

Cost of a Healthy Diet in Ghana

2024 Annual Report

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Ministry of Food and Agriculture



MINISTRY OF
FOOD & AGRICULTURE
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Highlights

- The Cost of a Healthy Diet (CoHD) is referred to as the minimum cost of foods needed to meet daily nutritional goals recommended in Ghana's food-based dietary guidelines. It is used as a measure of physical and economic access to healthy diets.
- The national average CoHD for 2024 was Gh¢12.29, up 14.8% from 2023. The highest CoHD was recorded in the Western region, at Gh¢17.75 during the 2024 reference period.
- Vegetables and animal source foods take up the largest share of the total diet cost, accounting for 31% and 27% of the total CoHD respectively.

Data Collection and Methodology

In Ghana, the CoHD is the minimum cost of foods needed to meet daily nutritional goals recommended in Ghana's food-based dietary guidelines, which categorizes food into six groups namely starchy staples, legumes, nuts and seeds, vegetables, fruits, oils and fats, and animal source foods.

The retail price data of agricultural produce used for this analysis was collected by the Statistics, Research and Information Directorate (SRID) of the Ministry of Food and Agriculture (MoFA). The data was obtained from 190 markets from 15 regions of Ghana. The data collection was done on weekly basis, and regional averages were aggregated at the end of each month. Central region is excluded for this bulletin due to lack of data. The total number of food commodities monitored by MoFA is 76 as indicated in Table 1.

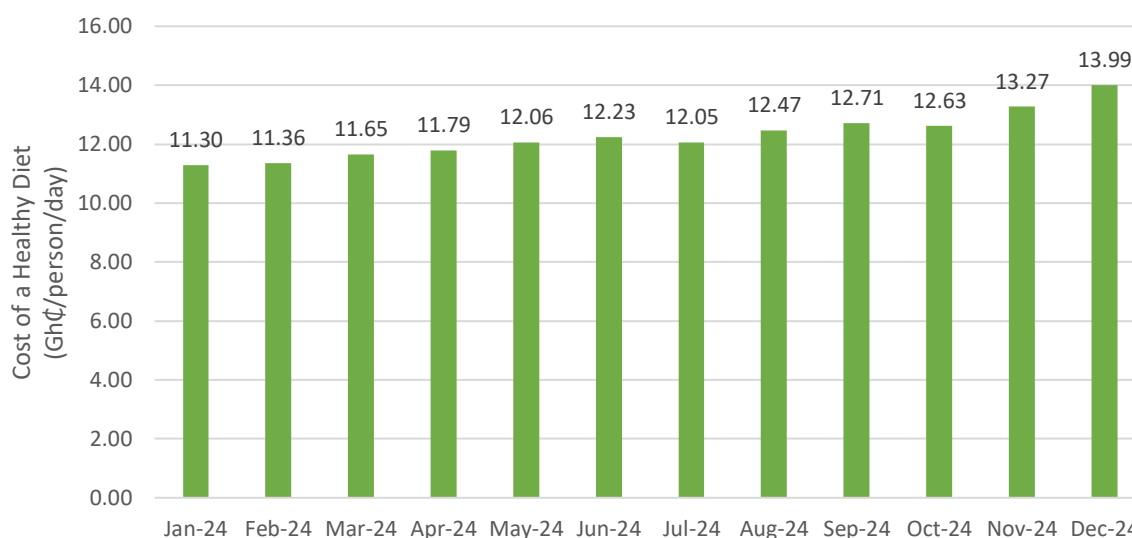
Table 1. Quantified food-based dietary guidelines for Ghana

Food Group	No. of Foods Recommended	Calories Needed (kcal/day)	Share of calories (%)	No. of Items in MoFA Food List
Starchy staples	2	1191	51	21
Oils and fats	1	50	2	3
Vegetables	3	109	5	16
Fruits	2	147	6	10
Legumes nuts and seeds	2	591	25	11
Animal source foods	2	243	10	15
Total	12	2,330	100	76

Cost of a Healthy Diet

The Cost of Healthy Diet (CoHD) is the cost of the least expensive combination of food that meets the healthy diet recommendation. The national average CoHD per person per day for 2024 was Gh¢12.29, rising by 24% within the year from Gh¢11.3 in January to Gh¢13.99 in December (Figure 1).

