

Food Prices for Nutrition

Developing a Healthy Diet Basket for global monitoring of the cost and affordability of healthy diets



<https://sites.tufts.edu/foodpricesfornutrition/>

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Background and objectives:

The cost and affordability of a healthy diet is crucial to understanding whether people can access healthy diets, such as those recommended in national food-based dietary guidelines (FBDG). The objective of this work was to develop a comparable standard of a healthy diet, for the purpose of calculating and comparing the cost and affordability of healthy diets across countries.

How the Healthy Diet Basket was developed:

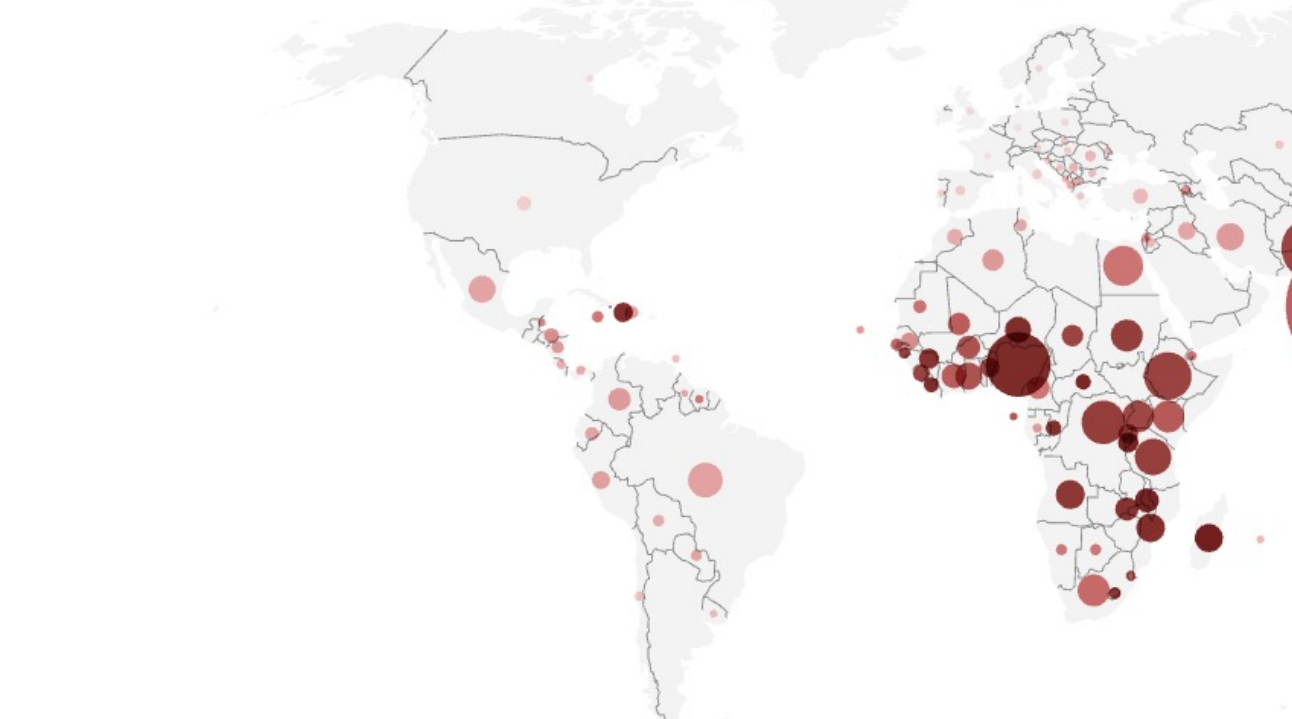
- Recent and quantifiable national FBDG were identified in all regions of the world.
- These were quantified in terms the range and average amount in dietary energy (kcal) of each food group recommended per day per person, proportionally standardized to meet a total dietary energy value of 2330 kcal (energy needs of an average 30-year-old woman).
- Average amounts of each food group across guidelines were determined and used to construct a Healthy Diet Basket (HDB).

How the Healthy Diet Basket is used:

Over 3 billion people - 42% of the global population - could not afford a healthy diet in 2021

Population who cannot afford a healthy diet, 2021
Share of population (%) Millions of people who cannot afford a healthy diet

0% 50% 100% 100 400 1,000



Source: FAO, 2023.

