



How to do no harm with existing interventions? Example of unintended effects from Guatemala

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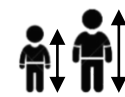
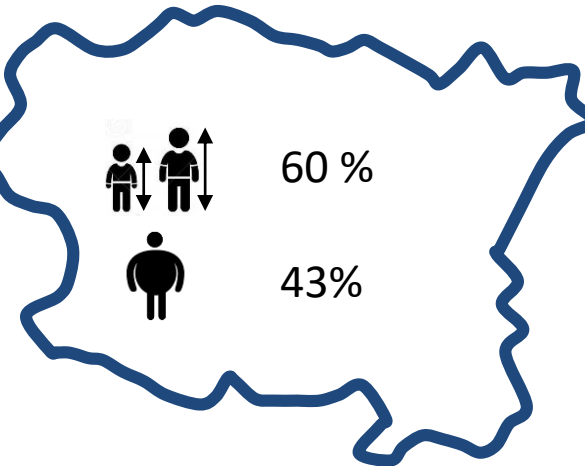
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Introduction

Food-assisted maternal and child health and nutrition programs are a commonly used development strategy

- Three components
 - Food rations
 - Behavior change communication
 - Health strategy
- Often focus on the first 1,000 days
- Typically targeted to households/areas with...
 - Children with linear growth retardation
 - Food insecurity

