

Nutrition matters

**Guidance for nutrition
programming**

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***Nutrition matters: Guidance for nutrition programming
06/2016 E***

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Nutrition matters:

Guidance for nutrition programming

The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest volunteer-based humanitarian network. With our 190 member National Red Cross and Red Crescent Societies worldwide, we are in every community reaching 160.7 million people annually through long-term services and development programmes, as well as 110 million people through disaster response and early recovery programmes. We act before, during and after disasters and health emergencies to meet the needs and improve the lives of those most vulnerable. The Red Cross Red Crescent is impartial and works with those most vulnerable, regardless of their nationality, race, gender, religious beliefs, class and political opinion.

Guided by *Strategy 2020* – our collective plan of action to tackle the major humanitarian and development challenges of this decade – we are committed to saving lives and changing minds.

Our strength lies in our volunteer network, our community-based expertise and our independence and neutrality. We work to improve humanitarian standards, as partners in development, and in response to disasters. We persuade decision-makers to act at all times in the interests of those most vulnerable. The result: we enable healthy and safe communities, reduce vulnerabilities, strengthen resilience and foster a culture of peace around the world.

Foreword

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Poor nutrition in the first 1000 days can have irreversible effects on a child's health and development. Undernourished children cannot withstand pneumonia, diarrhoea or other common illnesses, and those who survive often suffer cognitive and physical disabilities. Countries in Asia and Africa face an exceptionally high burden of undernutrition, with 90% of childhood under-nutrition occurring in these continents. Maternal undernutrition affects a mother's chance of survival during pregnancy and child birth. Young women with poor nutritional status during conception and in pregnancy often give birth to underweight babies, leading to a lifetime of potential health problems for the baby. Not only are underweight babies more susceptible to infectious disease and death in infancy, as adults they may face a higher risk of chronic illness such as heart disease and diabetes.

Malnutrition in all its forms is also exacerbated in places hit by humanitarian crises such as conflict and natural disaster often causing a downward spiral in health status. Nutrition programmes need to be part of community and primary health care and resilience work to be effective and accessible. The Red Cross and Red Crescent is well placed to link nutrition within its existing community-based health programmes.

Taken together, today's nutrition issues require urgent innovation, collaboration, and comprehensive, evidence-based action. The importance of nutrition throughout life in humanitarian and in development contexts, must be realized to maximize individual, community, national and global potential.

This guidance highlights tangible, evidence-based priority actions in health and WASH programs to achieve the Global Targets for nutrition. Throughout the guidance the importance of cross-sectoral collaboration within and outside the Red Cross Red Crescent Movement to holistically address nutrition is emphasised. Only through collaboration and community-based programmes, will we be able to tackle nutrition for mothers and children globally.

Julie Lyn Hall
IFRC Head Of Health

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The Netherlands
Red Cross



Norwegian Red Cross

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“ Causes of preventable illnesses and deaths for women and children include poor nutrition along with insufficient access to water, sanitation, communicable and non-communicable diseases. Globally, 25% of children are stunted and 6.5% are overweight or obese. These children then fail to reach their full physical, cognitive and psychological potential. To realise SDGs which are very holistic in spirit and scope, stakeholders need to strengthen resources in areas such as nutrition, education, water and sanitation along with providing technical and financial support for strengthening health systems. ”

Dr Arvind Bhardwaj

In 2011, Mohamed (seen here) would have had difficulty just standing to greet visitors. He weighed a mere 5.6 kilograms when he should have weighed at least double that. His mother fed him breast milk and animal milk, but he was very weak.

Mohamed and his mother live in Mauritania, a desert country of about three million people, most of whom rely on rain to provide them with water for their families, crops and livestock. In 2011, when rain did not fall, food production dropped dramatically. Children under the age of five were particularly affected. In Maghta Lahjar in the Brakna region, where Mohamed lives, the global acute malnutrition rates were among the highest in the country at 22%. The Mauritania Red Crescent Society screened 3,574 children under the age of five. Almost one-third of them, including Mohamed, suffered from malnutrition.

Acronyms

BMI	Body Mass Index
CBHFA	Community-based Health and First Aid
GAM	Global Acute Malnutrition
ECV	Epidemic Control for Volunteers
HAZ	Height-for-age Z-score
Hb	Haemoglobin
iCCM	Integrated Community Case Management of Childhood Illness
IFRC	International Federation of Red Cross and Red Crescent Societies
IFAD	International Fund for Agricultural Development
MAM	Moderate Acute Malnutrition
IYCF	Infant and Young Child Feeding
MUAC	Mid-Upper Arm Circumference
NCD	Non-communicable disease
RMNCAH	Reproductive, maternal, newborn, child and adolescent health
SAM	Severe Acute Malnutrition
WHO	World Health Organization
WHA	World Health Assembly
WHZ	Weight-for-height Z-score
UNICEF	United Nations Children's Fund
IMAM	Integrated management of acute malnutrition.
MMN	Multiple micro-nutrient supplement
CMAM	Community-based Management of Acute Malnutrition
WASH	Water Sanitation and Hygiene
RUTF	Ready to use therapeutic food
MoH	Ministry of health
MCH	Mother and child health
OTP	Community based outpatient therapeutic programme
SC	Stabilization Centre
IDP	Internally displaced people
ECV	Epidemic Control for Volunteers
MOH	Ministry of Health
ICGM	Integrated Community Case Management of malaria, pneumonia and diarrhea
BMS	Breast Milk Substitute

Definitions

Tool-specific definitions

Community message – key information that community members understand and supports behaviour change with regard to the proposed evidence-based action for good nutrition.

Evidence-based action – interventions or activities that are based on good quality research and evidence.

Individual cut-offs – a point or level which is a designated limit for an individual.

Nutrition secure – a nutrition secure individual has a nutritionally adequate diet and the food consumed is utilised resulting in adequate performance and growth. They are better able to withstand illness and external shocks.

Nutrition-sensitive – addressing the underlying determinants of foetal and child nutrition and development: food security; adequate caregiving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment.

Nutrition-specific – addressing the immediate determinants of foetal and child nutrition and development: adequate food and nutrient intake; feeding, caregiving and parenting practices; and low burden of infectious diseases.

Population cut-off – a limit for the proportion of people with a certain characteristics in a given population.

Strategy – overarching methods or platforms by which programme managers can implement evidence-based activities.

Technical definitions

Body Mass Index (BMI) – a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity in adults. It is defined as a person's weight in kilograms divided by the square of his height in metres (kg/m²). It is used for classifying underweight and overweight.

Community-based Management of Acute Malnutrition (CMAM) – community based management of acute malnutrition includes active outreach, identification, prevention and treatment for all children under 5 years of age. Sometimes CMAM is interchangeably used with IMAM i.e. Integrated management of acute malnutrition.

Food security – when all people at all times have access to sufficient, safe, affordable and appropriate nutritious food to maintain a healthy and active life.

Global Acute Malnutrition (GAM) – a measurement of the nutritional status of a population defined as the percentage of children 6-59 months with a weight-for-height Z-score (WHZ) less than -2. Also calculated as severe acute malnutrition (SAM) + moderate acute malnutrition (MAM).

Height-for-age Z-score (HAZ) – key indicator for stunting that compares an individual's height relative to their age to the reference population.

Moderate Acute Malnutrition (MAM) – weight for height (WHZ) between -3 and -2 Z-score or mid arm circumference (MUAC) values below the cut-offs of 125 mm and 115 mm.

Malnutrition – Malnutrition is a broad term commonly used as an alternative to undernutrition but technically it also refers to overnutrition. People are malnourished if their diet does not provide adequate calories and protein for growth and maintenance or they are unable to fully utilize the food they eat due to illness (undernutrition). They are also malnourished if they consume too many calories (overnutrition).

Mid-Upper Arm Circumference (MUAC) – the circumference of the left upper arm for children under 5 and pregnant or lactating women, measured at the midpoint between the tip of the shoulder and the tip of the elbow. It is used in the assessment of nutritional status and is a good indicator of wasting.

Oedema – it is the medical term for fluid retention in the body which causes affected tissue to get swollen.

Resilience – the ability of individuals, communities, organizations or countries exposed to disasters, crises and underlying vulnerabilities to anticipate, prepare for, reduce the impact of, cope with and recover from the effects of shocks and stresses without compromising their long-term prospects.

Severe Acute Malnutrition (SAM) – very low weight for height (below -3 Z-score) or MUAC less than 115 mm, and/or clinical signs of bilateral pitting oedema.

Weight-for-height Z-score (WHZ) – key indicator for wasting or thinness that compares an individual's weight relative to their height to the reference population.

Z-score – The difference between the value of an individual and the median value of the reference population for the same age or height, divided by the standard deviation of the reference population. For example, a Z-score can be used to describe how far a child's weight is from the median weight of a child at the same height in the reference value (WHZ).



90 percent of the children and 80 percent of the mothers coming to the Integrated Health Center in the village Kofo are malnourished. The volunteers from the Red Cross Society of Niger are measuring the children and giving advice to the mothers on nutrition and health.

Introduction

While tremendous strides have been made in reducing child mortality and improving maternal health worldwide, progress has been in silos and has failed to address the needs of vulnerable women and children in humanitarian contexts. In order to effectively address maternal and child health, there must be a seamless integration of work across the lifespan, place of care and resilience continua. Nutrition is intimately built into each of these continua and must be taken into account for comprehensive programming. As nutrition is fundamental to physical, psychological and social well-being of all individuals, its link with non-communicable diseases (NCDs), food security, and water and sanitation should be recognized. Meeting reproductive, maternal, newborn, child and adolescent health (RMNCAH) needs in fragile and development settings, as well as addressing fundamental needs for nutrition, has been critical in working towards achieving the aims set by Millennium Development Goals and will continue in Sustainable Development Goals.

Nearly half of all under-five deaths are attributable to undernutrition. Poor nutrition increases a child's susceptibility to and risk of dying from common infections and can lead to stunted growth, associated with impaired cognitive ability, decrease school performance and decreased work productivity. Childhood obesity is also a serious nutrition challenge, with the prevalence increasing at an alarming rate, particularly in low- and middle-income countries. There is an urgent need to improve and expand delivery of key nutrition interventions across the lifespan, but particularly during the critical 1,000 day window covering a woman's pregnancy and the first two years of a child's life, when rapid physical and mental development occurs. Recognizing the pervasive and destructive problem of the double burden of malnutrition worldwide, the World Health Assembly (WHA) endorsed the creation of six global nutrition targets for 2025 that aim to address the leading nutrition challenges: childhood stunting; anaemia in women of reproductive age; low birth weight; childhood overweight; rate of exclusive breastfeeding; and childhood wasting.

The International Federation of Red Cross and Red Crescent Societies (IFRC) has supported and promoted RMNCAH for more than twenty years. The IFRC's RMNCAH programming has evolved in response to the medium- and long-term needs of communities. While the IFRC doesn't have many nutrition-specific programmes within health programmes, given the alarming rates of malnutrition worldwide, several National Societies have developed programmes targeting malnutrition in the context of existing RMNCAH programmes. Given the reach of National Societies to impact communities around the world, there is tremendous opportunity for addressing nutrition in a comprehensive manner to ensure a better chance of survival for mothers and children.



Purpose



This document provides practical guidance based on the latest evidence with regard to nutrition programming. It challenges programme managers to think critically and consider the systems and contexts within which they work in order to address nutrition and build resilient communities. This document is not meant to be prescriptive—rather it is meant to empower programme managers in National Societies and to provide them with the inspiration, knowledge to design a system-changing and sustainable nutrition programme within their own communities. A list of references used to develop this guidance are provided at the end of this document for finding more information.



Nutrition and resilience

According to the IFRC's Framework for Community Resilience, resilience is the "ability of individuals, communities, organizations or countries exposed to disasters, crises and underlying vulnerabilities to anticipate, prepare for, reduce the impact of, cope with and recover from the effects of shocks and stresses without compromising their long-term prospects." As mothers, children and adolescents constitute a significant proportion of communities; RMNCAH is a critical entry point for building resilience.

The IFRC's Framework for Community Resilience highlights three strategic objectives:

1. Assist communities as they adopt risk informed, holistic approaches to address these underlying vulnerabilities.
2. Encourage communities to adopt demand-driven, people-centered approaches to community resilience strengthening.
3. Support National Societies to be connected to communities – being available to everyone, everywhere to prevent and reduce human suffering.

The IFRC's Framework for Community Resilience functions under the assumption that communities are inherently complex systems that are constantly evolving and susceptible to unpredictable internal and external inputs. Communities must embrace the reality that the future cannot be predicted but that the overall aim should be to develop systems that demand change in line with good nutrition and health.

Resilience requires nutrition (nutrition → resilience)

INDIVIDUAL LEVEL

- Nutrition is a prerequisite for proper growth, protection from infection and non-communicable diseases, body system functioning and overall health. Adequate nutrition during the first 1,000 days of life is necessary for cognitive development and will affect education outcomes. Well-nourished individuals can also work harder and have greater physical reserves.
- Good nutrition allows an individual to cope with and recover from crisis.
- Individuals with adequate knowledge, skills and competencies about nutrition will be able to adapt to new situations and demand a health-promoting environment.

COMMUNITY LEVEL

- To achieve balanced nutrition, communities must be able to identify barriers including food insecurity, inadequate health services, poor hygiene and sanitation, inadequate care and feeding practices; and poor knowledge and behaviour.
- Communities must prioritize good nutrition and demand services for nutrition promotion and rehabilitation.
- A community that embodies good nutrition through its various markets and systems will be able to anticipate, prepare for, reduce the impact of, cope with and recover from the effects of shocks and stresses.

Nutrition requires resilience (resilience → nutrition)

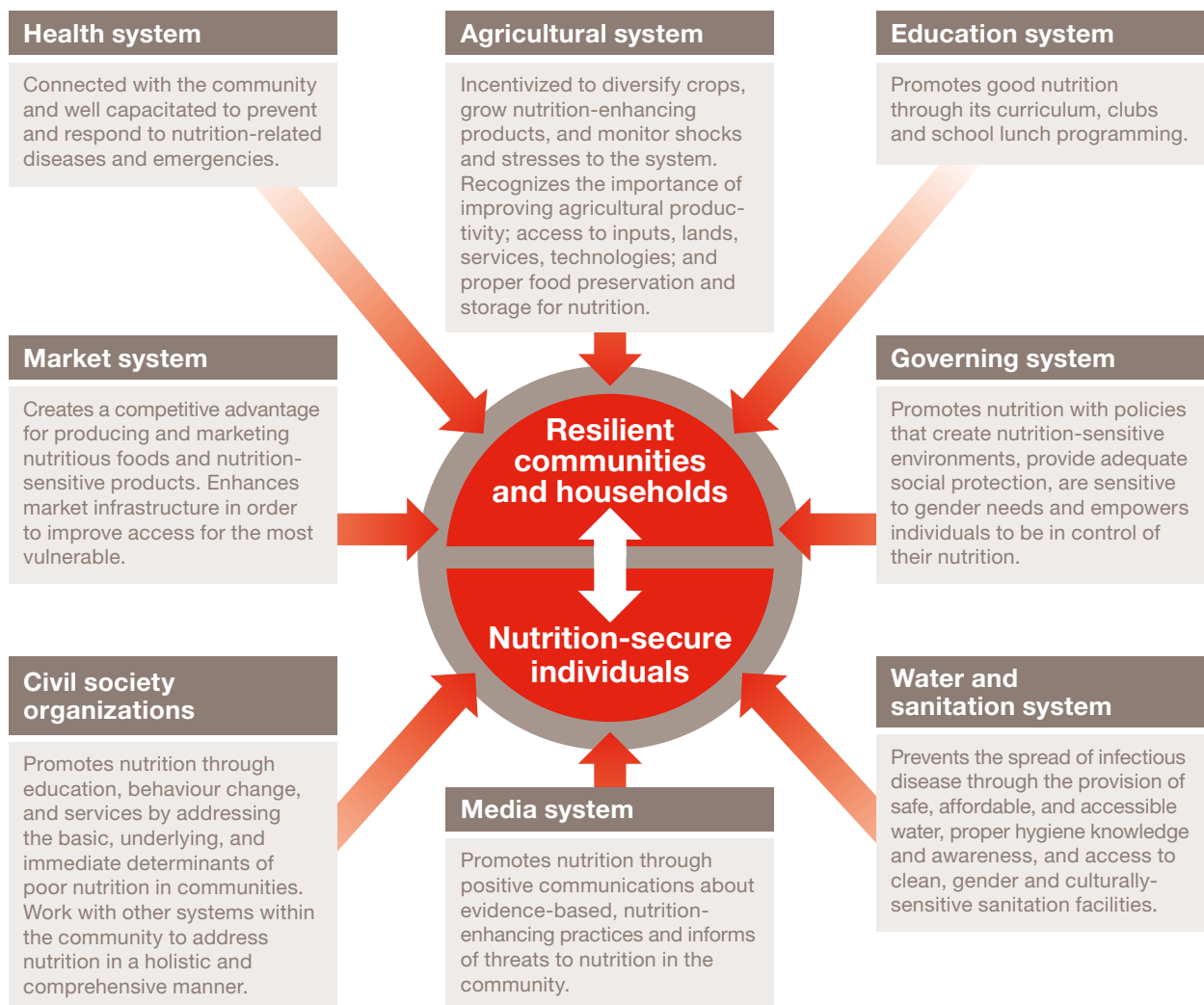
INDIVIDUAL LEVEL

- A resilient individual will be less vulnerable to poor nutrition within a community.
- Individuals most affected by crisis face the greatest risk of malnutrition.

COMMUNITY LEVEL

- Resilient communities ensure a safe and equitable distribution of food among all members regardless of gender, age or race.
- Communities must be able to evolve and accept change given the complexity of societies, in order to address the changing nutrition needs of their members.

Nutrition and resilience go hand-in-hand. In striving towards building resilient communities, the National Societies must also strive towards improving nutrition. A nutrition-secure individual has a nutritionally adequate diet and the food consumed is utilised resulting in adequate performance and growth. They are better able to withstand illness and external shocks. Long-term programming is required to account for cyclic malnutrition where food security and infectious disease are dictated by seasonal changes. The schema below depicts how nutrition is related to each system within a resilient community.



