

# Cost and Affordability of a Healthy Diet: monitoring food access in Malawi

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Zomba, Malawi



National Statistical Office



Gerald J. and Dorothy R.  
Friedman School of  
Nutrition Science and Policy

Food Prices for  
Nutrition 

The logo for Food Prices for Nutrition, featuring a stylized group of people in various colors.

# Vision: food price measurement to match food security aspiration

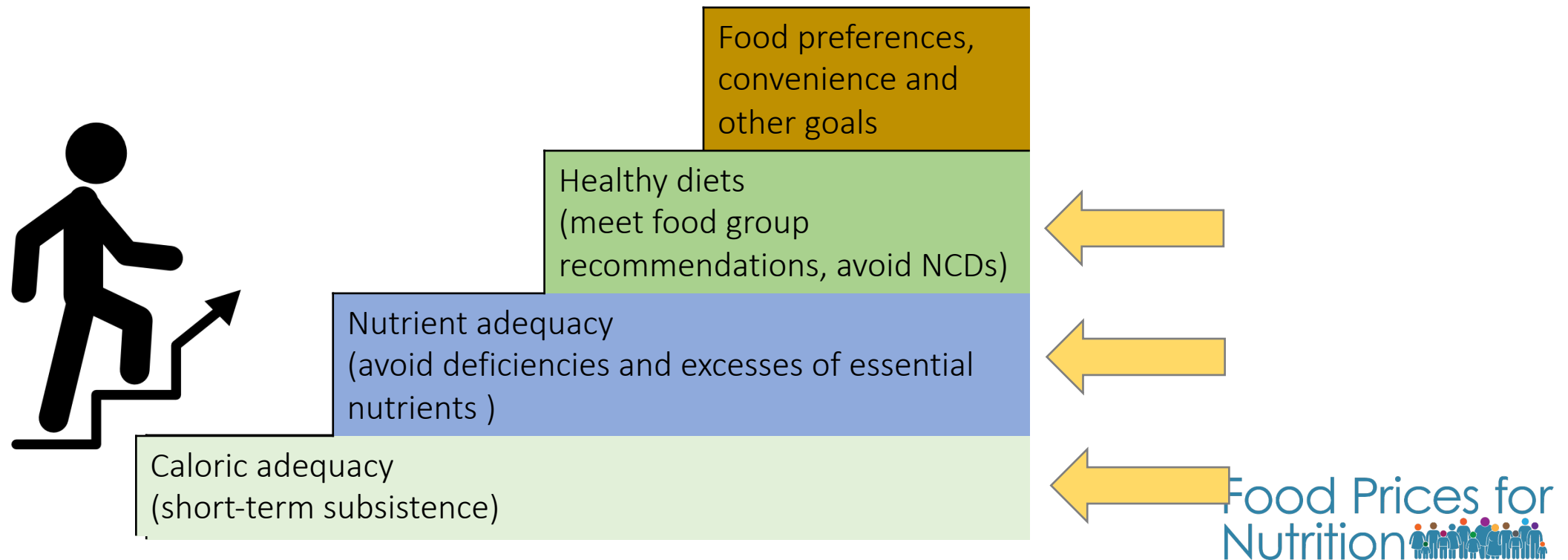
*Food security is when all people, at all times, have physical and economic access to sufficient, safe, nutritious food to meet dietary needs and food preferences for an active and healthy life.*



*- World Food Summit, 1996*

# Why do we track the cost of healthy diets?

- Policies and programs pursue what is measured
- Research finds higher costs for each “step up”
- If the next step is unaffordable, food prices are an **insurmountable barrier**



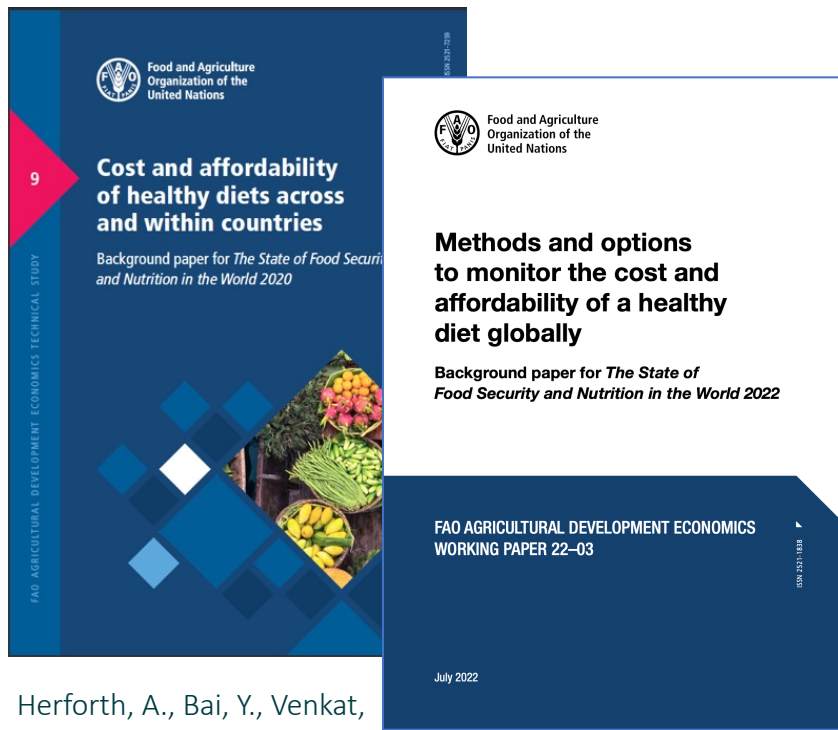
# Cost and Affordability of a Healthy Diet: indicators to understand food access

- Measuring **physical and economic access** to healthy diets
- Use **retail food prices** to identify the **least expensive** combinations of locally available foods
  - No standard “food basket”
  - Least-cost items and cost depend on time and place
- Least-cost diets and their affordability help to explain why healthy diets are not consumed



# CoAHD is monitored globally to understand food access

- Used in the UN State of Food Security and Nutrition in the World (2020, 2021, 2022), joining other food security metrics



Herforth, A., Bai, Y., Venkat, A., Mahrt, K., Ebel, A. & Masters, W.A. 2020.  
<https://doi.org/10.4060/cb2431en>

Herforth, A., Venkat, A., Bai, Y., Costlow, L., Holleman, C. & Masters, W.A. 2022.  
<https://doi.org/10.4060/cc1169en>



<https://www.fao.org/faostat/en/#data/CAHD/>

Food Prices for Nutrition 





# Aims

## Cost

If you go to an average market in Malawi, how much does it cost to purchase a diet that satisfies dietary guidelines?

## Affordability

How many people could not afford this cost?

# Defining healthy diets to measure CoHD

- Based on food-based dietary guidelines (FBDGs)
- FBDGs represent a realistic way for people to select nutrient-adequate diets, using food groups

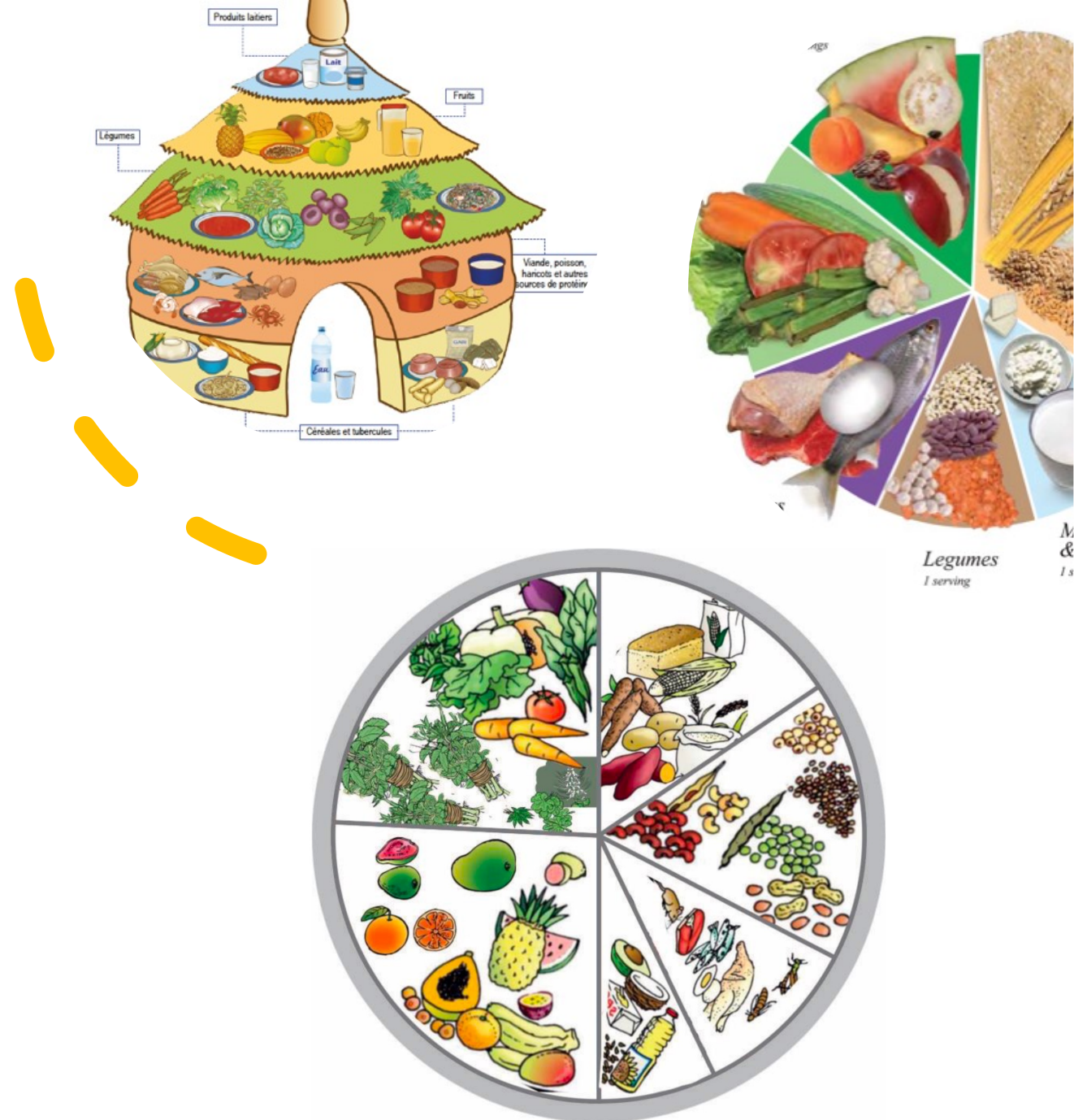


Figure 10: Revised Malawi six food groups guide



# Quantified food-based dietary guidelines tell us how much food we need



**Table 1. The recommended intake of different food groups in grams per day+\* for the general population and various age-range subpopulations from individual and population diet modelling**

Food group	General population above 2 years (g)	2–5 years (g)	6–18 years and 65+ years (g)	19–64 years (non-fasting) (g)	19–64 years (intermittent fasting) (g)	19–64 years (continuous fasting) (g)
Grains, white roots and tubers	570 (400–650)	490 (450–500)	600 (500–800)	650 (500–800)	600 (500–800)	600 (500–800)
Pulses	90 (80–115)	90 (80–115)	115 (80–115)	90 (90–120)	100 (90–150)	200 (100–250)
Nuts and seeds	15 (10–20)	15 (5–20)	10 (5–20)	15 (10–20)	15 (10–25)	50 (20–60)
Milk and dairy foods	250 (200–400)	200 (150–250)	200 (150–250)	250 (150–300)	250 (0–400)	0
Meat and eggs	30 (20–50)	30 (30–50)	50 (30–50)	45 (40–90)	40 (0–90)	0
Fruits	150 (110–160)	100 (100–150)	150 (100–200)	150 (100–200)	150 (100–200)	200 (150–250)
Vegetables	130 (100–140)	75 (70–100)	95 (70–100)	120 (100–170)	130 (100–150)	135 (100–150)
Fats and oils	15 (10–17)	15 (10–17)	15 (10–17)	15 (10–17)	15 (10–17)	15 (10–17)
Added sugar and SSBs	15 (0–31)	15 (0–31)	15 (0–31)	15 (0–31)	15 (0–31)	15 (0–31)
Salt	<5 (0–3)	<5 (0–3)	<5 (0–3)	<5 (0–3)	<5 (0–3)	<5 (0–3)
Alcohol	50 (0–150)	0	0	50 (0–150)	50 (0–150)	50 (0–150)
Physical activity+	>3 (3–5)	>3 (3–5)	>3 (3–5)	>3 (3–5)	>3 (3–5)	>3 (3–5)
Potable water*	>8 (8–10)	>8 (8–10)	>8 (8–10)	>8 (8–10)	>8 (8–10)	>8 (8–10)

Notes:

+days/week: at least 30 minutes per activity day

\*glass/day: average estimated based on the current intake, optimized individual diets and population diet

Pregnant or breastfeeding women should take at least one additional meal from the food group that is not part of their main meal for the day

The recommended amounts given for the general population are an average amount that can be used for public messages and tips

Source: Federal Government of Ethiopia, Ministry of Health, Ethiopian Public Health Institute (2022). Ethiopia: Food-Based Dietary Guidelines–2022. Addis Ababa, Ethiopia.



Figure 10: Revised Malawi six food groups guide

**Tips for portion control using the hand jive method**

- Use your own hand to estimate the portion sizes of each food group.
- Vegetables should make the biggest part of any meal. Use both hands cupped to estimate a big enough portion per meal. Refer to Figure 17.
- Fruits like oranges and apples can be size of your closed fist (Figure 18).
- Use the palm of your hand to estimate the amount of meat, nuts and legumes to be taken at each meal. Refer to figure 19.
- As shown in figure 20, staple foods should be the size of your closed fist.
- Use healthy fats and oils the size of your thumb (Figure 21).



Figure 17: Vegetable portion size per meal

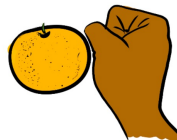
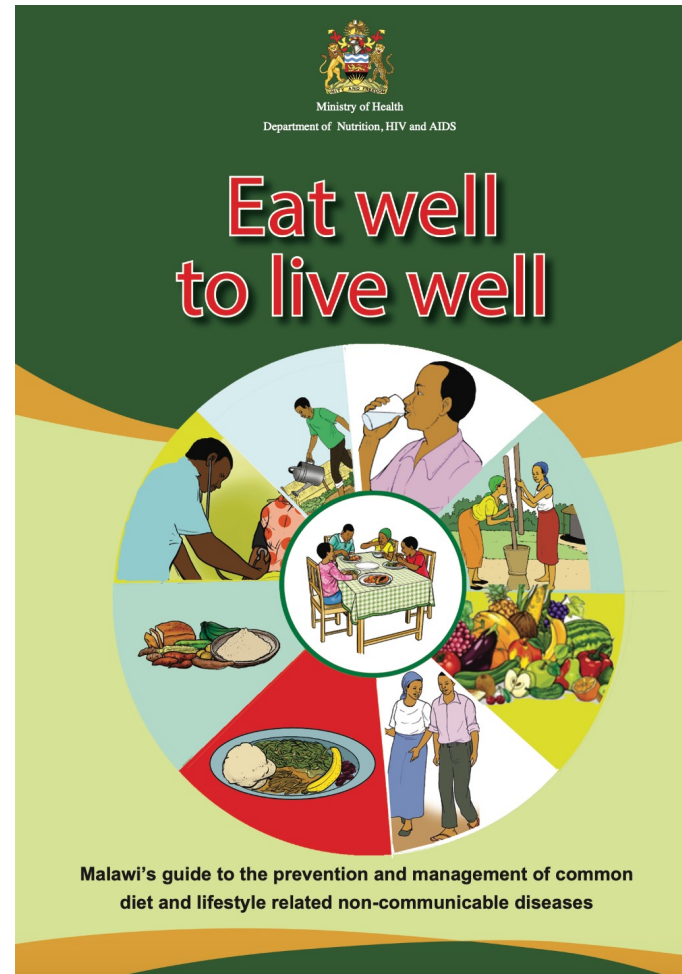


Figure 18: Fruit portion size per meal



Figure 19: Portion sizes for animal source food, nuts and legumes per meal



**Malawi's guide to the prevention and management of common diet and lifestyle related non-communicable diseases**

- **Eat a minimum of 2 portions of a variety of fresh fruit and 3 portions of fresh vegetables per day**
- Aim towards filling up at least half of your plate with fruits and vegetables at each meal.
- Buy fresh vegetables and fruits in season which are likely to be cheaper.
- Have a home garden of fruits and vegetables to ensure supply throughout the year.

