Advocating for Safe, Affordable, and Cost-effective Nutrition Interventions to Improve Maternal Health

The Global Scope of Maternal Malnutrition

Good nutrition is important—especially during pregnancy. Yet millions of women lack access to nutritious diets and essential healthcare services, leading to widespread nutritional deficiencies.

- 570 million women—1 in 3—of reproductive age are anemic.
- In South/Southeast Asia, stunting (short stature) affects 35% of women.
- 170 million women—1 in 10—of reproductive age are underweight.

During pregnancy, women have increased nutritional needs as their bodies adapt to support their baby’s growth and development. The consequences of maternal malnutrition are severe:

- 36.5% of pregnant women in low- and middle-income countries are anemic, and anemia contributes to 20% of all maternal deaths.\(^1\),\(^2\)
- Women experiencing maternal malnutrition have an increased risk of death from preeclampsia and postpartum hemorrhage.\(^3\)
- Every year, maternal malnutrition contributes to 800,000 newborn deaths.\(^4\)
- Children who survive infancy are more likely to experience physical and cognitive setbacks that can keep them from reaching their full potential as adults.\(^5\)
Meeting the Nutritional Demands of Pregnancy

Nutritional needs can increase by as much as 50% during pregnancy. An alarmingly high percentage of women of reproductive age in low- and middle- income countries are already deficient in several key micronutrients—including, but not limited to, iron—and have difficulty meeting these additional needs when they become pregnant.

- While women need 2.5 times more iron than men on average, the requirement increases further during pregnancy.
- During pregnancy, women need higher levels of vitamin A to support healthy fetal growth and development.
- Iodine is essential in the first 16 weeks of pregnancy; without it, miscarriages and stillbirths are more common, and infant brain development and cognition are compromised.

Pregnant women also face gender inequalities and additional social and cultural barriers that prevent them from getting the nutrients they need. For example, many women lack access to quality health services and interventions and often put their families first at meal times, eating last and least when it comes to nutritious foods like meat and fish. There is a clear need to invest in strengthening antenatal care (ANC) platforms—specifically the quality and delivery of nutrition interventions—to, ultimately, improve maternal nutrition and the health of future generations.

What Is MMS and Why Is It Important?

Multiple Micronutrient Supplementation (MMS) refers to the internationally recognized United Nations International Multiple Micronutrient Antenatal Preparation formula. UNIMMAP MMS (hereinafter referred to as MMS) contains 15 vitamins and minerals to meet the nutritional needs of pregnant women. Its formulation is developed by international health authorities, including the World Health Organization (WHO), United Nations University, and UNICEF. More than 20 years of research shows this formulation is safe, cost-effective, affordable, and more effective than iron and folic acid (IFA) supplementation, the current standard of care. MMS has been consistently shown to improve maternal nutrition and reduce the risk of adverse birth outcomes including preterm birth, stillbirth, low birth weight, and small for gestational age, especially in anemic and underweight women.

Effect of MMS on Adverse Birth Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Underweight pregnant women</th>
<th>Anemic pregnant women</th>
<th>Overall population of pregnant women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce the risk of low birth weight (&lt;2500g)</td>
<td>12%</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>Reduce the risk of stillbirth</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Reduce the risk of pre-term birth (&lt;37 weeks)</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Reduce the risk of being born small-for-gestational age</td>
<td>3%</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Healthy women and healthy babies are the essential foundation for strong families, robust communities, and thriving nations. Safe and affordable interventions such as MMS are needed now more than ever, as the COVID-19 pandemic continues to stress food and health systems as well as individuals and families. Integrating MMS into ANC services as part of a robust maternal nutrition intervention package will require focused, collective action from stakeholders across the globe, especially in areas with a high burden of nutritional deficiencies. Current WHO guidance supports contextual implementation of MMS, including in populations affected by an emergency, patients with active tuberculosis, and in context of rigorous research. While MMS is currently being implemented in combination with implementation research in 18 countries, demand is expected to grow significantly in the near future.

Advocates in countries exploring the transition to MMS can take action in the following ways:

1. **Raise awareness and advocate for use of MMS.**
   - Visit HMHB’s [Knowledge Hub](#) for recent data, guidance, and tools, such as the Advocacy toolkit, and join the Healthy Mothers Healthy Babies Consortium as a member.

2. **Establish or engage with a global and/or national MMS working group.**
   - Contact us if you are interested in establishing an MMS working group or if you would like to connect with other advocates. HMHB can provide contacts and resources to support you.

3. **Demonstrate cost and human capital implications of the introduction of MMS.**
   - Utilize cost-benefit analyses to demonstrate the incremental benefits and costs of transitioning from IFA to MMS, as well as long-term educational and human capital gains. Cost-benefit data are available for 30+ countries through Nutrition International’s [cost-benefit tool](#), and data on the impact of scaling up prenatal nutrition interventions on human capital outcomes in over 100 low- and middle-income countries are available in the [modeling analysis](#) by Perumal et al. (2021)⁹

4. **Advocate to include UNIMMAP MMS into national Essential Medicines Lists (EML).**
   - Inclusion of MMS in national EMLs can support wider implementation. Read our [EML FAQ and Advocacy Brief here](#).

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**Advocacy Resources**

For more advocacy resources and further evidence on the benefits of MMS, please visit the Healthy Mothers Healthy Babies Consortium website and the HMHB Knowledge Hub for recent data, guidance, and tools, such as the Advocacy toolkit.

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**Join Us**

We invite organizations and individuals active in maternal health and nutrition to join the Healthy Mothers Healthy Babies Consortium as a member. Visit us online at [HMHBconsortium.org](http://HMHBconsortium.org), subscribe to our [newsletter](http://newsletter), or contact us to learn more: [HMHB@micronutrientforum.org](mailto:HMHB@micronutrientforum.org).

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