The global malnutrition burden

KEY STATISTICS

Malnutrition

is responsible for

45%

of all child deaths under-five years of age

1 in 4
or
162 million children under-five are **stunted**

and

48%

of infants are **not weighed** at birth

15%

of all births worldwide are **low birth weight**

12%
of mortality

in children under-five years of age can be attributed to

suboptimal infant feeding practices

29%

of women of reproductive age (15-49 years)

and

38%

of pregnant women are

anaemic

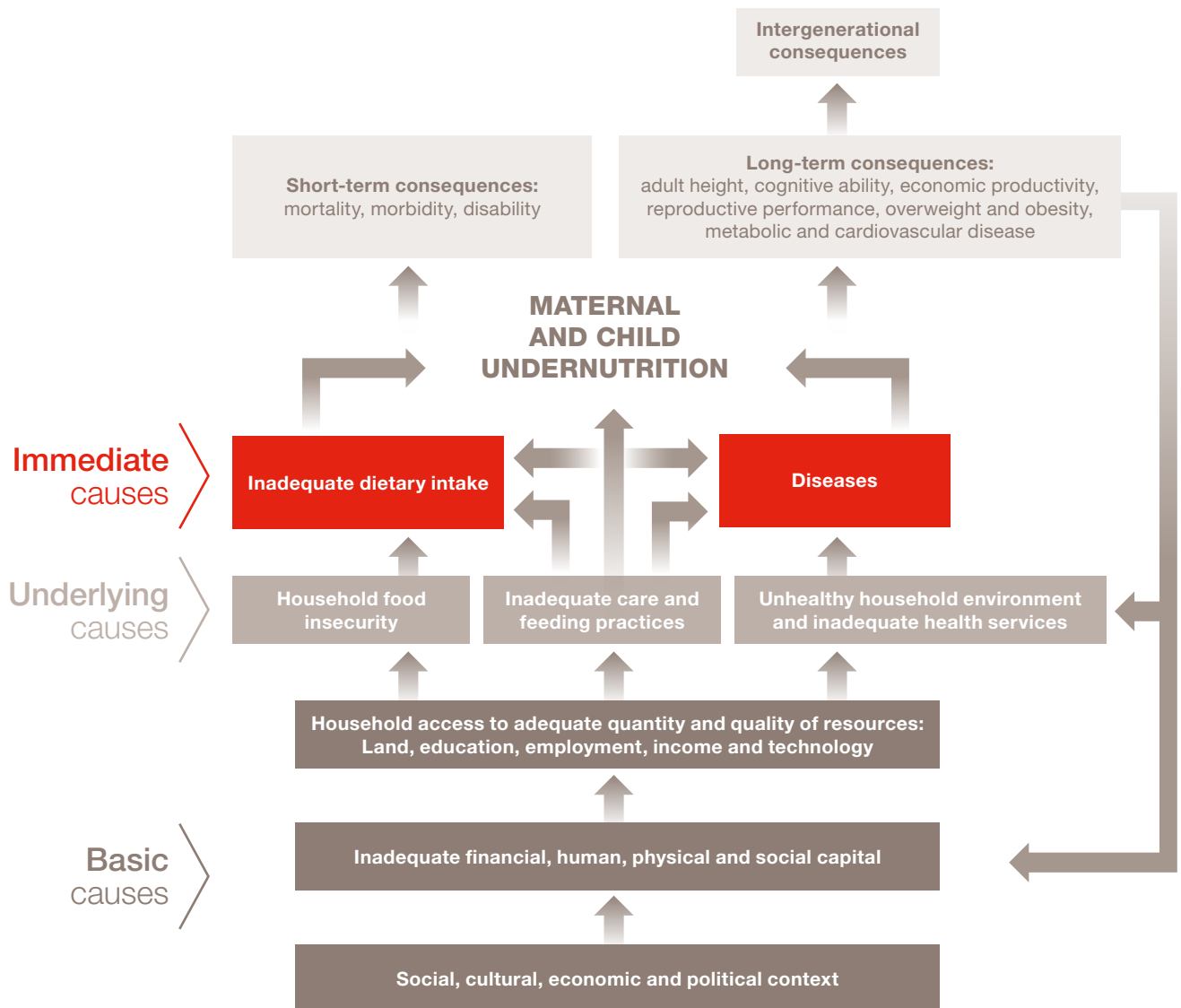
42 million children under-five of age are **overweight**

Severely wasted children are

11 times more likely to die than healthy counterparts

Source: WHO. Nutrition Global Targets 2025. Available at: www.who.int/nutrition/global-target-2025/en/

UNICEF's conceptual framework for maternal and child undernutrition



Source: Unicef

The IFRC has adopted UNICEF's conceptual framework for maternal and child undernutrition in order to understand the causes and consequences of poor nutrition. It identifies three levels of causes: 1) immediate; 2) underlying; and 3) basic as well as the short- and long-term consequences of undernutrition.

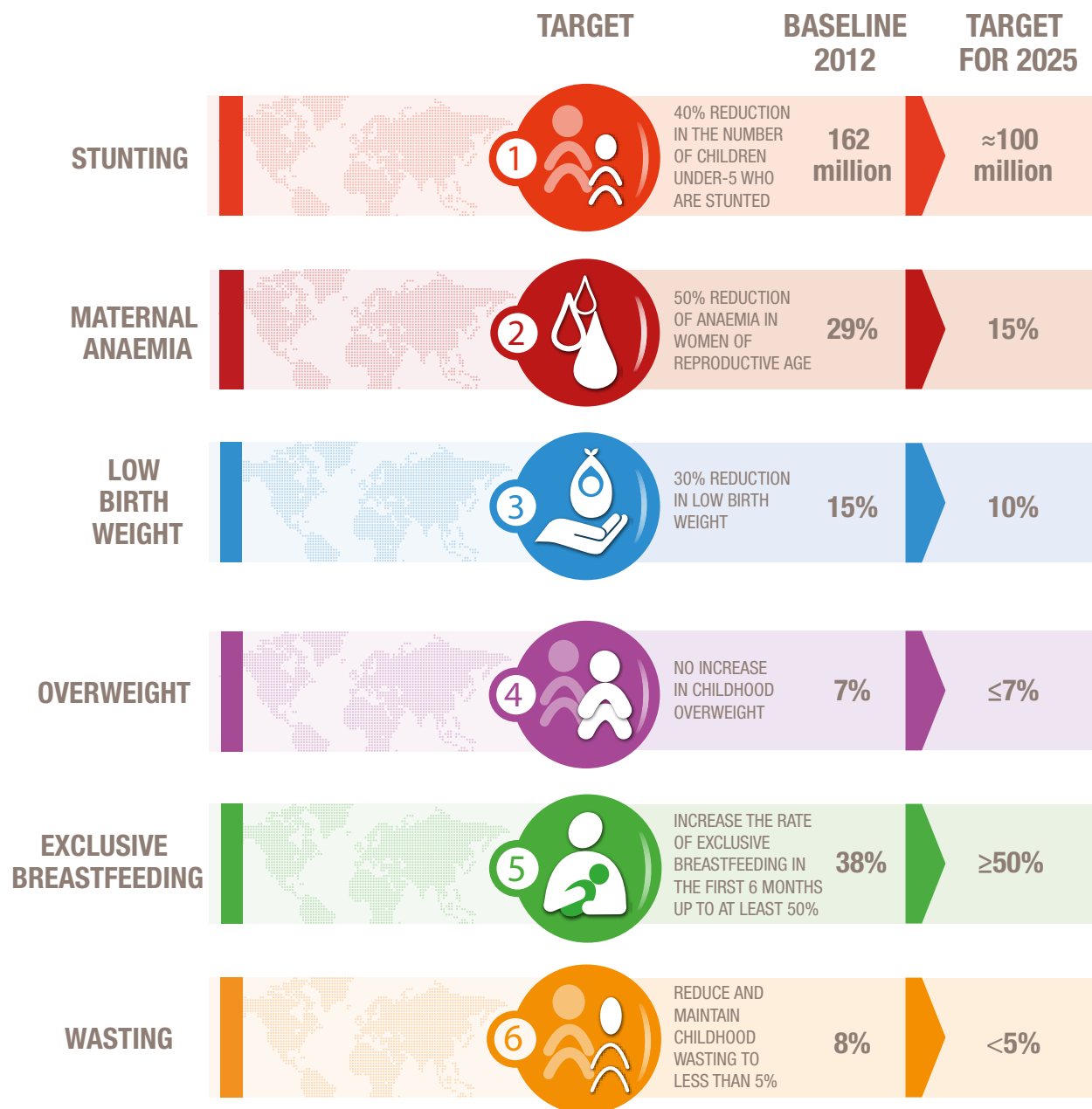
The immediate causes include inadequate dietary intake and disease which operate at the individual level. Individual requirements for macro- and micro-nutrients dictate whether dietary intake is adequate. Infection increases nutritional requirements and can prevent the body from absorbing those nutrients consumed. Undernutrition occurs as a result of an infection-malnutrition cycle.

The underlying causes are food insecurity, inadequate care and feeding practices, unhealthy household environment and inadequate health services that operate at the household and community level. Food security encompasses food availability, accessibility, affordability and appropriate use of a sufficient quantity and quality of food. Care and feeding practices at the household level includes breastfeeding, complementary feeding and hygiene – all of which are required for good nutrition. Poor public health, including exposure to disease and basic health service availability, also underlie undernutrition in many communities.

The basic causes refer to the vulnerability of a household to shocks and stresses based on how weak or strong their livelihoods are. The International Fund for Agricultural Development livelihoods framework possess five sets of assets essential to livelihood strategies: human capital, natural capital, financial capital, social capital and physical capital. Utilizing these assets, households adjust to their physical, social, economic and political environments through a set of livelihood strategies designed to strengthen their well being. The contexts in which households operate involve threats that render them vulnerable to negative livelihood outcomes, including natural disasters, economic shocks, conflict and civil unrest, as well as the illness and death of household members. Individuals' and communities' inability to anticipate, respond and cope with shocks and stresses is both an input and outcome of poor nutrition.

Consequences: Undernutrition has significant short-term consequences, contributing significantly to mortality, morbidity and disability worldwide. In addition, poor nutrition in early childhood can have long-term impact at the individual level including reduced cognitive ability, decrease reproductive performance, and decrease economic and societal productivity. These individual consequences have serious implications for a nation's economic and social well-being.

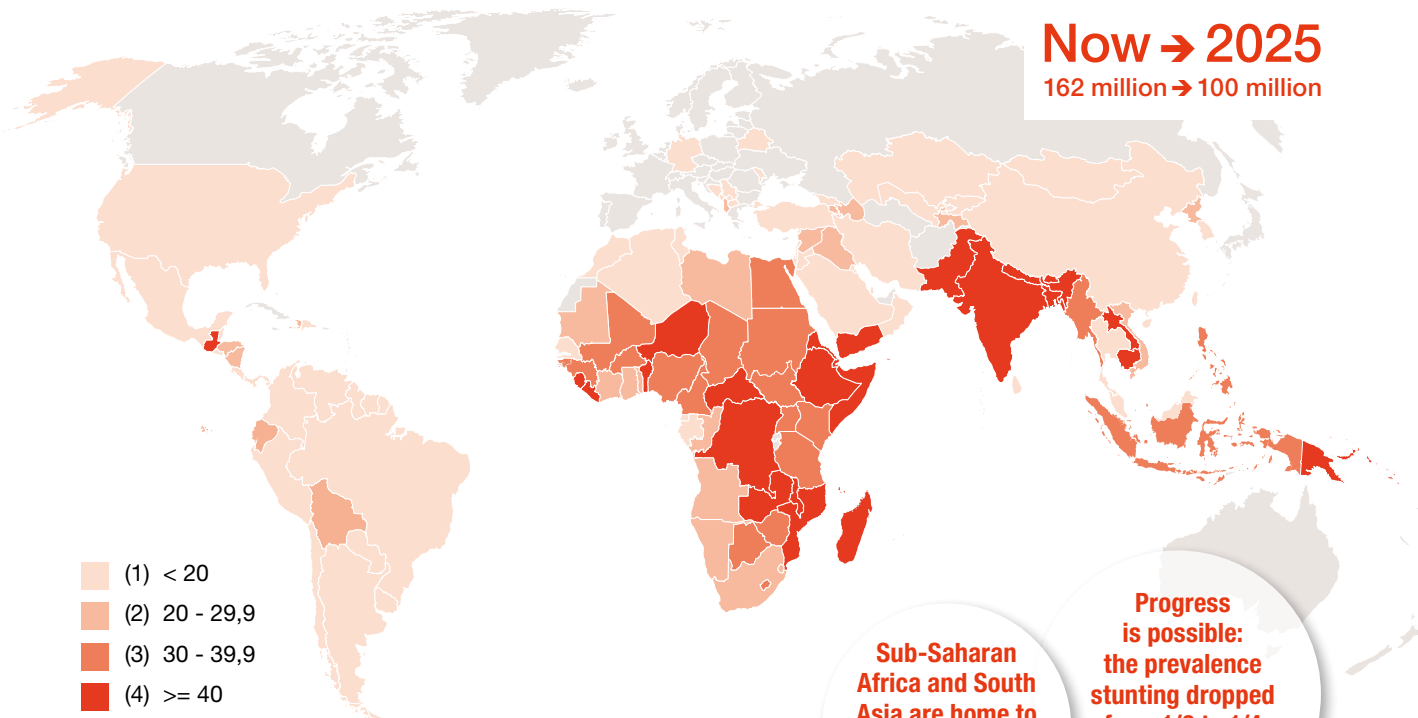
WHO global nutrition targets 2025



Source: WHO. Global Nutrition Targets 2025.
 Available at: www.who.int/nutrition/global-target-2025/en/



40 per cent reduction in the number of children under-five years of age who are stunted



- (1) < 20
- (2) 20 - 29,9
- (3) 30 - 39,9
- (4) >= 40

Now → 2025
162 million → 100 million

Sub-Saharan Africa and South Asia are home to three quarters of the world's stunted children.

Progress is possible: the prevalence stunting dropped from 1/3 to 1/4 between 2000-2013.

Definition:

Stunting is low height for age and reflects a process of failure to reach linear growth potential as a result of suboptimal health and/or nutritional conditions in early life.

Indicator:

Height-for-age Z-score (HAZ)

Individual cut-offs:

- Severe: HAZ <-3
- Moderate: HAZ <-2

Population cut-offs for stunting prevalence:

- Low: <20%
- Medium: 20-29%
- High: 30-39%

Main causes:

1. **Poor maternal health and nutrition** before, during and after pregnancy influences a child's early growth and development in the womb and as an infant.
2. **Suboptimal infant and young child feeding**, including non-exclusive breastfeeding, for the first six months of life and inadequate quantity, variety and quality of complementary feeding.
3. **Severe and subclinical infections**, often due to exposure to contaminated environments and poor hygiene.

Why it matters:

1. Stunting has **long-term consequences** including: diminished cognitive and physical development, reduced capacity and poor health.
2. Stunting is **largely irreversible** after the first 1,000 days of a child's life.
3. Stunted children have an **increased risk of overweight and obesity** later in life.
4. Stunting results in an average of 22 per cent **loss in yearly income** in adulthood.

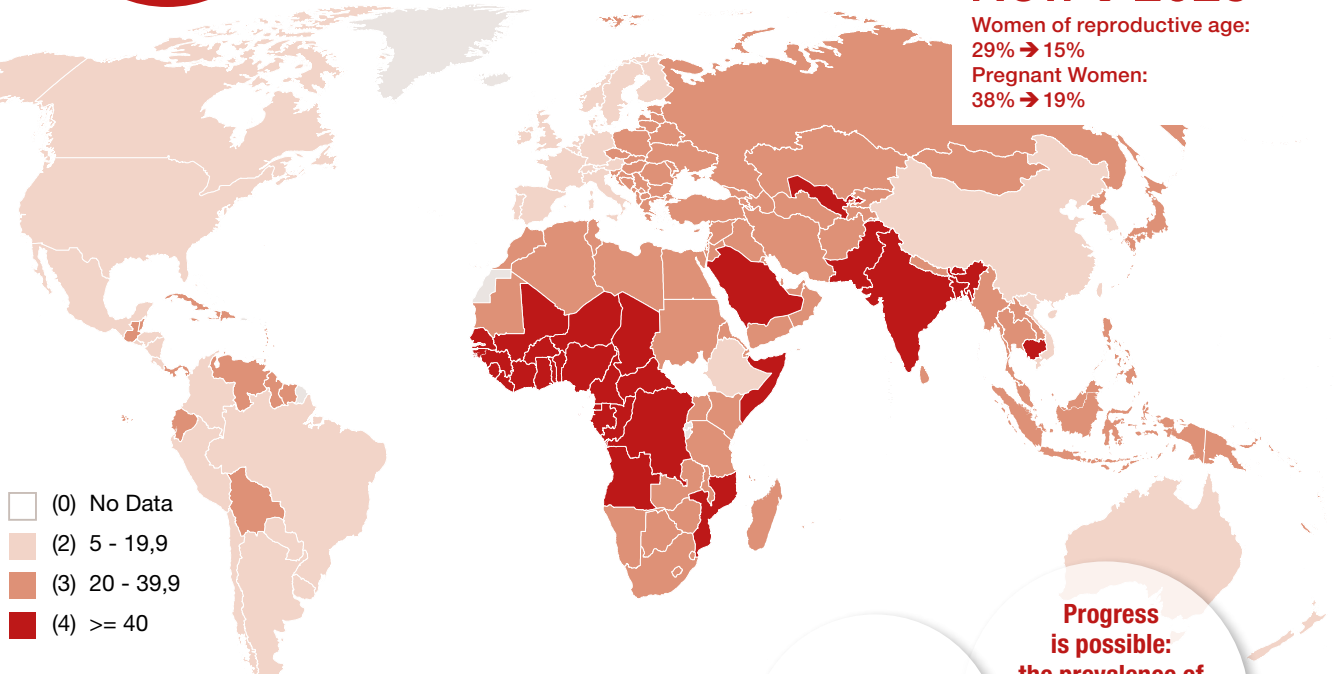
Information adapted from: WHO. Global Nutrition Target 2025- Stunting infographic. Available at: www.who.int/nutrition/global-target-2025/infographic_stunting.pdf?ua=1



50 per cent reduction in Anaemia in women of reproductive age

Now → 2025

Women of reproductive age: 29% → 15%
Pregnant Women: 38% → 19%



- (0) No Data
- (2) 5 - 19,9
- (3) 20 - 39,9
- (4) >= 40

Definition:

Anaemia is when the number and size of red blood cells in the body falls below a specific cut-off value, impairing the ability of the blood to transport oxygen around the body. Anaemia is linked with the other five targets and is an indication of poor health and nutrition.

Indicator:

Haemoglobin level (g/dL)

Individual cut-offs:

- Children under-five years of age: <11.0 g/dL
- Women: <12.0 g/dL
- Pregnant women: <11.0 g/dL

Population cut-offs for anaemia prevalence:

- Severe: >40%
- Moderate: 20-39.9%
- Mild: 5-19.9%
- Normal: <4.9%

50 per cent of anaemia cases are due to iron deficiency.

Progress is possible: the prevalence of anaemia fell by 12 per cent between 1995 and 2011.

Main causes:

1. **Low iron levels** due to inadequate dietary iron intake or absorption, increased needs during pregnancy and growth, and loss from menstruation or intestinal worm infection.
2. **Other micronutrient deficiencies** including Vitamin B12, Vitamin A, Vitamin C and folate.
3. **Infection and chronic inflammation**, including malaria and severe bacterial infections.
4. **Genetic conditions**, including Sickle Cell and Thalassemia.

