



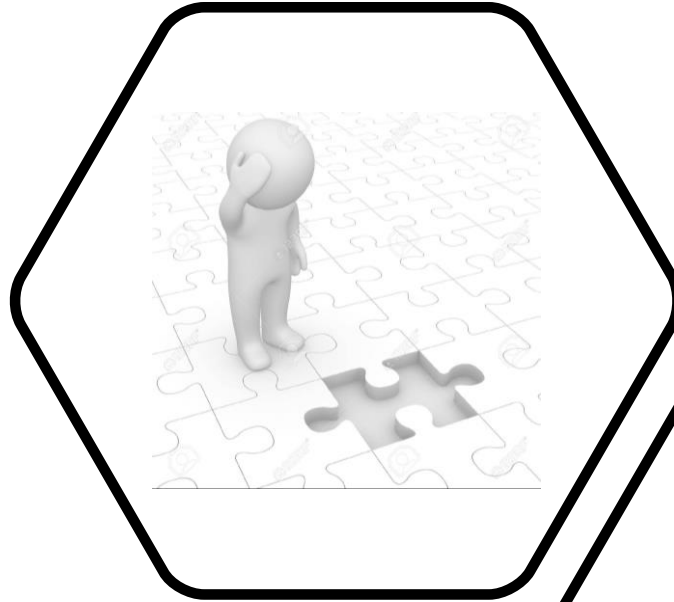
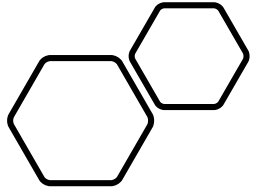
Development of Food-Based Dietary Guidelines in Ghana: A Learning Journey



UNIVERSITY OF GHANA

Prof. Richmond Aryeetey, University of Ghana





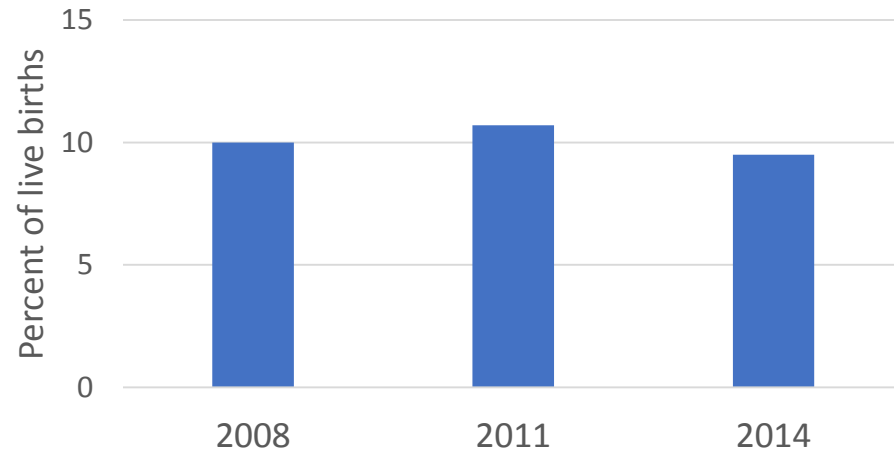
outline

- Food and nutrition situation in Ghana
- Policy and program landscape
- Food Based Dietary guidelines progress
- Lessons learned

