Multiple Micronutrient Powder Supply and Market Update
July 2021

This note provides new information on multiple micronutrient powder supply availability and product offtake through 2020. UNICEF has extended the duration of all six long-term arrangement supply awards from its 2017 tender results, for two additional years through to September 2021 and is issuing a new tender in July 2021.

1. Summary

- Multiple micronutrient powder (MNP) is designed to improve the quality of young children’s diets. It is used in the home fortification of local complementary foods introduced at six months of age. MNP procurement through UNICEF has fluctuated and was at its highest in 2017, reaching approximately 39 million boxes. A lot of this procurement was to replenish UNICEF’s pre-positioned warehouse stocks in Copenhagen, as well as for country deliveries scheduled for 2018, which subsequently resulted in much lower procurement volumes in 2018. In 2020, procurement through UNICEF reached approximately 23 million boxes. UNICEF anticipates its MNP procurement to stabilize at between 15-25 million boxes per year over the next few years, suitable to treat approximately 5-8 million children.
- UNICEF ships deliveries to countries directly from manufacturers as well as from stocks held at its warehouse in Copenhagen. Most of the demand for MNP comes from a number of high-volume countries and projects with fluctuating demand. Globally, in 2019, 58 countries implemented home fortification programmes with support from UNICEF. Of these, 46 countries reported on the reach of MNPs, covering about 16 million children.
- Since the start of the COVID-19 pandemic, UNICEF has been continuously assessing the development and the impact the crisis is having on global manufacturer production capacities, global supply chains, and acute food insecurity. UNICEF has also been assessing any impact that can affect UNICEF’s ability to source and secure any essential and strategic supplies in support of countries, including for specialised nutrition products. To mitigate any risks to MNP supply, UNICEF has increased and brought forward the stock replenishments of its warehouse inventory in Copenhagen to ensure that there is sufficient buffer stock to cover all eventual needs. UNICEF has a geographically well spread supplier base across the globe through six suppliers located on three continents (Africa, Asia, and Europe). Their combined production capacity is sufficient to meet all country requirements, including for customized packaging and sudden unforeseen increases in demand.
- UNICEF will issue a new tender in July 2021. Its last tender in May 2017 concluded with UNICEF issuing long-term arrangements (LTAs) to four suppliers through to September 2019. UNICEF awarded two additional suppliers LTAs in 2018 and had extended the duration of all six LTA supply awards through to September 2020. Since UNICEF is issuing a new tender in July 2021, it required a further extension of all six LTAs trough to September 2021.
- The United States Pharmacopeial Convention (USP) finalized and published in 2018 its Vitamins with Minerals Oral Powder Monograph. This sets an international reference standard for the identity, strength, quality, and purity of MNPs, and will serve as the main reference for UNICEF’s MNP specifications. The World Health Organization (WHO) has included MNPs in the 2019 update of its essential medicines list (EML) and its EML for children (EMLc).

2. Background

Millions of children suffer from undernutrition, which jeopardizes their health, growth, development, and survival. UNICEF, WHO, and the World Bank, recently estimated that 149.2 million children under-five are stunted. Stunting or being too short for one’s age is preventable. However, it is largely irreversible. Stunting has long-term effects on individuals and communities,

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2 One box of MNP contains 30 sachets of 1 g, which is sufficient to support one child for a two-month period based on WHO suggested guidelines of targeting no more than 90 sachets per child over a six-months period = 3 boxes per child per WHO suggested schedule.
as it diminishes cognitive and physical development, weakens the immunity, reduces productive capacity, and can lead to poor health as an adult. Stunted growth and development is the consequence of a poor diet resulting from micronutrient deficiencies and repeated infections during early childhood.

In 2015, world leaders adopted the Sustainable Development Goals (SDGs), which articulate a global plan to eradicate poverty and to ensure a healthy planet. The second SDG and associated targets, notably target 2.2, defines how to end all forms of malnutrition by 2030, including to reach the internationally agreed targets on stunting and wasting by 2025. Malnutrition represents an often-invisible impediment to achieving the SDGs, because of its effects on diminishing a child’s cognitive and physical development and reducing productive capacity.

