Cost and Affordability of a Healthy Diet
2024 Q3: July -September

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.
- The nominal Cost of a Healthy Diet was 88.4 birr per person per day in the third quarter of 2024. The national average CoHD increased by 4.5% from the second quarter of 2024 to the third quarter of 2024, with larger increases in Gambella and Tigray and a 10.2% decline in Dire Dawa.
- Meeting recommended intakes in the dairy and meat, fish, and eggs, and fruits food groups are the most expensive, depending on the region. Unpasteurized cows' milk and eggs are among the least-expensive items in most least-cost healthy diets in these categories.

Cost of a Healthy Diet

The national average Cost of a Healthy Diet saw a slight increase (4.5%) from the second quarter of 2024 (84.7) to the third quarter of 2024, reaching 88.4 ETB.

Regional trends

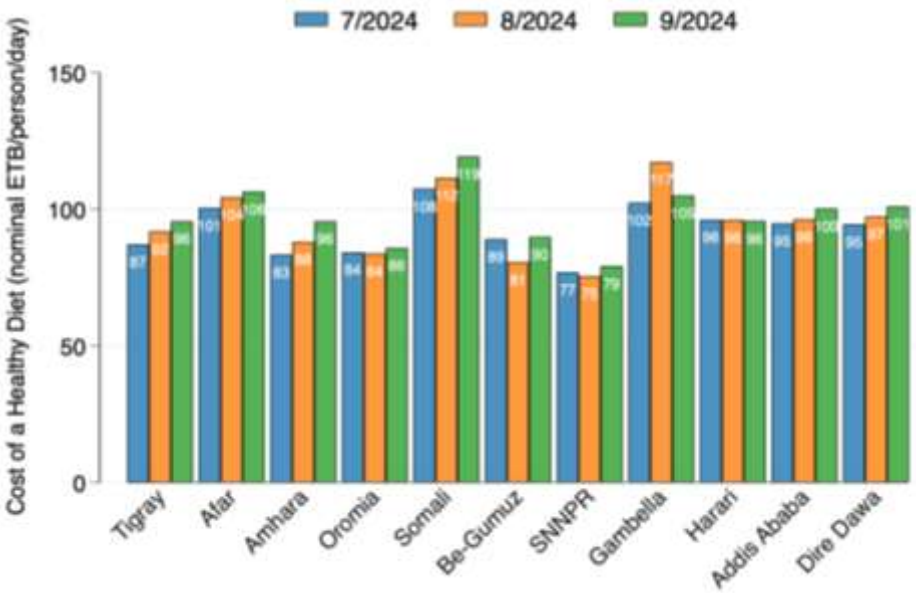
While CoHD increased in all regions during the third quarter, Dire Dawa region was a notable exception, showing a 10.2% decline from the second quarter.

The Somali region had the highest CoHD at 113 ETB in contrast to SNNPR, which had the lowest at 77 ETB. Meanwhile, Gambella (12.5%) and Tigray (12.1%) saw the largest percentage increase in CoHD.

Table 1. Cost of a Healthy Diet, by quarter

Region	Previous quarter (Q2 2024)	Current quarter	% change
Tigray	81.7	91.6	12.1
Afar	98.5	103.8	5.3
Amhara	84.3	89.2	5.8
Oromia	83.6	84.7	1.2
Somali	105.7	112.7	6.6
Ben-Gumuz	85.5	86.5	1.2
SNNPR	74.5	77.2	3.6
Gambella	94.6	106.4	12.5
Harari	91.8	96.0	4.5
Addis Ababa	91.4	97.1	6.2
Dire Dawa	108.7	97.6	-10.2
National Average	84.7	88.4	4.5

