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Health Education Strategies and Nutritional Knowledge in Selected Public Junior High Schools in the Division of Quezon City: Basis for an Intervention Program

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ABSTRACT

This study assessed health education strategies and nutritional knowledge in selected public junior high schools in the Division of Quezon City as the basis for an intervention program. Health education strategies were examined in terms of planning and development, implementation, instructional resources and materials, monitoring and evaluation, and stakeholder involvement and support. Nutritional knowledge was assessed through food groups and nutrient functions, balanced diet and meal planning, nutritional labels and food choices, health effects of poor nutrition, and healthy eating practices and lifestyle. A quantitative descriptive-correlational design was employed. The respondents were 754 school heads, teachers, health personnel, and learners from six public secondary schools in Districts 1, 2, and 5 of Quezon City. Data were gathered through a validated researcher-made questionnaire and analyzed using frequency, percentage, weighted mean, one-way analysis of variance, Tukey's honestly significant difference test, and Pearson product-moment correlation. Findings showed that health education strategies were Highly Evident, while learners were Highly Knowledgeable in nutrition. Significant differences were found in all dimensions of health education strategies, particularly between learners and the adult respondent groups. All dimensions of health education strategies were significantly related to all areas of nutritional knowledge. Challenges were moderately encountered, especially limited instructional time, inadequate materials, weak stakeholder coordination, and learners' established eating habits. The proposed HEALTHY Plate Project was rated Highly Acceptable and may serve as a practical school-based intervention for strengthening nutrition instruction, stakeholder participation, and healthy lifestyle practices.

Keywords: *Health Education Strategies, Nutritional Knowledge, Junior High School, Nutrition Education, Healthy Eating, HEALTHY Plate Project*

INTRODUCTION

Health education equips learners with the knowledge, skills, and dispositions needed to protect their well-being and make responsible health decisions. Nutrition education is especially important during adolescence because dietary habits established at this stage may influence long-term health. The World Health Organization (2021) noted that unhealthy dietary practices among adolescents contribute to undernutrition, overweight, obesity, and diet-related noncommunicable diseases. For this reason, schools are expected not only to transmit nutrition facts but also to help learners apply such knowledge in daily food choices.

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Effective nutrition instruction depends greatly on the strategies used in the classroom. Learner-centered, contextualized, and experiential activities can make abstract nutrition concepts more practical and meaningful. Contento (2016) emphasized that nutrition education becomes more effective when knowledge is connected with decision-making and behavior, while Anderson et al. (2020) reported that practical activities improve adolescents' understanding of health concepts. Instructional materials, digital resources, demonstrations, meal-planning exercises, and guided food-label analysis may therefore strengthen both understanding and application.

In the Philippines, the Department of Education supports school health and nutrition through classroom instruction and programs such as the School-Based Feeding Program and Gulayan sa Paaralan. Nevertheless, Filipino learners continue to face concerns related to diet quality, limited food diversity, unhealthy food environments, and the double burden of malnutrition (Gaupholm et al., 2023; Smith et al., 2024). These conditions suggest that the availability of programs alone does not guarantee improved nutritional knowledge or healthier practices. The quality of planning, implementation, learning resources, monitoring, and stakeholder support remains essential.

The Division of Quezon City represents an urban school context with varied socioeconomic conditions and nutritional needs. Although health and nutrition initiatives are implemented in public schools, localized evidence regarding how stakeholders assess health education strategies and how these strategies relate to learners' nutritional knowledge remains limited. Identifying strengths, weaker areas, and implementation challenges can support more responsive school-based action and encourage collaboration among administrators, teachers, health personnel, learners, parents, and community partners.

Accordingly, this study assessed health education strategies and nutritional knowledge in selected public junior high schools in the Division of Quezon City. It also examined differences among respondent groups, determined the relationship between the major variables, identified implementation challenges, and developed the HEALTHY Plate Project as an intervention program intended to improve nutrition instruction and healthy lifestyle practices among young adolescents.

