

# Simplified approaches for the treatment of child wasting: A rapid evidence review

Report summary<sup>1</sup>

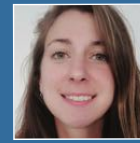
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## GLOBAL

**What we know:** Simplified approaches for the treatment of child wasting are increasingly being implemented in countries to improve the coverage and cost-effectiveness of treatment services.

**What this article adds:** The effectiveness of 36 projects testing simplified approaches in 21 countries was reviewed. Simplifications include the use of mid-upper arm circumference (MUAC) as the only admission criteria, the family MUAC approach, modified dosage of ready-to-use food, use of a single product for the treatment of both severe and moderate wasting, modification of admission criteria and delivery of wasting treatment by community health workers (CHWs). While the family-MUAC approach is implemented operationally, it has so far been less documented than other approaches. As a context-specific approach is promoted, the evidence is heterogeneous and includes gaps. The evidence on modified dosages shows that nutritional outcomes (recovery, non-response, defaulting, death) are usually non-inferior to the standard dosage although further research is needed. Nutritional outcomes for admissions based on MUAC-only and for the delivery of wasting treatment by CHWs are satisfactory when compared to standard treatment. The evidence is promising for some simplifications, implemented alone or in combination and when tailored to the specific context.

### Objective

This rapid review aimed to provide an overview of the current evidence and practice on the treatment of child wasting using simplified approaches. Simplified approaches include a range of adaptations of treatment protocols and programmes for the community-based management of acute malnutrition (CMAM) that aim to improve coverage and cost-effectiveness. This review compiles the existing evidence, synthesising the variety of simplifications implemented to date, as well as treatment outcomes.

### Methodology

The rapid review examined peer reviewed literature, grey literature (final reports, online publications) and other unpublished material (protocols, internal reports, webinars, briefs). The effectiveness of the simplified approaches was assessed using standard programme indicators.

### Results

We reviewed a total of 63 resources: 19 protocols, 16 peer reviewed papers, 10 Emergency Nutrition Network (ENN) papers, five proposals, three trials, four reports, three documents on preliminary results/protocol, one information sheet, one terms of reference document and

one webinar presentation. Among these 63 resources, we identified 36 projects of which detail on precise simplifications existed in 33 (shown in Figure 1). The available evidence on simplified approaches covers 21 countries: 10 in West and Central Africa, six in Eastern and Southern Africa, four in South Asia and one in the Middle East and North Africa and a multi-country secondary analysis to design the ComPAS<sup>2</sup> dosage table. Action Against Hunger, ALIMA, the International Rescue Committee and UNICEF are the four organisations that have contributed the most to the available evidence on simplified approaches.

Using mid-upper arm circumference (MUAC) as the only admission criteria is the most frequently used simplification, followed by the use of a modified dosage of ready-to-use food, the use of a single product for treatment of both severe and moderate wasting and the modification of admission criteria. Some of the projects reviewed tested a combination of simplifications, such as the ComPAS and OptiMA<sup>3</sup> trials which have brought together MUAC only admissions, modified dosage and the use of one product for treatment.

Recovery rates for projects including a modified dosage are usually non-inferior to standard

dosage. However, recovery rates tend to be less satisfactory for children admitted with MUAC under 115 mm (severe wasting) receiving either standard or modified dosages. Recovery rates for children admitted with a MUAC between 115 mm and 124 mm (moderate wasting) are always far higher than Sphere standards. Recovery rates for MUAC-only admissions are generally satisfactory when compared with Sphere standards. However, as noted when dosages are modified, recovery rates are generally lower for children admitted with MUAC <115 mm or oedema compared to those admitted with MUAC between 115 mm and 124 mm. Recovery rates for the delivery of wasting treatment by community health workers (CHWs) were found to be unanimously better when compared to standard treatment and defaulter rates were lower.

### Discussion

The evidence base on simplified approaches has been growing, especially over the last five years, and the West and Central Africa region has been increasingly at the centre of testing and implementing different sets of simplifications. The evidence is promising for some simplifications alone (CHW approach, family-MUAC, MUAC-only programming) and for combined approaches (such as the OptiMA and ComPAS research protocols which combine various simplifications). The positive results documented when CHWs deliver treatment may be linked to the fact that, with community level care, caregivers do not have to travel to health centres which can be far away from their villages, thereby overcoming the well-documented barrier of distance to the nearest health facility. Evidence related to the combination of different simplifications is more recent, heterogeneous and includes some gaps given that context-specific approaches are promoted. This heterogeneity is

<sup>1</sup> UNICEF (2020) Treatment of Wasting using Simplified Approaches. A Rapid Evidence Review. <https://www.acutemalnutrition.org/en/resource-library/3KWsCWixdQXSiXFOCME2f>

