



Multiple Micronutrient  
Supplementation in Pregnancy  
TECHNICAL ADVISORY GROUP

# Maternal multiple micronutrient supplementation (MMS) for maternal nutrition and birth outcomes during the COVID-19 pandemic

## Overview of MMS

Good nutrition during pregnancy is essential for the health of both mother and child. Maternal micronutrient requirements during pregnancy are increased, making it more challenging to meet these requirements through diet alone, especially in low-income settings. Globally many pregnant women do not meet these requirements, which has negative consequences for their own health and immune function as well as for the health, growth, and development of their infants.<sup>1</sup>

Maternal MMS\* can safely and effectively improve micronutrient status and improve birth outcomes.<sup>2-4</sup> Evidence shows<sup>5</sup> that the benefits of maternal MMS, when compared to supplementation with just iron and folic acid alone, include:

### **Reduce the risk of stillbirth**

- by 8% in the overall population of pregnant women
- by 21% in the group of anemic pregnant women

### **Reduce the risk of mortality among 6-month infants**

- by 29% in the group of anemic pregnant women
- by 15% in female infants

### **Reduce the risk of low birth weight (<2500g)**

- by 12% in the overall population of pregnant women
- by 19% in the group of anemic pregnant women

### **Reduce the risk of preterm (<37 weeks) birth**

- by 8% in the overall population of pregnant women
- by 16% in the group of underweight women

### **Reduce the risk of being born small-for-gestational age**

- by 3% in the overall population of pregnant women
- by 8% in the group of anemic pregnant women

**In the context of the COVID-19 pandemic**, many countries will experience disruptions in their food systems, especially where food systems are already fragile and where there is significant food insecurity and may result in a decreased availability of nutritious foods including fortified foods, rich in micronutrients. This may further increase the barriers to achieving a healthy diet with an adequate intake of micronutrients for pregnant women, who are often socio-economically marginalized during emergencies. This is especially concerning because it can increase the risk of adverse pregnancy outcomes during a time when routine antenatal and postnatal services may be disrupted. For pregnant women, maternal MMS can be used to help meet their increased micronutrient needs and support healthy pregnancy outcomes during the pandemic especially in the context of fragile and food insecure contexts.

**The daily use of maternal MMS** is recommended by the World Health Organization (WHO), the World Food Programme (WFP) and the United Nations Children's Fund (UNICEF), for pregnant women in emergency settings to ensure adequate micronutrient intake, whether they receive fortified rations or not.<sup>6</sup> This is aligned with the existing WHO Recommendation on Antenatal Care for a Positive Pregnancy Experience which recommends the use of maternal MMS in settings where nutritional deficiencies are prevalent.<sup>7</sup> Moreover, UNICEF has revised its Core Commitments for Children in Humanitarian Action to include recommendations for preventing undernutrition, micronutrient deficiencies, and anaemia in pregnant women which recommends the use of maternal MMS.<sup>8</sup>

**Delivery of maternal MMS** to pregnant women may become more challenging during lockdowns and with physical/social distancing measures. In cases where antenatal care contacts may be disrupted and scaled back, efforts should be made to pre-position supplies (2-3 months) and to increase the amount of maternal MMS distributed per contact to cover longer periods when access to providers and travel is restricted. While some women and their infants have the potential to benefit more than others, the intent should be to provide maternal MMS to all pregnant women where micronutrient deficiencies are prevalent.

## Procuring MMS

For information how to procure maternal MMS supplies, please contact UNICEF Procurement Services at [psid@unicef.org](mailto:psid@unicef.org) (<https://www.unicef.org/supply/governments-and-partners>) or the MMS Technical Advisory Group at [nutrition@nyas.org](mailto:nutrition@nyas.org) (<https://www.nyas.org/MMS>).

For additional information regarding MMS, please contact the MMS Technical Advisory Group at [nutrition@nyas.org](mailto:nutrition@nyas.org).

## References

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- (6) World Health Organization; UNICEF; World Food Programme. Preventing and Controlling Micronutrient Deficiencies in Populations Affected by an Emergency. *Bull. World Heal. Organ.* **2007**, *1*, 5–6.
- (7) World Health Organization. World Health Organization Recommendation on Antenatal Care for Positive Pregnancy Experience; Geneva, 2016.
- (8) United Nations Children's Fund (UNICEF). Core Commitments for Children in Humanitarian Action. (Draft) **2020**.

\*Maternal MMS refers to the United Nations International Multiple Micronutrient Antenatal Preparation—multiple micronutrient supplement product (<https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/nyas.14322?af=R>)