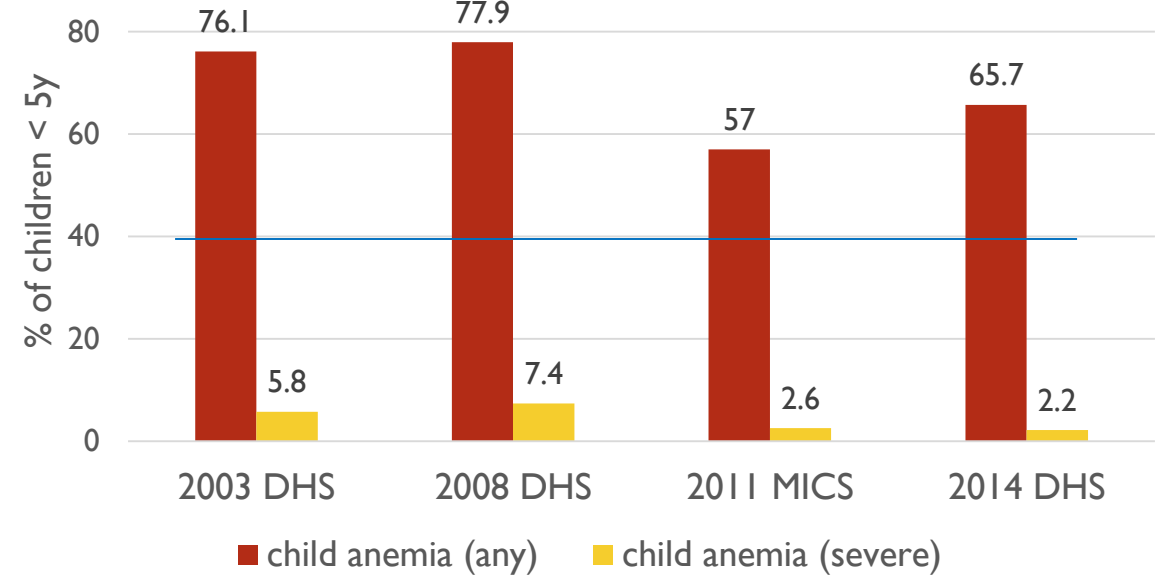




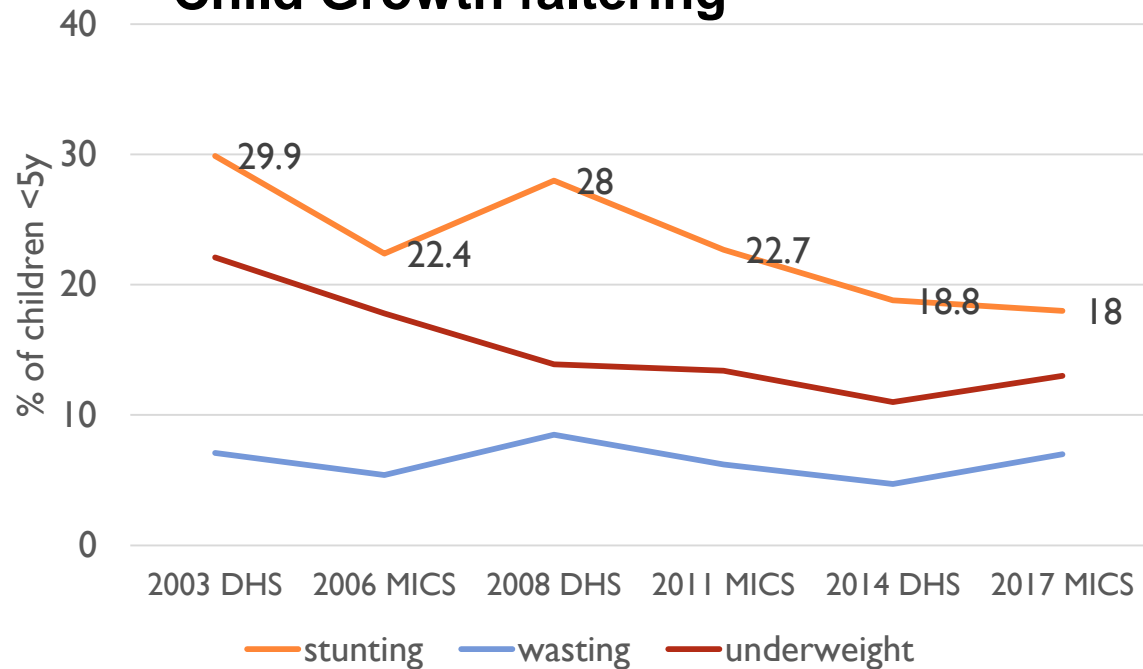
Low Birth weight



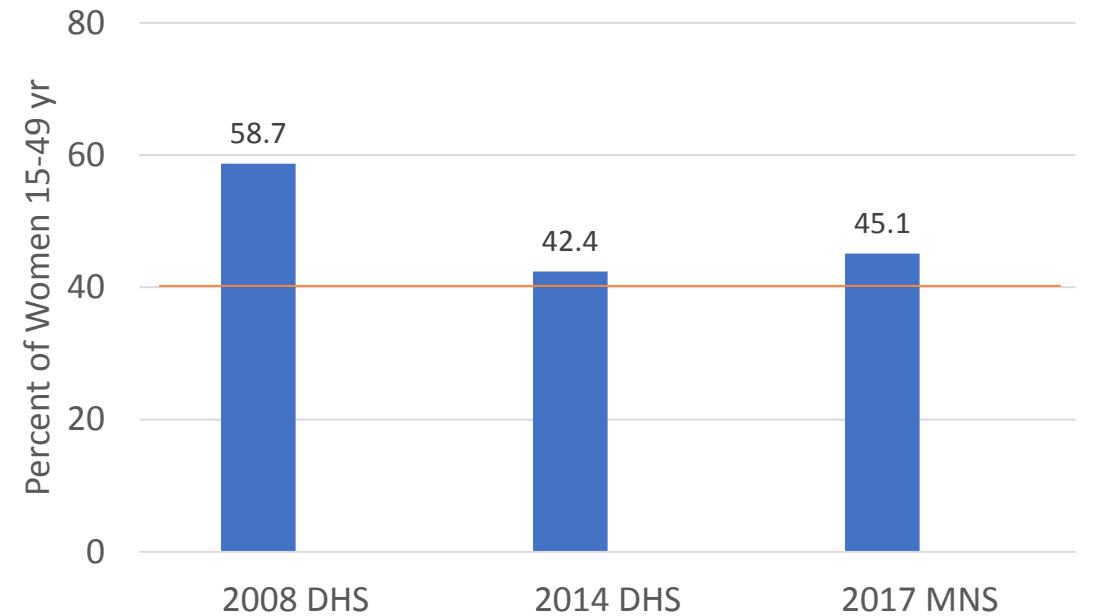
Child Anemia



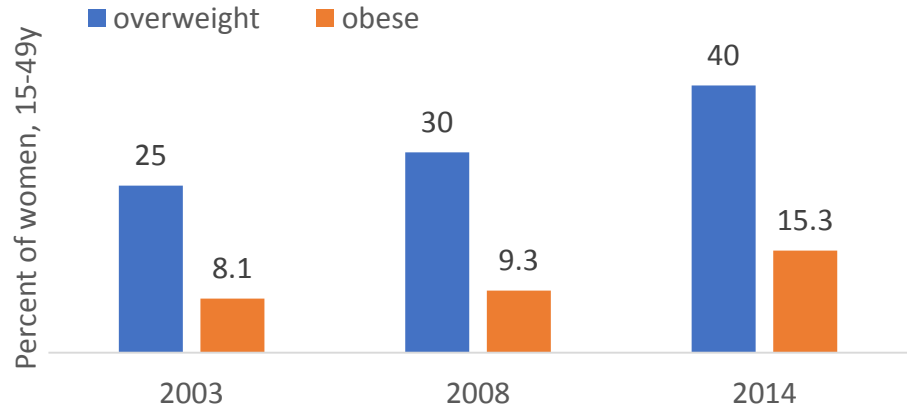
Child Growth faltering



