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"Global food security and food safety:
The role of universities"

Dietary Gaps in Ethiopia and Nigeria

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Abstract

Co-existence of undernutrition along with micronutrient deficiencies, overweight and obesity and non-communicable diseases is a growing challenge in low and middle income countries. A food systems approach will help to pinpoint the problem areas in the food system and could aid in the design of interventions. In this context, we investigate dietary gaps - difference between intake and the target amounts - on the level of food group, dietary diversity, and nutrient intake. We use the latest rounds of Living Standard Measurement Surveys (2015/16 LSMS-ISA) from Ethiopia and Nigeria. We estimate nutrient and dietary gaps for the individual from household data, in terms of adult female equivalent (AFE) which proxies intrahousehold distribution of food. Dietary gaps are assessed based on food groups which make up "healthy diets," according to the Dietary Approaches to Stop Hypertension (DASH) and Global Burden of Disease (GBD) dietary recommendations. We choose the DASH and GBD because available evidence shows these dietary recommendations are designed to prevent diet-related chronic diseases and are globally applicable and not country specific. We conduct nutrient intake gap analysis using the Estimated Average Requirements (EARs) based on European Food Safety Authority (EFSA) recommendations. Further, we assess the dietary diversity using the Household Dietary Diversity Score (HDDS), a composite measure and proxies for household's average food access. Preliminary HDDS results show that: people in the higher income quintile had access to more diverse food in both Ethiopia and Nigeria; and, consumption of fruits, meat, and eggs show the highest difference between people in the top and bottom income quintiles, in comparison to other food groups in the HDDS. Data analysis is ongoing, but when completed we will map dietary profiles for each country by different settings, including location of residence (rural-urban), sub-national and national level, and across income quintiles. We will present shares of households who deviate from the recommended dietary thresholds (i.e. both excesses and shortfalls), and the magnitude by which they are off the recommended intake. Further, the adequacy of nutrient intake will be shown.

Keywords: Caloric intake, dietary diversity, dietary gap, Ethiopia, micronutrients, Nigeria

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