

The Value of Health Maintenance and Food Handlers in the MBG Program According to The Book *Ta'lim al-Muta'allim* by Al-Zarnūjī

Euis Mutmainah*, Fitri Hilmiyati, Habudin Habudin

Fandy Adpen Lazzavietamsi

Universitas Islam Negeri Hasanuddin Banten, Indonesia

252701225.euismutmainah@uinbanten.ac.id*

Abstract

The Free Nutritious Meal Program (*Makan Bergizi Gratis* or MBG) is an Indonesian national policy aimed at improving nutritional status and supporting the quality of human resources development through the provision of nutritious meals for students and other target groups. However, the implementation of the MBG Program involves not only the fulfilment of nutritional requirements but also ensuring food hygiene, safety, halal status, and ethical responsibility among food handlers. Previous studies have predominantly examined MBG from the perspectives of nutrition, public health, and public policy, while its implementation from the perspective of Islamic educational ethics remains underexplored. This study aims to analyze health-care values and the role of food handlers in the MBG Program from the perspective of Burhān al-Dīn al-Zarnūjī's thought in *Ta'lim al-Muta'allim*. This study employs a qualitative library research method by analyzing relevant concepts in *Ta'lim al-Muta'allim*, official MBG Program documents, and supporting scholarly literature. The findings indicate that Al-Zarnūjī's concepts of dietary regulation, the selection of *halāl* *ṭayyib* food, *wara'*, cleanliness, and careful conduct are relevant to the implementation of the MBG Program. These values emphasize that food handlers have an ethical responsibility to ensure the quality, safety, hygiene, and halal status of food throughout the food-service process. The study concludes that the success of the MBG Program should not be measured solely by the fulfilment of nutritional standards but also by the consistent application of food-safety, hygiene, halal, and ethical principles. The novelty of this study lies in applying Al-Zarnūjī's thought as an Islamic educational-ethics framework for examining the implementation of a contemporary national nutrition policy, thereby contributing to interdisciplinary scholarship in Islamic education, food safety, and nutrition policy.

Keywords: Health Care, Food Handlers, MBG Program, *Ta'lim al-Muta'allim*, Al-Zarnūjī

INTRODUCTION

Physical and mental health are important conditions for children's development and participation in education. Good health can support learners' active participation in learning, concentration, and development of their intellectual and social capacities, whereas inadequate nutrition and poor health may interfere with learning participation and educational outcomes (Felter et al., 2021; Smith et al., 2021). In school settings, nutrition-related interventions may therefore contribute not only to children's health but also to educational participation. A systematic review and meta-analysis of school feeding interventions in low- and middle-income countries found improvements in several health and educational outcomes, including school attendance (Wang et al., 2021). Similarly, a systematic review of school meal programs in sub-Saharan

Africa reported a generally positive association between school feeding and educational outcomes such as attendance, enrollment, and test performance (Wall et al., 2022). These findings indicate that food provision within educational settings should be considered not only from a nutritional perspective but also in relation to children's capacity to participate in learning.

Malnutrition and stunting remain important challenges to human development in Indonesia. The 2022 Indonesian Nutritional Status Survey reported a national stunting prevalence of 21.6 percent, indicating that nutritional problems continue to require sustained public intervention. Stunting is not merely a nutritional issue but may have consequences for children's physical development, cognitive capacity, educational participation, and, in the longer term, human resource development (Nisa & Abdul, 2025). These conditions have encouraged the Indonesian government to develop policies that address nutritional needs as part of a broader strategy for improving the quality of human resources (Anzarkusuma et al., 2025).

