ASSESSING SCHOOL-BASED FEEDING AND NUTRITION EDUCATION STRATEGY FOR HEALTHIER KIDS

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Background:
Undernutrition is a persistent problem among 0-10 year old Filipino children according to the 2015 Updating Survey of the Department of Science and Technology's Food and Nutrition Research Institute (DOST-FNRI). Aside from being underweight and/or stunted, children of this age also consume diet poor in quantity and quality.

Objective:
The study evaluated the impact of a school-based feeding and nutrition education strategy among schoolchildren and their mothers/caregivers in terms of attaining good nutrition.

Materials and Methods:
The study was conducted in nine selected public schools in Bay (4) and Calauan (5), Laguna. Using a quasi-experimental design, 385 underweight children aged 7-9 years old and their mothers/caregivers were grouped into four: three interventions (n=287) and one non-intervention (n=98). Children received the following interventions: 1) they were fed during lunch with FNRI-developed recipes based on Pinggang Pinoy® for 120 days; 2) the children and their mothers/caregivers were provided with nutrition education using FNRI-developed modules; and 3) both feeding and nutrition education interventions were provided. Data collected at baseline, endline, and post-endline include: anthropometric measurements; nutrition knowledge, attitude, and behavior (KAB); and food intake among children and households. SPSS for Windows version 16 and Stata version 15 were utilized for data analysis.

Results and Findings:
Data on the 339 children-mother pairs were analyzed. Mean scores on KAB of school children in intervention groups increased significantly at endline ($P < 0.05$). Mothers in All FNRI (with feeding and nutrition education interventions) group significantly increased their mean scores in all components of KAB ($P < 0.05$). Protein requirement was met by more children and households than the energy requirement in all study groups. Significant improvements in nutritional status were observed from baseline to endline ($P < 0.05$). Most children with normal nutritional status after the interventions (25.3%) belonged in All FNRI group. The mean cost of school feeding program (SFP) intake, agreement of respondents on the accessibility of SFP ingredients and total weekly food expenditure indicated positive associations with change in weight-for-height z score as outcome measure of nutritional status.

Conclusion and Recommendations:
The provision of both feeding and nutrition education interventions is effective in improving KAB scores and nutritional status of school children. Meals acceptable to a family, as indicated in the measures of food economics, have a better chance of delivering good nutrition to the family members and improving child’s nutritional status. Results implied that the adoption of the complete DOST-FNRI intervention (feeding with nutrition education) in elementary public schools should be pursued.