Maternal, infant and young child nutrition:

Nutrition situation and WHO strategic focus

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WHO - EMRO
Outline

1. Nutrition situation
2. WHA resolutions on Infant and maternal nutrition
3. The five global targets
4. Nutrition challenges
5. WHO Country level support in nutrition
6. Partnership and international initiatives
The Ugly Face of “Hidden Hunger”

- Zinc Deficiency
- Vitamin A Deficiency
- Ca and Vitamin D Deficiency
- Rickets
- Iron Deficiency
- Iodine Deficiency
<table>
<thead>
<tr>
<th>Disease</th>
<th>Nutrient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaemia</td>
<td>Iron</td>
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<tr>
<td>Xerophthalmia</td>
<td>Vitamin A</td>
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<tr>
<td>Goitre</td>
<td>Iodine</td>
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<tr>
<td>Beriberi</td>
<td>Thiamine</td>
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<tr>
<td>Pellagra</td>
<td>Niacin</td>
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<tr>
<td>Scurvy</td>
<td>Vitamin C</td>
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<tr>
<td>Rickets &amp; Osteoporosis</td>
<td>Vitamin D</td>
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<tr>
<td>NTD</td>
<td>Folic acid</td>
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</tbody>
</table>
Over 165 million children under 5 are stunted as a result of malnutrition.

- **52 million children** are too thin and require special treatment.
- At the same time, **43 million children** are overweight - some as a result of poverty, when families are unable to afford a balanced, nutritious diet.
- **2 billion** people are deficient in key vitamins & minerals
171 million children under 5 stunted growth (2010)
293 million children under 5 are anaemic

Category of public health significance (anaemia prevalence)
- Normal (<5.0%)
- Mild (5.0-19.9%)
- Moderate (20.0-39.9%)
- Severe (≥40.0%)
- No Data

Source: WHO Global database on Anaemia, 2006
Anemia in pregnant woman in EMR countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Anemia (%)</th>
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<tbody>
<tr>
<td>Afghanistan</td>
<td>High</td>
</tr>
<tr>
<td>Bahrain</td>
<td>Moderate</td>
</tr>
<tr>
<td>Djibouti</td>
<td>Moderate</td>
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<tr>
<td>Egypt</td>
<td>High</td>
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<tr>
<td>Islamic Republic of Iran</td>
<td>High</td>
</tr>
<tr>
<td>Iraq</td>
<td>Moderate</td>
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<tr>
<td>Jordan</td>
<td>High</td>
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<tr>
<td>Kuwait</td>
<td>High</td>
</tr>
<tr>
<td>Lebanon</td>
<td>Moderate</td>
</tr>
<tr>
<td>Libya</td>
<td>High</td>
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<tr>
<td>Morocco</td>
<td>Moderate</td>
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<tr>
<td>Occupied Palestine Territories</td>
<td>High</td>
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<tr>
<td>Oman</td>
<td>High</td>
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<td>Pakistan</td>
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<td>Qatar</td>
<td>High</td>
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<tr>
<td>Saudi Arabia</td>
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<td>Somalia</td>
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<td>South Sudan</td>
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<td>Sudan</td>
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<td>Syrian Arab Republic</td>
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<td>United Arab Emirates</td>
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<tr>
<td>Yemen</td>
<td>High</td>
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</tbody>
</table>
Why nutrition?

Because when...

Girls & women are well-nourished and have healthy newborn babies.

Children receive proper nutrition and develop strong bodies & minds.

The world is a safer, more resilient & stronger place.

Adolescents learn better & achieve higher grades in school.

Families & communities emerge out of poverty.

Young adults are better able to obtain work & earn more.

Communities & nations are productive & stable.
The life course approach

Lifecourse: causal links

- Societal and environmental factors
  - Reduced capacity for care
  - Inappropriate food, health & care

- Elderly malnutrition
  - Reduced capacity for care
  - Inadequate nutritional intake

- Fetal & infant malnutrition
  - Low birth weight & compromised body composition
  - Impaired mental development
  - Inadequate catch up growth

- Pregnancy
  - Low weight gain
  - Higher maternal mortality

- Adult malnutrition
  - Inappropriate food, health & care
  - Reduced intellectual potential & reduced school performance

- Child malnutrition
  - Inappropriate feeding practices
  - Frequent infections
  - Inappropriate food, health & care

- Adolescent malnutrition
  - Inappropriate food, health & care

- Obesity
  - Abdominal obesity
  - Diabetes, CVD

Source: Darnton-Hill, Nishida & James, 2002 (adapted)
The causes of malnutrition are interconnected

Insufficient access to affordable, nutritious **FOOD** throughout the year

Lack of good **CARE** for mothers & children & support for mothers on appropriate child feeding practices

Inadequate access to **HEALTH** sanitation & clean water services

ROOTED

Political & Cultural Environment **IN** Poverty Disempowerment of women
Global targets 2025: to improve maternal, infant and young child nutrition

