non-communicable diseases (NCDs) in South Meruya—such as diabetes, hypertension, and cardiovascular disease. An imbalanced dietary pattern, such as frequent intake of instant foods and insufficient consumption of fruits and vegetables, also constitutes a major dietary concern in the community. Many individuals tend to choose fast food for its convenience while overlooking its nutritional value, which may result in micronutrient deficiencies, such as iron (leading to anemia), calcium (leading to osteoporosis), and vitamin A deficiency. These nutritional issues are supported by empirical data. For instance, the prevalence of type II diabetes in West Jakarta is relatively high, reaching approximately 4.2% (Santoso et al., 2023). Additionally, West Jakarta ranks second in DKI Jakarta in terms of the number of individuals with hypertension, totaling 134,182 cases (Dinkes Provinsi DKI Jakarta, 2017). Moreover, DKI Jakarta records the highest prevalence of adolescent obesity in the country, with rates exceeding the national average of 4.2% (Sitoayu et al., 2021). The high prevalence of nutrition-related diseases underscores the urgent need for widespread education and dissemination of the Balanced Nutrition Guidelines (PGS) among residents of West Jakarta, particularly in the South Meruya area.

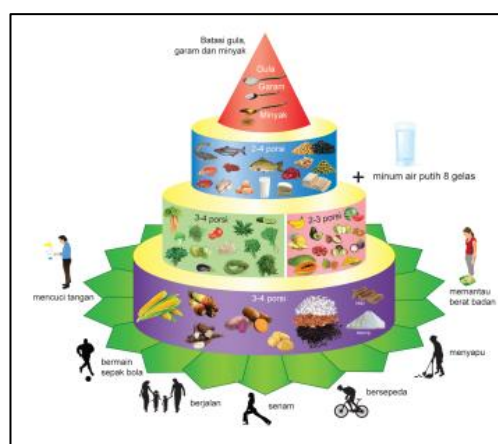


Figure 1. ‘Tumpeng’ The Indonesian Balanced Nutrition Guidelines

One of the contributing factors to the aforementioned nutritional problems is the lack of public knowledge and understanding regarding nutrition science, in which food consumption should ideally fulfill the principles of balanced nutrition as outlined in the Balanced Nutrition Guidelines (PGS). Nutrition knowledge is essential in reducing both undernutrition and overnutrition, as it helps individuals understand the body’s nutritional needs, choose appropriate foods, and manage caloric intake. With this knowledge, people can make healthier choices and reduce the risk of various nutrition-related health problems (Siahaan, Suraya & Siregar, 2024; Hartanti, Harwati & Aswinda, 2024; Prita, 2010). For example: (1) Nutrition knowledge helps individuals understand the types and amounts of nutrients needed for optimal growth and development. (2) With adequate knowledge, individuals can select foods that are nutritionally balanced and avoid those high in unnecessary calories, fats, or sugars. (3) Nutrition knowledge supports individuals in recognizing the importance of nutrients in preventing diseases caused by deficiencies, such as stunting in children, anemia, and growth disorders. (4) Nutrition knowledge can also increase individual awareness of the importance of a healthy diet and active lifestyle, thereby helping to maintain health and prevent disease. These points clearly demonstrate that nutrition education is a key intervention in tackling nutritional challenges within communities.

In addition, although Meruya Selatan Subdistrict in West Jakarta is well known for its abundance of culinary options—including street food, fast food, and packaged snacks—unfortunately, the majority of these food and beverage choices are unhealthy. Many contain excessive amounts of sugar, salt, trans fats, and harmful food additives. On the other hand, access to healthy food remains limited, both in terms of availability through local businesses and affordability. As a result, people tend to prefer fast food or easily accessible snacks. Moreover, many food vendors and small business owners still lack understanding of the principles of healthy eating, leading to a low availability and limited variety of nutritious food and snacks in the market. Therefore, both entrepreneurs and consumers must be educated on nutrition and health, particularly regarding the Balanced Nutrition Guidelines (PGS), so that more healthy food business opportunities can emerge and consumer demand for nutritious products can increase. If this educational effort continues, it will support the long-term growth of the healthy food sector and contribute to the adoption of healthier lifestyles within the community.

The aforementioned issues highlight the importance of providing education and outreach related to the Balanced Nutrition Guidelines (PGS) within the community of South Meruya, West Jakarta. This urgency has led to the

implementation of a Community Service Program (Program Pengabdian Kepada Masyarakat / PKM) aimed at increasing public awareness and understanding of the significance of PGS principles—specifically, how to apply them in daily life and how to utilize them as a foundation for establishing healthy food businesses. The primary target of this program includes women—as the central figures in shaping household dietary patterns (particularly members of Family Welfare Empowerment groups or PKK women)—as well as posyandu (community health post) cadres and micro, small, and medium enterprises (MSMEs). Through seminars, training sessions, and mentoring activities, participants are educated on the updated PGS framework, which has long replaced the outdated “4 Sehat 5 Sempurna” model. Furthermore, the program introduces participants to strategies for identifying and creating healthy food business opportunities grounded in PGS principles, including case examples of successful healthy food enterprises and approaches for product development, sales, and marketing.