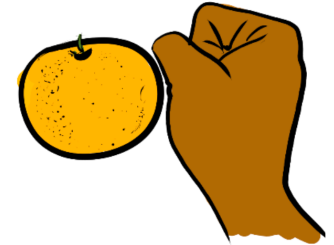


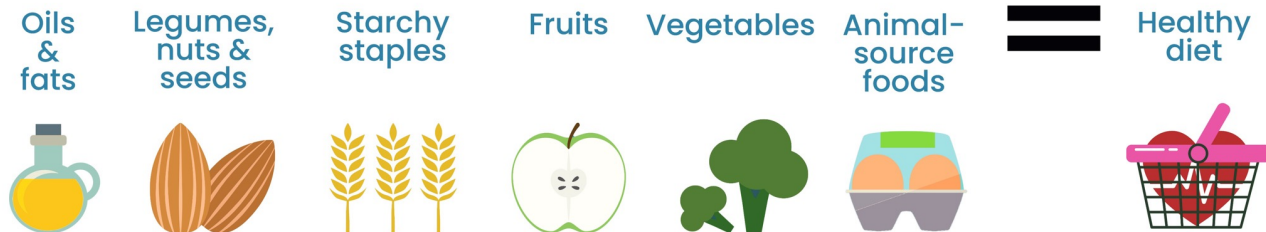
Figure 12: Portion sizes for fruits



Figure 20: Staple food portion size per meal

# Healthy Diet Basket

Food group	# of foods recommended	Calories (kcal/day)
Starchy staples	2	1160
Vegetables	3	110
Fruits	2	160
Animal source foods	2	300
Legumes nuts and seeds	1	300
Oils and fats	1	300
<b>Total</b>	<b>11</b>	<b>2330</b>



- Global standard / criteria
- Represents commonalities across most national food-based dietary guidelines
- Created for comparing the **cost of healthy diets across countries**
- Used when a country has no quantifiable FBDG

# Least-cost healthy diet

- The cost of the **least expensive** combination of locally-available foods that meet FBDG recommendations
- Within the least-cost healthy diet
  - Food group proportions stay constant (share of kcal)
  - Within food groups, food items are substitutable
  - Least-cost items may vary at each time and place
- Match retail prices for each food to:
  - Food composition
  - Requirements for health (FBDGs)

# Steps to calculate the Cost of a Healthy Diet

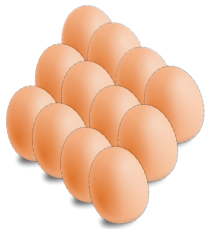
1. Calculate the price per kg for each food
2. Match each food to its food composition (calories, edible portion)
3. Calculate the price per calorie for each food
4. Categorize each food in the appropriate food group
5. Calculate the cost per day for each food
6. Drop duplicate items of the same food
7. Select the least-expensive food item(s) per food group
8. Sum the cost per day for all foods



# Cost of a Healthy Diet: Algebraic example

Food item	Unit sold	Item weight (kg)	Price per unit	Currency
Eggs, local chicken	1 dozen	0.6	2,400	Malawian Kwacha (MWK)

1 dozen  
eggs in  
shell



1 egg  $\approx$  50 grams or 0.05 kg  
 $0.05 \text{ kg} / 1 \text{ egg} \times 12 \text{ eggs} = 0.6 \text{ kg} / \text{dozen eggs}$

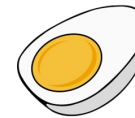
$$\frac{2400 \text{ MWK} / \text{dozen eggs}}{0.6 \text{ kg} / \text{dozen eggs}}$$

$$= 4000 \text{ MWK} / \text{kg of egg}$$

$$4000 \text{ MWK} / \text{kg of egg}$$

$$0.88 \text{ kg edible egg} / 1 \text{ kg of egg in shell}$$

$$= 4545 \text{ MWK} / \text{kg of edible egg}$$



$$4545 \text{ MWK} / \text{kg edible egg}$$

$$= 3.2 \text{ MWK} / \text{kcal of egg}$$

$$1430 \text{ kcal} / \text{kg} / 1 \text{ kg edible egg}$$

$$3.2 \text{ MWK} / \text{kcal of egg} \times 150 \text{ kcal} / \text{day} = 477 \text{ MWK} / \text{day}$$

1

Calculate price  
per kilogram

2

Calculate price  
per kilogram of  
edible food

3

Calculate price  
per calorie

4

Calculate cost per  
day to meet food  
group  
recommendation

Food  
Composition  
Data

Dietary  
Guidelines

# Food price data

- **Global analysis:** World Bank's International Comparison Program (ICP) dataset from 2017
  - Only global dataset of retail prices
  - Food list is designed for comparability across countries
  - One national average price
- **National monitoring:** use **retail** food prices from
  - Consumer Price Index data
  - Market information system data



# Least-cost diet from the 2017 ICP price data

Food group	Least-cost item (2017 ICP)	Cost per day (2017 MWK)	Cost per day (2017 PPP)
Animal source foods	Dried sardines	130	0.536
	Milk, fresh, unskimmed	133	0.548
Fruits	Large mango	42	0.174
	Fresh bananas	54	0.222
Legumes nuts and seeds	Groundnuts	31	0.130
Oils and fats	Soybean oil	42	0.176
	Maize flour, yellow	17	0.071
Starchy staples	Broken rice, 25%	62	0.257
	Fresh cabbage, green	30	0.125
Vegetables	Fresh eggplants (aubergines)	54	0.222
	Fresh carrots	64	0.264
		<b>659</b>	<b>2.72</b>

Cost to purchase 300 calories of animal-source foods from two different items (150 kcal each)

# Cost of a Healthy Diet

Using 2017 ICP data for Malawi

42 MWK  
\$0.18  
Soybean oil



1 item

300 kcal

31 MWK  
\$0.13  
Groundnuts



1 item

300 kcal

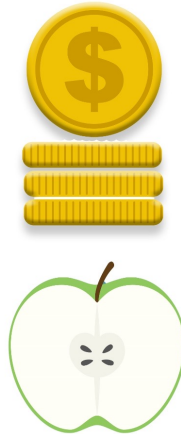
79 MWK  
\$0.33  
Maize flour, yellow  
Broken rice, 25%



2 items

1160 kcal

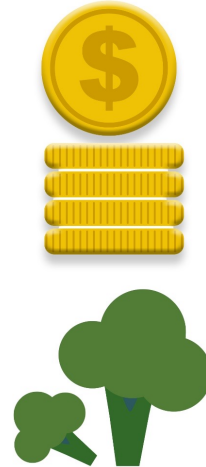
96 MWK  
\$0.40  
Mango  
Bananas



2 items

160 kcal

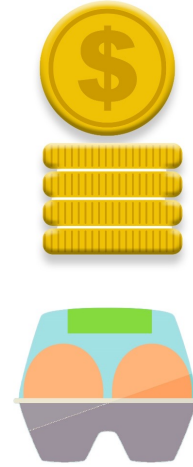
148 MWK  
\$0.61  
Cabbage  
Carrots  
Eggplants



3 items

110 kcal

262 MWK  
\$1.08  
Dried sardines  
Milk, fresh



2 item

300 kcal

659 MWK  
\$2.72

=



11 items

2330 kcal

# National and global CoAHD may differ

## Dietary standard

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

## Price data

Overall, national data are likely to result in lower costs  
*In Malawi: NSO data*

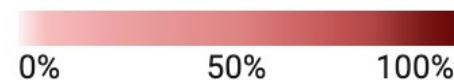
## Affordability standards

The % of income spent on food; in many countries the actual % of income spend on food is different than 52%  
*In Malawi, about 62%*

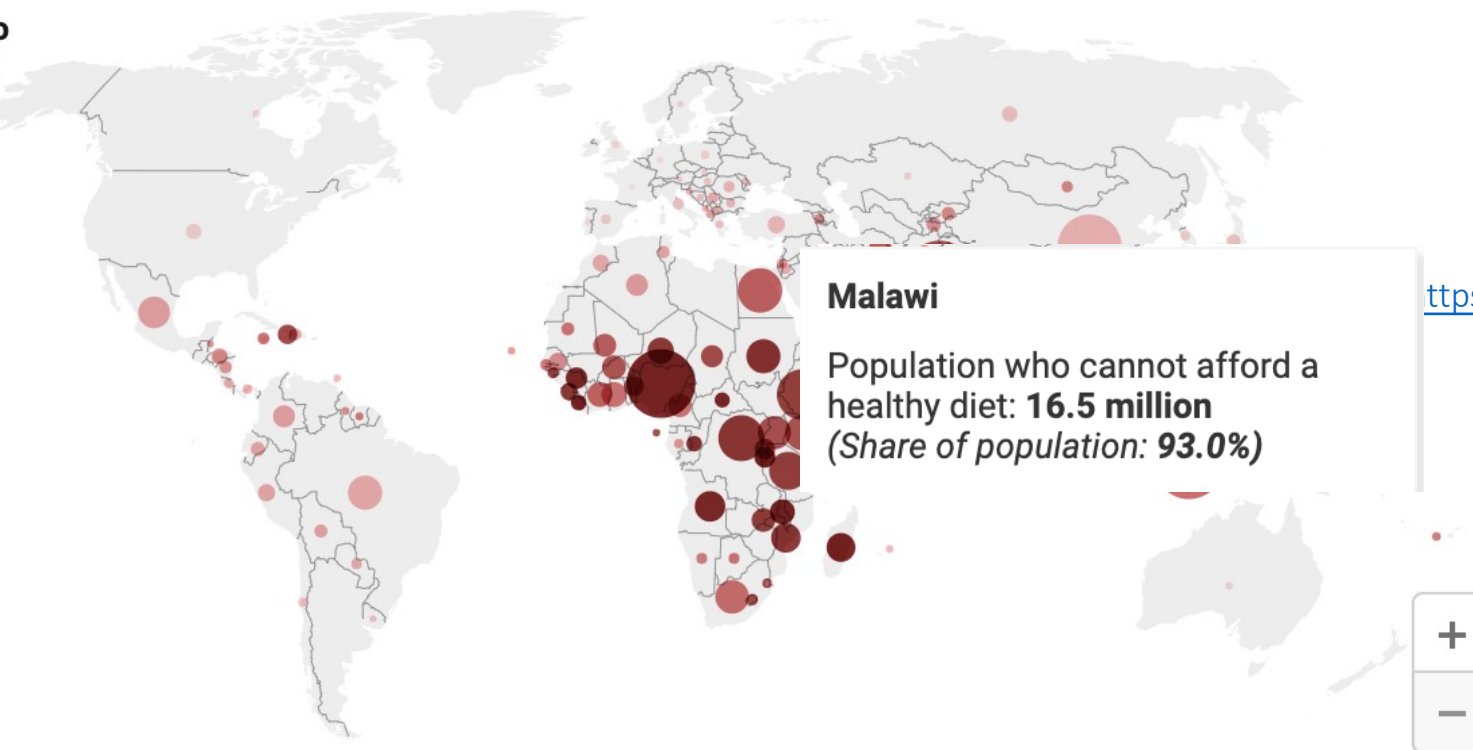
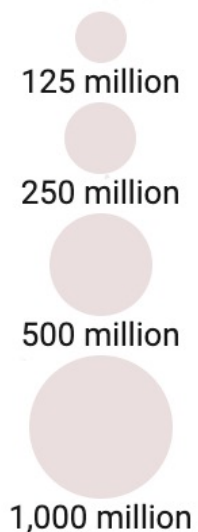
# Around **3 billion** people could not afford a healthy diet in 2020

Hover over interactive chart to see country data

Share of population who cannot afford a healthy diet



Population who cannot afford a healthy diet



**Malawi**  
Population who cannot afford a healthy diet: **16.5 million**  
(Share of population: **93.0%**)



<https://www.fao.org/faostat/en/#data/CAHD/>



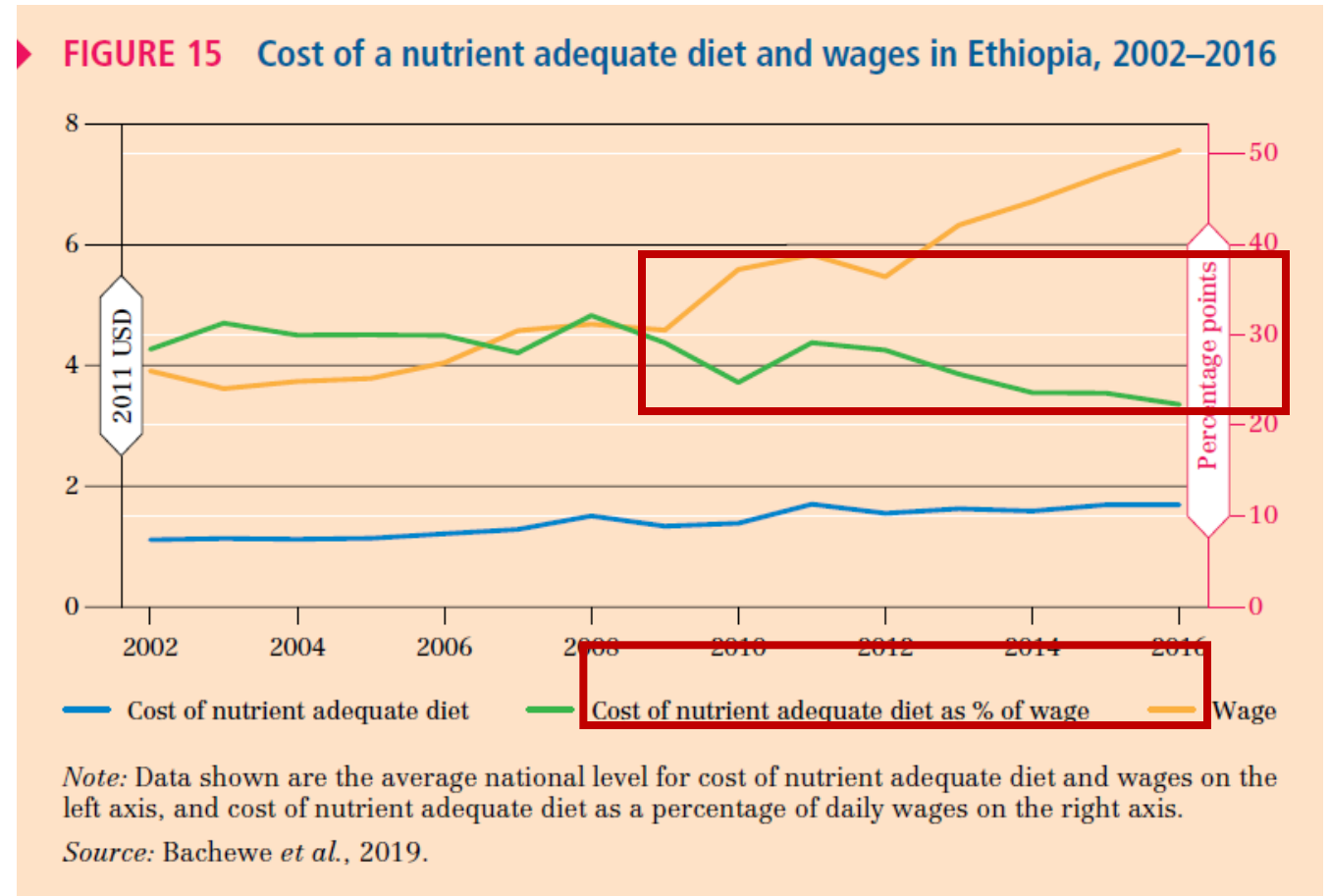
# How many people cannot afford a healthy diet?