Map source: Food Prices for Nutrition DataHub
<https://www.worldbank.org/foodpricesfornutrition>

Data are available in FAOSTAT and World Bank DataBank and monitored annually in the UN SOFI report (see right), joining other food security indicators.

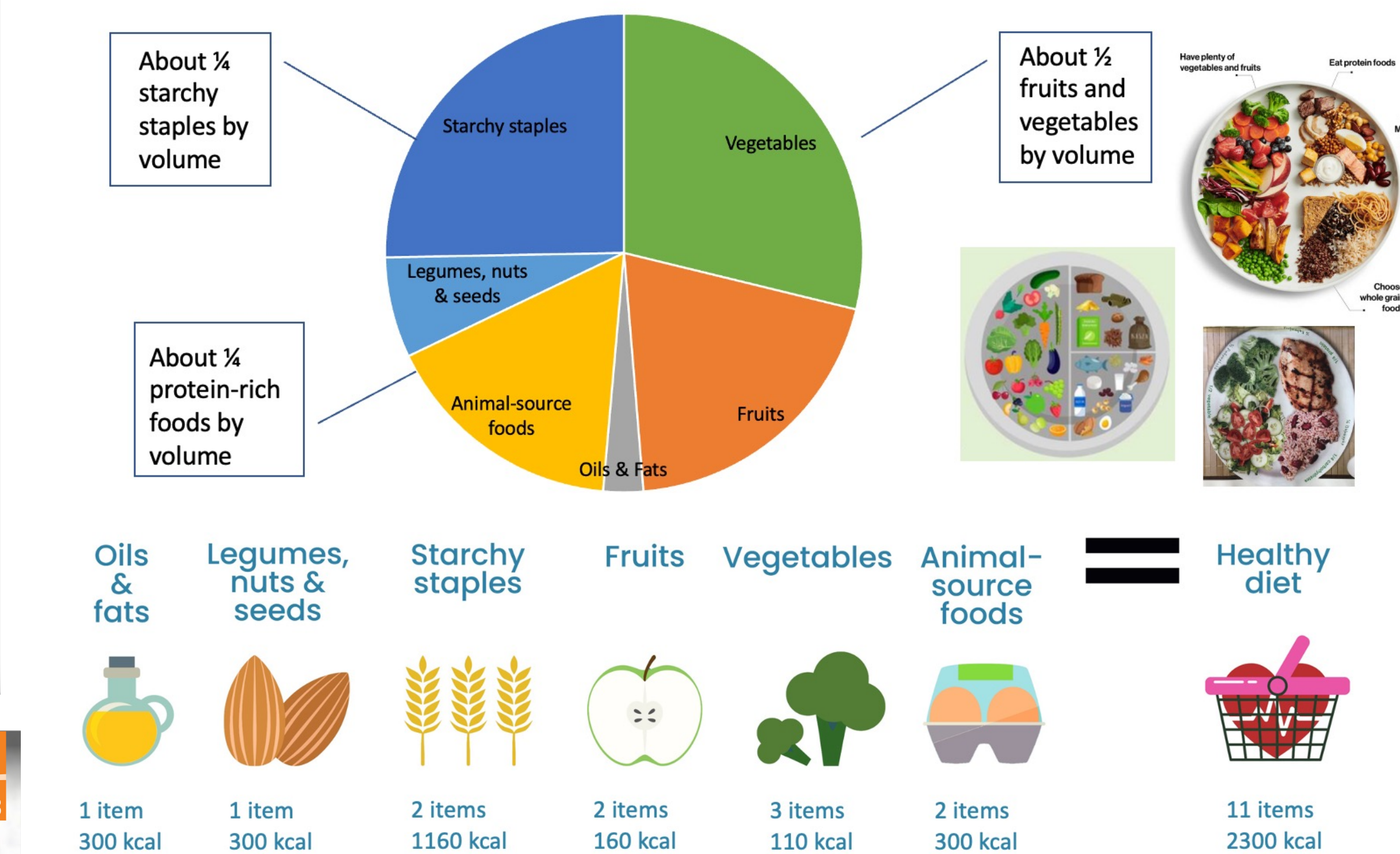


Conclusions:

- The **Healthy Diet Basket (HDB)** leverages the work done in many countries to define healthy diets and captures the commonalities across FBDG in terms of food groups and proportions.
- The HDB is consistent with national FBDG in micronutrient content, macronutrient balance, and cost.
 - It is also consistent with EAT-Lancet in environmental impact.
- The HDB provides a comparable standard to calculate the **Cost and Affordability of Healthy Diets** around the world, published annually now in the UN *State of Food Security and Nutrition in the World* reports.
 - These indicators allow the measurement of food security to be more fully aligned with the longstanding definition of *access to “sufficient, safe, nutritious food to meet dietary needs for an active and healthy life”*
 - Indicators for each country at national level are available on FAOSTAT faostat.fao.org/en/#data/CAHD/
 - Also available in the World Bank DataBank worldbank.org/foodpricesfornutrition
 - Ongoing work is underway on applying the indicators at subnational level to track access to healthy diets.
- Even least-cost diets meeting this standard are unaffordable for many people in the world, pointing to the need for accelerated action to make healthy diets accessible for all.

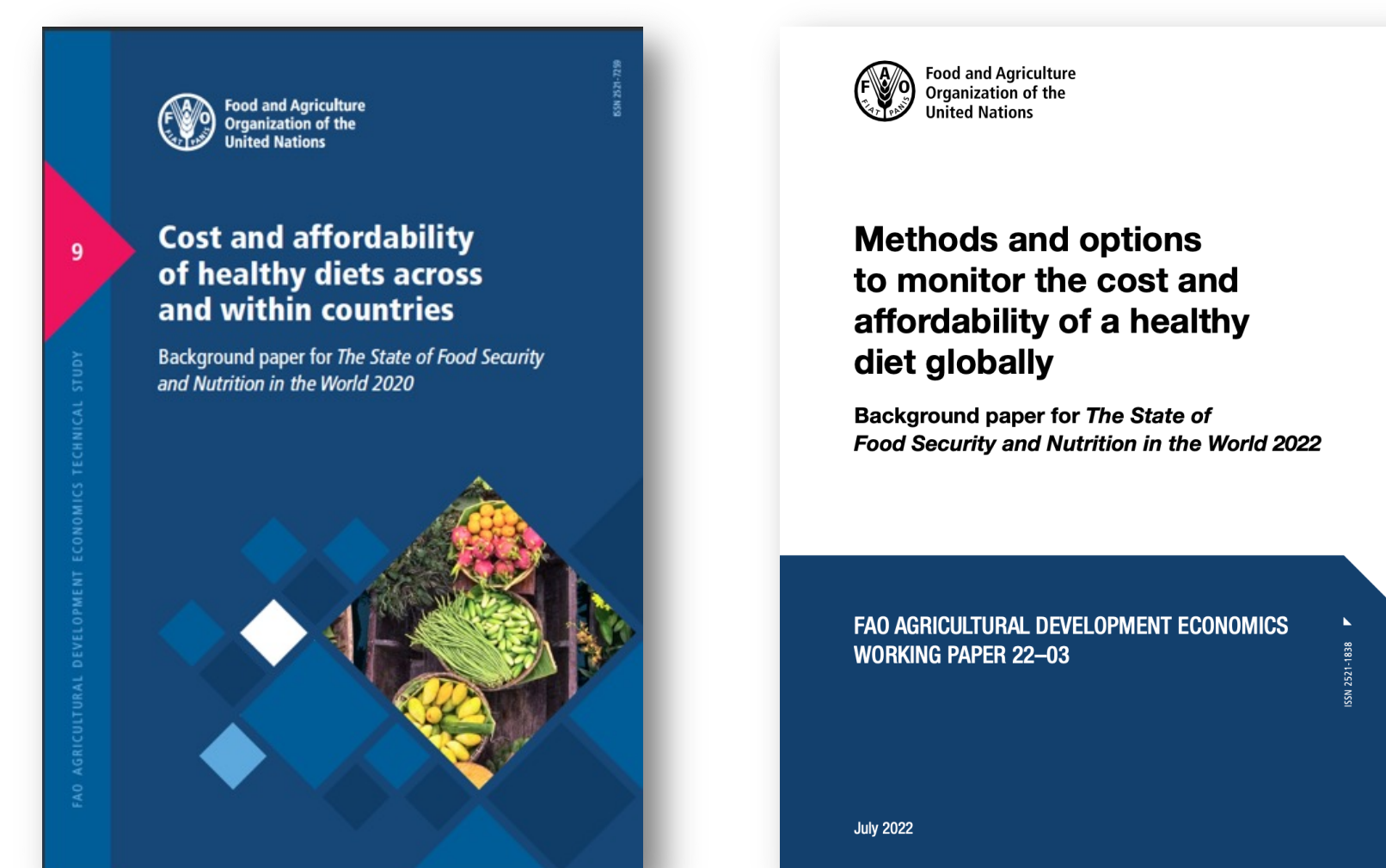
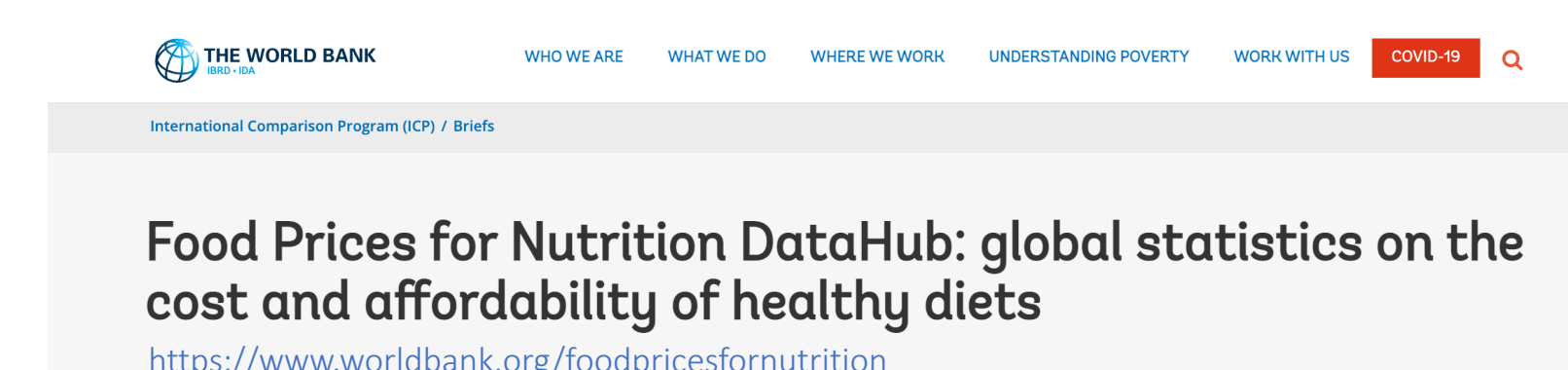


