Nutrition in the Post-2015 Context

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Presentation

• Different Dimensions of Malnutrition
• Consequences
• Food Security and Nutrition
• Looking forward
• Key Points
Nutrition Goes Beyond Food Security

• Multiple causes requires multi-sectoral response
• Health
• Water Sanitation
• Education
• Social Protection
Nutrition is important for ..
Wasting or Acute Malnutrition

Source: WHO
Guatemalan children, significantly stunted

Nine-year-old children in Guatemala are significantly shorter than the World Health Organization's global average height for their age. Chronic malnourishment, which causes stunted growth, is an epidemic in Guatemala. In rural villages, more than 80 percent of the population is stunted. (ABCNews)
Growth falters due to poor nutrition

Stunting Prevalence is Highest in sub-Saharan Africa and South Asia

Percentage of children under age 5 who are moderately or severely stunted

Note: Data are from 2007 to 2011, except for India.
Greatest Need: Prevalence and Trends of Stunting Among Pre-School Children, 1990-2020

Micronutrient deficiencies – Hidden Hunger
Overweight and Obesity among women >15 years
Consequences of Malnutrition

- Morbidity and Mortality
- Impaired cognitive ability
- Lower school attainment
- Intergenerational impact
- Increased susceptibility to chronic disease
- Health costs
- Lower work productivity
- Increased poverty
Undernutrition and child mortality

Micronutrient deficiencies among non-stunted, non-wasted children account for 10% of child mortality.

Stunting accounts for 15% of child mortality.

Severe acute malnutrition accounts for 4% of child mortality.

MAM accounts for 10% of child mortality.

Source: Ethiopia Demographic and Health Survey (2011); Lancet Nutrition Series, 2008
Underweight (no data for stunting) is still the biggest single risk factor for the attributable burden of disease in most of Sub-Saharan Africa and 4th in South Asia

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Global</th>
<th>South Asia</th>
<th>Central sub-Saharan Africa</th>
<th>Eastern sub-Saharan Africa</th>
<th>Western sub-Saharan Africa</th>
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<td>High blood pressure</td>
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<td>6</td>
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<td>Tobacco smoking, including second-hand smoke</td>
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<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
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<tr>
<td>Alcohol use</td>
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<td>Household air pollution from solid fuels</td>
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<td>1</td>
<td>4</td>
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<tr>
<td>Diet low in fruits</td>
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<td>5</td>
<td>9</td>
<td>8</td>
<td>11</td>
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<td>High fasting plasma glucose</td>
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<td>Childhood underweight</td>
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<td>4</td>
<td>8</td>
<td>9</td>
<td>1</td>
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<tr>
<td>Ambient particulate matter pollution</td>
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<td>6</td>
<td>8</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Physical inactivity and low physical activity</td>
<td>10</td>
<td>11</td>
<td>7</td>
<td>11</td>
<td>15</td>
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</tbody>
</table>

Risk factors ranked by attributable burden of disease, 2010
Human Brain Development in the First 1,000 Days

Stunting at the age of two

• **Irreversible**
  • Deprives these children from full potential
  • Deprives them from equal opportunities for the rest of their life
  • Deprives the communities, societies, countries, and the world from its full human potential
Nutrition and School Performance

• Children not stunted at 3 years of age:
  – Higher attained grade
  – Better test scores

• Recent Guatemala study – 25 year follow-up: a nutrition intervention in early childhood resulted in women staying in school 1.2 more years

• Both maternal and paternal education are strong determinants of child stunting
This Life Cycle model became popular in the 2000s.

Non communicable disease is the leading cause of death in all but the poorest countries, 2008

Source: Beaglehole, Lancet (2011)
Estimated % of GNP lost due to poor nutrition, 1900-2010, and projections to 2050

Nutrition and Food Security Linkages

- Availability
- Access
- Utilization
- Stability
Production, processing, storage and marketing of nutritious foods

- Food availability - (year round)
- Income
- Access (year round)
- Utilization
- Biodiversity
- Biofortification
- Fortification

Natural and human resource management

Food safety and safe agriculture practices

Nutrition education

Labor saving technology

Income used for health and hygiene
Nutrition and Food Availability

- Availability of nutritious foods, of nutrients
- Food Diversity
- Nutrition is often at the individual level or focused on specific target groups
- Processing – food fortification – is critical
- Food wastage – most commonly of nutritious foods
Nutrition and Food Access

• Economic access (affordability)
• Physical access (markets)
• Food price variability
• Many successful Social Protection (safety nets) programmes include special foods for children
Nutrition and Utilization
Nutrition and Utilization

• Consumption – foods/nutrients

• Beyond food security –
  – Breastfeeding, complementary feeding practices
  – Health water sanitation – Illness impacts on nutrient absorption and use and increases requirements
Looking forward

• Food price volatility – nutrients or calories?
• Climate change – increase in shocks, longer term impacts on food production and health
• Increase in food requirements vs. availability
• Links between systems
• Measuring malnutrition – same tools
• Elevate nutrition as part of the global conversation on sustainability
Key Points

• There can be no sustainable development if we do not eradicate hunger and poverty
• Malnutrition is universal in its three dimensions
• Nutrition is multi-sectoral – in causality and in response
• Risk that nutrition - in all its dimensions - will get lost in the post-2015 process
• Preventing malnutrition immediately and sustainably
Thank You