Conclusion



- 11.1%



+ 570 to + 1020g

PROGRAM & STUDY DESIGN



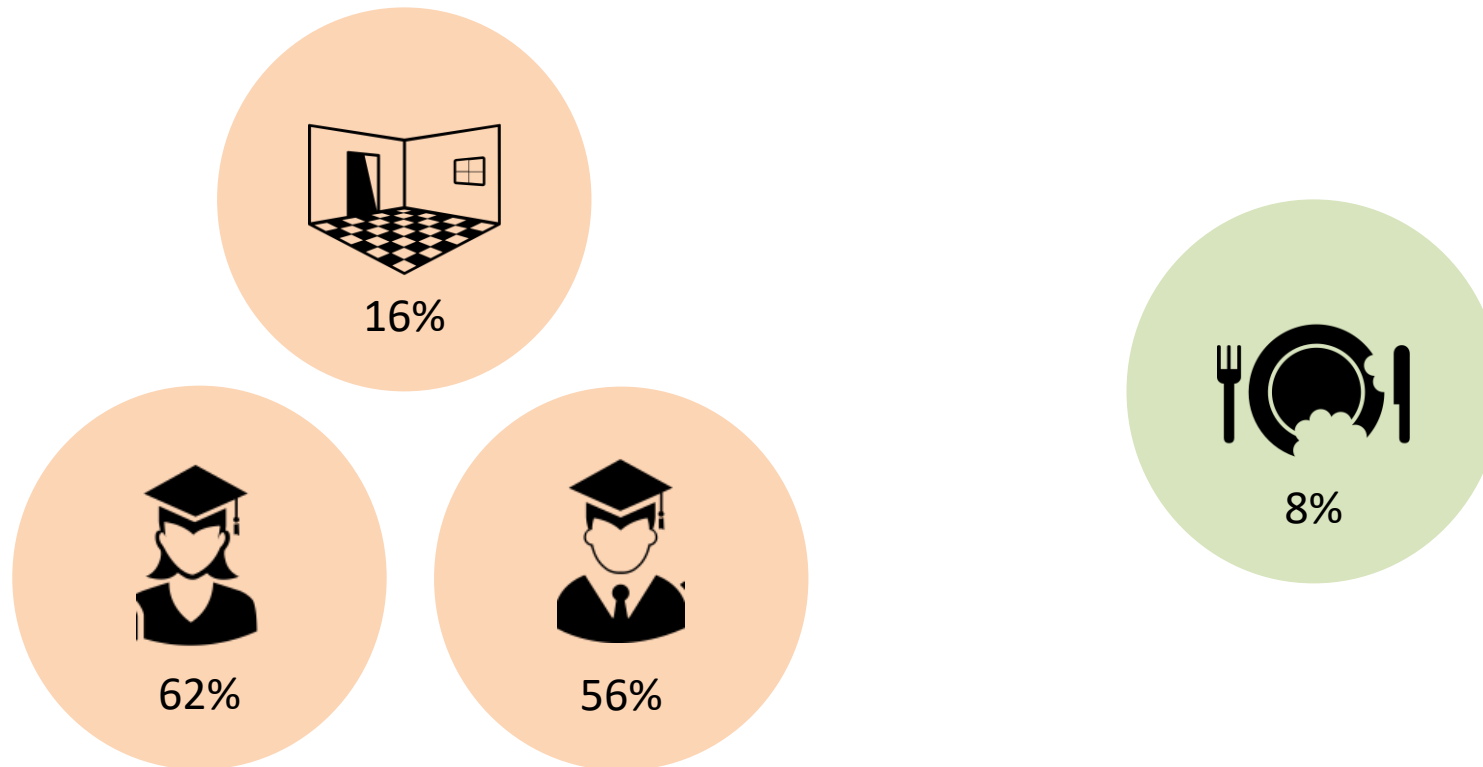
Intervention components & study arms

	Study arms (cluster randomized)					
	Full	Half	None	LNS	MNP	Control
Family ration						
Rice, kg	6.00					–
Beans, kg	4.00					–
Veg oil, kg	1.85					–
Indiv. ration	CSB					
CSB, kg	4.00					–
LNS	–					–
MNP	–	–	–	–	Yes	–
BCC	Yes	Yes	Yes	Yes	Yes	–
Health	Yes	Yes	Yes	Yes	Yes	Yes

