



Exploring Ghana's food environment (Researching Obesogenic Food Environments in Ghana)

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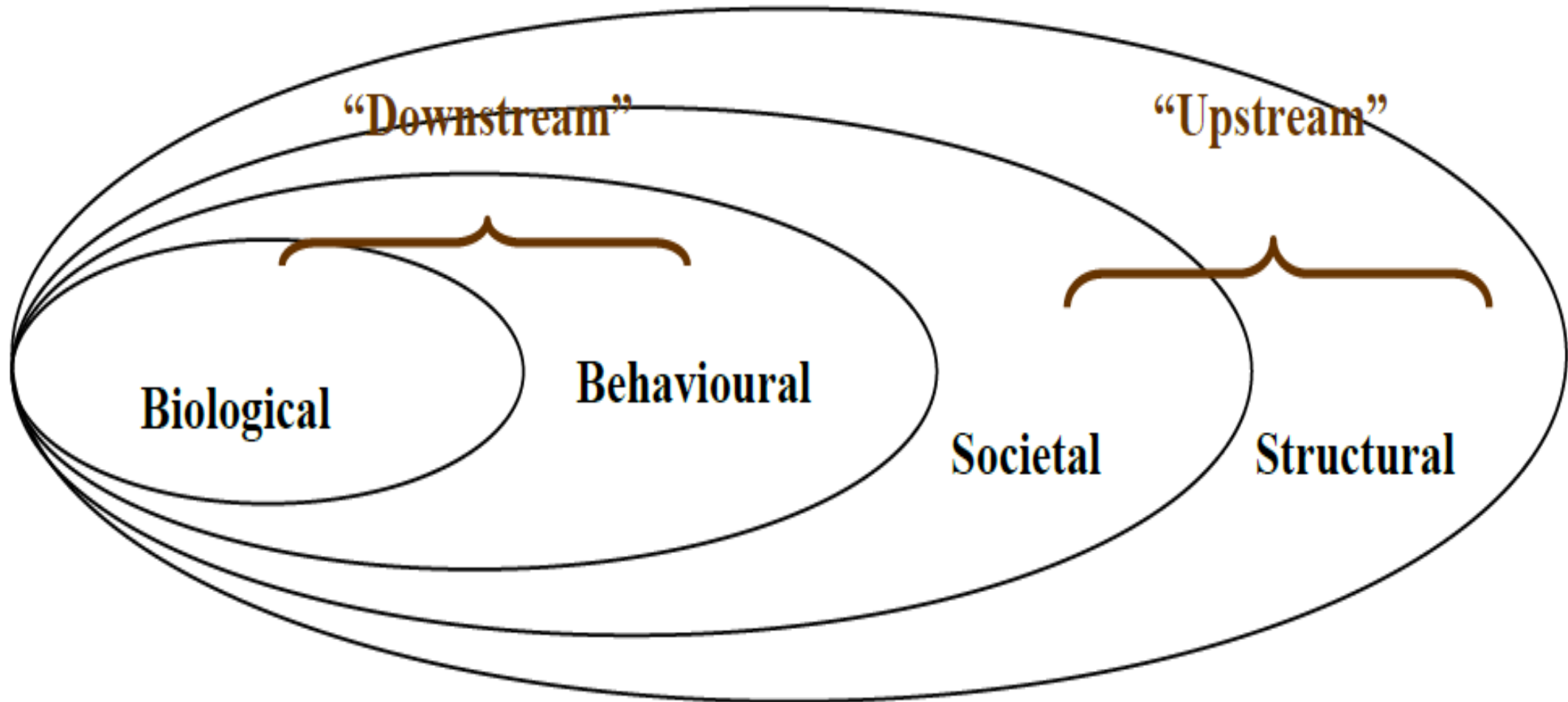
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WESTERN CAPE

Figure 1: Conceptual Model of Risk Factors for Disease



SOURCE: WESTERN CAPE BURDEN OF DISEASE REDUCTION PROJECT, 2007

Background

- The food environment is the environment within which people
 - *acquire*
 - *prepare and*
 - *consume food*
- Food environments are important
 - known to significantly influence dietary choices beyond **intra-personal** characteristics such as **age, sex, religion** etc. (Symonds, Martins, & Hartwell, 2013)
- Food environments are becoming obesogenic



Why should we be concerned with the food environment?

