

NO TIME TO WASTE

Improving diets,
services and practices
for the prevention,
early detection and
treatment of wasting
in early childhood



unicef 
for every child

ACKNOWLEDGEMENTS

This publication was prepared by the Nutrition Section at UNICEF Programme Division in New York.

Authorship: This publication was prepared by UNICEF Global Nutrition Team in New York and Regional Offices. **Editor:** Julia D'Aloisio;
Designer: Nona Reuter

Citation: United Nations Children's Fund (UNICEF). *No time to waste: Improving diets, services and practices for the prevention, early detection and treatment of wasting in early childhood.* New York: UNICEF, 2021

© United Nations Children's Fund (UNICEF)

April 2021

Permission is required to reproduce any part of this publication.
Permissions will be freely granted to educational or non-profit organizations.

Published by:
UNICEF
Nutrition Section, Programme Division
3 United Nations Plaza
New York, NY 10017, USA

Photography credits: Cover: © UNICEF/UNI151819/Zaidi, page 4: © UNICEF/UN0383977/Ralaivita; © UNICEF/UNI303242/Frank Dejongh; © UNICEF/UN0143090/LeMoyne; © UNICEF/UNI235963/Noorani; page 7: © UNICEF/UNI316678/Frank Dejongh; © UNICEF/UN0392528/Kolari; © UNICEF/UN0143440/Alhariri, page 8: © UNICEF/UN0345045/Wilson; © UNICEF/UN0403723/Raab; © UNICEF/UNI187266/Noorani; page 16: © UNICEF/UN0403545/Raab; © UNICEF/UN0378669/Tamiru; © UNICEF/UNI312547/Alghabri; © UNICEF/UNI313327/Coulibaly

NO TIME TO WASTE

Improving diets, services and practices for
the prevention, early detection and treatment
of wasting in early childhood



THE CHALLENGE



Children suffering from wasting are up to eleven times more likely to die than well-nourished children. This makes wasting one of the most significant contributors to child mortality.

Today, an estimated 45.4 million children under 5 suffer from wasting and 13.6 million (approximately one-third) of these children suffer from severe wasting, the most life-threatening form of child malnutrition.¹ More than half of children with wasting live in Asia, and an estimated one in four live in humanitarian contexts. Globally, an estimated 6.7 per cent of children under 5 suffer from wasting and there has been little progress towards the Sustainable Development Goal (SDG) target of reducing the prevalence of child wasting to <5 per cent by 2025 and <3 per cent by 2030.

The impact of the COVID-19 pandemic on livelihoods, food security, feeding and care practices, and access to essential services is likely to increase the proportion of children suffering from wasting and reduce their access to life-saving treatment. By 2022, the number of children with wasting could increase by 20 per cent as a result of the socio-economic impact of the pandemic, with consequences that are likely to endure for years to come.² Within this context, there is an immediate need

to accelerate prevention, early detection, and treatment efforts to address child wasting more effectively.

WE KNOW WHAT TO DO TO PREVENT WASTING – BUT WE NEED TO IMPROVE HOW WE DO IT

We know what is needed to achieve reductions in child wasting. We need to ensure that:

1. Children are born with a healthy weight;
2. Children benefit from nutritious and safe diets and positive feeding and care practices; and
3. Children have access to essential nutrition, health, water, and sanitation services

The 1,000 days from conception to the second year of life are a unique window of opportunity to prevent child wasting by ensuring: adequate maternal nutrition during pregnancy and lactation; early and exclusive breastfeeding during the first six months of life; age-appropriate complementary foods and feeding practices with continued breastfeeding until 2 years of age; and access and use of essential nutrition and health services through primary health care.

Services are in place to prevent child wasting in many settings. However, they are not always as effective as they could be – in part, because of the way they are designed and implemented. The result is that women and children at risk are not systematically being reached at the right time, with adequate quality and intensity, and/or for the appropriate duration. The three main roadblocks to the prevention of child wasting are:

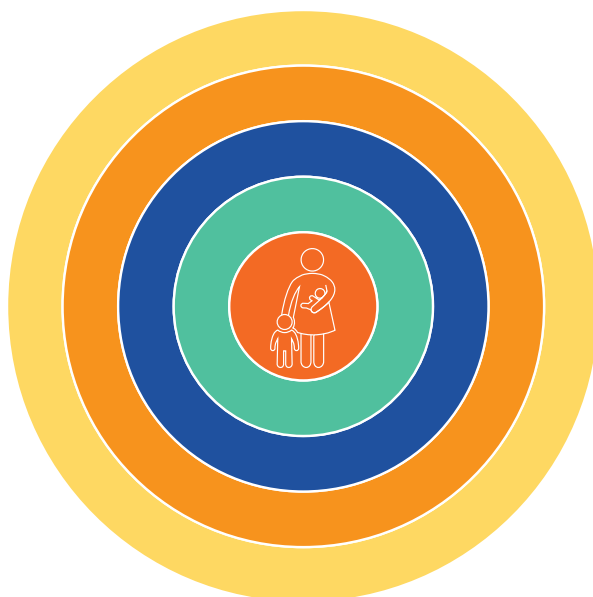
- First, like all forms of malnutrition, the determinants and drivers of wasting vary depending on the context and environment in which a child lives. Yet **interventions to tackle wasting do not systematically identify and map-out these determinants and drivers.** Instead, national responses to prevent wasting are often based on a generic understanding of the determinants and drivers of undernutrition and lack contextual specificity.
- Second, children, households and communities have varying levels of vulnerability to the context-specific determinants and drivers of wasting, but these **specific vulnerabilities are not systematically considered when designing programmes for the prevention of child wasting.** Furthermore, the age of a child is generally overlooked when considering vulnerabilities, even though children under 2 are at heightened risk of developing – and dying from –

wasting. Even when context-specific determinants and drivers are understood, this knowledge does not always translate into actions that prioritize the children, households and communities that are most in need.

- Third, the set of essential nutrition actions required to address key determinants and drivers of wasting **are not always available at the right time, in the right quantity or with the right quality to provide constant protection to the children who need it most.** Some children benefit from some of the actions some of the time, leaving most children vulnerable and limiting population-level progress in reducing child wasting. The risk of wasting in many contexts is also driven by seasonal variations. Adaptions to intensify programme actions and delivery are key to protect against these seasonal spikes in the incidence of child wasting.

To reduce wasting, all three roadblocks must be addressed. A revised preventive approach that protects vulnerable children, women and households can dramatically reduce the number of children who become wasted. Some children will invariably still become wasted, and when prevention fails, treatment is a must.