Maternal Anemia

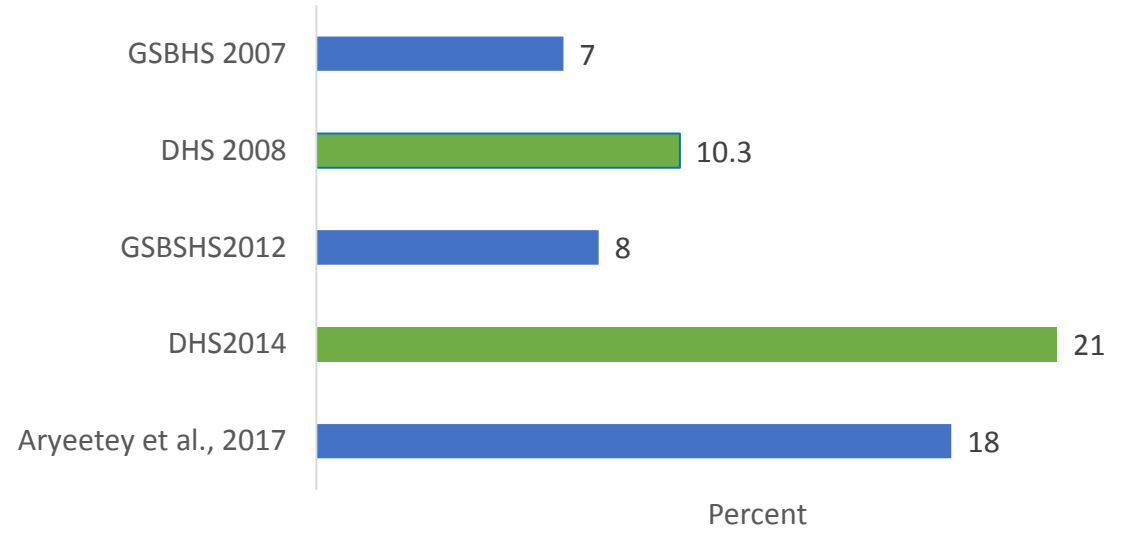


Overweight -adults

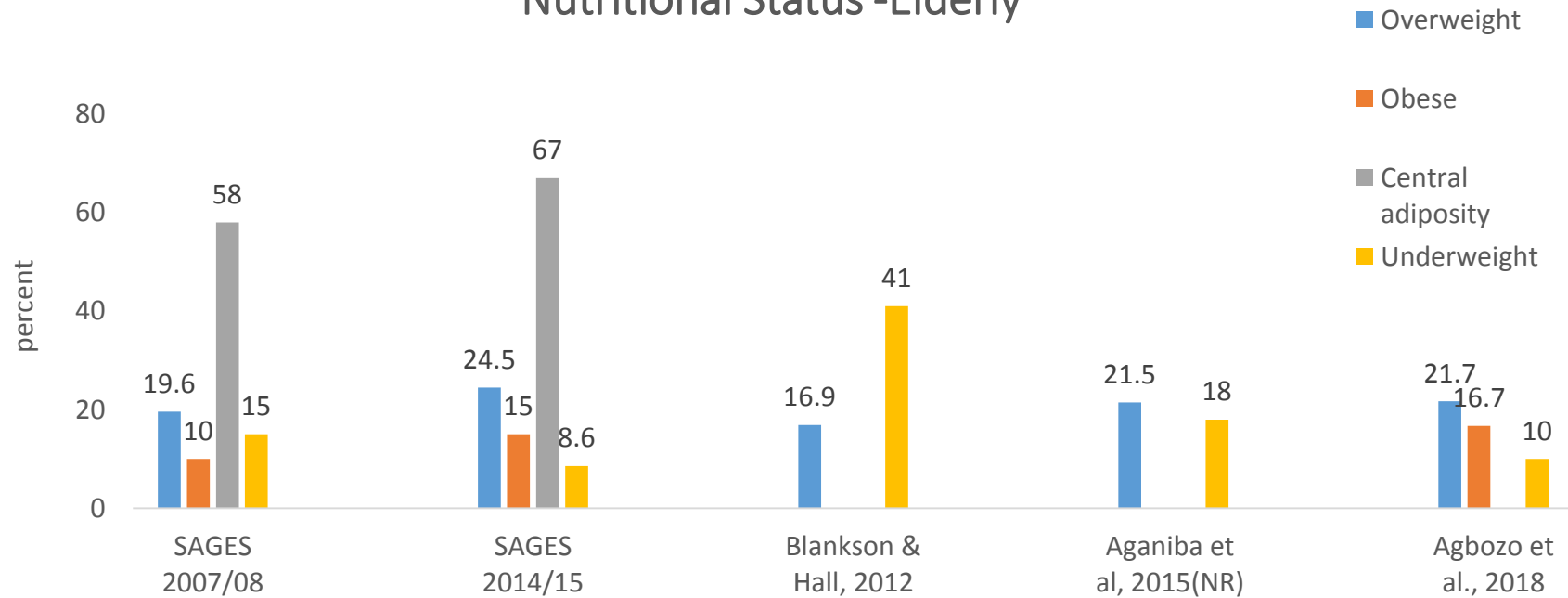


GSS et al, 2015

Overweight -adolescents

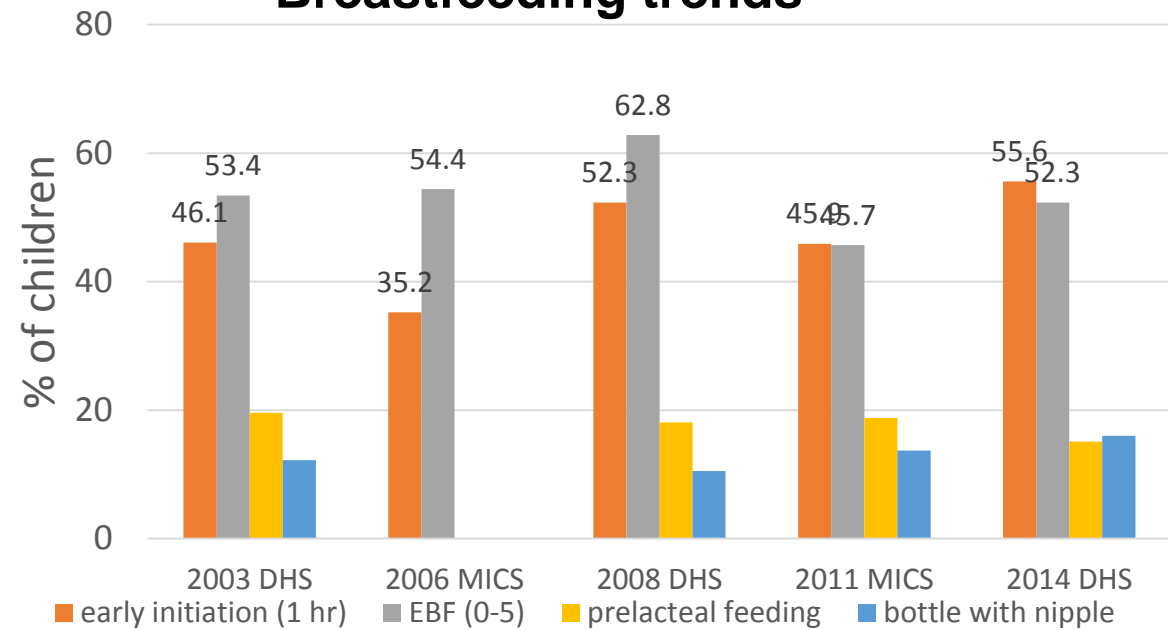


Nutritional Status -Elderly