The Healthy Diet Basket reflects the commonalities across guidelines in terms of food group proportions



Healthy Diet Basket

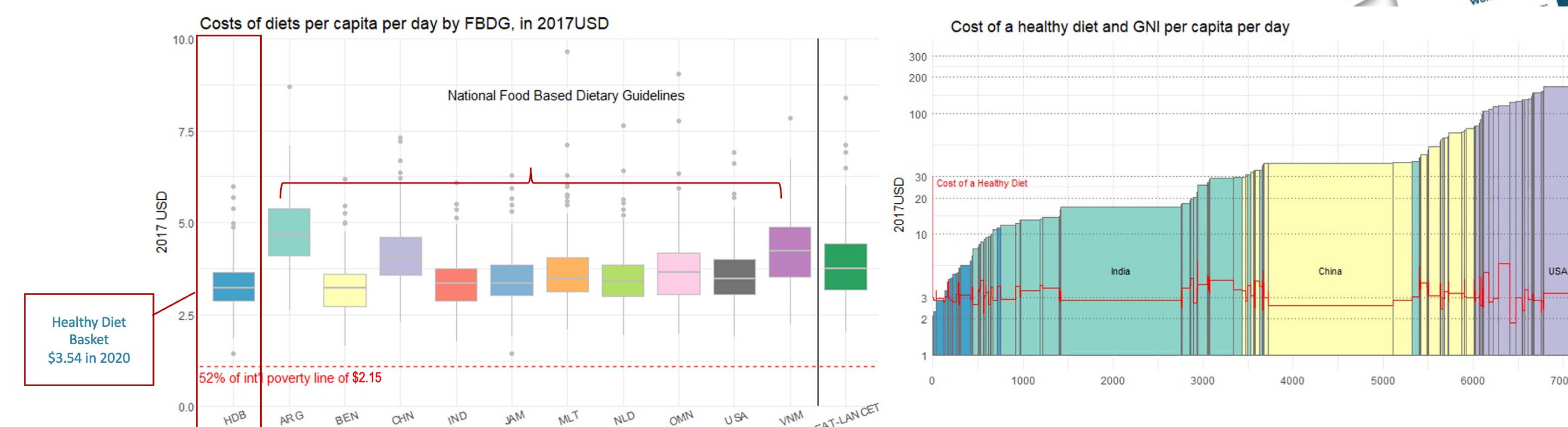
A global standard set of criteria that represents commonalities across most national food based dietary guidelines, created for the purpose of calculating and comparing the cost and affordability of healthy diets across countries.