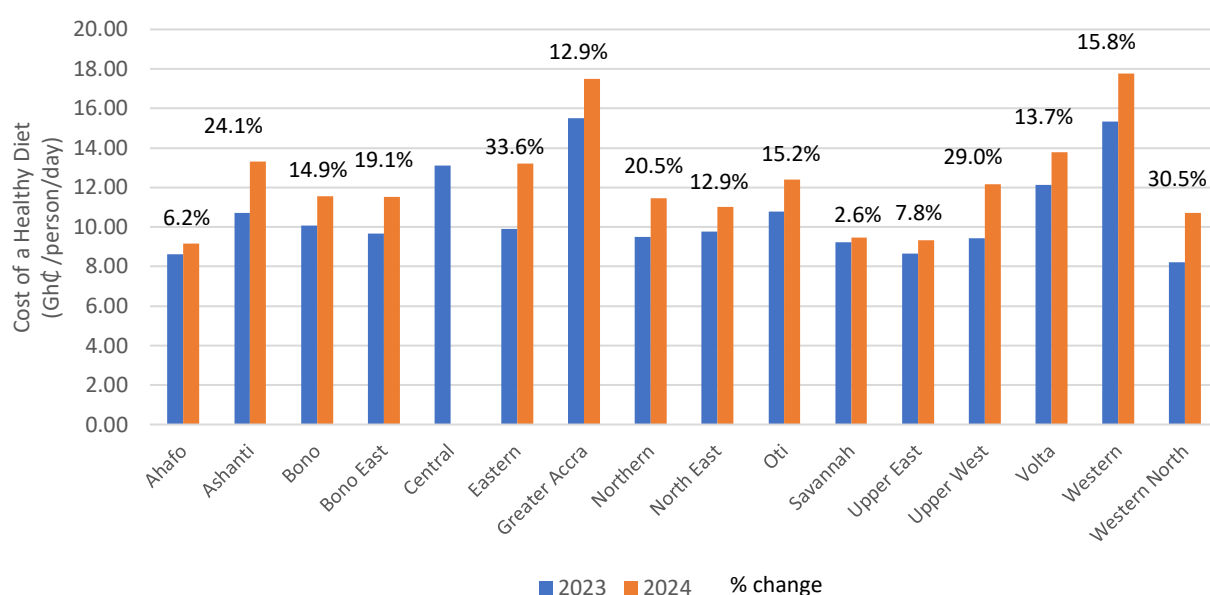
Figure 1. Monthly Cost of a Healthy Diet



Regional Average Cost of a Healthy Diet

The 2024 data on the regional average CoHD in Ghana reveals a general upward trend compared with 2023, with the national average increasing from Gh¢10.70 in 2023 to Gh¢12.29 in 2024, representing a 14.8% rise. Comparative analysis of the regional breakdown also revealed that Western region recorded the highest CoHD at Gh¢17.75 and Ahafo region recorded the lowest CoHD at Gh¢9.17 (Figure 2). The most significant increases were recorded in the Eastern (33.6%), Western North (30.5%), and Upper West (29.0%) regions. On the other hand, the Savannah Region experienced the least increase (2.6%). No data was reported for the Central region in 2024. Urban and high-income regions such as Western, Greater Accra, and Ashanti regions recorded very high CoHD in 2024 (Ghc17.75, Ghc17.50 and Ghc13.31, respectively).

Figure 2. Average Cost of a Healthy Diet and year-on-year change by region



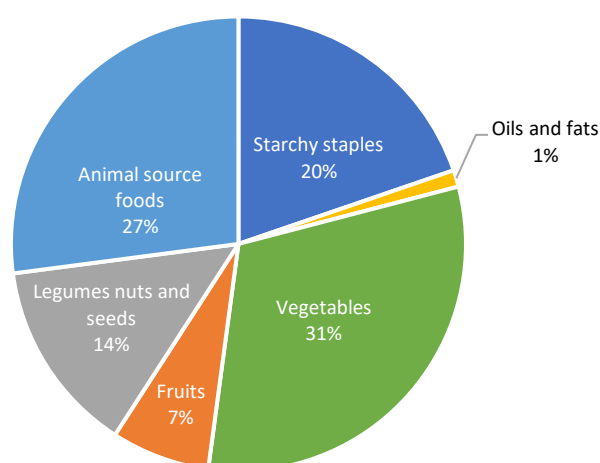
Cost Share by Food Group

The cost share by food group seeks to ascertain the average cost of each food group and to determine which food group cost the highest. The cost share per food group and the shared calories can vary depending on various factors such as geographical location, season, and market conditions.