Maternal- and child-centred essential nutrition actions for the prevention of child wasting



- **Essential nutrition, health, water, and sanitation services.**
- **Adequate maternal nutrition and a healthy birth weight**
- **Nutritious and safe diets and positive feeding and care practices**
- **Early detection and treatment of children with wasting at risk**

IN THE CONTEXT OF LIMITED RESOURCES, WE MUST PRIORITIZE THE MOST VULNERABLE AND MAKE IT EASIER FOR GOVERNMENTS TO OFFER ROUTINE SERVICES FOR THE EARLY DETECTION AND TREATMENT OF CHILD WASTING

In 2020 about 5 million children with life-threatening wasting were treated worldwide annually, which means that only 1 out of 3 children in need had access to treatment. To reach the almost 10 million children with life-threatening wasting that go untreated every year, we need to address the following practical challenges:

The first challenge is to **prioritize the financial resources available for treating wasting to protect children at highest risk of death**. Resources for the treatment of wasting are spread equally across children with moderate and severe forms of wasting – but children with severe forms of wasting are twice as likely to die than children with moderate forms.³ Resources should be prioritized to the children with more severe forms of wasting. In addition, children between the ages of 6 months and 5 years are targeted equally for treatment – but the burden of mortality among children <24 months is much higher than among children ≥24 months.⁴ Resources should be prioritized to the youngest children.

The second challenge is to **scale up access to and reach of early detection and treatment**. In fact, only an estimated one in three children can access existing services across most contexts, noting this is a particular challenge for infants under 6 months of age. Levels of coverage vary, but the overall low levels currently achieved are the result of three operational limitations:

- **Treatment of child wasting is poorly integrated into routine services for children**. This is the result of the lack of a coordinated effort to accelerate the integration of early detection and treatment into primary health care, as well as the complexity of current treatment protocols, which make it difficult for health providers to seamlessly add the treatment of wasting to their portfolio of services.
- **The treatment of child wasting is widely perceived as being costly**, although current evidence suggests that it is one of the most cost-effective child survival interventions, capable of saving thousands of lives,⁵ it is widely perceived as being costly. High treatment costs are largely the result of late presentation (which leads to longer-

treatment), suboptimal use of key commodities (including ready-to-use therapeutic foods (RUTF)) and the overall cost of these commodities.

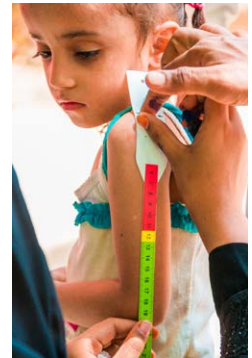
- **Treatment of child wasting in health facilities is often prohibitively expensive for families** because of transport and/or user fees involved. Building on the example of other child survival services – including treatment for malaria, pneumonia and diarrhoea – community-based early detection and treatment of children with wasting can and must be taken to full scale.

The final challenge is to **increase the availability of commodities for the early detection and treatment of children with wasting** – in particular RUTF. This key commodity is not yet included in the essential medicines/commodities list in many countries and is thus not routinely procured by national governments. The scale and reach of treatment services today are directly proportional to the resources available for RUTF; and resources are in turn heavily dependent on the availability of emergency/humanitarian funding.

Today, an estimated 90 per cent of cartons of RUTF procured in the world are purchased with emergency/humanitarian funding, even if only 25 per cent of children with wasting live in such contexts. Expanding access to treatment can only be achieved if national governments mobilize resources to procure RUTF, and if new, more cost-effective RUTF formulations are taken to market. As these two measures are put in place, global financing mechanisms need to be incentivized to play a more active role in ensuring that treatment services are sufficiently stocked with RUTF to meet global demand.



THE OPPORTUNITY



Never has the world been better prepared to meet these challenges and ensure that the SDG targets on child wasting are met.

At a practical level, the COVID-19 pandemic has created the conditions to accelerate innovative programmes and solutions to prevent, detect and treat child wasting. The UNICEF-WHO implementation guidance, released in 2020 to guide global adaptations to meet the challenges created by COVID-19, has accelerated the roll-out of new technologies to ensure the continuity of preventative services.⁶ At the same time, simplified approaches and protocols for the early detection and treatment of child wasting, including the involvement of community-based workers in delivering treatment, have also seen rapid uptake in many contexts.

COVID-19 has amplified the problem of child wasting, but it has also created a unique set of conditions that are enabling governments and partners to make quantum leaps in the field of innovation.

At a political level, the conditions today are ideal for mounting a concerted effort to address child wasting. In mid-2019, the United Nations Secretary-General commissioned United Nations agencies to develop a

Global Action Plan (GAP) on Child Wasting – the first-ever global plan to achieve the SDG targets on child wasting. The GAP outlines key commitments by national governments, United Nations agencies, civil society organizations, academics and private sector partners to accelerate progress on child wasting by 2025. In addition, the recently concluded UNICEF-World Food Programme (WFP) Partnership Framework for Addressing Wasting in Children provides a framework for streamlined and impactful actions to reduce child wasting and expand treatment, particularly in humanitarian contexts.

The GAP and the UNICEF-WFP Partnership Framework create a unique opportunity to recognize child wasting as a global development priority, and to mobilize inter-agency efforts at a global, regional and national level in a decisive, coordinated manner.

Never has UNICEF been better prepared to lead and coordinate efforts to address child wasting at scale.

In 2020, we launched *Nutrition, for Every Child: UNICEF Nutrition Strategy 2020–2030*⁷ setting forth our strategic intent to support national governments and partners in upholding children’s right to nutrition and ending child malnutrition in all its forms.

The Strategy lays out UNICEF’s **vision** of “**a world where all children, adolescents and women realize their right to nutrition**”. This vision is guided by the Convention on the Rights of the Child, which recognizes the right of every child to adequate nutrition.

The **goal** of the Strategy is “**to protect and promote diets, services and practices that support optimal nutrition, growth and development for all children, adolescents and women**”. This goal aims to contribute to the goal of the 2030 Agenda for Sustainable Development to ensure children’s access to nutritious diets and to end child malnutrition in all its forms.

The vision and goals of UNICEF’s Nutrition Strategy are realized through programmes that share **a universal premise: prevention comes first, in all contexts; if prevention fails, treatment is a must.**

UNICEF nutrition programmes aim to prevent child malnutrition in all its forms across the life cycle. When efforts to prevent malnutrition fall short, our programmes aim to ensure the early detection and treatment of children suffering from wasting and other forms life-threatening malnutrition, both in development and humanitarian contexts.

