UNICEF’s Nutrition Programmes & Commodities

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### Key facts: current status of nutrition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Fact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stunting</strong></td>
<td>159 million children under 5 are stunted</td>
</tr>
<tr>
<td><strong>Wasting</strong></td>
<td>50 million children under 5 are wasted</td>
</tr>
<tr>
<td></td>
<td>16 million are severely wasted</td>
</tr>
<tr>
<td><strong>Micronutrient deficiencies</strong></td>
<td>About 2 billion people are deficient in key vitamins &amp; minerals (women and children are most vulnerable)</td>
</tr>
<tr>
<td><strong>Overweight/obesity</strong></td>
<td>41 million children under 5 are overweight/obese</td>
</tr>
</tbody>
</table>

Why The World Needs Better Nutrition:

SCHOOLING: Early nutrition programs can increase school completion by one year

EARNINGS: Early nutrition programs can raise adult wages by 5-50%

POVERTY: Children who escape stunting are 33% more likely to escape poverty as adults

ECONOMY: Reductions in stunting can increase GDP by 4-11% in Asia & Africa

GLOBAL TARGETS FOR NUTRITION
World Health Assembly– WHA 2012

1. 40% reduction in the number of children under-5 who are stunted

2. 50% reduction of anaemia in women of reproductive age

3. 30% reduction in low birth weight

4. No increase in childhood overweight

5. Increase the rate of exclusive breastfeeding in the first 6 months up to at least 50%

6. Reduce and maintain childhood wasting to less than 5%

BY 20205
Sustainable Development Goals (SDGs)

GOAL 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Target 2.2. By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

### Table 2.2  Global progress against global nutrition targets

<table>
<thead>
<tr>
<th>Target and indicator</th>
<th>Baseline year</th>
<th>Baseline status</th>
<th>Target for 2025</th>
<th>On or off course?</th>
<th>Basis for assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Stunting</em> 40% reduction in the number of children under 5 who are stunted</td>
<td>2012</td>
<td>162 million</td>
<td>~100 million (currently 159 million)</td>
<td>Off</td>
<td>Current rate of reduction not rapid enough to attain 100 million by 2025</td>
</tr>
<tr>
<td><em>Wasting</em> Reduce and maintain childhood wasting at less than 5%</td>
<td>2012</td>
<td>8%</td>
<td>&lt; 5% (currently 7.5%)</td>
<td>Off</td>
<td>Current rate of reduction not rapid enough to reach below 5% by 2025</td>
</tr>
<tr>
<td><em>Under-5 overweight</em> No increase in childhood overweight</td>
<td>2012</td>
<td>7%</td>
<td>No increase (currently 6.1%)</td>
<td>Off</td>
<td>The baseline proportion for 2012 was revised down from 7% to 5.9% in the JCMEs for 2015, and the current rate is marginally above this threshold and hence off course</td>
</tr>
<tr>
<td><em>Anemia</em> 50% reduction of anemia in women of reproductive age</td>
<td>2011</td>
<td>29%</td>
<td>15% (no new data over baseline)</td>
<td>Off</td>
<td>Very little progress since 1995, when it was estimated at 33%</td>
</tr>
<tr>
<td><em>Low birth weight</em> 30% reduction in low birth weight</td>
<td>2008–2012</td>
<td>15%</td>
<td>10%</td>
<td>NA</td>
<td>Estimating methods being revised (see Panel 2.1)</td>
</tr>
<tr>
<td><em>Exclusive breastfeeding</em> Increase the rate of exclusive breastfeeding in the first six months to at least 50%</td>
<td>2008–2012</td>
<td>38%</td>
<td>50% (currently 39%)</td>
<td>Off</td>
<td>Not increasing rapidly enough to meet 50% by 2025</td>
</tr>
<tr>
<td><em>Adult overweight</em> Halt the rise in prevalence</td>
<td>2014</td>
<td>38%</td>
<td>Halt the rise in prevalence</td>
<td>Off</td>
<td>Rates are increasing in vast majority of countries, 2010–2014</td>
</tr>
<tr>
<td><em>Adult obesity</em> Halt the rise in prevalence</td>
<td>2014</td>
<td>12%</td>
<td>Halt the rise in prevalence</td>
<td>Off</td>
<td>Rates are increasing in vast majority of countries, 2010–2014</td>
</tr>
<tr>
<td><em>Adult diabetes (raised blood glucose)</em> Halt the rise in prevalence</td>
<td>2014</td>
<td>9%</td>
<td>Halt the rise in prevalence</td>
<td>Off</td>
<td>Rates are increasing in vast majority of countries, 2010–2014</td>
</tr>
</tbody>
</table>

**Source:** Based on IFPRI (2014, Table 3.1; 2015a, Table 2.1), UNICEF, WHO, and World Bank (2015), WHO (2014b, 2016a, 2016b); 1995 anemia estimate from Stevens et al. (2013).

