Cost of a Healthy Diet
Frequently Asked Questions

What is the Cost of a Healthy Diet?

The Cost of a Healthy Diet (CoHD) represents the daily cost of the least expensive combination of foods that meets the daily requirements for a healthy diet for an adult. It is the most affordable diet that meets healthy diet guidelines, given the market prices of locally available foods. The Cost of a Healthy Diet is a lower-bound estimate of what it costs to meet dietary guidelines. Considering preferences and convenience will add to the cost.

What is a healthy diet?

A healthy diet is one that meets the nutritional standards established by Ethiopian food-based dietary guidelines (FBDGs), aiming to achieve adequate nutrient consumption and prevent diet-related diseases. The nutritional standards generally include that food items must be consumed from several food groups and in specific proportions.

Which dietary guidelines are used to calculate the Cost of a Healthy Diet for Ethiopia?

The Ethiopian Public Health Institute developed the Ethiopian FBDGs in collaboration with the Ministry of Agriculture and the Ministry of Education. The stated goal of the FBDG is to improve the health status of the public by providing evidence-based information. The guidelines contain 11 key messages to help the public in making healthier food choices and maintaining a healthy lifestyle. The guidelines were quantified for monitoring the Cost of a Healthy Diet as part of the FBDG implementation. Quantification was done using reference foods for each food group. The quantified guideline for calculating CoHD comprises 12 items across eight food groups, as detailed in Table 1.

Table 1. Quantification of Ethiopian food-based dietary guidelines for monitoring the cost and composition of healthy diets

	Food group recommendations		Example items to allow substitution within energy balance					
Food Groups	Number of items needed per day from each food group	Recommended intake for 19-64 years (intermittent fasting)	Reference foods for food group quantification	Energy density of example item as purchased (kcal/g)	Mean amount recommended of reference food (g/day)	Energy per item as purchased (kcal/day)	Proportion of total calories	Sum total by food group for CoHD scaled to 2330 (kcal/day)
Grains, white roots, and tubers	2	600 (500-800)	White rice, dry	3.60	650	845	0.55	1282
			Injera	1.30			0.00	
Pulses	1	90 (90-120)	Bean	3.41	120	124	0.08	188
			Cooked shiro	1.03			0.00	
Nuts and seeds	1	15 (10–20)	Peanut	5.84	18	99	0.06	151
Milk and dairy foods	1	250 (0–400)	Fluid whole milk	0.61	200	122	0.08	185
Meat, Fish and Eggs	1	40 (0-90)	Egg	1.43	45	64	0.04	98
Fruits	2	150 (100-200)	Banana or mango	0.75	150	112	0.07	170
Vegetables	3	130 (100–150)	Kale (Ethiopian)	0.40	125	50	0.03	76
Fats and oils	1	15 (10–17)	Oil	8.84	14	119	0.08	181
All food groups	**12**	**1265 (930-1538)**				**1536**	**1.00**	**2330**

Note: *Column J shows scaled energy in kcals/day to meet the target 2330 kcal/day. This energy is the energy need of an average individual in the population globally (Bai, Herforth, & Masters, 2022)*

What is a food group?

A food group refers to a group of foods that are similar to one another. The foods in a food group generally contain similar nutrients in similar amounts. The Cost of a Healthy Diet uses eight (8) recommended food groups from the Ethiopian food-based dietary guidelines. These food groups are 1) starchy staples; 2) oils and fats; 3) fruits; 4) vegetables; 5) legumes; 6) nuts and seeds; 7) dairy; and 8) meat, fish, and eggs.

Where are the food prices used to calculate the Cost of a Healthy Diet obtained from?

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 vary between 108 and 120 (ESS, 2024). Data is collected every month. The number of markets surveyed in each region is approximately proportional to the region's share of the total urban population. The Cost of a Healthy Diet is calculated for each market and month, and regional averages are reported. EPHI plans to report the Cost of a Healthy Diet quarterly, thereby reporting the cost for three months at a time. In the bulletins, some costs are reported as an average for the region and quarter, while others are reported monthly for each area. Zonal or woreda level averages, or otherwise more detailed results, are available upon request.

How is the Cost of a Healthy Diet calculated?

The least-cost food items and their cost depend on time and place. Least-cost items are not predetermined or fixed. The food groups and the calories required from each food group remain constant. Still, the cheapest items in each food group are identified based on their price per calorie in each location and period in the dataset. The Cost of a Healthy Diet is the sum of the daily costs of the least-cost items in each food group to meet the daily calorie requirement of 2,330 calories.

This cost is calculated using the retail prices of locally available food items. We convert each item's price per unit to a price per calorie. The cost of each food per day equals the price per calorie multiplied by the number of calories required per food group per day. The least expensive items are identified at each time and place, so in any market or month, a different combination of 12 items may be identified as the least costly. This means that fluctuations in price resulting from changing seasons, different geographies, and other factors are taken into account in the calculation. A detailed description of the methods and tools used to calculate the Cost of a Healthy Diet can be found here.

How can we use the Cost of a Healthy Diet indicator?