The expected outcomes of this program include an increase in nutritional knowledge, particularly regarding the Balanced Nutrition Guidelines (PGS), as well as the emergence of interest in establishing healthy food businesses that measured through a structured questionnaire-based assessment. In addition, the program aims to encourage behavioral changes toward healthier lifestyles and consumption patterns, and to enhance the competitiveness of entrepreneurs in the healthy food and beverage sector. Ultimately, this community service initiative (PKM) is intended to support public health improvement while simultaneously contributing to sustainable economic growth.

2. METHOD

To address the nutritional issues in Meruya Selatan Subdistrict, this program will be implemented through several key stages, focusing on economically oriented nutrition education, particularly related to the principles of the Balanced Nutrition Guidelines (PGS). The methods of implementation for this Community Service Program include: **(1) Provision of PGS materials for the community and business actors.** In this stage, the team develops educational PowerPoint slides and booklets to help the general public understand the principles of balanced nutrition, and to support entrepreneurs in identifying healthy product innovations along with examples of successful businesses. **(2) Nutrition education on Balanced Nutrition Guidelines (PGS) with an economic and business orientation.** This stage includes a seminar covering the core principles of PGS and the importance of nutrition and health in relation to economic productivity, followed by a workshop on how to calculate Body Mass Index (BMI), determine ideal body weight, and interpret as well as compare nutritional information tables on product packaging. During this stage, seminar and workshop participants receive both PowerPoint materials and printed PGS guidebooks. **(3) Mentoring of business owners in the development of healthy food and beverage products.** In this stage, the team provides guidance to selected culinary entrepreneurs in the creation and development of healthy, nutrient-dense food and beverage products. Additionally, efforts are made to enhance the competitiveness of local products through health-oriented marketing strategies and innovation. **(4) Program monitoring and evaluation.** In this final stage, questionnaires are distributed to participants of the seminar, workshop, and mentoring activities to assess the program’s effectiveness and participant satisfaction. The team also conducts an impact survey using the same questionnaire to evaluate changes in consumption patterns and improvements in community well-being.

3. RESULTS AND DISCUSSION

The Community Service Program (PKM) organized by the lecturers of the Bachelor of Management Program, Faculty of Economics and Business, Universitas Mercu Buana, under the theme “Nutrition and Healthy Lifestyles: An Investment for the Future” and titled “Balanced Nutrition Guidelines (PGS) and Their Application in Creating Healthy Food Business Opportunities”, was successfully held on April 24, 2025, at RPTA Menara, Meruya Selatan Subdistrict, West Jakarta, DKI Jakarta. The program successfully engaged more than 30 participants, consisting of PKK members, Posyandu health cadres, MSME (Micro, Small, and Medium Enterprise) actors, and local community members.

This community service activity was successfully implemented due to the high level of motivation among participants to learn new knowledge regarding the Balanced Nutrition Guidelines (PGS) and its role in creating healthy food business opportunities. Participants were actively engaged in discussions, raised questions, and shared experiences, which served as a valuable medium for mutual learning. Participants showed strong attentiveness and enthusiasm in seeking more detailed information related to PGS, how to calculate ideal body weight, the “My Plate” concept (Isi Piringku), and examples of successful healthy food businesses. This was evident from the high level of participation during the discussion and Q&A sessions. Many participants also expressed a genuine interest in developing new healthy food products or variants, particularly among MSME actors who already had experience in the culinary business sector. The activity was assessed as effective, supported by the participants’ cooperative and enthusiastic attitude, and the presence of a timekeeper who ensured the program ran according to the schedule and aligned with the planned event rundown.

The implementation of this activity was thoroughly documented in various formats, including visual records, administrative files, and academic materials. Visual documentation includes photographs of the opening session, material presentations, group discussions, and Q&A activities. The participant attendance list was compiled and verified, while the presentation materials delivered by the speakers were collected as part of the academic archive. In addition, the event was supported by the production of a documentary video and brief interviews with participants, which reflected a high level of enthusiasm for the content presented. The documentation results are illustrated in the following figures.



Figure 2. Seminar and Workshop



Figure 3. PKM Program in South Meruya

Fundamentally, this community service program consisted of three main sessions, designed thematically and with practical application in mind, including: (1) Nutrition education and healthy lifestyle, delivered by Dr. Ade Permata Surya, S.Gz., M.M. and Dr. Firman Fauzi, S.T., M.M., which provided foundational knowledge on the Balanced Nutrition Guidelines (PGS), the importance of consuming nutritious food, and its impact on family health. The material was presented in a manner that was scientifically grounded yet accessible to the general public. (2) Opportunities in healthy culinary businesses, facilitated by Alvita Sari, S.E., M.M. and Septiani Juniarti, S.E., M.M., discussed the potential of developing healthy food enterprises as a form of local economic opportunity. Topics included product innovation, branding strategies, and marketing techniques tailored to urban market needs. (3) Social media management and digital marketing, led by Fitria Nursanti, S.E., M.Pd. and Isfandiari M. Bahanan, S.E., M.M., aimed to introduce effective digital promotion strategies, particularly for MSMEs in the culinary sector. Participants were introduced to popular platforms such as Instagram and WhatsApp Business, along with techniques for creating engaging visual content. Ultimately, all sessions were conducted in an interactive and participatory atmosphere. Participants were not merely passive recipients of information but actively engaged in sharing experiences, asking questions, and discussing everyday practices related to nutrition and healthy living.

