# Role of food choice motives in the socioeconomic disparities in diet diversity and obesity outcomes in Kenya



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### Introduction

Prevalence of overweight and obesity in Kenya is rising which is of concern because it is associated with non-communicable diseases (NCDs) such as diabetes, cardiovascular disease, and cancer

Socioeconomic factors such as income and education create variations in dietary behaviors and weight outcomes

Consumer behavior plays a key role in the variations seen in food consumption patterns and weight outcomes among different socio-economic groups

The aim of the study was to understand the role of food choice motives in explaining the differences in diet diversity and weight outcomes among different socioeconomic groups in Kenya

#### **Methods**

- Field research May June 2022
- Study area: Kiambu, Murang'a, Nakuru & Uasin Gishu Counties in Kenya
- Household survey of 381 adults above the age of 18
- Employed the food choice questionnaire: 33 questions grouped into 8 major motives:

	Motives	"It is important to me that the food I eat on a typical day"
1.	Health concerns	"Keeps me healthy" 1=strongly disagree 7= Strongly agree
2.	Mood concerns	"Helps me cope with stress"
3.	Convenience concerns	"Is easy to prepare"
4.	Sensory appeal	"Tastes good"
5.	Natural content	"Contains no additives"
6.	Price concerns	"is cheap"
7.	Weight control	"low in fat"
8.	Familiarity	"Is what I usually eat"

Measurement of height and weight





Fig.1 Participants being interviewed

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### Results

- Overweight and obesity prevalence: Nakuru at 55.8%, Kiambu at 46.7%, Murang'a at 45.6%, and Eldoret at 40.7%
- Average BMI Female (n=196) 26.91 kg/m<sup>2</sup> Male (n=185) 23.24
- Top food choice motives in the population

Motives	Mean	SD
Price	5.84	1.18
Convenience	5.70	1.22
Health	5.57	1.49
Natural	5.47	1.58
Sensory	5.31	1.34
Mood	5.24	1.45
Weight	5.06	1.67
Familiarity	5.01	1.61

#### **Mediation results**

- The probability of an overweight and obese BMI outcome increases by:
  - 19 % for a standard deviation change in the asset score
  - 8% for a standard deviation change in the years schooling
- Wealth-BMI relationship significantly mediated by sensory and weight concerns
  - An increase in the asset score leads to higher sensory and weight concerns, which then results in a higher probability of being overweight and obese by 6%
- Education-BMI relationship significantly mediated by sensory and familiarity concerns
  - Higher education leads to increased sensory concerns and lower familiarity concerns which results in a higher likelihood of overweight and obesity by 2%
- Education was positively associated with diet diversity

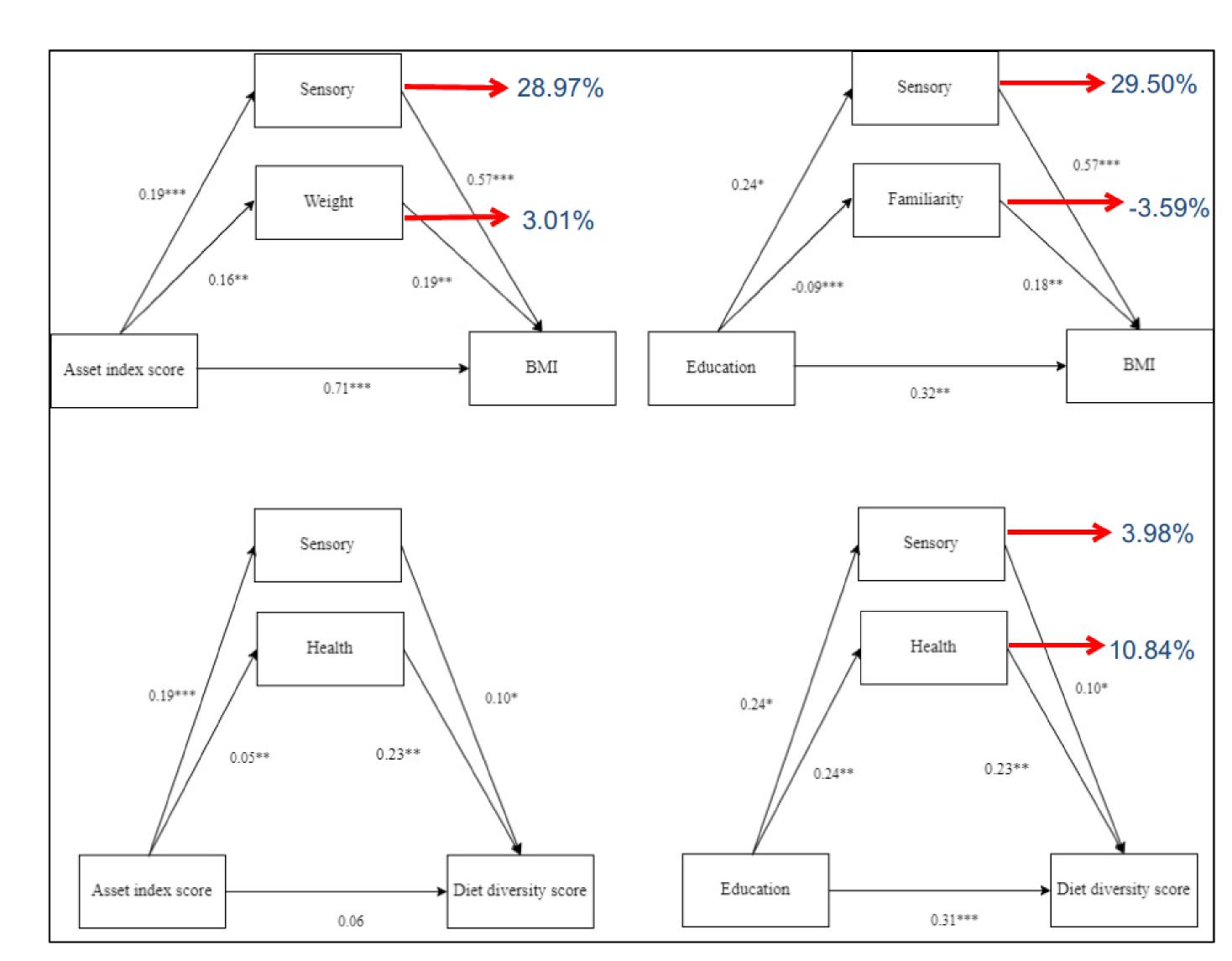


Fig.2 Mediation analysis with coefficients of direct and indirect effect and mediating percentage

#### Conclusion

- Rising prevalence of overweight and obesity among high socio-economic groups can partially be explained by the high importance that they place on Sensory motives
- Choosing foods based on sensory impulses leads to higher intake of fats, salt and sugars increasing energy intake
- High diet diversity score is associated with high education