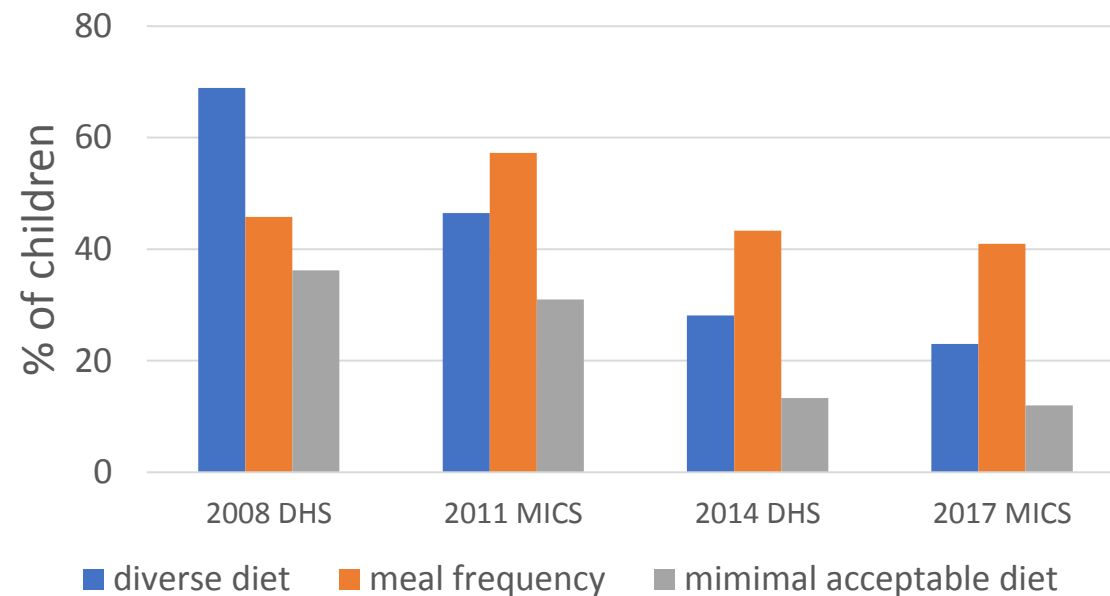
Dietary situation

Breastfeeding trends



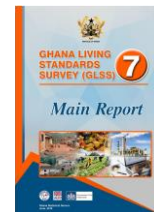
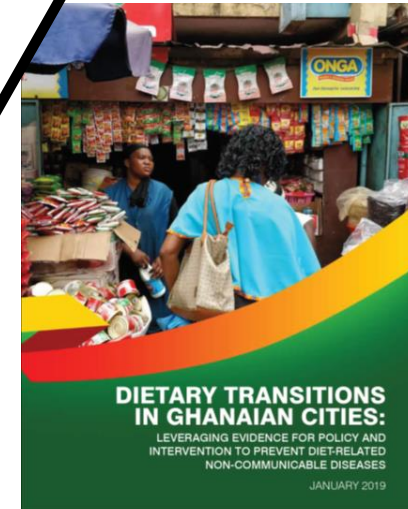
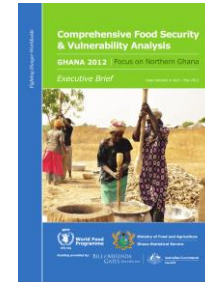
GSS et al, 2015; 2018