**Note:** The term “global nutrition targets” refers to targets adopted by the World Health Assembly for maternal, infant, and young child nutrition and the nutrition-related targets in the Global Monitoring Framework for the Prevention and Control of NCDs. For low birth weight, new data estimation methods have been developed and are planned for release in the second half of 2016 by a working group including the London School of Hygiene and Tropical Medicine, UNICEF, and the World Health Organization. For more on the methods behind the stunting target, see de Onis et al. (2013). NA = no data available. JCMEs = Joint Child Malnutrition Estimates.
UNICEF APPROACH TO SCALING-UP NUTRITION
UNICEF’s approach to scale up nutrition programming - *how UNICEF will operate differently*

Guides UNICEF’s actions to support country-led action to improve maternal and child nutrition with:

- greater focus on equity
- more strategic, responsive and contextually relevant (risk-informed)
- more efficient and effective, working across sectors and with partners

Outlines six strategic operational approaches to continually improve programme performance
UNICEF’s commitment to nutrition

Improve nutrition for all children and women by creating an enabling environment that results in evidence-based, sustainable, multisectoral nutrition actions delivered at scale.
UNICEF’s programme areas in nutrition

UNICEF’s commitment to nutrition

Improve nutrition for all children and women by creating an enabling environment that results in evidence-based, sustainable, multisectoral nutrition actions delivered at scale

**IYCF**
- Protect, promote and support appropriate feeding & adequate food

**Micronutrients**
- Prevent and treat micronutrient deficiencies

**SAM**
- Prevent and treat severe acute malnutrition (SAM)

**SAM**
- Improve nutritional care for those with infectious disease (including HIV/AIDS)

**Increase synergies with health, WASH, ECD and social protection**

**Promote linkages with agriculture**

**Promote linkages with health & education to prevent childhood obesity**

**Adolescent girls**
- Women of RA

**Children under 2 yrs**
- Children aged 2-5 yrs

**Pregnant & lactating women**

**Nutrition-specific interventions**

**Nutrition-sensitive approaches**
Operational approaches to nutrition programming

1. Situation analysis and programme design
2. Enabling environment
3. Scale up evidence-based interventions
4. Capacity development
5. Community involvement and empowerment
6. M&E and knowledge management

Notes: Green arrows illustrate that the operational approaches are interrelated.
UNICEF Programme Areas
UNICEF’s programme areas in nutrition

Improve nutrition for all children and women by creating an enabling environment that results in evidence-based, sustainable, multisectoral nutrition actions delivered at scale.

- **IYCF**
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**Adolescent girls**
Women of RA

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**Nutrition-specific interventions**
### Nutrition-specific interventions across the lifecycle

#### Adolescence → pregnancy
- Food fortification, including salt iodization
- Iron and folic acid or multiple micronutrient supplementation for pregnant women
- Intermittent (weekly) iron and folic acid supplementation for reproductive-age women
- Fortified food supplements for undernourished mothers
- Nutrition counselling for improved dietary intake during pregnancy

#### Birth
- Delayed cord clamping
- Initiation of breastfeeding within one hour (including colostrum)
- Appropriate infant feeding practices and anti-retroviral therapy for HIV-exposed infants
- Control of the marketing of breast milk substitutes
- Appropriate infant feeding practices and anti-retroviral therapy for HIV-exposed infants
- Vitamin A supplementation in first 8 weeks after delivery
- Use of fortified foods, micronutrients supplementation and home fortification with multiple micronutrients for undernourished women
- Nutrition counselling for improved dietary intake during lactation
- Communication for behavioural and social change

#### 0–5 months
- Exclusive breastfeeding – counselling and lay support on breastfeeding through community-based and facility-based contacts
- Timely, adequate, safe & appropriate complementary feeding
- Continued breastfeeding
- Control of the marketing of breast milk substitutes
- Appropriate infant feeding practices and anti-retroviral therapy for HIV-exposed infants
- Micronutrient supplementation, including vitamin A, zinc treatment for diarrhea
- Management of SAM
- Food fortification, including salt iodization
- Home fortification with multiple micronutrients
- Zinc supplementation with oral rehydration salts for diarrhea treatment and management

#### 6–23 months
- Counselling and nutrition advice to women of reproductive age/adults
- Communication for behavioural and social change to prevent childhood obesity
- Vitamin A supplementation
- Management of SAM (and moderate acute malnutrition)
- Food fortification, including salt iodization
- Zinc supplementation with oral rehydration salts for diarrhea treatment and management

#### 24–59 months
- Adolescence → pregnancy
- Birth
- 0–5 months
- 6–23 months
- 24–59 months

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Red refers to interventions of women of reproductive age and mothers.
Blue refers to interventions for young children.