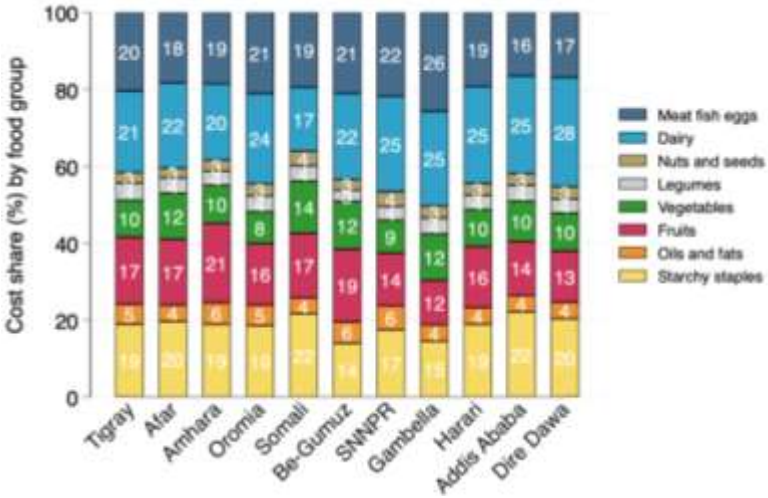
Figure 1. Diet cost per day, by region



In absolute terms, the Cost of a Healthy Diet across the three months reveals that Somali region consistently had the highest cost between 107-119 ETB per person per day. Conversely, the SNNPR region had the lowest CoHD between 75-77 ETB.

Figure 2. Cost share, by food group and region

Cost share by food group



In Figure 2, meat, fish and eggs (MFE) tends to be the costliest food groups across regions. In some regions, starchy staples rose as a share of costs, for example to 22 percent in Somali region. SNNPR and Gambella have the highest share of costs that was allocated to dairy and MFE. Fruits accounted for a greater cost share in Amhara (21%) and declined in Dire Dawa from a higher share in Q2 2024.

Table 2 shows the three most cost-effective value chains for each food group. This table shows the share of times an item is selected as least-cost, given the number of woreda-months and recommended items in each food group. For example, non-indigenous and traditional eggs were the least expensive MFE per calorie in nearly all (100%) of least-cost diets.

Avocado, banana, and fresh dates are the most commonly least-cost fruits; there is more variation here as 2 fruits are selected in each diet basket (woreda-month). The three most commonly least-cost vegetables are beetroot (28.2%), cabbage (26.3%), and Ethiopian kale (14.2%).

Unpasteurized cow milk is the least-cost dairy item in 68.1% of baskets, and eggs appear in almost all least-cost diets. Maize grain (47.8%) and white sunflower (45.7%) holds the largest share from the starchy staples and nuts and seeds categories, respectively.

Frequently selected least-cost items

Table 2. Top 3 most frequently selected least-cost items by food group (% of baskets item was included in)

Food group	Food item name	% of Q3 least-cost diets
Starchy staples	Maize	47.8
	Sorghum(red)	24.6
	Durrah (red)	6.7
Oils and fats	Imported sunflower oil	54.0
	Edible oil (Imported)	22.7
	Edible oil (local)	22.7
Fruits	Avocado	45.4
	Banana	31.1
	Dates (fresh)	17.3
Vegetables	Beet root	28.2
	Cabbage	26.3
	Ethiopian Kale	14.2
Legumes	Haricot beans, black, red or mixed	34.8
	Chickpeas	29.4
	Soya beans	9.9
Nuts and seeds	White sunflower	45.7
	Ground nuts, unshelled, not roasted	19.2
	Linseed, red	15.7
Dairy	Cow milk, unpasteurized	68.1
	Cheese	15.7
	Yoghurt (clotted)	12.1
Meat fish eggs	Egg, non-indigenous, fresh	61.0
	Egg	39.0

Note: The denominator in each % calculation is the number of woreda-months times the number of items recommended in each food group.

Access to diverse food groups

Food price data was available between 111 and 113 woredas in the third quarter of 2024, for a total of 336 woreda-months in which the Cost of a Healthy Diet was calculated. This includes a total of 113 to 115 markets out of the 120 markets (woredas) ESS collects data for. Ethiopia's dietary guidelines recommend diversity within and across 8 food groups, so each least-cost diet "basket" should include 12 food items across 8 food groups, for a total of 2,330 calories.

In 13.4% of woreda-months (45 out of 336), there was insufficient availability of healthy foods to make up a complete least-cost healthy diet. Of these, 12.5% (42 woreda-months) were missing at least one food group entirely, resulting in less than 2,330 calories per person per day; these market locations are therefore not comparable to other diet baskets and are not presented in the final results. Missing food groups were most common in SNNPR, Oromia, and Amhara.