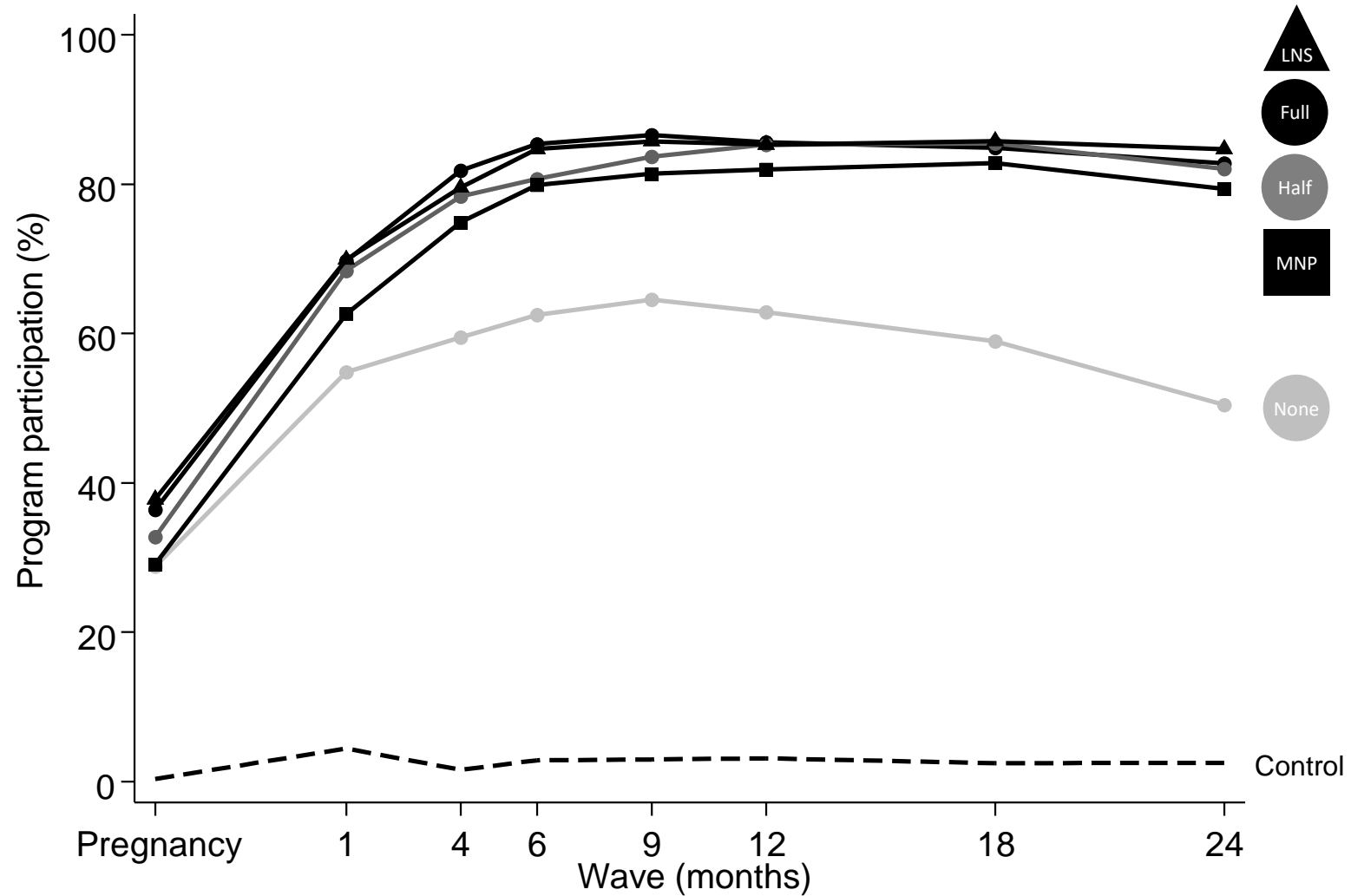
Data analyses

- Linear mixed effects models
- Covariates:
 - Household: wealth, dependency ratio, education of head, head speaks Spanish
 - Mother: education, speaks Spanish, age, height
 - Child: sex (for child outcomes)
- Standard errors adjusted for clustering

