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Effectiveness of Flipbook Media on Children's Knowledge and Behavior in Nutritious Food Consumption: School-based Intervention

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ABSTRACT

Background: childhood is an important stage of development. Non-fulfillment of nutrition in childhood has an impact on the health status of future generations. The use of Banjar-language flipbook educational media is one innovation that can be employed to enhance knowledge and change behavior in a more positive way.

Purpose: exploring the effectiveness of using digital innovation and media nutrition education in the form of flipbooks, integrating local culture, to improve elementary school students' knowledge and behavior regarding balanced nutrition.

Methods: a one-group pretest-posttest pre-experimental design study was conducted with students (n=97) from two primary schools in Banjarmasin, South Kalimantan, to evaluate the effectiveness of the flipbook. Data were collected from July to August 2025 and included characteristics of respondents and the effects on knowledge and behavior regarding food nutrition. Data were analyzed using SPSS version 25. Descriptive statistics were used to summarize respondents' characteristics. The Wilcoxon test was

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used to compare pretest and posttest scores of knowledge and behavior. A p-value of < 0.05 was considered statistically significant

Results: of the 97 respondents, 57 respondents (58.79%) had good knowledge in the category, and 64 respondents (65.98%) had quite positive behavior. After receiving health education and access to flipbooks monitored by observation sheets, 77 respondents (79.38%) were in the “good knowledge” category, and 77 respondents (74.23%) showed very positive behavior

Conclusion: the results of this study indicate that there is an increase in knowledge and behavior change in a positive direction after receiving nutrition education through flipbooks in the Banjar language integrated with Free Nutritious Meals (MBG) program in primary schools. The flipbooks will be integrated into the primary school curriculum.

Keywords: behaviour; food nutrition; knowledge; school-based intervention; technology

BACKGROUND

Efforts to prevent stunting need to be made early on (Aprillia et al., 2023; Hamidah et al., 2024; Paramitha et al., 2024). Stunting, which is caused by nutritional deficiencies, can significantly impact the cognitive abilities of elementary school students (Handina, 2024). Stunting can result from a lack of knowledge about the importance of balanced nutrition among children and parents. This stems from limited access to understandable, culturally relevant nutrition information. Additionally, low socioeconomic conditions in the community contribute to this problem. If stunting is not addressed, it will affect the quality of future human resources. Therefore, effective nutrition education that is accessible and easy to understand for school students, teachers, and parents is necessary.

Elementary school students were selected as the primary target of nutrition education because this is a crucial stage in child development for forming long-term healthy habits. This age is an important period when children enter a formal educational environment and begin acquiring basic knowledge and skills (Pongpalilu et al., 2023). Proper nutrition is crucial for children’s growth and development during their elementary school years, when they undergo rapid physical growth and cognitive development. Physical growth directly or indirectly affects children’s behavior in daily life (Rahmat, 2021). Additionally, elementary school students are more easily influenced by equipping children with relevant and easy-to-understand nutritional knowledge from an early age, they will become agents of change (Ratri, 2024). Nutrition education for elementary school students is expected to lead to a long-term decrease in stunting rates. The main

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objective of nutrition education is to improve the quality of human resources, particularly among children, as agents of change within their families and communities.

Improving the quality of human resources aligns with the 2015 UN global action agreement, the SDGs (Sustainable Development Goals), which consist of 17 sustainable development goals. This research supports SDG efforts, including SDG 2 (no poverty) to end hunger, SDG 3 (good health and well-being) for good health and well-being, and SDG 4 (quality education) for quality education (Nations, 2024). This research supports the Free Nutritious Meals (MBG) program, one of President Prabowo Subianto's Asta Cita programs (Subianto & Raka, 2024). Effective nutrition education is essential for achieving these goals. Providing elementary school students with accurate knowledge about balanced nutrition can prevent stunting early on. Using digital technology is expected to engage more elementary school students in an interactive and enjoyable learning process.