METHODS

Research Design

The study used a quantitative descriptive-correlational research design. The descriptive component determined the extent of health education strategies, the level of nutritional knowledge, the challenges encountered, and the acceptability of the proposed intervention. The correlational component examined the strength and direction of the association between health education strategies and nutritional knowledge. A researcher-made questionnaire was validated by three experts and reviewed by a language critic before administration. Data were analyzed through frequency and percentage, weighted mean, one-way ANOVA, Tukey HSD, and Pearson's r at the 0.05 level of significance.

Research Locale

The study was conducted during School Year 2025–2026 in six public secondary schools in Districts 1, 2, and 5 of the Division of Quezon City: Masambong High School, Sergio Osmeña Sr. High School, Judge Feliciano Belmonte Sr. High School, Pugad Lawin High School, Lagro High School, and Leandro Locsin Integrated School.

Sampling Technique

Stratified sampling by respondent category was employed to ensure representation of teachers, health personnel, and learners, while all school heads were included through total enumeration. Using Slovin's formula and proportional allocation, the final sample consisted of 754 respondents: 6 school heads, 240 teachers, 124 health personnel, and 384 learners.

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Table 1. *Population and Sample of the Study*

Respondents	Sample
School Heads	6
Teachers	240
Health Personnel	124
Learners	384
Total	754

RESULTS AND DISCUSSION

Assessment of Health Education Strategies

Health education strategies obtained an overall weighted mean of 4.49, interpreted as Highly Evident. Planning and development ranked first with 4.60, followed by implementation and instructional resources and materials, both with 4.59. Monitoring and evaluation obtained 4.54. Stakeholder involvement and support ranked last at 4.13 and was interpreted as Evident. The findings indicate that schools have established strong internal systems for health education, but community participation, orientations, and shared implementation may still be expanded.

Significant Difference in the Assessment of Respondent Groups

All five dimensions of health education strategies showed significant differences among the respondent groups, with F-values ranging from 7.79 to 12.31 and all p-values below .0001. Monitoring and evaluation produced the highest F-value, while stakeholder involvement and support had the lowest. Tukey post hoc comparisons showed consistent differences between teachers and learners and between health personnel and learners. The result suggests that adult implementers tend to view school health practices more favorably than the learners who directly experience them.

Assessment of Nutritional Knowledge

Learners' nutritional knowledge yielded an overall weighted mean of 4.52, interpreted as Highly Knowledgeable. Food groups and nutrient functions ranked first with 4.66, followed by health effects of poor nutrition at 4.65, healthy eating practices and lifestyle at 4.61, and nutritional labels and food choices at 4.58. Balanced diet and meal planning ranked last with 4.14 and was interpreted as Knowledgeable. The pattern shows that learners understand general nutrition concepts but need more opportunities to apply them in planning balanced meals and making everyday food decisions.

Relationship between Health Education Strategies and Nutritional Knowledge

Every dimension of health education strategies was significantly related to every area of nutritional knowledge, with all p-values below .0001. Most coefficients indicated high positive relationships, while several were moderate. The strongest association was between stakeholder involvement and support and balanced diet and meal planning ($r = .865$), interpreted as a very high correlation. The results imply that coordinated school, family, and community support can reinforce the practical application of nutrition knowledge, consistent with the importance of inclusive stakeholder engagement identified by Pellegrini and Lovati (2025).

Challenges Encountered

Challenges related to health education strategies were Moderately Encountered, with an overall weighted mean of 3.29. Limited instructional time ranked first (3.34), followed by inadequate updated materials (3.30) and weak stakeholder coordination (3.28). Challenges affecting nutritional knowledge were likewise Moderately Encountered, with an overall mean of 3.24. Learners' established eating habits and lifestyle ranked highest (3.32), followed by difficulty monitoring nutrition-related behaviors (3.26) and limited parental or community support

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(3.23). These concerns show that awareness must be reinforced by time, resources, monitoring, and supportive environments.

