Cost and affordability of nutritious diets bulletin

Issue 3— December 2022

The case of Northern regions, Ethiopia

Key messages

The cost of both a nutritious and energy-only diet has been sharply increasing in Amhara and Afar regions from December 2020 to July 2021.
A nutritious diet would cost almost 5 times more than an energy only diet.

A diet meeting nutrient needs is most expensive for adolescent female and pregnant and lactating women in northern regions.

In the Northern regions there is high prevalence of households that would be unable to afford a nutritious diet (>75%).

Figure 1: Regions of focus for bulletin 3 in Ethiopia

The war and instability in the Northern region negatively impacted the economic access to Food

Since November 2020, progressive violence, and insecurity in Northern region, have resulted in reduced/no access to basic and humanitarian services. Severe food insecurity has resulted from displacement, movement restrictions, supply constraints, loss of harvest and livelihoods, and disrupted markets. The escalation of the conflict occurred at the peak of the main agricultural season (Meher) harvest period hindering harvesting in some areas and therefore further compromising an already fragile food security situation

1 FEWS NET Food Security Outlook Ethiopia—Oct 2020

The cost of both nutritious diet and energy only diet increased sharply in 2021

The cost of nutritious and energy-only diets steadily increased between August 2020 and December 2020 and sharply increased between December 2020 and July 2021 in the regions of Afar and Amhara. Although retail price data for Tigray was not available after October 2020, the data from August to October 2020 show an increase in cost. In the recent WFP price monitoring report, except for wheat flour, prices of key cereals and grains increased because of limited market supply.

From August 2020 to July 2021, the cost of nutritious diet rose by 40% and 33% in the regions of Afar and Amhara, respectively. In the northern regions, a diet meeting nutrient needs (macro and micro) cost between 4.3 and 5.7 times more than a diet that only meets energy needs.

What's in a nutritious diet?

The Cost of the Diet software used in this analysis calculates the lowest cost of a diet that meets energy, protein, fat and micronutrient requirements based on locally available foods.

Foods that make up this diet therefore vary depending on what is available on the market and the price, but the resulting modelled diet tends to include a range of food groups including animal source foods (meat, eggs and dairy), fruit and vegetables.
By contrast, an energy only diet meets only calorie (and not vitamin and mineral) needs. It often consists of one staple, such as teff, wheat, maize or sorghum, in enough

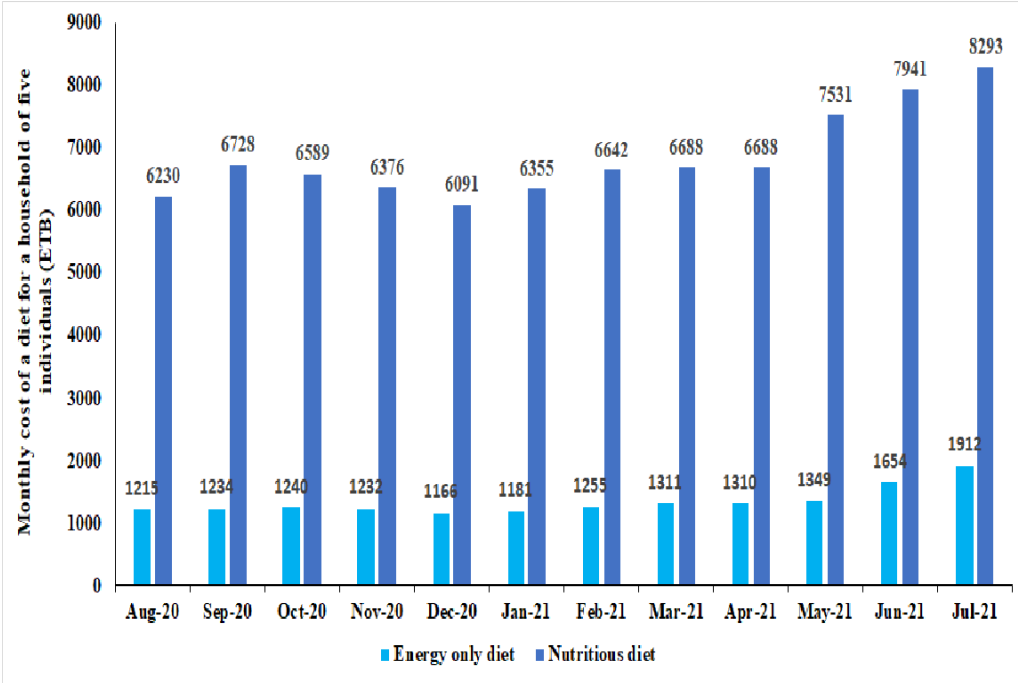

Figure 2: Trend in monthly cost of a nutritious and energy-only diet in Amhara region