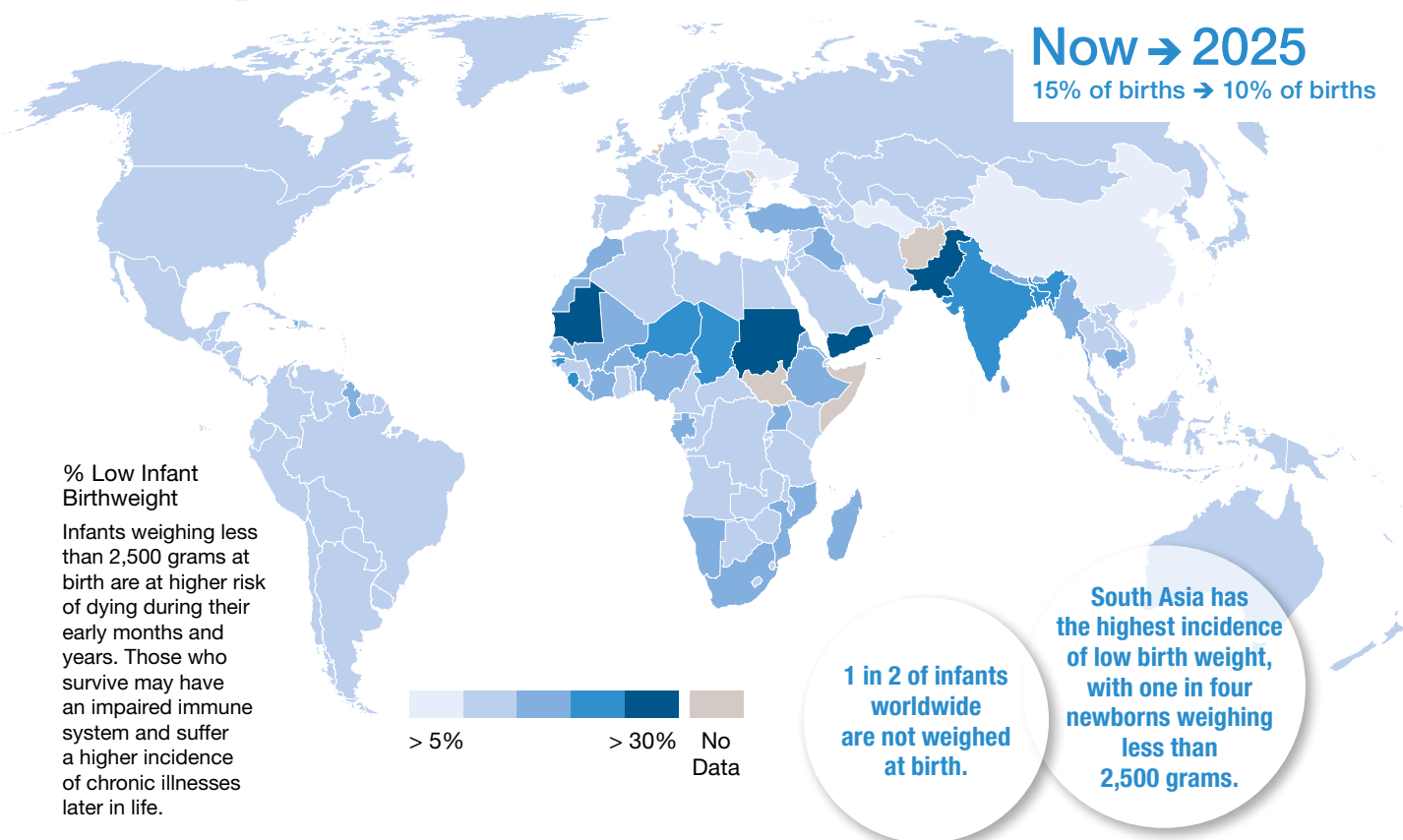
Why it matters:

1. Anaemic women have increased risk of **adverse maternal and neonatal outcomes**.
2. Anaemia leads to fatigue and lethargy, **impairing physical capacity and work performance**.
3. **Anaemia can impair health and quality of life**, development and learning of children.
4. Addressing Anaemia reduction can help **drive progress against other global nutrition targets**.

Information adapted from: WHO. Global Nutrition Target 2025- Anaemia infographic. Available at: www.who.int/nutrition/global-target-2025/infographic_anaemia.pdf?ua=1



30 per cent reduction in low birth weight



% Low Infant Birthweight

Infants weighing less than 2,500 grams at birth are at higher risk of dying during their early months and years. Those who survive may have an impaired immune system and suffer a higher incidence of chronic illnesses later in life.

Definition:

Low birth weight is when an infant weighs less than 2,500 grams at birth. It includes preterm neonates (before 37 weeks gestation), small for gestational age neonates and pre-term, small for gestational age neonates.

Indicator:

Weight (g.)

Individual cut-offs:

<2 500 g at birth

Population cut-offs

N/A

Main causes:

1. **Medical conditions** related to chronic hypertension, pre-eclampsia and eclampsia.
2. **Maternal characteristics** including body composition, stature and age.
3. **Poor maternal nutrition**, particularly energy and micronutrient insufficiency before and after conception.
4. **Maternal lifestyle choices** (e.g., alcohol, tobacco or drug use) and infection (e.g., malaria, HIV and other sexually transmitted infections).
5. **Deprived socio-economic conditions** including high prevalence of non-specific infections and physically demanding workload during pregnancy.

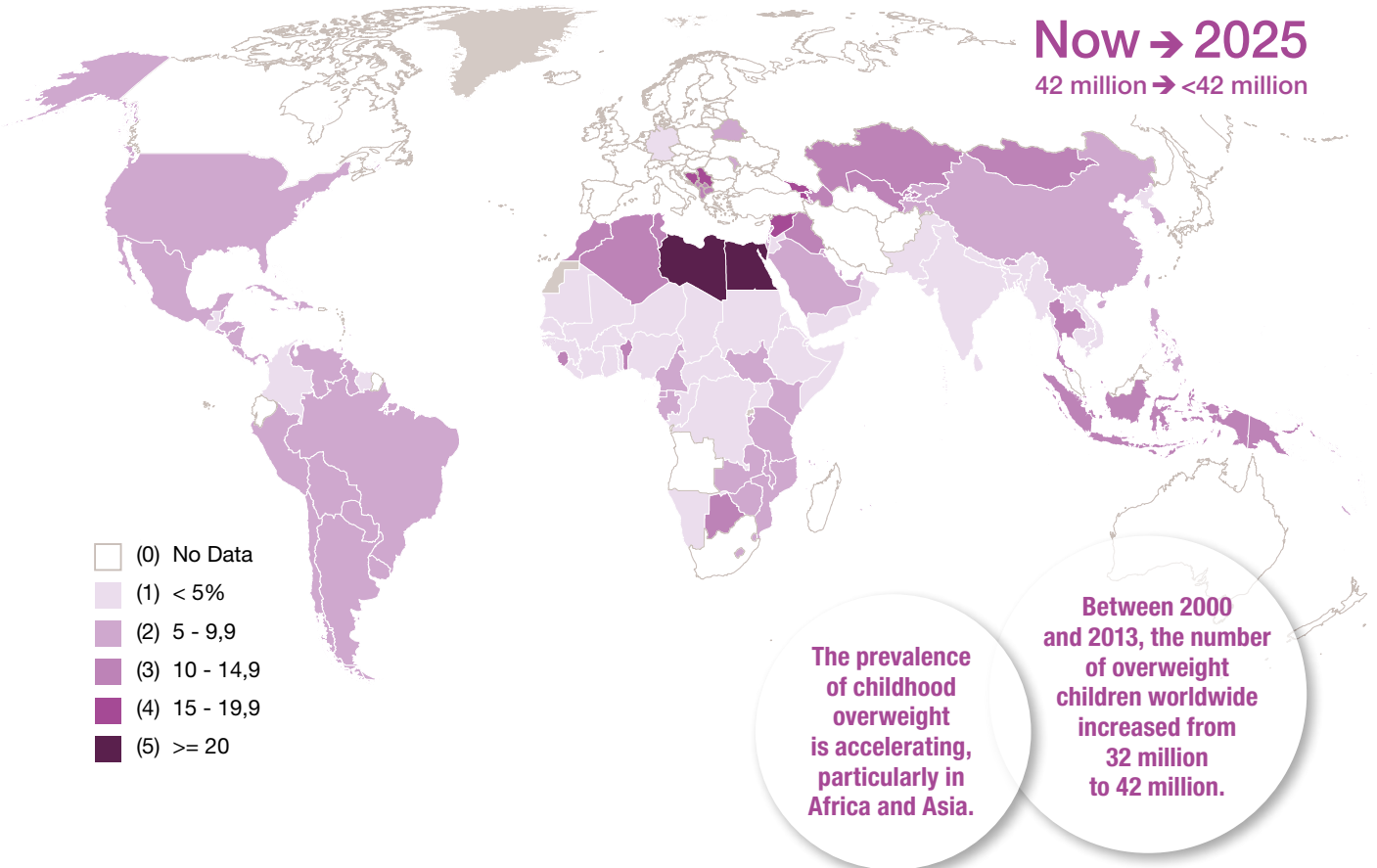
Why it matters:

1. Low birth weight infants have increased risk of **perinatal mortality and morbidity**.
2. Children born with low birth weight have an increased **risk of non-communicable disease** later in life.
3. Low birth weight is **a global concern**, but the majority of cases occur in low-and middle-income countries.

Information adapted from: WHO. Global Nutrition Target 2025- Low Birth Weight infographic. Available at: www.who.int/nutrition/global-target-2025/infographic_lowbirthweight.pdf?ua=1



No increase in childhood overweight



- (0) No Data
- (1) < 5%
- (2) 5 - 9,9
- (3) 10 - 14,9
- (4) 15 - 19,9
- (5) >= 20

Definition:

Overweight is when a child's weight for height is above two standard deviations from the median WHO Child Growth Standards.

Indicator:

Weight-for-height Z-score (WHZ)

Individual cut-offs:

- Severe /obese: WHZ >+3
- Moderate/ overweight: WHZ >+2

Population cut-offs

N/A

Main causes:

1. **Low birth weight combined with accelerated weight gain in childhood.**
2. **Suboptimal infant and young child feeding** including non-exclusive breastfeeding for the first six months of life and inadequate complementary feeding.
3. The nutrition transition which has led to a shift in diet towards **an increased intake of energy-dense, nutrient-poor foods.**
4. **Decreased physical activity** due to the increasingly sedentary nature of recreation time, changing modes of transportation and increasing urbanization.

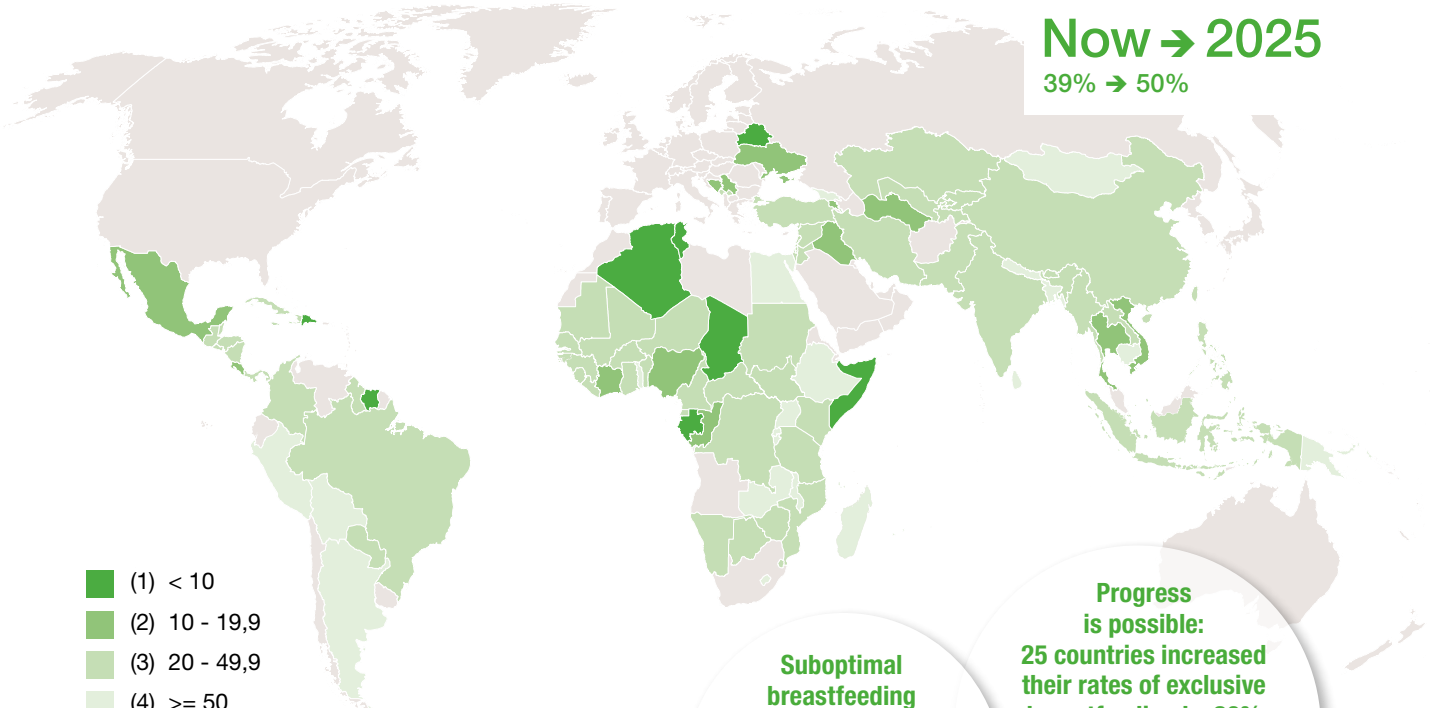
Why it matters:

1. Overweight children have a higher risk of developing serious health problems, including **obesity, non-communicable diseases, premature death and disability in adulthood.**
2. Child overweight is a growing problem in **all regions of the world.**
3. Addressing child overweight can help **drive progress against other global nutrition targets.**

Information adapted from: WHO. Global Nutrition Target 2025- Overweight infographic. Available at: www.who.int/nutrition/global-target-2025/infographic_overweight.pdf?ua=1



Increased rate of exclusive breastfeeding in first six months up at least 50 per cent



Now → 2025
39% → 50%

- (1) < 10
- (2) 10 - 19,9
- (3) 20 - 49,9
- (4) >= 50

Suboptimal breastfeeding practices contributed to 12% of mortality (804,000 deaths) in children under-five years of age in 2011.

Progress is possible: 25 countries increased their rates of exclusive breastfeeding by 20% or more after 1995, a rate that is similar to what is needed to achieve the global target.

Definition:

Exclusive breastfeeding is when infants receive only breast milk. No other liquids or solids are given—not even water—with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines.

Indicator:

Proportion (%) of infants 0-6 months of age who are exclusively breastfed

Individual cut-offs:

N/A

Population cut-offs

<80%

Main causes:

1. **Caregiver and societal beliefs** favouring mixed feeding and lack of awareness of the dangers of inadequate young child feeding practices.
2. **Lack of adequate skilled support and policies** in health facilities and within the community in favour of breastfeeding.
3. **Aggressive promotion of infant formula**, and other breast-milk substitutes.
4. **Workplace policies** that do not support maternity leave or breastfeeding in the workplace.

Why it matters:

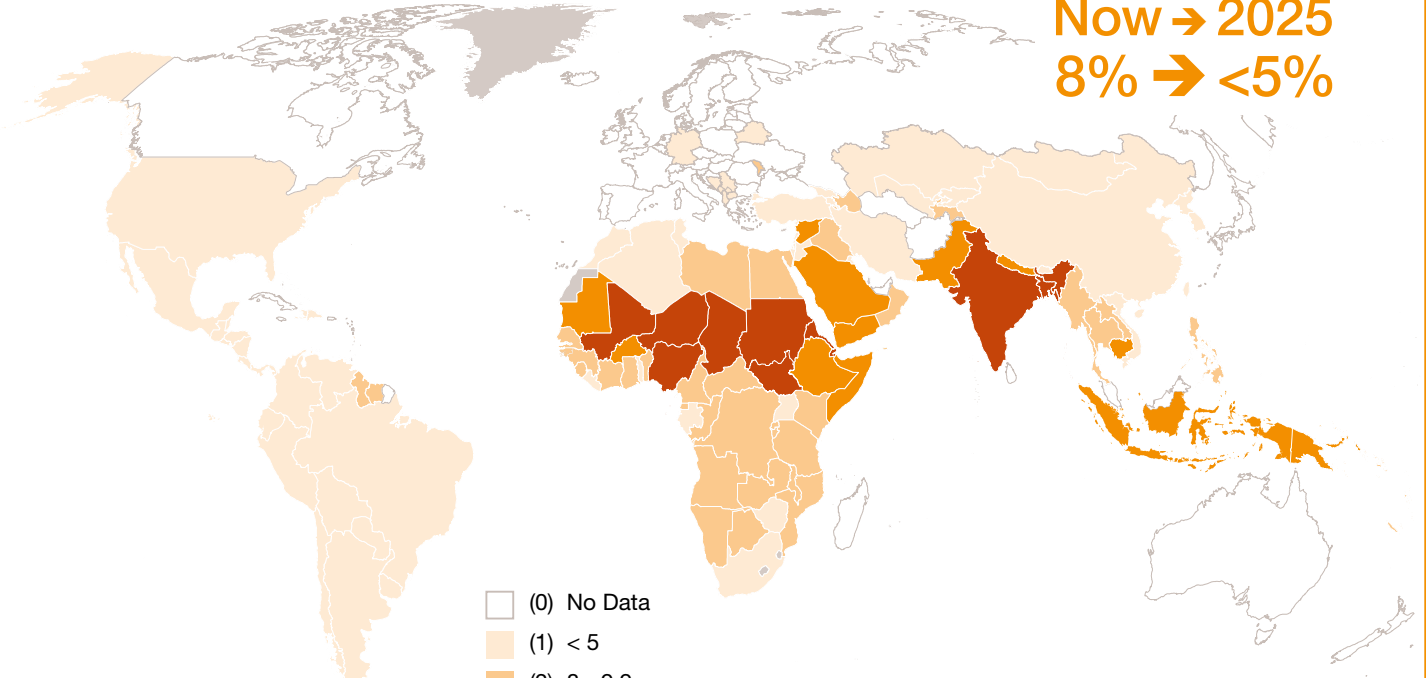
1. Exclusive breastfeeding provides babies the **perfect nutrition** for healthy growth and brain development.
2. Exclusive breastfeeding **protects infants** from respiratory infections, diarrhoeal disease and other **life-threatening ailments**.
3. Exclusive breastfeeding provides a child **protection against obesity and NCDs** such as asthma and diabetes.

Information adapted from: WHO. Global Nutrition Target 2025- Low Birth Weight infographic. Available at: www.who.int/nutrition/global-target-2025/infographic_lowbirthweight.pdf?ua=1



Reduce and maintain childhood wasting to less than five per cent

Now → 2025
8% → <5%



- (0) No Data
- (1) < 5
- (2) 8 - 9,9
- (3) 10 - 14,9
- (4) >= 15

Definition:

Wasting, or thinness, reflects acute malnutrition and indicates a recent and severe process of weight loss, due to either acute starvation and/or disease.

Indicator:

WHZ OR
Mid-upper arm circumference (MUAC)

Individual cut-offs:

- Severe/SAM:
WHZ <-3 OR
MUAC<11.5 cm
- Moderate/MAM :
WHZ < -2 and ≥ -3 OR
MUAC <12.5 cm

Population cut-offs

GAM = SAM + MAM

- Low: <5%
- Medium: 5-9%
- High: 10-19%
- Emergency: >15%

Main causes:

1. **Poor access to appropriate, timely and affordable healthcare.**
2. **Suboptimal infant and young child feeding** including non-exclusive breastfeeding for the first six months of life and inadequate quantity and quality of complementary feeding.
3. **Poor food security** characterized by a monotonous diet with low nutrient density, together with inadequate knowledge of patterns of food storage, preparation and consumption.
4. **Severe and subclinical infections**, oftentimes due to exposure to contaminated environments and poor hygiene.

Why it matters:

1. Wasting increases a child's risk of **stunted growth, impaired cognitive development and NCDs** in adulthood.
2. Wasting increases a child's risk of **mortality** from **infectious diseases** such as diarrhoea, pneumonia and measles.
3. Addressing wasting can help **drive progress against other global nutrition targets.**

Information adapted from: WHO. Global Nutrition Target 2025- Wasting infographic. Available at: www.who.int/nutrition/global-target-2025/infographic_wasting.pdf?ua=1

Does nutrition matter?

According to the 2014 Global Nutrition Report, only a handful of countries in the world achieve the thresholds for acceptable public health nutrition.¹ This global failure makes malnutrition one of the greatest global development challenges today. From food shortages and acute malnutrition to poor diet diversity and obesity, the malnutrition crisis worldwide is complex, multifaceted, and ever-evolving.