As seen in figure 3, vegetables are the food group with the highest daily cost, representing 31% of the total CoHD, despite making up only 5% of the recommended calorie share (see Table 1). Animal-source foods were the second most expensive food group on average, accounting for 27% of the total diet cost and only 10% of the recommended calorie share.

Fruits registered only 7% of the daily cost, and starchy staples which has the highest share of recommended calories represents only 20% of the cost. This trend was similar for all 15 regions.

Figure 3: National average food group cost shares

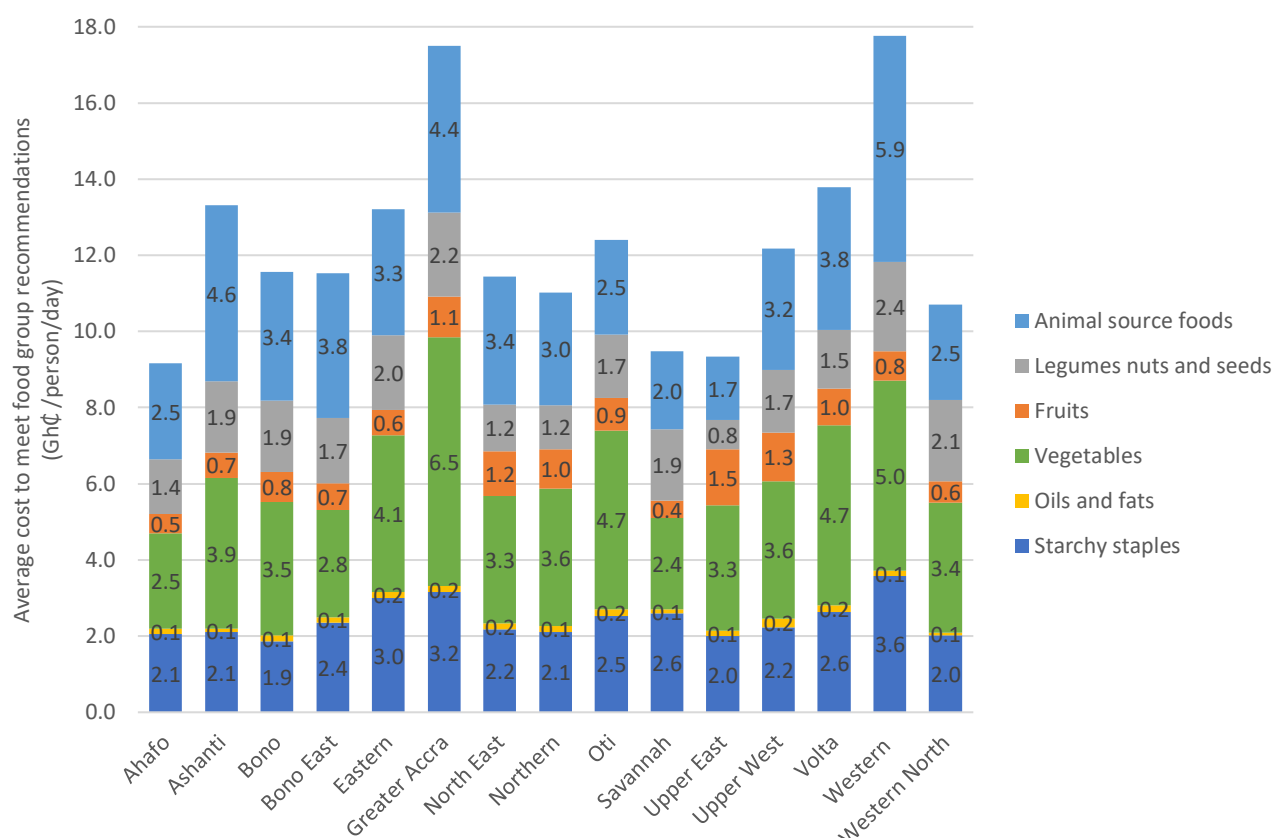


Regional Distribution of Cost Share by Food Group

On regional basis, Greater Accra reported the highest daily cost of vegetables at an average cost of Gh¢6.5, whilst Savannah region recorded the least expensive daily cost of vegetables (Gh¢2.4).

For legumes, nuts and seeds, Western region had the highest daily cost of Gh¢2.4. Also, comparative analysis on fruits, revealed that Savannah region, recorded the least daily cost of Gh¢0.4 whiles Upper East, recorded the highest daily cost of Gh¢1.5. For animal source foods, Western region recorded the highest daily cost of Gh¢5.9 whilst Upper East region recorded the least daily cost of Gh¢1.7.

Figure 4. Food group cost, by region



Frequently Selected Commodities in Each Food Group

The Cost of a Healthy Diet can be determined based on the price of each food item at each time and place, hence the least-cost items selected may vary across regions and months of the year. Within the vegetable food group, amaranthus leaves (alefu) recorded the highest percentage of least cost vegetable that was selected in the year under review (2024) at 28%, followed by nkontomire which was recorded as least-cost vegetable in 19% of the selections.

For starchy staples, white maize was frequently selected at 38%, followed by dried cassava chips at 29%. Palm oil was the most frequently selected type of oil (53%) while coconut oil was the least selected (17%). Among legumes, nuts and seeds, soybean was in 38% of least-cost diets. Melon seeds (agushi) was ranked as least commonly selected at 2%.