Proposed HEALTHY Plate Project

The HEALTHY Plate Project—Health Education and Learning for Total Health among Young Adolescents—was developed in response to the weaker areas and challenges. It includes Pinggang Pinoy meal-planning sessions, healthy baon campaigns, nutrition awareness activities, updated posters and learning resources, parent orientations, community seminars, canteen coordination, and quarterly monitoring reviews. The program combines instructional improvement with stakeholder participation so that nutrition knowledge can be practiced at school, at home, and in the community.

Acceptability of the Proposed Intervention Program

The proposed intervention program received an overall weighted mean of 4.56 and was assessed as Highly Acceptable. School administrators gave the highest rating at 4.67, followed by health personnel at 4.51 and teachers at 4.49. The respondents viewed the program as relevant, feasible, collaborative, aligned with Department of Education goals, and suitable for strengthening health education and nutritional knowledge among junior high school learners.

CONCLUSION

The selected public junior high schools generally demonstrate well-established health education strategies and a high level of nutritional knowledge among learners. Planning, implementation, instructional resources, and monitoring were strongly evident, while stakeholder involvement and support remained the comparatively weaker dimension. Learners showed strong understanding of food groups, food labels, health consequences, and healthy lifestyle practices, although balanced diet and meal planning require greater emphasis through practical and contextualized learning activities.

The significant differences among respondent groups indicate that program implementation should be reviewed from both adult and learner perspectives. More importantly, the significant positive relationships between health education strategies and nutritional knowledge confirm that stronger school health practices are associated with better nutrition understanding. Although implementation challenges were only moderate, limited time, materials, coordination, family support, and established eating habits may reduce the translation of knowledge into behavior. The highly acceptable HEALTHY Plate Project may therefore be adopted as a structured intervention to strengthen classroom instruction, stakeholder engagement, supportive food environments, and continuous monitoring.

References

Anderson, A. S., Wrieden, W. L., & Levy, L. (2020). Nutrition knowledge and dietary behavior among adolescents. Public Health Nutrition, 23(4), 765–773.

Bryson, J. M. (2018). Strategic planning for public and nonprofit organizations. Wiley.

Contento, I. R. (2016). Nutrition education: Linking research, theory, and practice (3rd ed.). Jones & Bartlett Learning.

Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.

Danforth, K., Ahmad, A. M., Blanchet, K., Khalid, M., Means, A. R., Memirie, S. T., et al. (2023). Monitoring and evaluating the implementation of essential packages of health services. BMJ Global Health, 8(Suppl 1), e010726.

Department of Education. (2022). School-Based Feeding Program guidelines (DepEd Order No. 39, s. 2022).

de Vasconcelos, C. B., de Amorim, C. R. F., Matias, G. M. T., Fiorentino, G., da Costa Galvão, P. C., Carneiro Filho, L. S., & Lima, R. D. O. C. (2023). Educational materials, design, health and nursing: A literature review. Research, Society and Development, 12(3).

Gaupholm, J., Dodd, W., Papadopoulos, A., & Little, M. (2023). Exploring the double burden of malnutrition at the household level in the Philippines. PLOS ONE, 18(7), e0288402.

Ghahramani, A., De Courten, M., & Prokofieva, M. (2022). The potential of social media in health promotion beyond creating awareness: An integrative review. BMC Public Health, 22(1), 2402.

Heslin, A. M., & McNulty, B. (2023). Adolescent nutrition and health: Characteristics, risk factors and opportunities of an overlooked life stage. Proceedings of the Nutrition Society, 82(2), 142–156.

Javier, C. A., Capanzana, M. V., & Gohilde, S. S. (2024). Socio-demographic determinants of Filipino consumers reading food product labels and nutrition facts. Acta Medica Philippina, 58(8), 92.

Pellegrini, G., & Lovati, C. (2025). Stakeholders' engagement for improved health outcomes. Frontiers in Public Health, 13, 1536753.

Smith, T. J., Hess, S. Y., Angeles-Agdeppa, I., Goyena, E., Gelli, A., & Olney, D. K. (2024). Diets, fruit and vegetable intake and nutritional status among children, adolescents and adults in the Philippines. Maternal & Child Nutrition, e13786.

World Health Organization. (2021). Global strategy on diet, physical activity and health.