Thus, in nearly all cases – the answer to this question is a resounding “yes”, nutrition matters! The question then becomes, what kind of nutrition programme should we start?

When starting a nutrition programme, it should be targeted and prioritized against the existing needs of the community, adapted to the local context, and designed based on the strengths of the implementing National Society (NS).

Nutrition programming does not have to be overwhelming. There is a large number of activities and initiatives that NSs can implement either as standalone programmes or integrated to leverage outcomes of other initiatives for outcomes related to nutrition, growth and development. Many nutrition interventions are low cost and high impact. For example, Vitamin A Supplementation is recognized as one of the most cost-effective interventions for improving child survival.²

There are three different broad approaches for a National Society to work in nutrition:

1. Flagship project: combined nutrition-specific and nutrition-sensitive approach

When nutrition is one of the leading causes of morbidity and mortality in a country, nutrition should be addressed holistically based on the root causes using the flagship project approach.

This approach involves both targeted, nutrition-specific programmes and the integration of nutrition components, indicators, and priorities into existing nutrition-sensitive programming. Programme managers would design a nutrition-specific programme based on the community nutrition needs and priorities generally aimed at reducing mortality. In addition, they can harmonize with existing programmes in health (CBHFA, ECV, TB, HIV, malaria, and RMNCAH

¹ Acceptable public health nutrition indicators include indicators for under-five stunting, adult overweight and anemia in women of reproductive age

² Edejer, Tessa Tan-Torres, et al., 'Cost Effectiveness Analysis of Strategies for Child Health in Developing Countries', *British Medical Journal*, vol. 331, 2005, pp. 1177-1182 and Bhutta, Z. A., Ahmed, T., Black, R. E., Cousens, S., Dewey, K., Giugliani, E., ... & Maternal and Child Undernutrition Study Group. (2008). *What works? Interventions for maternal and child undernutrition and survival. The Lancet*, 371(9610), 417-440.

programming), food security, disaster risk reduction, WASH, and gender to incorporate nutrition. This could encompass anything from adding nutrition into monitoring and evaluation frameworks, sensitizing communities to the links between nutrition and existing programmes, partnering with local organizations working across sectors, and building the capacity of health and food security staff and volunteers in nutrition. This approach is the most cost-effective and sustainable, as it tackles nutrition problems directly while also building nutrition into the infrastructure of existing programmes.

Illustrative example: CONCERN Niger

In response to failed seasonal rains and significant crop failure, CONCERN Worldwide transitioned a long term CMAM programme to a multi-sectorial resilience programme aimed at preventing a malnutrition crisis. The CMAM programme was scaled up with all local health centers being trained to identify and treat malnutrition. Supervision and support to health centers and the general hospital was increased to ensure not only improved nutrition services were available but co-morbidities such as malaria and diarrhea were also addressed to ensure mortality was decreased. A cash transfer programme was added to address changing market prices of food targeting the poorest of the poor. Screening and referral was added to all programmes including vaccination and primary education. Distribution of seed and tools was commenced by the food security unit, targeted at families most at risk of malnutrition and families with children under 5. Areas that were significantly affected also received monthly food distributions. Screening and health promotion was conducted at the mass food distribution sites to utilize the opportunity of having large numbers of at risk population present.

2. Nutrition-sensitive approach

A nutrition-sensitive approach should be taken when nutrition is impacting outcomes of other programmes but isn't a leading cause of morbidity and mortality in a country. Nutrition-sensitive approaches can be as simple as sensitizing staff about nutrition and adding nutrition indicators in standing projects to creating behavior change campaigns on nutrition tied to existing CBHFA, food security or livelihoods programmes. The nutrition-sensitive approach is about maximizing the potential of existing National Society work to tackle nutrition problems within the community without a large provision of resources.

Health example: Ethiopia Red Cross Society

The Netherlands Red Cross is working actively with the Ethiopia Red Cross Societies in RMNCAH and HIV care and support. As part of their work in RMNCAH, they are supporting government provision of iron-folic acid supplements for pregnant and lactating women, inclusion of zinc in diarrhea disease treatment, and breastfeeding promotion. In addition, RC volunteers are conducting household level education around micronutrient needs. Regarding the HIV care and support, volunteers are providing household level education about positive nutrition and healthy living for children, adolescents, and adults living with HIV.

Multisectoral example: Action Against Hunger – Burkina Faso

ACF-France has implemented the “WASH-in-Nut” strategy, which calls for the systemic integration of a minimum WASH package in undernutrition treatment programmes for children under five and pregnant and lactating women in Tapoa province, Burkina Faso. The “WASH-in-Nut” strategy was developed by UNICEF in 2012 in partnership with humanitarian actors including ACF. This strategy recommends three main groups of activities:

1. Improving WASH conditions in nutrition centre and reducing the risks of nosocomial infection among children who receive treatment;
2. Providing a hygiene kit and giving advice to families in order to improve treatment and reduce risks of relapse of undernutrition
3. Improving the WASH environment in communities at risk of undernutrition to prevent new cases of acute undernutrition.³

3. Nutrition-specific approach

A nutrition-specific approach is for targeted life-saving interventions to decrease the incidence of a particular issue or for prevention of malnutrition. This can be implemented by the NS directly or the NS can work with other international and local partner organizations in the implementation of nutrition-specific programming. In some cases, the government health facilities and infrastructure already have national and local programmes addressing nutrition such as CMAM, vitamin A supplementation campaigns, breastfeeding education, and growth monitoring in primary health care centers. National Societies can support these large-scale projects or initiatives through community-based means using existing approaches such as CBHFA or can implement them on behalf of the Ministry of Health MoH depending on the context.

Illustrative example: Kenya Red Cross Society (KRCS)

Using standard approved national IMAM* (Integrated management of acute malnutrition) guidelines, KRCS volunteers are trained and support the health sector in identifying and referring malnourished children to facilities. The volunteers also offer follow-up support at the household level for compliance to treatment protocols and provide caregivers with messages around appropriate maternal, infant and young child nutrition practices. KRCS is working to support government at all levels to deliver high impact nutrition interventions that contribute to the resilience of children and women and prevent malnutrition.

For instance, in the Tana North MCH project, 150 Community Health Volunteers and 15 Community Health Assistants were trained on the Community Health Strategy while Health Workers were trained on infant and young child feeding practices within the project site. Data generated at community level is shared with local facilities.

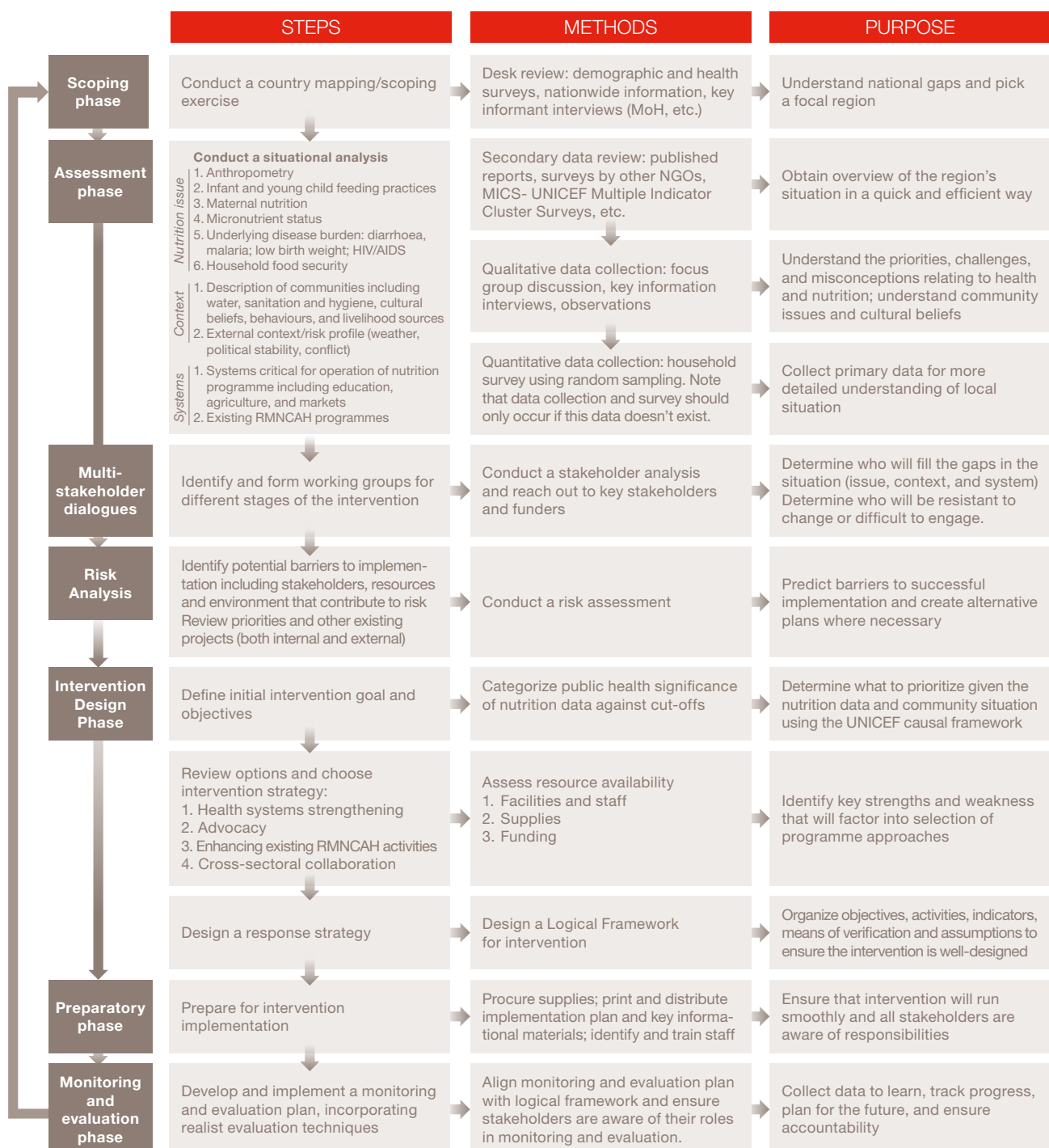
³ ACF International. “WaSH-in-Nut” programme: Integration of a minimum WaSH package in undernutrition treatment programmes.” 2014.

* it is same approach as in CMAM but called differently in different countries.

How to design a nutrition programme

The following schema is about designing a nutrition-specific programme from scratch. However, to include nutrition-sensitive interventions into an existing programme or project one needs to take the following steps:

- 1) Assess priority nutrition issues in the community
- 2) Consider existing activities and how nutrition can be addressed
- 3) Develop nutrition indicators (on output and outcome levels) for monitoring and planning
- 4) While evaluating the programme, ensure nutrition is addressed based on the indicators previously decided upon



Key strategies for National Societies in RMNCAH

The strategies National Societies can take for addressing malnutrition are diverse and should be based on a National Society's technical capacity, resources, competing priorities, and partnership opportunities. Below are a list of some examples of strategies organized into four categories: health systems strengthening, advocacy, enhancing existing RMNCAH CBHFA activities, and cross-sectoral collaboration.

Health systems strengthening

1. Improve health systems' identification and measurement of stunting, wasting and micronutrient deficiency.
2. Strengthen health facility-based capacity for anaemia prevention and treatment.
3. Improve pregnancy care and maternal nutrition for preconception to prevent low birth weight babies and appropriate neonatal and post-neonatal care for low birth weight infants.
4. Promote and support exclusive breastfeeding through healthcare workers
5. Adopt the community-based management of acute malnutrition (CMAM) to identify, prevent and treat wasting in both development and emergency contexts.
6. Create contingency plans for nutrition emergencies and nutrition in the context of emergencies

Advocacy

1. Advocate for maternity protection and reduced physical and psychological workload during pregnancy.
2. Advocate for stricter guidelines for the marketing of energy-dense, nutrient-poor processed food and beverages to children.

Enhancing existing RMNCAH activities

1. Include adolescent girls in the planning and implementation of maternal nutrition activities, including micronutrient supplementation.
2. Improve community understanding and social norms around breastfeeding in the workplace and in public.
3. Prevent early risk to unhealthy growth by improving infant and young child feeding practices.
4. Promote pre-pregnancy and antenatal interventions including birth spacing, smoking cessation and addressing infection during pregnancy.

Cross-sectoral collaboration

1. Include water, sanitation and hygiene in RMNCAH community-based interventions to protect children from diarrhoeal diseases, malaria, intestinal worms and other infections.
2. Include food security/disaster risk reduction in RMNCAH community-based interventions to improve dietary intake.
3. Strengthen links between RMNCAH and NCD programming to address child overweight.
4. Strengthen links between RMNCAH and other stakeholders working on nutrition in communities.

Key considerations

for comprehensive implementation

of nutrition programmes

in the context of RMNCAH

The following are cross-cutting themes and elements to consider when developing a nutrition programme. Comprehensive implementation in the context of RMNCAH requires that we work across the three continua, increase access to healthcare, empower volunteers, and strive for gender equality. In addition, we need to develop synergies with other programmes, explore partnerships, mobilize resources, and design our programmes based on the latest evidence.

The three continua

Nutrition programming works across the three continua of care: the resilience continuum from preparedness to relief, recovery and development; the lifespan continuum from birth to death; and the healthcare continuum from the individual to the household to the community to all levels of the formal and informal health system. RMNCAH cannot be addressed in isolation as each stage is linked to the health status across various stages of life. For instance, the nutrition of an adolescent girl has an impact on pregnancy, her child's growth and development, and disease risk of the child in the short- and long-term. By recognizing the continuous nature of health and developing interventions that address nutrition across the lifespan and care structures, implementing National Societies can have a greater and more meaningful impact on reducing maternal and child mortality.

Increasing access to healthcare

Implementing National Societies can recognize existing nutrition programmes within the healthcare system and work to improve community access to these. Activities include advocacy for improving community access and coverage; promotion of existing healthcare programmes addressing nutrition; and follow-up with community members about their experiences with the healthcare system. The NS community and population-based programmes can align with the healthcare system to avoid duplication of activities and instead enhance efficiency and coverage. For instance, National Societies can help with government Iron-Folic acid supplementation of pregnant women, by helping to extend coverage to all women of reproductive age and promoting adherence to supplementation regimens through health promotion and behaviour change communications at key intervention points.

Key considerations**Volunteer empowerment**

The strength of the International Red Cross Red Crescent Movement lies in the 17 million active volunteers committed to addressing the underlying social, behavioural and environmental factors that determine good health. Evidence shows that Community Health Volunteers, as part of the community-based health work force, are unique resources in bridging the gap between communities and health systems. National Societies can empower and motivate volunteers as agents of change to maximize the reach and impact of its programmes. Empowering volunteers includes regular sensitization, training, coaching and support. For instance, community volunteers can be sensitized to the basic, underlying and immediate causes of malnutrition among women and children. When Community Health Volunteers are well trained and supported, they can deliver crucial messages related to nutrition and RMNCAH, thereby contributing to reducing maternal and child mortality.

Gender equality and empowerment

Promoting gender equality by empowering women of reproductive age and engaging men and adolescent boys is fundamental to improving reproductive health and RMNCAH outcomes. Gender inequalities substantially influence poor maternal and child feeding and care practices. These inequalities stem from inadequate attention to the needs and roles of women, resulting in inadequate care for pregnant and lactating women, lack of education, poor self-confidence, low economic status and a substantial workload. Research indicates the nutrition status of infants and children is intimately linked with women's empowerment and status in both the household and community. Thus, nutrition interventions in the context of RMNCAH must find innovative ways to empower women to be agents of change for the health of themselves and their children.

Developing synergies and linking programmes

Nutrition is a cross-cutting, multisectoral problem that requires multisectoral solutions. While the immediate causes of malnutrition are related to food and nutrient intake, the underlying causes are embedded in the community context in which malnutrition occurs. As such, to enhance health outcomes cover the continuum of care and scale up effectively, the IFRC, supporting National Societies and other partners can coordinate efforts. For example, nutrition can be integrated as an important theme in RMNCAH, NCDs and other health programmes (HIV, TB, and malaria) as well as in WASH, food security, agriculture and livelihoods programmes. Existing IFRC platforms such as the CBHFA framework in community settings and Epidemic Control for Volunteers Framework in emergency contexts can be used for successful implementation. A common platform to share learning, analyses and trends, and to rely on each other's strengths is crucial.

Evidence-informed programming

Nutrition-related definitions, indicators and cut-offs are all based on a compilation of global evidence. However, it is important to note that understanding of nutrition is constantly evolving, and thus programme managers should stay up to date on the latest evidence. National Societies can learn from their previous experiences, partner organizations and other National Societies for implementation expertise. To do so, monitoring and evaluation can be integrated into nutrition programming from the planning stage to facilitate learning and knowledge sharing. Realist evaluations are a great way to explore the context in which programmes operate and the mechanism that drive action. These evaluations seek to answer what works, for whom, in what context and why. The realist approach to evaluation can be used to build a fine-grained understanding of how certain programmes work and to develop knowledge that goes beyond the local context.

Value of partnerships

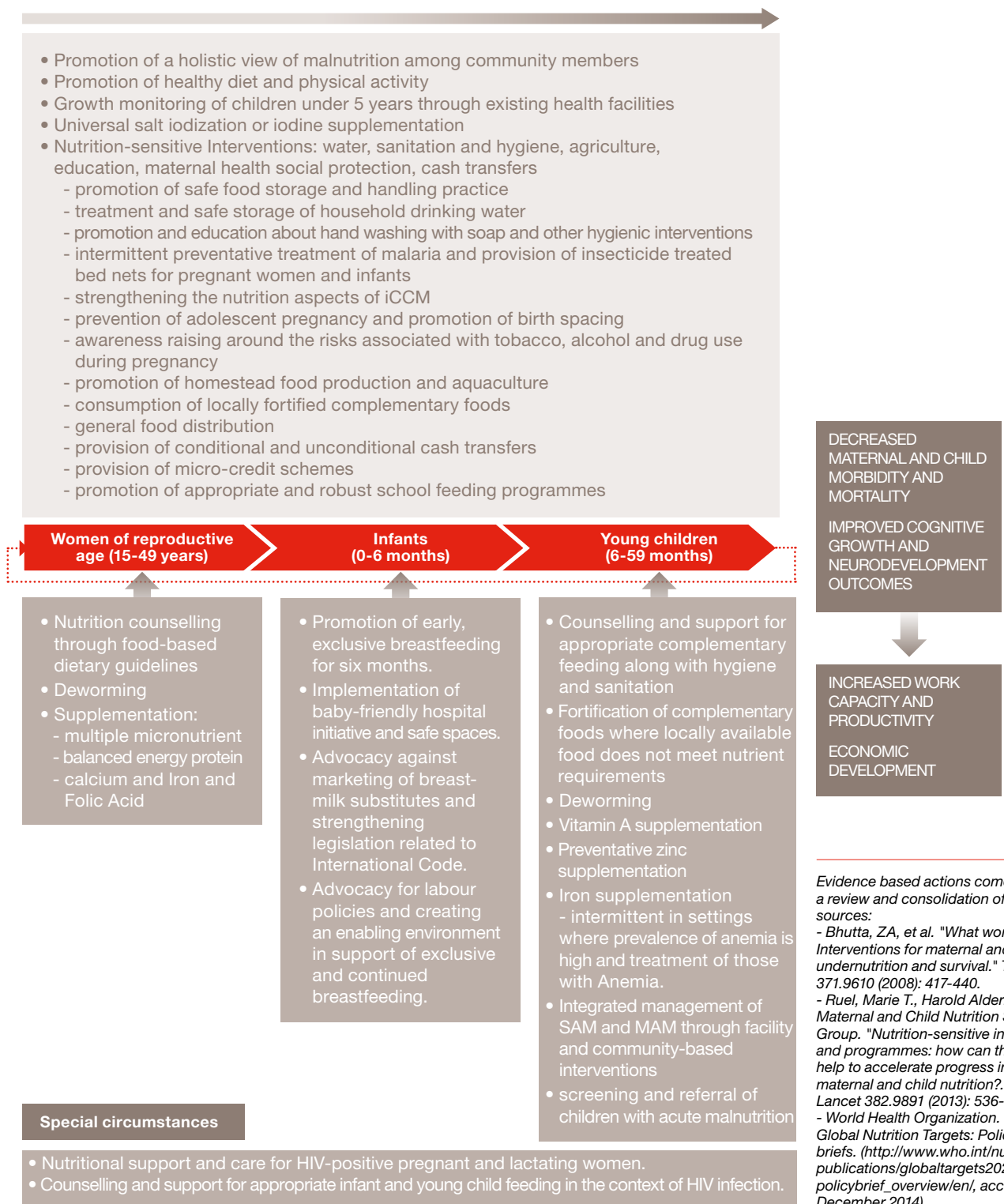
Partnership is critical at many levels for nutrition programming. Collaboration with the government and external partners to identify communities with high health needs and providing capacity building on RMNCAH at all levels within the project has been giving positive dividends. A stakeholder analysis is an important first step for identifying partners and mapping out a plan. As nutrition is a cross-cutting issue, collaboration with actors in health, agriculture and food security, education, gender equality, and WASH should be explored. Once identified and aligned with project objectives and outcomes, partners can be engaged for moving forward.