Complementary feeding trends



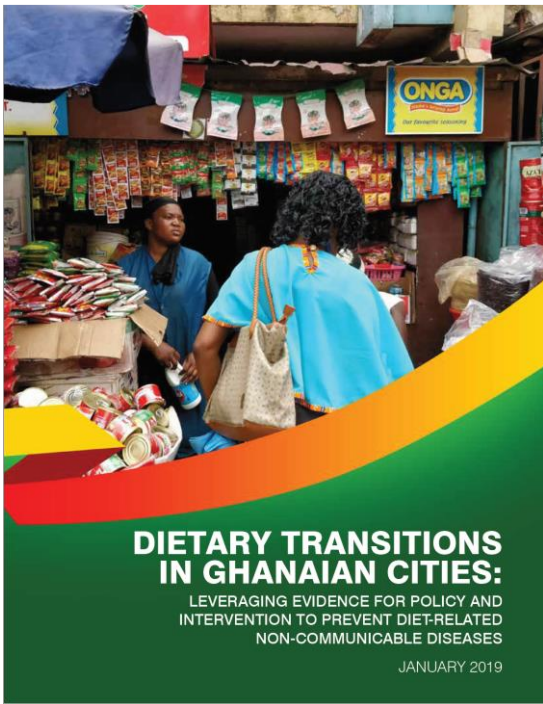
Dietary situation

- Increasing food availability
- Household food insecurity remains a challenge
 - 42% of household annual expenditure is on food
- Ghana is already undergoing a nutrition transition, especially in urban areas; resulting in unhealthy dietary patterns
 - High exposure: energy-dense foods
 - Low exposure : Fruits and vegetables
- Important food environment challenges drive these behaviours



Key dietary issues

- **Urban areas:** Access to healthy foods, but also unhealthy foods
- **Promotion:** High exposure to food unhealthy advertising, street foods; limited communication on healthy eating
- **School** food environment exposes children to cheap highly processed foods
- **Informal markets:** safety, adulteration, & environmental sanitation
- **Affordability:** Healthy food is expensive
- **Culture:** Friends and family influence diet choice



DIETARY TRANSITIONS IN GHANAIAN CITIES: LEVERAGING EVIDENCE FOR POLICY AND INTERVENTION TO PREVENT DIET-RELATED NON-COMMUNICABLE DISEASES

JANUARY 2019

Public Health Nutrition page 1 of 17

Dietary behaviours in the context of nutrition transition: a systematic review and meta-analysis in two African countries
 Emily K. Roastman^{1*}, Rebecca Pradellars², Robert Akpanbo³, Richmond Agyepong⁴, Kristin Bash⁵, Andrew Booth⁶, Sallia K. Muthuri⁷, Hibbab Osei-Kwasi^{8,9}, Collette M. Mazar¹⁰, Tom Norris¹¹ and Michelle Holdsworth¹²
¹School of Sport, Exercise and Health Sciences, Loughborough University, Loughborough, United Kingdom; ²School of Health and Related Research (SciHR), Sheffield Hallam University, United Kingdom; ³Department of Population, Family and Reproductive Health, School of Public Health, University of Ghana, Accra, Ghana; ⁴Department of International Development (DfID), Nairobi, Kenya; ⁵Department of Geography, University of Sheffield, Sheffield, United Kingdom; ⁶NIHRFPAAS Unit, University of Manchester, England; ⁷Suprago, Amsterdam, France

Submitted 23 March 2018; final version accepted 2 September 2018; September 10, 2019

Abstract
 Objective: To synthesise evidence of urban dietary behaviour transitions, types of foods, dietary diversity and dietary practices in two African countries in relation to population changes in the context of nutrition transition. Design: Systematic review and meta-analysis, including six online databases and grey literature, 1973–2018 (PROSPERO CRD420170774). Setting: Urban Ghana and Kenya. Participants: Population-based studies of healthy adolescents and adults. Results: Forty-seven included studies encompassed 207,163 individuals plus 620,626 households. The countries were within 100 km of commercial energy maize energy maize was 100% total (195–211 kcal, 1669g) and the proportion of maize energy maize was 25% (100–125 kcal, 64–84 g, 24–25% of total energy intake). 18, 75.3, 1.1% of the population population consuming total and vegetable was 54.4%, unhealthy foods, 29.4%, and sugar-sweetened beverages (SSBs), 29.9%. There is a 100% increase in total energy intake. Dietary diversity scores were within the mid-range. Most patients were identified typically three months after diagnosis with evidence lacking on tracking or eating up. Conclusions: Population-based data from within WHO non-communicable disease surveillance systems were relatively diverse with increased and patterns, but some indicators of nutrition transition were apparent. The proportion of population consuming total and vegetable was low compared to healthy eating, recommendations, and consumption of SSBs was widespread. A paucity of evidence from 1973 to 2018 provided a longitudinal analysis of nutrition transition. Evidence from these two countries indicates which aspects of dietary behaviour may be contributing to increasing non-communicable disease, namely a low proportion of population consuming total and vegetable and widespread consumption of SSBs. There are potential targets for preventing health risks.