- Affordability analyses compare Cost of a Healthy Diet to an income standard
- Global analyses:
  - compare CoHD to 52% of income using national accounts data compiled by World Bank ICP
- Other options: household expenditure, wages, Cost of a Healthy Diet as a food poverty line



# Can incorporate other data, including wages

- Daily wages for unskilled laborers
- Cost as a percentage of wages decreased from 32% (2008) to 22% (2016)
- Affordability improved due to wage increases rather than less expensive food



Source: Bachewe *et al.*, 2019; Herforth *et al.*, 2020

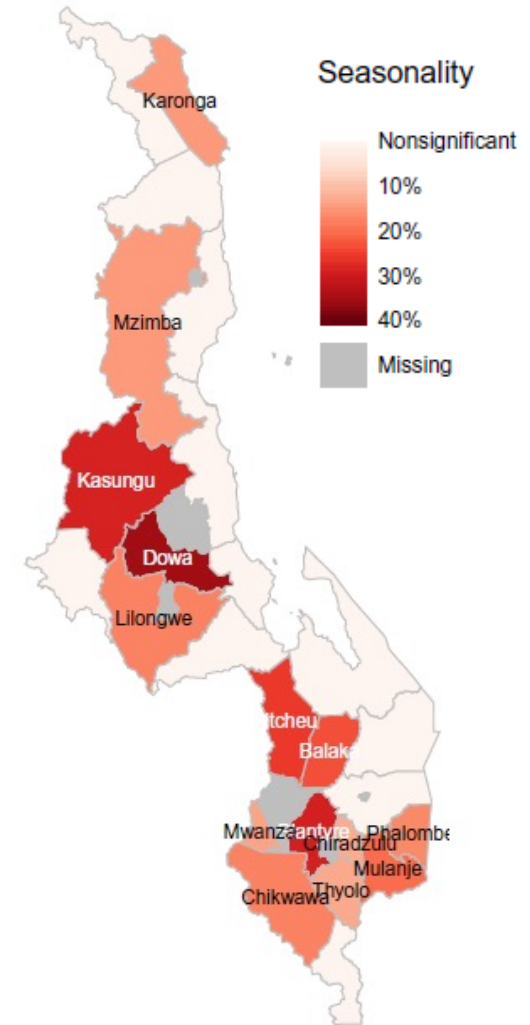


# Monitoring

# Why do we need to monitor regularly?

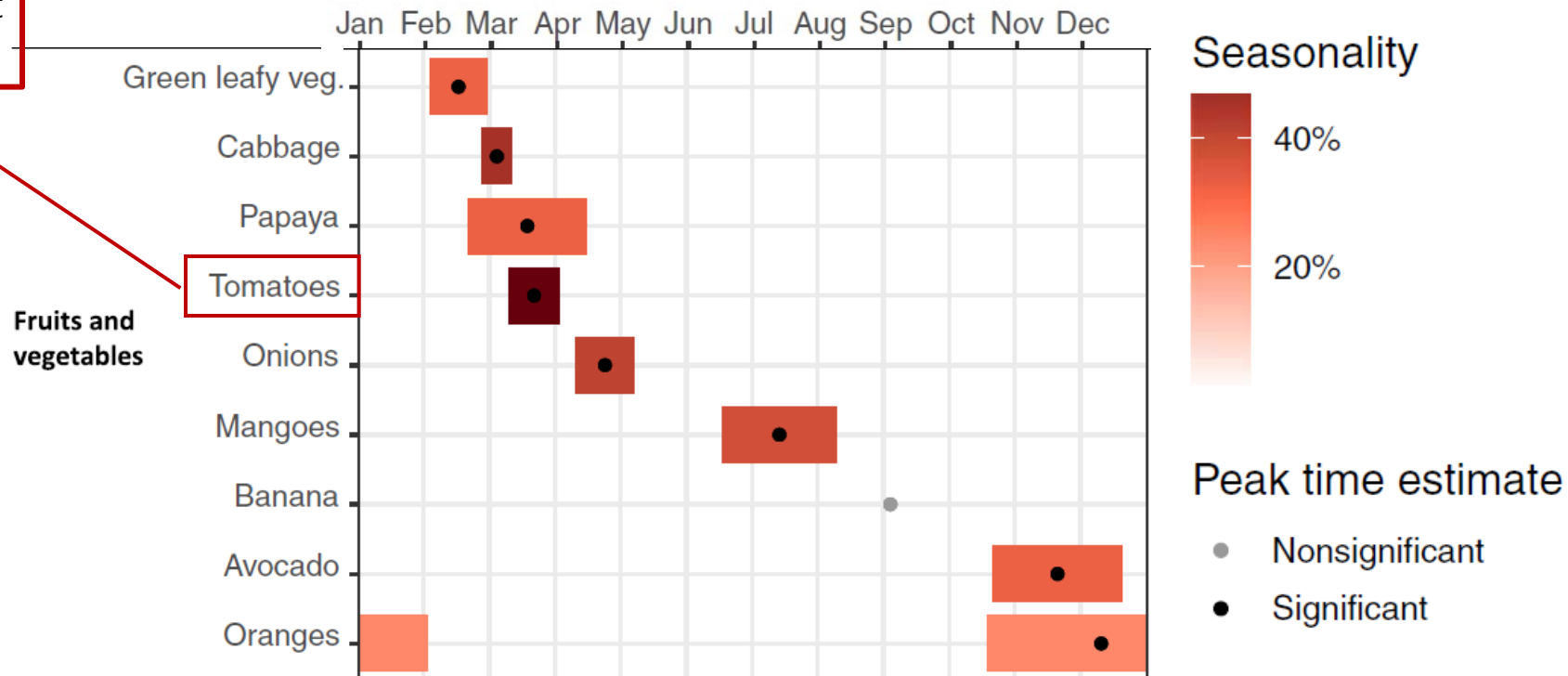
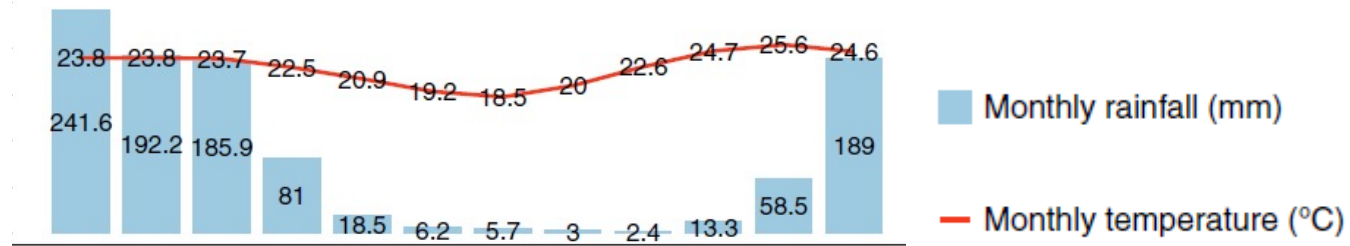
## *Seasonality of price variation in Malawi*

- Seasonal intensity shows the % that the peak price increased over the lowest price
- Seasonality was much stronger in Malawi (10%) as compared to Tanzania (6%) and Ethiopia (4%)
  - 35% in Dowa; 5 districts had >20% on average



# Fruit and vegetable prices highly seasonal

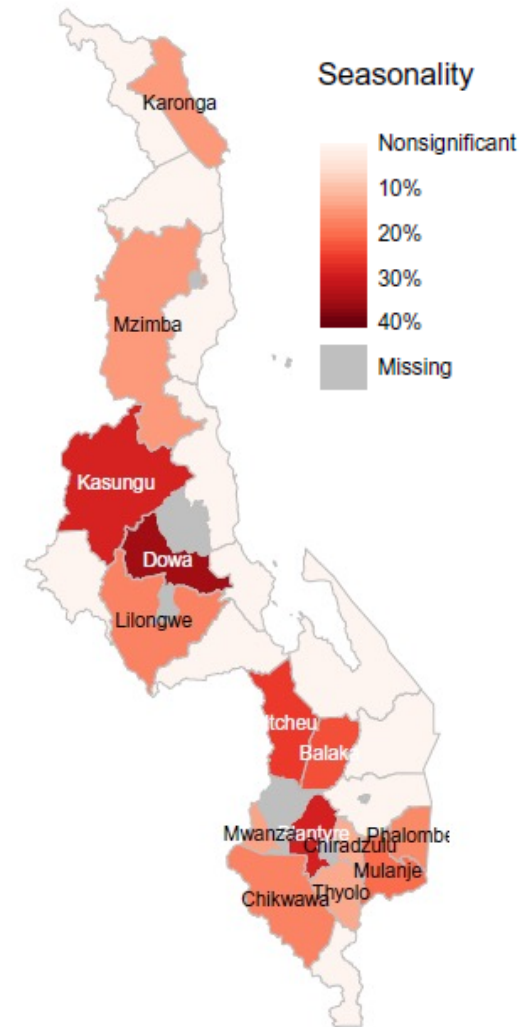
60% seasonal intensity; peak price increased 60% over the lowest price



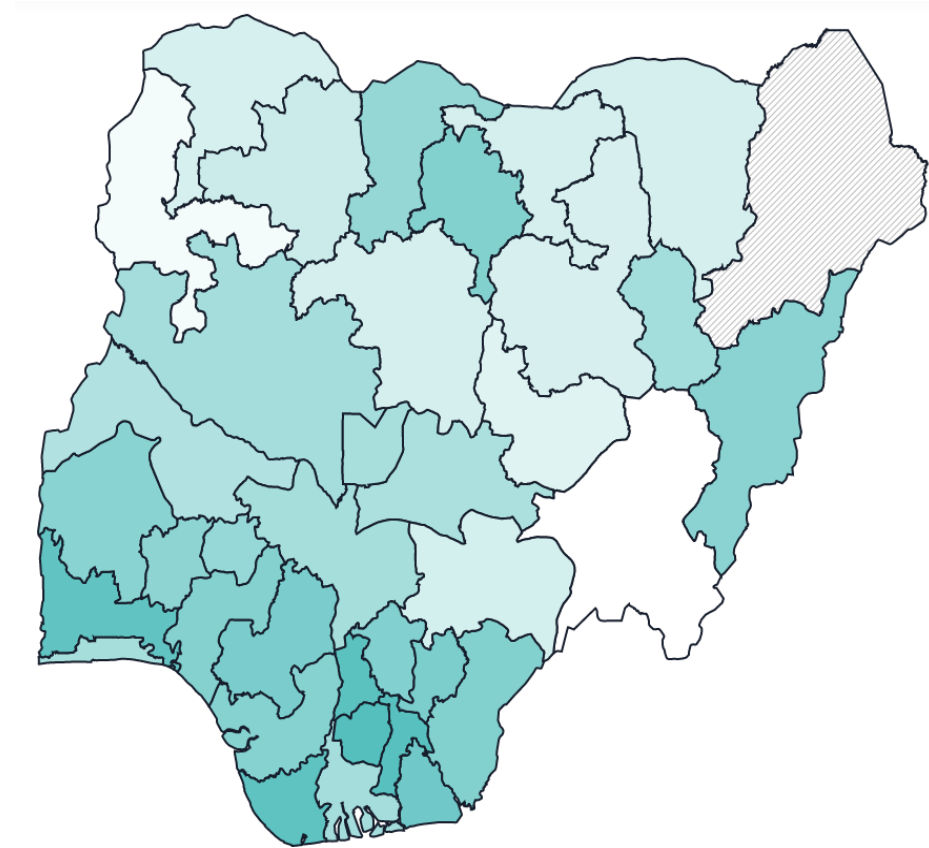
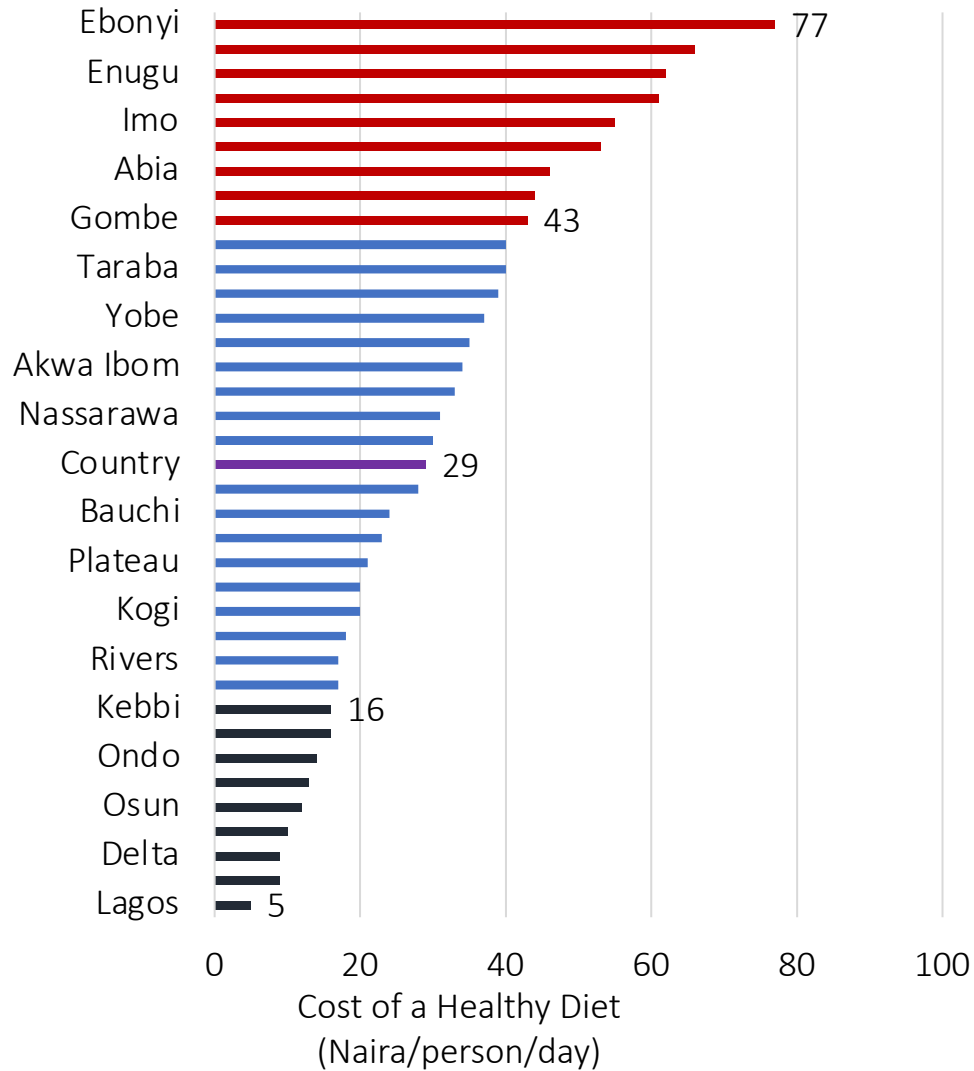
# Why do we need to monitor regularly?

## *Seasonality of price variation in Malawi*

- Relatively low intensity of seasonality for starchy staples, high for fruits and vegetables
- Reducing & stabilizing cost of a healthy diet is important for consumers and farmers who use markets to complement what they grow



# Example sub-national results from Nigeria



Source: Mekonnen et al., 2021 (left), Food Systems Dashboard (right).



PAKISTAN

BANGLADESH

BURKINA  
FASO

INDIA

GHANA

ETHIOPIA

NIGERIA

TANZANIA

MALAWI

# Country Collaborations

# Different models in each country

- Ethiopia:
  - Collaboration: Ethiopian Statistical Service and Ethiopian Public Health Institute
  - Output: Quarterly bulletin
- Ghana
  - Collaboration: Ministry of Food and Agriculture (prices) and Ghana Statistics Service (affordability)
  - Output: Quarterly bulletin
- Pakistan
  - Collaboration: Pakistan Bureau of Statistics and Food and Agriculture Organization (FAO)
  - Output: State of Food and Nutrition Insecurity in Pakistan (POFI)
- Nigeria
  - Nigerian Bureau of Statistics leading
  - Output: Subnational Food Systems Dashboard, Governor's Scorecard

# Reporting and dissemination options

## Reporting Scope:

### Frequency

- Monthly
- Quarterly

### Geographic level

- Market
- District
- Region

## Reporting Formats:

### Newsletter or Bulletin

**Cost and Affordability of a Healthy Diet**  
2022 Q4: October-December

**Highlights**

- The Cost of a Healthy Diet (CoHD) is the least expensive combination of locally available items that meets Ethiopia's food-based dietary guidelines, used for affordability analyses as a measure of physical and economic access to healthy diets by comparing CoHD to wages or income available to buy food.
- In Ethiopia over this period the nominal Cost of a Healthy Diet increased by X%, with the largest increases seen in the \_\_\_\_\_ region and smallest increases seen in \_\_\_\_\_ region.
- Affordability in terms of wages \_\_\_\_\_ while affordability of the CoHD relative to food expenditure \_\_\_\_\_.
- Physical availability of diverse items is present in almost all locations, but nearly 5 percent of woredas-months (14 out of 296) did not have 12 healthy foods available to select a complete least-cost healthy diet.

**Cost of a Healthy Diet**

The national average Cost of a Healthy Diet was X\$ per (ETB) in the final quarter of 2022. The CoHD increased at a faster rate than all goods and services (general CPI), and more than all other foods for which retail prices are collected between September and December 2022.

**Figure 1. National averages over time**

**Regional trends**

Between September and December 2022, the average regional CoHD was lowest in SNNPR at \$2 ETB per day in September, compared with \$1 ETB in Somalia in September and October (Figure 2).

Region	Cost of a Healthy Diet (2022 Ethiopian Birr)		
	Sep	Oct	Nov
Afar	77	86	85
Amhara	66	68	66
Oromia	66	67	67
Somali	91	91	82
Benishangul-Gumuz	71	72	72
SNNPR	62	63	68
Gambella	79	80	79
Hara	73	74	82
Adis Abeba	74	74	73
Dira Dawa	73	75	78

**December 2022**

The retail food price data used in this analysis is collected by the Ethiopian Statistics Service on a monthly basis from 110 markets/woredas in all regions of Ethiopia (ESS, 2023). The number of markets surveyed in each region is approximately proportional to the region's share of total urban population. Data was not collected from the Tigray Regional State due to the conflict ongoing during the period covered in this bulletin.