One of the major government interventions in this area is the Free Nutritious Meal Program (Makan Bergizi Gratis or MBG), which was launched nationally on January 6, 2025. The program is designed to provide nutritious meals to students and other designated beneficiary groups and to contribute to the improvement of nutritional status. Its implementation requires a large-scale food-service system involving the procurement of raw materials, food preparation, distribution, and delivery to beneficiaries. Nutrition Provision Service Units (Satuan Pelayanan Pemenuhan Gizi or SPPG) function as important operational units within this system. The program has expanded rapidly since its implementation began on 6 January 2025, creating a large-scale food-service system that requires effective nutritional, hygiene, and food-safety governance. The scale of the program demonstrates that its effectiveness depends not only on the availability and nutritional composition of food but also on the capacity of the food-service system to maintain food quality and safety (Karso, 2026).

The large scale of MBG implementation also creates significant challenges in ensuring food safety. Reports of suspected food-poisoning incidents involving program beneficiaries have raised concerns regarding the management of food throughout the supply chain. The rapid expansion of MBG has increased the importance of food-safety governance and preventive oversight. The Ministry of Health has issued specific guidance concerning food safety, preparedness, and response to potential food-poisoning incidents within the MBG Program, while SPPGs are required to comply with hygiene and sanitation requirements (Basuki et al., 2026). Although such reports require careful verification and interpretation, they demonstrate the importance of strengthening preventive measures and oversight in food provision. Food safety therefore needs to be considered alongside nutritional adequacy as an essential component of MBG implementation.

Food handlers occupy a critical position in maintaining food safety because their practices influence food hygiene throughout food preparation and service. Evidence from food-service settings indicates that food-safety knowledge, attitudes, and practices are interconnected, although knowledge alone does not always guarantee appropriate practice (Putri & Susanna, 2021; Kwol et al., 2020). Food-safety training that combines theoretical and practical components has also been shown to improve hygienic conditions and reduce microbial contamination in food-service environments (Soares et al., 2013). These findings reinforce the importance of food-handler competence, training, and responsible conduct within large-scale food-service programs such as MBG.

The ethical dimension of food provision is particularly relevant from an Islamic educational perspective. In Islamic teachings, food is not considered solely in terms of its nutritional value. The concepts of *halālan ṭayyiban*, cleanliness, moderation, and responsibility in consumption provide a broader framework for understanding the relationship between food, health, and human development. These principles are also relevant to educational processes because physical well-being is closely associated with the ability of learners

to engage in learning and develop their potential. Thus, an examination of food provision within an educational program such as MBG can be expanded beyond the domains of nutrition and public health to include ethical and educational considerations.

One Islamic educational text that provides relevant perspectives on this issue is *Ta'lim al-Muta'allim* by Burhān al-Dīn al-Zarnūjī. The work is widely associated with discussions of learning ethics, student conduct, discipline, intention, and the cultivation of character. However, its relevance is not limited to classroom behavior. Al-Zarnūjī also discusses matters concerning the learner's physical condition, dietary practices, and conduct that may support the learning process. Concepts such as dietary regulation, the selection of appropriate food, cleanliness, and *wara'*, understood as careful avoidance of doubtful or potentially harmful matters, can provide an ethical lens through which food consumption and preparation may be examined.

Existing research on the MBG Program has predominantly addressed nutritional adequacy, stunting prevention, public policy, implementation, and the program's potential contribution to human resource development. Studies of *Ta'lim al-Muta'allim*, meanwhile, have generally concentrated on learning ethics, student character, teacher-student relationships, and educational values. Research on *halālān ṭayyiban*, food hygiene, and food safety has largely developed within Islamic jurisprudence, public health, nutrition, and food-technology studies. These strands of scholarship indicate the relevance of the respective fields but have not sufficiently connected the ethical thought of Al-Zarnūjī with the implementation of a contemporary national nutrition policy, particularly concerning health maintenance and food-handlers' responsibilities.

This gap is important because the objectives of the MBG Program extend beyond simply providing food. The program requires a process in which food is selected, prepared, handled, and distributed responsibly so that it is nutritious, safe, hygienic, and suitable for consumption. From Al-Zarnūjī's perspective, these processes can be examined through the interconnected values of health maintenance, dietary discipline, *halālān ṭayyiban*, and *wara'*. Such an approach makes it possible to place food handlers not merely as technical workers within a food-service system but also as actors whose conduct has ethical implications for the health and educational development of beneficiaries.