Source: UNICEF, 2013
Key Components of IYCF Programme

Legislation
(Code of marketing of BMS)
National level

Complementary feeding
Children 6-23m
Health facility and community levels

Counselling and support
Mothers
Health facility and community

IYCF in difficult circumstances
(HIV, emergency)

Communication for behaviour change
Mothers, fathers, leaders…
National to community levels

SUPPLIES
Key Components of Micronutrient Programme

**Supplementation**

- **Vitamin A Supplementation**
  - Children 6-59m
  - Health Facilities, campaigns, outreach

- **Iron folic-Acid supplementation**
  - Pregnant Women
  - Health facilities/ANC

- **Zinc supplementation (with ORS)**
  - Children 0-59m
  - Health Facilities

**Fortification**

- **Home fortification (MNPs, Low dose LNS)**
  - Children 6-23m
  - Health facilities (for use at HH level)

- **Food fortification (Iodine, VA, Iron)**
  -
Key Components of Micronutrient Programs

- **Vitamin A Supplementation**
  - Children 6-59m
  - Health Facilities, campaigns, outreach

- **Iron folic-Acid supplementation**
  - Pregnant Women
  - Health facilities/ANC

- **Zinc supplementation**
  - (with ORS)
  - Children 0-59m
  - Health Facilities

- **Home fortification**
  - (MNPs, Low dose LNS)
  - Children 6-23m
  - Health facilities (for use at HH level)

- **Food fortification**
  - (Iodine, VA, Iron)

**SUPPLIES**
1 sachet a day

2

Open sachet

3

Pour entire content of sprinkles plus into child’s serving of uji or other food

4

Mix well

5

Eat immediately

6

Healthy and happy child

7

Happy family
Key Components of Management of SAM Programme

Treatment

- Screening and referrals
  - Children 6-59m
  - Health facility/community

- Treatment complicated cases
  - Children 6-59m
  - Inpatient care

- Treatment uncomplicated cases
  - Children 6-59m
  - Outpatient care
  - (HF, Community)

Prevention

- Early detection and management of MAM
  - (WFP)

- Multi-sectoral approach
Key Components of Prevention & Management of SAM Programme

- Screening and referrals
  - Children 6-59m
  - Health facility/community

- Treatment:
  - Complicated cases
    - Children 6-59m
    - Inpatient care
  - Uncomplicated cases
    - Children 6-59m
    - Outpatient care
    - (HF, Community)

- Early detection and management of MAM
  - (→ WFP)

- Multi-sectoral approach

SUPPLIES
Nutrition accounts for 13% of UNICEF expenditures

Expenditures in nutrition by funding source

- Other resources (Emergency)
- Other resources (Regular)
- Regular resources

UNICEF expenditures
2014: $400 millions
2015: $600 millions
→ 190 millions for supplies
Specialized nutrition products for women and children

**Women**

- Pregnancy and Lactation
  - Iron + Folic Acid tablets
  - Multiple Micronutrient tablets

**Children**

- Micronutrient Supplementation
  - Multiple Micronutrient Powder (MNP)
  - Vitamin A capsules

- Moderate Acute Malnutrition (MAM)
  - Ready to Use Supplementary Food (RUSF)
  - Lipid Nutrition Supplements (LN-SQ/MQ)

- Severe Acute Malnutrition (SAM)
  - Therapeutic Milk (F-75, F-100)
  - Resomal
  - Ready to Use Therapeutic Food (RUTF)
  - Antibiotics, deworming…
Iron Folic Acid (IFA)

Description

Supplement for the treatment and prevention of iron and folic acid deficiency during pregnancy

Composition and standards

WHO Model List for Essential Medicines: ferrous salt + folic acid tablet: equivalent to 60 mg iron + 400 micrograms folic acid

Regulated as medicine. Pharmacopoeia standards.