Coconut was the most frequently selected in the fruit category at 43% and avocado was the second frequently selected at 28%. Under the animal source food, salted dried tilapia (koobi) was recorded as the most selected animal source at 23%, followed by Kako at 21 percent. However, snail was the least selected animal source (1%).

Table 2. Frequently selected least-cost items

Food Group	Commodity	No. of least-cost diets that include food as a least-cost item	% of least-cost diets that include food as a least-cost item
Starchy staples	Maize (white)	136	38%
	Dried cassava chips (kokonte)	106	29%
	Maize (yellow)	43	12%
Oils and fats	Palm oil	96	53%
	Groundnut oil	54	30%
	Coconut oil	30	17%
Fruits	Coconut (fresh)	155	43%
	Avocado pear	102	28%
	Pawpaw	27	8%
Vegetables	Alefu (amaranthus)	150	28%
	Nkontomire	104	19%
	Onion	79	15%
Legumes nuts and seeds	Soya bean	137	38%
	Unshelled groundnut	81	23%
	Groundnut (red)	74	21%
Animal source foods	Salted dried tilapia (koobi)	81	23%
	Kako	74	21%
	Anchovy	48	13%

Notes: Each food item selection is for every unique combination of month and region. The denominator in each % calculation is the number of region-month combinations times the number of items recommended in each food group. For starchy staples, the denominator is 360 (=15 regions x 12months x 2 starchy staples per basket). Only the top three frequently selected items within each food group are shown.

Availability

Most of the food items were available in almost all regions during the year, except for a few that were missing during some months. Fresh cow milk was only available in 44.3% (85 of 192) of region-month combinations, while snail and melon seed powder (neri) were only available in 50% (96 of 192) of the region-month combination during the year under review (2024). These items are rarely selected as least cost so their unavailability is unlikely to affect access to healthy diets for the most vulnerable.

Factors that affect demand includes cultural preferences and tastes as well as the availability and unavailability of specific commodities in certain regions. For example, there is less motivation to distribute snails in certain regions where they are viewed as a taboo to consume it.