Accordingly, this study aims to analyze the values of health maintenance and the role of food handlers in the implementation of the MBG Program from the perspective of Burhān al-Dīn al-Zarnūjī's thought in *Ta'lim al-Muta'allim*. The study specifically examines the relevance of dietary regulation, *halālān ṭayyiban*, *wara'*, hygiene, and responsible food handling to the implementation of the MBG Program. Through this analysis, the study seeks to contribute an Islamic educational-ethical perspective to discussions of food safety and nutrition policy. The study's contribution lies in connecting the ethical framework of *Ta'lim al-Muta'allim* with the practical challenges of a contemporary national nutrition program, thereby expanding interdisciplinary discussion across the fields of Islamic education, nutrition, food safety, and public policy.

METHOD

This study employs a qualitative research approach using library research and qualitative document analysis to examine the relevance of Al-Zarnūjī's educational ethics to the implementation of the Free Nutritious Meal (MBG) Program. Document analysis is appropriate for examining textual and documentary materials systematically and for identifying meanings, patterns, and relationships across different sources (Bowen, 2009). Qualitative content analysis was used to organize and interpret the selected textual materials thematically (Bengtsson, 2016).

The primary source of the study is *Ta'lim al-Muta'allim Ṭarīq al-Ta'allum* by Burhān al-Dīn al-Zarnūjī. Contemporary policy documents were used as contextual sources, including Presidential Regulation

No. 83 of 2024 concerning the National Nutrition Agency, Presidential Regulation No. 115 of 2025 concerning the governance of the Free Nutritious Meal Program, Ministry of Health Circular Letter No. HK.02.02/A/4954/2025 concerning the prevention, preparedness, and response to potential food-poisoning incidents in the MBG Program, Ministry of Health Circular Letter No. HK.02.02/C.I/4202/2025 concerning the acceleration of Hygiene and Sanitation Eligibility Certificates for SPPGs, and BGN Regulation No. 4 of 2026 concerning the food safety and quality assurance system within the National Nutrition Agency. These documents were selected because they provide the contemporary regulatory context for nutrition, food safety, hygiene, sanitation, and food-service governance in the MBG Program.

Secondary sources consisted of peer-reviewed journal articles, academic books, and scholarly publications related to school feeding, food safety, food handlers, halal and tayyib food, and Islamic educational ethics. Hasyim Asy'ari's *Adab al-'Ālim wa al-Muta'allim* was also used as a comparative classical source to examine the continuity of dietary discipline and ethical conduct within the Indonesian Islamic educational tradition.

Data collection was conducted through systematic documentation. Relevant passages from *Ta'lim al-Muta'allim* were identified based on their relevance to health maintenance, dietary moderation, food selection, *wara'*, cleanliness, and responsible conduct. Relevant provisions from contemporary MBG policy documents and findings from scholarly literature were then identified and classified according to their relevance to food safety, nutrition, hygiene, sanitation, and food-handler responsibilities.

The analysis consisted of four interconnected stages. First, relevant textual and documentary materials were selected and reduced according to the research objectives. Second, the selected materials were coded and organized into thematic categories, including health maintenance, dietary moderation, *wara'*, *halālan tayyiban*, hygiene, food safety, and food-handler responsibility. Third, the themes identified in *Ta'lim al-Muta'allim* were comparatively interpreted alongside contemporary MBG policies and food-safety literature. Fourth, the findings were synthesized conceptually to identify points of correspondence between Al-Zarnūjī's ethical principles and contemporary requirements for responsible food provision. The analysis maintained the historical distinction between classical educational thought and modern nutritional and food-safety standards; therefore, the study does not treat Al-Zarnūjī's dietary recommendations as substitutes for contemporary scientific or regulatory standards.

