THE EFFECTS OF COCONUT SKIM MILK, COW’S MILK AND DAIRY-COCO MILK BLEND ON THE ANTHROPOMETRIC INDICES OF UNDERWEIGHT SCHOOL CHILDREN

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BACKGROUND

Milk is an important source of energy and nutrients particularly for children. Hence, it is used in the management of undernutrition. Milk feeding can serve as a strategy to address undernutrition in Filipino children.

OBJECTIVE

This study investigated and compared the effects of coconut skim milk; cow’s milk and dairy-coconut milk blend (80% cow’s milk + 20% coconut skim milk) on weight and height of selected schoolchildren aged 6 to 9 years old over a 120-day feeding period.

MATERIALS AND METHODS

The study followed a randomized, double-blind, controlled, parallel-group design in Guadalupe Elementary School in Cebu City. A total of 444 underweight/underheight schoolchildren were randomly allocated into three groups and they were given 200 ml milk in color-and number-coded bottles. Height and weight were measured at baseline, midline and endline. Food intake was assessed at baseline and endline while acceptability of milk products was done monthly. Due to numerous holidays and class suspension, the feeding days was reduced to 95 days.

RESULTS

A significant increase in mean weight and mean height was noted in all child participants after the 95 feeding day period. Similarly, nutrient intake of child participants particularly carbohydrates, protein, fats and calcium increased significantly from baseline to endline in all groups. Lastly, the three milk products were generally acceptable based on the acceptability questionnaire accomplished by the child participants.

CONCLUSIONS AND RECOMMENDATION

The study results showed a significant increase in weight and height of child participants from baseline to endline. The results affirmed the beneficial effects of consuming either one of the three types of milk (cow’s milk, dairy-coco milk blend or coconut skim milk) in improving height and weight of schoolchildren. Coconut skim milk and dairy-coconut milk blend can be considered as good alternatives to cow’s milk in feeding programs.