Example: Ethiopia, Ghana

### Data Dashboard

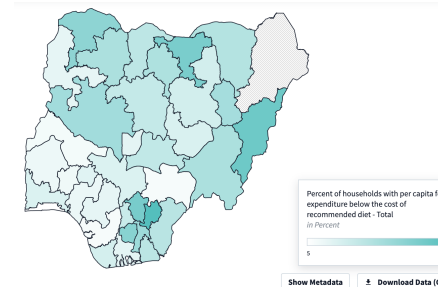
**DNHA DASHBOARD**  
Nutrition Status in Lilongwe

**Information At District (Lilongwe)**

**Information Source:** District

- 2626901 Total population
- 371029 People in Population
- 3309 Number of TAs, Villages
- 615168 Number of Households
- 36% Percentage of children under age 5 who are stunted
- 8% Percentage of children under age 5 who are underweight
- 1% Percentage of children under age 5
- 16% Percentage of women age 15+

Example: DNHA Dashboard



Example: Nigeria

### Mailing Lists









# Demonstration: Calculating the Cost of a Healthy Diet

Log in Sign up Download

### CoHD\_Activity

NAME	UPDATED ↓	SIZE
 Activity_Instructions.pdf	Today by Rachel Gilbert	304.5 KB
 CostofHealthyDiet_Data.xlsx	Yesterday by Rachel Gilbert	5.3 MB
 CostofHealthyDiet_FoodItemInformationDatabase.xlsx	Yesterday by Rachel Gilbert	49.5 KB
 CostofHealthyDiet_ExcelWorkbook.xlsx	Yesterday by Rachel Gilbert	8.4 MB

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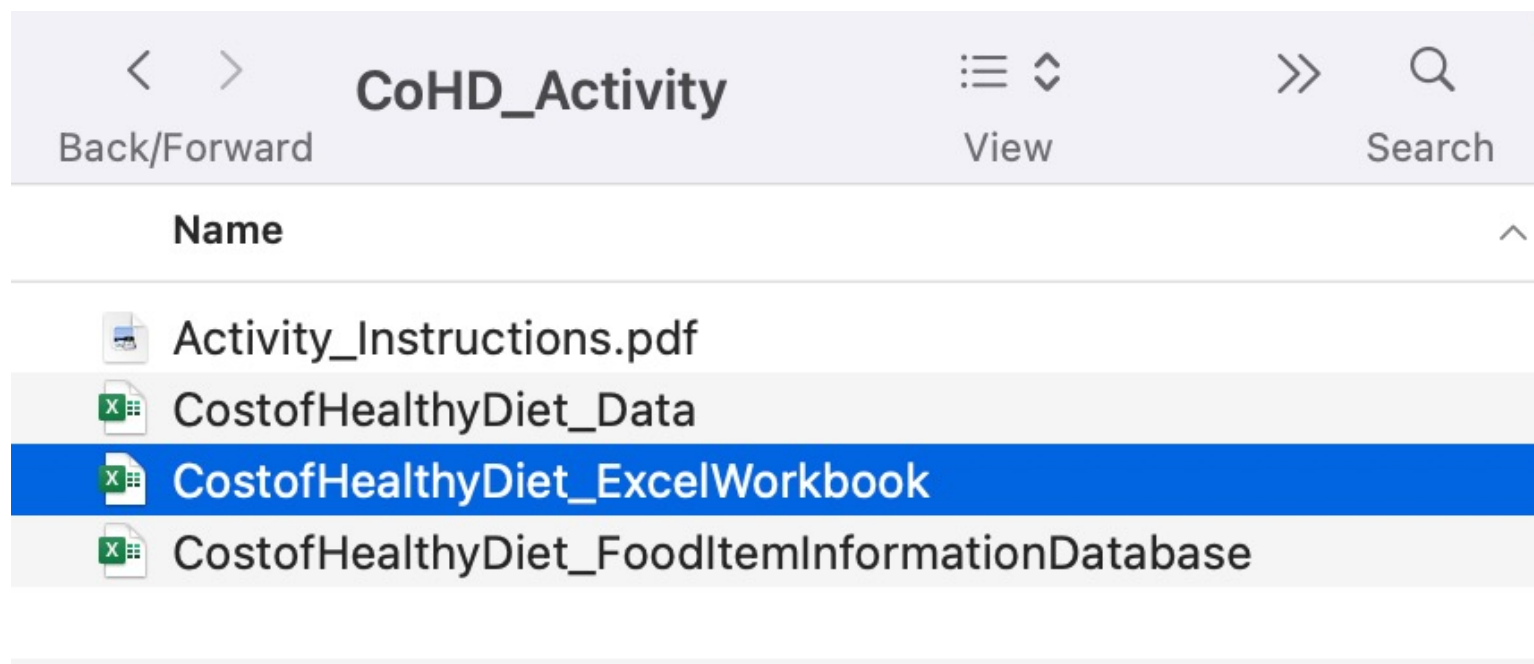
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## Cost of a Healthy Diet Excel Workbook Version 5.0

This workbook provides a template for calculating the *Cost of a Healthy Diet* indicator. It can be used with standard food price datasets from a national statistical agency or market information service, and is based on either global Healthy Diet Basket (HDB) targets or your own national Food-Based Dietary Guidelines (FBDGs). The workbook contains formulas that connect data across sequential sheets and generate *Cost of a Healthy Diet* results for each time and place. Designed for standalone use or integration into your pre-existing data analysis process.

The worksheets follow five steps of diet cost computation:

- (1) Define **Target Quantities** of each food group, by selecting one of the national FBDGs or the global HDB (in the **FBDG Recommendations** sheet)
- (2) Prepare your food price observations in rows and columns using the format provided, and paste into the **Food Price Data** sheet
- (3) Complete your food composition matching (dietary energy and edible portion) for each item in the **Food Item Information** sheet
- (4) Check the final item selections computed by formulas in the **CoHD Calculation** sheet, and
- (5) Check the resulting cost per day computed by pivot tables in the **CoHD Results** sheet.

For more information about how to use this Excel Workbook, please refer to the Instructions document included in your download. This workbook was developed by Rachel Gilbert, Kristina Sokourenko, Aishwarya Venkat, and William A. Masters, and Anna Herforth as part of the Food Prices for Nutrition project at Tufts University. You can provide feedback by emailing Rachel Gilbert at [rachel.gilbert@tufts.edu](mailto:rachel.gilbert@tufts.edu).

**Required citation:** Food Prices for Nutrition. (2023) *Technical Assistance Tools for Calculating the Cost of a Healthy Diet, Version 5.0*. Published May 2023. Tufts University, Boston (USA). Available at: <https://sites.tufts.edu/foodpricesfornutrition/tools/>

Ready Accessibility: Investigate

ABOUT Target Quantities FBDG Recommendations Food Price Data Food Item Information CoHD Calculation CoHD Results +

140%

Font: Calibri (Body) 12, Bold, Italic, Underline, Paragraph, Styles, Number, Conditional Formatting, Format as Table, Cell Styles, Cells, Editing, Analyze Data, Sensitivity, Solver, Create and Share Adobe PDF

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	A	B	C	D	E	F	G	H	I	J	K
1	FBDG Name	Food Group	Number of Foods Needed	Calories Needed (kCal/day)							
2	Healthy Diet Basket	Starchy staples	2	1160							
3	Healthy Diet Basket	Animal source foods	2	300							
4	Healthy Diet Basket	Legumes nuts and seeds	1	300							
5	Healthy Diet Basket	Oils and fats	1	300							
6	Healthy Diet Basket	Fruits	2	160							
7	Healthy Diet Basket	Vegetables	3	110							
8	Healthy Diet Basket	Exclude	0	0							
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	A	B	C	D	E
1	FBDG Name	Food Group	Number of Foods Recommended	Calories Needed (kcal/day)	
5	Healthy Diet Basket	Oils and fats	1	300	
6	Healthy Diet Basket	Fruits	2	160	
7	Healthy Diet Basket	Vegetables	3	110	
8	Healthy Diet Basket	Exclude	0	0	
9	Argentina	Starchy staples	2	730	
10	Argentina	Dairy	1	368	
11	Argentina	Oils and fats	1	320	
12	Argentina	Discretionary foods	1	270	
13	Argentina	Meat fish eggs	2	270	
14	Argentina	Fruits	2	228	
15	Argentina	Vegetables	3	145	
16	Argentina	Exclude	0	0	
17	Bangladesh	Starchy staples	2	1279	
18	Bangladesh	Meat fish eggs	2	212	
19	Bangladesh	Oils and fats	1	196	

FBDG Recommendations sheet has various quantified FBDGs to choose from

Copy and paste into Target Quantities to choose FBDG

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	A	B	C	D	E	F	G	H	I	J
Unique ID (Item Code - Unit Sold)		Date	Market Name	Market Location	Market District or Region	Item Code	Item Name	Unit Sold	Price per Unit	
1										
2		ADD DATA HERE								
3										
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# Add price data

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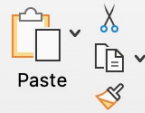
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- Activity\_Instructions.pdf
- CostofHealthyDiet\_Data**
- CostofHealthyDiet\_ExcelWorkbook
- CostofHealthyDiet\_FoodItemInformationDatabase

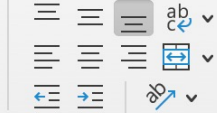




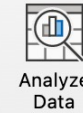
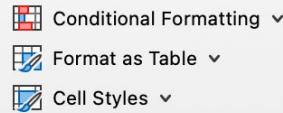
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	A	B	C	D	E	F	G	H	I
1	Date	Market Name	Market Location	Market District or Region	Item Code	Item Name	Unit Sold	Price per Unit	
2	JAN-2018	Market A	Rural	North	1	Beans	Kilograms	1.900	
3	JAN-2018	Market A	Rural	North	2	Rice, long	Kilograms	1.066	
4	JAN-2018	Market A	Rural	North	3	Rice, medium	Kilograms	0.986	
5	JAN-2018	Market A	Rural	North	4	Cornflakes	Packet	3.534	
6	JAN-2018	Market A	Rural	North	5	Maize on the cob, fresh	Kilograms	1.438	
7	JAN-2018	Market A	Rural	North	6	Spaghetti	Packet	1.071	
8	JAN-2018	Market A	Rural	North	7	Semolina	Bag	2.437	
9	JAN-2018	Market A	Rural	North	8	Maize flour (2 kg)	Bag	4.008	
10	JAN-2018	Market A	Rural	North	9	Biscuit, cream	Packet	0.562	
11	JAN-2018	Market A	Rural	North	10	Bread, wheat	Loaf	2.238	
12	JAN-2018	Market A	Rural	North	11	Biscuit	Kilograms	5.383	
13	JAN-2018	Market A	Rural	North	12	Cerelac (400g)	Box	6.449	
14	JAN-2018	Market A	Rural	North	13	Pork	Kilograms	5.244	
15	JAN-2018	Market A	Rural	North	14	Ground pork	Kilograms	5.506	
16	JAN-2018	Market A	Rural	North	15	Beef, steak, sirloin	Kilograms	7.630	
17	JAN-2018	Market A	Rural	North	16	Chicken, wings	Kilograms	10.481	
18	JAN-2018	Market A	Rural	North	17	Mutton	Kilograms	3.411	
19	JAN-2018	Market A	Rural	North	18	Goat meat, with bone	Kilograms	7.885	
20	JAN-2018	Market A	Rural	North	19	Liver	Kilograms	9.080	
21	JAN-2018	Market A	Rural	North	20	Guinea fowl	Kilograms	20.039	

Food Price Data

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	A	B	C	D	E	F	G	H	I
1	Date	Market Name	Market Location	Market District or Region	Item Code	Item Name	Unit Sold	Price per Unit	
2	JAN-2018	Market A	Rural	North	1	Beans	Kilograms	1.900	
3	JAN-2018	Market A	Rural	North	2	Rice, long	Kilograms	1.066	
4	JAN-2018	Market A	Rural	North	3	Rice, medium	Kilograms	0.986	
5	JAN-2018	Market A	Rural	North	4	Cornflakes	Packet	3.534	
6	JAN-2018	Market A	Rural	North	5	Maize on the cob, fresh	Kilograms	1.438	
7	JAN-2018	Market A	Rural	North	6	Spaghetti	Packet	1.071	
8	JAN-2018	Market A	Rural	North	7	Semolina	Bag	2.437	
9	JAN-2018	Market A	Rural	North	8	Maize flour (2 kg)	Bag	4.008	
10	JAN-2018	Market A	Rural	North	9	Biscuit, cream	Packet	0.562	
11	JAN-2018	Market A	Rural	North	10	Bread, wheat	Loaf	2.238	
12	JAN-2018	Market A	Rural	North	11	Biscuit	Kilograms	5.383	
13	JAN-2018	Market A	Rural	North	12	Cerelac (400g)	Box	6.449	
14	JAN-2018	Market A	Rural	North	13	Pork	Kilograms	5.244	
15	JAN-2018	Market A	Rural	North	14	Ground pork	Kilograms	5.506	
16	JAN-2018	Market A	Rural	North	15	Beef, steak, sirloin	Kilograms	7.630	
17	JAN-2018	Market A	Rural	North	16	Chicken, wings	Kilograms	10.481	
18	JAN-2018	Market A	Rural	North	17	Mutton	Kilograms	2.411	

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Unique ID (Item Code - Unit Sold)	Date	Market Name	Market Location	Market District or Region	Item Code	Item Name	Unit Sold	Price per Unit
1								
2	JAN-2018	Market A	Rural	North	1	Beans	Kilograms	1.900
3	JAN-2018	Market A	Rural	North	2	Rice, long	Kilograms	1.066
4	JAN-2018	Market A	Rural	North	3	Rice, medium	Kilograms	0.986
5	JAN-2018	Market A	Rural	North	4	Cornflakes	Packet	3.534
6	JAN-2018	Market A	Rural	North	5	Maize on the cob, fresh	Kilograms	1.438
7	JAN-2018	Market A	Rural	North	6	Spaghetti	Packet	1.071
8	JAN-2018	Market A	Rural	North	7	Semolina	Bag	2.437
9	JAN-2018	Market A	Rural	North	8	Maize flour (2 kg)	Bag	4.008
10	JAN-2018	Market A	Rural	North	9	Biscuit, cream	Packet	0.562
11	JAN-2018	Market A	Rural	North	10	Bread, wheat	Loaf	2.238
12	JAN-2018	Market A	Rural	North	11	Biscuit	Kilograms	5.383
13	JAN-2018	Market A	Rural	North	12	Cerelac (400g)	Box	6.449
14	JAN-2018	Market A	Rural	North	13	Pork	Kilograms	5.244
15	JAN-2018	Market A	Rural	North	14	Ground pork	Kilograms	5.506
16	JAN-2018	Market A	Rural	North	15	Beef, steak, sirloin	Kilograms	7.630
17	JAN-2018	Market A	Rural	North	16	Chicken, wings	Kilograms	10.481
18	JAN-2018	Market A	Rural	North	17	Mutton	Kilograms	3.411
19	JAN-2018	Market A	Rural	North	18	Goat meat, with bone	Kilograms	7.885
20	JAN-2018	Market A	Rural	North	19	Liver	Kilograms	9.080
21	JAN-2018	Market A	Rural	North	20	Guinea fowl	Kilograms	20.039



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	A	B	C	D	E	F	G	H	I	J	K	L	M
	Unique ID (Item Code - Unit Sold)  Automatic: Do not change or add data in this column.	Item Code	Item Name	Unit Sold	Item Weight (kg)	Food Name	FCT	FCT Code	FCT Name		Energy Density (kcal/100g of edible portion)	Edible Portion	Food Group
1													
2													
3													
4													
5													
6													
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	A	B	C	D	E	F	G	H	I	J	K	L	M
	Unique ID (Item Code - Unit Sold)	Item Code	Item Name	Unit Sold	Item Weight (kg)	Food Name	FCT	FCT Code	FCT Name	Energy Density (kcal/100g of edible portion)	Edible Portion	Food Group	
1													
2	1-Kilograms	1	Beans	Kilograms									
3	2-Kilograms	2	Rice, long	Kilograms									
4	3-Kilograms	3	Rice, medium	Kilograms									
5	4-Packet	4	Cornflakes	Packet									
6	5-Kilograms	5	Maize on the cob, fresh	Kilograms									
7	6-Packet	6	Spaghetti	Packet									
8	7-Bag	7	Semolina	Bag									
9	8-Bag	8	Maize flour (2 kg)	Bag									
10	9-Packet	9	Biscuit, cream	Packet									
11	10-Loaf	10	Bread, wheat	Loaf									
12	11-Kilograms	11	Biscuit	Kilograms									
13	12-Box	12	Cerelac (400g)	Box									
14	13-Kilograms	13	Pork	Kilograms									
15	14-Kilograms	14	Ground pork	Kilograms									
16	15-Kilograms	15	Beef, steak, sirloin	Kilograms									
17	16-Kilograms	16	Chicken, wings	Kilograms									
18	17-Kilograms	17	Mutton	Kilograms									
19	18-Kilograms	18	Goat meat, with bone	Kilograms									
20	19-Kilograms	19	Liver	Kilograms									
21	20-Kilograms	20	Guinea fowl	Kilograms									
22	21-Kilograms	21	Duck, live	Kilograms									
23	22-Kilograms	22	Duck	Kilograms									
24	23-Kilograms	23	Chicken, frozen	Kilograms									
25	24-Kilograms	24	Chicken, live	Kilograms									
26	25-Single	25	Eggs, local chicken	Single									
27	26-Tin	26	Sardines, tin	Tin									