Trustworthiness was strengthened through source triangulation by comparing the primary classical text, government regulations, scholarly literature, and institutional documents. Source criticism was also applied by considering the authority, authenticity, relevance, and historical context of each source. The interpretation was further constrained by distinguishing textual evidence from the researchers' contemporary interpretation of its relevance to MBG implementation.

RESULTS AND DISCUSSION

Health Maintenance and Dietary Moderation in the MBG Program

The analysis of *Ta'lim al-Muta'allim* indicates that Al-Zarnūjī places health among the conditions that support the successful pursuit of knowledge. His discussion connects physical condition, dietary habits, memory, concentration, and learning discipline. This perspective is relevant to the MBG Program because the provision of nutritious meals is intended not merely to address hunger but also to support children's growth, health, and capacity to participate in learning. The connection, however, should be understood as a conceptual relationship rather than as evidence that Al-Zarnūjī anticipated contemporary nutritional science.

One relevant passage state:

"وأقوى أسباب الحفظ: الجُودُ والمواظبةُ، وتقليلُ الغذاء، وصلاةُ الليل، وقراءةُ القرآن من أسباب الحفظ"
(al-Zarnūjī, p. 130).

Which may be translated as: "Among the strongest causes of memorization are diligence, persistence, reducing food intake, night prayer, and recitation of the Qur'an." The expression *taqlīl al-ghidhā'* should be interpreted within the educational and ascetic context of the text. It is more appropriately understood as moderation in eating and avoidance of excessive consumption than as a recommendation to reduce the nutritional intake required for healthy growth. This distinction is important when relating a classical educational text to a contemporary school-feeding program. MBG, in contrast, is designed according to modern nutritional requirements and age-specific needs. The relevant point of convergence is therefore the principle of moderation and appropriateness rather than a direct equivalence between Al-Zarnūjī's dietary recommendations and current nutritional standards.

Al-Zarnūjī also mentions several foods traditionally regarded as beneficial for students, including milk, honey, raisins, and dates, as well as the use of *siwāk* for oral hygiene. He writes:

"وكانوا يستعملون الكندر مع السكر، ويأكلون الحبة الخضراء، ويشربون اللبن، ويأكلون العسل، ويأكلون الزبيب، ويأكلون التمر، ويستعملون السواك" (al-Zarnūjī, p. 130).

These recommendations should be read within the medical and intellectual context of his period rather than treated as scientifically established prescriptions for improving memory. Their contemporary relevance lies principally in the broader principle that food consumed by learners should contribute to health and support their ability to learn. In this respect, the MBG approach to providing diverse and nutritionally adequate meals can be interpreted as compatible with the underlying educational concern expressed in Al-Zarnūjī's work.

A similar emphasis on moderation can be found in Hasyim Asy'ari's *Adab al-Ālim wa al-Muta'allim*, which situates dietary discipline within the ethical life of students in the *pesantren* tradition (Putra, 2026). The parallel between the two texts strengthens the interpretation that moderation in consumption represents a recurring ethical concern in Islamic educational thought. Nevertheless, the classical concept should not be used to replace contemporary nutritional standards. Rather, it can complement them by introducing an ethical dimension concerning self-discipline, responsible consumption, and awareness of the relationship between physical well-being and learning.

Wara', Food Safety, and the Role of Food Handlers

A second finding concerns the relevance of *wara'* to food safety and the responsibilities of food handlers. In *Ta'lim al-Muta'allim*, Al-Zarnūjī associates *wara'* with careful conduct, including restraint in eating and caution concerning food. He states:

"...ومن الورع [الكامل] أن يتحذر عن الشبع وكثرة النوم وكثرة الكلام فيما لا ينفع، وأن يتحرر عن أكل طعام السوق إن أمكن" (Al-Zarnūjī, 1981).

In its historical context, this passage reflects a concern with the moral and physical consequences of dietary practices. It should not, however, be read as a direct technical regulation concerning modern food markets. Its analytical significance for the MBG Program lies in the underlying principle of precaution: food should be handled and consumed with careful attention to cleanliness, suitability, and potential harm.

