Enhanced Multi Nutrient Growth Mix (MGM) to Address Malnutrition Among Children

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INTRODUCTION

GLOBAL MAGNITUDE OF MICRONUTRIENT DEFICIENCY

27% of the global population or equivalent to 2 BILLION people have micronutrient deficiency. (WHO)

MICRONUTRIENT DEFICIENCY AND INADEQUATE NUTRIENT INTAKE IN THE PHILIPPINES

IMPORTANCE OF NUTRITION DURING FORMATIVE YEARS

Infants and children are included in the vulnerable groups

Proper nutrition is vital to combat and impede the effects of malnutrition

COMPENSATORY FOODS

-vital for children under 2 years of age.
tailored to provide nutrients and minerals

However it often contains low levels of micronutrients

Hence, the enhance MGM mix

This study aims to determine the feasibility of fortifying complementary food with essential micronutrients for children 6 months to 36 months

MATERIALS AND METHOD

PREPARATION OF ENHANCED MGM MIX

Optimization of formulation
Consumer acceptability of complementary food and other recipes fortified with enhanced MGM Mix
Nutritional content evaluation
Shelf-life study
RESULTS

SENSORY ACCEPTABILITY OF RECIPES

FORTIFIED WITH ENHANCED MGM MIX

Sensory acceptability of different recipes fortified with enhanced MGM mix was obtained a hedonic rating scale of "like moderately" to "like very much".

WHAT IS IN ENHANCED MGM MIX?

2 grams MGM powder contains:
- 315 ug RE, Vitamin A
- 2.5 mg, Zinc
- 2.4 mg, Iron
- 24 ug, Iodine
- 62 mg, Calcium
- 0.21 mg, Vitamin B1
- 73.2 ug DFE, Vitamin B9
- 0.63 ug, Vitamin B12
- 22.4 mg, Vitamin C

WHAT IS THE COMPETITIVE ADVANTAGE OF ENHANCED MGM MIX?

Convenient
Acceptable sensory
Micronutrient dense
Long Shelf-life
Low cost

CONCLUSION AND RECOMMENDATION

CONCLUSION

Acceptable and shelf-stable rice base enhanced multi-nutrient growth mix was developed and standardized. The addition of MGM improved the level of micronutrients in complementary foods and other common household recipes. Enhanced MGM mix has a shelf-life of 1 year.

RECOMMENDATION

Efficacy trials, market study, scale-up production and commercialization are recommended.