Introduction
 Nutrition transition includes changes in dietary patterns and nutrient intakes observed as populations go through economic and social development [1]. It has been associated with consistent increases in dietary intake of total energy, total fat and total protein, increased added sugar, increased animal-source foods and decreased cereals and fibre [2].

Open access | Original research | BMJ Open

Investigating foods and beverages sold and advertised in deprived urban neighbourhoods in Ghana and Kenya: a cross-sectional study

Mark Allen Ghosh^{1*}, Rebecca Pradellars², Arnon Lasa³, Hibbab Osei-Kwasi⁴, Nicolas Brichas⁵, Nathaniel Colquhoun⁶, Sarim Kamran⁷, Aksha Nyer Wangari⁸, Akua Tandoh⁹, Robert Akpanbo¹⁰, Richmond Nii Chai Agyepong¹¹, Paula Griffiths¹², Elizabeth W. Kinyua-Munaga¹³, Kobay Mensah¹⁴, Francis Zotor¹⁵, Stefania Vandevivere¹⁶, Michelle Holdsworth¹⁷

Abstract
 Objectives: The aim of this study was to characterise the food and beverage sold and advertised in three deprived urban neighbourhoods in Ghana and Kenya on a daily basis. Design: Cross-sectional observational study. The study was conducted in three deprived urban neighbourhoods in Ghana and Kenya. Participants: All food outlets (street food and food stalls) and all advertisements (billboards, posters, signs, etc.) were identified. Results: In Ghana, 100% of food outlets sold and advertised at least one of the following: sugar-sweetened beverages (SSBs), unhealthy fats, and unhealthy oils. In Kenya, 100% of food outlets sold and advertised at least one of the following: SSBs, unhealthy fats, and unhealthy oils. Conclusions: The study identified the food and beverage sold and advertised in three deprived urban neighbourhoods in Ghana and Kenya. The findings suggest that the food and beverage sold and advertised in these areas are high in energy, fat, and sugar, and low in fibre and other nutrients. This is consistent with the findings of other studies in low-income countries, which have shown that the food and beverage sold and advertised in these areas are high in energy, fat, and sugar, and low in fibre and other nutrients.

Open access | Original research | PLOS ONE

Food Policy

Implementation of healthy food environment policies to prevent nutrition-related non-communicable diseases in Ghana: National experts' assessment of government action

Arnon Lasa^{1*}, Amy Barnes², Richmond Agyepong³, Akua Tandoh⁴, Kristin Bash⁵, Kobay Mensah⁶, Francis Zotor⁷, Stefania Vandevivere⁸, Michelle Holdsworth⁹

Abstract
 Nutrition-related non-communicable diseases (NCDs) are a global health problem, increasingly recognized as a threat to sustainable development. The aim of this study was to assess the implementation of government action to improve the food environment in Ghana. Design: A cross-sectional survey of national experts in Ghana. Setting: The study was conducted in Ghana. Participants: National experts in Ghana. Results: The study identified the implementation of government action to improve the food environment in Ghana. The findings suggest that the implementation of government action to improve the food environment in Ghana is limited. This is consistent with the findings of other studies in low-income countries, which have shown that the implementation of government action to improve the food environment in these areas is limited.

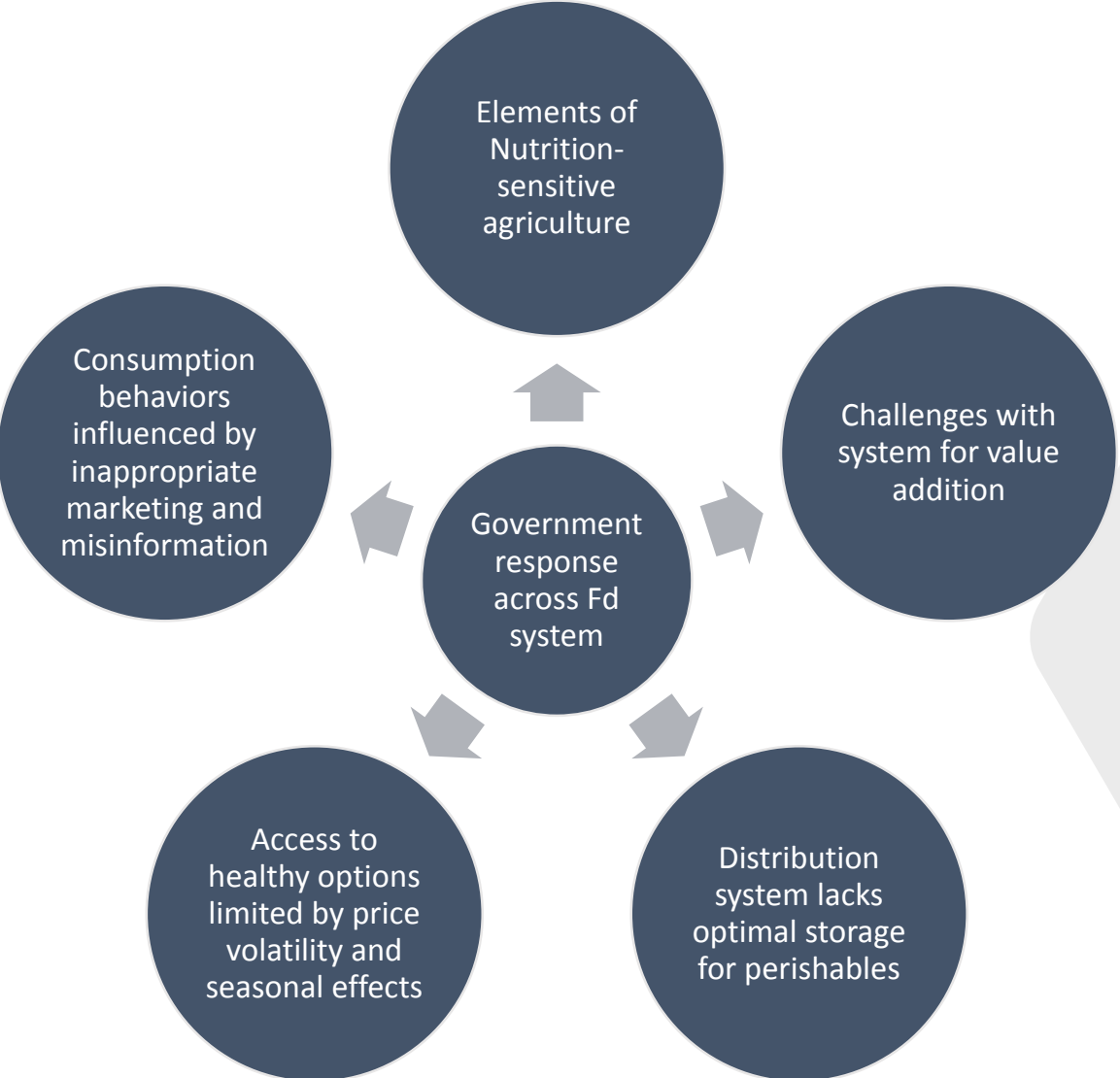
Open access | Research Article | PLOS ONE