- Diet and disease
- Influx of food giants
 - *They drive both healthy and unhealthy food access*
- Traveling long distances for healthy food can deter people
- Physical location
 - *Food environment and dietary pattern associations assume that dwellers of a particular neighborhood acquire their foods from their immediate environment*
- Informality of Ghana's food system
 - *Implications for regulation, advantage for fresher, less processed and cheaper food*
 - *Also a driver of unhealthy food*
- The food environment provide basis for policies and interventions



ROFE Study Aims

- To understand the changing environment in South Africa and Ghana
- Drivers of the food environment – value chain
- Potential policy opportunities

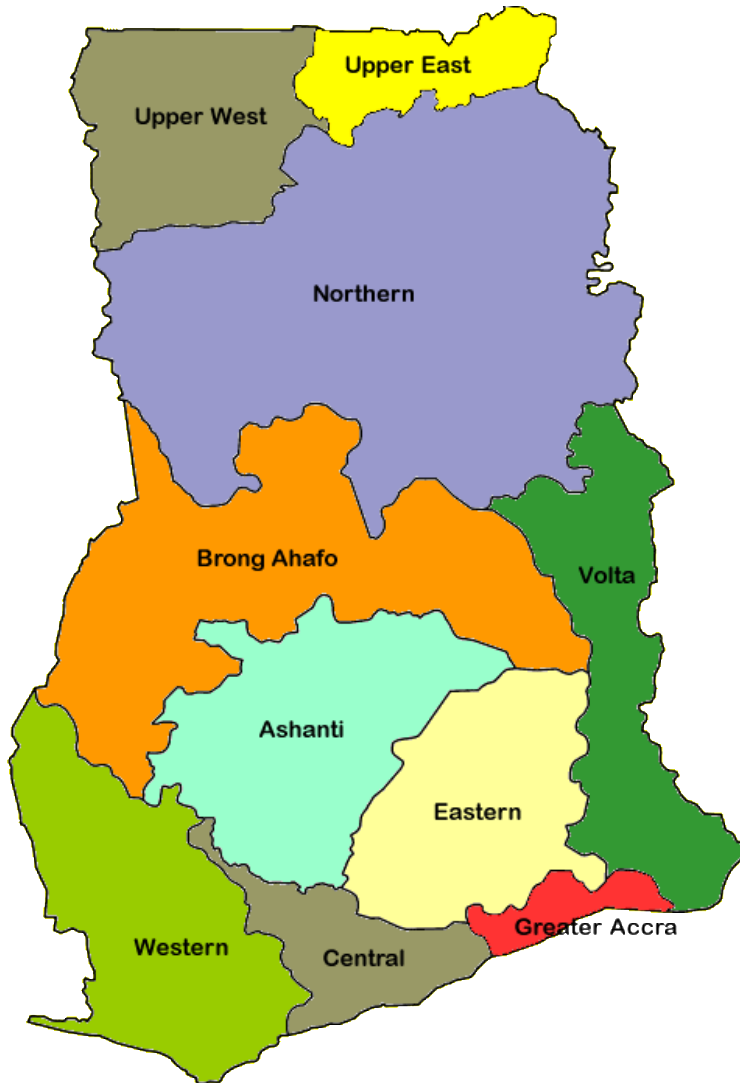


Study area in Ghana

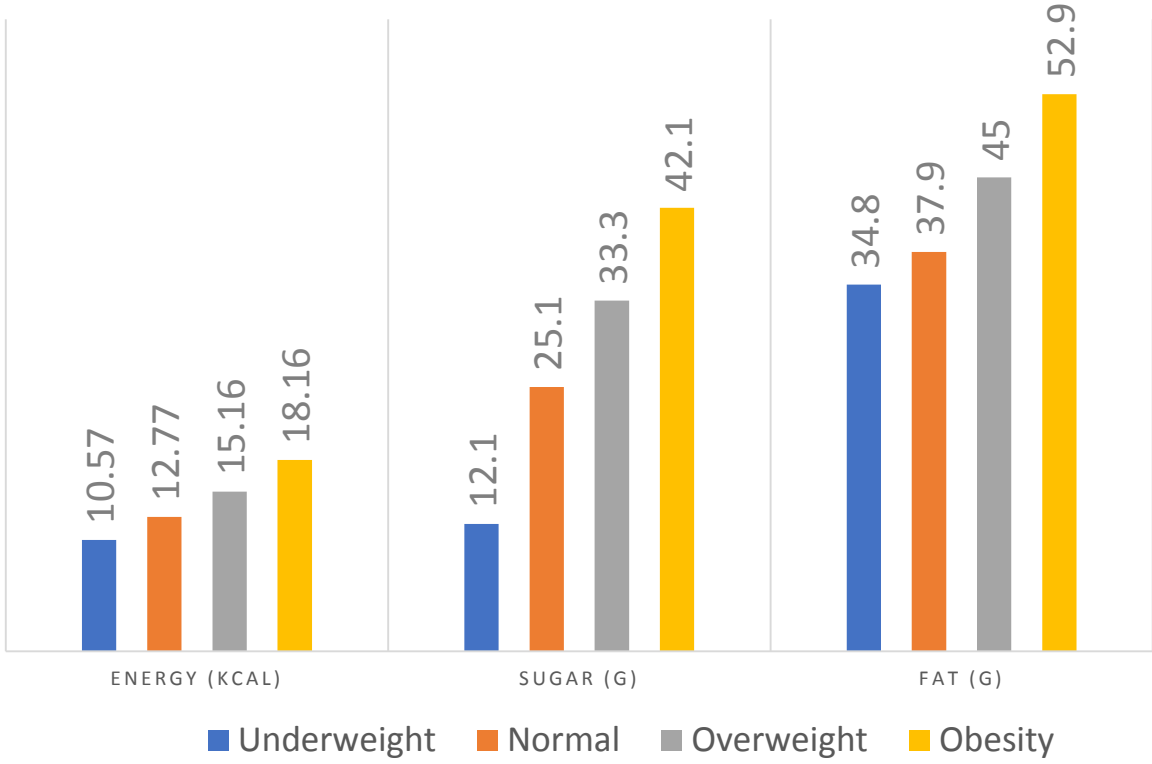
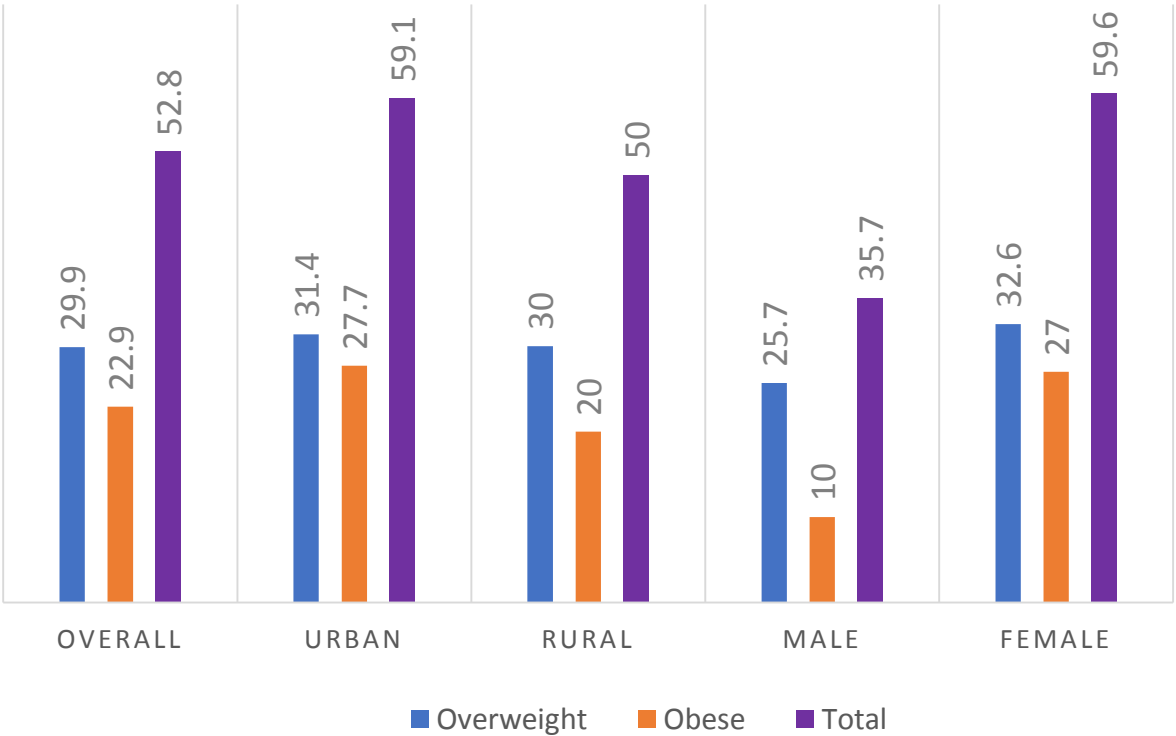
Ejuratia in Kwabre district