Descriptive statistics



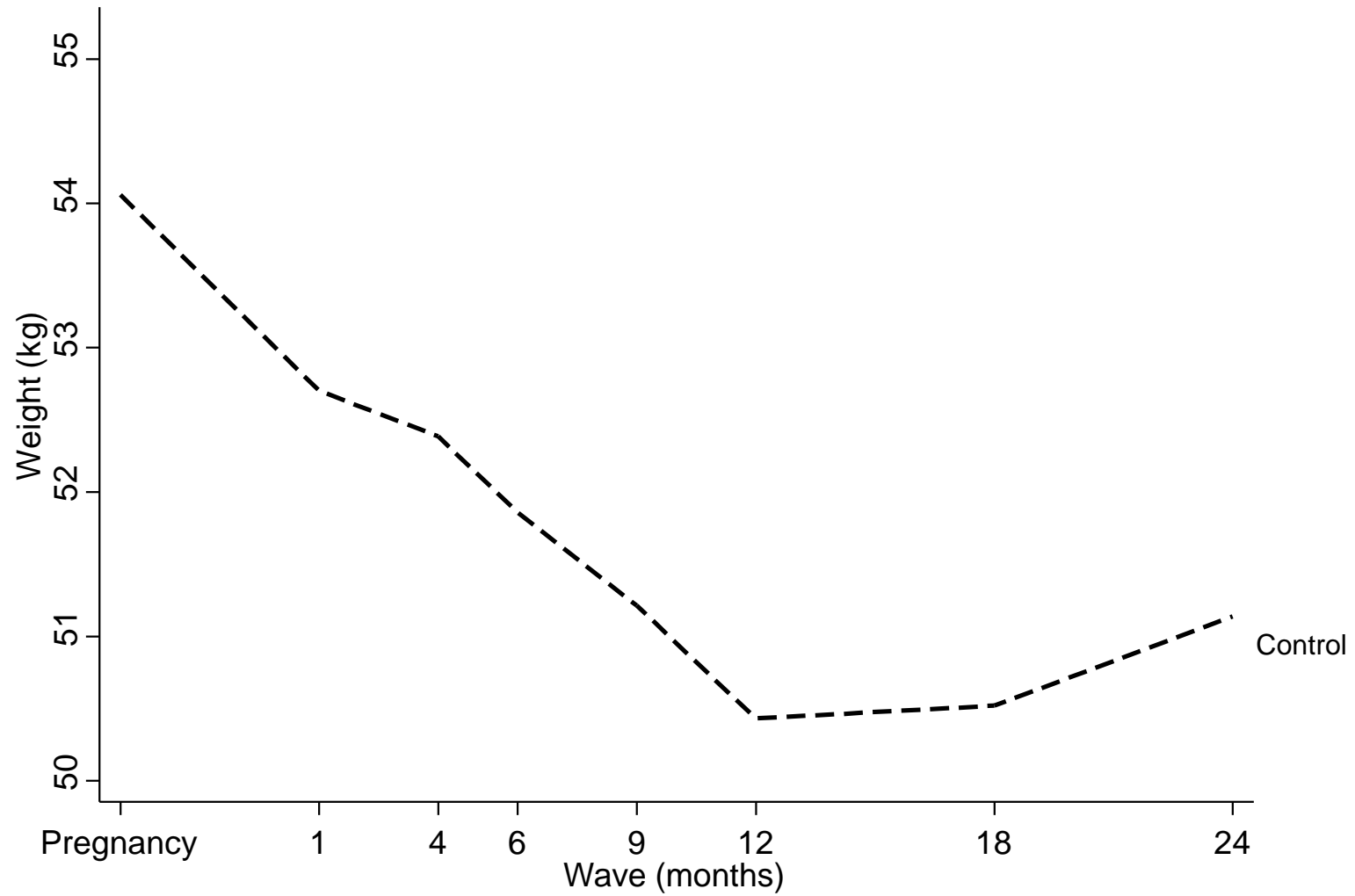
Program participation



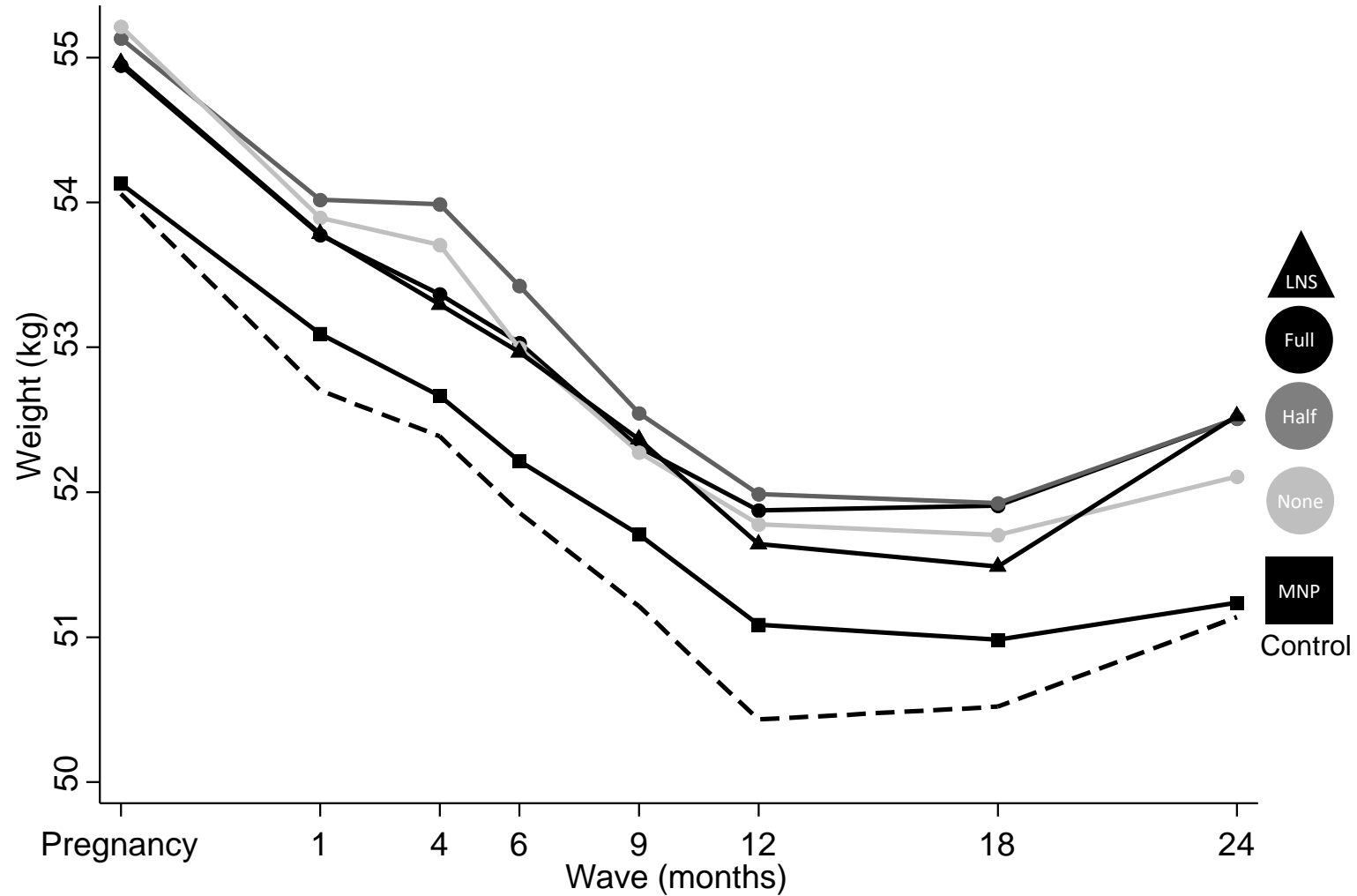
IMPACT ON MOTHERS' WEIGHT



Women's body weight



Women's body weight (observed)



Weight impacts (estimated)

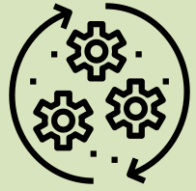
Full

- ↑ 570 g (depending on estimation method)
- ↑ 0.26 kg/m² (*idem*)