This principle provides an ethical complement to contemporary food-safety regulations. Food handlers are positioned at several critical points in the MBG food-service process, including receiving ingredients, preparation, cooking, storage, transportation, and serving. Their actions can therefore affect whether food remains safe and suitable for consumption (Sugiarti et al., 2026). The requirement for food-safety training, hygiene and sanitation controls, and competency standards in MBG implementation can be interpreted as institutional mechanisms that operationalize a principle of carefulness that is also present in Al-Zarnūjī's concept of *wara'*. The connection should be understood as an interpretive correspondence: modern regulations provide technical and administrative standards, while *wara'* provides an ethical orientation toward responsibility and prevention of harm.

The concept also has a clear relationship with *halālan ṭayyiban*. In Islamic ethics, the permissibility of food (*halāl*) is distinct from its wholesomeness and safety (*ṭayyib*). Consequently, food that satisfies halal requirements should also be handled in ways that protect consumers from biological, chemical, or physical hazards. Within the MBG context, this means that halal assurance, hygiene, sanitation, proper storage, safe preparation, and quality control should be treated as interconnected dimensions of responsible food provision. The role of food handlers consequently extends beyond technical food preparation to include responsibility for maintaining the safety and integrity of meals provided to beneficiaries. This interpretation is also consistent with contemporary scholarship on halal food governance. Soon et al. (2018) argue that the concept of *ṭayyib* provides an important practical connection between halal requirements and food-safety considerations, while Soon (2017) highlights the need to integrate food-safety requirements into halal assurance systems. Thus, the relationship between *halālan ṭayyiban* and food safety can be understood not merely as a theological interpretation but also as a contemporary food-governance concern.

Hasyim Asy'ari's emphasis on *wara'* and avoidance of doubtful food provides a complementary perspective from the Indonesian *pesantren* tradition. The convergence between Al-Zarnūjī and Hasyim Asy'ari suggests continuity in the ethical emphasis on careful food selection and responsible consumption (Asiah et al., 2024). Nevertheless, the two classical perspectives should be distinguished from contemporary certification systems such as the Hygiene and Sanitation Suitability Certificate (SLHS), HACCP, or halal certification. These modern instruments establish measurable standards and institutional procedures, whereas *wara'* concerns the moral disposition that encourages individuals to act cautiously and responsibly.

Al-Zarnūjī's Contribution to the Nutritional and Food-Safety Framework of MBG

The third finding concerns the broader contribution of Al-Zarnūjī's thought to understanding the quality of MBG implementation. National nutritional standards provide an essential basis for determining the nutritional adequacy of meals, but nutritional adequacy alone does not encompass all dimensions of food quality. The analysis of *Ta'lim al-Muta'allim* indicates three complementary principles: food should support health, consumption should avoid excess and harmful practices, and food selection should be accompanied by caution and ethical responsibility. These principles provide a conceptual basis for viewing food quality as both a nutritional and ethical matter.

This interpretation is particularly important because the provision of nutritious food does not automatically eliminate food-safety risks. A meal may satisfy nutritional requirements while still becoming unsafe because of contamination during preparation, inadequate storage, poor sanitation, or inappropriate handling. Therefore, the principle of *ṭayyib* provides a useful conceptual bridge between nutritional adequacy and food safety. In this framework, *halālan ṭayyiban* can be understood as requiring not only permissible ingredients but also food that is clean, safe, wholesome, and appropriate for consumption.

The analysis also demonstrates that Al-Zarnūjī's thought should be applied critically rather than transferred directly into contemporary policy. His recommendations concerning particular foods reflect the medical and educational knowledge of his historical period and cannot be treated as substitutes for contemporary nutritional evidence. The value of his thought for MBG lies instead in the ethical principles underlying those recommendations: moderation, care for health, avoidance of harmful consumption, and precaution in food-related practices. These principles can complement, rather than replace, contemporary standards established by government institutions.