Ahowdwo in Kumasi Metropolis



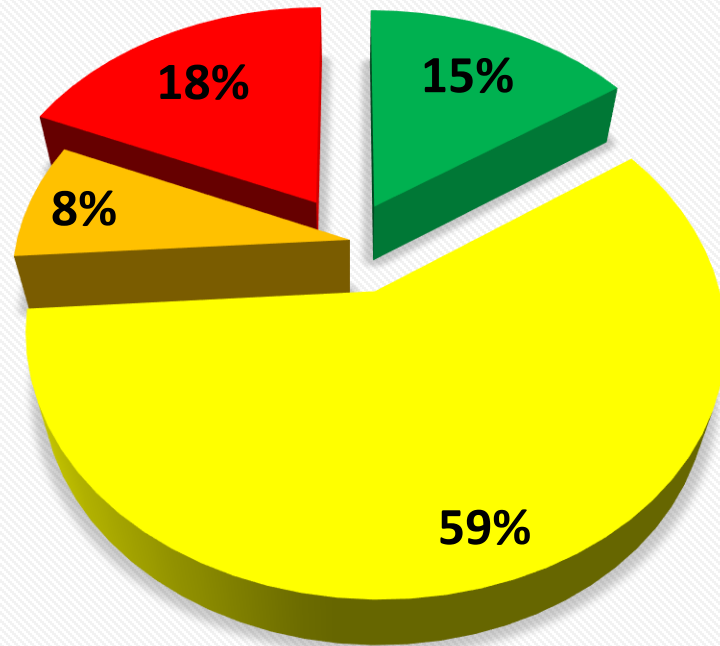
Proportion of overweight/obesity among Ghanaian participants



OVERWEIGHT AND OBESITY PREVALENCE, ROFE, 2017

WEIGHT STATUS AND NUTRIENT INTAKE

Household consumption of obesogenic and protective foods – Kumasi urban



■ Low risk, high protective ■ Low risk, low protective
■ High risk, high protective ■ High risk, low protective