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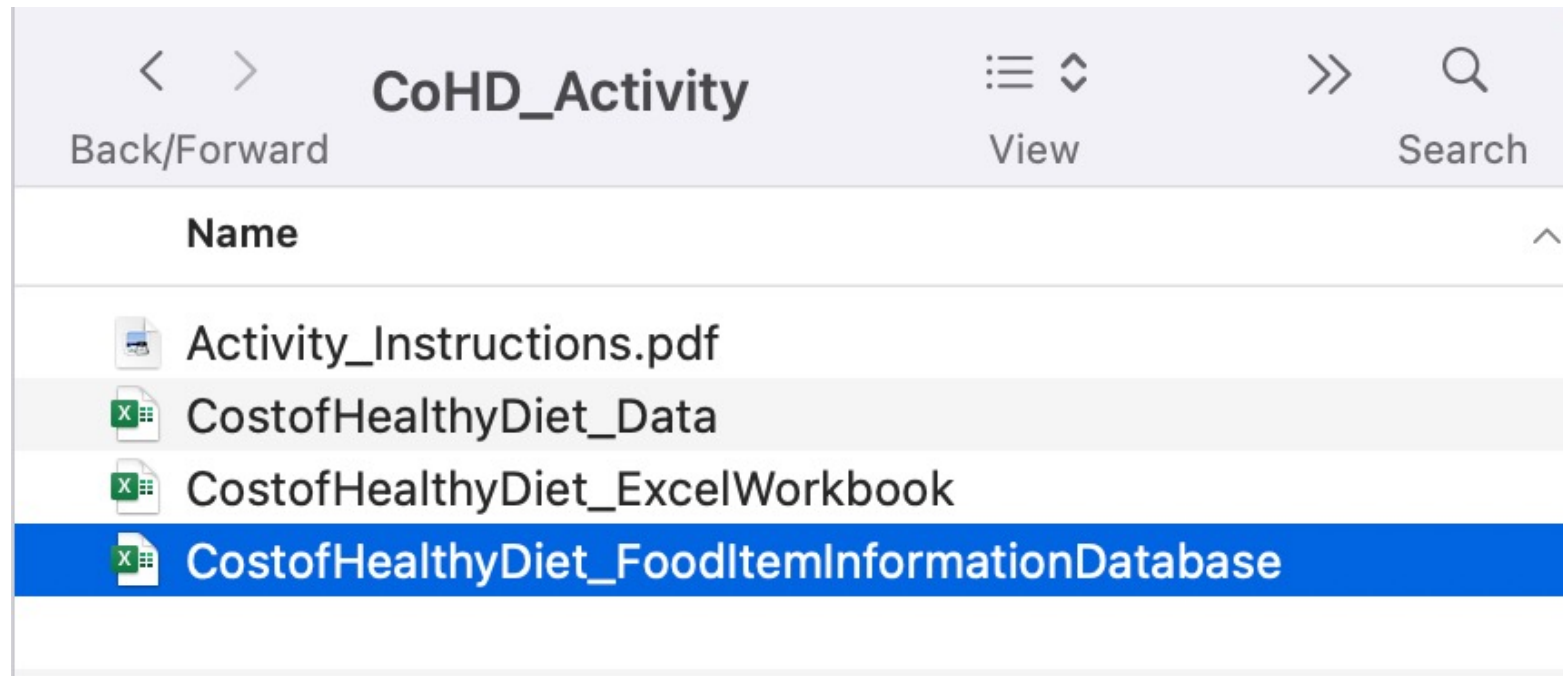
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	A	B	C	D	E	F	G	H	I	J	K	L
	Unique ID (Item Code - Unit Sold)	Item Code	Item Name	Unit Sold	Item Weight (kg)	Food Name	FCT	FCT Code	FCT Name	Energy Density (kcal/100g of edible portion)	Edible Portion	Food Group
1												
2	1-Kilograms	1	Beans	Kilograms	1	Beans Kidney	USDA SR28	16032	BEANS,KIDNEY,RED,MATURE SEEDS,RAW	337	1.00	Legumes nuts and seeds
3	2-Kilograms	2	Rice, long	Kilograms	1	Rice	USDA SR28	20444	RICE,WHITE,LONG-GRAIN,REG,RAW,UNENR	365	1.00	Starchy staples
4	3-Kilograms	3	Rice, medium	Kilograms	1	Rice	USDA SR28	20450	RICE,WHITE,MEDIUM-GRAIN,RAW,UNENR	360	1.00	Starchy staples
5	4-Packet	4	Cornflakes	Packet								
6	5-Kilograms	5	Maize on the cob, fresh	Kilograms	1							
7	6-Packet	6	Spaghetti	Packet								
8	7-Bag	7	Semolina	Bag								
9	8-Bag	8	Maize flour (2 kg)	Bag	2							
10	9-Packet	9	Biscuit, cream	Packet								
11	10-Loaf	10	Bread, wheat	Loaf	0.6							
12	11-Kilograms	11	Biscuit	Kilograms	1							
13	12-Box	12	Cerelac (400g)	Box	0.4							
14	13-Kilograms	13	Pork	Kilograms	1							
15	14-Kilograms	14	Ground pork	Kilograms	1							
16	15-Kilograms	15	Beef, steak, sirloin	Kilograms	1							
17	16-Kilograms	16	Chicken, wings	Kilograms	1							
18	17-Kilograms	17	Mutton	Kilograms	1							
19	18-Kilograms	18	Goat meat, with bone	Kilograms	1							
20	19-Kilograms	19	Liver	Kilograms	1							
21	20-Kilograms	20	Guinea fowl	Kilograms	1							
22	21-Kilograms	21	Duck, live	Kilograms	1							
23	22-Kilograms	22	Duck	Kilograms	1							
24	23-Kilograms	23	Chicken, frozen	Kilograms								
25	24-Kilograms	24	Chicken, live	Kilograms								
26	25-Single	25	Eggs, local chicken	Single								
27	26-Tin	26	Sardines, tin	Tin								

# Food Item Information Database helps you match items to their food composition



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	A	B	C	D	E	F	G
	Food Name	Food Composition Table (FCT)	FCT Code	FCT Name	Energy Density (kCal/100g of edible portion)	Edible Portion	Food Group
1							
2	Almonds	USDA SR28	12063	ALMONDS,DRY RSTD,WO/SALT	598	1.00	Legumes nuts and seeds
3	Apple	USDA SR28	9003	APPLES,RAW,WITH SKIN	52	0.90	Fruits
4	Apricots	USDA SR28	9032	APRICOTS,DRIED,SULFURED,UNCKD	241	1.00	Fruits
5	Apricots	USDA SR28	9021	APRICOTS,RAW	48	0.93	Fruits
6	Avocado	USDA SR28	09037	AVOCADOS,RAW,ALL COMM VAR	160	0.74	Fruits
7	Banana	USDA SR28	9040	BANANAS,RAW	89	0.64	Fruits
8	Barley	USDA SR28	20130	BARLEY FLOUR OR MEAL	345	1.00	Starchy staples
9	Barley	USDA SR28	20004	BARLEY,HULLED	354	1.00	Starchy staples
10	Beans Bambara	WA 2019	03_018	Bambara groundnut, combined varieties, dry, raw (r	319	1.00	Legumes nuts and seeds
11	Beans Black	USDA SR28	16014	BEANS,BLACK,MATURE SEEDS,RAW	341	1.00	Legumes nuts and seeds
12	Beans Cowpea	WA 2019	03_154mod	Boussan touba (Burkina Faso)*: fried cowpea panca	253	1.00	Legumes nuts and seeds
13	Beans Cowpea	WA 2019	03_005	Cowpea, black, dry, raw	301	1.00	Legumes nuts and seeds
14	Beans Cowpea	WA 2019	03_027	Cowpea, brown, dry, raw	326	1.00	Legumes nuts and seeds
15	Beans Cowpea	WA 2019	03_103	Cowpea, dehulled, soaked, boiled in different water	125	1.00	Legumes nuts and seeds
16	Beans Cowpea	WA 2019	03_006	Cowpea, white, dry, raw	331	1.00	Legumes nuts and seeds
17	Beans Fava	USDA SR28	16052	BROADBEANS (FAVA BEANS),MATURE SEEDS,RAW	341	1.00	Legumes nuts and seeds
18	Beans Kidney	USDA SR28	16032	BEANS,KIDNEY,RED,MATURE SEEDS,RAW	337	1.00	Legumes nuts and seeds
19	Beans Mung	USDA SR28	16080	MUNG BNS,MATURE SEEDS,RAW	347	1.00	Legumes nuts and seeds
20	Beans Navy	USDA SR28	16037	BEANS,NAVY,MATURE SEEDS,RAW	337	1.00	Legumes nuts and seeds
21	Beans Pinto	USDA SR28	16042	BEANS,PINTO,MATURE SEEDS,RAW	347	1.00	Legumes nuts and seeds
22	Beans White	USDA SR28	16049	BEANS,WHITE,MATURE SEEDS,RAW	333	1.00	Legumes nuts and seeds
23	Beef	USDA SR28	23562	BEEF,GROUND,90% LN MEAT / 10% FAT,RAW	176	1.00	Animal source foods
24	Beef	USDA SR28	13795mod	BEEF,ALL GRADES,RAW	214	1.00	Animal source foods
25	Beef	USDA SR28	13803	BEEF,BRISKET,WHL,LN&FAT,1/8" FAT,ALL GRDS,RAV	251	0.99	Animal source foods
26	Beef	USDA SR28	13065	BEEF,FLANK,STEAK,LN & FAT,0" FAT,CHOIC,RAW	165	1.00	Animal source foods
27	Beef	USDA SR28	13891	BEEF,RND,TOP RND,STEAK,LN & FAT,1/8" FAT,ALL C	166	1.00	Animal source foods

- Helps you match a food from your retail food price list to its energy density (calories per 100 g) and edible portion
- Includes 400+ foods commonly found in food price lists



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	A	B	C	D	E	F	G	H	I	J	K	L
	Unique ID (Item Code - Unit Sold)	Item Code	Item Name	Unit Sold	Item Weight (kg)	Food Name	FCT	FCT Code	FCT Name	Energy Density (kcal/100g of edible portion)	Edible Portion	Food Group
1												
2	1-Kilograms	1	Beans	Kilograms	1	Beans Kidney	USDA SR28	16032	BEANS,KIDNEY,RED,MATURE SEEDS,RAW	337	1.00	Legumes nuts and seeds
3	2-Kilograms	2	Rice, long	Kilograms	1	Rice	USDA SR28	20444	RICE,WHITE,LONG-GRAIN,REG,RAW,UNENR	365	1.00	Starchy staples
4	3-Kilograms	3	Rice, medium	Kilograms	1	Rice	USDA SR28	20450	RICE,WHITE,MEDIUM-GRAIN,RAW,UNENR	360	1.00	Starchy staples
5	4-Packet	4	Cornflakes	Packet								
6	5-Kilograms	5	Maize on the cob, fresh	Kilograms	1							
7	6-Packet	6	Spaghetti	Packet								
8	7-Bag	7	Semolina	Bag								
9	8-Bag	8	Maize flour (2 kg)	Bag	2							
10	9-Packet	9	Biscuit, cream	Packet								
11	10-Loaf	10	Bread, wheat	Loaf	0.6							
12	11-Kilograms	11	Biscuit	Kilograms	1							
13	12-Box	12	Cerelac (400g)	Box	0.4							
14	13-Kilograms	13	Pork	Kilograms	1							
15	14-Kilograms	14	Ground pork	Kilograms	1							
16	15-Kilograms	15	Beef, steak, sirloin	Kilograms	1							
17	16-Kilograms	16	Chicken, wings	Kilograms	1							
18	17-Kilograms	17	Mutton	Kilograms	1							
19	18-Kilograms	18	Goat meat, with bone	Kilograms	1							
20	19-Kilograms	19	Liver	Kilograms	1							
21	20-Kilograms	20	Guinea fowl	Kilograms	1							
22	21-Kilograms	21	Duck, live	Kilograms	1							
23	22-Kilograms	22	Duck	Kilograms	1							
24	23-Kilograms	23	Chicken, frozen	Kilograms								
25	24-Kilograms	24	Chicken, live	Kilograms								
26	25-Single	25	Eggs, local chicken	Single								
27	26-Tin	26	Sardines, tin	Tin								

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	A	B	C	D	E	F	G	H
	Food Name	Food Composition Table (FCT)	FCT Code	FCT Name	Energy Density (kCal/100g of edible portion)	Edible Portion	Food Group	Notes
40	Beverages: Soft drink	USDA SR28	14144	BEVERAGES,CARB,LEMON-LIME SODA,NO CAFFEIN	41	1.00	Exclude	/!\ do not copy to "Food Item Information" sheet
41	Beverages: Soft drink	USDA SR28	14150	BEVERAGES,CARB,ORANGE	48	1.00	Exclude	
42	Beverages: Soft drink	WA 2019	12_024	Carbonated drink (e.g. Coca-Cola, Sprite)	40	1.00	Exclude	
43	Beverages: Tea	WA 2019	12_008	Tea, infusion	0	1.00	Exclude	
44	Bread	USDA SR28	18413	BREAD,PITA,WHITE,UNENR	275	1.00	Starchy staples	
45	Bread	USDA SR28	18069	BREAD,WHITE,COMMPLY PREP (INCL SOFT BREAD C	266	1.00	Starchy staples	
46	Bread	USDA SR28	18075	BREAD,WHOLE-WHEAT,COMM. PREPARED	252	1.00	Starchy staples	
47	Bread	USDA SR28	18973	FOCACCIA,ITALIAN FLATBREAD,PLN	249	1.00	Starchy staples	
48	Bread	USDA SR28	18337	PUFF PASTRY,FRZ,RTB	551	1.00	Starchy staples	
49	Bread	USDA SR28	18347	ROLLS,DINNER,WHEAT	273	1.00	Starchy staples	
50	Bread	USDA SR28	18350	ROLLS,HAMBURGER OR HOTDOG,PLN	279	1.00	Starchy staples	
51	Breakfast Cereal	USDA SR28	43218	CEREALS RTE,ALPEN	352	1.00	Starchy staples	
52	Breakfast Cereal	USDA SR28	08506	CEREALS RTE,RALSTON CORN FLAKES	357	1.00	Starchy staples	
53	Breakfast Cereal	WA 2019	01_182	Cornflakes (breakfast cereal), unfortified	383	1.00	Starchy staples	
54	Broccoli	USDA SR28	11090	BROCCOLI,RAW	34	0.61	Vegetables	
55	Buckwheat	USDA SR28	20008	BUCKWHEAT	343	1.00	Starchy staples	
56	Buffalo	USDA SR28	35174	BUFFALO,FREE RANGE,TOP RND STEAK,RAW (SHOS	97	1.00	Animal source foods	
57	Butter	USDA SR28	1001	BUTTER,WITH SALT	717	1.00	Oils and fats	
58	Butter	USDA SR28	1145	BUTTER,WITHOUT SALT	717	1.00	Oils and fats	
59	Cabbage	USDA SR28	11109	CABBAGE,RAW	25	0.80	Vegetables	
60	Cake	USDA SR28	18954	BREAD,POUND CAKE TYPE,PAN DE TORTA SALVAD	390	1.00	Exclude	
61	Cake	USDA SR28	18101	CAKE,CHOC,PREP FROM RECIPE WO/FRSTNG	371	1.00	Exclude	
62	Cake	USDA SR28	18114	CAKE,GINGERBREAD,DRY MIX	437	1.00	Exclude	
63	Cake	USDA SR28	18133	CAKE,SPONGE,COMMPLY PREP	290	1.00	Exclude	
64	Cake	USDA SR28	18144	CAKE,YEL,ENR,DRY MIX	374	1.00	Exclude	
65	Cake	USDA SR28	18147	CHEESECAKE COMMPLY PREP	321	1.00	Exclude	



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A53 Copy as Picture... t Cereal