To do so, UNICEF organizes its programming for maternal and child nutrition into six results areas (see Box 1). Results Areas 1–3 embody the importance of preventative action, whilst Result Area 4 reflects UNICEF’s commitment to improving access to early detection and treatment of wasting for those who need it, both in development and humanitarian contexts.

UNICEF’s Nutrition Strategy 2020-2030 offers a comprehensive and purposeful framework to guide our collective efforts over the next decade. Guided by the Strategy, **No Time to Waste** is our approach to scale up **prevention, early detection and treatment of wasting for the most vulnerable children: the youngest of the young, the poorest of the poor, and those left behind by humanitarian crises.** A plan that recognizes the importance of protecting children from wasting and offers concrete actions and commitments to do so in a way that is commensurate to the scale and urgency of this need.

Box 1

UNICEF Nutrition Strategy 2020–2030: Results Areas

Results Area 1: Early childhood nutrition

– encompasses UNICEF’s programming for the prevention of all forms of malnutrition from birth to five years of age, including undernutrition – both stunting and wasting – micronutrient deficiencies and overweight.

Results Area 2: Nutrition in middle childhood and adolescence

– encompasses UNICEF’s programming for the prevention of all forms of malnutrition in middle childhood (ages 5–9 years) and adolescence (ages 10–19 years), including undernutrition, micronutrient deficiencies and overweight.

Results Area 3: Maternal nutrition

– encompasses UNICEF’s programming for the prevention of all forms of malnutrition in women during pregnancy and breastfeeding – including undernutrition, micronutrient deficiencies and overweight – and the prevention of low birthweight in newborns.

Results Area 4: Nutrition and care for children with wasting

– encompasses UNICEF’s programming for the early detection and treatment of wasting in early childhood, through facility- and community-based approaches, as part of a continuum of nutrition, care and support for infants and young children.

Results Area 5: Maternal and child nutrition in humanitarian action

– encompasses UNICEF’s nutrition programming in emergencies and is guided by UNICEF’s Core Commitments for Children in Humanitarian Action and UNICEF’s commitments as Cluster Lead Agency for Nutrition.

Results Area 6: Partnerships and governance for nutrition

– encompasses UNICEF’s programming to strengthen the enabling environment for maternal and child nutrition at global, regional and country level through improved partnerships, data, knowledge, advocacy and financing.



THE STRATEGIC APPROACH



UNICEF's primary goal is to ensure that no child dies from wasting. Our approach aims to simultaneously accelerate progress on two inter-related fronts:

- reducing the number of children suffering from wasting; and
- increasing the number of children with life-threatening wasting who access treatment.

To do so effectively, UNICEF aims to harness a number of global partnerships to unlock five key policy, programmatic and financial enablers:

- 1. Improved geospatial allocation of services for the prevention, early detection and treatment of child wasting:** With the support of national, regional and global partners, UNICEF aims to use innovative technologies to identify specific 'hot-spots' in countries with persistently high levels of child wasting.⁸ This will help prioritize services and resources where they can be most impactful, improve targeting over time and space, and allow for better allocation of resources to the prevention, early detection and treatment of child wasting.
- 2. A coordinated approach to integrate essential maternal and child nutrition services for the prevention, early detection and treatment of child wasting, with emphasis on children under two:** With the support of key partners, including national governments, the World Health Organization (WHO) and other United Nations agencies and development partners, UNICEF aims to harmonize and coordinate efforts to integrate essential nutrition actions, including the prevention and treatment of child wasting, into national systems and services. This will accelerate and improve the availability and accessibility of these essential services.
- 3. A targeted evidence generation agenda on the prevention, early detection and treatment of child wasting:** With the support of partners, UNICEF aims to document pathways towards reducing the incidence of wasting in a variety of vulnerable contexts, while generating new evidence to simplify and optimize protocols and programmes for the treatment of child wasting.

4. **New RUTF financing mechanisms:** With the support of partners, UNICEF aims to introduce new financing mechanisms to incentivize greater domestic resource allocation, reduce stockouts and reduce the cost of RUTF. This will improve the availability and sustainability of treatment for child wasting.

5. **Roll-out innovative RUTF formulations:** With the support of academic and private sector partners at national and global levels, UNICEF aims to accelerate the testing and roll-out of a new generation of RUTFs. This will improve the cost-effectiveness and availability of treatment for child wasting.

By unlocking these **five policy, programmatic and financial enablers**, UNICEF aims to accelerate progress towards achieving five strategic results.