Micronutrients, also known as vitamins and minerals, are essential components of a high-quality diet and have a profound impact on a person’s health. While they are only required in tiny quantities, micronutrients are the essential building blocks of healthy brains, bones and bodies. There are several main deficiencies:

<table>
<thead>
<tr>
<th>Micronutrient Deficiency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine deficiency</td>
<td>Iodine deficiency is the primary cause of preventable brain damage in children. Its most devastating impacts occur during foetal development and in the first few years of a child’s life. Globally, 30 per cent of the world’s population live in areas with iodine deficiency.</td>
</tr>
<tr>
<td>Vitamin A deficiency</td>
<td>Vitamin A deficiency affects about one third of children living in low- and middle-income countries (LICs and MICs), mainly in sub-Saharan Africa and South Asia. Vitamin A deficiency weakens the immune system and increases a child’s risk of contracting and dying from infections like measles, and diarrhoeal illnesses. Today, more than one third of children in need are not receiving the life-saving benefits of vitamin A supplementation, while 190 million and 293 million suffer from Vitamin A deficiency and anaemia respectively.</td>
</tr>
<tr>
<td>Iron deficiency</td>
<td>Iron deficiency can lead to anaemia, which increases the risk of haemorrhage and bacterial infection during childbirth and is implicated in maternal deaths. In turn, babies may be born prematurely and suffer from infections, learning disabilities, and delayed development. Almost 40 per cent of pregnant women and more than 40 per cent of children under five in developing countries are anaemic. About half of these cases are estimated to result from iron deficiency.</td>
</tr>
<tr>
<td>Zinc deficiency</td>
<td>Zinc deficiency impairs immune function and is associated with an increased risk of gastrointestinal infections. It is also a contributing factor in child deaths due to diarrhoea. Zinc deficiency is especially common in LICs due to the low dietary intake of zinc-rich foods and inadequate absorption.</td>
</tr>
<tr>
<td>Calcium, vitamin D, and folate deficiencies</td>
<td>Calcium, vitamin D, and folate deficiencies are a particular concern during pregnancy, and can lead to a number of health complications for both the mother and growing baby.</td>
</tr>
</tbody>
</table>

Source: UNICEF

MNPs are products designed specifically to address micronutrient deficiencies, including anaemia, by improving the quality of children’s diets and prevent vitamin and mineral deficiencies where access to a diverse range of nutritious foods is limited. They are in the form of a dry powder that can be added to any solid, semi-solid, or soft food that is ready for consumption. MNPs have proven to be both efficient and effective, and studies have found that on average MNPs reduce anaemia in infants and young children from 6 to 23 months of age by 26 per cent and iron deficiency by 52 per cent. MNPs also have a low programmatic imprint and present very few challenges to programmes as they can easily integrate MNPs into their existing local food security programmes and community food practices. WHO suggests fortifying foods with iron containing micronutrient powders in children 2-12 years of age with a regimen target of using 90 sachets over a 6-months period, especially in areas where the prevalence of anaemia in children under five years of age is 20 per cent or higher. As one box

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of MNP contains 30 sachets of 1 g, it is sufficient to support one child for a two-month period based on WHO suggested guidelines of 90 sachets per child over a six-months period, representing three boxes per child.

3. MNP Product and Quality

WHO recommends the use of MNPs that contain iron, vitamin A, and zinc to reduce anaemia and improve the iron status among infants and young children aged 6-23 months, and children aged 2-12 years.\(^\text{15}\) However, it can be difficult to meet a young child’s nutrient needs in settings affected by acute food insecurity or humanitarian crisis, and in settings with predominantly vegetarian diets. As other vitamins and minerals are often absent or lacking in foods typically consumed by young children, UNICEF promotes the use of a 15-component MNP, which it procures in sachets packed in a box or pouch of 30 sachets (Table 1).

### Table 1 MNP Sachet Procured Through UNICEF

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Composition</th>
<th>Frequency of Use</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 box or pouch = 30 x 1-gram sachets</td>
<td>15 vitamins and minerals (including iron, vitamin A, and zinc)</td>
<td>1 sachet a day</td>
<td>Available with standard and customized layout</td>
</tr>
<tr>
<td>1 box = 30 x 1-gram sachets</td>
<td>5 vitamins and minerals (including iron, zinc, vitamin A and C, and folic acid)</td>
<td>1 sachet a day</td>
<td>Only available as customized layout</td>
</tr>
</tbody>
</table>

Source: UNICEF Supply Division

UNICEF supplies MNPs with either a standard or customized layout of sachets and cartons, or pouches. Many country offices choose to order the customized products as it enables government programmes to better adapt the labelling of the product to their local communities. Product messages can provide clear instructions for use in local languages to facilitate consumer compliance and are more likely to be accepted as an intervention. UNICEF issued in 2016 a Technical Bulletin to guide programmes with customization layouts.\(^\text{16}\) Since 2007, on average 40 per cent of all MNPs procured through UNICEF have been for products with a customized layout.

