

Health Education on Balanced Nutrition for Elementary Students at SDN 1 Kadungora, Garut

Novriyanti Lubis^{1,a)}, Wahyuningsih²⁾, Muhammad Belfa³⁾, Mahesa Prana Chandra⁴⁾, Naila Azqiatul Aulia¹⁾, Khairul Anam¹⁾

¹Pharmacy Study Program, University Garut, Garut, Indonesia

²Accounting Study Program, University Garut, Garut, Indonesia

³Journalism Study Program, Sunan Gunung Djati State Islamic University, Bandung, Indonesia

⁴Public Administration Study Program, Sunan Gunung Djati State Islamic University, Bandung, Indonesia

^{a)}Corresponding author: novriyantilubis@uniga.ac.id

ABSTRACT

The quantity and quality of nutrients consumed by students can affect their balanced nutritional status, which will impact their developmental needs. School-aged children are experiencing a period of growth, requiring special attention from parents and the community, especially regarding nutrition and balanced diets. The purpose of this outreach program is for the students of SDN 1 Kadungora to have a higher awareness of the importance of a balanced diet to support optimal physical and cognitive development, and to build a healthier and highly competitive generation. Community service and outreach were conducted at SDN 1 Kadungora, Kadungora sub-district, Garut district, as a collaboration between KKN Thematic Group 18 of Garut University and Sunan Gunung Djati Islamic State University from Group 44, with a total of 44 students from 6th grade participating. The PKM program was carried out using direct outreach methods and the distribution of brochures. The results of the counselling show that before the counselling, 94.1% of students understood the definition of balanced nutrition, and after the counselling, this increased to 100%.

ARTICLE INFO

Article History:

Submitted/Received: 21 August 2025

First Revised: 24 August 2025

Accepted: 30 August 2025

First Available online: 31 October 2025

Publication Date: 31 October 2025

Keyword:

Balanced Nutrition

Students

Snacks

Health Education

Nutrition Knowledge

INTRODUCTION

Improving community nutrition is one way to improve health. According to the Indonesian Ministry of Health (2009), balanced nutrition consumption can increase the body's resistance, improve intelligence, and restore growth to normal levels (Ministry of Health, 2009). A healthy person is sure to have many activities, which is important for school children as it helps improve concentration and intellectual ability (Devi, 2012).

Children experience a period of growth during their school years. Differences in child growth increase with age (Padila et al., 2019). Students are an age group that requires special attention from parents and society, especially regarding child nutritional care. The amount and quality of nutrition provided by parents to school-aged children affects their growth. Additionally, a child's nutritional status must be balanced because their growth needs depend on their nutritional status.

Breakfast is an important part of a balanced nutritional status because it meets a quarter of daily nutritional needs. Therefore, if someone is not used to eating breakfast, the likelihood of experiencing nutritional problems is higher. Facts show that many students in Indonesia do not make it a habit to eat breakfast, with 20–40% of children in Indonesia skipping it before starting their activities (Mawarni, 2021). To keep blood sugar levels normal, the breakfast routine must be done every day (Apriani, 2022). Increased concentration in children is the most significant benefit of breakfast. Breakfast provides the best energy for the brain, which can help improve concentration when studying at school. Students who don't eat breakfast usually buy snacks at school that have an unbalanced nutritional content to reduce their hunger (Mujahidah, 2021).

The habit of consuming snacks can lead to a thin nutritional status, or wasting, because most snacks that school children often eat do not contain the necessary nutrients (Mujahidah, 2021). Additionally, the snacks sold in schools and school canteens are not nutritionally balanced, which can affect children's nutritional status. Based on the background of the problem outlined previously, the PKM team is attempting to provide education with the title "Balanced Nutrition Socialization for Child Development at SDN 1 Kadungora, Kadungora District, Garut Regency, West Java".

METHOD

This community service (PKM) uses a counseling method to build education, increase awareness, and knowledge of students at SDN 1 Kadungora. Before the activity began, a pre-test on balanced nutrition knowledge was conducted. The pre-test lasted for ten minutes. Next, the counseling was carried out by delivering material through a lecture containing "Socialization of the importance of balanced nutrition," followed by a direct discussion. The students were given a brochure containing material entitled "Balanced Nutrition," as shown in Figure 1. After that, a ten-minute post-test was conducted to evaluate the increase in student knowledge by involving KKN students from UNIGA and UIN Bandung.

The students in this counseling consisted of 44 people from class 6th. The 6th-grade elementary school students were selected because they were old enough to receive material regarding balanced nutrition. In this counseling, data is collected from the results of filling questionnaire before and after counseling. Data on knowledge, attitudes, and behavior regarding balanced nutrition were collected through evaluation Data. The results are in the form of a plot of average knowledge data before and after education.