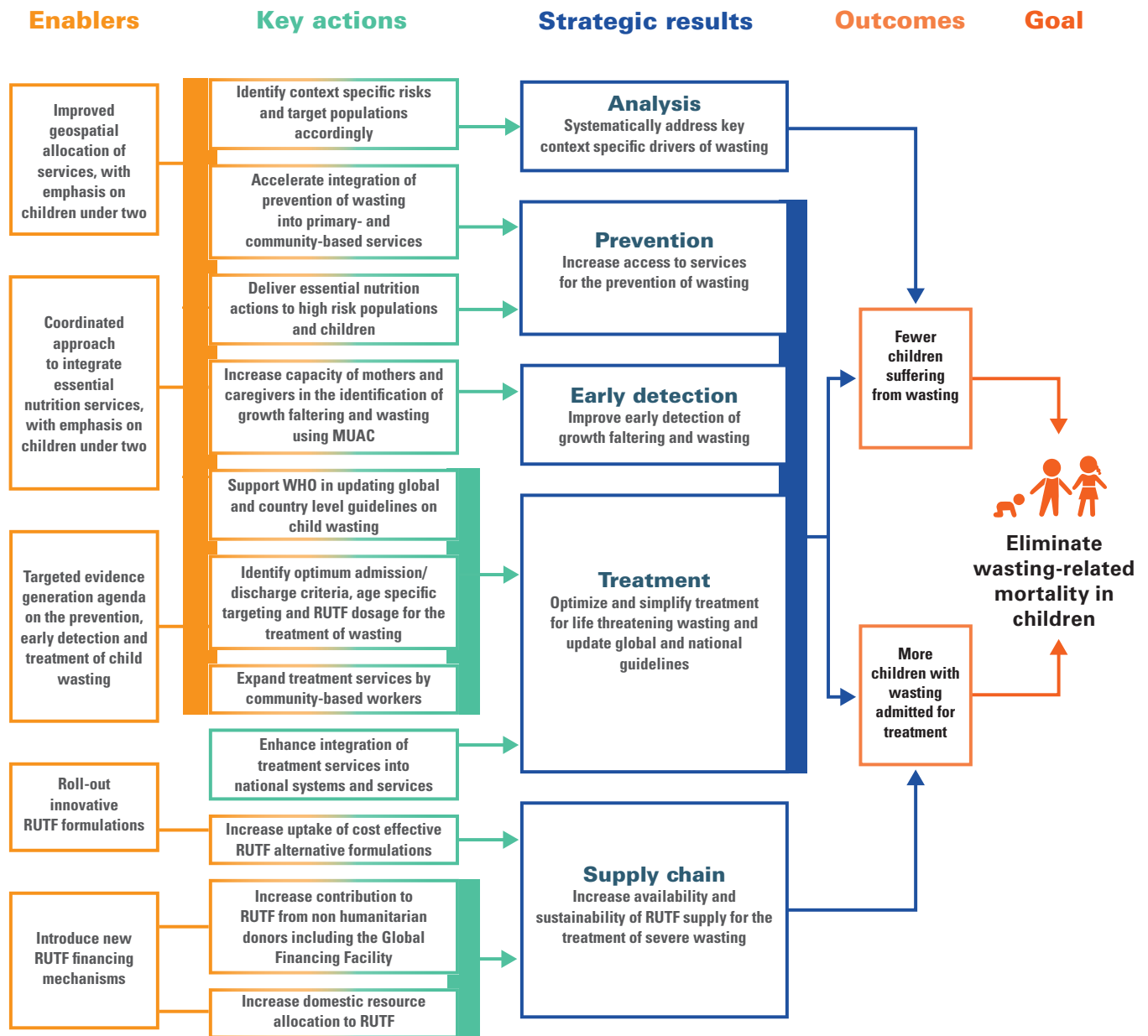


Figure 1. UNICEF strategic approach to address child wasting

STRATEGIC RESULTS

UNICEF and its partners will focus on five key results that will accelerate and improve the prevention, early detection and treatment of child wasting. To achieve these five results, UNICEF focuses on a series of specific actions, which are described below.

RESULT 1.

ENHANCED ANALYSIS TO ADDRESS CONTEXT-SPECIFIC DRIVERS OF CHILD WASTING

Action 1.1. Identify context-specific determinants and drivers of child wasting and high-risk children and populations

Over the last decades, efforts to prevent wasting have focused on addressing risks to the health and food security status of populations. However, a growing number of targeted efforts are shedding light on the causes behind persistently high levels of wasting in some populations. Recent analyses have shown how the drivers of wasting in the African drylands⁹ (see case study below) are different to the drivers of wasting in South Asia.¹⁰ These and other context specific analyses have also helped to gradually improve our ability to identify and target specific population groups known to be particularly vulnerable to wasting. Our immediate priority is to operationalize this knowledge: to put this growing body of evidence into practice by ensuring a robust understanding of the determinants and drivers of wasting in each context and by establishing a more nuanced understanding of the populations and population groups that must be prioritized.

Contexts and communities are different, and a one-size-fits-all approach to the implementation of nutrition interventions is therefore ineffective. Unpacking the context specific determinants and drivers of wasting is necessary to develop appropriate preventive interventions. Through partnerships with research institutions, UNICEF aims to build the evidence base to reduce

the burden of wasting in different vulnerable contexts. This includes identifying core actions to be delivered at scale to targeted vulnerable groups. These actions are selected based on a theory of change for the different contexts, with flexibility to respond during times of increased food insecurity.

A further strategic shift is needed to focus on the children at greatest risk of becoming wasted in order to prioritize resources accordingly. Wasting is increasingly recognized in infants under 6 months of age and is often associated with higher mortality. Globally, an estimated 8.5 million infants aged 6 months or younger are wasted.¹¹ Many more underweight, stunted, and/or low birthweight children are also at increased risk of death, illness, and poor developmental outcomes because of wasting in early childhood. Urgent and intensified efforts are therefore required to intervene early to protect these young children from becoming wasted while treating those who do become wasted, to provide them with the best opportunities for survival and development. While the specific needs of this vulnerable group have been largely unmet, in recent years new approaches have shown promise, including the MAMI Care Pathway (2021) and therefore the opportunity to refocus efforts.

Case Study

Understanding and responding to drivers of child wasting in Africa's drylands

Africa's drylands support millions of people, and despite the harsh climatic conditions, contribute significantly to national economies (primarily through the provision of livestock products). These areas, however, bear the brunt of climatic changes. With population growth, increasing frequency of drought and increasing restrictions on mobility, indicators in many of Africa's drylands show persistently high levels of child wasting, or acute malnutrition, which

are well in excess of internationally recognized emergency thresholds. In many areas, these levels of wasting exist despite significant investment in both disaster response and social safety nets. In households that are heavily dependent on livestock, the declining availability of forage is directly correlated to a decline in child nutritional status and an increase in child wasting. This is because animal products such as milk, meat and blood form an essential source of food

for pastoralists, with children under 5 years of age obtaining up to two-thirds of their daily energy intake from milk in some pastoral communities.^{12,13} Despite this knowledge, the use of climate data is not well developed as an early warning predictive indicator for risk of increased child wasting in the drylands across sub-Saharan Africa, where a significant burden of child wasting is currently found.

RESULT 2.

