Task Force :- Ethiopia

May 2016
Kampala; Uganda
Food consumption

• Report from national food consumption survey shows
  ❖ the highest proportion of foods consumed by women and men come from the cereals/grains group, while dairy is highest among children. Consumption of flesh foods (meat and organ meat) and egg was reported among very few children, women and men.
Food consumption cont.....

• Over 50% of average daily caloric intake of an average household is from wheat, sorghum, and corn

• Commercially processed flours are consumed by 28% of Ethiopians, while an estimated 58% of the population consumes wheat flours and grains.
Food consumption cont...
National grain consumption
Malnutrition trend in Ethiopia CONT...

Figure 7.2 Trends in Nutritional Status of Children Under Age 5, 2000-2014

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting</td>
<td>58</td>
<td>51</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td>Wasting</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Underweight</td>
<td>41</td>
<td>33</td>
<td>29</td>
<td>25</td>
</tr>
</tbody>
</table>

Note: For comparison purposes, the 2000 and 2005 anthropometric indicators are computed on the basis of the new WHO Standards and as such are different from the published reports. The values in the figure indicate percentage below -2 SD.

EMDHS 2014
Cont...


- Underweight
- Stunting
- Wasting
Prevalence of Malnutrition

• The four most prevalent forms of malnutrition are acute and chronic malnutrition, iron deficiency anemia, iodine deficiency disorder, and vitamin A deficiency.

• Other common micronutrient deficiencies include folic acid, zinc, and vitamins B and D.
Table 1. Deficiency rates in Ethiopia (7)

<table>
<thead>
<tr>
<th>Study Subjects</th>
<th>Indicators</th>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children, 6 – 59 months</td>
<td>Night Blindness</td>
<td>4.3 – 7.3</td>
</tr>
<tr>
<td></td>
<td>Bitot’s Spot</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>&lt;0.7 SRC μmol/L</td>
<td>37.6</td>
</tr>
<tr>
<td>Iron Deficiency - Anemia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children, 6 – 59 months</td>
<td>Hb &lt;11.0 g/dL</td>
<td>54.0</td>
</tr>
<tr>
<td></td>
<td>Hb &lt;4.0 g/dL</td>
<td>4.0</td>
</tr>
<tr>
<td>Women, 15 – 49 years</td>
<td>Hb &lt;11.0 g/dL</td>
<td>30.4</td>
</tr>
<tr>
<td></td>
<td>SF &lt;50 μg/L</td>
<td>50.1</td>
</tr>
<tr>
<td>Folic Acid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women of child bearing age</td>
<td>SFA &lt;2 ng/mL (severe)</td>
<td>46.0</td>
</tr>
<tr>
<td></td>
<td>SFA &lt;4.9 ng/mL (marginal)</td>
<td>21.2</td>
</tr>
<tr>
<td>Iodine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>Goiter rate</td>
<td>35.8</td>
</tr>
<tr>
<td>Women</td>
<td>Goiter rate</td>
<td>27.0</td>
</tr>
</tbody>
</table>

SRC = Serum Retinol Concentration; Hb = Hemoglobin; SF = Serum Ferritin; SFA = Serum Folic Acid
Nutrition intervention

NNS along with the National Micronutrient Guidelines developed by the MOH, outline a comprehensive set of strategies to reduce the burden of micronutrient deficiencies including:

• Provision of iron-folic supplements to pregnant women
• Vitamin A capsules for children 6-59 months and mothers within first 45 days of delivery
• Nutrition education and dietary diversification
• Hygiene, de-worming and other public health measures
• Food fortification
Food fortification intervention

- For which food products - salt
- With which components - Iodine
- At what concentrations - ???
- Regulations - Salt Iodization Council of Ministers Regulation No. 204/2011”.

Standard of iodized Salt

- Any iodized salt for human consumption shall conform with the standards for iodized salt set by the appropriate authority.
- Any imported salt for human consumption shall be accompanied by a certificate of safety.
• Requirement for Salt Iodization

No person shall process, import, store, transport, distribute or sale non iodized salt for human consumption.

Goal; to reach 100% coverage in 2015
You are fortifying

• By January 2012, salt regulation #204/2011 makes it mandatory to iodize salt for human consumption.

• FMOH Commissioned Assessment
  – Techno-feasibility & market landscape analysis

• The food consumption survey carried out.
Cont’d

• It is mainly dependent on manual salt production and Knapsack salt iodization technique (KIO3) for >300,000MT of salt per year
• Marketing and communication

• Sustainable supply of KIO3 is Established
  —Government and public awareness increased about USI and IDD
• **Challenges /constraints**

• The harsh weather (>45°C) in all production sites

• low production capacity and less robust iodization machines,

• lack of infrastructure (water and electricity)

• lack of commitment by salt producers to iodize,

• lack of a clear strategy to enforce the salt legislation.
• You are not(yet) fortifying?

<table>
<thead>
<tr>
<th>% RNI</th>
<th>Feasible Industrial Coverage</th>
<th>Estimated Cost</th>
<th>Cost Per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Consumers</td>
<td>Million Consumers</td>
<td>USD Million/Yr</td>
</tr>
<tr>
<td>Flour</td>
<td>26% Iron; 64% Folic Acid</td>
<td>28%</td>
<td>22</td>
</tr>
<tr>
<td>Oil</td>
<td>~37% Vit A</td>
<td>48%</td>
<td>38</td>
</tr>
<tr>
<td>Sugar</td>
<td>~36% Vit A</td>
<td>20%</td>
<td>16</td>
</tr>
</tbody>
</table>

• wheat flour and oil fortification will start by January, 2017.
• What could be the challenges/constraints
  
• Agro ecological difference
• Small scale milling
• Awareness (millers, public and regulatory body)
• Affordability
• fortificant choice

• Wheat flour: folic acid, iron
• Oil: vitamin A
Thank you
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 сырімозлам!!!!!