Resource mobilization

Resources are always a constraint in health programmes relative to need. National Societies can address this challenge by creating partnerships with both the government and other NGOs for cost-effective and integrated programming. In addition, National Societies can find creative, low-cost and local solutions to the RMNCAH problems facing their communities. Dedicated efforts and continuous capturing of impact and evidence that programmes are sustainable beyond the project period is one of the crucial selling points to seek RMNCAH-specific funding, replicating and scale-up activities.

Evidence-based actions

Malnutrition is preventable, predictable and treatable.



Nutrition-specific evidence-based actions summary matrix

The following matrix provides a list of evidence-based actions for addressing the six global nutrition targets. Details regarding strategies, indicators and community messages for implementation are covered in the subsequent tables.

Intervention area	Evidence-based action	Stunting	Maternal anaemia	Low birth weight	Child overweight	Exclusive breastfeeding	Wasting	Emergency/Prevention/Response*	
								Development/Recovery	Development/Recovery
Overall nutrition	Promotion of a holistic view of malnutrition among community members	X	X	X	X	X	X	X	X
	Promotion of healthy diet and physical activity	X	X	X	X	X	X	X	X
	Growth monitoring through existing facilities	X		X	X		X		X
Women of reproductive age (15-44 years)									
Nutrient deficiency	Nutrition counseling about food-based dietary guidelines	X	X	X	X				X
	Maternal “multiple micronutrient supplementation”	X	X	X	X				X
	Maternal balanced energy protein supplementation	X		X	X				X
	Maternal calcium supplementation	X		X					X
	Universal salt iodization or iodine supplementation	X		X					X
Infants (0-5 months)									
Proper infant feeding practices	Promotion of early, exclusive breastfeeding for six months and continued breastfeeding with appropriate complementary foods until 24 months								
	Implementation of baby-friendly hospital initiative and safe spaces Advocacy against marketing of breast-milk substitutes and strengthening legislation related to International Code Advocacy for labour policies and creating an enabling environment in support of exclusive and continued breastfeeding.	X			X	X	X		X
Young children (6-59 months)									
Complementary feeding	Counseling and support for appropriate complementary feeding at the community level	X			X		X	X	X
	Fortification of complementary foods where locally available food does not meet nutrient requirements	X					X		X
Worm infection	Deworming of young children (and women of reproductive age)	X	X	X			X	X	X
Micronutrient deficiency	Vitamin A supplementation between 6-59 months age	X					X	X	X
	Preventative zinc supplements between 12-59 months age	X					X	X	X
	Daily iron supplementation for children 6-23 months age	X	X				X	X	X
Acute malnutrition	Integrated management of severe acute malnutrition (SAM) through facility and community-based interventions	X				X	X	X	X
	Supplementary feeding for moderate acute malnutrition (MAM)	X					X	X	X
	Screening and referral of children with acute malnutrition						X		
Special Circumstances									
Nutrition of HIV-infected pregnant and lactating women	Nutritional care and support	X	X	X		X	X	X	X
Infant feeding in the context of HIV	Counseling and support of HIV-positive mothers and other caregivers of HIV-positive infants	X				X	X	X	X
Feeding of low birth weight infants	Counseling and support at facility and community level	X				X	X	X	X

*size and scale of the problem dictate when it is an emergency

Nutrition-specific evidence-based actions

The following pages provide a comprehensive guide for the nutrition-specific and nutrition-sensitive evidence-based actions proposed in the matrices on pages 19-20. For each evidence-based action, the table provides: indicators, including outcome indicators and indicators linked to the global targets; strategies and specific ideas for how these actions can be implemented; ideas to base community messages on; and links to key implementation tools and guidance as well as the relevant IFRC CBHFA community tools to reference.

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Overall nutrition				
Promotion of a holistic view of malnutrition among community members	<p>OUTCOME Proportion of community members receiving nutrition education and sensitization messages</p> <p>Community knowledge of causes of malnutrition</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia in women of reproductive age</p> <p>Prevalence of infants born <2500 g.</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community health volunteer visits - community-based activities and demonstrations <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - nutrition counselling through agricultural extension programmes - nutrition in the school curriculum - demonstration school kitchen gardens <p>Community mobilization and social marketing</p> <ul style="list-style-type: none"> - nutrition education and promotion - talk shows and songs 	<p>Nutrition throughout the lifecycle is critical to short-and long-term health and well-being. Household food insecurity and inadequate infant feeding and care practices contribute to inadequate intake of food, a major immediate cause of malnutrition. Insufficient health services, unhealthy environments and inadequate care for women contribute to disease, the second immediate cause of malnutrition. It is critical communities are sensitized to the importance of nutrition and their children's risk factors to malnutrition in the community. Malnutrition refers to both overnutrition and undernutrition. Communities should be sensitized to the importance of a nutritionally balanced, high quality diet. The emphasis should be placed on eating traditional, local foods rather than processed and packaged foods.</p>	<p>UNICEF online training tool for understanding the causes of malnutrition: www.unicef.org/nutrition/training/2.5/1.html</p> <p>CBHFA COMMUNITY TOOLS: Tool 1- Nutrition Tool 3- Malnutrition</p> <p>https://www.som.soton.ac.uk/learn/test/nutrition/courses/ http://onlinelearning.cornell.edu/programming-infant-and-young-child-feeding</p>

Nutrition-specific evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Promotion of healthy diet and physical activity	Child overweight	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community-based physical activity programme - cooking demonstrations - social media campaigns and online Healthy Lifestyle Community <p>Health system strengthening</p> <ul style="list-style-type: none"> - sensitize health workers about the importance of growth monitoring, promotion of healthy diet, and physical activity <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - nutrition in curriculum - demonstration kitchen gardens - government lunch programmes - sports and dance clubs 	<p>The most successful community-based interventions for childhood obesity prevention have multiple components that are designed for and implemented according to the local context.</p> <p>The desired behaviors targeted by interventions typically include:</p> <ul style="list-style-type: none"> - increased fruit and vegetable consumption; - reduced consumption of beverages high in sugar (e.g. “soft” drinks); - reduced consumption of foods high in fat, saturated fat, salt and sugar; - decreased television viewing and other screen-based activities; - increased competitive and non-competitive sport participation; - increased active transport to schools. <p>These behaviors may be targeted through education campaigns, changes to school and other organizational policies, activities and competitions, promotion programmes and the involvement of a broad range of stakeholders in the community.</p> <p>Social marketing campaigns are considered cost effective for physical activity promotion because they change awareness and behavior by using frequent but simple messages.</p>	<p>Population-based approaches to child obesity prevention: http://apps.who.int/iris/bitstream/10665/80149/1/9789241504782_eng.pdf?ua=1</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Growth monitoring through existing facilities	<p>OUTCOME Proportion of children 0-59 months whose growth was monitored correctly based on national guidelines</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - routine monitoring by community health volunteer visits <p>Health system strengthening</p> <ul style="list-style-type: none"> - routine monitoring at post-natal check-ups 	<p>Growth monitoring is a critical component of community nutrition programmes. Evidence indicates routine growth monitoring and promotion is linked to positive nutrition outcomes.</p> <p>Growth monitoring should be through routine check-ups within the existing health system with a focus on children under five years of age. The frequency of measurements and recording mechanism should be based on national protocols. Growth monitoring should lead to referral and linking with other services when a child falls under nation-specific cut-offs.</p> <p>Growth monitoring should encompass weight, height and age in order to gauge problems of wasting, stunting and overweight for prevention and when necessary, timely referral. Underweight (low weight for age) should NOT be used as it is not a good indicator for undernutrition.</p> <p>Counselling about good nutrition (dietary intake and infection) should be incorporated at this intervention point as well.</p>	<p>Experts' consultation on growth monitoring and promotion strategies: Programme guidance for a way forward: www.unicef.org/nutrition/files/GMP_technical_consultation_2008%281%29.pdf</p>

Nutrition-specific evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Maternal nutrient deficiency				
Nutrition counselling about food-based dietary guidelines	<p>OUTCOME</p> <p>Proportion of women of reproductive age receiving food-based nutrition counselling and guidance</p> <p>Household dietary diversity score</p> <p>Individual dietary diversity score</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of overweight in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community health volunteer visits - nutrition education through media channels <p>Health system strengthening</p> <ul style="list-style-type: none"> - Antenatal check-ups and routine care <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - nutrition in the curriculum - demonstration school kitchen gardens - government lunch programmes 	<p>Maintaining good nutrition during pregnancy and adolescence is critical for the health of the mother and the unborn child. Nutrition education and counselling should focus primarily on:</p> <ul style="list-style-type: none"> - enhancing maternal diet quality by increasing the diversity and amount of food consumed - promoting adequate weight gain through sufficient and balanced protein and energy intake - promoting consistent and continued use of micronutrient supplements, food supplements and fortified foods. <p>Counselling and nutrition education may improve gestational weight gain, reduce the risk of anaemia in pregnancy, increase birth weight and lower the risk of preterm delivery.</p> <p>In certain populations where overweight and obesity is more of a problem, adolescents and pregnant women should focus on having a well-balanced diet. preterm delivery.</p>	<p>Maternal Nutrition Dietary Guide (Core Group): www.coregroup.org/storage/documents/Workingpapers/MaternalNutritionDietaryGuide_AED.pdf</p> <p>FAO food-based dietary guidelines country resources: www.fao.org/nutrition/nutrition-education/food-dietary-guidelines/en/</p> <p>FAO Guidelines for Measuring Household and Individual Dietary Diversity: www.fao.org/3/a-i1983e.pdf</p> <p>CBHFA COMMUNITY TOOLS: Tool 1: Safe motherhood</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
<p>Maternal supplementation:</p> <p>1) MMN</p> <p>2) Balanced energy protein</p> <p>3) Calcium</p>	<p>OUTCOME Proportion of women of reproductive age (15-49 years) receiving supplementation</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of overweight in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <p>- supplement provision and counselling during community health volunteer visits</p> <p>Health system strengthening</p> <p>- supplement provision and counselling through antenatal check-ups or routine care</p> <p>Cross-sectoral collaboration</p> <p>- supplement provision and counselling through schools</p>	<p>Micronutrients are needed in small quantities but are essential for normal bodily function and growth. Vitamin A, iron, iodine, and folate deficiencies are all common during pregnancy, due to increased requirement of the mother and the developing foetus. Supplementation should be combined with antenatal nutrition advice and should be delivered through one of the existing health, community or education platforms.</p> <p>Giving multiple micronutrient supplements to women of reproductive age can address common deficiencies such as anaemia and reduce the risk of low birth weight infants.</p> <p>Protein energy supplements provided to undernourished pregnant women should be balanced, e.g. protein provides less than 25 per cent of total energy content. Evidence indicates such supplementation will promote weight gain during pregnancy and improve pregnancy outcomes, such as reduced risk of stillbirths or low birth weight infants.</p> <p>Calcium supplementation improves calcium intake and reduces the risk of maternal death and pre-term birth from pre-eclampsia and eclampsia (common in calcium deficient mothers).</p> <p>Dosage: 1.5-2.0 g. elemental calcium/day Frequency: daily Duration: 20 weeks gestation until birth</p>	<p>Multiple Micronutrient Nutrition: Evidence from History to Science to Effective Programmes: http://www.sightandlife.org/fileadmin/data/Magazine/2012/26_1_2012/multiple_micronutrient_nutrition.pdf</p> <p>Calcium Supplementation Guidance summary: http://www.who.int/elena/titles/guidance_summaries/calcium_pregnancy/en/</p> <p>Guideline: Calcium supplementation in pregnant women http://apps.who.int/iris/bitstream/10665/85120/1/9789241505376_eng.pdf?ua=1</p>

Nutrition-specific evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Universal salt iodization or iodine supplementation	<p>OUTCOME</p> <p>Proportion of households with access to iodized salt</p> <p>Proportion of pregnant and lactating women receiving iodine supplementation</p> <p>Prevalence of goiter and cretinism in the community</p> <p>Market availability of iodized salt or iodine-fortified foods</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of infants born <2500 g</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - supplement provision and counselling during community health volunteer visits <p>Advocacy</p> <ul style="list-style-type: none"> - advocacy targeted at national and local food industries for mass fortification <p>Health system strengthening</p> <ul style="list-style-type: none"> - supplement provision and counselling through antenatal check-ups or routine care <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - supplement provision and counselling through schools 	<p>Iodine is essential for healthy brain development in the foetus and young child. A woman's iodine requirements increase substantially during pregnancy to ensure adequate supply to the foetus. All food-grade salt used in household and food processing should be fortified with iodine as a safe and effective strategy for the prevention and control of iodine deficiency disorders in populations living in stable and emergency settings.</p> <p>In areas where less than 20 per cent of households have access to iodized salt: Iodine supplementation dosage: Pregnant and lactating women: 250 µg/d or 400 mg/y Women of reproductive age (15-49 y): 150 µg/d or 400 mg/y Children <2 years: 90 µg/d or 200 mg/y</p>	<p>Iodization of salt for the prevention and control of iodine deficiency disorders- Guidance summary: www.who.int/elena/titles/guidance_summaries/salt_iodization/en/</p> <p>Guideline: Fortification of food-grade salt with iodine for the prevention and control of iodine deficiency disorders http://apps.who.int/iris/bitstream/10665/136908/1/9789241507929_eng.pdf?ua=1</p> <p>Guidance summary: Iodine supplementation in pregnant and lactating women: www.who.int/elena/titles/guidance_summaries/iodine_pregnancy/en/</p>
Infant feeding practices				
Promotion of early, exclusive breastfeeding for six months and continued breastfeeding with appropriate complementary foods until 24 months	<p>OUTCOME</p> <p>Proportion of mothers of children aged 0-23 months who have receiving counselling or support on optimal breastfeeding</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community health volunteer visits for counselling and support - community-based activities promoting breastfeeding - community-based incentives for breastfeeding <p>Health system strengthening</p> <ul style="list-style-type: none"> - promotion and support at post-natal care and routine check-ups 	<p>Breast milk contains all the nutrients an infant needs for the first six months of life, protects against diarrhoea and common child illnesses, and has long-term health benefits for the child and mother such as reduced risk of obesity.</p> <p>Mothers should initiate breastfeeding within one hour of birth. Infants should be exclusively breastfed for the first six months. Exclusive breastfeeding means no other liquids or solids are given except oral rehydration solution, vitamin/mineral drops or medicines.</p> <p>To meet changing nutritional requirements, infants should receive nutritionally adequate and safe complementary foods, while continuing breastfeeding up to two years.</p>	<p>Global Strategy for Infant and Young Child Feeding: http://whqlibdoc.who.int/publications/2003/9241562218.pdf</p> <p>Acceptable medical reasons for use of breast-milk substitutes: http://apps.who.int/iris/bitstream/10665/69938/1/WHO_FCH_CAH_09.01_eng.pdf?ua=1</p> <p>CBHFA COMMUNITY TOOLS: Tool 1- Care of a new born Tool 2- Breastfeeding and complementary feeding</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Implementation of the Baby-Friendly Hospitals Initiative and safe spaces	<p>OUTCOME Proportion of hospitals implementing Baby-Friendly Hospitals Initiative</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Advocacy - demand hospitals implement Baby-Friendly Hospitals Initiative</p> <p>Health system strengthening - strengthen quality of post-natal services including counselling and support for breastfeeding</p>	<p>Breast milk contains all the nutrients an infant needs for the first six months of life, protects against diarrhoea and common child illnesses, and has long-term health benefits for the child and mother such as reduced risk of obesity.</p> <p>The Baby-Friendly Hospital Initiative is a global effort to implement practices to protect, promote and support breastfeeding. It aims to ensure that all maternity facilities become centres for breastfeeding support.</p> <p>The initiative requires every facility to practice the “Ten Steps to Successful Breastfeeding” (see guidance summary for the ten steps).</p>	<p>Implementation of the Baby-friendly Hospital Initiative- Guidance Summary: http://www.who.int/elena/titles/guidance_summaries/implementation_bfhi/en/</p> <p>Baby-Friendly Hospital Initiative- revised, updated and expanded for integrated care http://www.who.int/nutrition/publications/infantfeeding/bfhi_trainingcourse/en/</p>
Advocacy against marketing of Breast Milk Substitutes BMS and strengthen legislation related to International Code	<p>OUTCOME Number of countries adopting and enforcing the International Code and subsequent relevant resolutions</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Advocacy - community-based advocacy against the marketing of breast milk substitutes</p>	<p>The International Code of Marketing of Breast Milk Substitutes calls for the regulating of marketing of breast milk substitutes, feeding bottles and teats to contribute to the safe and adequate nutrition of infants.</p> <p>Advocacy messages: Infants should be breastfed. If they are not breastfed, infants should be fed safely on the best available nutritional alternative. Breast milk substitutes should be available when needed, but not promoted.</p>	<p>International Code of Marketing of Breast Milk Substitutes: http://whqlibdoc.who.int/publications/9241541601.pdf?ua=1</p>