INCREASE ACCESS TO SERVICES FOR THE PREVENTION OF WASTING

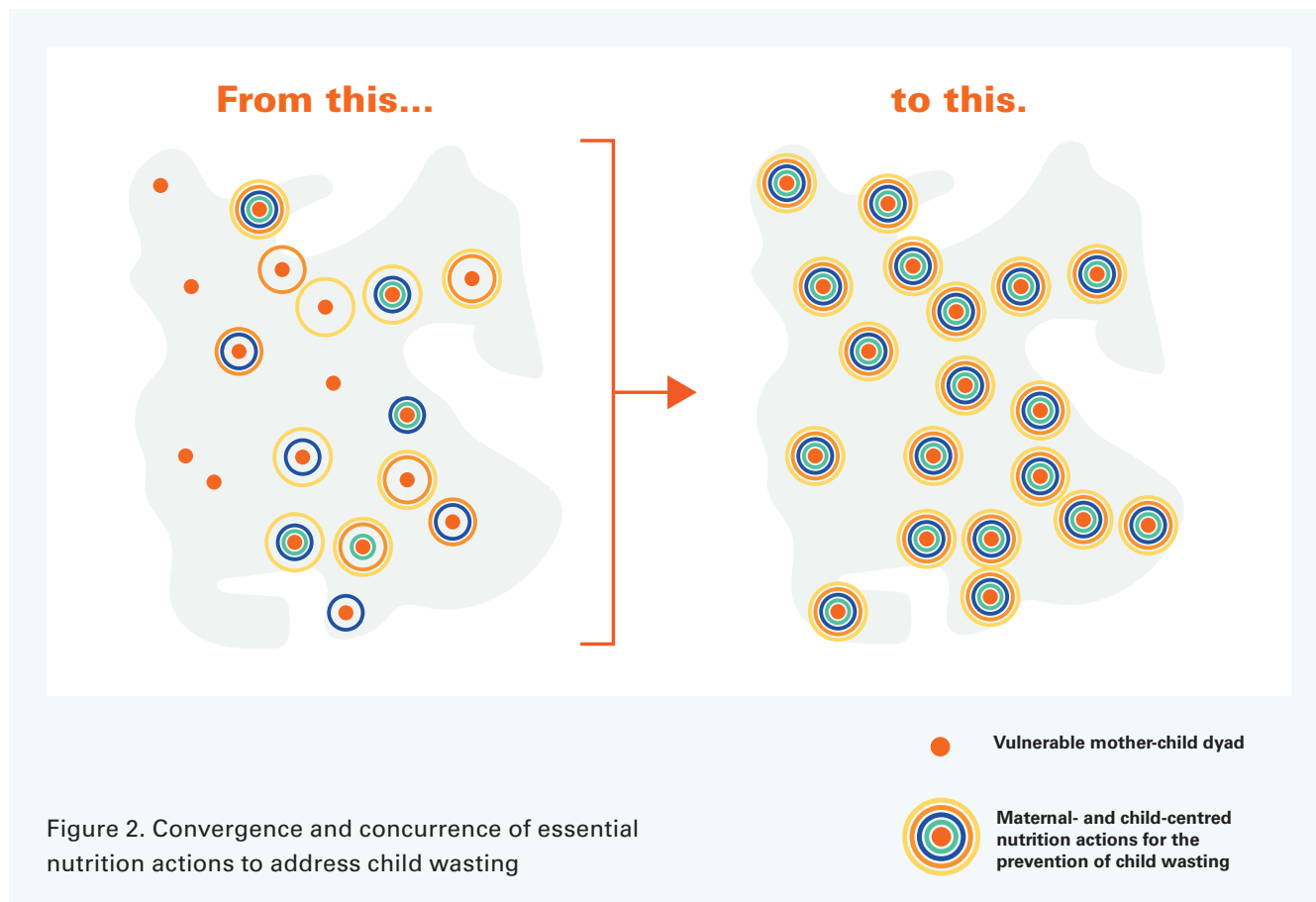
Action 2.1. Accelerate integration of prevention of wasting into primary and community health and nutrition services

Ensuring access to an integrated package of preventive interventions for vulnerable children remains a major challenge. This is because in settings where child wasting is prevalent, interventions to prevent child wasting are rarely implemented at a scale that can show meaningful reduction in numbers of wasted children. Furthermore, the services required for a life-cycle approach to the prevention of child wasting are often missing or are delivered through a siloed, vertical, single intervention approach.

A key example is maternal nutrition, which is a critical component of prevention given the strong link between maternal underweight, low birthweight and wasting, but is rarely considered as part of an integrated package of services to prevent child wasting.

This example makes clear that preventive actions must be integrated into antenatal care, family planning and other primary and community-based services beyond nutrition as an integrated pathway of care. The same applies to strategies for improving children's diets, which require essential actions to be delivered through multiple systems – including the food, health and social protection systems.

A systems approach can protect and promote diets, services and practices that support optimal nutrition, growth and development for all children, adolescents and women. This is critical to support enhanced integration of preventive actions in a meaningful manner.



**Action 2.2.
Advocate for
and support the
delivery of essential
nutrition actions for
the prevention of
child wasting**

To affect demonstrable change in child wasting, a new approach is needed: An approach based on geographical convergence and service delivery concurrence; an approach that ensures all vulnerable women and children receive all the right support services all of the time. These essential services need to be multisectoral and bring together food, health, social protection, and water and sanitation systems in a coordinated and child-centered manner. They also need to be based on evidence and a context-specific theory of change. For UNICEF, this involves mobilizing a ‘whole of UNICEF’ approach, using the prevention, early detection and treatment of child wasting as a shared outcome (see Figure 2).

This includes ensuring pregnant mothers have access to good nutrition, that children are born at a healthy weight and benefit from adequate feeding and care, with access to essential health, nutrition, water and sanitation services. We also need to protect and support early diets, including breastfeeding, to ensure that children thrive during the 1,000 day window of opportunity, from conception to age two years. This includes early intervention in the event of growth faltering to protect against wasting.

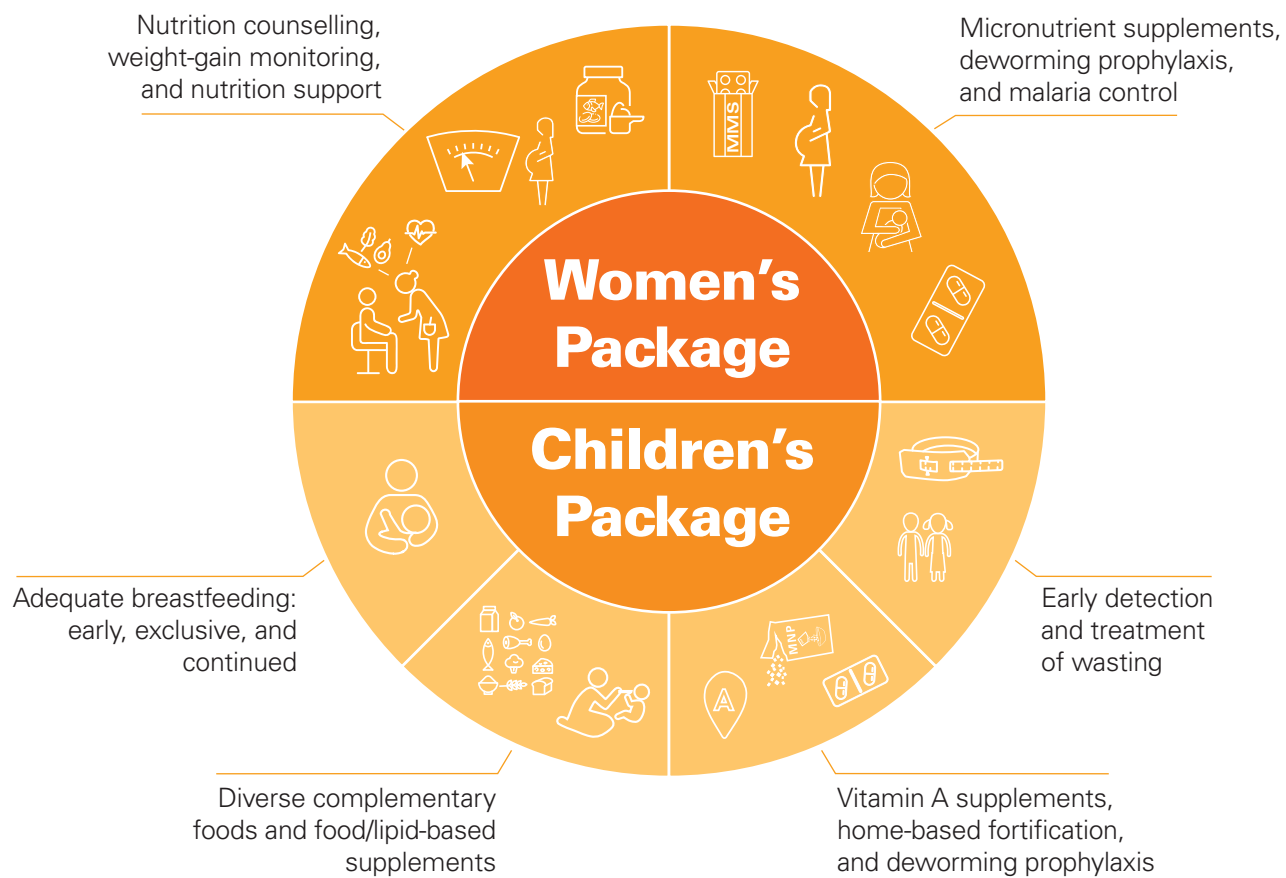
UNICEF aims to work with national governments and other key strategic partners to ensure the full package of core actions are provided in different settings to meet the needs of these vulnerable children. The specific package of essential actions needs to be defined based on the theory of change for each context and should address the key elements of protecting and promoting quality diets, services and practices that support optimal nutrition, growth and development for all children and mothers. This core set of actions needs to be adapted, in content, timing and scale, to the specific needs of each context, while building on a ‘model list’ of effective, essential and scalable interventions (see Table 1 below).