Table 3. Count and percentage of least-cost healthy diet basket food groups with missing items

Food group	Food groups with fewer than recommended # of items	% with fewer than recommended # of items	# of food groups with no items	% with no items
Starchy staples	0	0.0	0	0.0
Oils and fats	5	1.5	5	1.5
Fruits	12	3.6	9	2.7
Vegetables	3	0.9	3	0.9
Legumes	3	0.9	3	0.9
Nuts and seeds	16	4.8	16	4.8
Dairy	4	1.2	4	1.2
Meat fish eggs	2	0.6	2	0.6
Total	45	1.7	42	1.6

Note: Most woredas represent only one market and are represented in each month of the quarter. In some woredas in Addis Ababa and Harari there are two markets per woreda. In some cases, data is not available for a woreda in a given month.

Overall, 1.6% of food groups showed a complete lack of priced items, and thus an incomplete least-cost diet basket. As in previous quarters, nuts and seeds were the most frequently missing food group, with 4.8% of all baskets lacking items in this category. Fruits were completely missing from 2.7% of baskets, but another 3.6% of baskets had only one fruit available, although two fruits are recommended. Dairy was unavailable in 1.2% of instances, and oils and fats were missing in 1.5%. Table 4 shows number of foods recommended in each food group.

Implications for policymakers

- Least-cost diets increased most in Gambella and Tigray between the second and third quarter of 2024. Somali, Gambella and Afar have the highest average CoHD. The high CoHD in Gambella and pastoral regions (Somali and Afar) suggests a greater focus is needed in those areas.
- Availability of recommended food groups improved from Q2 to Q3, but nuts and seeds, fruits, dairy, and oils and fats are still unavailable in covered markets in some woredas.
- The relatively high cost per calorie of dairy and meat, fish, and eggs across the country, and the high cost of fruits in regions like Amhara should be addressed, possibly by improved production, distribution, processing or storage of least-cost or low-cost commodities in those food groups.

Policymakers can use this information to:

- Foster collaboration with a wide range of stakeholders focused on production, distribution and storage of diverse foods in each recommended food group, to devise strategies that tackle availability and cost concerns for key value chains.
- Promote partnerships that facilitate the establishment of initiatives aimed at improving access to healthy diets and ensuring the creation of comprehensive programs that can address the broader social and economic factors that contribute to food insecurity.

Data collection and methodology

In Ethiopia, the CoHD is the minimum cost of foods needed to meet daily nutritional goals recommended in Ethiopia's food-based dietary guidelines, which categorizes foods into eight food groups (Table 4).

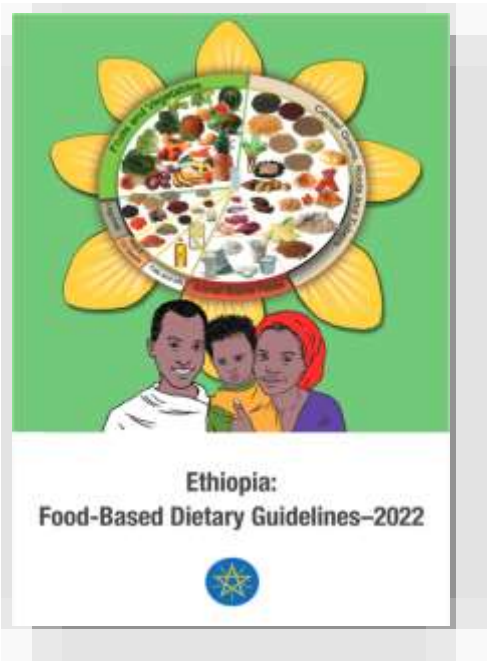


Table 4. Quantification of Ethiopia's FBDG for costing purposes

Food group	# of foods recommended	Calories (kcal/day)	Calories (%)
Starchy staples	2	1282	55
Oils and fats	1	50	2
Fruits	2	170	7
Vegetables	3	76	3
Legumes	1	188	8
Nuts and seeds	1	151	6
Dairy	1	185	8
Meat, fish, and eggs	1	98	4
Total	12	2330	100

Retail food prices

The retail food price data used in this analysis is collected by the Ethiopian Statistics Service (ESS). The total number of woredas for Consumer Price Index (CPI) in ESS is 120 but due to various reasons woredas/markets varies between 108 to 120 (ESS, 2024). The number of markets surveyed in each region is approximately proportional to the region's share of total urban population.

Support for the bulletin

This bulletin is produced by the Ethiopian Public Health Institute (EPHI) using data sourced from the Ethiopian Statistical Service (ESS).The aim of this bulletin is to inform decision-makers from government agencies, UN agencies, and NGOs to improve access to healthy diets. All interested health and other professionals can get this bulletin at the Institute website, www.ephi.gov.et.

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