The MBG policy to improve student nutrition, which requires a significant amount of government funding, has received both support and opposition (Amril & Sazali, 2025). Various studies emphasize the importance of effective and transparent communication, as well as community involvement, to ensure the program's success. The MBG program aims to educate and inspire the community, particularly students, about the significance of balanced nutrition in child development (Andin et al., 2025). However, various obstacles were encountered during implementation, including low food quality and student participation due to uncertainty about the nutritional value of the provided food (Amril & Sazali, 2025; Triningsih et al., 2025). Therefore, one solution offered to support the MBG program is effective education. Research shows that digital media has been used as an educational medium through video platforms such as YouTube, Facebook, Instagram, and TikTok (Astuti et al., 2025; Merlinda & Yusuf, 2025). No educational media in the form of a flipbook guidebook that considers the local cultural context has been found. Digital innovation in nutrition education in the Banjarese language has great potential to inspire a deeper understanding of children's nutritional needs.

Since January 2025, the MBG program has been implemented in 14 schools in Banjarmasin, ranging from kindergarten to high school. A total of 6,531 students have benefited from the program. Initial interviews with program participants revealed that they were happy to receive free, nutritious lunches, as the menu offerings were quite complete. However, one of the challenges that MBG catering providers face is becoming more creative in their menu planning and incorporating local wisdom (Muhammad, 2025; Sukarli, 2025).

Previous community service results demonstrate the important role that local food interventions and nutrition education play in preventing stunting. One such intervention is the use of local shrimp as a nutritious food alternative (Paramitha et al., 2024). It emphasizes the importance of nutrition education for pregnant women to ensure healthy

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eating from the beginning, as well as the effectiveness of practice-based education in improving eating habits, such as consuming more vegetables (Paramitha & Perdana, 2021). These findings underscore the urgent need for research on developing digital nutrition education media.

Effective nutrition education can prevent health problems caused by nutritional deficiencies or excesses (Paramitha & Putri, 2021). Environment-based digital flipbook instructional tools in the course of study, especially for the family of foods theme, since the media has been associated with enhancing students' learning independence (Chaeratunnisa et al., 2022). However, cultural and language barriers sometimes hinder the effectiveness of nutrition education. Using the local language, in this case the language of the region is believed to be a relevant educational strategy for students in South Kalimantan. Conveying nutrition information in the local language is expected to make it easier to understand and apply in daily life. Additionally, the information is tailored to the eating habits and food availability of the target users of digital nutrition education innovations. The nutrition education program greatly raised students' awareness of healthy eating habits, especially through participatory and culturally sensitive methods (Fransisca, 2024). Thus, this solution supports the success of the MBG program in improving students' nutrition and bridges the knowledge gap, which is often an obstacle to the effectiveness of national programs.

Using digital media for nutrition education with elementary school students is relevant to their digital literacy in the information technology era (Sari, 2024). Digital media allows nutritional material to be delivered in a more interactive, visual, and contextual manner, which makes it easier for children to understand balanced nutrition in a fun and engaging way (Mauda & Zaliluddin, 2025). Additionally, digital media can reach students more broadly and flexibly (Paling et al., 2024) in both school and at-home settings. It also allows for the involvement of parents and teachers in the learning process. Integrating local cultural elements, such as the use of the Banjar language, into digital media makes nutrition education more relevant and meaningful for children. This increases the effectiveness of learning and the potential for early behavioral changes in eating habits.

Nutrition education has an important role in forming healthy eating habits in school-age children, as early intervention can prevent various health problems related to an unbalanced diet. Various learning media have been used to improve students' knowledge and behavior regarding nutrition, such as posters, videos, and digital applications. However, some of these media still have limitations in student involvement and lack of appropriate interactive elements for children. Flipbook as an innovative visual learning media has the potential to improve students' understanding and motivation in nutrition learning. Nevertheless, empirical evidence on the effectiveness of the use of flipbook media in improving the knowledge and nutritional behavior of elementary

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school students, especially by using regional languages such as banjar language is still very limited. Therefore, this study was conducted to fill the research gap and assess the effectiveness of flipbook media in improving students ' knowledge and behavior related to food nutrition.

OBJECTIVE

This study aims to explore the effectiveness of using digital media in the form of flipbooks with local cultural integration to improve balanced nutrition knowledge and behavior among elementary school students.

METHODS

This is a pre-experimental study with a one-group pre-test/post-test design with educational media in the form of a flipbook in the language of the Banjar. Conducted in two elementary schools that implemented the MBG Program from July to August 2025, the study involved 97 respondents selected using purposive sampling techniques. Inclusion criteria for research subjects included being an elementary school student in grades three or four, having parental/ guardian permission, having no food allergies, being able to communicate in the Banjar language, and having parents/guardians who own gadgets for digital educational media. The study maintained the confidentiality of respondent data and obtained ethical approval (No. 435/UMB/KE/VI/2025).