In very food insecure contexts, food assistance may be required to meet the nutritional needs of children and their households. In such contexts, UNICEF will work national governments and key partners to identify the most appropriate interventions, including food relief, food vouchers, cash transfers, and livelihoods interventions.

Table 1. Model package of essential nutrition actions for the prevention, early detection and treatment of child wasting

Women’s Package	<ol style="list-style-type: none"> 1. Counselling on maternal nutrition and monitoring healthy weight gain, with balanced protein-energy supplements for undernourished women. 2. Multiple micronutrient supplements, deworming prophylaxis, and malaria control for the prevention of micronutrient deficiencies and anemia.
Children’s Package	<ol style="list-style-type: none"> 1. Adequate breastfeeding: early initiation within one hour of birth; exclusive breastfeeding 0-5 months; and continued breastfeeding 6-23 months. 2. Age-appropriate, diverse complementary foods with food-based supplements – including lipid-based nutrient supplements – for undernourished children. 3. Vitamin A supplements, deworming prophylaxis, and home-based fortification where dietary diversity is limited, and micronutrient deficiencies and anemia are prevalent. 4. Early detection and treatment of child wasting with emphasis on young children aged 0–23 months and community-based approaches.

Model package of essential nutrition actions for the prevention, early detection and treatment of child wasting



RESULT 3.

IMPROVE EARLY DETECTION OF WASTING

Action 3.1. Increase capacity of mothers and caregivers in the identification of growth faltering and wasting using mid-upper arm circumference measurement

Evidence suggests that the single biggest barrier to accessing treatment for child wasting is lack of information. This includes information about how wasting can be diagnosed at home, and information about where treatment is available.¹⁴ Therefore, interventions to identify children who are wasted or at risk of becoming wasted are key to improve outcomes and reduce the overall burden of children with wasting.

Growth monitoring platforms are an important strategy for detecting early growth faltering and are ideally linked to community-based interventions to correct such faltering, ultimately preventing wasting, while also referring for treatment where needed. Where growth monitoring activities are systematically coupled with age-specific health and nutrition counselling, they are more effective and recognized by caregivers as a point of interaction for getting information on breastfeeding, complementary feeding, immunizations, and illness management.

In addition to identification of growth faltering, another immediate priority is to empower mothers and caregivers in the use of low-literacy, low-numeracy diagnostic tools, such as mid-upper arm circumference (MUAC) tapes. Such tools increase demand for treatment services and allow caregivers to make informed decisions about when to seek appropriate care. Our goal is to make the MUAC bands in high-burden countries in Africa and Asia as ubiquitous as thermometers are in the developed world. There is a growing body of evidence showing that mothers are as effective in using these tools as health workers,¹⁵ and the low cost of these tools allows for large-scale programming in a cost-effective way.

To support this approach, we aim to focus on countries that admit children for wasting treatment using MUAC and that have shown political commitment to scale up this approach. Whenever needed, additional evidence will be generated to demonstrate the local impact of these tools and support their wider scale-up by the national government.

RESULT 4.

OPTIMIZE AND SIMPLIFY TREATMENT FOR LIFE-THREATENING WASTING AND UPDATE GLOBAL AND NATIONAL GUIDELINES

Action 4.1. Support WHO and national governments in updating global and country level policies and guidelines for the early detection and treatment of child wasting

Our goal is to see the global roll-out of these programmatic innovations to simplify early detection and treatment of child wasting. This requires an enabling policy environment, including appropriate normative guidance and the alignment of donor priorities.

Our five-year partnership with WHO includes specific measures to review emerging evidence on the prevention, early detection and treatment of child wasting and

how this evidence is reflected in normative guidelines. The first phase of this strategy focuses on reviewing emerging evidence and updating normative guidance at a global level. UNICEF will support WHO in commissioning evidence reviews and convening technical experts to generate appropriate recommendations. The second phase of this strategy focuses on reviewing and revising national guidelines to reflect global updates.

Action 4.2. Identify optimum admission/discharge criteria, age-specific targeting and RUTF dosage for the treatment of wasting

To date, the vast majority of the 34 programmes to test simplified approaches have been small in scale and implemented primarily by non-governmental organizations in controlled environments. As a result, we lack evidence on how these simplifications perform at scale when delivered as part of routine services implemented by national systems in real-life conditions. To address this, UNICEF is accelerating evidence generation at scale, focusing whenever possible on testing as many simplifications as possible in any one context in order to better understand the cumulative effect of different simplifications on the efficiency and effectiveness of services.