Basic school pupils' food purchases during mid-morning break in urban Ghanaian schools

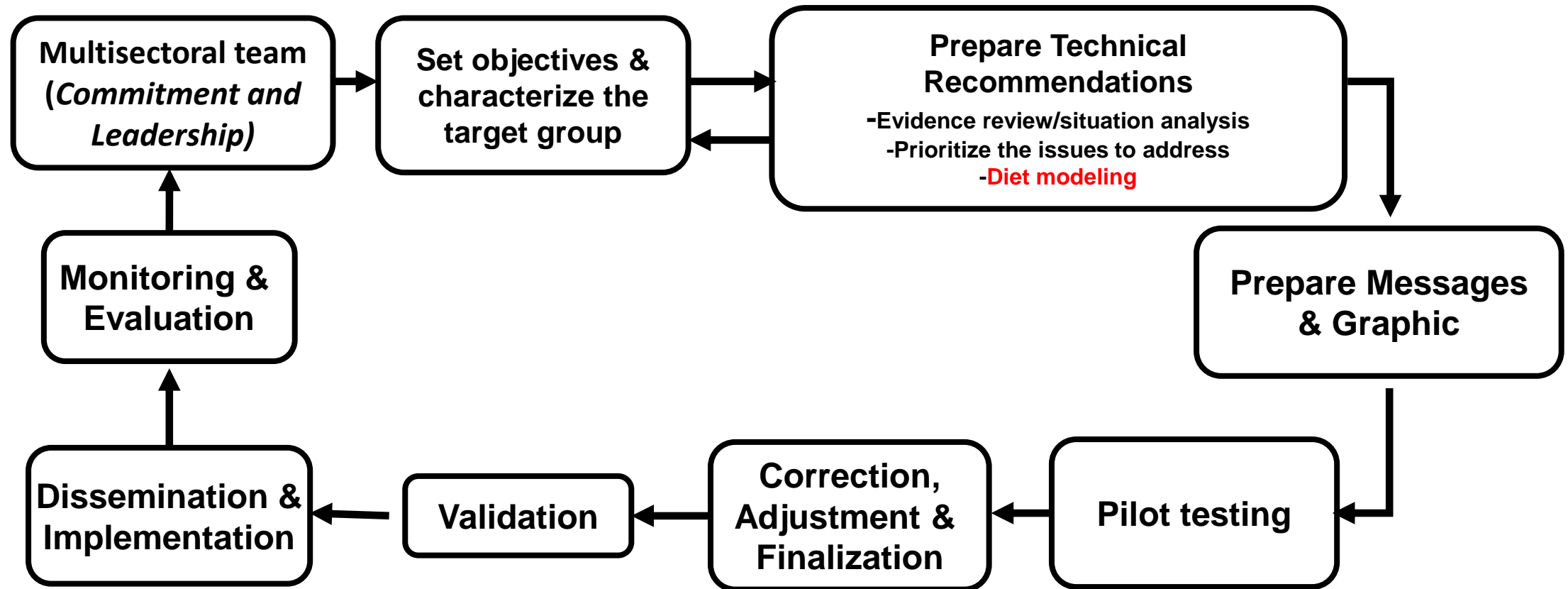
Dele Oyin-Adegun^{1*}, Richmond N. O. Agyepong², Heewon L. Gray³, Amos K. Lasa⁴, Richard H. K. Aden⁵