	A	B	C	D	E	F	G	H
	Food Name	Food Composition Table (FCT)	FCT Code	FCT Name	Energy Density (kCal/100g of edible portion)	Edible Portion	Food Group	Notes
1								! do not copy to "Food Item Information" sheet
40	Beverages: Soft drink	USDA SR28	14144	BEVERAGES,CARB,LEMON-LIME SODA,NO CAFFEIN	41	1.00	Exclude	
41	Beverages: Soft drink	USDA SR28	14150	BEVERAGES,CARB,ORANGE	48	1.00	Exclude	
42	Beverages: Soft drink	WA 2019	12_024	Carbonated drink (e.g. Coca-Cola, Sprite)	40	1.00	Exclude	
43	Beverages: Tea	WA 2019	12_008	Tea, infusion	0	1.00	Exclude	
44	Bread	USDA SR28	18413	BREAD,PITA,WHITE,UNENR	275	1.00	Starchy staples	
45	Bread	USDA SR28	18069	BREAD,WHITE,COMMPLY PREP (INCL SOFT BREAD C	266	1.00	Starchy staples	
46	Bread	USDA SR28	18075	BREAD,WHOLE-WHEAT,COMM. PREPARED	252	1.00	Starchy staples	
47	Bread	USDA SR28	18973	FOCACCIA,ITALIAN FLATBREAD,PLN	249	1.00	Starchy staples	
48	Bread	USDA SR28	18337	PUFF PASTRY,FRZ,RTB	551	1.00	Starchy staples	
49	Bread	USDA SR28	18347	ROLLS,DINNER,WHEAT	273	1.00	Starchy staples	
50	Bread	USDA SR28	18350	ROLLS,HAMBURGER OR HOTDOG,PLN	279	1.00	Starchy staples	
51	Breakfast Cereal	USDA SR28	43218	CEREALS RTE,ALPEN	352	1.00	Starchy staples	
52	Breakfast Cereal	USDA SR28	08506	CEREALS RTE,RALSTON CORN FLAKES	357	1.00	Starchy staples	
53	Breakfast Cereal	WA 2019	01_182	Cornflakes (breakfast cereal), unfortified	383	1.00	Starchy staples	
54	Broccoli	USDA SR28	11090	BROCCOLI,RAW	34	0.61	Vegetables	
55	Buckwheat	USDA SR28	20008	BUCKWHEAT	343	1.00	Starchy staples	
56	Buffalo	USDA SR28	35174	BUFFALO,FREE RANGE,TOP RND STEAK,RAW (SHOS	97	1.00	Animal source foods	
57	Butter	USDA SR28	1001	BUTTER,WITH SALT	717	1.00	Oils and fats	
58	Butter	USDA SR28	1145	BUTTER,WITHOUT SALT	717	1.00	Oils and fats	
59	Cabbage	USDA SR28	11109	CABBAGE,RAW	25	0.80	Vegetables	
60	Cake	USDA SR28	18954	BREAD,POUND CAKE TYPE,PAN DE TORTA SALVAD	390	1.00	Exclude	
61	Cake	USDA SR28	18101	CAKE,CHOC,PREP FROM RECIPE WO/FRSTNG	371	1.00	Exclude	
62	Cake	USDA SR28	18114	CAKE,GINGERBREAD,DRY MIX	437	1.00	Exclude	
63	Cake	USDA SR28	18133	CAKE,SPONGE,COMMPLY PREP	290	1.00	Exclude	
64	Cake	USDA SR28	18144	CAKE,YEL,ENR,DRY MIX	374	1.00	Exclude	
65	Cake	USDA SR28	18147	CHEESECAKE COMMPLY PREP	321	1.00	Exclude	

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	A	B	C	D	E	F	G	H	I	J	K	L
	Unique ID (Item Code - Unit Sold)	Item Code	Item Name	Unit Sold	Item Weight (kg)	Food Name	FCT	FCT Code	FCT Name	Energy Density (kcal/100g of edible portion)	Edible Portion	Food Group
1												
2	1-Kilograms	1	Beans	Kilograms	1	Beans Kidney	USDA SR28	16032	BEANS,KIDNEY,RED,MATURE SEEDS,RAW	337	1.00	Legumes nuts and seeds
3	2-Kilograms	2	Rice, long	Kilograms	1	Rice	USDA SR28	20444	RICE,WHITE,LONG-GRAIN,REG,RAW,UNENR	365	1.00	Starchy staples
4	3-Kilograms	3	Rice, medium	Kilograms	1	Rice	USDA SR28	20450	RICE,WHITE,MEDIUM-GRAIN,RAW,UNENR	360	1.00	Starchy staples
5	4-Packet	4	Cornflakes	Packet		Breakfast Cereal	WA 2019	01_182	Cornflakes (breakfast cereal), unfortified	383	1.00	Starchy staples
6	5-Kilograms	5	Maize on the cob, fresh	Kilograms	1							
7	6-Packet	6	Spaghetti	Packet								
8	7-Bag	7	Semolina	Bag								
9	8-Bag	8	Maize flour (2 kg)	Bag	2							
10	9-Packet	9	Biscuit, cream	Packet								
11	10-Loaf	10	Bread, wheat	Loaf	0.6							
12	11-Kilograms	11	Biscuit	Kilograms	1							
13	12-Box	12	Cerelac (400g)	Box	0.4							
14	13-Kilograms	13	Pork	Kilograms	1							
15	14-Kilograms	14	Ground pork	Kilograms	1							
16	15-Kilograms	15	Beef, steak, sirloin	Kilograms	1							
17	16-Kilograms	16	Chicken, wings	Kilograms	1							
18	17-Kilograms	17	Mutton	Kilograms	1							
19	18-Kilograms	18	Goat meat, with bone	Kilograms	1							
20	19-Kilograms	19	Liver	Kilograms	1							
21	20-Kilograms	20	Guinea fowl	Kilograms	1							
22	21-Kilograms	21	Duck, live	Kilograms	1							
23	22-Kilograms	22	Duck	Kilograms	1							
24	23-Kilograms	23	Chicken, frozen	Kilograms								
25	24-Kilograms	24	Chicken, live	Kilograms								
26	25-Single	25	Eggs, local chicken	Single								
27	26-Tin	26	Sardines, tin	Tin								



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	A	B	C	D	E	F	G	H	I
	Unique ID (Food Item Number- Unit)	Date	Market Name	Market Location	Market District or Region	Item Code	Item Name	Unit Sold	Price per Unit (LCU/unit)
1									
2	1-Kilograms	JAN-2018	Market A	Rural	North	1	Beans	Kilograms	1.90
3	2-Kilograms	JAN-2018	Market A	Rural	North	2	Rice, long	Kilograms	1.07
4	3-Kilograms	JAN-2018	Market A	Rural	North	3	Rice, medium	Kilograms	0.99
5	4-Packet	JAN-2018	Market A	Rural	North	4	Cornflakes	Packet	3.53
6	5-Kilograms	JAN-2018	Market A	Rural	North	5	Maize on the cob, fresh	Kilograms	1.44
7	6-Packet	JAN-2018	Market A	Rural	North	6	Spaghetti	Packet	1.07
8	7-Bag	JAN-2018	Market A	Rural	North	7	Semolina	Bag	2.44
9	8-Bag	JAN-2018	Market A	Rural	North	8	Maize flour (2 kg)	Bag	4.01
10	9-Packet	JAN-2018	Market A	Rural	North	9	Biscuit, cream	Packet	0.56
11	10-Loaf	JAN-2018	Market A	Rural	North	10	Bread, wheat	Loaf	2.24
12	11-Kilograms	JAN-2018	Market A	Rural	North	11	Biscuit	Kilograms	5.38
13	12-Box	JAN-2018	Market A	Rural	North	12	Cerelac (400g)	Box	6.45
14	13-Kilograms	JAN-2018	Market A	Rural	North	13	Pork	Kilograms	5.24
15	14-Kilograms	JAN-2018	Market A	Rural	North	14	Ground pork	Kilograms	5.51
16	15-Kilograms	JAN-2018	Market A	Rural	North	15	Beef, steak, sirloin	Kilograms	7.63
17	16-Kilograms	JAN-2018	Market A	Rural	North	16	Chicken, wings	Kilograms	10.48
18	17-Kilograms	JAN-2018	Market A	Rural	North	17	Mutton	Kilograms	3.41
19	18-Kilograms	JAN-2018	Market A	Rural	North	18	Goat meat, with bone	Kilograms	7.88
20	19-Kilograms	JAN-2018	Market A	Rural	North	19	Liver	Kilograms	9.08
21	20-Kilograms	JAN-2018	Market A	Rural	North	20	Guinea fowl	Kilograms	20.04
22	21-Kilograms	JAN-2018	Market A	Rural	North	21	Duck, live	Kilograms	25.58
23	22-Kilograms	JAN-2018	Market A	Rural	North	22	Duck	Kilograms	26.86
24	23-Kilograms	JAN-2018	Market A	Rural	North	23	Chicken, frozen	Kilograms	9.68
25	24-Kilograms	JAN-2018	Market A	Rural	North	24	Chicken, live	Kilograms	5.32
26	25-Single	JAN-2018	Market A	Rural	North	25	Eggs, local chicken	Single	0.66
27	26-Tin	JAN-2018	Market A	Rural	North	26	Sardines, tin	Tin	1.31
28	27-Kilograms	JAN-2018	Market A	Rural	North	27	Mackerel (frozen)	Kilograms	6.14
29	28-Kilograms	JAN-2018	Market A	Rural	North	28	Shrimp, dried	Kilograms	21.06
30	29-Kilograms	JAN-2018	Market A	Rural	North	29	Catfish (Fresh)	Kilograms	7.85
31	30-Kilograms	JAN-2018	Market A	Rural	North	30	Tilapia (fresh)	Kilograms	7.50
32	31-Kilograms	JAN-2018	Market A	Rural	North	31	Sardines, dried	Kilograms	14.71
33	32-Kilograms	JAN-2018	Market A	Rural	North	32	Sardine (frozen)	Kilograms	5.95
34	33-Kilograms	JAN-2018	Market A	Rural	North	33	Shellfish, small	Kilograms	18.06
35	34-Litre	JAN-2018	Market A	Rural	North	34	Local milk (fresh)	Litre	6.18
36	35-litre	JAN-2018	Market A	Rural	North	35	Imported milk (liquid)	Litre	7.41

- CoHD calculation compiles, or merges, information from previous sheets
- Contains all formulas to select the least-cost items at each time and place
- No new formulas or data needed here



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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Unique ID (Food Item Number-Unit)	Date	Market Name	Market Location	Market District or Region	Item Code	Item Name	Unit Sold	Price per Unit (LCU/unit)	Item Weight (kg/unit)	Price per Kilogram (LCU/kg)	Energy density (kcal/100 g of edible portion)	Edible Portion	Price per kCal (LCU/kCal)	Food Group
1															
2	1-Kilograms	JAN-2018	Market A	Rural	North	1	Beans	Kilograms	1.90	1	1.90	337	1.00	0.001	Legumes nuts a
3	2-Kilograms	JAN-2018	Market A	Rural	North	2	Rice, long	Kilograms	1.07	1	1.07	365	1.00	0.000	Starchy staples
4	3-Kilograms	JAN-2018	Market A	Rural	North	3	Rice, medium	Kilograms	0.99	1	0.99	360	1.00	0.000	Starchy staples
5	4-Packet	JAN-2018	Market A	Rural	North	4	Cornflakes	Packet	3.53	0.4	8.84	357	1.00	0.002	Starchy staples
6	5-Kilograms	JAN-2018	Market A	Rural	North	5	Maize on the cob, fresh	Kilograms	1.44	1	1.44	86	0.36	0.005	Starchy staples
7	6-Packet	JAN-2018	Market A	Rural	North	6	Spaghetti	Packet	1.07	0.2	5.35	371	1.00	0.001	Starchy staples
8	7-Bag	JAN-2018	Market A	Rural	North	7	Semolina	Bag	2.44	2	1.22	360	1.00	0.000	Starchy staples
9	8-Bag	JAN-2018	Market A	Rural	North	8	Maize flour (2 kg)	Bag	4.01	2	2.00	361	1.00	0.001	Starchy staples
10	9-Packet	JAN-2018	Market A	Rural	North	9	Biscuit, cream	Packet	0.56	0.25	2.25	483	1.00	0.000	Exclude
11	10-Loaf	JAN-2018	Market A	Rural	North	10	Bread, wheat	Loaf	2.24	0.4	5.60	252	1.00	0.002	Starchy staples
12	11-Kilograms	JAN-2018	Market A	Rural	North	11	Biscuit	Kilograms	5.38	1	5.38	464	1.00	0.001	Starchy staples
13	12-Box	JAN-2018	Market A	Rural	North	12	Cerelac (400g)	Box	6.45	0.4	16.12				Exclude
14	13-Kilograms	JAN-2018	Market A	Rural	North	13	Pork	Kilograms	5.24	1	5.24	166	0.84	0.004	Animal source f
15	14-Kilograms	JAN-2018	Market A	Rural	North	14	Ground pork	Kilograms	5.51	1	5.51	166	0.84	0.004	Animal source f
16	15-Kilograms	JAN-2018	Market A	Rural	North	15	Beef, steak, sirloin	Kilograms	7.63	1	7.63	166	1.00	0.005	Animal source f
17	16-Kilograms	JAN-2018	Market A	Rural	North	16	Chicken, wings	Kilograms	10.48	1	10.48	191	0.62	0.009	Animal source f
18	17-Kilograms	JAN-2018	Market A	Rural	North	17	Mutton	Kilograms	3.41	1	3.41	126	0.73	0.004	Animal source f
19	18-Kilograms	JAN-2018	Market A	Rural	North	18	Goat meat, with bone	Kilograms	7.88	1	7.88	109	0.70	0.010	Animal source f
20	19-Kilograms	JAN-2018	Market A	Rural	North	19	Liver	Kilograms	9.08	1	9.08	135	1.00	0.007	Animal source f
21	20-Kilograms	JAN-2018	Market A	Rural	North	20	Guinea fowl	Kilograms	20.04	1	20.04	106	1.00	0.019	Animal source f
22	21-Kilograms	JAN-2018	Market A	Rural	North	21	Duck, live	Kilograms	25.58	1	25.58				Exclude
23	22-Kilograms	JAN-2018	Market A	Rural	North	22	Duck	Kilograms	26.86	1	26.86	404	0.72	0.009	Animal source f
24	23-Kilograms	JAN-2018	Market A	Rural	North	23	Chicken, frozen	Kilograms	9.68	1	9.68	213	0.52	0.009	Animal source f
25	24-Kilograms	JAN-2018	Market A	Rural	North	24	Chicken, live	Kilograms	5.32	1	5.32	213	0.52	0.005	Animal source f
26	25-Single	JAN-2018	Market A	Rural	North	25	Eggs, local chicken	Single	0.66	0.05	13.14	143	0.88	0.010	Animal source f
27	26-Tin	JAN-2018	Market A	Rural	North	26	Sardines, tin	Tin	1.31	0.25	5.23	208	1.00	0.003	Animal source f
28	27-Kilograms	JAN-2018	Market A	Rural	North	27	Mackerel (frozen)	Kilograms	6.14	1	6.14	205	0.29	0.010	Animal source f
29	28-Kilograms	JAN-2018	Market A	Rural	North	28	Shrimp, dried	Kilograms	21.06	1	21.06	253	1.00	0.008	Animal source f
30	29-Kilograms	JAN-2018	Market A	Rural	North	29	Catfish (Fresh)	Kilograms	7.85	1	7.85	119	0.52	0.013	Animal source f
31	30-Kilograms	JAN-2018	Market A	Rural	North	30	Tilapia (fresh)	Kilograms	7.50	1	7.50	96	0.65	0.012	Animal source f
32	31-Kilograms	JAN-2018	Market A	Rural	North	31	Sardines, dried	Kilograms	14.71	1	14.71	406	1.00	0.004	Animal source f
33	32-Kilograms	JAN-2018	Market A	Rural	North	32	Sardine (frozen)	Kilograms	5.95	1	5.95	106	0.52	0.011	Animal source f
34	33-Kilograms	JAN-2018	Market A	Rural	North	33	Shellfish, small	Kilograms	18.06	1	18.06				Exclude
35	34-Litre	JAN-2018	Market A	Rural	North	34	Local milk (fresh)	Litre	6.18	1.03	6.00	64	1.00	0.009	Animal source f
36	35-litre	JAN-2018	Market A	Rural	North	35	Imported milk (liquid)	Litre	7.41	1.03	7.19	64	1.00	0.011	Animal source f