- **Key obesogenic foods**

- Bread
- Sugar
- Sugar Sweetened Beverages
- Confectionary

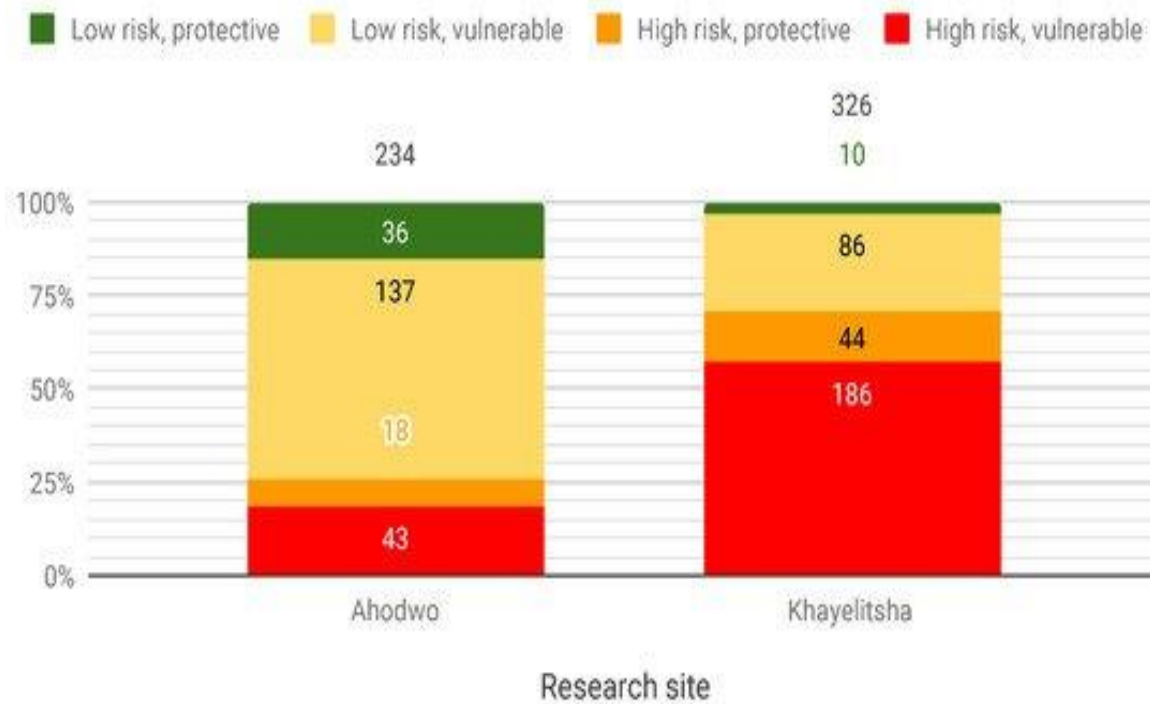
Key protective foods

- Fish
- Fruits
- Cooked vegetables
- Fresh vegetables

Consumption versus availability

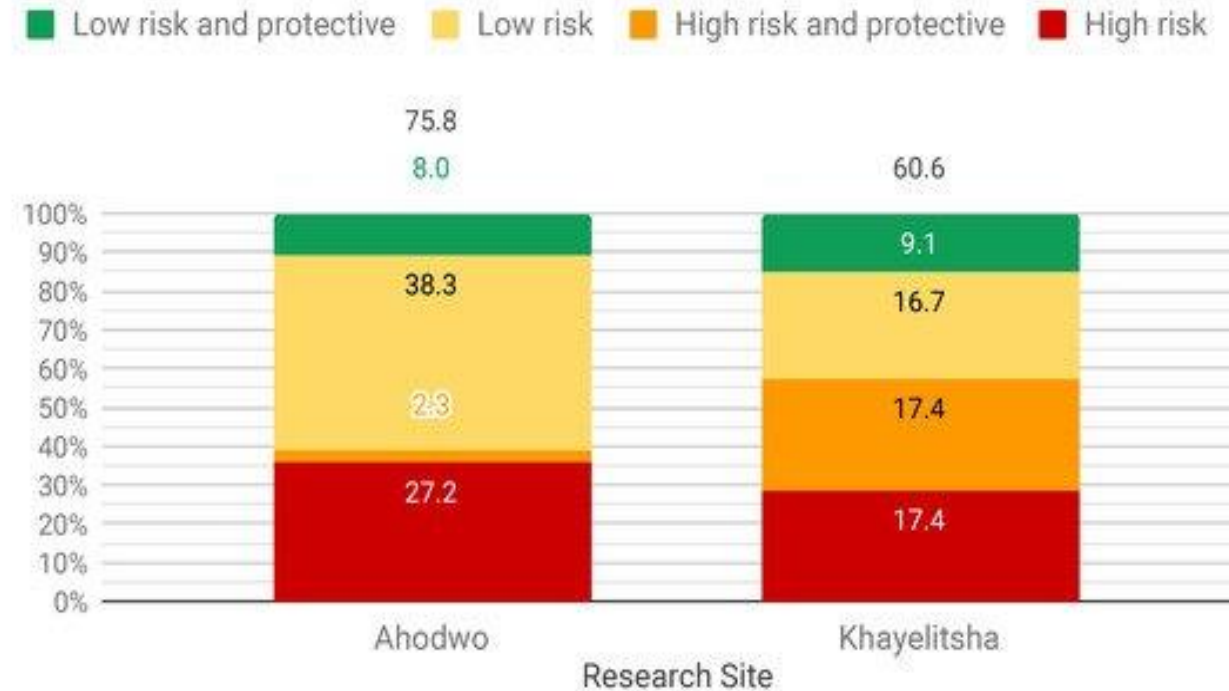
Household consumption risk and vulnerability