FIGURE 1. Speakers and Socialization Brochure

RESULT AND DISCUSSION

This socialization activity began with a speech given by the principal of SDN 1 Kadungora and ended with closing remarks from the head of group 18 of UNIGA Thematic KKN, as shown in Figure 2.



FIGURE 2. PKM Collaboration with UIN Bandung

The results obtained will be described as follows. This PKM uses an outreach method, including lectures as a source of learning and instruction, as well as pre- and post-outreach questionnaires. Outreach is a non-formal educational process that utilizes information to improve community knowledge and skills. Outreach is typically delivered through group discussions, field visits, and lectures (Koraag et al., 2024). The advantages of the extension method include the extension worker's ability to prepare the

material to be delivered and the ability to reach more people. According to TIM (2002), the target audience can use the extension worker to ask questions and voice their opinions (TIM, 2002). However, according to observations by Yuniarti et al., because children's attention often shifts to doing things they prefer, they can only concentrate for 5 to 7 minutes during learning activities. Furthermore, students often get bored quickly and don't pay attention to what is being taught (Yuniarti, 2023). The quantitative method of questionnaires collects data by giving respondents a number of written questions or statements to answer according to the user's request (Widoyoko, 2012).

This PKM is also carried out to introduce important nutritional components according to the Ministry of Health (2022), which are the 4 main pillars of balanced nutrition, namely:

- Consume a variety of foods
- A lifestyle full of activity and exercise
- Implementing a clean and healthy lifestyle
- Maintain body weight according to standards (Ministry of Health, 2022).

The test was conducted twice, before and after the training, with each test lasting 10 minutes. Data on knowledge, attitudes, and behaviors regarding balanced nutrition were collected through data processing. The results were plotted in the form of average knowledge data before and after the education. Before the counseling, it was found that many students already knew the definition of balanced nutrition, namely 91.4%, and after the counseling material was provided, this figure increased to 100%, a 6% increase, as shown in Figure 3.



FIGURE 3. Percentage of understanding of the definition of balanced nutrition

A balanced diet is a daily nutritional intake that meets the body's needs in terms of the types and amounts of nutrients. To prevent nutritional problems, dietary diversity, physical activity, healthy living habits, and maintaining a normal body weight are all essential elements in meeting this nutritional requirement (Ministry of Health, 2022). To maintain a healthy body, a balanced nutritional intake is essential for the growth and development of infants, children, adolescents, adults, and the elderly. Nutritional intake is proportional to the amount of nutrients used, thus preventing infection, increasing work productivity, and protecting against premature death and chronic disease. As stated in the General Guidelines for Balanced Nutrition (PUGS), all the food used on my plate consists of rice, side dishes, vegetables, and fruit, which are very beneficial naturally. Staple foods provide energy, side dishes provide protein and fat, and vegetables and fruit provide minerals and vitamins (Briliannita et al., 2022).

The slogan "Fill my plate" refers to the General Guidelines for Balanced Nutrition, or PUGS. This consists of staple foods: 2/3 of half a plate, side dishes: 1/3 of half a plate, vegetables: 2/3 of half a plate,

fruit: 1/3 of half a plate, water: eight glasses a day, physical activity, and handwashing with soap (Rahmy et al., 2020). Based on the observation results, as shown by the diagram based on observation results. The students' abilities have increased, so it is estimated that the students will adopt a diet with a balanced nutritional composition. The students in the counseling are as seen in Figure 4.



FIGURE 4. PKM activities with the student participants

Students are also equipped with knowledge about various things, one of which is the delivery of healthy food, which is food that contains good nutrition and does not contain harmful substances (Fatrikawati and Hamidah, 2017). According to Nuraini (2007), food is considered healthy if it has all the nutrients the body needs and does not contain toxins or disease germs (Nuraini, 2007). The body needs various types of food, such as carbohydrates, protein, healthy fats, vitamins, minerals, and fiber. However, harmful ingredients that should not be present in healthy food include excess preservatives, artificial colors, or other chemicals that can harm the body (Lubis et al., 2022). Healthy food should not only be fresh, but also free from dust and other contaminants. Clean food has the following characteristics: the outside appears clean, free from any adhering dirt; the plate or container is dust-free; there is no hair or stapler residue; it is cooked, stored, or served in a place away from garbage dumps, gutters, and frequently used road sides.

Safe food must not only be hygienic and healthy, but also free from harmful chemicals. During food processing, chemicals such as colorings and sweeteners are typically added. These chemicals are referred to as food additives. In most cases, chemicals that are not tolerated by the body are used as food additives. Preservatives, thickeners, and flavor enhancers fall into this category (D. S. et al., 2019).

CONCLUSION

In this counseling session, there were 44 students from SDN 1 Kadungora with an age range of 12-13 years. The process is carried out collecting data from respondents where the process uses extension methods and brochure media. The results of the counseling session for students at SDN 1 Kadungora showed a 4% increase in their understanding of balanced nutrition, and 100% of students understood the concept of balanced nutrition. Therefore, the health counseling session at SDN 1 Kadungora was deemed successful.