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	Unit Sold	Price per Unit (LCU/unit)	Item Weight (kg/unit)	Price per Kilogram (LCU/kg)	Energy density (kcal/100 g of edible portion)	Edible Portion	Price per kCal (LCU/kCal)	Food Group	Number of Foods Recommended	Unique ID (Date-Market-FoodGroup)	Number of Foods Available	Daily kCal Requirement (per item)	Daily Cost (per item, per food group)	Common Food Name
2	Kilograms	1.90	1	1.90	337	1.00	0.001	Legumes nuts an	1	JAN-2018-Market A-Legumes r	5	300.0	0.17	Beans Kidney
3	Kilograms	1.07	1	1.07	365	1.00	0.000	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	0.17	Rice
4	Kilograms	0.99	1	0.99	360	1.00	0.000	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	0.16	Rice
5	Packet	3.53	0.4	8.84	357	1.00	0.002	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	1.44	Breakfast cereal
6	Kilograms	1.44	1	1.44	86	0.36	0.005	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	2.69	Maize
7	Packet	1.07	0.2	5.35	371	1.00	0.001	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	0.84	Pasta
8	Bag	2.44	2	1.22	360	1.00	0.000	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	0.20	Wheat
9	Bag	4.01	2	2.00	361	1.00	0.001	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	0.32	Corn
10	Packet	0.56	0.25	2.25	483	1.00	0.000	Exclude		JAN-2018-Market A-Exclude	16			
11	Loaf	2.24	0.4	5.60	252	1.00	0.002	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	1.29	Bread
12	Kilograms	5.38	1	5.38	464	1.00	0.001	Starchy staples	2	JAN-2018-Market A-Starchy st	15	580.0	0.67	Cracker
13	Box	6.45	0.4	16.12				Exclude		JAN-2018-Market A-Exclude	16			
14	Kilograms	5.24	1	5.24	166	0.84	0.004	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	0.56	Pork
15	Kilograms	5.51	1	5.51	166	0.84	0.004	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	0.59	Pork
16	Kilograms	7.63	1	7.63	166	1.00	0.005	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	0.69	Beef
17	Kilograms	10.48	1	10.48	191	0.62	0.009	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.33	Chicken
18	Kilograms	3.41	1	3.41	126	0.73	0.004	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	0.56	Mutton
19	Kilograms	7.88	1	7.88	109	0.70	0.010	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.55	Goat
20	Kilograms	9.08	1	9.08	135	1.00	0.007	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.01	Organ Meat
21	Kilograms	20.04	1	20.04	106	1.00	0.019	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	2.84	Guinea Fowl
22	Kilograms	25.58	1	25.58				Exclude		JAN-2018-Market A-Exclude	16			
23	Kilograms	26.86	1	26.86	404	0.72	0.009	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.39	Duck
24	Kilograms	9.68	1	9.68	213	0.52	0.009	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.31	Chicken
25	Kilograms	5.32	1	5.32	213	0.52	0.005	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	0.72	Chicken
26	Single	0.66	0.09	13.14	143	0.88	0.010	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.57	Egg
27	Tin	1.31	0.25	5.23	208	1.00	0.003	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	0.38	Fish Sardine
28	Kilograms	6.14	1	6.14	205	0.29	0.010	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.55	Fish Mackerel
29	Kilograms	21.06	1	21.06	253	1.00	0.008	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.25	Seafood Shrimp
30	Kilograms	7.85	1	7.85	119	0.52	0.013	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.90	Fish Catfish
31	Kilograms	7.50	1	7.50	96	0.65	0.012	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.80	Fish Tilapia
32	Kilograms	14.71	1	14.71	406	1.00	0.004	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	0.54	Fish Sardine
33	Kilograms	5.95	1	5.95	106	0.52	0.011	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.62	Fish Sardine
34	Kilograms	18.06	1	18.06				Exclude		JAN-2018-Market A-Exclude	16			
35	Litre	6.18	1.03	6.00	64	1.00	0.009	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.41	Milk
36	Litre	7.41	1.03	7.19	64	1.00	0.011	Animal source fo	2	JAN-2018-Market A-Animal so	24	150.0	1.69	Milk



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P2 fx =INDEX('Target Quantities'!C:C, MATCH(O2, 'Target Quantities'!B:B, 0))

	P	Q	R	S	T	U	V	W	X	Y	Z	AA
	Number of Foods Recommended	Unique ID (Date-Market-FoodGroup)	Number of Foods Available	Daily kCal Requirement (per item)	Daily Cost (per item, per food group)	Common Food Name	Unique ID (Date-Market-Common Food Name)	Rank Duplicate Food Items by Cost (per location and date)	Unique ID (Date-Market-FoodGroup)	Rank Least-Cost Food Items (per location and date)	Food Item Selection (for least-cost diet)	
1												
2	1	JAN-2018-Market A-Legumes r	5	300.0	0.17	Beans Kidney	JAN-2018-Market A-Beans Ki	1	JAN-2018-Market A		2	
3	2	JAN-2018-Market A-Starchy st	15	580.0	0.17	Rice	JAN-2018-Market A-Rice	2				
4	2	JAN-2018-Market A-Starchy st	15	580.0	0.16	Rice	JAN-2018-Market A-Rice	1	JAN-2018-Market A		2	1
5	2	JAN-2018-Market A-Starchy st	15	580.0	1.44	Breakfast cereal	JAN-2018-Market A-Breakfas	1	JAN-2018-Market A		11	
6	2	JAN-2018-Market A-Starchy st	15	580.0	2.69	Maize	JAN-2018-Market A-Maize	1	JAN-2018-Market A		13	
7	2	JAN-2018-Market A-Starchy st	15	580.0	0.84	Pasta	JAN-2018-Market A-Pasta	1	JAN-2018-Market A		8	
8	2	JAN-2018-Market A-Starchy st	15	580.0	0.20	Wheat	JAN-2018-Market A-Wheat	1	JAN-2018-Market A		3	
9	2	JAN-2018-Market A-Starchy st	15	580.0	0.32	Corn	JAN-2018-Market A-Corn	2				
10		JAN-2018-Market A-Exclude	16									
11	2	JAN-2018-Market A-Starchy st	15	580.0	1.29	Bread	JAN-2018-Market A-Bread	1	JAN-2018-Market A		10	
12	2	JAN-2018-Market A-Starchy st	15	580.0	0.67	Cracker	JAN-2018-Market A-Cracker	1	JAN-2018-Market A		7	
13		JAN-2018-Market A-Exclude	16									
14	fo	JAN-2018-Market A-Animal so	24	150.0	0.56	Pork	JAN-2018-Market A-Pork	1	JAN-2018-Market A		4	
15	fo	JAN-2018-Market A-Animal so	24	150.0	0.59	Pork	JAN-2018-Market A-Pork	2				
16	fo	JAN-2018-Market A-Animal so	24	150.0	0.69	Beef	JAN-2018-Market A-Beef	1	JAN-2018-Market A		5	
17	fo	JAN-2018-Market A-Animal so	24	150.0	1.33	Chicken	JAN-2018-Market A-Chicken	3				
18	fo	JAN-2018-Market A-Animal so	24	150.0	0.56	Mutton	JAN-2018-Market A-Mutton	1	JAN-2018-Market A		3	
19	fo	JAN-2018-Market A-Animal so	24	150.0	1.55	Goat	JAN-2018-Market A-Goat	1	JAN-2018-Market A		12	
20	fo	JAN-2018-Market A-Animal so	24	150.0	1.01	Organ Meat	JAN-2018-Market A-Organ M	1	JAN-2018-Market A		8	
21	fo	JAN-2018-Market A-Animal so	24	150.0	2.84	Guinea Fowl	JAN-2018-Market A-Guinea F	1	JAN-2018-Market A		16	
22		JAN-2018-Market A-Exclude	16									
23	fo	JAN-2018-Market A-Animal so	24	150.0	1.39	Duck	JAN-2018-Market A-Duck	1	JAN-2018-Market A		10	
24	fo	JAN-2018-Market A-Animal so	24	150.0	1.31	Chicken	JAN-2018-Market A-Chicken	2				
25	fo	JAN-2018-Market A-Animal so	24	150.0	0.72	Chicken	JAN-2018-Market A-Chicken	1	JAN-2018-Market A		6	
26	fo	JAN-2018-Market A-Animal so	24	150.0	1.57	Egg	JAN-2018-Market A-Egg	1	JAN-2018-Market A		13	
27	fo	JAN-2018-Market A-Animal so	24	150.0	0.38	Fish Sardine	JAN-2018-Market A-Fish Sarc	1	JAN-2018-Market A		2	1
28	fo	JAN-2018-Market A-Animal so	24	150.0	1.55	Fish Mackerel	JAN-2018-Market A-Fish Mac	1	JAN-2018-Market A		11	
29	fo	JAN-2018-Market A-Animal so	24	150.0	1.25	Seafood Shrimp	JAN-2018-Market A-Seafood	1	JAN-2018-Market A		9	
30	fo	JAN-2018-Market A-Animal so	24	150.0	1.90	Fish Catfish	JAN-2018-Market A-Fish Catf	1	JAN-2018-Market A		15	
31	fo	JAN-2018-Market A-Animal so	24	150.0	1.80	Fish Tilapia	JAN-2018-Market A-Fish Tila	1	JAN-2018-Market A		14	
32	fo	JAN-2018-Market A-Animal so	24	150.0	0.54	Fish Sardine	JAN-2018-Market A-Fish Sarc	2				
33	fo	JAN-2018-Market A-Animal so	24	150.0	1.62	Fish Sardine	JAN-2018-Market A-Fish Sarc	3				
34		JAN-2018-Market A-Exclude	16									
35	fo	JAN-2018-Market A-Animal so	24	150.0	1.41	Milk	JAN-2018-Market A-Milk	2				
36	fo	JAN-2018-Market A-Animal so	24	150.0	1.69	Milk	JAN-2018-Market A-Milk	3				

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F61 Refresh All

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**No manual entry is necessary on this sheet.**

**COST OF A HEALTHY DIET**

Use **Data >> Refresh All** feature to update results when changes are made in other sheets. This step assembles the food items, daily kCal requirements, and daily cost for each least-cost item selected for a healthy diet according to your chosen FBDG (or another criteria). Total cost is reported for each market and date. Only the final selection of least-cost food items appears in the



Food Item Select (Multiple It...

Date	Market Dis	Market Lo	Market Name	Food Group	Item Name	Daily Food Items	Daily kCal Needed	Daily Cost
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7								
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**COST OF A HEALTHY DIET**

**No manual entry is necessary on this sheet.**

Use **Data >> Refresh All** feature to update results when changes are made in other sheets. This step assembles the food items, daily kCal requirements, and daily cost for each least-cost item selected for a healthy diet according to your chosen FBDG (or another criteria). Total cost is reported for each market and date. Only the final selection of least-cost food items appears in the table.

Food Item Select 1

Date	Market District	Market Location	Market Name	Food Group	Item Name	Daily Food Items	Daily kCal Needed	Daily Cost
JAN-2018	North	Rural	Market A	Vegetables	Cabbage	1	37	0.09
					Carrot	1	37	0.17
					Onion	1	37	0.25
				Starchy staples	Rice, medium	1	580	0.16
					Maize flour, yello	1	580	0.06
				Oils and fats	Palm oil	1	300	0.09
				Legumes nuts and seeds	Groundnuts, shelled	1	300	0.16
				Fruits	Orange	1	80	0.12
					Grapefruit	1	80	0.25
				Animal source foods	Sardines, tin	1	150	0.38
					Powdered Skimmed Milk	1	150	0.21
<b>Market A Total</b>						<b>11</b>	<b>2330</b>	<b>1.93</b>
AUG-2018	North	Rural	Market A	Vegetables	Cucumber	1	37	0.18
					Green leaves	1	37	0.14
					Onion	1	37	0.21



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Date	Market District	Market Location	Market Name	Food Group	Item Name	Daily Food Items	Daily kCal Needed	Daily Cost
JAN-2018	North	Rural	Market A	Vegetables	Cabbage	1	37	0.09
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					Grapefruit	1	80	0.25
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<b>Market A Total</b>						<b>11</b>	<b>2330</b>	<b>1.93</b>
AUG-2018	North	Rural	Market A	Vegetables	Cucumber	1	37	0.18
					Green leaves	1	37	0.14
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				Starchy staples	Rice, medium	1	580	0.16
					Maize flour, yello	1	580	0.06
				Oils and fats	Groundnut oil	1	300	0.09
				Legumes nuts and seeds	Beans	1	300	0.11
				Fruits	Pineapple	1	80	0.19
					Guava	1	80	0.24
				Animal source foods	Sardines, tin	1	150	0.38
					Powdered Skimmed Milk	1	150	0.21
<b>Market A Total</b>						<b>11</b>	<b>2330</b>	<b>1.95</b>

Selected items by food group and their cost per day

Cost of a Healthy Diet

# Activity: Practice calculating CoHD in Excel

[http://bit.ly/Malawi CoHD Activity](http://bit.ly/Malawi_CoHD_Activity)



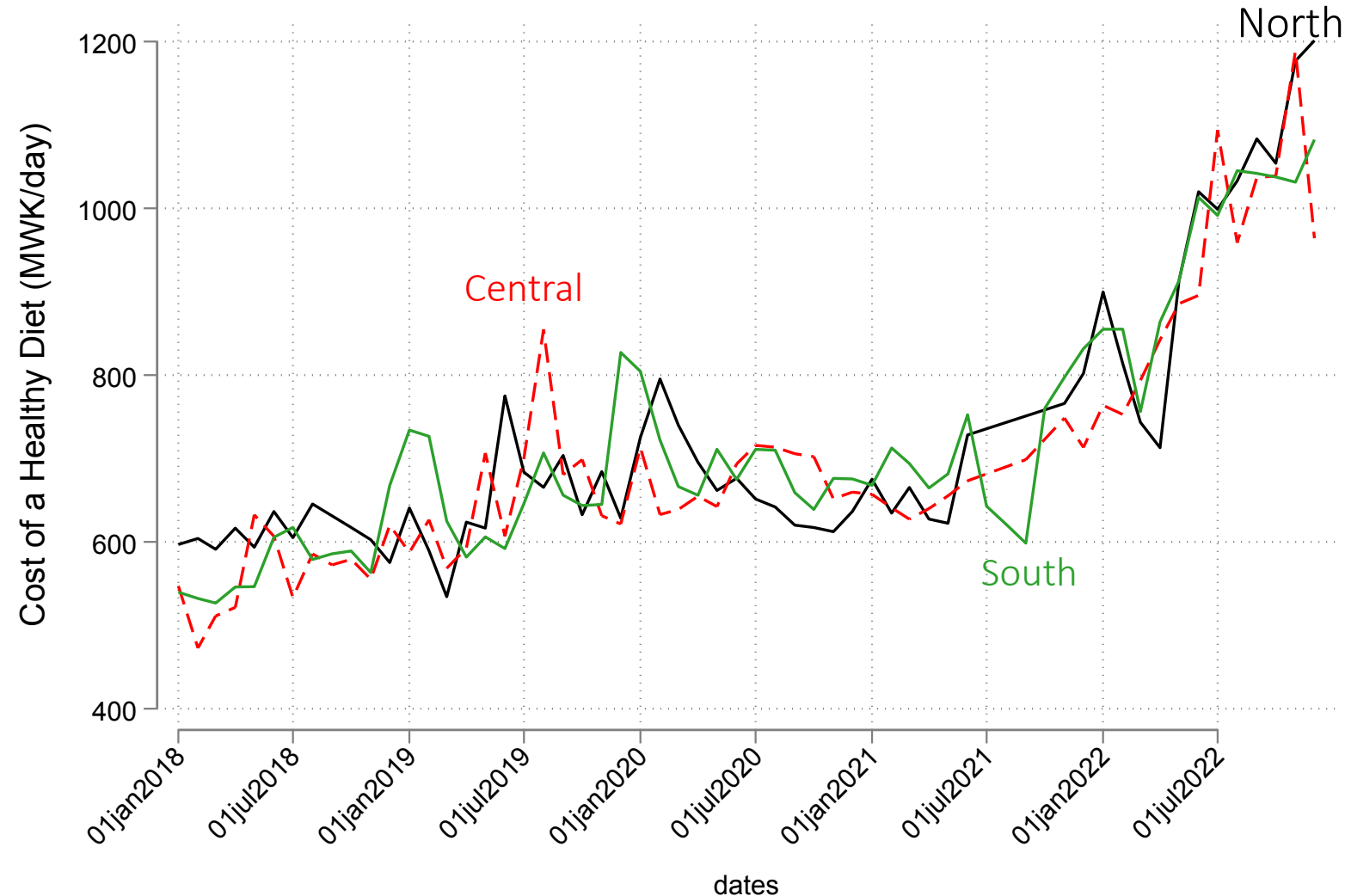
# Cost of a Healthy Diet: tools for calculating

INSTRUCTIONS	Visual step-by-step protocol
EXCEL WORKBOOK	Excel Workbook to calculate Cost of a Healthy Diet. Generates pivot table of results.
EXCEL FOOD ITEM INFORMATION DATABASE	Database of food composition data for 400+ common items found in national food price datasets.
STATA CODE	Stata code to calculate the Cost of a Healthy Diet. Generates results and simple summary statistics and figures.