Together, countries and supporting stakeholders are collectively working to reach the global targets set out by the World Health Assembly 2012 Resolution WHA65/6:

| Target 1: | 40% reduction of the global number of children under 5 who are stunted |
| Target 2: | 50% reduction of anemia in women of reproductive age |
| Target 3: | 30% reduction of low birth weight |
| Target 4: | Increase exclusive breastfeeding rates in the first 6 months up to at least 50% |
| Target 5: | No increase in childhood overweight |
| Target 6: | Reducing and maintaining childhood wasting to less than 5% |
Effect of scale up of interventions on deaths in children younger than 5 years

- Management of SAM
- Preventive zinc supplementation
- Promotion of breastfeeding
- Appropriate complementary feeding
- Management of MAM
- Periconceptual folic acid supplementation or fortification
- Maternal balanced energy protein supplementation
- Maternal multiple micronutrient supplementation
- Vitamin A supplementation
- Maternal calcium supplementation

Number of deaths of children <5 years averted:

Source: The Lancet 2013; 382:452-477 (DOI:10.1016/S0140-6736(13)60996-4)
### Specific Actions for Nutrition

**Feeding Practices & Behaviors:**
Encouraging exclusive breastfeeding up to 6 months of age and continued breastfeeding together with appropriate and nutritious food up to 2 years of age and beyond.

**Fortification of foods:** Enabling access to nutrients through incorporating them into foods.

**Micronutrient supplementation:** Direct provision of extra nutrients.

**Treatment of acute malnutrition:** Enabling persons with moderate and severe malnutrition to access effective treatment.

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### Nutrition-Sensitive Strategies

**Agriculture:** Making nutritious food more accessible to everyone, and supporting small farms as a source of income for women and families.

**Clean Water & Sanitation:** Improving access to reduce infection and disease.

**Education & Employment:** Making sure children have the nutrition needed to learn and earn a decent income as adults.

**Health Care:** Access to services that enable women & children to be healthy.

**Support for Resilience:** Establishing a stronger, healthier population and sustained prosperity to better endure emergencies and conflicts.
WHO Country level support in nutrition

**THE FUNCTIONS**

- Analysing the needs: nutrition surveillance
- Analysing the responses and the capacities: policy analysis
- Supporting the development of integrated food and nutrition policies
- Strengthening the delivery of essential nutrition actions through the health system
- Guidance on programme design and implementation
- Assisting in emergency responses

**THE PROGRAMMES**

- Landscape analysis
- Growth standards
- Micronutrients supplements in antenatal care and in child care
- Micronutrient fortification of staple food
- Nutritional support of people living with HIV and TB
- Integrated treatment of malnutrition
- Promotion of breastfeeding, safe and adequate complementary feeding

Source: Branca, 2012
Global movement to scale up nutrition

1. Scaling Up Nutrition Network (SUN)
   • a global movement led by countries.
2. Renewed Efforts Against Child Hunger and under-nutrition (REACH).
   • Initiating partners of the UN Network include FAO, UNICEF, WFP, WHO and IFAD.
REACH – a country level UN partnership

- MoU signed and operational
- Steering Committee in place, leading on workplan, budget and resource mobilization.
- 10 countries supported (Ethiopia, Ghana, Mali, Mauritania, Mozambique, Niger, Rwanda, Tanzania, Uganda, Bangladesh, Laos, Nepal)
- 7 additional considered (Chad, Cambodia, Sri Lanka, Timor Leste, Namibia, Zambia, Afghanistan)
- Funding from CIDA, USAID and the Bill & Melinda Gates Foundation.

World Health Organization
Regional Office for the Eastern Mediterranean
“window of opportunity”

By focusing on improving nutrition for mothers and children in the 1,000 day window,

Evidence shows that the right nutrition during the 1,000 day window can:

- save more than one million lives each year;
- significantly reduce the human and economic burden of diseases such as tuberculosis, malaria and HIV/AIDS;
- reduce the risk for developing various non-communicable diseases such as diabetes, and other chronic conditions later in life;
- improve an individual’s educational achievement and earning potential; and,
- increase a country’s GDP by at least 2-3 percent annually.
Maternal Nutrition

- Improve nutritional status – adolescence and pre-pregnancy
- Pre-pregnancy use of fortified foods – iron, folic acid, zinc, iodine
- MN supplementation: iron, folic acid, other MNs
- De-worming, TT, IPTp, ITN use
- Macronutrients - food support/security
- Child protection – prevent teenage pregnancies
- Support innovative approaches: newly wed
Food fortification

- Strategy to improve overall baseline micronutrient status
  - Identify vehicles for fortification – flour, sugar, oil, condiments, complementary food, salt
  - Assess industry structure and willingness
  - Focus on ‘low hanging fruit’ - distribute through public institutions (schools, …)
  - Market based approaches
Thank you