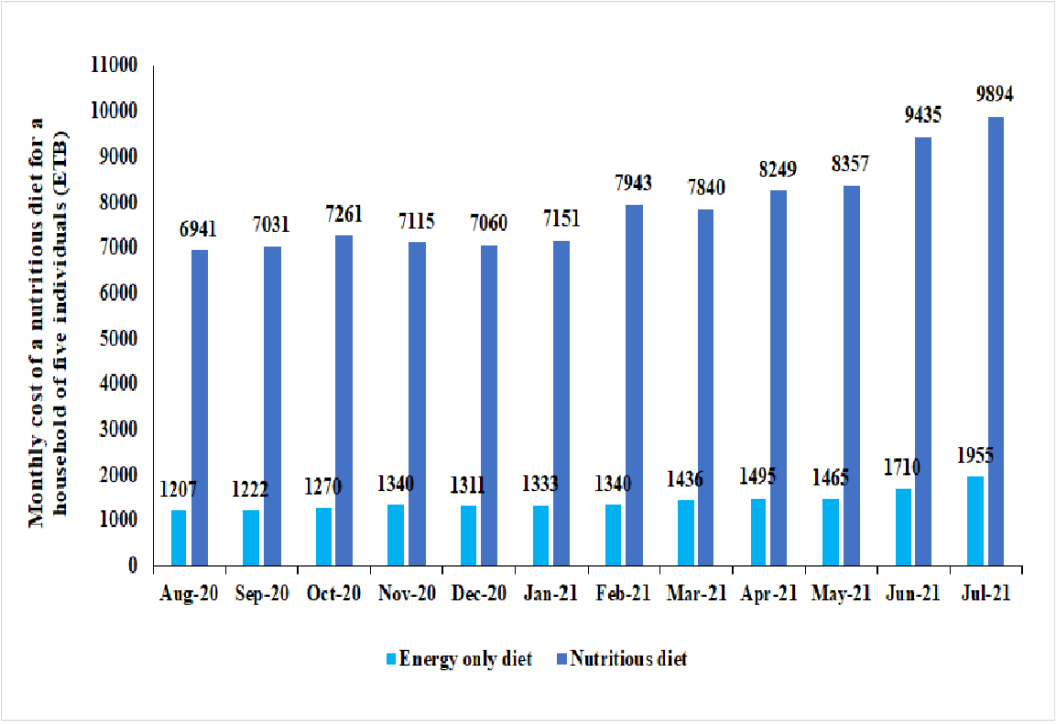

Figure 3: Trend in monthly cost of nutritious and energy-only diet in Afar region

2 Cost of the Diet: EPHI/WFP own calculations. Calculated using CotD linear programming tool, based on national Consumer Price Index (CPI) prices August 2020 to July 2021 for Amhara and Afar, August to October 2020 for Tigray from the Central Statistical Agency (CSA), calculates the lowest cost locally available diet that would meet needs of energy, protein and 13 micronutrients, when adjusted to incorporate local staple foods (Food list Afar=47, Amhara=33, Tigray=37). This is an optimized diet and does not reflect actual consumption.

Most households would be unable to afford a nutritious diet

As highlighted in previous Bulletin issues and in the national Fill the Nutrient Gap assessment (2020) for Ethiopia, the cost of a nutritious diet is found to be higher for pregnant and lactating women (PLW) and adolescent girls compared with adult males and younger children.

In Amhara, the cost of a nutritious diet was estimated to be highest for pregnant and lactating women (82birr/day) (Figure 4). In Afar and Tigray regions, the cost of the nutritious diet for adolescent girls would be most expensive followed by pregnant and lactating women (analysis not shown). These groups are therefore most at risk of inadequate nutrient intake.