WHO included MNPs in the 2019 update of their EML and EMLc.\(^\text{17}\) These guidance documents help countries prioritize critical health products that should be widely available and affordable throughout national health systems. WHO’s inclusion of MNPs into their EML and the EMLc confirms that MNPs should be considered an essential product that can have an impact on public health. It is also a step towards making MNPs more accessible to children in need and to ensure greater cost-effectiveness in delivery through health systems. MNPs are recommended for the prevention of anaemia in infants and young children in

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\(^{15}\) Ibid, p. 5.
populations where anaemia is a public health problem, in line with the recommendations of current WHO guidelines on point-of-use fortification of foods.\textsuperscript{18}

UNICEF and the USP have been collaborating to develop a monograph for MNPs. Monographs are the official publications that set the quality standards for active ingredients and product formulations. Manufacturers, regulatory authorities, as well as any agencies or organizations can check the quality of a product or its active ingredient by referencing monographs and use them as an integral part of product quality assurance, authorization, and release. The USP Vitamins with Minerals Oral Powder Monograph, used for MNPs, was completed in 2018. It sets the international reference standard for the identity, strength, quality, and purity of MNPs, and which is the reference for UNICEF’s MNP specifications. The monographs (part of the USP compounding compendium) is a USP product. Anyone needing to access the monograph will need to purchase a subscription to see the monographs, accessible here: The United States Pharmacopeia National Formulary.\textsuperscript{19} Anyone requiring more detailed information can contact nfmonographs@usp.org or visit https://www.usp.org


The Global Network Against Food Crises, which includes the European Union, (EU), the United Nations (UN) Food and Agriculture Organization (FAO), the UN Office for the Coordination of Humanitarian Affairs (OCHA), the US Agency for International Development (USAID), the World Food Programme (WFP), as well as UNICEF, recently reported that around 155 million people across 55 countries are in food crisis or worse, representing an increase of 20 million since 2019, experiencing acute food insecurity requiring urgent food, nutrition, and livelihoods assistance for survival.\textsuperscript{20} The primary causes of acute food insecurity were due to conflict, insecurity, economic shocks, COVID-19, and weather extremes. Many of the causes co-exist and reinforce one another.\textsuperscript{21}

Manufacturers of specialized nutrition products are geographically well spread across the globe. Commodities used in nutrition programmes such as MNPs and anti-anaemias (iron folic acid and others) can be delivered from UNICEF’s warehouse in Copenhagen or directly from manufacturers. Replenishment of UNICEF’s warehouse inventory in Copenhagen is being increased and brought forward to ensure that there is enough buffer stock to cover any eventual needs. The supplier base for MNPs is considered healthy and have a large production capacity in Africa, Asia, and Europe. Similarly, for anti-anaemias with suppliers in Asia and Europe. However, the current COVID-19 pandemic is applying global pressure on all manufacturer production capacities and global supply chains and is impacting market assessments and forecasts. Since the start of the pandemic, UNICEF has been undertaking a continuous assessment of developments and the impact this crisis is having on being able to source essential and strategic supplies, as well as shipping freight and logistics.

One of the long-term logistical consequences of the COVID-19 pandemic that is now having serious consequences is the major disruptions to the global shipping industry. It is challenging the delivery of critical supplies, including pharmaceuticals, water, sanitation, education, and hygiene supplies. The current global shipping capacity is now very tight, with sea carriers preferring to position as many available containers and equipment as possible on the more highly profitable sea lanes between Asia-Europe and Asia-USA, which is resulting in a build-up of containers at European and US ports and shortages in Asia. Vessel cancelations continue, with no commitments being made on transit times due to congestion at transhipment hubs. Given tight container fleets, compounded by the shift in trade imbalances, UNICEF anticipates that it could take up six months before any shipping capacity is normalized until 3\textsuperscript{rd} or 4\textsuperscript{th} quarter 2021, with shipping container leasing rates having increased by approximately 50 per cent in the past six months period, and has noted the global price increases of many raw materials. UNICEF has mitigated some of the impact of reduced shipping capacity by applying a flexible and agile interim strategy to overcome difficulties and identifying alternative solutions.

As UNICEF procures and ships some of its MNP products for use in emergencies, they are also vulnerable to the disruptions from global airfreight, as well as any logistical bottlenecks created by border closures, export bans, and reductions to sea, air, and road transport, which can also have an impact on the production of finished products if manufacturers rely on the importation of raw materials and packaging.