Our approach centers on the identification and scale-up of specific, simplified approaches that when combined improve the impact and reduce the costs of treatment services. Based on their catalytic potential, the following seven solutions are prioritized:

1. Focusing early detection and treatment on children under 2 years of age
2. Building the capacity of family members to detect wasting at home
3. Empowering community-based workers to treat child wasting in the community
4. Adopting a single product (RUTF) for all children with wasting in need of therapeutic treatment
5. Optimizing the amount of RUTF used for the treatment of child wasting
6. Implementing a single, easy-to-use criteria (MUAC) for admission and discharge from therapeutic treatment
7. Reducing the number of visits to health facilities during treatment

Generating new evidence on the effectiveness of simplified approaches and scaling up their use in national programmes is expected to have a significant impact on the prevention, early detection and treatment of child wasting.

Action 4.3. Expand treatment services to the community via community-based workers

There is a growing body of evidence to suggest that treatment of uncomplicated wasting does not need to be provided in a health facility and can be delivered safely and effectively by adequately trained community-based workers.¹⁶ Adding this community layer to services has shown to significantly increase coverage, reduce treatment defaulting, and reduce the costs of treatment for caregivers.¹⁷ Countries like Mali have already made this approach part of their national policy, and others across Africa and Asia are beginning to introduce it.

Our objective is to accelerate the introduction of this approach by building on operational proof-of-concept programmes and government commitment to make treatment by community-based workers a key feature of national programmes for the treatment of child wasting. This is particularly crucial in the context of COVID-19, as this approach has been demonstrated to be effective in ensuring continuity of treatment and offering communities a safe alternative to visiting health facilities overstretched by the pandemic.

Action 4.4 Enhance integration of treatment services into national systems and services

Increasing access to treatment for child wasting also requires that services be routinely available wherever facility- and community-based services exist. To achieve this level of integration, a concerted effort is needed to achieve integration of treatment into the six building blocks of the health system: service delivery, workforce, information systems, access

to essential medicines, financing, and leadership/governance. To develop a more coordinated approach, with support of its partners, UNICEF is consolidating successful integration experiences from around the world to standardize the approach to integrate treatment services into national health systems.

RESULT 5.

INCREASE AVAILABILITY AND SUSTAINABILITY OF RUTF SUPPLY FOR THE TREATMENT OF LIFE-THREATENING WASTING

**Action 5.1.
Increase uptake
of cost-effective
RUTF alternative
formulations**

Increasing the availability and sustainability of treatment services requires that the costs of treatment be optimized – and there is no clearer opportunity to do so than by addressing one of the primary drivers of treatment costs: the cost of RUTF. In addition to the measures described above to expand access to treatment, UNICEF aims to identify and increase uptake of new, more cost-effective RUTF formulations. These ‘renovation’ formulas explore the use of

cheaper, more locally available ingredients and leverage the food system for longer-term benefits in both locally produced and offshore supplies of RUTF. UNICEF aims to build evidence on the acceptability, palatability and effectiveness of RUTF formulations and support the roll-out and uptake of these formulations across the world.

**Action 5.2.
Increase financial
contributions to
RUTF from non-
humanitarian
donors, including
the Global
Financing Facility**

The identification of new, more cost-effective RUTF formulas will help UNICEF maximize the use of existing financial resources for RUTF. But to increase the availability and sustainability of RUTF supplies, financial resources must also increase and become more predictable. UNICEF will drive a concerted effort to leverage new financial resources for RUTF from non-humanitarian donors, including development funding mechanisms.

This will include working closely with global mechanisms such as the Global Financing Facility to expand the allocation of resources to cover RUTF.

**Action 5.3.
Increase domestic
resource
allocation to RUTF**

To support governments in mobilizing domestic resources for nutrition, a Match Fund has been established and is managed by UNICEF Supply Division. The Match Fund supplements governments’ own spending on nutrition supplies (namely RUTF). Importantly, this leverages interventions that are already in-motion as part of the Global Financing Facility investment cases. To qualify for the Match Fund, governments ideally need to align with the following criteria: (1) include overall RUTF needs and costs in Global Financing Facility investment cases; (2) cover a proportion of those total costs using domestic resources, with domestic spending dedicated towards RUTF procurement

commensurate to the country’s investment case; and (3) provide evidence that the domestic allocation for RUTF does not negatively impact other nutrition services or distort financing for other life-saving interventions.

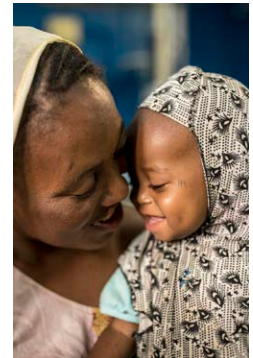
THE MEASURE OF SUCCESS

The success of this approach will be assessed using the following metrics:

Commitment		
Result	2023	2025
1. Analysis: Systematically address key context-specific drivers of wasting	By 2023, evidence-based intervention packages to address context-specific/seasonal determinants and drivers of child wasting are defined in at least 15 priority countries	By 2025, evidence-based intervention packages to address context-specific/seasonal determinants and drivers of child wasting are defined in at least 25 priority countries
2. Prevention: Increase access to services for the prevention of wasting	By 2023, at least 20 million children benefit from a package of essential nutrition actions for the prevention of child wasting and related child mortality in at least 15 priority countries.	By 2025, at least 100 million children benefit from a package of essential nutrition actions for the prevention of child wasting and related child mortality in at least 25 priority countries.
3. Early detection: Improve early detection of growth faltering and wasting	By 2023, at least 10 million caregivers are empowered to use MUAC bands and at least 100 million children are screened for the early detection of wasting annually.	By 2025, at least 15 million caregivers are empowered to use MUAC bands and at least 125 million children are screened for the early detection of wasting annually.
4. Treatment: Optimize and simplify treatment for life-threatening wasting and update global and national guidelines	By 2023, at least 20,000 community health workers are empowered to treat uncomplicated severe wasting using simplified approaches/protocols in the community and at least 7 million children are admitted for treatment annually.	By 2025, at least 40,000 community health workers are empowered to treat uncomplicated severe wasting using simplified approaches/protocols in the community and at least 9 million children are admitted for treatment annually.
5. Supply chain: Increase availability and sustainability of RUTF supply for the treatment of severe wasting	By 2023, at least US\$20 million from national budgets are allocated every year to increase the availability and sustainability of RUTF for the treatment of child wasting in at least 15 countries.	By 2025, at least US\$30 million from national budgets are allocated every year to increase the availability and sustainability of RUTF for the treatment of child wasting in at least 25 countries.



The Partners



The implementation of this approach requires a coalition of like-minded partners committed to the goals and strategic priorities described above.