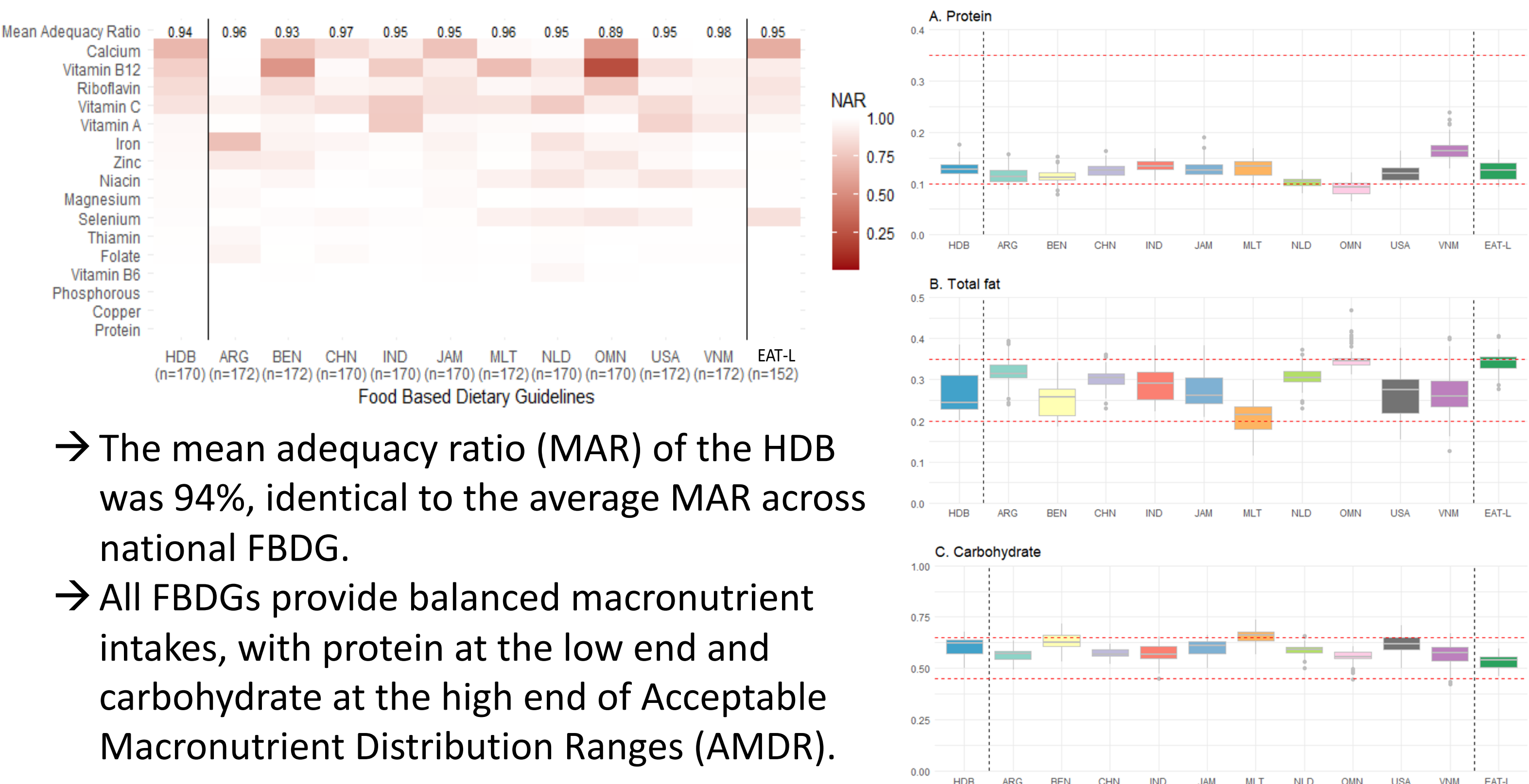
Reference:
Herforth, A., Bai, Y., Venkat, A., Mahrt, K., Ebelt, A., & Masters, W.A. 2020. *Cost and affordability of healthy diets across and within countries*. Background paper for The State of Food Security and Nutrition in the World 2020. FAO Agricultural Development Economics Technical Study No. 9. Rome, FAO.