\textsuperscript{21} Ibid.
In 2018, the size of the global food premix market was estimated to be USD 1.14 billion and is anticipated to grow at a compound aggregate growth rate (CAGR) of 5.3 per cent to reach USD 1.5 billion in 2023. The vitamins segment accounted for a substantial share in value in 2018. This is due to the continuous and innovative customized premix development by manufacturers in the global market with significant applications in bakery, beverages, cereals, confectionery, dairy, dietary supplements, amongst many others.\(^\text{22}\)

MNPs for point-of-use fortification of complementary foods are a niche product used in public health programmes. UNICEF is the biggest buyer of MNPs, followed at a distance by governments and others. WFP procures MNPs in eight-gram sachets for use in school feeding programmes. UNICEF’s procurement volumes are small compared to the global food premix market, and only reached USD 22.6 million at its highest in 2017, representing a market share of approximately two per cent.

4.1 Demand and Forecast through UNICEF

UNICEF procures MNP to pre-position stocks at its warehouse in Copenhagen and for direct delivery to countries. Country demand for MNP increased from approximately 900,000 boxes (27 million sachets) in 2007 to reach 39.3 million boxes (1.2 billion sachets) in 2017. UNICEF has been procuring MNP on behalf of 80 different countries since 2007. Sixty-five per cent of these countries are MICs, accounting for 47 per cent of the value of MNP procurement. LICs make up a third of the countries accounting for 53 per cent of value. The majority of countries have been in Asia, Europe and Central Asia (ECA), formerly Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS), as well as countries in Latin America and the Caribbean (Figure 1). However, demand in sub-Saharan Africa has also been increasing significantly since 2013, accounting for 30 countries. In 2017, overall demand decreased due to fewer orders in a few major procuring countries.

Figure 1 UNICEF Deliveries by Region and Number of Countries Supplied 2007-2020

The significant increase in demand since 2013 is due to the introduction and scaling up of existing programmes. More than three quarters of all MNP interventions globally are integrated into infant and young children feeding (IYCF) programmes, which is a critical step to improving the knowledge of caregivers on complementary feeding practices, while at the same time increasing the nutrient intake by children from complementary foods. Globally, 58 countries currently implement home fortification programmes with UNICEF support (following the latest available estimates). The number of children benefiting from home fortification programmes quadrupled from 2014 to 2019, increasing from 4 million to 16 million children, and has surpassed UNICEF’s 2021 target of reaching 12 million.\(^\text{23}\)


Procurement volumes tend to experience year-to-year fluctuations as some key country programmes order MNP every second year. In 2015, country demand doubled compared to previous years to reach 24.2 million boxes. 2016 and 2017 saw record procurement volumes reaching 38.9 million and 39.3 million boxes respectively, representing a value of USD 21.8 million and USD 22.6 million. Many of the procurement orders placed through UNICEF in 2017 were for delivery to countries as well as to replenish UNICEF emergency warehouse stocks in 2018. This resulted in a far fewer orders being placed in 2018 and much lower procurement volumes, only reaching 6.4 million boxes. In 2019, procurement levels moderately increased again to reach 15.9 million boxes, followed by a further increase to 23.2 million boxes in 2020 (Figure 2).

Figure 2 UNICEF MNP Procurement and Forecast 2007-2021

Approximately two thirds of UNICEF’s procurement volumes are shipped directly from manufacturers (including all MNPs with customized layout), with UNICEF procuring approximately one third as pre-positioned stocks placed at its warehouse in Copenhagen. The consolidation of current programmes and the scale up from product introduction in new countries due to the support from donors and the investments from governments account for the increase since 2012. UNICEF anticipates that its MNP procurement will stabilize at around 15-20 million boxes per year for the coming years.

Country demand forecasts are subject to inaccuracy and uncertainty particularly on the timing of scale-up and product introduction. These forecast limitations can lead to MNP supply constraints, as most manufacturers make MNPs to order, not to stock. In 2013, UNICEF and partners established the Nutrition Dashboard (NutriDash) to help address these challenges. NutriDash is a web-based database used to collect and strengthen nutrition programme information. The dashboard information is used to support programme management, advocacy, and mobilize resources, as well as to improve country demand forecasting. It assists countries to project supply requirements and ensure timely delivery and includes home fortification programmes (Figure 3, next page).