Evaluation was conducted through the distribution of questionnaires and brief interviews with participants. The results indicated that 90% of participants stated that the materials were highly relevant to their daily lives and easy to understand. Furthermore, 78% of participants reported being motivated to begin developing or improving their healthy culinary businesses, while 80% acknowledged gaining new awareness regarding the importance of implementing a balanced nutritional diet within their households. Overall, the activity received very positive responses from the target community, in terms of content quality, communication approach, and the relevance of the material to local needs. In addition, the questionnaire results—measured using a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree)—were obtained from 31 respondents, all of whom were participants in the PKM program. The analysis revealed that the highest mean score (3.74) was achieved by Item 6 (U6) and Item 10 (U10), indicating that respondents agreed the activity enhanced participants' knowledge and that the community service program (PKM) was highly beneficial for the residents of South Meruya. The second-highest mean score (3.65) was recorded for Item 3 (U3), which reflects the perception that the activity was useful in the development of knowledge and future prospects. The questionnaire results also demonstrate that all indicator data are normally distributed, as the kurtosis values for each indicator fall

within the acceptable range of -2 to +2. Moreover, all indicators are considered accurate, as indicated by the low standard deviation values relative to their means, and consistent (stable), as evidenced by their very low variance values. The detailed questionnaire results are presented in Table 1 below.

Table 1. Questionnaire Results

	N	Min	Max	Sum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Stat	Stat	Std. Error	Stat	Std. Error
U1	31	3	4	109	3.52	.508	.258	-.068	.421	-2.138	.821
U2	31	3	4	111	3.58	.502	.252	-.344	.421	-2.017	.821
U3	31	3	4	113	3.65	.486	.237	-.638	.421	-1.708	.821
U4	31	3	4	111	3.58	.502	.252	-.344	.421	-2.017	.821
U5	31	3	4	109	3.52	.508	.258	-.068	.421	-2.138	.821
U6	31	3	4	116	3.74	.445	.198	-1.163	.421	-.697	.821
U7	31	3	4	112	3.61	.495	.245	-.487	.421	-1.889	.821
U8	31	3	4	115	3.71	.461	.213	-.972	.421	-1.134	.821
U9	31	3	4	110	3.55	.506	.256	-.204	.421	-2.098	.821
U10	31	3	4	116	3.74	.445	.198	-1.163	.421	-.697	.821
U11	31	3	4	111	3.58	.502	.252	-.344	.421	-2.017	.821

Information:

Disagree : 1 Agree : 3
Less Agree : 2 Strongly Agree : 4

- U1** Contributes to the provision of alternative solutions to existing problems by leveraging the relevant expertise of academic personnel
- U2** Positively impacts productivity and performance, while encouraging collective advancement.
- U3** Supports the development of scientific knowledge and contributes to future academic or practical progres
- U4** Serves as instructional material or training content to enrich teaching and learning resources
- U5** Contributes to the increase of individual or household income
- U6** Enhances participants' knowledge and understanding of relevant subject matter.
- U7** Improves productivity in relevant personal, community, or business contexts.
- U8** Encourages positive behavioral changes aligned with program objectives.
- U9** Enhances the quality of the physical and/or social environment.
- U10** The collaboration conducted with Universitas Mercu Buana (UMB) through the community service program (PKM) is perceived as beneficial to the community.
- U11** The collaboration conducted with Universitas Mercu Buana (UMB) through the community service program (PKM) is considered successful in meeting its partnership targets.

4. CONCLUSION

Overall, this community service program (PKM) successfully raised awareness among the residents of South Meruya regarding the importance of nutrition and a healthy lifestyle, fostered interest in healthy food entrepreneurship, and promoted local economic potential through an empowerment-based educational approach. This activity represents a tangible contribution by Universitas Mercu Buana in supporting the realization of a healthy, productive, and empowered society. However, during the implementation of this PKM program, the team encountered several challenges that serve as valuable experience and lessons for future initiatives. These challenges included: limited facilities and infrastructure at the activity site, unstable internet connection during the sessions, time constraints among participants, and varying levels of participant comprehension. Nonetheless, through strong teamwork and clearly defined job descriptions, these obstacles were effectively managed and overcome.

5. ACKNOWLEDGMENT

This community service program (PKM) would not have been successfully implemented without the support of the Meruya Selatan Subdistrict Office, particularly Mr. M. Ghufri Fachtani, S.M., as the Head of Meruya Selatan Subdistrict, and Mr. Tubagus Rafiudin, S.Kom., M.Si., as the Subdistrict Secretary. Their contributions included providing access to the venue and essential equipment such as chairs, tables, a sound system, and a projector, as well as assisting in mobilizing participants in alignment with the program's target audience. The PKM team also extends sincere gratitude to Universitas Mercu Buana for providing financial support, which enabled the program to run smoothly and effectively.

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