Accordingly, the findings suggest that an ethically informed MBG framework should connect four dimensions: nutritional adequacy, food safety, halal and wholesome food, and responsible human conduct. Within this framework, food handlers become important ethical actors because they translate institutional standards into everyday practices. The contribution of Al-Zarnūjī's thought is therefore not the formulation of technical nutritional standards but the provision of an ethical perspective that emphasizes care, discipline, precaution, and responsibility in supporting the health of learners.

CONCLUSION

This study finds that Al-Zarnūjī's thought in Ta'lim al-Muta'allim is relevant to the MBG Program primarily through the principles of health maintenance, dietary moderation, wara', and responsible food consumption. The analysis shows that these principles can complement contemporary nutritional and food-safety standards by emphasizing that food provided to learners should be not only nutritionally adequate but also safe, clean, wholesome, and responsibly handled. In this context, food handlers have an important ethical role because their practices directly influence the safety and quality of meals provided to beneficiaries.

Theoretically, this study extends the discussion of Al-Zarnūjī's educational thought beyond learning ethics by connecting it with contemporary issues of nutrition, food safety, and Islamic educational ethics. Its practical implication is that MBG implementation can benefit from integrating ethical awareness with existing systems of nutritional standards, hygiene, sanitation, halal assurance, and food-handler competency. However, this study is limited by its library-based research design and therefore does not directly assess food-handler practices or the implementation of MBG at specific SPPG sites. Future research should employ field-based methods to examine how the principles of wara', halālan ṭayyiban, and health maintenance are reflected in actual food-service practices and whether they contribute to safer and more ethically grounded implementation of the MBG Program.

REFERENCES

- Al-Zarnūjī, B. D. (1981). *Kitāb ta'lim al-muta'allim tariq al-ta'allum* (M. Qabbānī, Ed.). Al-Maktab al-Islāmī.
- Anzarkusuma, I. S., Fikawati, S., & Rahmi, A. T. (2025). Determinan stunting pada anak usia 24-59 bulan di Provinsi Nusa Tenggara Barat: Analisis data Survei Status Gizi Indonesia (SSGI) tahun 2022. *Gizi Indonesia*, 48(1), 55–68.
- Badan Gizi Nasional Republik Indonesia. (2026a). *Peraturan Badan Gizi Nasional Nomor 4 Tahun 2026 tentang Sistem Penjaminan Keamanan Pangan dan Mutu Pangan di Lingkungan Badan Gizi Nasional*.
- Badan Gizi Nasional Republik Indonesia. (2026b). *Peraturan Badan Gizi Nasional Nomor 5 Tahun 2026 tentang Standar Gizi dalam Pelaksanaan Program Makan Bergizi Gratis*.
- Basuki, R. M., Muharrom, N. W., Kusuma, N. A., & Hadji, K. (2026). Implementasi program Makan Bergizi Gratis: Evaluasi pelaksanaan dan tantangan operasional. *Al-Zayn: Jurnal Ilmu Sosial & Hukum*, 4(1), 1413–1423.

- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8–14. <https://doi.org/10.1016/j.npls.2016.01.001>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Gesundheit, B. (2011). Maimonides' appreciation for medicine. *Rambam Maimonides Medical Journal*, 2(1), 1–8. <https://doi.org/10.5041/RMMJ.10018>
- Karso, A. J. (2026). *Program Astacita Prabowo di bidang MBG, Sekolah Rakyat, kesehatan gratis*. CV Eureka Media Aksara.
- Kementerian Kesehatan Republik Indonesia. (2025). *Surat Edaran Nomor HK.02.02/C.I/4202/2025 tentang Percepatan Penerbitan Sertifikat Laik Higiene Sanitasi untuk Satuan Pelayanan Pemenuhan Gizi pada Program Makan Bergizi Gratis*.
- Kwol, V. S., Eluwole, K. K., Avci, T., & Lasisi, T. T. (2020). Another look into the knowledge attitude practice (KAP) model for food control: An investigation of the mediating role of food handlers' attitudes. *Food Control*, 110, Article 107025. <https://doi.org/10.1016/j.foodcont.2019.107025>
- Pemerintah Republik Indonesia. (2024). *Peraturan Presiden Nomor 83 Tahun 2024 tentang Badan Gizi Nasional*.
- Pemerintah Republik Indonesia. (2025). *Peraturan Presiden Nomor 115 Tahun 2025 tentang Tata Kelola Penyelenggaraan Program Makan Bergizi Gratis*.
- Putra, D. D. (2026). Epistemologi keilmuan Islam tradisional dalam pemikiran KH. Hasyim Asy'ari: Studi kasus karya Adab al-'Alim wa al-Muta'allim. *Lectures*, 5(3), 282–295.
- Putri, M. S., & Susanna, D. (2021). Food safety knowledge, attitudes, and practices of food handlers at kitchen premises in the Port 'X' area, North Jakarta, Indonesia 2018. *Italian Journal of Food Safety*, 10(4), Article 9215. <https://doi.org/10.4081/ijfs.2021.9215>
- Rahmadiani, I., Fibriana, A. I., Nisa, A. A., Shabbir, S. A., & Azam, M. (2025). Impact of low birth weight and other determinants on stunting in children under-five years old: Evidence from Indonesia's Nutrition Status Survey. *International Journal of Preventive Medicine*, 16, Article 76. https://doi.org/10.4103/ijpvm.ijpvm_242_24
- Salvador-Carulla, L., & Javed, A. (2023). The relationship between physical and mental health: An update from the WPA Working Group on Managing Comorbidity of Mental and Physical Health pushing forward public mental health agenda and promotion of mental health. *World Psychiatry*, 22(1), 169–170. <https://doi.org/10.1002/wps.21055>
- Smith, C., Goss, H. R., Issartel, J., & Belton, S. (2021). Health literacy in schools? A systematic review of health-related interventions aimed at disadvantaged adolescents. *Children*, 8(3), Article 176. <https://doi.org/10.3390/children8030176>
- Soares, K., García-Díez, J., Esteves, A., Oliveira, I., & Saraiva, C. (2013). Evaluation of food safety training on hygienic conditions in food establishments. *Food Control*, 34(2), 613–618. <https://doi.org/10.1016/j.foodcont.2013.06.006>
- Soon, J. M. (2017). Positioning food safety in Halal assurance. *Food Control*, 73, 1023–1031. <https://doi.org/10.1016/j.foodcont.2016.05.059>
- Soon, J. M., Jan, M. T., & Tran, V. T. (2018). Rational and practical aspects of Halal and Tayyib in the context of food safety. *Trends in Food Science & Technology*, 71, 264–267. <https://doi.org/10.1016/j.tifs.2017.10.020>

- Sugiarti, T., Arifin, F., & Maarif, I. (2026). State responsibility and food safety supervision in the Free Nutritious Meal Program: A constitutional and health law analysis. *As-Siyasi*, 6(1), 292–315. <https://doi.org/10.24042/as-siyasi.v6i1.30885>
- Wall, C., Tolar-Peterson, T., Reeder, N., Roberts, M., Reynolds, A., & Rico Mendez, G. (2022). The impact of school meal programs on educational outcomes in African schoolchildren: A systematic review. *International Journal of Environmental Research and Public Health*, 19(6), Article 3666. <https://doi.org/10.3390/ijerph19063666>
- Wang, D., Shinde, S., Young, T., & Fawzi, W. W. (2021). Impacts of school feeding on educational and health outcomes of school-age children and adolescents in low- and middle-income countries: A systematic review and meta-analysis. *Journal of Global Health*, 11, Article 04051. <https://doi.org/10.7189/jogh.11.04051>