Reference:
Herforth, A., Venkat, A., Bai, Y., Costlow, L., Holliman, C., & Masters, W.A. 2022. *Methods and options to monitor the cost and affordability of a healthy diet globally*. Background paper for The State of Food Security and Nutrition in the World 2022. FAO Agricultural Development Economics Working Paper 22-03. Rome, FAO.

The cost of the HDB and each of the originally quantified FBDG was found by analyzing food price data from 177 countries globally from the World Bank International Comparison Program (2017), adjusted for inflation.
→ The cost of the HDB was \$3.54 on average across countries in 2020.

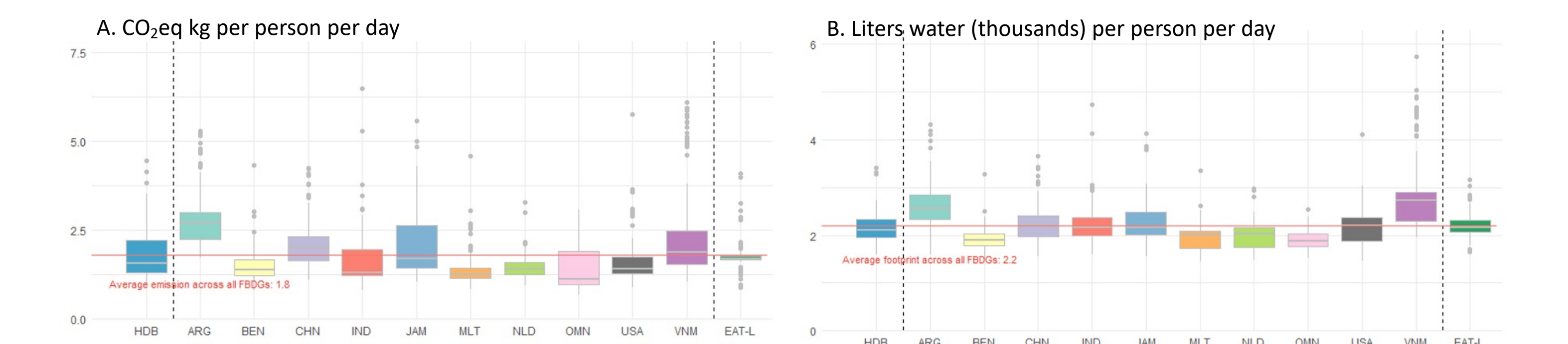


The macro- and micronutrient content was calculated for the resulting least-cost set of items in each country.



- The mean adequacy ratio (MAR) of the HDB was 94%, identical to the average MAR across national FBDG.
- All FBDGs provide balanced macronutrient intakes, with protein at the low end and carbohydrate at the high end of Acceptable Macronutrient Distribution Ranges (AMDR).

Carbon and water footprints of least-cost diets were calculated to assess sustainability of healthy diets. → The carbon and water footprints of least-cost diets meeting the HDB were very similar to those of the EAT-Lancet reference diet.



Public-facing instructions and software tools from Tufts, and a World Bank Open Learning Course, are available to help people calculate the Cost of a Healthy Diet in their own country, geographic program area, or research.



<https://sites.tufts.edu/foodpricesfornutrition/tools/>