NutriDash reports that various country home fortification programmes have reached 16 million children with MNPs globally, these are with or without UNICEF support. UNICEF supports countries in several different ways and can comprise a mix of combined responses to include financial and technical support, or both, as well as supplies depending on the country’s requirements. The number of children reached with UNICEF’s support in 2019 was about 16 million children, although some countries with very high numbers only benefitted from UNICEF’s technical support and did not procure supplies through UNICEF. UNICEF directly supplied 35 countries with 19.5 million boxes of MNP, reaching an estimated 6.5 million children.

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25 One box of MNP contains 30 sachets of 1 g, which is sufficient to support one child for a two-month period based on WHO suggested guidelines of targeting no more than 90 sachets per child over a six-months period = 3 boxes per child per WHO suggested schedule.
Based on UNICEF, WHO, and the World Bank’s recent 2021 estimates, approximately 149.2 million children under-five are stunted.\textsuperscript{26} UNICEF anticipates procuring between 15-20 million boxes over the coming year, which is sufficient to reach approximately 5-7 million children with supply based on WHO’s suggested guidelines.\textsuperscript{27}

**Figure 3 UNICEF Home Fortification Programme with Micronutrient Powders**

Fifty-eight countries report implementing home fortification programmes with MNPs. However, substantially more effort is needed to increase the level of coverage in treating children under five years of age if the international community is to achieve the SDG target on nutrition,\textsuperscript{28} notably to reach its internationally agreed targets on stunting and wasting by 2025 and to end all forms of malnutrition by 2030. Malnutrition represents one of the invisible impediments to achieving the SDGs, because of its effects on children and their ability to achieve their full potential as adults. Countries could improve on increasing the coverage and scaling up the use of MNP interventions by strengthening the integration of MNPs into nutrition services and delivery through the relevant health care systems, better supply-chain management, and improved monitoring and reporting.

### 4.2 Supply

UNICEF’s last MNP tender was in May 2017 for the period September 2017 to September 2019, having evaluated products from 16 suppliers. UNICEF awarded two-year LTAs to four suppliers (through until September 2019). UNICEF added an additional supplier in January 2018 after its manufacturing site passed a positive Good Manufacturing Practice (GMP) inspection, and a sixth supplier was added in February 2018 after resolving outstanding technical requirements. UNICEF has

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\textsuperscript{27} WHO, *Guideline: Use of Multiple Micronutrient Powders for Point-of-use Fortification of Foods Consumed by Infants and Children 6-23 Months and Children Aged 2-12 Years*, p. 4.

extended all six LTA durations by two additional year through to September 2021 (Table 2). UNICEF’s six approved suppliers are located on three continents (Africa, Asia, and Europe), and have a combined production capacity sufficient to meet all country requirements, including for customized packaging and unexpected sudden increases in demand. UNICEF is issuing a new tender in July of 2021.

Table 2 Current UNICEF MNP Supply Arrangements

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Type of supply</th>
<th>Duration months</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSM Europe (Switzerland)</td>
<td>Global</td>
<td>24+12+12</td>
<td>25-Sept-17</td>
<td>24-Sept-21</td>
</tr>
<tr>
<td>DSM (South Africa)</td>
<td>Global</td>
<td>24+12+12</td>
<td>25-Sept-17</td>
<td>24-Sept-21</td>
</tr>
<tr>
<td>Renata (Bangladesh)</td>
<td>Global</td>
<td>24+12+12</td>
<td>25-Sept-17</td>
<td>24-Sept-21</td>
</tr>
<tr>
<td>Piramal (India)</td>
<td>Global</td>
<td>24+12+12</td>
<td>25-Sept-17</td>
<td>24-Sept-21</td>
</tr>
<tr>
<td>Hexagon (India)</td>
<td>Global</td>
<td>20+12+12</td>
<td>24-Jan-18</td>
<td>24-Sept-21</td>
</tr>
<tr>
<td>DSM (Malaysia) / formerly Fortitech</td>
<td>Global</td>
<td>19+12+12</td>
<td>24-Feb-18</td>
<td>24-Sept-21</td>
</tr>
</tbody>
</table>

Source. UNICEF Supply Division

5. Pricing

The Weighted Average Price (WAP) per pack of MNPs has been relatively stable from 2015-2020 (Figure 4), currently reaching USD 0.55 a box. As large procurement volumes are placed against LTAs in Euro, some of the large price fluctuations and the notable decreases in the WAP over 2014-2015 was attributed to the exchange rate fluctuations between the USD and Euro. Since this period, prices have largely remained stable.