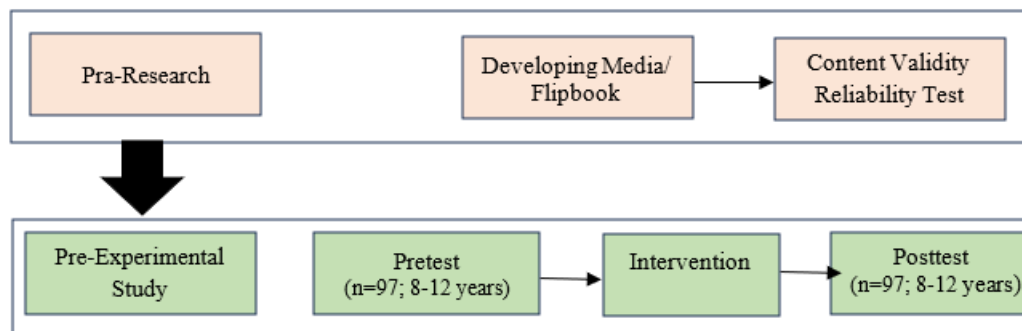


Figure 1. Research Flowchart

The flipbook media were developed using the Four-D (4-D) model consisting of define, design, development, and disseminate. Research data were collected using a questionnaire. The flipbook media used in this study underwent content validity by subject matter experts, media validation by media experts, and feasibility testing by parents and teachers. Content validity was evaluated using Aiken's V formula. Aiken's coefficient V ranges from 0.87 to 0.91, which indicates that the flipbook media is valid and suitable for use. The reliability test showed that the Cronbach's α values of the overall

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questionnaire were all above 0.81. These tests indicate that the questionnaire is a valid and reliable instrument. The Wilcoxon test was used for statistical testing to determine the significance of changes in nutritional knowledge and behavior before and after the intervention.

RESULTS

Table 1. Respondent Characteristics Based on Age

Age	n	%
8	21	21.65
9	40	41.24
10	25	25.77
11	9	9.28
12	2	2.06
Total	97	100.00

Table 1 shows that most respondents in this study were elementary school students aged 9 years (41.24%).

Table 2. Respondent Characteristics Based on Gender

Gender	n	%
Male	39	40.21
Female	58	59.79
Total	97	100.00

Table 2 shows that most respondents in this study were female elementary school students (59.79%).

Table 3. Univariate Analysis Results

	Before		After	
	n	%	n	%
	Knowledge			
Good	57	58.76	77	79.38
Fair	25	25.77	13	13.40
Poor	15	15.46	7	7.22
	Behaviour			
Very positive	28	28.87	72	74.23
Quite positive	64	65.98	23	23.71
Less positive	5	5.15	2	2.06

Table 3 shows that, before the intervention, 57 respondents (58.79%) had good knowledge, while 64 respondents (65.98%) behaved fairly positively. After receiving health education and access to flipbooks monitored using observation sheets, however,

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77 respondents (79.38%) were in the “good knowledge” category, and 77 respondents (74.23%) behaved very positively

Table 4. Differences in Knowledge Scores Before and After Intervention

Knowledge	Min	Max	Median	Mean	Standard Deviation	p
Before	20	100	80	74.43	21.55	0.003*
After	20	100	100	85.77	21.00	

Based on table 4, it is known that there is an increase in knowledge related to nutritious food by using flipbooks that integrate local languages. There is an increase in knowledge that can be seen from the increase in the median from 80 to 100. The average pretest score is 74.43 ± 21.55 , while the average post-test score is 85.77 ± 21.00 .

Based on the Wilcoxon test results, there is a significant difference in the level of knowledge related to nutritious food before and after the intervention of providing education using a Banjar language flipbook with a p-value of 0.003 ($p < 0.05$).

