

MODERATE ACUTE MALNUTRITION

MAM Recipes



World Food
Programme

Alternative to Ready to Use Supplementary Food (RUSF)

2020 - REV 1

SAVING
LIVES
CHANGING
LIVES

ABOUT THE COVER

Exposure to repeated bouts of acute malnutrition (wasting) coupled with infection puts a child more at risk of dying. It is, therefore, important that good nutrition beginning from the early stages of life is already maintained for the child's early brain development, normal growth and unleashing his potential in the future. The mother's health and nutrition is also crucial to the unborn child's status.

In WFP's Moderate Acute Malnutrition (MAM) Recipe Book, we featured a healthy rather than a malnourished child where both parents were involved from keeping a healthy pregnancy up to raising a well-nourished baby. During pregnancy, the mother's nutritional status (body mass index) was maintained within the normal range. With the guidance of her obstetrician-gynecologist or OB-GYN, the mother went through a smooth pregnancy and gave birth to a full-term healthy baby boy, Andres at 2.6 kilograms.

Andres was exclusively breastfed from birth to six months, and is still currently breastfeeding while being introduced to solid food such as mashed carrots. The mother aims to continue breastfeeding him until he reaches 2 years old. He just started eating complementary solid foods such as mashed carrots at 6 months old. He is well-nourished with a Mid-Upper Arm Circumference (MUAC) and Weight for Length (WFL) score within normal range. His father is very supportive and is involved in childcare since the beginning- changing diapers, assisting in breastfeeding and complementary feeding and rocking the baby to sleep among other things. Most importantly, he supported the breastfeeding mom both in physical and mental aspect of this journey. Their personal experience showed the importance of having a reliable support system to look out for both the mother and baby's welfare throughout the entire process.

The parents made sure that they seek guidance from their OB-GYN, Pediatrician, Lactation Adviser, other Health Workers and Volunteers in the community. The mother also shared that meaningful discussions from a breastfeeding mom's group in Facebook also helped her learn more, along with reading medical and nutrition journals and websites. Apart from those, studies published by the WFP, UNICEF, and WHO and guidelines from the Department of Health and the National Nutrition Council made her confident that everything she does that revolves around her health and the baby's is within the global and national standards.

We aspire that more children will get the nutrition support they need especially in the far-flung areas, with the support and involvement of the whole family and the community so that they can reach their optimum potential up to their adulthood.

FOREWORD

Following the issuance of the 2015 Department of Health's Administrative Order on the National Guidelines on the Management of Acute Malnutrition for Children Under-Five Years, the United Nations World Food Programme (WFP) extended its technical support to the Department in the development of the Manual of Operations specific for the Management of Moderate Acute Malnutrition (MAM).

The Manual features various types of supplementary food preparations for children with MAM, which ranges from the standard Ready to Use Supplementary Food (RUSF); Fortified Blended Food (FBF), such as the super cereals; and the locally-prepared foods. Both the RUSF and the FBF are procured internationally and in the absence of such, locally-prepared food remains the practical option. Further, children who are on RUSF and FBF often develop "taste fatigue" overtime that leads to poor compliance, and therefore, the slow recovery from acute malnutrition, underscoring the need for having alternatives.

The supply chain and logistics of RUSF and FBF have always been a perennial problem and children with MAM can't wait for it to be available before getting treated. Timeliness, maximum coverage, appropriate medical and nutritional rehabilitation and providing care as long as needed - are the four guiding principles of the integrated management of acute malnutrition.

During the roll-out training on the Management of Moderate Acute Malnutrition conducted by the DOH co-facilitated by WFP and support from NNC, there was a felt need to develop a supplementary material which contains the standard locally-available, culturally sensitive and age appropriate supplementary food that will serve as alternative to the standard regimen, thus, the birth of this Project "MAM Recipes- Alternative to Ready to Use Supplementary Food". As the recipes are meant for the rehabilitation of MAM, the term "supplementary" food will be used to distinguish it from "complementary" food given to children aged 6-23 months.

This Project was initiated in 2019 spearheaded by the WFP Nutrition Team (Martin Parreno and Corazon Barba), with support from the Senior Management (Stephen Gluning, Mats Persson, Jutta Neitzel, and Laurene Goublet) and the Communications and Partnership Unit (Catherine Mones and Katrina Mae Lerios) with the support of WFP's new Representative and Country Director Brenda Barton and additional assistance from new CPU colleagues Maitta Rizza Pugay and Justine Marie Sugay.