Nutrition-specific evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Advocacy for labour policies and create an enabling environment in support of exclusive and continued breastfeeding.	<p>OUTCOME</p> <p>Number of countries with maternity protection laws and regulation for breastfeeding in the workplace</p> <p>Proportion of employers that have enacted policies to support breastfeeding in the workplace</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Advocacy</p> <p>- community-based advocacy for maternity protection laws and regulation for breastfeeding in the workplace</p>	<p>If women are both to work and have children in healthy conditions, maternity protection is a necessity. Breastfeeding is the best way of providing ideal food and care for the growth and development of infants. Labour policies thus must align with WHO recommendations for exclusive breastfeeding for the first six months of life and adequate complementary feeding with continued breastfeeding up to two years and beyond.</p> <p>Advocacy messages:</p> <p>There should be legal provisions for paid breastfeeding breaks at work. Workplace support for breastfeeding should include paid breastfeeding breaks, a breastfeeding room/facility, workplace breastfeeding policy statement and a supportive workplace climate.</p>	<p>Maternity Protection Resource Package – Breastfeeding arrangements at work: http://mprp.itsilo.org/allegati/en/m10.pdf</p>
Young child complementary feeding				
Counselling and support for appropriate complementary feeding along with hygiene and sanitation at the community level	<p>OUTCOME</p> <p>Proportion of mothers of children 0-23 months who have received counselling or support on complementary feeding at least once in the last year</p> <p>Proportion of children aged 6-23 months who receive a minimum acceptable diet</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <p>- community health volunteer counselling for mothers</p> <p>- community demonstration gardens</p> <p>Advocacy</p> <p>- community-based advocacy</p>	<p>At six months of age, breast milk alone is no longer sufficient to meet infant nutritional requirements. The transition from exclusive breastfeeding to family feeding is called complementary feeding and should occur from 6-24 months age. Safe and adequate complementary feeding should occur with continued frequent, on-demand breastfeeding up to two years or beyond. This is necessary to reduce the risk of nutritional deficiency and illness.</p> <p>Messages related to adequate complementary feeding:</p> <ul style="list-style-type: none"> - practice responsive feeding - practice good hygiene and proper food handling - increase quantity of food as child gets older - gradually increase food consistency and variety as child gets older - number of feeds/meal frequency depends on energy density of local foods being fed - feed a variety of foods - increase fluid and food intake during and after illness 	<p>Guiding Principles for Complementary Feeding of the Breastfed Child: http://whqlibdoc.who.int/paho/2003/a85622.pdf?ua=1</p> <p>Guiding Principles for Feeding Non-breastfed Children 6-24 months of age: http://apps.who.int/iris/bitstream/10665/43281/1/9241593431.pdf?ua=1&ua=1</p> <p>CBHFA COMMUNITY TOOLS:</p> <p>Tool 2- Breastfeeding and complementary feeding</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Fortification of complementary foods where locally available food does not meet nutrient requirements	<p>OUTCOME</p> <p>Proportion of mothers of children 6-23 months who have received fortified complementary foods</p> <p>Proportion of children aged 6-23 months who receive a minimum acceptable diet</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - home fortification of complementary foods with micronutrient powders and lipid-based nutrient supplements <p>Advocacy</p> <ul style="list-style-type: none"> - advocacy around mass fortification <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - bio-fortification of local staples - partner with local producers for market-driven fortification of rice, wheat and maize flour and complementary foods 	<p>Food fortification refers to addition of micronutrients to processed foods. This strategy can lead to rapid improvements in micronutrient status of a population and at a very reasonable cost, especially if advantage can be taken of existing technology and local distribution networks. Fortification should be utilized for reducing micronutrient deficiency when and where existing food supplies and limited access fail to provide adequate levels of respective nutrients in the diet.</p> <p>The nutrient content of complementary foods is critical for ensuring proper young child growth and development. Vegetarian diets cannot meet nutrient needs at this age unless nutrient supplements or fortified products are used (particularly iron, zinc, and calcium).</p> <p>Fortification can take several forms, depending on the target population including:</p> <ol style="list-style-type: none"> 1. mass fortification (foods consumed by the general public) 2. targeted fortification (foods aimed at specific subgroups such as young children) 3. market-driven fortification (food manufacturers take a business-oriented approach to add specific amounts of micronutrients to processed foods) 4. household and community fortification (adding micronutrients to foods at the household level, particularly complementary foods) 	<p>Guidelines on food fortification with micronutrients: http://whqlibdoc.who.int/publications/2006/9241594012_eng.pdf?ua=1</p> <p>Fortification of wheat and maize flour Guidance Summary: www.who.int/elena/titles/guidance_summaries/flour_fortification/en/</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Young child micronutrient deficiency				
Vitamin A supplementation along with deworming between 6-59 months age	<p>OUTCOME Proportion of children aged 6-59 months who have received Vitamin A supplementation (correct dosage)</p> <p>Prevalence of night blindness among children under-five years of age</p> <p>Prevalence of diarrhea in children under-five years of age</p> <p>GLOBAL TARGET Prevalence of stunting in children under 5 years</p> <p>Prevalence of wasting in children under 5 years</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - health volunteer visits - public health campaigns such as Child Health Days <p>Health system strengthening</p> <ul style="list-style-type: none"> - supplement provision and counselling through routine health check-ups - delivery with immunization <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - Supplement provision and counselling through health days at schools 	<p>Vitamin A is essential to support growth and combat infections in children. Inadequate intake can lead to visual impairment, night blindness and increase the risk of illness and death from infections such as measles and diarrhoea.</p> <p>Vitamin A can be safely provided to children in a large dose, rather than more frequent smaller doses, as it can be stored by the body and released over time as needed.</p> <p>6-11 months: 100,000 IU Vitamin A (once)</p> <p>12-59 months: 200,000 IU Vitamin A (every 4-6 months)</p> <p>Route of administration: oral liquid, oil-based preparation</p> <p>Settings: night blindness prevalence >1 per cent in children 24-59 months or deficiency (serum retinol <0.70 µmol/L) is greater than 20 per cent in children under-five years of age</p>	<p>Guidance Summary: Vitamin A Supplementation 6-59 months age www.who.int/elena/titles/guidance_summaries/vitamina_children/en/</p> <p>Guideline: Vitamin A Supplementation 6-59 months age http://apps.who.int/iris/bitstream/10665/44664/1/9789241501767_eng.pdf?ua=1</p> <p>Full set of Vitamin A supplementation recommendations www.who.int/elena/titles/full_recommendations/vitamina_supp/en/</p>
Preventative zinc supplements between 12-59 months age	<p>OUTCOME Proportion of children aged 6-59 months who have received zinc supplementation (correct dosage)</p> <p>Prevalence of diarrhea in children under-five years of age</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community health volunteer visits <p>Health system strengthening</p> <ul style="list-style-type: none"> - delivery during diarrheal disease management 	<p>Zinc is required for child growth and resistance to infections. Recent evidence indicates zinc supplementation may improve growth of children under-five years of age. It has also been shown to reduce the duration and severity of diarrhoea and prevent subsequent episodes.</p> <p>General growth: No approved guidelines to date</p> <p>Diarrhoea: Provide child with 20 mg/day of zinc supplementation (10 mg/day for infants <6 months) for 10-14 days with oral rehydration solution (ORS)</p>	<p>Implementing the New Recommendations on the Clinical Management of Diarrhoea- Guidelines for Policy Makers and Programme Managers: http://whqlibdoc.who.int/publications/2006/9241594217_eng.pdf?ua=1</p> <p>CBHFA Community Tools: Tool 1- Diarrhoea and dehydration</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Daily iron supplementation for children 6-23 months age	<p>OUTCOME Proportion of children aged 6-23 months who have received iron supplementation (correct dosage)</p> <p>Prevalence of anaemia in children under-five years of age</p> <p>Symptoms: breathlessness, lethargy, pale complexion, dizziness</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - supplement provision and counselling through community health volunteer visits <p>Health system strengthening</p> <ul style="list-style-type: none"> - supplement provision and counselling through routine health check-ups <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - supplement provision and counselling through schools 	<p>Children are particularly vulnerable to iron deficiency anaemia because of their increased iron requirements in the periods of rapid growth, especially in the first five years of life. Anaemia in children is linked to increased morbidity, impaired cognitive development and poor school performance.</p> <p>In settings where the prevalence of anaemia in young children is above 40 per cent or the diet does not include foods fortified with iron, supplements of iron at a dosage of 2 mg/kg of body weight per day should be given to all children between 6 and 23 months of age.</p>	<p>Intermittent iron supplementation in preschool and school-age children Guideline: http://apps.who.int/iris/bitstream/10665/44648/1/9789241502009_eng.pdf</p>
Deworming of children 6-59 months	<p>OUTCOME Proportion of children 6-59 months receiving deworming tablets</p> <p>Symptoms: loss of appetite, diarrhea, stool inconsistency, lack of weight gain, anemia</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community health volunteer visits - public health campaigns such as Child Health Days <p>Health system strengthening</p> <ul style="list-style-type: none"> - provision and counselling through routine health check-ups - delivery with immunization or vitamin A supplementation <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - provision and counselling through health days at schools 	<p>Worm (schistosome and soil-transmitted helminth) infections are among the most common infections in developing countries and can impair nutritional status by causing internal bleeding (which can contribute to anaemia), malabsorption of nutrients, diarrhoea, and loss of appetite which can lead to reduced energy intake. This nutritional impairment has been shown to have a significant impact on the growth and development of children.</p> <p>As such, the WHO recommends periodic drug treatment (deworming) of all school-age children living in endemic areas along with health and hygiene education and provision of adequate sanitation.</p> <p>Deworming is commonly coupled with Vitamin A supplementation for children and schools are a good platform for delivery.</p>	<p>Helminth control in school-age children. A guide for managers of control programmes: http://whqlibdoc.who.int/publications/2011/9789241548267_eng.pdf?ua=1</p> <p>How to add deworming to vitamin A distribution: http://whqlibdoc.who.int/hq/2004/WHO_CDS_CPE_PVC_2004.11.pdf?ua=1</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Acute malnutrition				
Integrated management of SAM through facility and community-based interventions	<p>OUTCOME Proportion of SAM children receiving treatment</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community mobilization for the identification and referral of SAM children - provision of ready to use therapeutic food for uncomplicated SAM children - follow-up with SAM children treated within the community - community sensitization to SAM <p>Health system strengthening</p> <ul style="list-style-type: none"> - strengthening of in-patient treatment of SAM - alignment with community system on case finding, referral and follow-up 	<p>Severe acute malnutrition is defined by lvery low weight for height (below -3 Z-score) or MUAC less than 115 mm, and/ or clinical signs of bilateral pitting oedema. Not all severely malnourished children require in-patient treatment.</p> <p>Children 6-59 months If there are no medical complications and the child has an appetite, ready-to-use therapeutic foods can be used to treat SAM children 6-59 months. In all other cases, SAM children should be treated as in-patients.</p> <p>Infants 0-6 months SAM in infants commonly is a result of suboptimal feeding practices. Clinical signs of infection and dehydration may be difficult to identify in infants. Feeding approaches in infants should focus on establishing or re-establishing exclusive breastfeeding. Medical care for SAM infants is the same as SAM children.</p> <p>See guidelines for exact medical care, feeding, and discharge protocols.</p>	<p>Guideline: Updates on the management of severe acute malnutrition in infants and children: http://apps.who.int/iris/bitstream/10665/95584/1/9789241506328_eng.pdf?ua=1</p> <p>Management of severe acute malnutrition in infants and children: Full set of WHO recommendations www.who.int/elena/titles/full_recommendations/sam_management/en/</p>
Supplementary feeding for MAM	<p>OUTCOME Proportion of MAM children receiving appropriate supplementary feeding</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community mobilization for the identification and referral of MAM children - provision of supplementary foods - follow-up with MAM and referral of cases that progress to SAM - community sensitization to MAM <p>Health system strengthening</p> <ul style="list-style-type: none"> - alignment with community system on case finding, referral, and follow-up 	<p>MAM children can be treated within the community. Children 6-59 months need to receive nutrient-dense foods to meet their extra needs for weight and height gain and function recovery.</p> <p>Dietary management should be based on the optimal use of locally available foods to improve nutritional status and prevent SAM. In situations of food shortage, supplementary foods can be used to treat MAM.</p> <p>For infants 0-6 months age, feeding approaches should focus on establishing or re-establishing exclusive breastfeeding.</p> <p>There is currently no evidence-informed recommendation for the composition of supplementary foods to treat children with MAM.</p>	<p>Technical note: Supplementary foods for the management of moderate acute malnutrition in infants and children 6-59 months of age: http://apps.who.int/iris/bitstream/10665/75836/1/9789241504423_eng.pdf</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Screening and referral of children with acute malnutrition	<p>OUTCOME Proportion of children under-five years of age in a population that are screened</p> <p>Proportion of children under-five years of age screened that are referred for acute malnutrition</p> <p>GLOBAL TARGET Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community mobilization for the identification and referral of acutely malnourished children - community sensitization to acute malnutrition (MAM and SAM) symptoms and referral routes <p>Health system strengthening</p> <ul style="list-style-type: none"> - Alignment of community system on case finding, referral and follow-up 	<p>Active case-finding is important to ensure that clients with acute malnutrition (SAM and MAM) are identified early before the development of severe medical complications. Children identified with acute malnutrition should be referred to the nearest health facility depending on the severity of the malnutrition.</p> <p>Community Health Volunteers can assist by screening for acute malnutrition at various contact points (house to house visits, community meetings, health facilities/outreach programmes, and at other opportunities) using the Mid Upper Arm Circumference (MUAC) and bilateral pitting oedema. Based on cut-offs for severity of malnutrition, these children can be referred for appropriate treatment (outpatient vs. inpatient treatment for SAM children, supplementary feeding for MAM children).</p>	<p>Integrated Management of Acute Malnutrition Guidelines, UNICEF: http://www.unicef.org/uganda/IMAM_Guidelines_final_version.pdf</p>
Special circumstances				
Nutritional care and support for HIV-infected pregnant and lactating women	<p>OUTCOME Proportion of HIV-positive pregnant and lactating women receiving nutritional care and support</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community health volunteer visits for counselling and nutrition education - provision of supplementary foods for HIV-positive mothers when necessary <p>Health system strengthening</p> <ul style="list-style-type: none"> - counselling and nutrition education at routine HIV check-ups and antenatal care 	<p>Adequate nutrition is best achieved through consumption of a balanced, healthy diet, regardless of HIV status.</p> <p>Micronutrient deficiencies are common in pregnant women and can be exacerbated by conditions like HIV. Multiple micronutrient supplements (MMN) may improve the health of both the mother and the baby.</p> <p>Nutrition counselling and support from the early stages of infection are to key to preventing the development of nutritional deficiencies and improving health outcomes of both the mother and the child.</p>	<p>Nutritional requirements for people living with HIV/AIDS: www.who.int/nutrition/publications/Content_nutrient_requirements.pdf</p>

Nutrition-specific evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Counselling and support of HIV-positive mothers for infant feeding in the context of HIV	<p>OUTCOME</p> <p>Proportion of HIV-infected mothers given counselling and support regarding proper infant feeding practices</p> <p>Proportion of infants born HIV-positive or infected during the first six months</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <p>- community health volunteer visits for counselling and nutrition education</p> <p>Health system strengthening</p> <p>- counselling and nutrition education at routine HIV check-ups and postnatal care</p>	<p>Mothers known to be HIV-infected should be provided with lifelong antiretroviral therapy to reduce HIV transmission through breastfeeding.</p> <p>Infant feeding should be based on the recommendations of the national or sub-national health authorities.</p> <p>In settings where national health authorities are recommending breastfeeding for HIV-infected mothers: HIV-infected mothers should follow normal feeding practices—exclusively breastfeed their infants for the first six months of life, introducing appropriate complementary foods thereafter, and continue breast feeding for the first 12 months of life.</p> <p>Breastfeeding should then only stop once a nutritionally adequate and safe diet without breast milk can be provided.</p> <p>Mixed feeding (breastfeeding and liquid/foods) during infancy may increase the risk of HIV transmission and secondary infection.</p>	<p>Guidelines on HIV and infant feeding 2010: http://whqlibdoc.who.int/publications/2010/9789241599535_eng.pdf?ua=1</p>
Counselling and support at facility and community level for feeding of low birth weight infants	<p>OUTCOME</p> <p>Proportion of mothers of low birth weight infants receiving counselling and support regarding proper infant feeding practices</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <p>- community health volunteer visits for counselling and nutrition education</p> <p>Health system strengthening</p> <p>- counselling and support after delivery and during postnatal care</p>	<p>Low birth weight infants are at increased risk of early growth retardation, infectious disease, developmental delay and mortality.</p> <p>Low birth weight infants who are able to be breastfed should be put to the breast as soon as possible after birth when they are clinically stable, and should be exclusively breastfed until six months of age.</p> <p>If low birth weight infants cannot be breastfed, they should be fed donor human milk or standard infant formula where donor milk is unavailable.</p>	<p>Feeding of low-birth-weight infants in low and middle income countries: www.who.int/elena/titles/full_recommendations/feeding_lbwt/en/</p> <p>Optimal feeding of low birth weight infants: technical review: http://whqlibdoc.who.int/publications/2006/9789241595094_eng.pdf?ua=1</p>

Nutrition-sensitive evidence-based actions summary matrix

The following matrix provides a list of evidence-based actions for ways to address nutrition through existing programming in other sectors. Details regarding strategies, indicators and community messages for implementation are covered in the subsequent tables.

Nutrition-sensitive interventions across lifespan									
Intervention area	Evidence-based action	Stunting	Maternal anaemia	Low birth weight	Child overweight	Exclusive breastfeeding	Wasting	Emergency/Prevention/Response*	Development/Recovery
Improve hygiene and sanitation in the community	Promotion of safe food storage and handling practices								
	Treatment and safe storage of household drinking water	X	X	X			X	X	X
	Promotion and education about hand washing with soap and other hygienic interventions								
Malaria prevention and treatment	Intermittent preventative treatment of malaria and provision of insecticide treated bed nets for pregnant women and infants in high transmission areas	X	X	X			X	X	X
Integrated Community Case Management (iCCM)	Strengthening the nutrition aspects of iCCM	X		X	X	X	X	X	X
Maternal health and safe pregnancy	Prevention of adolescent pregnancy and promotion of birth spacing	X	X	X					X
	Awareness raising around the risks associated with tobacco, alcohol and drug use during pregnancy	X	X	X	X				X
Agriculture and food security	Promotion of homestead food production (livestock, crops, vegetables, fruits) and aquaculture	X	X	X	X				X
	Consumption of local, fortified complementary foods	X					X		X
	General food distribution						X	X	
Social safety nets (cash transfers)	Provision of conditional and unconditional cash transfers							X	X
	Provision of micro-credits schemes	X	X	X			X		X
	Promotion of appropriate and robust school feeding programmes								X