Table 5. Differences in Behaviour Scores Before and After Intervention

Behavior	Min	Max	Median	Mean	Standard Deviation	p
Before	0	100	70	68.66	18.35	0.000*
After	40	100	90	85.98	16.81	

Based on table 5, it is known that there was a positive behavior change in related to nutritious food using flipbooks that integrated the local language. There was a positive behavior change, which can be seen from the increase in the median from 70 to 90. The pretest score average was 68.66 ± 18.35 , while the posttest average was 85.98 ± 16.81 .

Based on the Wilcoxon test results, there is a significant difference in the respondents' behavior related to nutritious food before and after the intervention of providing education using a Banjar language flipbook, with a p-value of 0.000 ($p < 0.05$).

DISCUSSION

This study was conducted in elementary schools that provided free nutritious meals. This became the basis for conducting research related to the knowledge and behavior surrounding nutritious food consumption in schools. Health belief model (HBM) theory is a theory used to explain and identify the attitudes, perceptions, and behaviors of individuals. The model includes six key constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. Modifying variables, cues to action, and self-efficacy all influence an individual's view of health behavior. The HBM extends beyond health promotion and has

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been used to evaluate intervention effectiveness using pre- and post-intervention methods (Alyafei & Easton-Carr, 2024).

Flipbooks were one of the educational media options that best suited the needs of the community in this study. Flipbooks are an attractive medium that can easily be accessed via mobile phones, computers, or laptops. They use attractive visualizations, such as images, diagrams, and illustrations, to convey information in a simpler way, making it easier to understand (Chairunisa et al., 2025). Additionally, using flipbooks in local languages was key to innovating this study because combining technological advances with local wisdom through local languages is key to the acceptance of Banjar-language flipbooks in this study in the local area. The existence of easy-to-understand information increases the perceived susceptibility of respondents to healthy and unhealthy nutrition, as well as the perceived severity of health problems that can arise such as obesity and malnutrition. In this study, respondents gained a clearer knowledge of the importance of nutritional intake in accordance with the needs and consequences of unhealthy food consumption.

The intervention in this study provided thru the local language flipbook also forms perceived benefits, namely awareness of the importance of consuming healthy foods during childhood. Additionally, the presence of the flipbook also lowers the perceived barriers that healthy food consumption can be easily found in the surrounding environment with simple yet nutritious menus. This is expected to raise respondents' awareness and increase their motivation to consume healthy foods, so that respondents have self-efficacy in eating nutritious foods according to their needs. This study was conducted on 97 respondents and showed that the use of Banjar-language flipbook media can increase knowledge related to nutritious food, with 57 respondents (58.76%) having good knowledge before the pretest and 77 respondents (79.38%) after the intervention. These results align with previous research from 2022 that used interactive flipbook learning media in elementary schools and showed an increase in students' knowledge before and after the intervention (Manalu, 2022). The other research conducted in Chinese schools (school-based interventions) showed that student awareness increased after the intervention, as did the positive role of families in providing nutritious food to elementary school students (Wang et al., 2022). School-based health promotion programs can encourage positive behavior in students (Kobel et al., 2024).

Behavioral changes were also observed in the respondents after they received health information through the flipbook media. Initially, 28 respondents (28.87%) exhibited very positive behaviors towards nutritious food; after receiving the intervention, this number increased to 72 respondents (74.23%). Previous research has shown that using flipbooks as an educational medium increases awareness of and behavior related to preventing stunting in adolescence (Lestari et al., 2024). The findings of this study suggest that elementary school students increased their knowledge and exhibited positive

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changes in behavior after receiving information about nutritious eating through flipbook media. These results are consistent with previous research showing that knowledge of nutritious foods influences eating habits (Antwi et al., 2021).

This in line with the previous study explained that the children in Saudi Arabia may benefit from health promotion curriculum in terms of their food habits, health behaviors, and nutrition knowledge. Nutrition knowledge, health, and diet-related behaviors among children and adolescents in this Arab Saudi can all be positively impacted by well-designed and implemented nutrition interventions (Hazim et al., 2023). In the Eastern Mediterranean Region (EMR) countries, the most popular nutrition-specific treatments for managing child malnutrition were case-based interventions and nutrition education (Ghods et al., 2021).

Nutritious food during childhood plays an important role in growth and development, ensuring good health in adulthood. Various interventions can be implemented to promote nutritious food during childhood. Flipbooks in local languages are one option that health workers, schools, and parents can use to increase children's knowledge of and positive attitudes toward nutritious food (Dallagiacoma et al., 2023).