This initiative was made possible in collaboration with the University of the Philippines Los Baños - Institute of Human Nutrition and Food (UPLB-IHNF), through Prof. Divine Grace Domingo, utilizing existing local recipes compiled by WFP and recipes from the Menu Guide Calendars of the Department of Science and Technology- Food and Nutrition Research Institute (DOST-FNRI).

Special thanks to WFP HQ – Saskia de Pee, Nicolas Joannic, Deborah Wison, Diane Ashley; and Bangkok Regional Bureau Nutrition team- Britta Schumacher and Anusara Singhkumarwong- for reviewing and providing further technical assistance in the development of this material.

ABOUT THE RECIPE

These standardized recipes are meant for children aged 6-59 months diagnosed with Moderate Acute Malnutrition (MAM). It will only be used in the absence of a standard Ready to Use Supplementary Food (RUSF) and should be prepared at the treatment facility or in any appropriate location where children can be fed. It can also be prepared at home if facilities are disrupted due to COVID-19. The recipes were patterned after the WFP nutrient specifications for the RUSF.

As children with MAM need higher macro and micronutrients than a normal child, each food serving was designed to contain 510-560 kcal of energy comprised of 11-16 grams of protein, 26-36 grams of fat and 30-70 grams of carbohydrates with the addition of the micronutrient powder. It has no or has very low sodium as children with MAM have problems maintaining sodium balance resulting to considerably high level in their bodies which is dangerous.

The macronutrient content of each recipe was computed and re-adjusted to meet the required standard. Verification and standardization were done twice with sensory evaluation in between. The recipes, compiled in this material, provide 10 servings; thus can be served to 10 children with MAM on a daily basis. Only one serving of any of the recipes is required for a child with MAM per day for at least 90 days or until the nutritional status goes back to normal, base from the criteria in the Manual of Operations. Child caregivers or any one that prepares the food can alternate the recipes everyday to avoid taste fatigue.

The recipes for children aged 6-11 months diagnosed with MAM can also be served to children aged 1-5 years old with MAM with additional provision of ½ cup of rice. These MAM recipes will serve as supplementary material to the Manual of Operations in the Management of Moderate Acute Malnutrition among Children Under-Five Years. The utilization and effectiveness of these recipes need to be further monitored and further explored.

It is important to note that once a child is enrolled in the MAM facility or while being provided with recipes containing MNP, the child should not be receiving additional MNP from the other Department of Health (DOH) programs on nutrient supplementation to avoid nutrient toxicity. Once the child has returned to normal nutritional status then the provision of MNP, as part of the regular DOH program, can resume.

Further, this MAM recipe should be provided to a child with MAM in addition to the daily regular intake of nutritious meals (breakfast, lunch, dinner) base from the Philippine Dietary Reference Intakes (PDRI) 2015¹ and the Pinggang Pinoy² (Filipino Plate) recommendations by the Food and Nutrition Research Institute and of the Infant and Young Child Feeding.

MESSAGE

The foundation of a progressive country is its healthy and productive citizen and investing in children's nutrition is paramount.

Undernutrition is one of the deterring factors of a country's comprehensive development. The Philippines lag behind other neighboring countries in the ASEAN region in terms of nutrition with nearly a million children under-five years suffering from acute malnutrition. The government is doubling its effort to address this in order to achieve the SDG 2 target of decreasing Acute Malnutrition to less than 5% by 2030.

WFP is supporting the government in finding quick and feasible solutions to address gaps in the management of childhood malnutrition with supply chain being one. While specialized nutritious food such as Ready to Use Supplementary Food (RUSF) and Fortified Blended Food (FBF) are the standards for treatment for Moderate Acute Malnutrition (MAM), these are not locally produced and not always globally available on time.

Children with MAM can't wait as their risk of dying is 2-3 times than that of a normal child, thus, WFP with its partners, designed recipes as alternative to the standard treatment. The ingredients are culturally acceptable and locally available, and it also fosters local production of those ingredients energizing local economy.

We hope that this material, as supplement to the MAM Manual of Operations, will provide additional resource to the Program Managers from the national up to the local levels in their effort to suppress childhood undernutrition.



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