*size and scale of the problem dictate when it is an emergency

Nutrition-sensitive evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Promotion of safe food storage and handling practices	<p>OUTCOME</p> <p>Proportion of mothers receiving education about safe food storage and handling practices</p> <p>Prevalence of diarrhea in children under-five years of age</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <p>- community education and information dissemination</p>	<p>Follow safe food handling procedures to prevent foodborne illness and minimize intake of harmful food contaminants.</p> <p>Wash hands with hot, soapy water and sanitize kitchen surfaces before and after preparing food. Separate raw meat and eggs from other foods before and during food preparation. Refrigerate or freeze perishable foods and leftovers within two hours of preparation. Cold foods should be kept at four degrees C or lower. Cook foods to the appropriate temperature.</p> <p>In places where there is no electricity and therefore no fridges, it is important to keep the food in safe places to avoid contamination.</p> <p>Education around safe food storage and handling should be practical and should be based on the local context.</p>	<p>WASH plus- Integrating water, sanitation, and hygiene into nutrition programming: www.washplus.org/sites/default/files/wash_nutrition2013.pdf</p>
Treatment and safe storage of household drinking water	<p>OUTCOME</p> <p>Proportion of households safely treating and storing their water</p> <p>Prevalence of diarrhea in children under-five years of age</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <p>- education and sensitization within community and during home visits</p> <p>Cross-sectoral collaboration</p> <p>- link with global water and sanitation initiatives</p>	<p>Treatment and safe storage of drinking water in the household has been shown to reduce the risk of diarrheal disease by 30-40 per cent. Treatment methods for drinking water include: chlorination; boiling; solar disinfection using heat and UV radiation; filtration; combined chemical coagulation, flocculation and disinfection.</p> <p>Store water in an appropriate vessel with a narrow neck and tap. If there is no tap, use a ladle to dispense water safely. Do not touch the inside of the water container with your hands. Periodically wash the water container.</p>	<p>WASH plus- Integrating water, sanitation, and hygiene into nutrition programming: www.washplus.org/sites/default/files/wash_nutrition2013.pdf</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Promotion and education about hand washing with soap and other hygienic interventions	<p>OUTCOME</p> <p>Proportion of target group educated and sensitized about the importance of hand washing with soap</p> <p>Proportion of target group washing their hands with soap using correct techniques</p> <p>Prevalence of diarrhea in children under-five years of age</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - education and sensitization within community and during home visits <p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - link with global water and sanitation initiatives 	<p>Proper hand washing reduces the risk of diarrhea in the general population by 42–44 per cent.</p> <p>Technique:</p> <ul style="list-style-type: none"> - Use soap every time you wash your hands. - Wash hands under poured or flowing water. A washbasin in which many people wash their hands in the same water does not prevent infection. - Wash hands before handling, preparing or eating food; before feeding someone or giving medicines; and wash hands often during food preparation. - Wash hands after going to the toilet, cleaning a person who has defecated, blowing your nose, coughing, sneezing or handling an animal or animal waste, and both before and after tending to someone who is sick. 	<p>The Handwashing Handbook: A guide for developing a hygiene promotion programme to increase hand washing with soap- http://esa.un.org/iys/docs/san_lib_docs/Handwashing_Handbook.pdf</p>
Intermittent preventative treatment of malaria and provision of insecticide-treated bed nets for pregnant women and infants in high transmission areas	<p>OUTCOME</p> <p>Proportion of mothers receiving intermittent preventative treatment</p> <p>Proportion of mothers using insecticide-treated bed nets</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Health system strengthening</p> <ul style="list-style-type: none"> - iCCM <p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - community health volunteer visits for treatment, bed net provision, and follow-up - counselling about the importance of nutrition for malaria prevention and treatment 	<p>In malaria-endemic areas, insecticide-treated bed nets and intermittent preventative treatment of malaria should be a priority, particularly for pregnant women and young children.</p> <p>Research indicates that intermittent preventative treatment of malaria in all pregnant women reduced malaria risk but also had nutritional outcomes including reduced low birth weight and reduced severe antenatal anaemia. Similarly, insecticide-treated bed net use during pregnancy reduces low birth weight.</p> <p>There is concern about the administration of iron supplementation in malaria-endemic areas given research evidence showing increased risk of hospital admission and serious illness with iron supplementation. Iron supplementation should thus be administered in these areas only if prevention and treatment for malaria are available.</p>	<p>Guidelines for the Treatment of Malaria http://whqlibdoc.who.int/publications/2010/9789241547925_eng.pdf?ua=1</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Strengthen the nutrition aspects of the iCCM	<p>OUTCOME Proportion of iCCM programmes with a nutrition component</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of overweight among children under-five years of age</p> <p>Prevalence of exclusive breastfeeding in infants aged six months or less</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - communication and social mobilization around nutrition <p>Health system strengthening</p> <ul style="list-style-type: none"> - incorporate nutrition commodities in supply chain management - ensure nutrition service delivery - training community healthcare workers in identifying and referring children with acute malnutrition - incorporate nutrition metrics into monitoring, evaluation, and health information systems - Activities around the prevention of malnutrition 	<p>iCCM is a strategy to identify and treat the major diseases contributing to under-five child mortality. It takes a holistic approach, reviewing all danger signs and providing needed treatment, prevention and follow-up for the child's condition(s). In most countries, the iCCM protocol includes the identification and referral of acute malnutrition. It also includes advice on continued feeding of any sick child treated at home, as well as advice on sleeping under bed nets and ensuring the correct vaccination status.</p> <p>iCCM may be a logical platform for increasing the reach and coverage of treating malnourished children as well as preventing malnutrition given the considerable overlap between disease and malnutrition.</p> <p>Linking nutrition and iCCM has several advantages including:</p> <ul style="list-style-type: none"> - more holistic, comprehensive, and cost-effective management of child illness - increased efficiency or screening and referral for acute malnutrition - provides a single point of care for health and nutrition services for the caregiver - reducing malnutrition reduces morbidity and underlying vulnerability to disease - provides health workers an opportunity to communicate linkages between malnutrition and disease for prevention. 	<p>Linking Nutrition and (Integrated) Community Case Management (iCCM/CCM): A review of operational experiences *still in draft form</p>
Prevention of adolescent pregnancy and promotion of birth spacing	<p>OUTCOME Proportion of adolescent girls receiving family planning</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia among women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - education through community health volunteer visits - sensitization through community-based activities - improved access and choice to family planning methods. <p>Health system strengthening</p> <ul style="list-style-type: none"> - education and sensitization at pre- and post-natal check-ups 	<p>The additional energy and nutrient demands of pregnancy coupled with the nutritional requirements for growth during adolescence put pregnant adolescents at significant nutritional risk. Family planning education should be promoted to prevent pregnancy in young women.</p> <p>Breastfeeding suppresses a woman's fertility after delivery. As such, exclusive breastfeeding should be encouraged in order to promote birth spacing and reduce the risk of nutritional inadequacy.</p>	<p>Report of a WHO Technical Consultation on Birth Spacing: http://apps.who.int/iris/bitstream/10665/107130/1/9789241548731_eng.pdf?ua=1</p> <p>Healthy timing and spacing of pregnancy: www.who.int/pmnch/topics/maternal/htsp101.pdf</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Awareness raising around the risks associated with tobacco, alcohol and drug use during pregnancy	<p>OUTCOME Proportion of women of reproductive age receiving substance use education</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age Prevalence of infants born <2 500 g. Prevalence of anaemia among women of reproductive age Prevalence of child overweight in children under-five years of age</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - education through community health volunteer visits - sensitization through community-based activities <p>Health system strengthening</p> <ul style="list-style-type: none"> - education and sensitization at pre- and post-natal check-ups 	There is no safe time to drink alcohol, smoke or use drugs during pregnancy. Use of alcohol, illicit drugs and other psychoactive substances during pregnancy can lead to multiple health and nutrition problems for both mother and child, including miscarriage, low birth weight, prematurity, physical malformations and neurological damage. Women of reproductive age should be educated about the dangers of substance use in schools, at antenatal check-ups, and within their communities.	Guidelines for the identification and management of substance use and substance use disorders in pregnancy: http://apps.who.int/iris/bitstream/10665/107130/1/9789241548731_eng.pdf?ua=1
Promotion of homestead food production (crop, livestock, vegetables, fruits) and aquaculture	<p>OUTCOME Proportion of families conducting homestead food production for their own consumption</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age Prevalence of anaemia in women of reproductive age Prevalence of infants born <2 500 g. Prevalence of overweight in children under-five years of age Prevalence of wasting in children under-five years of age</p>	<p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - education and promotion of homestead food production through community health volunteers - demonstration plots in communities to increase project upscaling and replicability - school kitchen gardens - promotion homestead food production for students at their homes through the curriculum 	<p>Increasing homestead food production through vegetable gardens, horticulture, and animal husbandry, has potential for improving nutritious food intake. It allows women to grow fruits and vegetables and rear small animals while fulfilling their domestic and child care responsibilities. It can be promoted as both a primary occupation and a means to access diversified food all year round, provided the produce is consumed at home.</p> <p>To maximize benefits:</p> <ul style="list-style-type: none"> - promote different crops for harvesting at different times of the year - include perennial plants such as fruit trees or cassava - encourage farmers to use the food they produce for their family - encourage people to consume animal products (milk, eggs, meat, fish and seafood) - encourage farmers to conduct fish farming and aquaculture where appropriate - include nutrition education and promotion - encourage micro-irrigation systems - encourage farmers to protect and preserve their natural resources such as land, forest, and water - include nutrition indicators in project proposal and objectives 	<p>Acting at Scale: Intervention Guide- Local Homestead Food Production (HFP) www.unscn.org/layout/modules/resources/files/Guides_Local_Homestead_Food_Production.pdf</p> <p>Maximizing the Nutritional Impact of Food Security and Livelihood Interventions- A Manual for Field Workers www.fao.org/fileadmin/user_upload/fsn/docs/ACF_Manual_Maximising_the_Nutritional_Impact_of_FSL_Interventions_FINAL.pdf</p>

Nutrition-sensitive evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Consumption of locally fortified complementary foods	<p>OUTCOME</p> <p>Proportion of complementary food that is fortified locally</p> <p>Proportion of children aged 6-23 months who receive a minimum acceptable diet</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of wasting in children under 5 years</p>	<p>Enhancing existing RMNCAH CBHFA activities</p> <ul style="list-style-type: none"> - promotion of various types of fortified complementary foods - education around home fortification within the community and during home visits 	<p>Food fortification involves deliberately increasing the content of essential micronutrients in food to improve the quality and provide a public health benefit with minimal risk to health. Fortification can take several forms: mass fortification for general population; targeted fortification (i.e., complementary foods for young children or rations for displaced populations); market-driven fortification; or household level fortification with micronutrient powders, crushable tablets, or lipid-based nutritional spreads.</p> <p>When possible, fortification should be done locally using indigenous foods to match the local palate and keep costs down. Household fortification is a particularly good technique for improving the quality of complementary foods for young children 6-23 months.</p>	<p>Guidelines on food fortification with micronutrients: http://whqlibdoc.who.int/publications/2006/9_241594012_eng.pdf?ua=1</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
General food distribution	<p>OUTCOME Proportion of population receiving general food distribution</p> <p>GLOBAL TARGET Prevalence of wasting in children under-five years of age</p>	<p>Cross-sectoral collaboration Food distribution in collaboration with local and international partners based on the Sphere Standards</p>	<p>The aim of general food distribution is to ensure that people have safe access to food of adequate quality and quantity, and have the means to prepare and consume it safely.</p> <p>General (free) distributions of food are introduced when assessed to be necessary, targeted to those who need the food most, and discontinued when beneficiaries have recovered the ability to produce or access their food through other means. Beneficiaries may require a transition to other forms of assistance, such as conditional transfers or livelihood responses. Supplementary feeding may be needed in addition to any general ration for individuals at risk (children under-five and pregnant or breastfeeding women). This may be blanket or targeted depending on the context (see management of MAM and SAM).</p> <p>For both general food distributions and supplementary feeding, take-home rations are provided wherever possible. On-site feeding is undertaken only when people do not have the means to cook for themselves (immediately after a disaster or during population movements), where insecurity would put recipients of take-home rations at risk or for emergency school feeding (though take-home rations may be distributed through schools).</p> <p>Nutritional requirements and ration planning: The following estimates for a population's minimum requirements should be used for planning general rations, with the figures adjusted for each population based on Sphere standards: 2,100 kcal/person/day 10% of total energy provided by protein 17% of total energy provided by fat adequate micronutrient intake</p>	<p>Sphere Handbook: 4.1. Food security- Food transfers http://www.spherehandbook.org/en/4-1-food-security-food-transfers/</p>

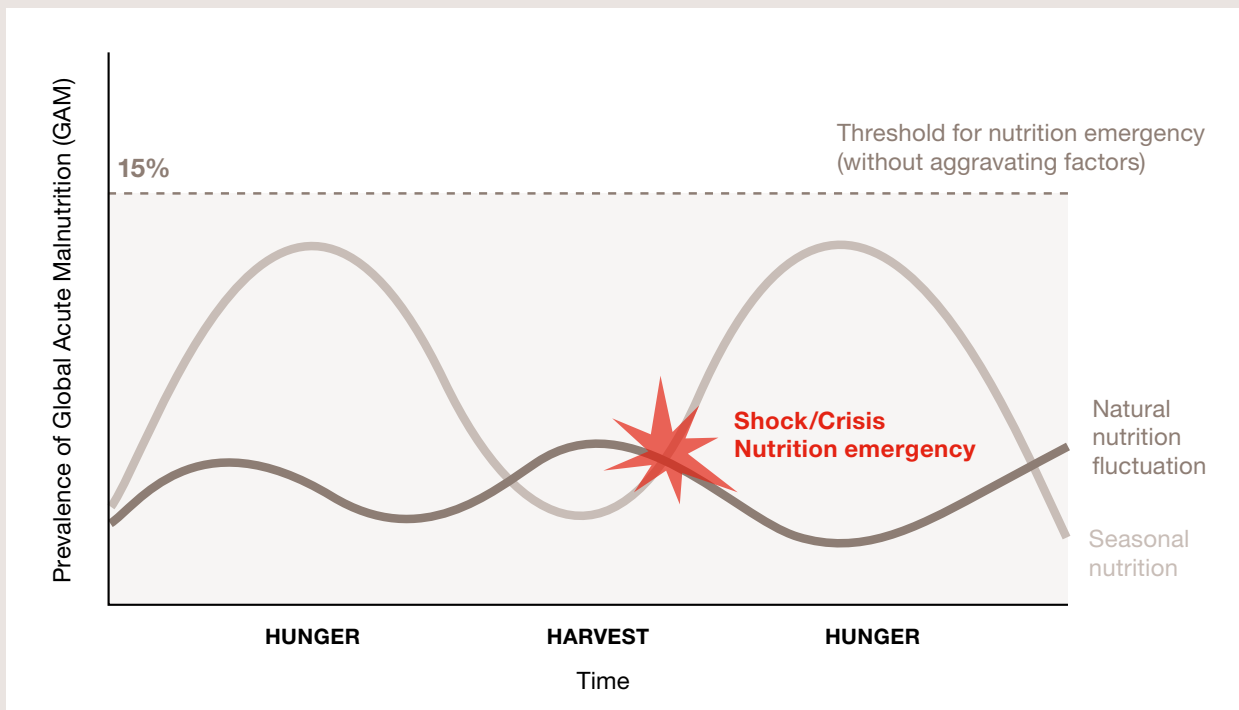
Nutrition-sensitive evidence-based actions

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Conditional and unconditional cash and voucher transfers	<p>OUTCOME Proportion of families receiving cash transfers</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia in women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Cross-sectoral collaboration</p> <p>- provision of cash transfer through health centres, volunteers or other innovative channels</p>	<p>Conditional cash transfer programmes give money to households on the condition they comply with certain pre-defined requirements (e.g., vaccinations, regular health facility visits or school attendance, attending educational sessions, taking nutritional supplements, etc.)</p> <p>Cash and vouchers (both conditional and unconditional) might also be used to buy nutritious food.</p> <p>Such programmes can be effective in increasing the use of health services and improving health outcomes including improving nutrition and preventing the deterioration of the nutritional status.</p>	<p>IFRC Guidelines for cash transfer programming: www.ifrc.org/Global/Publications/disasters/finance/cash-guidelines-en.pdf</p> <p>Sphere Project: Food security- cash and voucher standard 1 www.spherehandbook.org/en/food-security-cash-and-voucher-transfers-standard-1-access-to-available-goods-and-services/</p>
Provision of micro-credit schemes to women	<p>OUTCOME Proportion of women participating in microcredit schemes</p> <p>GLOBAL TARGET Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia in women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Cross-sectoral collaboration</p> <p>- provision of microcredit through health centres, volunteers or other innovative channels</p>	<p>Microcredit services, the awarding of small loans to individuals who are too poor to take advantage of traditional financial services, are an increasingly popular scheme for poverty alleviation today. In addition to poverty alleviation, research has also shown that providing women access to micro-credit can act as a social safety, empower and improve women and children's food and nutrition security.</p> <p>Further research is required to explore more definitive causal pathways through which micro credit can empower women.</p>	<p>Micro-Economic Initiatives programming at the IFRC: www.livelihoodscentre.org/livelihoods/portal.portal?nfpb=true&pageLabel=pages_documentDetail_page&section=Publications&nodeId=/Livelihoods/16012#wlp_pages_documentDetail_page</p>

Evidence-based action	Indicators	Strategy	Community message	Annexed links and implementation tools
Promotion of appropriate and robust school feeding programmes	<p>OUTCOME</p> <p>Proportion of school children receiving school feeding</p> <p>Proportion of schools with a school feeding programme</p> <p>GLOBAL TARGET</p> <p>Prevalence of stunting in children under-five years of age</p> <p>Prevalence of anaemia in women of reproductive age</p> <p>Prevalence of infants born <2 500 g.</p> <p>Prevalence of overweight in children under-five years of age</p> <p>Prevalence of wasting in children under-five years of age</p>	<p>Cross-sectoral collaboration</p> <ul style="list-style-type: none"> - collaboration with government schools for nutritious school feeding - incorporation of school gardens - incorporation of nutrition and cooking classes into the school curriculum 	<p>School feeding programmes include meals and/or snacks for children at school or take-home rations for families with children who attend school regularly. The benefits to school feeding include:</p> <ul style="list-style-type: none"> - Safety nets: School feeding provides food security for children, particularly in times of crisis - Nutrition: When combined with deworming and micronutrient fortification and tailored to specific nutrition needs, school feeding can improve school children's nutrition - Education: School feeding has been shown to increase school enrolment and attendance and improve school children's cognitive abilities - Local agriculture: When food is procured locally, it can benefit local farmers and the whole community, enhancing the sustainability of the programme 	<p>Home Grown School Feeding, including operations resources: www.hgsf-global.org/</p>

Source: WHO. *E-Library of Evidence for Nutrition Actions (eLENA)*. Available at: www.who.int/elena/titles/en/

FROM DEVELOPMENT TO HUMANITARIAN CRISIS – ADDRESSING NUTRITION ACROSS THE RESILIENCE CONTINUUM



Nutrition fluctuates naturally in all communities. However, nutrition can be dictated by seasonally based on hunger/harvest patterns or infectious disease occurrence. While a crisis or shock event can exacerbate either situation into a nutrition emergency, it is also important to recognize the impact of low-grade seasonal malnutrition on the health and wellbeing of a community.

Key nutrition emergencies

The line between emergency and non-emergency situations related to nutrition is not always clear. This is because disasters often act as a tipping point, exacerbating pre-existing nutritional concerns that were present before the ‘event’ and intensifying the negative outcomes (see graphic depicting nutrition trends in different contexts). Likewise, in many places, seasonal harvest and disease patterns can dictate the course of nutrition problems.

Nutrition issues can be exacerbated by a number of factors including economic crisis, food insecurity, conflict and disaster. It is important to consider the impact of emergencies on a population’s overall health. However, nutrition is often overlooked in emergencies until it becomes a significant issues leading to increased morbidity and mortality.

Just like nutrition in development settings, nutrition in emergencies can be addressed with nutrition-sensitive or nutrition-specific programming and is key to ensuring early recovery and improved resilience for communities.

All emergencies impact nutrition in some way, even if only for a limited time. Nutrition interventions should be considered in all emergencies and assessment of the impact of an event on the populations nutrition status should be considered in the first days of an event. Disasters like hurricanes, earthquakes, and floods can all change the populations’ access to food and can create vulnerable populations such as orphans who are significantly more at risk of nutrition issues. Epidemics can significantly impact nutrition, especially for those that have been ill. Conflict and refugee situations where populations may lose access to food completely can cause not only acute malnutrition but also micronutrient deficiencies that, if addressed early, could be prevented.

Disasters can have a devastating impact on a communities resilience, but seasonal crisis or prolonged food insecurity can deplete the coping mechanisms within a community to the point of emergency levels of acute malnutrition can occur every year or peak in a nutrition crisis.

Nutrition in emergencies

Nutrition in emergencies is similar to nutrition-sensitive programming but should identify at- risk populations in need of specific programming.

The key objective of nutrition programming in emergencies is to prevent the deterioration of nutrition status of the community and identify at-risk groups that need special attention, such as breastfeeding mothers, children under 5 that are already malnourished and marginalised groups. Nutrition interventions can be integrated into emergency programmes such as WASH, Health and Relief and can include screening and referral, food distribution or cash transfer programming and safe spaces for breastfeeding mothers and vulnerable groups.