This study contributes valuable evidence in the field of health education by demonstrating the effectiveness of digital flipbooks by integrating local culture and language (Banjar language) with attractive and easy-to-understand visualizations so as to improve nutritional knowledge and behavior among primary school students. The flipbook media used also passed the stages of review and due diligence to support the credibility of the research.

Further recommendations research is required to determine whether school, community, clinical or a combination of settings is optimal for these interventions and advised that experimental or quasi-experimental designs with control groups be used in future research to confirm the correlation between the flipbook intervention and behavioral outcome. The long-term impact of behavioral changes over time could potentially be assessed by longitudinal research. Further insights into how the flipbook affects motivation, perceptions, and self-efficacy may be obtained by incorporating qualitative techniques like focus groups or student reflections. With the help of teachers and parents, it is additionally recommended that the flipbook be enhanced to include more comprehensive health-related subjects and integrated into the school curriculum.

Limitations of this study were the design used one-group pretest–posttest method restricts the capacity to determine causal relationships, the study used self-reported data which could be influenced by social desirability effects or response bias and the study was limited to two elementary schools in Banjarmasin, South Kalimantan and may not be generalizable to a larger population

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CONCLUSION

This study analyzed the effectiveness of using Banjar-language flipbooks to improve the knowledge and behavior of elementary school students through the Free Nutritious Meals Program in elementary schools. The results show that students' knowledge increased and their behavior changed positively after receiving nutrition education through flipbooks integrated with the program. These results underscore the effectiveness of educational media that integrate local culture and language as an easy-to-understand and innovative learning medium.

Further research can be conducted in wider locations and over longer periods of time so that students' nutritious eating habits can be explored more comprehensively, sustainably, and in accordance with local culture.

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REFERENCES

- Alyafei, A., & Easton-Carr, R. (2024). The Health Belief Model of Behavior Change. In *StatPearls*.
- Amril, A., & Sazali, H. (2025). Formulasi Regulasi dan Kebijakan Komunikasi dalam Pelaksanaan Program Pembangunan: Studi pada Program Makan Bergizi Gratis. *Jurnal Indonesia : Manajemen Informatika Dan Komunikasi*, 6(3), 1670–1679. <https://doi.org/10.63447/jimik.v6i3.1566>
- Andin, A., Risti, D., Latifah, I., Panuntun, M., Nur, M., Selviani, R., & Saptatiningsih, R. I. (2025). Penerapan Nilai Pancasila Melalui Program Makan Bergizi Gratis. *IJEDR: Indonesian Journal of Education and Development Research*, 3(1), 370–383. file:///C:/Users/User/Downloads/Penerapan_Nilai_Pancasila_Melalui_Program_Makan_Be.pdf
- Antwi, J., Ohemeng, A., Boateng, L., Quaidoo, E., & Bannerman, B. (2021). Primary School-Based Nutrition Education Intervention on Nutrition Knowledge, Attitude and Practices Among School-Age Children in Ghana. *Global Health Promotion*, 27(4), 114–122. <https://doi.org/10.1177/1757975920945241>
- Aprillia, R., Astuti, A. W., Fatimah, S., Annisa, L., Pondawati, L. W. O., Zahra, T., Febrianti, C. P., & Arofah, T. H. (2023). Community Empowerment with Stunting Risk Factors Based on Home visit Approach: Scoping Review. *Women, Midwives and Midwifery*, 3(1), 61–76. [10.36749/wmm.3.1.61-76.2023](https://doi.org/10.36749/wmm.3.1.61-76.2023)