# Cost of a Healthy Diet in Malawi: Preliminary results

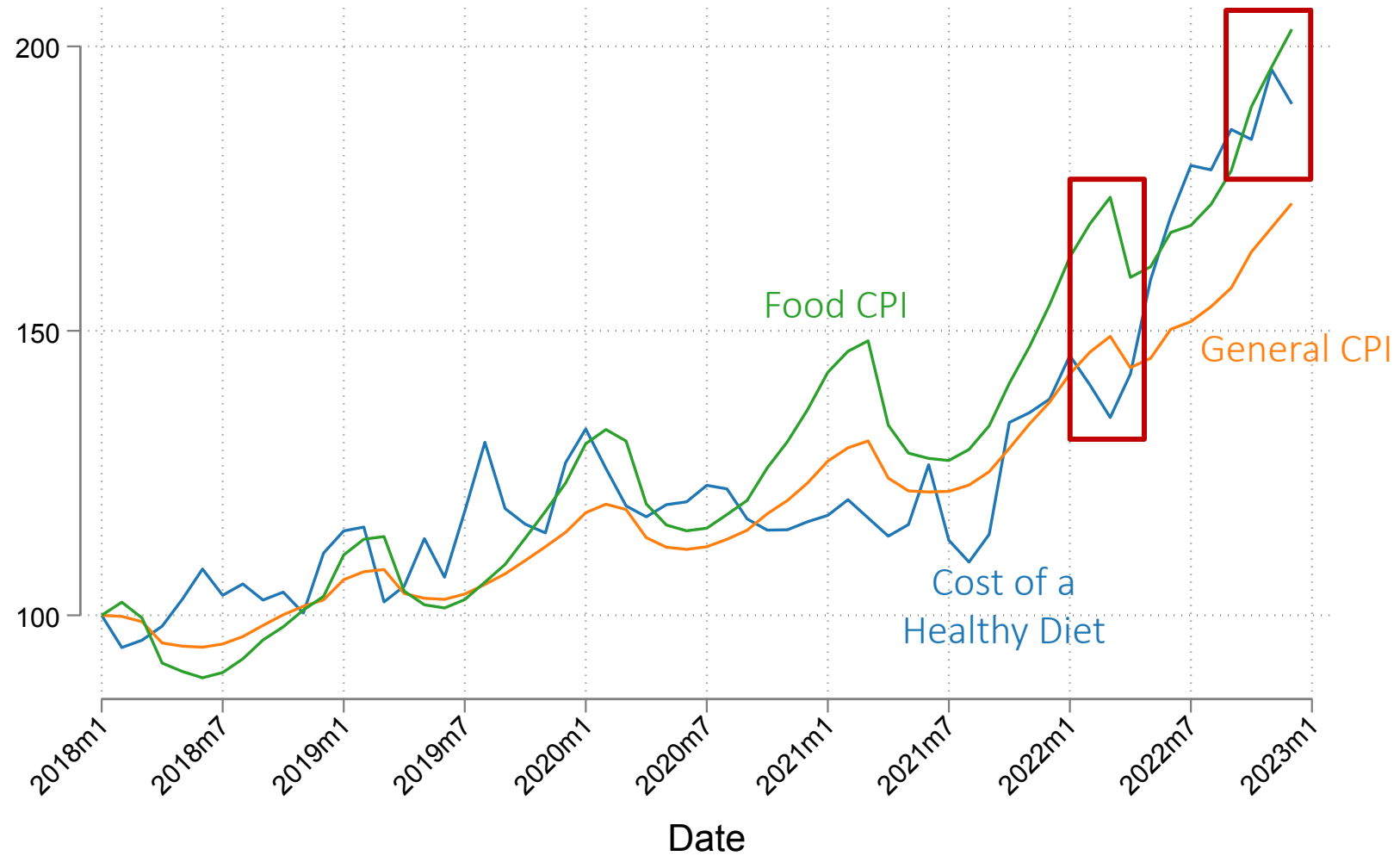
# CoHD using NSO retail food prices, by region



- CoHD increased sharply in all regions beginning around July 2021
- National average CoHD ~ 960 MWK in 2022
- Latest data from Dec 2022; real-time monitoring needed

# Food prices and CoHD increased more than all goods

- Indexed values to compare change since 2018
- Food CPI contains a larger number of items and accounts for preferences with expenditure weights

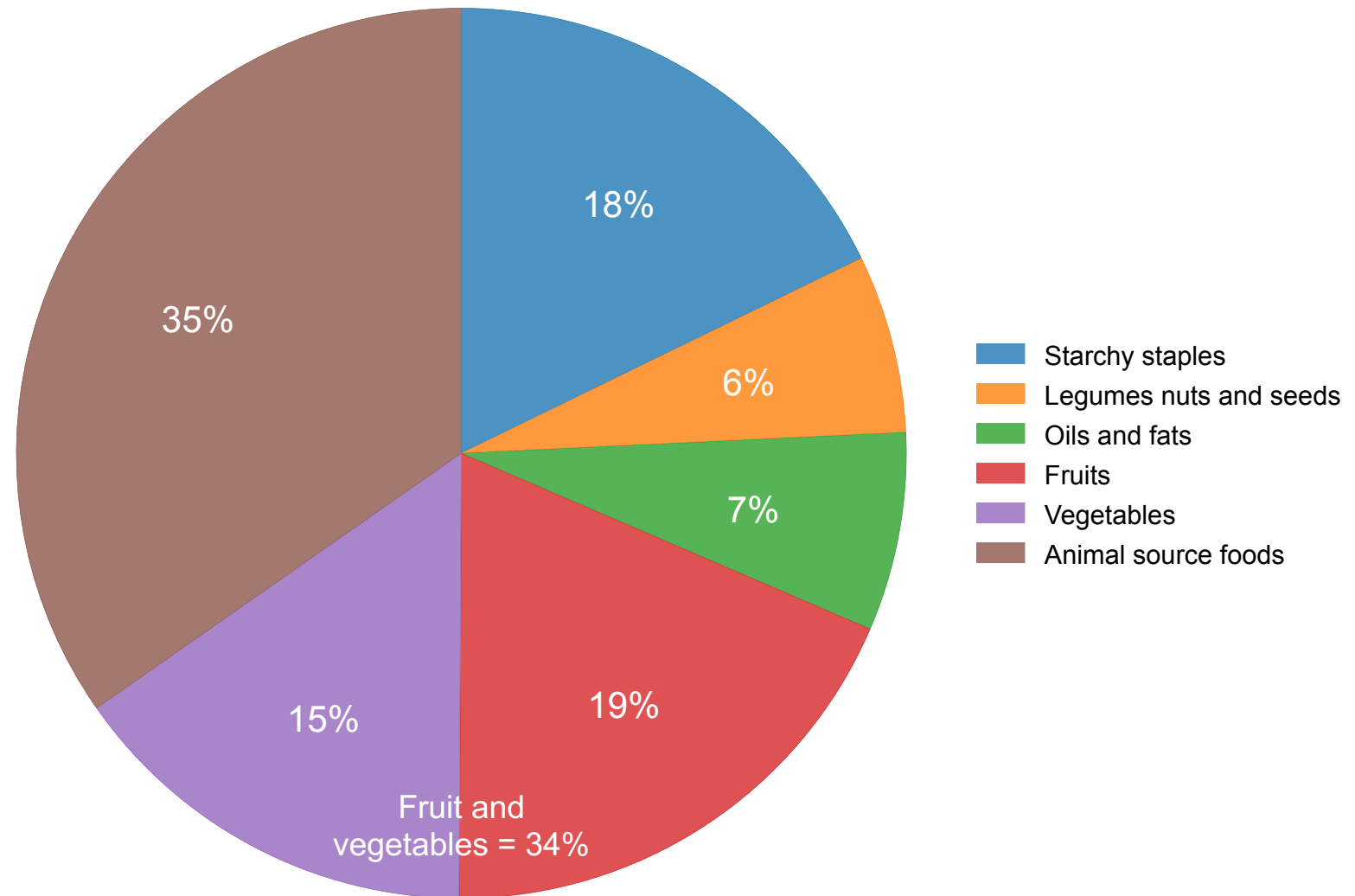


\* All values rescaled (1/2018 = 100)

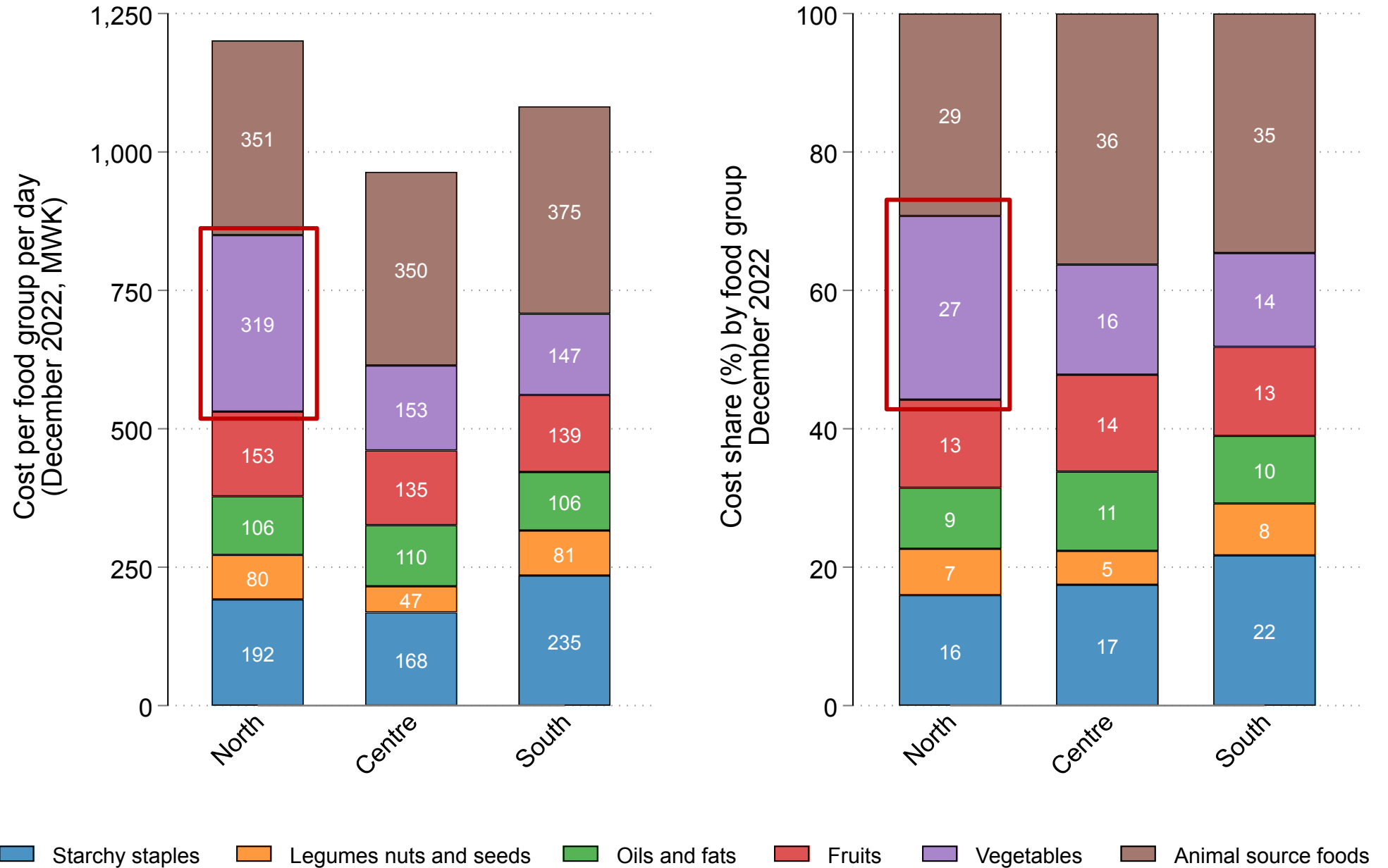


# National average cost share by food group

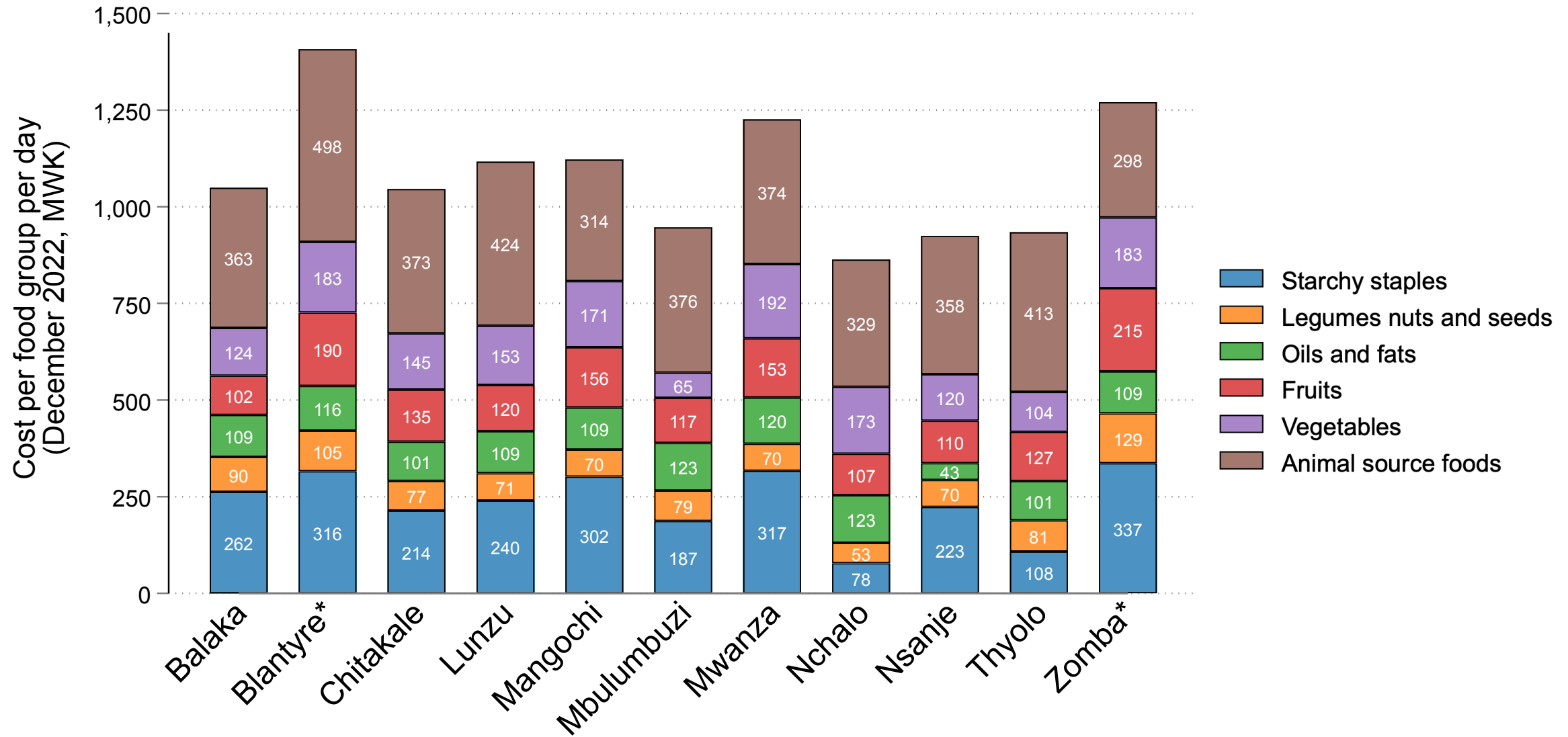
- Animal-source foods account for 35% of the total cost
- Fruits and vegetables account for another 34%
- Fruits and starchy staples are food groups are similar in terms of cost share
  - Fruits due to cost per calorie
  - Starchy staples due to calories contributed



Meeting vegetable requirement is more costly in North



# Markets results reveal more variation



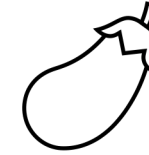
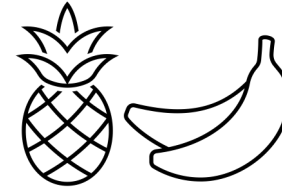
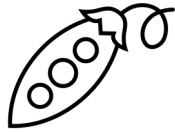
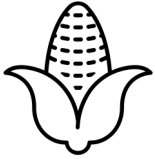
\* High and medium SES markets.

# Least-cost diets in different markets, December 2022

Food group	Balaka		Chilumba		Kasungu	
	Least-cost item(s)	CoHD (MWK/day)	Least-cost item(s)	CoHD (MWK/day)	Least-cost item(s)	CoHD (MWK/day)
Animal source foods	Milk, Ching'ombe	193	Pork	170	Milk, Ching'ombe	201
Animal source foods	Pork	170	Powdered milk	162	Pork	170
Fruits	Avocado	38	Banana	127	Banana	71
Fruits	Mango	64			Guava	70
Legumes nuts and seeds	Cowpea (khobwe)	90	Soyabeans	99	Groundnut, flour	10
Oils and fats	Cooking oil, refill	109	Cooking oil, refill	109	Cooking oil, refill	112
Starchy staples	Finger millet (mawere)	215	Finger millet (mawere)	172	Maize, grain	32
Starchy staples	Maize, grain	48	Maize, grain	48	Potato, sweet	143
Vegetables	Cabbage	37	Cabbage	73	Cabbage	35
Vegetables	Nkhwani	43	Nkhwani	60	Onion	39
Vegetables	Tanaposi (rape)	44	Onion	55	Tanaposi (rape)	53
<b>Total</b>		1049		1073		937



# Common least-cost items in each food group



## Starchy staples

- Maize grain
- Rice
- Sweet potato

## Legumes nut and seeds

- Groundnuts flour or shelled
- Soyabeans
- Pigeon pea

## Oils and fats

- Cooking oil
- Margarine

## Fruits

- Banana
- Avocado
- Mango

## Vegetables

- Tanaposi (rape)
- Cabbage
- Nkhwani

## Animal source foods

- Pork
- Liquid milk
- Usipa