



3 May 2021

The WHO Expert Committee on the Selection and Use of Essential Medicines
Department of Essential Medicines and Health Products
World Health Organization
20 Avenue Appia
CH-1211 Geneva 27
Switzerland

Reference: Application to include Multiple Micronutrient Supplementation (MMS) on EML

Dear Committee Members,

Vitamin Angel Alliance, Inc. (VA) is pleased to provide this letter in support of the application for *Multiple Micronutrient Supplement – Antenatal Supplement* to be added to the WHO Model List of Essential Medicines (WHO EML) for the reduction of adverse pregnancy outcomes.

VA is a global public health nutrition organization that promotes health and economic equity across the lifespan by ensuring that nutritionally vulnerable, underserved populations have access to evidence-based nutrition interventions.¹ VA focuses on interventions that target the first 1,000 days of life (i.e., from conception through 24 months of age) and children up to 5 years of age. We support evidence-based nutrition services in 60+ countries that affect over 60 million women and children annually, including support (as requested by governments and other local stakeholders) for introducing and scaling MMS. VA currently reaches over 2 million pregnant women annually with MMS through a network of 1,500 program partners in 56 countries.

Micronutrient deficiency in pregnant women is a major public health problem due to inadequate dietary intakes (often resulting from food insecurity) combined with increased nutrient requirements during pregnancy.² Many pregnant women in low- and middle-income countries (LMICs) experience iron deficiency anemia, vitamin A deficiency, and zinc deficiency.³ Micronutrient deficiencies in pregnancy can lead to adverse consequences for the mother and their infants.⁴ An estimated 20 million infants are born each year at low birth weight, representing 15% of all births worldwide⁵, and roughly 15 million infants are born preterm.⁶

Over the past two decades, as noted in the application to include multiple micronutrient supplementation (MMS) in the WHO EML, randomized controlled trials have compared iron and folic acid supplementation (IFAS) with MMS. These studies, supplemented by additional published information, have generated strong evidence that MMS is efficacious, safe, cost-effective, and affordable while providing substantial, additional benefits over IFAS for improving pregnancy outcomes. Findings from the WHO analysis conclude that MMS (specifically the UNIMMAP formula) reduces the risk of low birth weight and small for gestational age.⁷ An individual patient data (IPD) meta-analysis also finds that MMS reduces the risk of stillbirth and preterm birth.⁸ Finally, anemic women and underweight women are shown to experience even greater benefits with MMS as compared to IFA.⁸

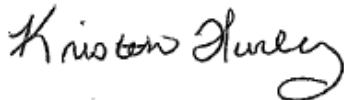
Given the robust evidence base supporting the use of MMS, VA supports the inclusion of MMS for pregnant women on the WHO EML. Notably, the WHO itself supports the introduction and scaling of MMS for pregnant women to improve pregnancy outcomes as evidenced in the 2020 *WHO antenatal care recommendations for a positive pregnancy experience*.⁷ In this guidance document, the WHO includes a recommendation to introduce MMS in the context of antenatal care services informed by rigorous research, including implementation research to ensure that initial introduction of MMS is designed and implemented in an effective manner that informs future scaling. UNICEF, along with other organizations, recently issued *Interim Country-Level Decision-Making Guidance for Introducing Multiple Micronutrient Supplementation for Pregnant Women*.⁹ This document echoes the 2020 WHO antenatal care recommendations by recommending the introduction of MMS in the context of antenatal care services informed by implementation research.

Dozens of national governments in Africa, Asia, and Latin America and the Caribbean are already moving to introduce MMS through the application of a systematic implementation research approach, consistent with WHO and UNICEF guidance.^{10,11,12, 13,14} While the absence of MMS from the WHO EML is not a deterrent to introduction of MMS, many governments find its absence from the WHO EML to be an unnecessary barrier to local decision-making to explore introduction in ways that are otherwise consistent with WHO and UNICEF guidance. Adding MMS to the WHO EML would facilitate local conversation about a proven intervention.

