## **Three-Minute Article for Parents**

## Multiple micronutrient supplementation programme in Sri Lanka

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Micronutrient deficiencies are not uncommon and are often referred to as "hidden hunger" because they can go unnoticed for extended periods. For example, in Sri Lanka, prevalence of iron deficiency is about 26.5%<sup>1</sup>. In addition, vitamin A deficiency is not uncommon, seen in 30% of children in Sri Lanka<sup>1</sup>.

In response to high deficiency rates, the Multiple Micronutrient (MMN) supplementation programme for 6-23-month-old children was first launched in Sri Lanka in 2007. MMN sachets are designed to provide a balanced and comprehensive mix of essential vitamins and minerals that are crucial for the child's growth, development, and overall health. It contains 15 micronutrients, including iron, retinol, zinc, iodine, and vitamins (A, B1, B2, B3, B6, B12, C, D, E, and folic acid), copper, and selenium. The safety and efficacy of MMN powder are well established and it reduces anaemia, iron deficiency anaemia, and vitamin A deficiency by 34%, 57%, and 21% respectively2. The effectiveness of such nutritional interventions is also dependent on the acceptability of the recipients and this has not been studied adequately in Sri Lanka.

We assessed the acceptance and adherence of this nutritional intervention among 153 caregivers in an urban community setting in Sri Lanka<sup>3</sup>. Caregivers' acceptance of taste and smell, health gains, ease of use, and need perception were assessed. Also, anaemia knowledge, MMN knowledge, and reported adherence were evaluated through a self-administered questionnaire.

The mean (SD) acceptability score was 66.8% (9.8%). Acceptance of sensory qualities (smell/taste) had a lower score than perceived health benefit. The mean (SD) anaemia knowledge score was 62.2% (25.8%). The reported adherence rate of 72.5% indicates a relatively high compliance with the MMN sachet consumption among caregivers in this population. The significant influence of anaemia knowledge and acceptability on adherence emphasizes the importance of both awareness and positive perceptions in ensuring sustained compliance with the nutritional intervention

In conclusion, there is encouraging perception and trust regarding the health benefits of MMN but there is room for improvement in acceptability and knowledge on anaemia to enhance adherence further among parents in this population.

Our message to the parents is that if your child expresses discomfort or has concerns about the MMN sachets, address them promptly. Discuss any issues with your healthcare provider to find suitable solutions. Stay informed about the benefits of the specific micronutrients in the sachets. Knowledge about the positive impact on

your child's health can reinforce your commitment to the supplementation.

## References

- Senarath U, Jayatissa R, Siriwardena I. Evaluation of Multiple Micronutrient Supplementation Programme in Sri Lanka 2009–2012. Medical Research Institute, Ministry of Health and UNICEF: Colombo. 2014. Available from: http://www.mri.gov.lk/assets/Nutrition/2014-Multiple-Micronutrient-report.pdf.
- Salam RA, MacPhail C, Das JK, Bhutta ZA. Effectiveness of Micronutrient Powders (MNP) in women and children. BMC Public Health 2013; 13 (Suppl. 3): S22. https://doi.org/10.1186/1471-2458-13-S3-S22 PMid: 24564207 PMCid: PMC3847468
- Liyanage G, Anupama KGIS, Sudarshini MLP. Acceptability of home fortification with multiple micro-nutrients among Sri Lankan children. PLoS One 2021; 16(12): e0261516. https://doi.org/10.1371/journal.pone.0261516 PMid: 34936678 PMCid: PMC8694412