National governments are UNICEF's major partner in the implementation of *No Time to Waste*. National governments are not only responsible for upholding children's right to nutrition but are also the only ones that can provide sustainable access to services for this and future generations. Supporting governments and strengthening national systems to improve the prevention, early detection and treatment of child wasting is our priority.

Our capacity to support governments in the pursuit of this ambitious agenda demands that we work strategically with other partners too. To support the implementation of *No Time to Waste*, UNICEF has created a series of strategic partnerships with United Nations agencies, donors and civil society partners designed to share responsibilities, optimize resources, and maximize results. These partnerships include (but are not limited to):

- **Partnerships with UN agencies** strengthen global normative guidance on child wasting, and improve the availability of services for the prevention, early detection and treatment of child wasting in fragile contexts.

- **Partnerships with donor governments and philanthropies** to scale-up proven programme innovations and develop new financing modalities for the prevention, early detection and treatment of child wasting.
- **Partnerships with civil society organizations** to test new programme models and build the capacity of local communities to prevent, detect and seek treatment for child wasting.
- **Partnerships with academics** at a global and national levels to generate a robust and compelling evidence-base that informs global and national policy and guidance on child wasting.

These partnerships reflect the need for multi-systemic, multi-layered solutions at global, regional and level, as well as UNICEF's commitment to harness and maximize the contribution of a range of partners towards a common, impactful global response to child wasting.

ENDNOTES

- 1 United Nations Children's Fund (UNICEF), World Health Organization, International Bank for Reconstruction and Development/The World Bank. *Levels and Trends in Child Malnutrition: Key Findings of the 2021 Edition of the Joint Child Malnutrition Estimates*. New York; UNICEF; 2021. License: CC BY-NC-SA 3.0 IGO.
- 2 Headey D, Heidkamp R, Osendarp S, et al. Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality. *The Lancet* (July 27th, 2020); [https://doi.org/10.1016/S0140-6736\(20\)31647-0](https://doi.org/10.1016/S0140-6736(20)31647-0)
- 3 Olofin I., et al., 'Associations of Suboptimal Growth with All-Cause and Cause-Specific Mortality in Children under Five Years: A Pooled Analysis of Ten Prospective Studies', *PLoS ONE* 8(5): e64636, 2013. <https://doi.org/10.1371/journal.pone.0064636>.
- 4 See: Pelletier, D., et al., 'Child anthropometry and mortality in Malawi: testing for effect modification by age and length of follow-up and confounding by socioeconomic factors', *Journal of Nutrition*, 124(10 Suppl), October 1994, 2082S-2105S. doi: 10.1093/jn/124.suppl_10.2082S; and V. Fauveau, et al., 'The contribution of severe malnutrition to child mortality in rural Bangladesh: Implications for targeting nutritional interventions', *Food and Nutrition Bulletin*, vol. 12, no. 3, 1990.
- 5 Bhutta, Z. et al. 'Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?' [published correction appears in *Lancet*. 2013 Aug 3;382(9890):396]. *Lancet*, vol.382, no.9890, 2013, pp. 452-477. doi:10.1016/S0140-6736(13)60996-4
- 6 United Nations Children's Fund. *Prevention, Early Detection and Treatment of Wasting in Children 0-59 Months through National Health Systems in the Context of COVID-19*, United Nations Children's Fund and World Health Organization, New York, 2020.
- 7 United Nations Children's Fund. (UNICEF). *Nutrition, for Every Child: UNICEF Nutrition Strategy 2020–2030*. UNICEF, UNICEF, New York
- 8 Local Burden of Disease Child Growth Failure Collaborators., Kinyoki, D.K., Osgood-Zimmerman, A.E. et al. Mapping child growth failure across low- and middle-income countries. *Nature* 577, 231–234 (2020). <https://doi.org/10.1038/s41586-019-1878-8>
- 9 See Young, H. and Marshak, A. *Persistent Global Acute Malnutrition*. Boston: Feinstein International Center, Tufts University, 2017.
- 10 See Harding, K., Aguayo, V., and Webb, P. "Factors associated with wasting among children under five years old in South Asia: Implications for action", *PLoS ONE*, vol. 13, no.7, 2018. <https://doi.org/10.1371/journal.pone.0198749>
- 11 Kerac, Marko et al. "Prevalence of wasting among under 6-month-old infants in developing countries and implications of new case definitions using WHO growth standards: a secondary data analysis." *Archives of disease in childhood* vol. 96,11 (2011): 1008-13. doi:10.1136/adc.2010.191882
- 12 Galvin, K.A. (1992) Nutritional ecology of pastoralists in dry tropical Africa. *Am J Hum Biol* 4:209–221
- 13 Sellen, Daniel W. "Nutritional Status of Sub-Saharan African Pastoralists: A Review of the Literature." *Nomadic Peoples*, no. 39, 1996, pp. 107–134. JSTOR, www.jstor.org/stable/43123497. Accessed 16 Mar. 2021.
- 14 Rogers, E., Myatt, M., Woodhead, S., Guerrero, S., Alvarez, J. 'Coverage of Community-Based Management of Severe Acute Malnutrition Programmes in Twenty-One Countries, 2012-2013', *PLoS ONE*, vol. 10, no.6, 2015. <https://doi.org/10.1371/journal.pone.0128666>
- 15 Blackwell, N., et al., 'Mothers Understand And Can do it (MUAC): A comparison of mothers and community health workers determining mid-upper arm circumference in 103 children aged from 6 months to 5 years', *Archives of Public Health*, 73(1):26, 2015. doi:10.1186/s13690-015-0074-z
- 16 López-Ejeda, N., Charle Cuellar, P., Vargas, A., Guerrero, S., 'Can community health workers manage uncomplicated severe acute malnutrition? A review of operational experiences in delivering severe acute malnutrition treatment through community health platforms', *Maternal and Child Nutrition*, vol.15, no.2, 2019. doi:10.1111/mcn.12719
- 17 Rogers, E., et al., 'Cost-effectiveness of the treatment of uncomplicated severe acute malnutrition by community health workers compared to treatment provided at an outpatient facility in rural Mali', *Human Resources for Health*, 16(1):12, 2018. doi:10.1186/s12960-018-0273-0

© United Nations Children's Fund (UNICEF)

April 2021

Permission is required to reproduce any part of this publication. Permissions will be freely granted to educational or non-profit organizations.

Published by:
UNICEF
Nutrition Section, Programme Division
3 United Nations Plaza
New York, NY 10017, USA

Email: nutrition@unicef.org
Website: www.unicef.org

unicef  | for every child