Figure 4 MNP USD Price per Box Delivered to UNICEF Copenhagen and Countries per Incoterm 2012-202029

One box, currently costing a WAP of USD 0.55, if used correctly to fortify a child’s daily main meal, would represent a cost of approximately USD 0.018 per meal. Or put another way, it would cost approximately USD 1.65 to provide MNP for one child in accordance with WHO’s suggested guidelines of no more than 90 sachets per child over a six-month period. This cost excludes freight costs and all programmatic implementation costs.

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29 Incoterms: Delivered at Place (DAP), and Free Carrier Named Place (FCA) to nearest sea- or airport.
UNICEF seeks to enhance the flow of market information and to improve the functioning of key markets by publishing a dashboard highlighting critical determinants of a product’s market health, including affordability. UNICEF’s pricing dashboard summarises UNICEF’s market assessment of strategic essential lifesaving products for women, children, and young people, and includes MNP. UNICEF regularly updates its prices for nutrition products, which it lists on an online interactive searchable database, accessible here.30

**Figure 5 UNICEF Multiple Micronutrient Powder Price Data**

![Multiple Micronutrient Powder (MNP) Price Data](source: UNICEF Supply Division)

6. **Issues and Challenges**

- Country demand forecasts are often subject to inaccuracy and uncertainty, particularly on the timing of scale-up and product introduction. These forecast limitations can lead to MNP supply constraints, as customized MNPs (accounting for up to 40 per cent of total quantities since 2007) are made to order and not to stock. MNPs with standard layout can be delivered from buffer stocks held at UNICEF’s warehouse in Copenhagen.
- Many countries have only prioritized programmes to address stunting relatively recently, and while there is progress being made, with many country programmes having overarching strategies or frameworks to address stunting, very few countries include the reduction of stunting as a specific target, outcome, or output, to be measured.31
- Many UNICEF country programmes reflect the cooperation with national governments and are aligned with national priorities, which need to include a reduction in the prevalence of stunting. Country programmes need to seize on the opportunities to strengthen approaches, partnerships, and strategic alliances at regional and country levels to include a holistic approach to nutrition, combined with water, sanitation, hygiene, health, and food security.
- Programmes should also not only identify stunting in disaggregated community groups, but to include approaches to ensure an intervention’s long-term sustainability.

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7. Steps Forward

- UNICEF will continue to support the scale-up of MNPs as part of infant and young child feeding programmes across countries in the seven regions. This will include better understanding and addressing the barriers and bottlenecks of MNP programmes at country level coupled with global guidance and advocacy through HF-TAG\(^\text{32}\). MNPs and complementary and supplementary foods more in general are also being recognised and integrated as part of wasting prevention programmes and plans, especially with the Global Action Plan for Wasting.\(^\text{33}\)
- UNICEF will continuously and closely monitor the evolution of the COVID-19 pandemic and the impact it is having on the supply of specialized nutrition products, including MNPs, as well as its impact on supply chains.
- UNICEF will continue to use the best available MNP forecast data to inform the industry and will continue to strengthen forecast accuracy as a result of NutriDash and other related efforts. UNICEF anticipates further improvements in forecast accuracy based on country feedback and collaboration, following repetitive forecasting exercises, as well as the encouragement of all countries with home fortification programmes using MNPs to participate.
- UNICEF will continue to work with manufacturers to maintain and improve the quality and capacity of production.
- UNICEF anticipates issuing a new tender in July 2021 to secure MNP supply for 2022 onwards.

For further questions or additional information, please contact:

Akthem Fourati  
Chief, Medicine and Nutrition Centre  
UNICEF Supply Division  
+45 45 33 57 65  
afourati@unicef.org

Jan Debyser  
Contracts Manager  
UNICEF Supply Division  
+45 45 33 56 43  
jdebyser@unicef.org

Aadrian Sullivan  
Information Management  
UNICEF Supply Division  
+45 45 33 57 68  
asullivan@unicef.org

Other UNICEF information notes can be found at: https://www.unicef.org/supply/market-notes-and-updates

UNICEF issues market and information notes on products and supplies that are essential for the needs of children, and by extension their families. While some products are easily available and affordable, the availability of others can be limited, or in some instances, non-existent in the quality and price required. UNICEF places a strategic focus on these supplies to shape healthy markets. UNICEF seeks to influence the market to achieve greater coverage, affordable prices, diversified supplier bases, competitive market landscapes, and product quality that is fit for purpose and in the right form for children.

\(^{32}\) Home Fortification Technical Advisory Group  