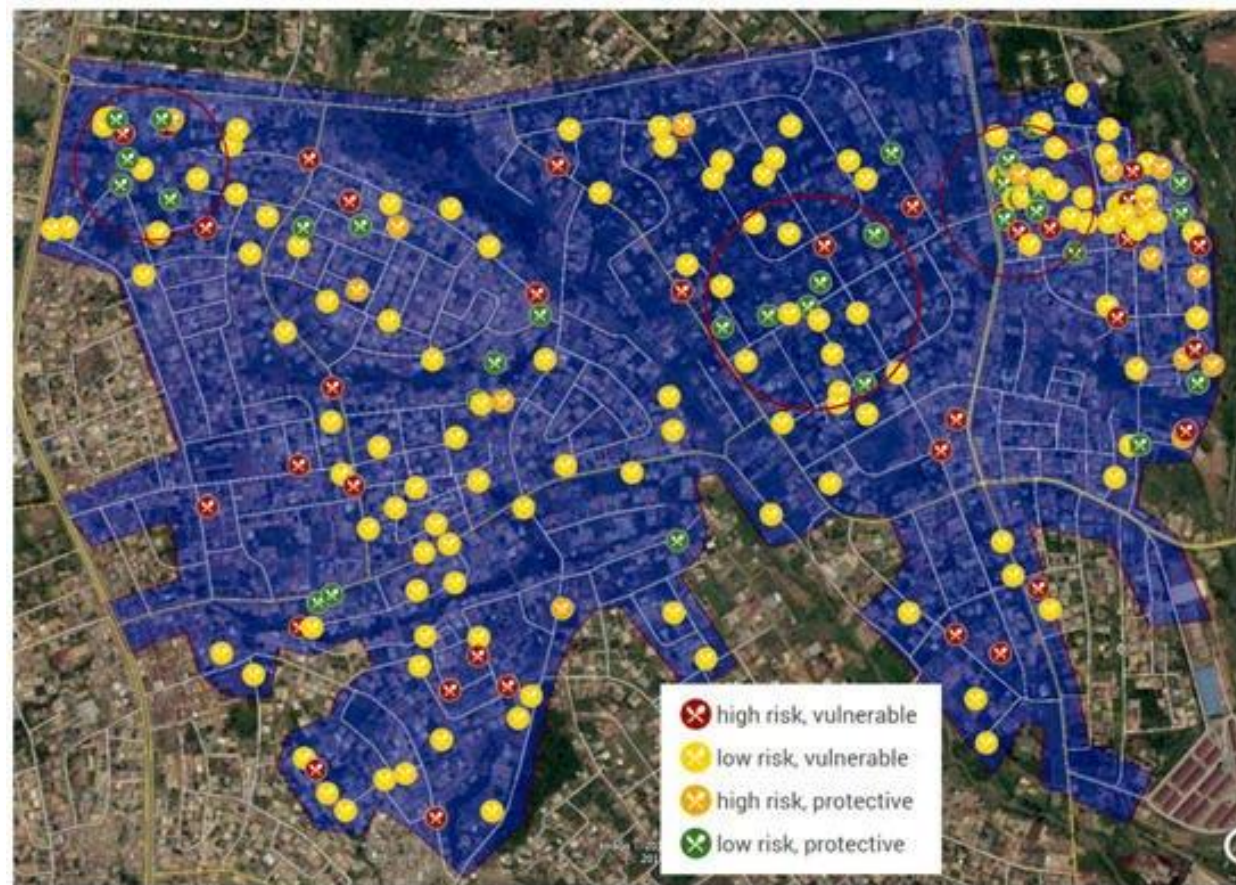
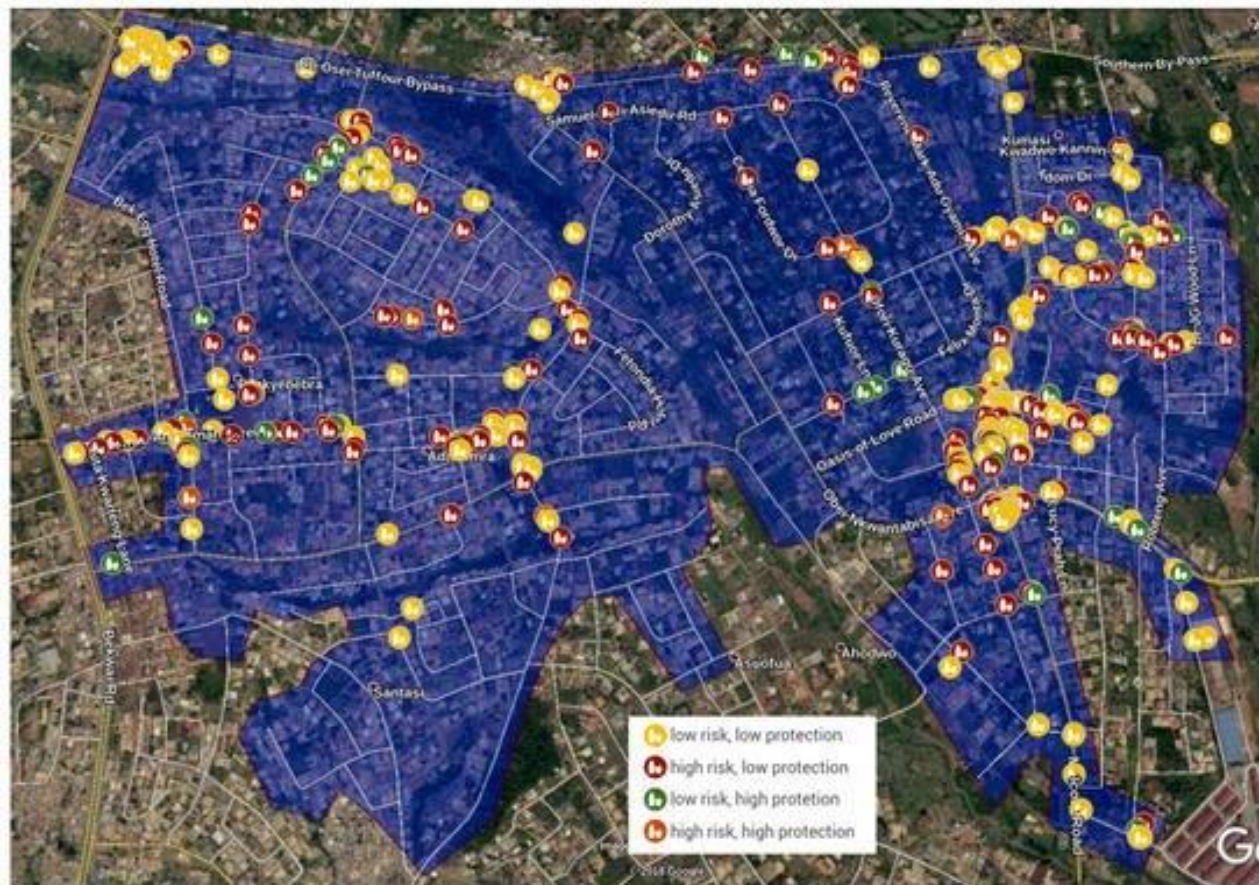
ROFE 2017 Ahodwo and Khayelitsha $p=0.002$



