

A Step Forward for Women's Nutrition During Pregnancy

Multiple Micronutrient Supplementation (MMS): The WHO's Model List of Essential Medicines (EML)

An FAQ and Advocacy Brief for Inclusion of MMS into the WHO's Model List of Essential Medicines

Summary

For any medicine or essential health commodity, registration on the WHO's Model List of Essential Medicines (EML) is a significant step forward for its procurement, supply, and ultimately for its wider accessibility and use. The EML provides guidance for countries developing and revising a national EML, which can result in increased accessibility, lower costs, and less restrictions on importing.¹ The inclusion of the United Nations International Multiple Micronutrient Antenatal Preparation of Multiple Micronutrient Supplements (UNIMMAP MMS) formulation (referred to as MMS in this document) into the WHO's EML is no exception, complementing WHO guidance developed over previous years to support the implementation of MMS in three contexts: 1) populations affected by an emergency for children, pregnant women, and lactating women; 2) individuals with active tuberculosis; and 3) in the context of rigorous research in pregnant women as part of antenatal care. The public health relevance of this decision is significant: MMS improves maternal nutrition status, and reduces the risk of adverse birth outcomes such as preterm birth, stillbirth, low birth weight, and small for gestational age. As a result, long-lasting human capital losses in educational years and lifetime income will be prevented. It is hoped that with wider dissemination of the evidence base on the impacts of MMS, and targeted national level advocacy, more countries will consider MMS on national EMLs. This recent decision has the potential to motivate country governments to explore the feasibility and acceptability of introducing MMS in the context of systematic implementation research, aligned with WHO and UNICEF guidance.

Introduction

Improving nutrition during pregnancy as part of the critical 1,000-day window for optimal nutrition for women and their baby's development has not always had the attention it deserves. In September 2021, the World Health Organization (WHO) included multiple micronutrient supplementation (MMS) on the WHO Model List of Essential Medicines (EML). This decision has the potential to contribute to improved nutrition for women during pregnancy, most notably by providing a standard for country governments to include MMS on national EMLs. This brief is a tool for advocates or public policy professionals working in women's health and nutrition. It provides essential information about how and why MMS was included on the WHO EML, the implications of the recent decision for the availability and uptake of MMS at country level, and gives broad guidance on how to advocate for the inclusion of MMS on national EMLs.

Frequently Asked Questions

Multiple Micronutrient Supplementation (MMS) is now included on WHO's Model List of Essential Medicines (EML): Why is this important and what happens next?

What is the WHO Model List of Essential Medicines (EML) and why is it important?

The [World Health Organization's Model List of Essential Medicines](#) (EML) is a register of minimum medicine requirements for every country's health system. Functioning health systems require high priority

¹ Hutchings, J.; Neroutsos, K.; Donnelly K. Making the List: The Role of Essential Medicines Lists in Reproductive Health. *International Perspectives on Sexual and Reproductive Health*. Dec. 2010. Vol. 36, Issue 4. 205-208. <https://www.guttmacher.org/journals/ipsrh/2010/12/making-list-role-essential-medicines-lists-reproductive-health>

medicines to be available for everyone, and as such, the EML “lists the most efficacious, safe, and cost-effective medicines for priority conditions.” The list is intended to guide national governments with their own EMLs and policies and is a significant step forward for procurement, supply, and ultimately for wider accessibility and use of medicines. In theory, the EML narrows the market, thus, a medicine on the list will be in higher demand and could become cheaper over time. By guiding countries in the public procurement and supply of medicines, the EML also “provides a framework for donors, local pharmaceutical manufacturers and insurance systems that reimburse medicine costs.”²

What is Multiple Micronutrient Supplementation (MMS)?

The United Nations International Multiple Micronutrient Antenatal Preparation of Multiple Micronutrient Supplements (UNIMMAP MMS) is an antenatal supplement for pregnant women that is proven to improve maternal nutrition status, and reduces risk of adverse birth outcomes such as preterm birth, stillbirth, low birth weight, and small for gestational age. As a result, long-lasting human capital losses in educational years and lifetime income will be prevented.