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<http://aipkind.org>



- Astuti, A. W., Fatimah, S., Anisa, L., Aprilia, R., Febrianti, C. P., Arifin, S. R. M., Suryani, I., & Savitri, M. (2025). Stunting Prevention and First 1,000 Days of Life Optimisation Programme in Gunungkidul. *Jurnal Kesehatan Masyarakat*, 11(1), 87–95. <https://journal.unnes.ac.id/journals/kemas/article/view/13706/3131>
- Chaeratunnisa, E., Utari, E., & Lestari, I. D. (2022). Development of Environment-Based Digital Flipbook Teaching Materials to Enhance Learning Independence among Elementary School Students. *Jurnal Paedagogy: Jurnal Penelitian Dan Pengembangan Pendidikan*, 9(1), 2022. <https://e-journal.undikma.ac.id/index.php/pedagogy/index>
- Chairunisa, N., Sriyanti, C., Widayani, W., & Ferina, F. (2025). Pengaruh Pendidikan Kesehatan Menggunakan Flipbook Terhadap Pengetahuan Tentang Menarche Pada Remaja Putri. *Jurnal Riset Kesehatan*, 17(1), 214–220. <https://juriskes.com/index.php/jrk/article/view/2660/778>
- Dallagiacomma, G., Alberti, F., & Odone, A. (2023). The efficacy of digital media tools to promote a healthy diet in children: A systematic review of intervention studies. *Acta Bio-Medica : Atenei Parmensis*, 94(S3), e2023157. <https://doi.org/10.23750/abm.v94iS3.14293>
- Fransisca, V. (2024). Effectiveness of the Nutrition Education Program in Increasing Awareness of Balanced Eating Patterns in Elementary Schools. *Almakki Health Informatics Journal*, 2(6), 353–358. <https://healthinformaticsjournal.al-makkipublisher.com/index.php/hij/article/view/47/53>
- Ghodsi, D., Omidvar, N., Nikooyeh, B., Roustae, R., Shakibazadeh, E., & Al-Jawaldeh, A. (2021). Effectiveness of Community Nutrition-Specific Interventions on Improving Malnutrition of Children under 5 Years of Age in the Eastern Mediterranean Region: A Systematic Review and Meta-Analysis. *International Journal of Environmental Research and Public Health*, 18(15). <https://doi.org/10.3390/ijerph18157844>
- Hamidah, J. M., Rahmah, A., Noviana, D. P., & Ariana, R. A. (2024). Pelatihan Literasi Digital untuk Edukasi Pencegahan Stunting pada Remaja di SMAN 11 Banjarmasin. *Jurnal Pengabdian Masyarakat Progresif Humanis Brainstorming*, 7(2). <https://doi.org/10.30591/japhb.v7i2.6637>
- Handina, W. P. (2024). Bahaya Stunting pada Bidang Kognitif Siswa Sekolah Dasar. *Jurnal Review Pendidikan Dan Pengajaran (JRPP)*, 7(2), 4650–4653. <https://doi.org/https://doi.org/10.31004/jrpp.v7i2.27250>
- Hazim, K., Shihab, N. A., Dodge, E., Benajiba, N., Chavarria, E. A., Aboul-enein, B. H., & Faris, M. A. E. (2023). Effectiveness of School-Based Nutrition Interventions Promoted in the League of Arab States : A Systematic Review. *Oxford: Health Promotion International Journal*, 38, 1–14. <https://doi.org/https://doi.org/10.1093/heapro/daad094>