ACKNOWLEDGMENTS

The PKM team expressed its gratitude to the principal of SDN 1 Kadungora, Kadungora sub-district, Garut Regency, who has granted permission for the Community Service Program (KKN) team from UIN Bandung to conduct health education activities. The author also expresses his gratitude to the village head

of Kadungora for providing the venue for this education, and especially to the members of the UNIGA Thematic 2025 KKN Group 18 team who have worked hard to ensure the success of this PKM.

REFERENCES

Apriani, DGY 2022. The relationship between breakfast and the level of learning concentration in children in grades 4-6 of Tiyinggading 1 Public Elementary School. *Jurnal Medika Usada*. 5(1):16–21.

Boulay, A.-M., J. Bare, L. Benini, M. Berger, MJ Lathuillière, A. Manzardo, M. Margni, M. Motoshita, M. Núñez, and A.V. Pastor. 2018. The Wulca consensus characterization model for water scarcity footprints: assessing impacts of water consumption based on available water remaining (aware). *The International Journal of Life Cycle Assessment*. 23:368–378.

BPOM, RI 2013. School snacks. *Food Watch Integrated Food Safety System*, Vol. 1

BPOM, RI 2020. Food safety management in schools. Retrieved from <https://Hfis.WoRdpress.Com/2014/02/13/Food-Safetymanagement-Di-Sekolah/> Accessed On. 12

Briliannita, A., M. Sada, and M. A. Matto. 2022. Increasing public knowledge about the role of balanced nutrition with the composition of my plate during the COVID-19 pandemic. *Panrita Abdi-Jurnal Pengabdian Pada Masyarakat*. 6(2):420–427.

Ministry of Health, Republic of Indonesia 2009. Indonesian health profile 2008. Jakarta: Ministry of Health of the Republic of Indonesia

Devi, N. 2012. Nutrition for school children. Jakarta: Kompas. 47–127.

DS, YN, A. Fitri, and SM Dewi. 2019. EDUCATION of healthy food and snacks to increase knowledge about nutrition at SDN Karangjaya III, Pedes District, Karawang. *Buana Journal of Service*. 1(1):26–36.

Fatrikawati, H. and S. Hamidah. 2017. The influence of healthy food knowledge on the eating habits of class X culinary students at SMKN 4 Yogyakarta. *Journal of Culinary Education and Technology*. 6(2)

Ministry of Health, Republic of Indonesia 2022. Main Pillars in the Principles of Balanced Nutrition. 2022.

Koraag, CR, A. Punusingon, DM Pusung, MI Sumeleh, F. Lintjewas, CM Senduk, S. Tontuli, and AM Kakalang. 2024. New extension methods: innovations to increase effectiveness and participation. *Merenda: Journal of Religious Extension*. 1(1):19–22.

Lubis, N, Prasetyawati, Djunaedi E. C., and Soni, D.. 2022. Types And Study of Food Additives. Edition 1. Jl. Gerilya No. 292 South Purwokerto, Banyumas Regency, Central Java: CV. Pena Persada.

Mawarni, E. 2021. The relationship between breakfast and student concentration. *Tambusai Health Journal*. 2(4):159–167.

Michels, N., K. Van den Bussche, J. Vande Walle, and S. De Henauw. 2017. Belgian primary school children's hydration status at school and its personal determinants. *European Journal of Nutrition*. 56:793–805.

Mujahidah, FF 2021. Counseling on the importance of breakfast for children. *State Abmas Journal (JAGRI)*. 2(1):36–40.

Nuraini, H. 2007. Choosing & Making Healthy & Halal Children's Snacks. QultumMedia.

Padila, P., FN Andari, and J. Andri. 2019. Results of toddler development screening between ddst and sdidtk. *Silampari Nursing Journal*. 3(1):244–256.

Rahmy, HA, N. Prativa, R. Andrianus, and MP Shalma. 2020. Nutrition education on balanced nutrition guidelines and the contents of my plate for elementary school students in Batang Anai 06, Padang Pariaman Regency. *Nagari Membangun Scientific Bulletin*. 3(2)

Sari, IPTP 2014. Level of knowledge about the importance of consuming mineral water in grade IV students at Keputran A State Elementary School, Yogyakarta. *Indonesian Journal of Physical Education*. 10(2)

TEAM. 2002. Posyandu Cadre Training Guide. Jakarta: Cross-sectoral Team.

Widiantari, MAW, and PI Daryaswanti. 2023. Overview of adolescents' knowledge and attitudes regarding drinking water. *ProHealth Journal*. 20(1):17–24.

Widoyoko, EP 2012. Techniques for preparing research instruments

Yuniarti, L., T., & Diana. (2023). Improving concentration in learning in children. *Jurnal Warna: Journal of Early Childhood Education and Learning*. 8(01):41–51.