How are medicines reviewed for inclusion on the EML?

The Expert Committee meets every two years to add, remove, or amend medicines on the list. Defining an essential medicine involves an evidence-based process, that considers the disease prevalence, public health relevance, evidence of clinical efficacy and safety, and comparative costs and cost-effectiveness.

What was the basis for the decision to include MMS into the EML?

In 2021, the [23rd Expert Committee on the Selection and Use of Essential Medicines](#) recommended the “inclusion of multiple micronutrient supplement tablets on the core list of the EML for use as an antenatal supplement in pregnant women, based on public health need and evidence of benefit in pregnancy outcomes including reduced risk of stillbirth, low and very low birth weight, small for gestational age births, and preterm births,

compared to iron and folic acid supplementation. The Committee considered the financial impact on health systems associated with multiple micronutrient supplements was likely to be small. The Committee acknowledged the WHO Guideline recommendations for use of multiple micronutrient antenatal supplements only in a research-specific context. The Committee considered that inclusion on the EML may facilitate and should not prevent such research.”

What other international guidelines support the use of MMS?

Existing guidelines recommend the use of UNIMMAP MMS formulation by pregnant women in specific contexts such as populations affected by an emergency, those with active tuberculosis, and in the context of rigorous research as part of antenatal care. The Expert Committee acknowledges these guidelines:

- [WHO, WFP, UNICEF. Preventing and controlling micronutrient deficiencies in populations affected by an emergency multiple vitamin and mineral supplements for pregnant and lactating women, and for children aged 6 to 59 months.](#) Geneva: World Health Organization; 2007.
- [Nutritional care and support for patients with tuberculosis.](#) Geneva: World Health Organization; 2013.
- [WHO antenatal care recommendations for a positive pregnancy experience. Nutritional interventions update: multiple micronutrient supplements during pregnancy.](#) Geneva: World Health Organization; 2020.

What does inclusion of MMS in WHO’s EML mean for countries and nutrition partners?

Inclusion of MMS on the WHO’s EML is an important step in a broader process of facilitating discussions with decision-makers to consider the introduction of MMS in ways that are consistent with WHO and UNICEF guidance.

What does this mean for countries that already have MMS on national EMLs?

Nearly 70 countries have already included MMS on

² World Health Organization Model List of Essential Medicines – 22nd List, 2021. Geneva: World Health Organization; 2021 <https://apps.who.int/iris/bitstream/handle/10665/345533/WHO-MHP-HPS-EML-2021.02-eng.pdf>

their national EMLs, although not all are specifically for pregnant women and most do not follow the UNIMMAP formulation. The inclusion of MMS into WHO's EML offers a unique opportunity to advocate for the adoption of the specific UNIMMAP MMS formulation for pregnant women supported by 20 years of scientific evidence. Having MMS on national EMLs can support wider implementation.

What are potential next steps for countries that do not have MMS on national EMLs?

The inclusion of MMS into the WHO's EML offers the opportunity for targeted advocacy to:

- Include UNIMMAP MMS into the national EML. WHO has [guidelines](#) for countries developing their own lists. A helpful resource on procurement is the [UNICEF Supply Catalogue](#), which contains all the medicines on the EML. See below for further guidance.
- Introduce MMS as part of an evidence-based approach to introduction (e.g., implementation science, implementation research or well-designed pilot or demonstration programs) that focuses on developing an effective context-specific delivery approach prior to scaling the use of MMS.
- Advocate for dedicated budget line to ensure MMS availability for pregnant women in emergency settings, pregnant women suffering from tuberculosis, and pregnant women in contexts with poor diets.

Who supported the application for inclusion of MMS into WHO's EML?

In November 2020, the MMS Technical Advisory Group (TAG) (hosted by the New York Academy of Sciences) and the Micronutrient Forum (MNF) submitted an [application](#) to the WHO to consider including MMS in their list of EMLs. This application also received numerous letters of support from global and nutrition actors, including governments and implementing agencies.