Nutrition emergencies

Nutrition Emergencies are similar to flagship programs. Nutrition-specific programs should aim to decrease mortality and treat cases of acute malnutrition, but should also focus on prevention of malnutrition and mitigation against the erosion of community and household resilience.

Nutrition Emergencies may be declared on the basis of food security indicators, nutrition indicators such as prevalence of GAM or SAM or a combination of both. The WHO considers a SAM and GAM prevalence of $\geq 5\%$ and $\geq 15\%$ in children aged 6-59 months respectively as an indicator of a 'critical situation'.

Nutrition emergencies are often predictable and are referred to as slow onset, meaning they progressively get worse. Most often, nutrition emergencies are preceded by drought and food insecurity and can be prevented or at least the impact limited if response is early and targeted. For this reason, humanitarian response to nutrition emergencies should be based on predictions of impact and should not wait for malnutrition levels to cross emergency thresholds before the response starts. Use of early warning systems such as FEWS Net (<http://www.fews.net/>) allows for targeted response focused on building and maintaining resilience within communities and mitigating the impact of shocks. Consequently, we often undertake nutrition-sensitive type projects prior to transitioning into large scale emergency nutrition-specific programs if conditions continue to deteriorate.

In some regions, prevalence of acute malnutrition can reach alarming levels on a yearly basis. Often known locally as the hunger season, these ongoing and cyclic situations require sustained and long term development solutions and do not generally fall within the scope of emergency response unless aggravated by other crisis. Within this guidance, the issue of cyclic nutrition crisis is covered in the developmental section and is addressed within the context of prevention and building resilient communities.

Evidence-based programming

Emergency nutrition actions should be evidence-based just as highlighted for development contexts. Most nutrition-specific and nutrition-sensitive evidence based actions are also valid in emergency context but should be evaluated for their ability to be delivered at scale and speed. Likewise, their impact on decreasing mortality or ability to prevent deterioration should be guided by continual assessment.

The primary focus in emergencies remain on reducing mortality and therefore focus on four key interventions.

1. Reduce levels of wasting (GAM and SAM)
2. Reduce or prevent micronutrient deficiencies
3. Reduce specific vulnerabilities of infants and young children
4. Prevent life threatening deterioration in nutritional status of the population (by addressing root causes, including disease prevention and adequate food and water/ sanitation).

Consult the nutrition-specific and nutrition-sensitive evidence-based actions summary matrices to see which actions are applicable in emergency contexts.

How is nutrition impacted in disasters

1. Acute malnutrition: drastic deterioration in nutrition status in short time, which manifests as wasting and/or nutritional oedema

a. Wasting: rapid weight loss due to inadequate dietary intake or infection, indicated by either WHZ (individual's weight for their height relative to the WHO reference population) or MUAC (middle upper arm circumference)

b. Nutritional oedema: bilateral pitting oedema in lower body and moving upwards.

Grading Oedema⁴:

Grade + Mild: Both feet / ankles

Grade ++ Moderate: Both feet, plus lower legs, hands or lower arms.

Grade +++ Severe: Generalised bilateral pitting edema, including both feet, legs, arms and face.

Individual cut-offs:

- Severe Acute Malnutrition (SAM): WHZ < -3; MUAC < 11.5 cm or oedema
- Moderate Acute Malnutrition (MAM): Between -3 < WHZ < -2; 11.5 cm < MUAC < 12.5 cm
- Global Acute Malnutrition (GAM): WHZ < -2; SAM + MAM

Example – nutrition in an emergency

Nepal Earthquake (2015): increased risk of acute malnutrition among children under-5 and pregnant and lactating women as a result of reduced food stocks and increased risk of disease outbreaks due to poor hygiene and sanitation in affected communities. Screening and referral systems were established and food distribution commenced in the initial stages. Due to the rapid response, an increase in malnutrition rates was thwarted in Nepal.

⁴ Grading in Oedema - Nutrition in Emergencies Measuring oedema. Erin Boyd, reviewed by Diane Holland, Nutrition in Emergencies Unit, UNICEF - Nov 2012.

Example – nutrition emergency

Sahel Hunger crisis (2012): Erratic weather, failed crops, soaring food prices and violence put 20 million people at risk of food insecurity. This nutrition emergency led to a massive increased risk and incidence of acute malnutrition, particularly among vulnerable young children and pregnant and lactating women with over 18 million people were identified at risk. The emergency required a significant scale up in treatment of severe and moderate acute malnutrition through reinforcement of CMAM programs, resulting in over 800,000 children being treated during the year. Large scale food distribution was conducted in addition to addressing co-morbidities through nationwide vaccination campaigns and distribution of insecticide treated bed nets.

2. Micronutrient Deficiency Disorders: inadequate intake of one or more vitamins or minerals, oftentimes coupled by the presence of illness or disease

In emergencies, micronutrient deficiency outbreaks typically occur due to dependence on general food rations and/or poor dietary diversity in a population.

Micronutrient	Associated Disease/ Disorder	Vulnerable Populations
Greatest public health significance due to their prevalence worldwide		
Vitamin A	Night blindness Xerophthalmia	Children under-five years of age, pregnant and lactating women Populations with low fruit, vegetable and animal-based food intake
Iron	Anemia Paleness, tiredness, breathlessness, headaches Complications in childbirth	Children under-five years of age, women of childbearing age, pregnant and lactating women Populations with low intake of animal-based foods and vegetables
Iodine	Goiter Cretinism Fetal growth retardation	Children under-five years of age, pregnant and lactating women Populations without universal salt iodization
Common in emergency-affected populations		
Thiamin (vitamin B1)	<i>Dry beriberi</i> - diminished sensation, muscle weakness <i>Wet beriberi</i> - cardiac abnormalities and oedema <i>Infantile beriberi</i> - irritability, loss of normal crying voice	Populations with low fruit and vegetable intake/reliance on food rations
Niacin (vitamin B3)	Pellagra- dermatitis, diarrhea, dementia	Populations on a maize diet/reliance on food rations
Vitamin C	Scurvy- swollen/bleeding gums, bruising	Populations on a polished rice diet/ reliance on food rations

Example – nutrition in an emergency

Pellagra outbreak in Angola (1999): A large-scale outbreak of Pellagra occurred in the central highlands of Angola in 1999. The province had been engulfed in continuous civil conflict since June 1998, resulting in the internal displacement of half the population in the province. The purchasing power of the resident population rapidly decreased due to inflation, the activities of most traders had been reduced due to the war and food rations were being supplied by the international agencies to IDPs, children under five, and pregnant and lactating women. A Pellagra outbreak occurred due to inadequate food rations. Pellagra is due to a lack of Niacin (vitamin B3) and is associated with non-alkali treated, maize-based diets.

Example – nutrition emergency

Scurvy epidemic in Afghanistan (2002): In March 2002, there were reports of a haemorrhagic fever outbreak in western Afghanistan and it was later confirmed that these symptoms and increased mortality were actually due to Scurvy—a disease caused by vitamin C deficiency. Most aid workers did not include scurvy in the initial diagnosis because it is uncommon throughout the world and has mainly been reported in refugee populations in recent times. However, many Afghans have limited dietary diversity due to isolated locations, lengthy winters, the continuing drought of the last four years, asset depletion, and loss of livelihood. Vitamin C tablet supplementation was selected as the main intervention because of the relatively rapid response time as compared with other prevention methods. A three-month course of vitamin C tablets was distributed to 827 villages in at-risk areas. The tablets were acceptable and compliance was good. The case study from Afghanistan demonstrates that scurvy can occur in non-refugee or non-displaced populations; vitamin C supplementation can be an effective prevention strategy; there is an urgent need to develop field-friendly techniques to diagnose micronutrient-deficiency diseases; food-security tools should be used to assess and predict risks of nutritional deficiencies; and the humanitarian community should address prevention of scurvy in outbreak-prone areas.

Source: Cheung, E., Mutahar, R., Assefa, F., Ververs, M. T., Mahmood Nasiri, S., Borrel, A., & Salama, P. (2003). *An epidemic of scurvy in Afghanistan: assessment and response. Food & Nutrition Bulletin, 24(3), 247-255.*

3. Overweight and obesity: abnormal or excessive fat accumulation that presents a risk to health

Overweight and Obesity is not something the IFRC has traditionally responded to in emergencies. However, it is becoming an important issue, especially as an indicator of non-communicable diseases that can be severely affected by lack of access to essential medicines and people's ability to evacuate. This can be particularly devastating emergencies when access to normal medication for chronic diseases can be interrupted.

Individual cut-offs:children

- Overweight: WHZ>+2
- Obese: WHZ >+3

Individual cut-offs:adults

- Overweight: BMI > 25 kg/m²
- Obese: BMI > 30 kg/m²

Example – nutrition in an emergency context

Cyclone Pam, Vanuatu (2015): Overweight and obesity is one of the top health problems in Vanuatu, with 27.5% of the population obese (WHO, 2008). This problem is exacerbated in natural disasters such as Cyclone Pam in 2015. Destruction to infrastructure and medical supplies can have serious implications for prevention and treatment availability. Likewise, in times of crisis, the influx of breastmilk substitute and infant formula donations oftentimes creates more problems than it solves, as women replace breastfeeding with these substitutes. Breastfeeding is one of the top early preventative actions to reduce the risk of unhealthy growth and NCD risk in young children.

Example – nutrition emergency

Obesity epidemic in American Samoa: According to WHO records, 94% of the population is overweight—an alarmingly high rate in any context. The obesity epidemic can be blamed on a variety of factors including unhealthy fast-food culture, the price of imported foods, and a sedentary lifestyle. The epidemic has reached emergency proportions as almost all babies being born are also overweight.

Identifying and taking action in nutrition emergencies

For global, regional or country health representatives

Identifying regional or country-level nutrition emergencies

In assessing the severity of a malnutrition crisis, one should consider: the prevalence of malnutrition in relation to internationally defined benchmarks (see below), trends in rates of malnutrition over time (including seasonal trends), and the relationship between malnutrition and mortality. The following online resources provide updates on the prevalence of malnutrition, general food insecurity, and seasonal trends based on field surveys being conducted:

1. Reliefweb: search for general updates, disasters, or country reports
2. Fewsnet: breaking news updates, food security alerts, or search by region.

Making sense of the numbers

The following table provides a simple classification system for nutrition emergencies based on the WHO decision tree for implementation of selective feeding programmes. This is often used with tool on Integrated Food Security Phase Classification (IPC) that is used for classifying the severity and magnitude of food insecurity. This chart is for guidance only and should be adapted to local circumstances. Prevalence of global acute malnutrition (GAM) is defined as the percentage of the child population (6 months-5 years) who are -2 SD below the reference median weight for height.

Classification	Prevalence of GAM	Minimum Action Required
Acceptable Nutrition Situation	<5% with NO aggravating factors	Prevention of malnutrition within communities, through nutrition-specific and sensitive approaches
Poor Nutrition Situation	<5% with aggravating factors or 5-9% with NO aggravating factors	Prevention of malnutrition within communities, through nutrition-specific and sensitive approaches Individual attention for malnourished through regular community service
Serious Nutrition Situation	10-14% with NO aggravating factors or 5- 9% with aggravating factors	Targeted supplementary feeding for individuals identified malnourished in vulnerable groups; Therapeutic feeding programme for severely malnourished individuals
Critical Nutrition Situation	>15% with NO aggravating factors or 10% < GAM < 15% with aggravating factors	General ration; Blanket Supplementary feeding generalized for all members of vulnerable groups, especially children and pregnant and lactating women; Therapeutic feeding programme for severely malnourished individuals

GAM = global acute malnutrition (SAM+MAM)

Aggravating factors:

- General food ration below the mean energy requirements
- Crude mortality rate > 1/10,000/day
- Epidemic of measles or whooping cough
- High incidence of respiratory or diarrheal disease

Key strategies for evidence-based action

Strategy	Evidence-based action
Address acute malnutrition in a holistic and evidence-based manner, incorporating the community management of acute malnutrition (CMAM) framework	Health systems strengthening and capacity building for CMAM
	Advocacy against the marketing and acceptance of breast milk substitutes
	Collaboration with external partners: align with OCHA (WFP- food rations; UNICEF- breastfeeding, CMAM)
Address identified micronutrient deficiency disease outbreaks through the most context-appropriate channel	Inclusion of micronutrient-fortified foods in food rations
	Supplementation campaigns, including multiple micronutrient (MMN) supplements and vitamin A supplements, for vulnerable populations
Work across sectors to mitigate the underlying factors of nutrition emergencies	Water and Sanitation: Prevention of waterborne illness and infection
	Disaster Risk Reduction/Disaster Management: Improvement of access and availability of food in the short (cash transfers, food rations) and long-term (kitchen gardens, provision of seeds and fertilizers, etc.)

For country level programme managers and/or branch-level fieldworkers

Acute malnutrition

Identifying individual-level nutrition emergencies

Community mobilization for screening and referral of vulnerable populations. To identify individuals requiring nutrition support or treatment, two different screening techniques can be used:

1. Mid-Upper Arm Circumference (MUAC)
2. Weight for Height Z-score (WHZ).

MUAC is typically used as a rapid screening tool to determine the action and therapeutic intervention required. It is strongly related to child mortality, and thus a good indicator of a nutrition emergency. WHZ is typically used during nutrition surveys to indicate acute malnutrition. It requires more resources and time, and is thus better for robust surveys than for rapid screening.

Making sense of the numbers

The following table provides a classification system for acute malnutrition including diagnostic criteria, actions required and the related therapeutic intervention, and discharge criteria. This chart is for guidance only and should be adapted to local circumstances.

Severity	Diagnostic criteria	Actions required	Therapeutic intervention	Discharge criteria
Moderate	-3 < WHZ <-2 11.5 cm <MUAC <12.5 cm Discharge from OTP	Supplementary feeding programme (SFP): 1) Blanket 2) Targeted	Specialized Nutritious Foods (context specific)	MUAC > 12.5 cm for 2 consecutive visits
Severe (<i>appetite, no medical complications</i>)	WHZ <-3 MUAC <11.5 cm	Community-based outpatient care	RUTF, basic medical care	WHZ ≥-2 Z-score or MUAC ≥12.5 cm and no oedema for at least 2 weeks.
Severe (<i>no appetite, medical complications</i>)	Bilateral pitting oedema	Inpatient care	F75 F100/RUTF and 24 hour medical care	Reduced oedema and good appetite (move to OTP)

Micronutrient deficiencies

It is oftentimes too time consuming and impractical to systematically screen for micronutrient deficiencies in emergencies. The following are considerations to take action with regards to micronutrient deficiency disease outbreak:

- 1) Clinical signs of deficiency, particularly in vulnerable populations
- 2) Local diet patterns and the quality of the food rations available, if any
- 3) Market availability of fruits, vegetables and animal-based foods.

Key strategies for evidence-based action

Strategy	Evidence-based action
Prevent nutrition emergencies by tracking indicators such as crop production, local market prices, and health service statistics to identify and intervene in evolving crises before rates of malnutrition reach crisis level	Market-based interventions to ensure food remains affordable
	Cash transfers to ensure families have sufficient means to purchase food
	General food distribution where food is unavailable or unaffordable
	Improved household level feeding practices and health care
Address acute malnutrition in a holistic and evidence-based manner, incorporating the community management of acute malnutrition (CMAM) frame work	Identify groups particularly vulnerable to nutrition emergencies
	Community mobilization for screening and referral of acutely malnourished individuals
	Supplementary feeding programmes (SFP) for the management of moderate malnutrition (blanket and target). The ration should deliver 1000-1200 calories and 40 grams of protein per day.
	Outpatient therapeutic feeding programmes (OTP) for the management of severe acute malnutrition without complications including Ready to Use Therapeutic Food (RUTF).
	Inpatient/stabilization Centre for the treatment of severe acute malnutrition with complications following standard WHO protocols.
	Promotion of breastfeeding and non-acceptance of breast milk substitutes for proper infant feeding in emergencies
	Establishment of baby tents for mothers to learn about and conduct proper infant feeding practices in emergencies
Address the needs of individuals suffering from overnutrition in emergencies	Identify at-risk individuals, particularly those handicapped by obesity, and ensure they have proper evacuation plans
	Ensure access to essential medicines for patients suffering from NCDs, particularly diabetes, cancer, and cardiovascular disease
Address identified micronutrient deficiency disease outbreaks through the most context-appropriate channel	Inclusion of micronutrient-fortified foods in food rations
	Supplementation campaigns, including multiple micronutrient (MMN) supplements and vitamin A supplements, for vulnerable populations
Work across sectors to mitigate the underlying factors of nutrition emergencies	Water and sanitation: promote good personal and community hygiene practices
	Food safety: promote adequate and hygienic food preparation and consumption
	Disaster management: cash transfers, and food rations to alleviate food insecurity
	Disaster risk reduction: kitchen gardens, provision of seeds and fertilizers, etc.

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Programme flowchart

General

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Appendix

Key indicators and cut-offs

Global Target Indicators*	Public health significance cut-offs			
	Low	Medium	High	Very high
1. Stunting				
% children under 5 stunted (HFA < -2 Z-scores)	<20	20-29	30-39	>40
2. Maternal anaemia				
% women of women with anaemia (Hb<11 g/dl)	<4.9	5.0-19.9	20.0-39.9	>40
% women of pregnant women with anaemia (Hb<12 g/dl)				
3. Low birth weight				
% low birth weight infants (<2 500 g)	>15			
4. Child overweight				
% children under 5 with HFA>2 Z-scores	Not available			
5. Exclusive breastfeeding				
% exclusive breastfeeding of children under 6 months	<80			
6. Wasting				
% Wasted (WFH < -2 Z-scores)	<5	5-9	10-14	>15

Outcome indicators to achieve global target indicators**	Public health significance cut-offs				Global target addressed by indicator
	Low	Medium	High	Very high	
% non-pregnant women of reproductive age with low BMI (<18.5 kg/m ²)	5-9.9	10-19.9	20-39.9	>40	1,2,3,6
% SAM (WHZ <-2, MUAC <115 mm or bilateral pitting oedema)		>0.5	>1		6
Child vitamin A deficiency (6-59 months)					
% children with vitamin A deficiency (serum retinol <0.7 µmol/l)	2-9.9	10-19.9	>20		1
% children 24-71 months with night blindness	>1				1
% children who have received vitamin A supplements in previous 6 months	<80				1
Maternal vitamin A deficiency – women of reproductive age (15-49 years)					
% women with vitamin A deficiency (serum retinol <0.7 µmol/l)	<2	2.0-9.9	10.0-19.9	>20	1
% mothers of children 0-23 months with night blindness during pregnancy	>5				1
% mothers of children 0-23 months who received high-dose vitamin A supplements within 8 weeks post-partum	<80				1
Iodine deficiency					
% households consuming adequately iodized salt	<90				1
% mothers of children 0-23 months who received IFA supplements while pregnant	<80				1,2,3
Nutrition behaviours					
Correct Infant and young child feeding behaviours	<80				1,4,5,6

*Cut-offs for public health significance given for six global target Indicators. Example: If 12% of children under 5 are wasted, this is considered to be "high" public health significance.

**Cut-offs for public health significance given where available for outcome indicators that enable achieving the global targets. Example: If 15 per cent of non-pregnant women of reproductive age have a low BMI, this is considered of medium public health significance. Addressing this issue will address 4 Global Target: stunting, low birth weight, maternal anaemia and wasting.

Source: CORE group. Nutrition Working Group. Nutrition Programme Design Assistant: A Tool for Programme Planners, Washington, DC: 2010. (www.coregroup.org/storage/documents/Workingpapers/NPDA_RefGuide_web.pdf)

The Fundamental Principles of the International Red Cross and Red Crescent Movement

Humanity The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary service It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

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