Food outlets per square kilometre by obesity risk

ROFE 2017 - Ahodwo and Khayelitsha $p=0.0001$





- Ahowdwo food provision (left) and consumption right)

Retail food environment

- ❖ Small shops play a central role
- ❖ Formal retailers and convenience stalls - key source of sugary drinks, confectionery and sugar.
- ❖ Stalls, open markets, table top and mobile food vendors - Fruit, vegetables, legumes and fish



Sources of healthy and obesogenic foods

Food	Sources
Legumes – cowpea	Burkina Faso and Niger
Fish	USA, Holland, Norway, Spain, New Zealand, Angola, Mauritius
Chicken	Holland, France, Brazil, Argentina and USA
Processed meat	Brazil, Argentina, Holland
SSBs	Togo



Drivers of food environment - value chain findings

❖ Trade and industrialization

- ❖ Regional influx of imported food

❖ Collapsing Ghana's local poultry/broiler industry

- ❖ Large importation giants take over
- ❖ Local production cost high, hinder local farmers, cannot compete
- ❖ Ghanaians prefer local chicken but consume more imported chicken due to lower cost

❖ Increased levels of imported ultra processed foods

- ❖ Infiltration
- ❖ Value chain actors not nutrition-conscious
- ❖ SSBs choice for snacks

❖ Post-harvest losses of fruits and vegetables

- ❖ Poor display, lack of storage facilities, left to rot
- ❖ Ghana's COVID response



Policy incentives

- Operationalising a multi-sectoral food system
 - Coordination
 - Funding
 - Mandates
- Interest of food system actors
- Power in food system governance
 - Power wielding
- Ideas and understanding of food system actors
- Regulation
- Promotion
- Protection
- Incentivization

ROFE Team





Thank you