How supplied

Iron 60mg+Folic ac.400mcg tab/PAC(10x10) (Mat. No. S1550005)
Iron 60mg + Folic ac. 400mcg tab/PAC-100 (Mat. No. S1550030)
Shelf-life XX months at 30°C
WAP 2015: USD 1.43 (10x10 in blister) and USD 0.70 (100 in bottle)
Iron Folic Acid (IFA)

Procurement

USD 9.1M in 2015

2 sources at present. Need additional sources and competition for blisters and bottles

long lead time (warehouse managed)

Product/Market development

Need for improved packaging, labeling and instructions for use

Tablets with lower iron/folic acid for weekly supplementation not available (needed?)

Many formulations, strengths. WHO EML strength not available in many markets
Multiple Micronutrient Powder (MNP)

Description

Mineral and vitamin mix formulated for point of use fortification of foods for children and vulnerable populations to address anemia and vitamin and mineral deficiencies.

Target group is children 6–59 months of age. Primary target: 6-24 months

Composition and standards

15-component formulation is in line with the WHO, UNICEF, WFP joint statement on micronutrient supplements in emergencies (2006)

No pharmacopoeia monograph. USP monograph for Oil and water soluble vitamins and minerals tablets is referred to in our specification in combination International Pharmacopeia standard for Oral powders.

Regulated as food or dietary supplement

How supplied

Multiple micronutrient pdr,sach./PAC-30 (Mat. No. S1580201)
Multiple micrn. pdr,custom sach./PAC-30 (Mat. No. S0000225)
Micronutr. pdr, 5 comp, custom /PAC-30 (Mat. No. S0000214)

Shelf-life 24 to 36 months at 25°C and 30°C

WAP 2015: USD 0.56 (pack of 30)
Multiple Micronutrient Powder (MNP)

Procurement

- USD 13.6M in 2015
- 3 sources with manufacturing in 5 countries. Need additional sources.
- Long lead time (standard pack warehouse managed). In Nutridash.
- Establishment of methods for QA/QC critical

Product/Market development

Development of products with alternative formula for specific contexts
Investigation on need to add components to standard formula
Pharmacopoeia monograph (with USP)
# Therapeutic Milks (F-75, F-100)

## Description

Milk-based powder with added vegetable fat, carbohydrates, vitamins and minerals to prepare a liquid for the treatment of children with severe acute malnutrition (SAM).

- F-75: initial feeding or starting phase
- F-100: rehabilitation phase

## Composition and standards


Regulated as food/food for special medical purposes. Closer standards are those for Infant Formula (Codex)

## How supplied

Powder in aluminium sachets for reconstitution with 500 ml of water

- F-75 therap. diet, sachet, 102.5g/CAR-120 (Mat No. S0000208)
- F-100 therap. diet, sachet, 114g/CAR-90 (Mat No. S0000209)

Shelf-life 24 months at 30°C
**Therapeutic Milks (F-75, F-100)**

**Procurement**

- USD 4.8M in 2015
- 2 sources at present- work on expansion of manufacturing base
- Long lead time (capacity constrained). Forecasting through Nutridash.
- Significant QA/QC requirements for procurement

**Product/Market development**

Specifications under review: Micronutrient limits, packing in tin with measuring spoon

Product development: ready to use liquid (South Africa), dual compartment ready to mix pack.
Ready to Use Therapeutic Food

Description

High-energy fortified food used for the treatment of SAM. RUTF paste is the sole source of food, except for breast milk in the case of breast-fed infants, during the period of SAM treatment. Can be used for out-patient treatment (CMAM).

Composition and standards

Composition derived from Joint Statement for Community case management of severe acute malnutrition (2007)

Interagency collaboration to define manufacturing standards and product specifications

Regulated as food/food for special medical purposes. Closer standards are those for Low Moisture Food (Codex). Codex standards for RUTF under development.

How supplied

Ready to Use paste in aluminum sachets
Therapeutic spread, sachet 92g/CAR-150 (Mat No. S0000240)
Shelf-life 24 months at 30°C
WAP 2015: USD 50/CTN
Ready to Use Therapeutic Food

Procurement

- USD 114M in 2015
- 20 sources at present- 11 in programme countries (strategy aims at 50% of procurement in programme countries by 2016)
- Short lead time. Multiple LTAs. Forecast through Nutridash

Product/Market development

Research into alternative formulas (local suitability, substitution of milk)
Expansion of programme and manufacturing capacity in large countries (Pak, Nig, Ind)
Improved taxation of ingredients and financing options for suppliers
Thank You