Relative Changes in the Consumer Price Indices and CoHD

The Consumer Price Index (CPI) is a tool used to measure inflation, which is the average change over time in the prices of goods and services that are consumed by people for their daily needs. Figures 5 and 6 compare the national general CPI and the food CPI calculated by the Ghana Statistical Service, with the Cost of a Healthy Diet. Figure 5 compares the general CPI and the food CPI (indices with 2021 as the base year) with the nominal Gh¢ value of the Cost of a Healthy Diet, to understand whether the least-cost items needed for a healthy diet are rising in cost at a rate like that of the rest of the goods and services in Ghana. Food prices and the CoHD are both expected to rise over time; here we focus on the relative rate of that inflation.

The food CPI includes a larger number of items, and more packaged and value-added items than the CoHD, as least-cost items are often relatively unprocessed foods. Over time, all three indicators - the CoHD, general CPI, and food CPI have shown a steady increase. However, figure 6 shows the relative

change over the past year. Although all three indicators continued to show a steady increase, the rate of increase of the CoHD was lower than that of the CPI.

Figure 5: Relative Changes in CPI and CoHD (Value)

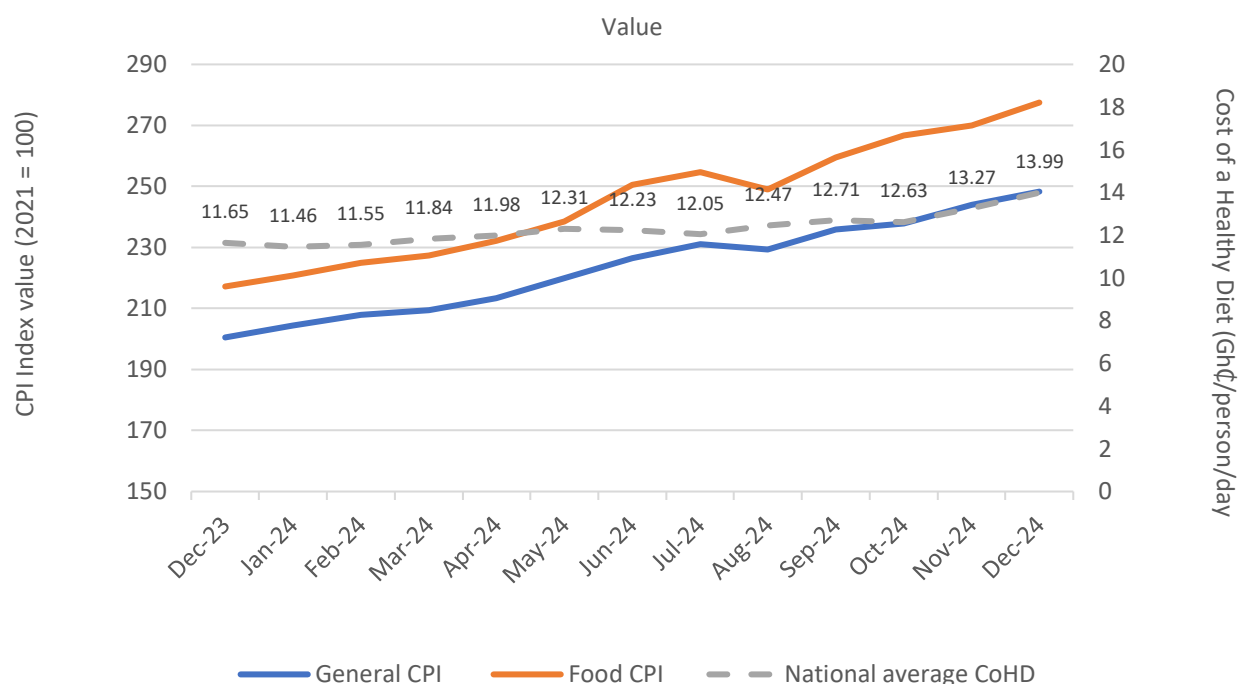
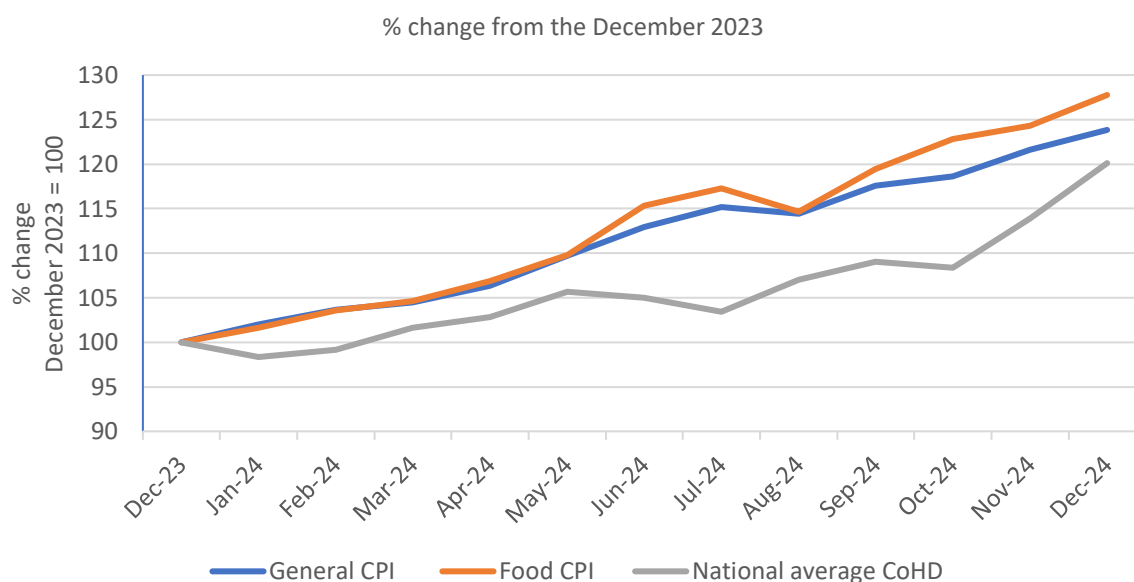


