# DEVELOPMENT OF THE AFRICAN URBAN FOOD ENVIRONMENT FRAMEWORK

















## **Project overview**



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## Funding acknowledgement (2017-2019)

The **TACLED project** was funded by a Global Challenges Research Fund Foundation Award led by the MRC, and supported by AHRC, BBSRC, ESRC and NERC, with the aim of improving the health and prosperity of low and middle-income countries.



The **DFC project** was funded by the Drivers of Food Choice (DFC) Competitive Grants Programs, which is funded by the UK Government's Department for International Development and the Bill & Melinda Gates Foundation, and managed by the University of South Carolina, Arnold School of Public Health, USA.









## Why were the projects needed?

- Prevalence of overweight/obesity in urban areas is high especially amongst women in both Ghana (49.0%) and Kenya (43.3%).
- Ghana and Kenya advancing towards the latter stages of the nutrition transition.
- NCDs recognised as pressing public health concern estimated to account for 43% of total deaths in Ghana vs. 27% in Kenya.
- National policies emphasise the need for interventions that respect the cultural context.



## What are the aims of the projects?



- To assess current food consumption and dietary practices in African cities.



- To examine factors in urban food environments that drive the consumption of unhealthy food and beverages.



- To identify context-relevant interventions and policy to promote healthier diets.

## Why are we investigating food environments?

- Lack of evidence about how environments drive dietary behaviours in African cities.
- Most research has focused on individual level drivers in Africa (Gissing et al. 2017 Public Health Nutrition).
- Individual-level approaches have limited success when they don't account for the wider context that drives dietary behaviours.

Drivers of dietary behaviours in women living in urban Africa: a systematic mapping review

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Submitted 31 August 2016: Final revision received 15 March 2017: Accepted 18 April 2017

#### Abstract

Objective: To (i) systematically review the literature to determine the factors influencing diet and dietary behaviour in women living in urban Africa; (ii) present these in a visual map; and (iii) utilize this to identify potentially important areas for future research.

Design: Systematic mapping review. The review protocol was registered at PROSPERO (http://www.crd.york.ac.uk/PROSPERO/; registration number CRD42015017749). Six databases were systematically searched, followed by reference and citation searching. Eligibility criteria included women aged 18–70 years living in urban Africa, any design/methodology, exploring any driver, using any measure of dietary behaviour. Quality appraisal occurred parallel with data extraction. Twelve predominantly cross-sectional quantitative studies were included; reported in seventeen publications. Determinants were synthesized narratively and compiled into a map adapted from an existing ecological model based on research in high-income countries.

Setting: Urban Africa.

Subjects: African women aged 18-70 years.

Results: Determinants significantly associated with unhealthy dietary behaviour ranged from the individual to macro level, comprising negative body image perception, perceptions of insufficient food quantity and poorer quality, poorer

- Policy (across sectors)
- Governmental and political structures
- -Marketing/advertising policy
- Government readiness

- Home
- School/college
- Work
- Neighbourhood& communities
- Food outlets access/availability

Adapted from Story et al. (2008) Annu. Rev. Public Health; 29:253-72

Macro-level environment (policy)

Physical environments

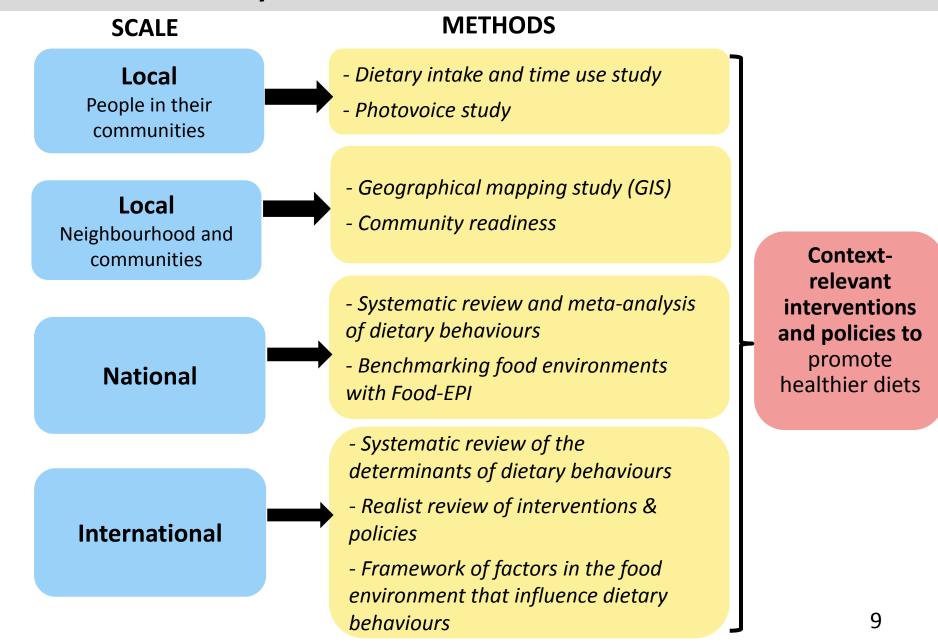
Social environment (networks)