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- Kobel, S., Wartha, O., Steinacker, J. M., & Dreyhaupt, J. (2024). Does the intervention of the school-based health promotion programme “Join the Healthy Boat” have equal or differential effects on weight status and health-related behaviours in children from a high or low socio-economic background? - A randomised contro. *BMC Public Health*, 24(1), 3385. <https://doi.org/10.1186/s12889-024-20879-x>
- Lestari, E., Shaluhiah, Z., & Adi, M. S. (2024). Use of Android-Based Flipbook Educational Media to Increase Knowledge, Beliefs, Attitudes, and Intentions of Prospective Brides in Stunting Prevention in Semarang City. *Jurnal Promkes*, 12(1), 54–63. <https://doi.org/10.20473/jpk.v12.i1.2024.54-63>
- Manalu, D. C. (2022). Pengembangan Media Flipbook Obestitas dan Makanan Sehat Anak Sekolah Di SD Negeri 104283 Jaharun B. *Journal of Nutrition and Culinary*, 3(1), 17–23. <https://doi.org/https://doi.org/10.24114/jnc.v3i1.42336>
- Mauda, C., & Zaliluddin, D. (2025). Pengembangan Game Edukasi dengan Pendekatan MDLC: Game Zat Gizi untuk Generasi Digital. *Seminar Nasional Riset Dan Inovasi Teknologi (SEMNAS RISTEK)*, 9(1), 509–515. <file:///C:/Users/User/Downloads/7906-16044-1-PB.pdf>
- Merlinda, A. A., & Yusuf, Y. (2025). Analisis Program Makan Gratis Prabowo Subianto Terhadap Strategi Peningkatan Motivasi Belajar Siswa di Sekolah Tinjauan dari Perspektif Sosiologi Pendidikan. *Ranah Research: Juornal of Multidisciplinary Research and Development*, 7(2), 1364–1373. <https://doi.org/https://doi.org/10.38035/rrij.v7i2.1360>
- Muhammad, J. (2025). Pelaksanaan Program Makan Bergizi Gratis di SDN Pemurus Dalam 1 Banjarmasin. *RRI.Co.Id*, 1238061.
- Nations, U. (2024). Progress Towards The Sustainable Development Goals, Report of the Secretary-General. *Assembly*, 64782(May), 14.
- Paling, S., Makmur, A., Albar, M., Susetyo, A. M., Putra, Y. W. S., Rajiman, W., Djamilah, S., Suhendi, H. Y., & Irvani, A. I. (2024). *Media Pembelajaran Digital*. Tohar Media.
- Paramitha, D. S., & Perdana, M. N. (2021). Healthy Food and Safe Medication During Pregnancy at Beringin Village. *Prosiding Pengembangan Masyarakat Mandiri Berkemajuan Muhammadiyah (Bamara-Mu)*, 1(1), 559–564.
- Paramitha, D. S., & Putri, C. S. (2021). Making Spinach Vegetable Nugget for Women Community in Kurau Village, Tanah Laut Regency. *Prosiding Pengembangan Masyarakat Mandiri Berkemajuan Muhammadiyah (Bamara-Mu)*, 1(2), 112–117.
- Paramitha, D. S., Sabran, M., Rahman, M. A., Zahra, R., Isnaini, R. R., Nurma, N., Zulfa, S., Solehah, A., Hasanah, U., & Hikmah, H. (2024). Local Shrimp Commodity as an Alternative Supplementary Food Ingredients for Stunting-Free Generation. *BCD Journal (Borneo Community Development)*, 3(1), 39–43.
- Pongpalilu, F., Hamsiah, A., Raharjo, Sabur, F., Nurlela, L., Akbar, J. S., Hakim, L.,

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<http://aipkind.org>



- Waliulu, H., & Hasanah, N. (2023). *Perkembangan Peserta Didik: Teori dan Konsep Perkembangan Peserta Didik* (Efitra (ed.); Issue June 2023). Sonpedia.
- Rahmat, P. S. (2021). Perkembangan Peserta Didik. In *Sustainability (Switzerland)* (Vol. 11, Issue 1). Bumi Aksara.
- Ratri, R. N. (2024). Penyuluhan Makanan Sehat dan Bahan Tambahan Pangan bagi Anak Sekolah di Desa Pulosari. *MUJAHADA: Jurnal Pengabdian Masyarakat*, 2(1). <https://doi.org/https://doi.org/10.54396/mjd.v2i1.1444>
- Sari, M. (2024). Pemanfaatan Aplikasi Edukasi dalam Penanaman Literasi Digital Di Sekolah Dasar. *Jurnal Keguruan Dan Ilmu Pendidikan (JKIP)*, 2(2), 61–68. <https://doi.org/10.61116/jkip.v2i2.334>
- Subianto, P., & Raka, G. R. (2024). *Visi, Misi, dan Program Indonesia Maju*.
- Sukarli. (2025). 14 Sekolah Dapat Makan Bergizi Gratis Di Banjarmasin. *Antara News Banjarmasin*, 1–12.
- Triningsih, E., Afdal, M., Permana, I., & Rozanda, N. E. (2025). Analisis Sentimen terhadap Program Makan Bergizi Gratis Menggunakan Algoritma Machine Learning pada Sosial Media X. *Building of Informatics, Technology and Science (BITS)*, 6(4), 2685–3310. <https://doi.org/10.47065/bits.v6i4.6534>
- Wang, C., Hong, X., Wang, W., Zhou, H., Wu, J., Xu, H., Zhou, N., & Zhao, J. (2022). The Combination of School-Based and Family-Based Interventions Appears Effective in Reducing the Consumption of Sugar-Sweetened Beverages, a Randomized Controlled Trial among Chinese Schoolchildren. *Nutrients*, 14(4). <https://doi.org/10.3390/nu14040833>