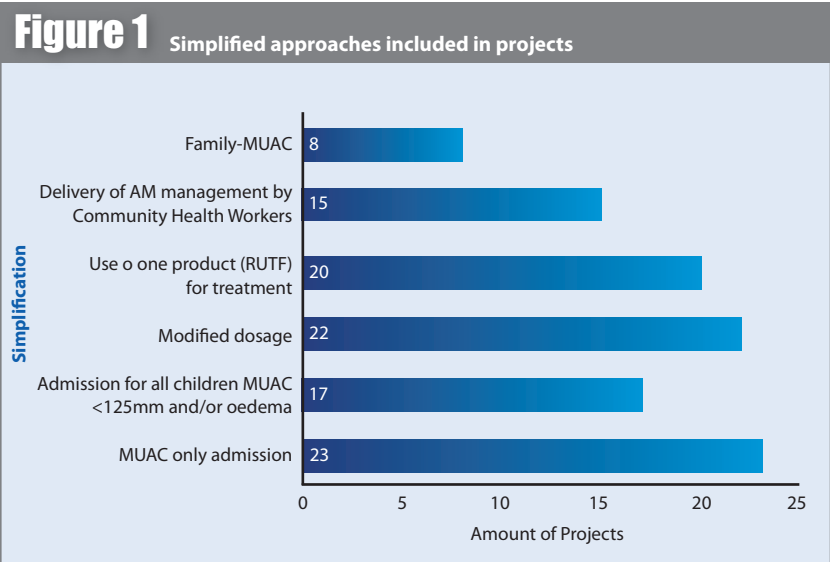
<sup>2</sup> The ComPAS project refers to the Combined Protocol for Acute Malnutrition Study implemented by IRC and Action Against Hunger using a single treatment approach for children with wasting

<sup>3</sup> OptiMA: Optimizing treatment for acute Malnutrition, is a combined protocol implemented by ALIMA in several countries across West and Central Africa

linked to different organisations testing different combinations of simplifications under different circumstances making it challenging to directly compare results. However, the evidence available and consolidated in this review provides important programming insights that can inform the continued testing of these approaches.

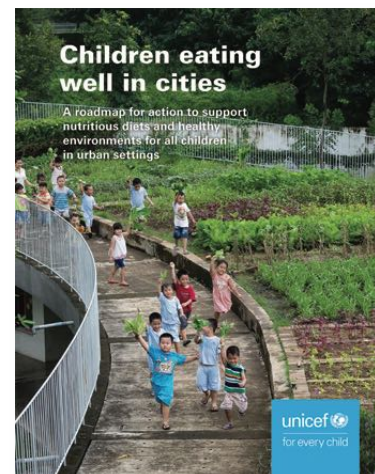
Given that the nutrition outcomes of the various simplified approaches may vary according to the context and pre-existing challenges (e.g., high prevalence of stunting and distance to health centres), we recommend that simplifications continue to be selected and combined based on the context. Contextualising simplified approaches involves identifying barriers to early detection and treatment and understanding the humanitarian and nutritional situation to improve the overall effectiveness of treatment services. Outstanding questions remain regarding the optimal dosage for the most vulnerable children (MUAC <115 mm); continued research is needed in this area.

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MUAC = mid-upper arm circumference; AM = acute malnutrition; RUTF = ready-to-use therapeutic food

## Children eating well in cities: A roadmap for action to support nutritious diets and healthy environments for all children in urban settings



New forces are influencing the global burden of child malnutrition. One such force is that of urbanisation, as people around the world increasingly leave the countryside for urban areas. As a result, many families are changing the way they feed their children. Traditional diets are increasingly being replaced by diets high in processed food, low in essential nutrients and high in salt, sugar and fat. There is increasing consumption of commercially produced snack foods and reliance on foods produced outside of the household. These trends not only increase the risk of overweight, obesity and diet-related noncommunicable diseases, they can also increase risk of micronutrient deficiencies and undernutrition. Although urban dwellers have more access to basic goods including food, they typically buy their food, which makes income a key factor in what they eat. While cities offer many opportunities for employment, cities house high concentrations of poor people who live in polluted or insecure environments and who are not able to meet the costs of basic goods. Cities are also more disconnected from food system supply chains which increases their vulnerability to unreliable food provision and

surging food prices. Given these factors, urbanisation clearly presents several challenges for tackling malnutrition.

Understanding how children and their caregivers experience urban environments is thus a critical starting point for designing actions to improve malnutrition rates. Given this, UNICEF developed a roadmap for action to support nutritious diets for families and children in urban contexts. This roadmap sets out how UNICEF can support urban nutrition activities through offering nutrition expertise, multi-sector action and collaboration with partners and existing city platforms. It aims to place child rights at the centre of the urban food agenda.

Using the Innocenti Framework on Food Systems for Children and Adolescents, the roadmap outlines actions for urban contexts across the supply side, external and personal environments, and behaviours of caregivers. It recognizes that other systems, including health, water and sanitation, education and social protection, also have crucial roles to play as part of a coordinated multi-sector approach to address diets and practices in urban contexts. The roadmap further

acknowledges the important role of governments at all levels to coordinate efforts and innovate to support good nutrition within urban environments. In many countries, through devolution processes, local governments are increasingly gaining responsibility for nutrition and already have been noted to be driving innovative approaches to reduce malnutrition. Several promising city-level practices now exist to illustrate how a city can initiate work on food and nutrition and the roadmap outlines several examples of city-level success stories. The roadmap also presents a schematic overview of how responsibilities and roles can be allocated between the local and national level to drive forward targeted nutrition actions. This includes actions for governance for children's access to nutrition and health, commitment to child rights, social protection, participation and engagement, food and nutrition in public institutions, water and hygiene, physical activity, food retail, food standards and labelling, health and nutrition-related taxes, marketing and conflicts of interest.

<sup>1</sup> <https://www.unicef.org/media/89396/file/Children-eating-well-in-cities.pdf>