Abstract
 Background: Food vending can expose children to malnutrition and other diet-related challenges such as obesity. This study sought to describe types and sources of food in basic schools in urban Accra, and to describe food purchases by pupils. Methods: This was a cross-sectional study of five basic schools (3 public, 2 private) and 644 pupils in the Greater Accra Metropolitan Area, Ghana. Check-lists were used to document available sources of foods during school hours. Pupils were interviewed after making purchases during break-time and the type, cost and sources of foods purchased documented. Energy content of foods were read from labels when available or estimated using the Ghana Food Composition Database when unavailable. Frequencies and amounts were used to compare food type by source and school type. Results: Foods were purchased from school canteen, school stores, private stores, and 'table-top' vendors. Meals were most frequently purchased (30%), although single purchases were sweetened drinks, savory snacks and confectioneries. About 53% of retailers located within the schools sold relatively healthier food options. Similar foods with comparable energy content were purchased within and outside of school. Conclusions: Basic schools in urban Ghana provide ready access to energy-dense food options, which are purchased by pupils both within and outside of school premises. Timely interventions to improve school food policies can encourage healthier diets among pupils.

Interventions in Policy environment



Development of Ghana FBDGs



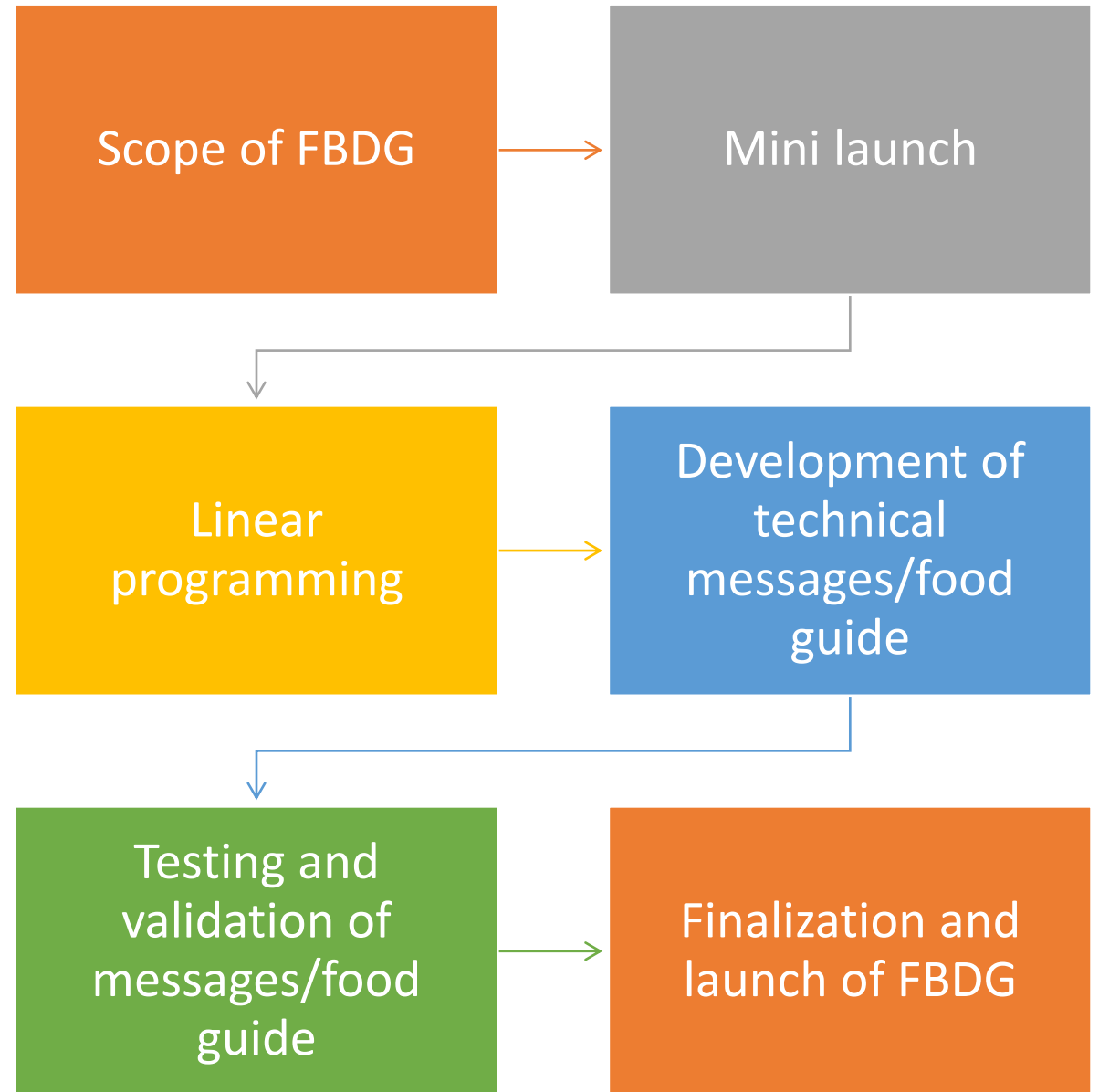
Development of Ghana FBDGs

- Multi-stakeholder technical task team (MTTT) in place (N=21)
- Completed review of local evidence to guide decisions of MTTT
- Validated the reviews
- Prioritization of key issues ongoing



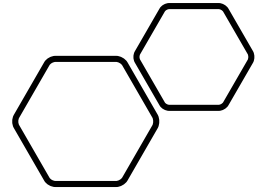


Actions yet to be completed



Lessons learned

- Requires time and resources
- Government leadership is absolutely critical
- Technical support (training) has been quite important for progress
- Stakeholder interest and prioritization needed



Thank you for
your attention