Finally, the addition of MMS to the EML will facilitate much needed progress towards Sustainable Development Goals (SDGs) 2 and 3, saving lives and improving the health of millions of women and newborns. While MMS is the standard of care in high-income countries, most pregnant women in LMICs only have access to IFA. We believe this disparity can be addressed with the addition of UNIMMAP MMS to the WHO EML and thereby serve to improve maternal equity by increasing access to MMS in LMICs, where the burden of micronutrient deficiencies is greatest.

We thank you for considering the addition of MMS for pregnant women to the WHO EML.

Sincerely,



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Vitamin Angel Alliance

¹ More information about Vitamin Angel Alliance can be found at www.vitaminangels.org.

² Bourassa MW, Osendarp SJM, Adu-Afarwuah S, Ahmed S, Ajello C, Bergeron G, et al. Review of the evidence regarding the use of antenatal multiple micronutrient supplementation in low- and middle-income countries. *Ann N Y Acad Sci*. 2019;1444(1):6–21.

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- ³ Black, RE, Victora CG, Walker SP, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet*. 2013; 382: 427–451.
- ⁴ Black RE. Micronutrients in pregnancy. *Br J Nutr*. 2001; 85 Suppl 2:S193–7.
- ⁵ Blencowe, H, Krusevec J, de Onis M, et al. National, regional, and worldwide estimates of low birthweight in 2015, with trends from 2000: a systematic analysis. *Lancet Glob. Health*.
- ⁶ Chawanpaiboon S, Vogel JP, Moller AB, Lumbiganon P, Petzold M, Hogan D, et al. Global, regional, and national estimates of levels of preterm birth in 2014: a systematic review and modelling analysis. *Lancet Glob Health*. 2019;7(1):e37–e46.
- ⁷ World Health Organization. WHO Antenatal Care Recommendations for a Positive Pregnancy Experience. Nutritional Interventions Update: Multiple Micronutrient Supplements during Pregnancy; Geneva, 2020.
- ⁸ Smith, ER, Shankar, AH, Wu, LS, Aboud, S, Adu-Afarwuah, S, Ali, H, et al. Modifiers of the Effect of Maternal Multiple Micronutrient Supplementation on Stillbirth, Birth Outcomes, and Infant Mortality: A Meta-Analysis of Individual Patient Data from 17 Randomised Trials in Low-Income and Middle-Income Countries. *Lancet Glob. Heal*. 2017, 5 (11), e1090–e1100.
- ⁹ UNICEF, et al. Interim Country-level Decision-making Guidance for Introducing Multiple Micronutrient Supplementation for Pregnant Women. 2020. <https://www.nyas.org/media/22939/111220-mms-guidance-v10.pdf>
- ¹⁰ Steets, A, Ajello, CA, Harvey, Q, Schiffer, H, Dacius, M, Diese, M, et al. Experiences Supporting the Introduction and Implementation of Multiple Micronutrient Supplementation for Pregnant Women Globally. *Sight and Life Magazine*. 2020. Focusing on Multiple Micronutrient Supplements in Pregnancy - Special Report; 37-41.
- ¹¹ Dacius M, King SE, Harvey Q, Ajello CA, Marhoney-Pierre J, Hurley KM. Ensuring Effective Implementation of MMS for Pregnant Women in Haiti. *Sight and Life Magazine*. 2020. Focusing on Multiple Micronutrient Supplements in Pregnancy - Special Report; 54-57.
- ¹² Hurley KH, Achadi EL, Ajello C, Askari S, Bajoria M, Beesabathuni K, et al. Prevention of child wasting in Asia: Possible role for multiple micronutrient supplementation in pregnancy. *Field Exchange* 63, October 2020. p76.
- ¹³ Dalmiya N, Kupka R. The Introduction of Multiple Micronutrient Supplementation Requires a Comprehensive Systems Approach. *Sight and Life Magazine*. 2020. Focusing on Multiple Micronutrient Supplements in Pregnancy - Special Report; 42-45.
- ¹⁴ Schwendler T, Kodish S, van Zutphen KG. Formative Research: Ensuring adequate demand and compliance of MMS in Bangladesh, Burkina Faso, Madagascar and Tanzania. *Sight and Life Magazine*. 2020. Focusing on Multiple Micronutrient Supplements in Pregnancy - Special Report; 46-48.