How to Advocate for Inclusion of UNIMMAP MMS into a National Essential Medicines List

The process for updating EMLs at a national level is not uniform and, in some cases, there may not be a formal application process. The following information provides general guidance to help countries determine next steps to take in advocating for the inclusion of MMS into a national EML.^{3,4}

1) Understand the process

- At the national level, an EML Review Committee may be responsible for identifying which commodities to add (or remove from) the national EML. The Committee is often appointed by the Ministry of Health (MOH).⁴
- It is important to know the date the EML Review Committee has set for the submission.
- It can help to connect with other partners who can support the EML application.
- Countries may consider exploring how to directly connect with decision makers or members of the EML Committee.

2) Make an application using the latest evidence

- Cover the evidential requirements for an application laid out by the national EML, including evidence in support of a commodity's efficacy, safety, acceptability, and cost-effectiveness.⁵
- Refer to public health arguments based on national statistics for micronutrient deficiencies in pregnancy, low birth weight, small for gestational age, preterm, and still birth.
- Showcase scientific evidence: MMS can avert adverse birth outcomes, such as preterm birth, low birth weight and small for gestational age,⁶ in turn, preventing long-lasting impairments on cognitive and physical development.⁷ See the [Interim Guidance document](#) by the MMS-Technical Advisory Group (TAG).

³ Rashid, S. (2016) *Updating National Essential Medicine Lists: A Step-by-Step Advocacy Guide*. https://www.msh.org/sites/default/files/eml-update_advocacy-guide.pdf

⁴ PATH, World Health Organization, United Nations Population Fund. *Essential Medicines for Reproductive Health: Guiding Principles for Their Inclusion on National Medicines Lists*. Seattle: PATH, 2000. <https://www.who.int/reproductivehealth/publications/general/a91388/en/>

⁵ Rashid, S. (2016) *Updating National Essential Medicine Lists: A Step-by-Step Advocacy Guide*. https://www.msh.org/sites/default/files/eml-update_advocacy-guide.pdf

⁶ Smith ER, Shankar AH, Wu LS, et al. (2017) 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. *The Lancet Global Health*. 5(11): e1090-e1100. [https://doi.org/10.1016/S2214-109X\(17\)30371-6](https://doi.org/10.1016/S2214-109X(17)30371-6)

⁷ Upadhyay, R.P., Naik, G., Choudhary, T.S. (2019). Cognitive and motor outcomes in children born low birth weight: a systematic review and meta-analysis of studies from South Asia. *BMC Pediatrics*. 19, 35. <https://doi.org/10.1186/s12887-019-1408-8>

- Present cost-benefit analyses to calculate the incremental benefits and costs of transitioning from IFAS to MMS, where possible referring to data from your country ([Nutrition International, MoMS](#)).
- Cite the economic and human capital implications. The potential of prenatal supplementation to prevent loss to human capital and to economies is staggering. For instance, by modelling impacts on future productivity, if MMS were to reach 90% of pregnant women across 132 lower- and middle-income countries, then approximately an additional 5.02 million school years and \$18.1 billion USD in cumulative lifetime income would be gained.⁸ Detailed information for selected countries can be found [here](#).

3) Additional considerations when preparing an application

- Some countries adopt EMLs at subnational level or state province level.
- It can be helpful to understand your country's fiscal windows and wider government policy planning cycles set down by the Department of Health.
- It is worth noting that UNIMMAP MMS can be Halal certified. For countries who have (non UNIMMAP) MMS on national EMLs, this can be an important message during advocacy.

For advocacy resources and further evidence on the benefits of MMS, visit the [Healthy Mothers Healthy Babies Consortium](#) and the [HMHB Knowledge Hub](#). Additional information for advocates on updating national EMLs can be found, [here](#).

⁸ Perumal, N., Blakstad, M. M., Fink, G., Lambiris, M., Bliznashka, L., Danaei, G., & Sudfeld, C. R. (2021). Impact of scaling up prenatal nutrition interventions on human capital outcomes in low- and middle-income countries: a modeling analysis. *The American Journal of Clinical Nutrition*, 114(5), 1708–1718. <https://doi.org/10.1093/ajcn/nqab234>