DISCUSSION



Discussion



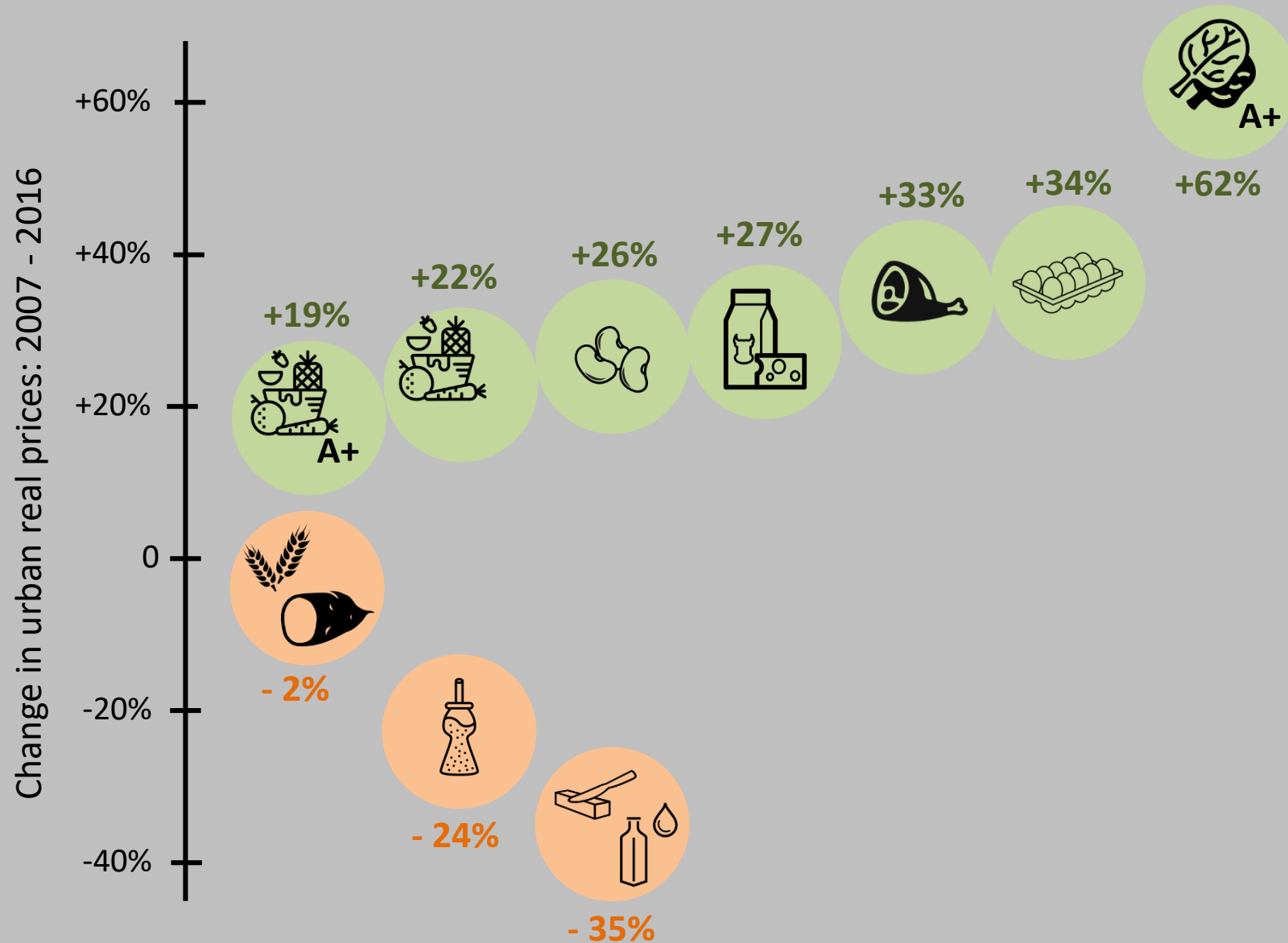
- Changes in physical activity: unlikely
- Increase in intake: likely (qualitative work & dose-response)

Discussion



– Our findings do ***not*** imply that reducing poverty is not necessary

Rising cost of health diets



Rising costs of nutritious foods in Ethiopia, Bachewe et al. (2017)

Discussion



- Our findings do ***not*** imply that reducing poverty is not necessary
- The design and targeting of programs must embrace the problem of overweight/obesity
- Include “double duty” objective:
 - Micronutrient supplements during pregnancy (instead of food rations) in food secure areas
 - BCC to promote healthy micronutrient-dense diets
 - Cash instead of food rations

Thank you
