

## Dietary Transitions in Ghanaian Cities

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### Key Takeaways

- Food choice decision-making among study participants was primarily driven by food safety concerns such as food adulteration by vendors and neighborhood environmental sanitation. Cost of healthier food was also cited as a driver.
- Family characteristics such as family food preferences (e.g., traditional versus non-traditional dishes, healthy or unhealthy foods) and income were key drivers of food choices.
- Home environment characteristics such as household composition, intrahousehold food allocation, urban farming practices, and availability of domestic help also played a role in food choice decision-making.
- Consumption of unhealthy foods and beverages were widespread, with high consumption of fried foods, sweetened foods and beverages, and energy-dense foods (some of which were nutrient-poor).
- All socio-demographic groups ate similar diets, although the poorest had even greater consumption of unhealthy foods and beverages.
- Mapping analyses found that while there was high availability of many healthy foods in deprived neighborhoods, there was also wide availability of energy-dense nutrient-poor foods and beverages (e.g. sugar-sweetened beverages, fats/oils, processed/fried foods).
- Policy action to promote healthier diets is required across several sectors: enhancing financial and physical access to healthier, convenient foods through subsidies. This may include actions to limit access to unhealthy foods through taxation and advertising policies to dis-incentivize unhealthy food and beverage consumption, such as in the case of sugar-sweetened beverages. Food-based dietary guidelines and incentives/training for local food vendors to help government enforce legislation and regulation around food hygiene and standards are other avenues of policy action necessary to curb the spread of diet-related non-communicable diseases.

### Objectives

The overall project objective was to examine factors in social and physical food environments of African cities that drive consumption of energy-dense, nutrient-poor (EDNP) foods and beverages among adolescent girls (13-18y) and women (aged 19-49y).

### Background

Ghana is a lower-middle income country that has reached an advanced stage of the nutrition transition. Diet-related non-communicable diseases (NCDs) account for 41% of total deaths for this West African nation. High-risk diets

have made women and girls (ages 15-49) in Ghana three times more likely to be overweight or obese compared to men. From 1993-2008, obesity/overweight more than doubled (13.2% to 31.0%). This project aimed to understand how EDNP foods and beverages are embedded in everyday life of women and adolescent girls, by investigating what factors drive consumption in social (e.g. peers, friends/family through social support, norms, role modelling) and physical environments (e.g. at home, school, food marketing). Evidence gathered from this project can help to inform context-relevant interventions to reduce consumption of EDNP food and beverages.

## Methods

This study took place in 2 deprived urban areas of Ghana: Accra and Ho. The team combined qualitative and quantitative methods to understand the social and physical characteristics of the food environment, participant perspectives on food choice and its drivers, and participants' dietary intake. Data were derived from longitudinal qualitative interviews, photovoice exercises, geographic information systems mapping, and 24-hour qualitative dietary recalls. Additionally, the team undertook participatory exercises with key stakeholders to assess community readiness for healthy eating interventions and engage policy makers in prioritizing country-level actions to promote healthy food environments.

## Results

Across income groups in these deprived urban areas of Ghana, there is widespread consumption of EDNP foods and beverages. Energy-dense nutrient-rich (including traditional dishes) were heavily consumed by 89.4% of the sample. Individuals with the lowest socioeconomic status and those who ate frequently were more likely to have unhealthy diets. Shorter eating episodes were more likely to include greater intake of unhealthy foods and beverages. Longer eating episodes contained more traditional foods that were nutrient-rich but also energy-dense and often fried. 82% of meals were consumed at home; in particular, the evening meal which was often energy-dense.

The cost of food, family and food vendors emerged as key influences on participants' dietary behaviors. In the family, children, spousal and parental preferences were key drivers of food purchases and consumption. Food vendors' hospitality and services including credit, packaging and subsidized food prices also influenced participants' dietary behaviors. Food safety concerns were crucial and included poor hygiene, environmental sanitation, food contamination and adulteration. In the home physical environment, urban farming was practiced to supplement household food needs.

While the majority of outlets in Accra (80.5%) were defined as informal vendors, the nature of outlet types varied by neighborhood. Vegetable/fruit stand/table tops (63.9%) were the majority, with low availability of all the other types of outlets apart from kiosks (15.1%). In Ho, the majority of food outlets were formal vendors. High availability of shops (43.9%), as well as local vendors (22.8%) and vegetable/fruit stand/table top (21.1%). Outlets generally offered a mixture of healthy and unhealthy foods. There was a high availability of sugar-sweetened beverages (35.8% in Accra vs. 50.0% in Ho) and processed/fried foods (37.4% in Accra vs. 68.3% in Ho). Food advertising on billboards or posters were most frequently observed for sugar-sweetened beverages, alcohol and milk.

## More Information

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- **Open Access Data** - [https://dataverse.harvard.edu/dataverse/DFC\\_Ghana](https://dataverse.harvard.edu/dataverse/DFC_Ghana)
- **Project Page** - <https://driversoffoodchoice.org/research/project-descriptions/dietary-transitions-in-ghanaian-cities/>

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