Figure 6: Relative Changes in CPI and CoHD (%)



Policy Implications

The Cost of a Healthy Diet (CoHD) affects an individual's ability to have access to quality food. Analysing the CoHD have positive implications for addressing food security challenges in Ghana. Here are some potential strategies based on policy.

The Ministry of Food and Agriculture's goals are targeted to mitigate the high cost of healthy diets and to ensure that quality diet is accessible to all. This cannot be effectively achieved without estimating the CoHD. Among the objectives of the National Medium-Term Development Policy Framework (NMTDPF) that are relevant to the ministry are:

- Improve public-private investments in the agricultural sector,
- Modernize and enhance agricultural production systems,
- Improve post-harvest losses and promote agriculture as a viable business among the youth,
- and promote livestock and poultry development.

Again, one way to improve food systems is by allocating resources to commodities for agricultural production and implementing trade and other policy interventions. Strengthening programs like the Outgrower and Value Chain Fund (OVCF) is essential for providing medium to long-term financing to agricultural value chain players, including commercial farmers. Currently, OVCF focus has been on rubber, oil palm, rice, pineapple, maize-soya-sorghum, cassava-gari, cocoa, and poultry-maize schemes. Extending funding to vegetables such as tomato, onion and pepper will bring some relief as these vegetables are important ingredients in most diets in Ghana. This support can facilitate investment in productivity-enhancing measures and infrastructure, ultimately improving food availability.

It was also intriguing to realise that regions such as North East and Oti, identified as having the highest incidence of multidimensional poverty according to the Ghana Statistical Services (GSS) 4th Quarter Multidimensional Poverty Report (June 2024) recorded relatively higher percentage increases in CoHD this year, when compared to the increase recorded for Greater Accra. This trend points to the growing inequalities in food affordability and may reflect challenges such as weaker food distribution systems and food inflationary pressures in some rural regions.

It is essential to comprehend the minimum income required by households to afford a healthy diet. This knowledge is crucial for developing effective social protection and transfer programs such as Livelihood Empowerment Against Poverty (LEAP) for vulnerable populations. Policymakers can utilize this pertinent data to establish appropriate income thresholds such as setting the minimum wage and target interventions where they are most needed.

Support for the bulletin

This bulletin is produced by SRID-MoFA, with technical support from Food Prices for Nutrition project at Tufts University. For questions or comments, please email james.ayithey@mofa.gov.gh or eunice.arhin@mofa.gov.gh.