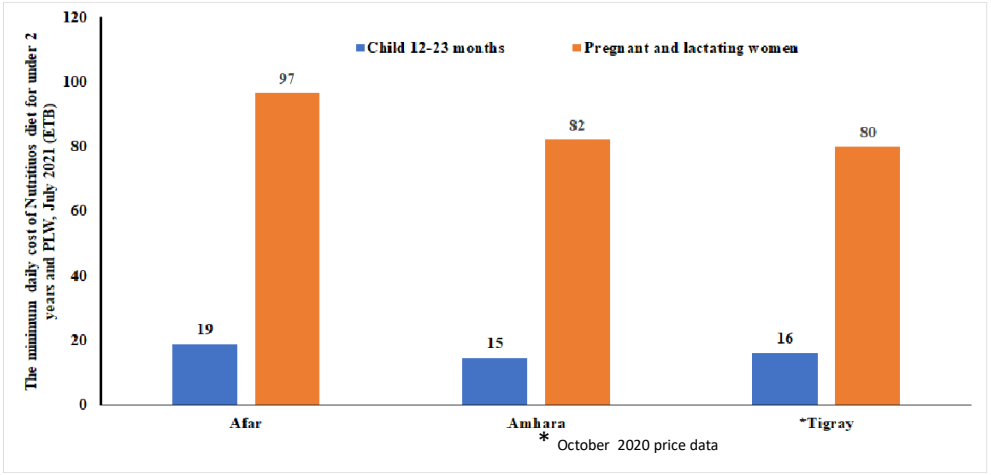

Figure 4: The daily minimum cost of a nutritious diet in children aged 12-23 months and PLW

Affordability of a nutritious diet in Northern regions

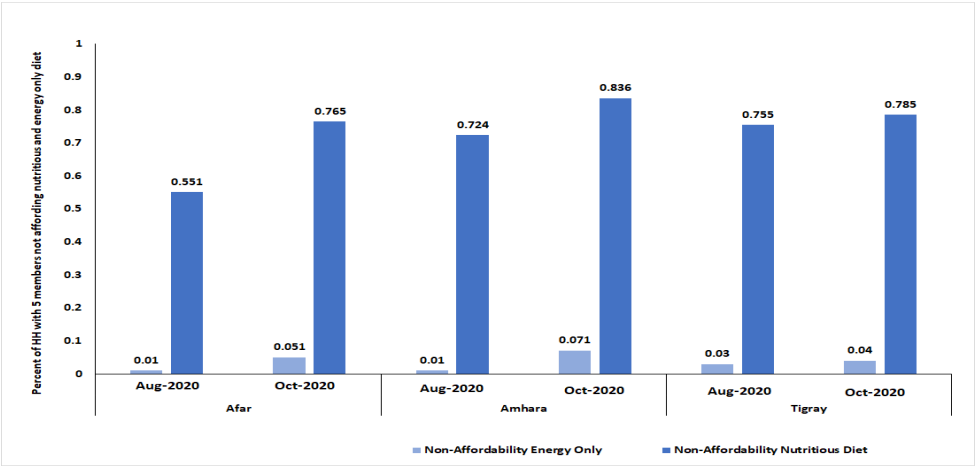

Figure 5: Percentage of HHs affording a nutritious and energy only diet in Northern regions

Based on the cost of the diet estimates and household food expenditure data (ESS 2018-2019), the analysis estimated that while less than 10% of households would be unable to afford an energy-sufficient diet, more than 75% of households would be unable to afford the foods required to provide a nutritious diet for all household members.

3 Affordability analysis estimated based on CotD results and household food expenditure data from Ethiopian Socioeconomic Survey of 2015-16, adjusted for inflation to October 2020.
4 70% of the total PSNP transfer value assumed to be available for food purchasing.

Note on Tigray region

The study used regional CPI data (August 2020-July 2021) to analyse cost and affordability of nutritious diet for Afar, Tigray and Amhara regions. For Tigray, due to incomplete data available, only three months data (Aug-Oct 2020) has been considered in the analysis.

About this bulletin

This bulletin is produced by EPHI with the support of WFP and reports on the affordability of nutritious diets in Ethiopia based on results from WFP's Fill the Nutrient Gap analysis. It aims to provide relevant, up-to-date data and insights to inform multisectoral interventions such as supplementation, fortification, nutrient-dense food baskets and nutrition-sensitive programming. See previous issues here.

About Fill the Nutrient Gap and Cost of the Diet

Fill the Nutrient Gap (FNG) is a nutrition situation analysis and multi-sectoral decision-making tool created by WFP and partners. FNG combines secondary data review with a Cost of the Diet (CotD) analysis to identify context-specific entry-points for food, health and social protection systems to improve nutrition through increasing availability, access, affordability and choice of nutritious foods.

The CotD tool was developed by Save the Children UK and uses linear optimization to estimate the lowest cost of a diet that meets energy, protein, fat and micronutrient requirements. Affordability is estimated using percentiles of total food expenditure and measured against the cost of the energy only and the nutritious diet cost at zonal level and regional levels.

For more information on this bulletin, please contact the Food Science and Nutrition Research Directorate of EPHI at **anetbr@gmail.com**.