The Cost of a Healthy Diet is an indicator of physical and economic access to healthy diets. It is helpful in identifying where and when healthy diets are more expensive, allowing for the development of appropriate interventions. If the costs of even the least-expensive items are high, interventions to lower the cost to a reasonable level could include production, distribution, or preservation interventions. When we have information on incomes, we can also assess the affordability of healthy diets. Where least-cost diets are low, but households cannot afford them, social protection and earnings-focused policies can be used to increase incomes. When people can afford a healthy diet but do not consume one, policies can focus on behavior change, providing information, and altering preferences through targeted marketing. It is also essential to consider other costs, like meal preparation, when targeting interventions to those who can afford but do not consume healthy diets.

What decisions can my household and I make from the Cost of a Healthy Diet bulletin?

The Cost of a Healthy Diet was developed as a tool for policymaking and planning, rather than as a tool to prescribe individual diets. Food-based dietary guidelines serve to help individuals identify and plan a healthy diet. Ultimately, where even the most affordable healthy diets are too expensive or not easily accessible, improvements in food systems and social assistance are necessary.

Are the foods selected in the Cost of a Healthy Diet a recommendation for the specific food items I should consume to achieve a healthy diet?

The food-based dietary guidelines are the document to consult for guidance on how to consume a healthy diet. The Cost of a Healthy Diet (CoHD) is an indicator of economic access to healthy diets, estimating the least expensive way to meet dietary guidelines at each time and place. Dietary guidelines themselves recommend food groups, and a variety of food items fall into the same food group. A healthy diet refers to the food groups consumed in the right proportions to support good nutrition and health, not to specific items. The fact that the food items in CoHD vary at each time and place where they are measured is similar to how a person consuming a healthy diet might eat different food items every day.

Does the Cost of a Healthy Diet consider traditional Ethiopian diets?

Yes, the Cost of a Healthy Diet is calculated using locally available food items from selected markets in every region of the country. The food items are chosen based on their consumption in the population, as determined by household consumption and expenditure surveys. Items that are commonly consumed are then selected for price monitoring by ESS. Therefore, the foods monitored reflect what Ethiopians eat. The Ethiopian FBDGs also consider the food habits of the population. Some of the frequently selected least-cost items include local staples like teff, durrah, and furno duket; fruits like bananas, avocados, and dates; and vegetables like cabbage, pumpkin, and Ethiopian kale.

What is the relationship between food inflation and the Cost of a Healthy Diet?

It is expected that the prices of all goods and services, including food, will rise over time. Inflation monitors the rate at which this happens. Food prices and the Cost of a Healthy Diet are both expected to rise over time, and there is a positive relationship between food inflation and the Cost of a Healthy Diet. However, the food inflation index includes a larger number of items than the Cost of a Healthy Diet, often including more processed items, as the least-cost items are usually relatively unprocessed foods. If the Cost of a Healthy Diet is increasing faster than food inflation, that suggests that at least some of the prices of least-cost food are rising more quickly than food prices more generally.

Does the Cost of a Healthy Diet consider nutrient needs?

The Cost of a Healthy Diet is based on food-based dietary guidelines, which are designed to help consumers meet their nutrient needs. While macronutrient and micronutrient needs are not explicitly part of the Cost of a Healthy Diet calculation, research has shown that least-cost diets selected meet nutrient needs on average. When using the Healthy Diet Basket, the dietary standard for monitoring CoHD across countries, macronutrients fell within the acceptable macronutrient distribution ranges, and the average mean adequacy ratio (MAR) of 15 micronutrients and protein was 94%, close to the average MAR of 95.0% across FBDG (Herforth et al. 2025). Specific micronutrient needs may not be met within each least-cost diet, but this is reasonable and realistic, given that a person does not need to meet all their nutrient needs each day, but on average over the short term.

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What is the relationship between the cost of a healthy diet and unhealthy, less nutritious food?

The Cost of a Healthy Diet can help us identify where and when less nutritious items are displacing low-cost healthy foods. This occurs in households that can afford to consume a healthy diet but do not do so. To assess this, we need information on diets, which can be obtained from various sources. In these cases, interventions may focus more on demand for healthy foods, assessing marketing, availability, convenience, and preferences for healthy versus less healthy options. Interventions may aim to limit the consumption of unhealthy foods that displace low-cost, affordable options and promote or incentivize healthy alternatives.

What is the role of local food production and markets in influencing CoHD in Ethiopia?

Where the prices of the lowest-cost healthy foods are too high or unavailable, we can improve the supply of those food items through increased local production, trade, or other market initiatives, to lower costs to a more reasonable frontier for people to afford healthy diets. Addressing preservation, distribution, and storage of foods may be important for some value chains. More research is needed on when and where food prices are unreasonably high. Interventions related to food prices should consider their effect on both producers and consumers.

Which agencies are responsible for the Cost of a Healthy Diet in Ethiopia?

The Cost of a Healthy Diet bulletin is produced in collaboration between the Ethiopian Public Health Institute (EPHI) and the Ethiopian Statistical Service (ESS) and is published quarterly on the EPHI website (www.ephi.gov.et) and on the National Information Platform for Nutrition (NiPN) website (https://www.nipn.ephi.gov.et). For questions or comments, please contact the Directorate of Nutrition, Environmental Health, and NCDs Research at dr.masresha.tessema@gmail.com or dacseleassie@gmail.com.

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