Individual factors

- Family structure
- Friends, Peers
- Social support
- Social norms
- Social capital
- Social practices

- Attitudes, beliefs, preferences, knowledge
  - Sex, age, ethnicity
- Income, education

## Research involving individuals, communities, local and national stakeholdersurban Ghana and Kenya



# Developing a framework of how the food environment influences dietary behaviours in urban Africa

## **Aims**

 To develop a framework that is culturally adapted for the urban African context

 Identify factors that are a priority for research and interventions in urban Africa



## Summary of methods-based on concept mapping

#### PHASE 1: GENERATION OF FACTORS

**Evidence** 

Reviews, primary & secondary data



**Eminence** 

#### **PHASE 2: FRAMEWORK EVALUATION**

Online survey- Africa Nutrition Society members
International Symposium in Ethiopia at ANEC conference
71 experts from/working in Africa contributed
26 African countries represented; multi-disciplinary backgrounds

#### PHASE 3: FINALISE FRAMEWORK

>100 factors

Around half were shared factors with the Story food environment framework and half were additional factors that emerged in African setting

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## Shared factors with high income country framework\*

	Macro (n=15)	Advertising Societal norms Food prices Social welfare policy Ready meals Taxes or levies	TV/radio/media Food production Government policy Market structure Access to transport	of food
	Physical (n=7)	Availability/distance of food outlets Type of food available Community spaces	Convenience (time/effort) Area deprivation Foods sold near schools Healthiness of school meals	
	Social (n=6)	Family food practices Family support Culture	Peer/friends Social norms	Role modelling Gender
	Individual (n=25)	Taste; Aroma of food Diet quality Food appearance SES; income Education level Employment Land use Cooking skills	Knowledge Preferences Locus of control Risk perception Age; sex; ethnicity	Household food security Skipping meals Time constraints Food habits Eating out Eating at home Portion size Sleeping pattern

## Additional factors that emerged in the urban African setting

	Macro (n=11)	Religion Food labelling	War Weather Home gardening Road safety	Resource of nutritionists Dietary guidelines Social media use
	Physical (n=7)	Household sanitation & hygiene Neighbourhood sanitation & hygiene Food adulteration/contamination Cooking facilities		Housing condition Home food stocks Food storage facilities
	Social (n=7)	roou anocation		al taboos Id composition tatus
	Individual (n=23)	Women's empowerm Workload in home Female headed house Shift work Migration history Body satisfaction Wealth	Puberty	Physical activity level Speed eating Physical/mental health Familiarity with food Weight status Pregnancy/lactation Allergies Smoking; Alcohol

## <u>Key findings</u>: what the study tells us about nutrition transition and its drivers in these two countries?

- Drivers of food choice across all the different food environment levels are important - suggesting policies and interventions are needed at multiple levels.
- There are many factors (almost 50) that have emerged as additional influences of food choice in the urban African context that are not captured/accounted for in existing portfolio of recommended interventions to prevent NCDs.
- Offers opportunity to create new ideas for novel interventions and policies that prevent NR-NCDs as well as multiple burdens of malnutrition in these communities.



Policies to reduce **the price** of healthier food should be explored.



Develop interventions that address the **Africa specific factors** that have emerged.

## **Conclusions**



Focus on developing home-based family interventions to improve dietary habits.

## Recommended further research(Framew ork)





Research the broader food environment (the physical and macro levels) as well as identify pathways of the factors that influence dietary behaviours.

existing interventions to promote healthy diets in a way that goes beyond 'what works', but also identifies 'for whom it works and in what context'

Especially women and adolescents

## THE AFRICAN URBAN FOOD ENVIRONMENT FRAMEWORK

## Any questions?















