Affordability of a Healthy Diet

Rachel Gilbert
28 September 2023
Abuja, Nigeria
How many people cannot afford a healthy diet?

- Affordability analyses compare Cost of a Healthy Diet to a measure of income
  - Global level: Compare CoHD to 52% of income using national accounts data compiled by World Bank ICP

- National measurement options:
  - Household expenditure
  - Wages
Affordability of Healthy Diets: Example

Person 1
Location: Abia Rural
Month: June 2023
Cost per adult per day: 767 Naira
Income per day: 1000 Naira

Person 2
Location: Abuja Urban
Month: June 2023
Cost per adult per day: 431 Naira
Income per day: 400 Naira
Findings from global CoAHD analysis

• For about 3 billion people (40% of the global population), healthy diets remain unaffordable

• Nutrient-rich foods are more costly to grow and distribute than starchy staples, vegetable oil & sugar

• Most unaffordability is due to low incomes, so healthier diets will require higher earnings or safety nets
National and global CoAHD may differ

• **Price data**
  • Overall, national data are likely to result in lower costs

• **Dietary standard**
  • The cost of national FBDG and HDB can have small differences, as we have seen
  • *In Nigeria, use HDB because it aligns closely with Eat Well to Live Well*

• **Affordability standards**
  • The % of income spent on food; in many countries the actual % of income spent on food is different than 52%
  • *In Nigeria, about 56%*
Global data is online at
https://databank.worldbank.org/source/food-prices-for-nutrition
and
<table>
<thead>
<tr>
<th>Domain Code</th>
<th>Domain</th>
<th>Area Code (M49)</th>
<th>Area</th>
<th>Element Code</th>
<th>Element</th>
<th>Item Code</th>
<th>Item</th>
<th>Year Code</th>
<th>Year</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAHD</td>
<td>Cost and Affordability of a Healthy Diet (CoAH)</td>
<td>566</td>
<td>Nigeria</td>
<td>6121</td>
<td>Value</td>
<td>7005</td>
<td>Percentage of the population unable to afford a healthy diet (percent)</td>
<td>2017</td>
<td>2017</td>
<td>%</td>
<td>90.2</td>
</tr>
<tr>
<td>CAHD</td>
<td>Cost and Affordability of a Healthy Diet (CoAH)</td>
<td>566</td>
<td>Nigeria</td>
<td>6121</td>
<td>Value</td>
<td>7005</td>
<td>Percentage of the population unable to afford a healthy diet (percent)</td>
<td>2018</td>
<td>2018</td>
<td>%</td>
<td>91.1</td>
</tr>
<tr>
<td>CAHD</td>
<td>Cost and Affordability of a Healthy Diet (CoAH)</td>
<td>566</td>
<td>Nigeria</td>
<td>6121</td>
<td>Value</td>
<td>7005</td>
<td>Percentage of the population unable to afford a healthy diet (percent)</td>
<td>2019</td>
<td>2019</td>
<td>%</td>
<td>91.8</td>
</tr>
<tr>
<td>CAHD</td>
<td>Cost and Affordability of a Healthy Diet (CoAH)</td>
<td>566</td>
<td>Nigeria</td>
<td>6121</td>
<td>Value</td>
<td>7005</td>
<td>Percentage of the population unable to afford a healthy diet (percent)</td>
<td>2020</td>
<td>2020</td>
<td>%</td>
<td>93.1</td>
</tr>
<tr>
<td>CAHD</td>
<td>Cost and Affordability of a Healthy Diet (CoAH)</td>
<td>566</td>
<td>Nigeria</td>
<td>6121</td>
<td>Value</td>
<td>7005</td>
<td>Percentage of the population unable to afford a healthy diet (percent)</td>
<td>2021</td>
<td>2021</td>
<td>%</td>
<td>93.5</td>
</tr>
</tbody>
</table>
Affordability Indicators

• Ratio of the cost of a healthy diet to food expenditure per adult per day
  • Ratio of the cost of an energy-sufficient diet to food expenditure per adult per day
  • Can also do this with wage data as in Ethiopia bulletin

• Proportion of the population whose food budget is less than the cost of a healthy diet
  • In global analysis, food expenditure data are also from the International Comparison Program dataset
  • At the national level, we can use household surveys (e.g., NLSS 2018/19) to estimate a food budget
Example of adult equivalent used for affordability of a healthy diet

<table>
<thead>
<tr>
<th>HHID</th>
<th>Person ID</th>
<th>Age (years)</th>
<th>Age (months)</th>
<th>Sex</th>
<th>Age-sex</th>
<th>Calorie needs</th>
<th>Adult equivalent for comparison with CoHD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>33</td>
<td>0</td>
<td>Male</td>
<td>Male 18-59</td>
<td>3,091</td>
<td>1.3</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>32</td>
<td>0</td>
<td>Female</td>
<td>Female 18-59 nonpregnant</td>
<td>2,408</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>11</td>
<td>0</td>
<td>Female</td>
<td>Girl 10-17</td>
<td>2,326</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>0</td>
<td>7</td>
<td>Male</td>
<td>Boy 6-11 months</td>
<td>708</td>
<td>0.3</td>
</tr>
</tbody>
</table>

3.6
Why is this useful?

• Identifying least-cost items and diet costs helps guide intervention
  • **Cost:** which items and food groups have the most potential to improve affordability of healthy diets?
  • **Incomes:** Which people would need higher incomes or safety nets to afford healthy diets?
  • **Preferences:** How and why unhealthy foods enter to displace the items in least-cost healthy diets