HEALTHY MOTHERS HEALTHY BABIES

Micronutrient FORUM

Technical Brief and FAQ for Quality Standards in UNIMMAP Multiple Micronutrient Supplements

Summary

UNICEF's UNIMMAP MMS Product Specification and Technical Requirements for Micronutrient Products establish **one globally recognized quality framework for the manufacturing, testing, packaging, and labeling of UNIMMAP MMS for pregnant and breastfeeding women**.

Developed through a collaboration between **UNICEF** and **Kirk Humanitarian**, these unified standards protect the health of vulnerable pregnant and breastfeeding women and their babies by ensuring that **only high-quality, safe, and effective UNIMMAP MMS products reach pregnant women no matter where they live, and no matter where they are produced**.

Kirk Humanitarian's UNIMMAP MMS product meets UNICEF's specifications, ensuring the same proven benefits for pregnant and breastfeeding women globally.

Frequently Asked Questions

What is UNIMMAP MMS?

The United Nations International Multiple Micronutrient Antenatal Preparation (UNIMMAP) Multiple Micronutrient Supplement (MMS) is a prenatal vitamin and mineral supplement formulation originally developed by WHO, UNICEF, and the UN University. It contains 15 essential micronutrients and is supported by 25 years of scientific research. UNIMMAP MMS is proven to improve pregnancy outcomes and reduce stillbirths and preterm births, particularly in low- and middle-income countries.[1,2]

Why do we need a unified product specification for UNIMMAP MMS?

Because of the 15 active ingredients that constitute UNIMMAP MMS, it is a complex product to manufacture to the accepted standards. As more countries integrate UNIMMAP MMS into their national antenatal care programs as the standard of care for pregnant women and manufacturers scale up production, it is critical to ensure consistent, high-quality standards across all products. Without unified standards, different manufacturers may produce products that vary significantly in quality, safety, and composition—creating uncertainty for the pregnant women who depend on them for a healthy pregnancy.

These standards were developed to:

1. Mitigate the risk of inconsistent or substandard product quality
2. Harmonize expectations across manufacturers, regulators, and procurers
3. Ensure that scaling up UNIMMAP MMS does not compromise the quality that makes it effective

What are the UNICEF Product Specification and Technical Requirements?

These are two UNICEF documents that work together:

1. **UNICEF Product Specification Sheet for UNIMMAP MMS** – A detailed technical standard that specifies:
    - Quality standards for all 15 active ingredients and the UNIMMAP MMS product throughout shelf life
    - Test requirements and acceptance limits (identity, assay, impurities, physical characteristics, packaging)
    - Manufacturing standards aligned with WHO issued good manufacturing practices (GMP)
    - Unified labeling requirements, shelf-life assurances, and packaging guidance
2. **UNICEF Technical Requirements for Micronutrient Supplement Products:** An overarching framework that defines minimum quality, safety, composition, manufacturing, testing, stability, packaging, labeling, and documentation standards for all micronutrient products procured by UNICEF.

These documents serve as the standard references for UNICEF's procurement tenders and supply processes, and are recognized and trusted by governments, manufacturers, donors, and implementing organizations. These specifications are often used in advocacy and technical assistance to governments to support development of national policies, including National Essential Medicines Lists, procurement standards, regulatory frameworks, and program guidance.

How does following these specifications enable global market reach?

Product quality can be viewed as **interchangeable** across all products when manufacturers implement the **same technical requirements and specifications for UNIMMAP MMS**.

This means that governments, NGOs, donors, and UNICEF can procure the same proven UNIMMAP MMS formulation and deploy it across multiple countries without concerns about quality variation. This interchangeability streamlines supply chains, reduces procurement complexity, improves cost efficiency, and accelerates scale-up of this critical maternal health intervention.

What technical support is available to manufacturers interested in producing UNIMMAP MMS?

UNICEF has launched a resource hub (https://unimmap-mms.org/) for MMS manufacturers and regulators. The website provides easy access to supply, quality, manufacturing, and regulatory information.

The United States Pharmacopeia (USP) has developed the **USP UNIMMAP MMS Verification Program**, an independent verification program for manufacturers seeking to provide UNIMMAP MMS to national governments, donors, and NGOs. Manufacturers that pass the program can place the USP Verified Mark for UNIMMAP MMS—a visible symbol of quality—on their product. Participation is voluntary but strengthens market access and demonstrates the manufacturer's commitment to maternal health.

What does this specification mean for *national governments*?

National governments and regulatory authorities benefit from:

- Trusted, evidence-based standards aligned with UNICEF specifications and public procurement principles
- A harmonized framework that simplifies product approval and oversight processes
- A foundation for supporting the development of national policies, from essential medicines lists to procurement standards to regulatory frameworks
- The ability to confidently monitor and assess product quality using clear, internationally recognized standards

What does this specification mean for *regulators and program managers*?

Governments, UN agencies, donors, and NGOs gain:

- A single, clear reference for qualifying, purchasing, and monitoring high-quality UNIMMAP MMS products
- Assurance that products purchased from different manufacturers will be **interchangeable and consistent**
- Simplified procurement processes and stronger supply chain predictability
- The ability to deploy the same proven product across multiple countries and programs efficiently

What does this specification mean for *manufacturers*?

The UNICEF specifications provide manufacturers with:

- A clear, science-backed technical roadmap for product design and production
- Aligned global standards based on benchmarked national and regional requirements
- A pathway to market access across multiple countries and procurement channels through the USP UNIMMAP MMS Verification Program
- Assurance that compliant products will be recognized and trusted by regulators, donors, and purchasers worldwide

Call to Action

Steps National Decision Makers, Donors, and NGOs Can Take:

- Demand high-quality UNIMMAP MMS for pregnant women in your country.
- Use the UNICEF specifications and USP Verification status in procurement processes and supplier selection.
- Prioritize interchangeable, UNICEF-compliant products and manufacturers to ensure consistent quality and efficient deployment across your programs.
- **Together, we can ensure that only the highest-quality products reach the women and babies who depend on them.**

Steps Manufacturers Can Take:

- Follow the UNICEF Technical Requirements for Micronutrient Products and the UNIMMAP MMS Product Specification.
- Consider joining the USP UNIMMAP MMS Verification Program to verify compliance and strengthen market access.
- **Your commitment to these standards ensures product interchangeability, protects your competitive position, and safeguards maternal and child health.**

For More Information:

- UNICEF UNIMMAP MMS Product Specification Sheet: https://www.unicef.org/supply/media/25231/file
- UNICEF Technical Requirements for Micronutrient Supplement Products: https://www.unicef.org/supply/media/24976/file
- USP UNIMMAP MMS Verification Program: https://go.usp.org/usp_unimmap_mms_ver_program
- UNICEF UNIMMAP MMS Resource Hub: https://unimmap-mms.org/
- Nutrition Market Dashboard: https://www.unicef.org/supply/nutrition-market-dashboard

1. Smith ER, Shankar AH, Wu LS, 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 Health. https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(17)30371-6/fulltext 2017;5(11):e1090-e1100. Accessed March 10, 2026.
2. Keats EC, Haider BA, Tam E, Bhutta ZA. Multiple-micronutrient supplementation for women during pregnancy. Cochrane Database Syst Rev. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004905.pub6/full 2019;3:CD004905. doi:10.1002/14651858.CD004905.pub6. Accessed March 10, 2026.