



MyBreakfast Study of School Children:

Findings, Implications & Solutions

SYMPOSIUM

Presentation 4:

Breakfast intake and body weight status

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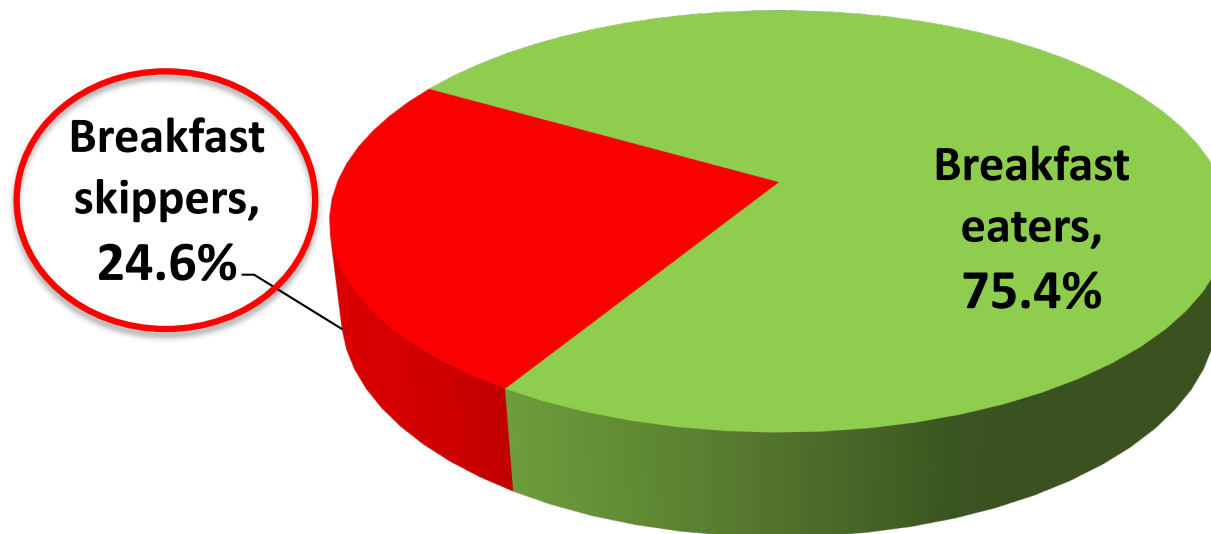
Introduction

- Breakfast skipping has been found to be associated with:
 - Higher body mass index
(Kapantais et al., 2011; Deshmukh-Taskar et al., 2010)
 - Prevalence of overweight and obesity
(Ahadi et al., 2015; Papoutsou et al., 2014; Moy et al., 2006)among children and adolescents.
- Breakfast skipping tends to increase with age and was more prevalent among girls compared to boys (Moy et al., 2006).

Key Findings #1

1 in 4 children skipped breakfast

Breakfast eaters vs Breakfast skippers($n=8661$)



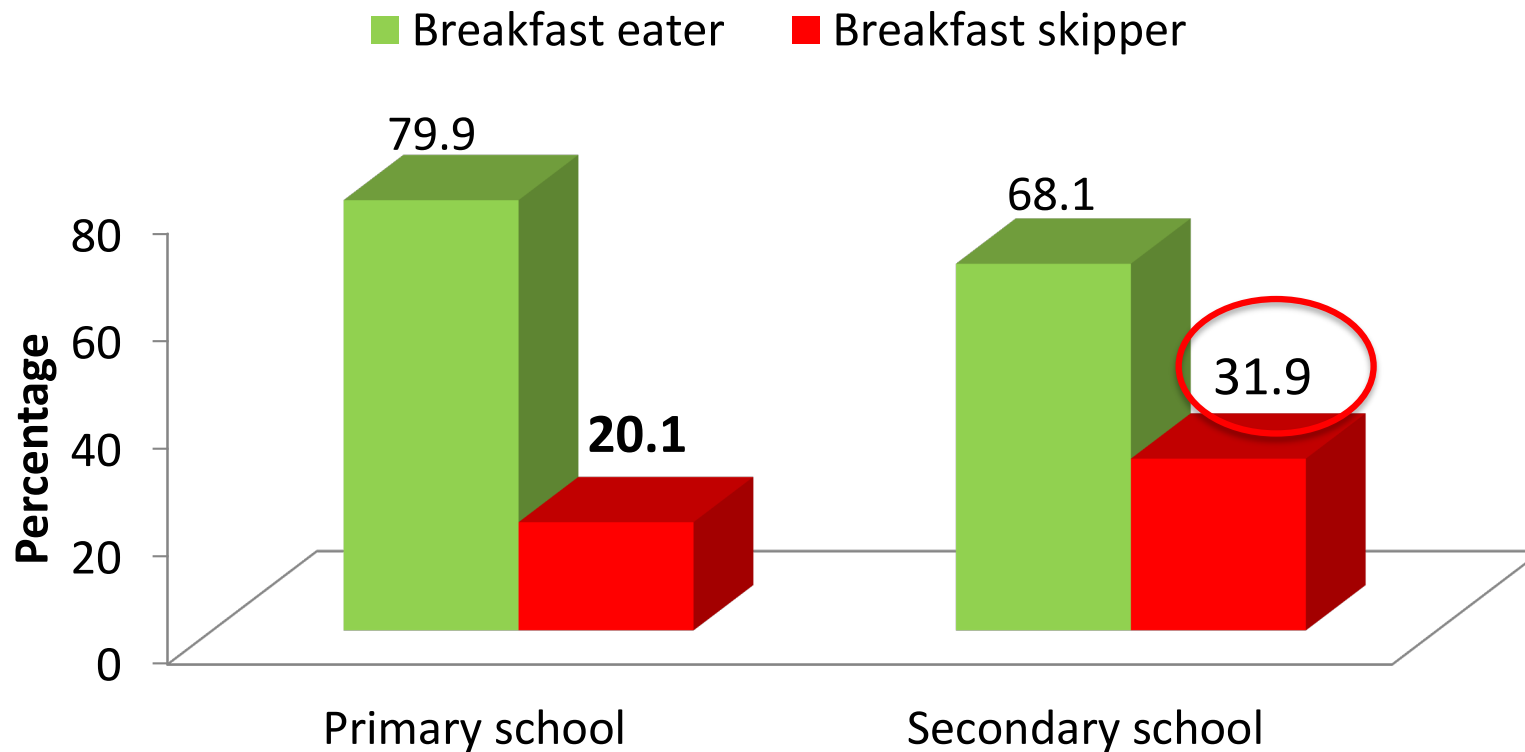
Definitions:

1. Breakfast eater: Consumed breakfast **at least 5 days a week**
2. Breakfast skipper: Skipped breakfast **3 days or more in a week**

Key Findings #2

The prevalence of breakfast skipping was higher among secondary school children than primary school children

Prevalence of breakfast skipping among primary ($n=5567$) and secondary ($n=3094$) school children

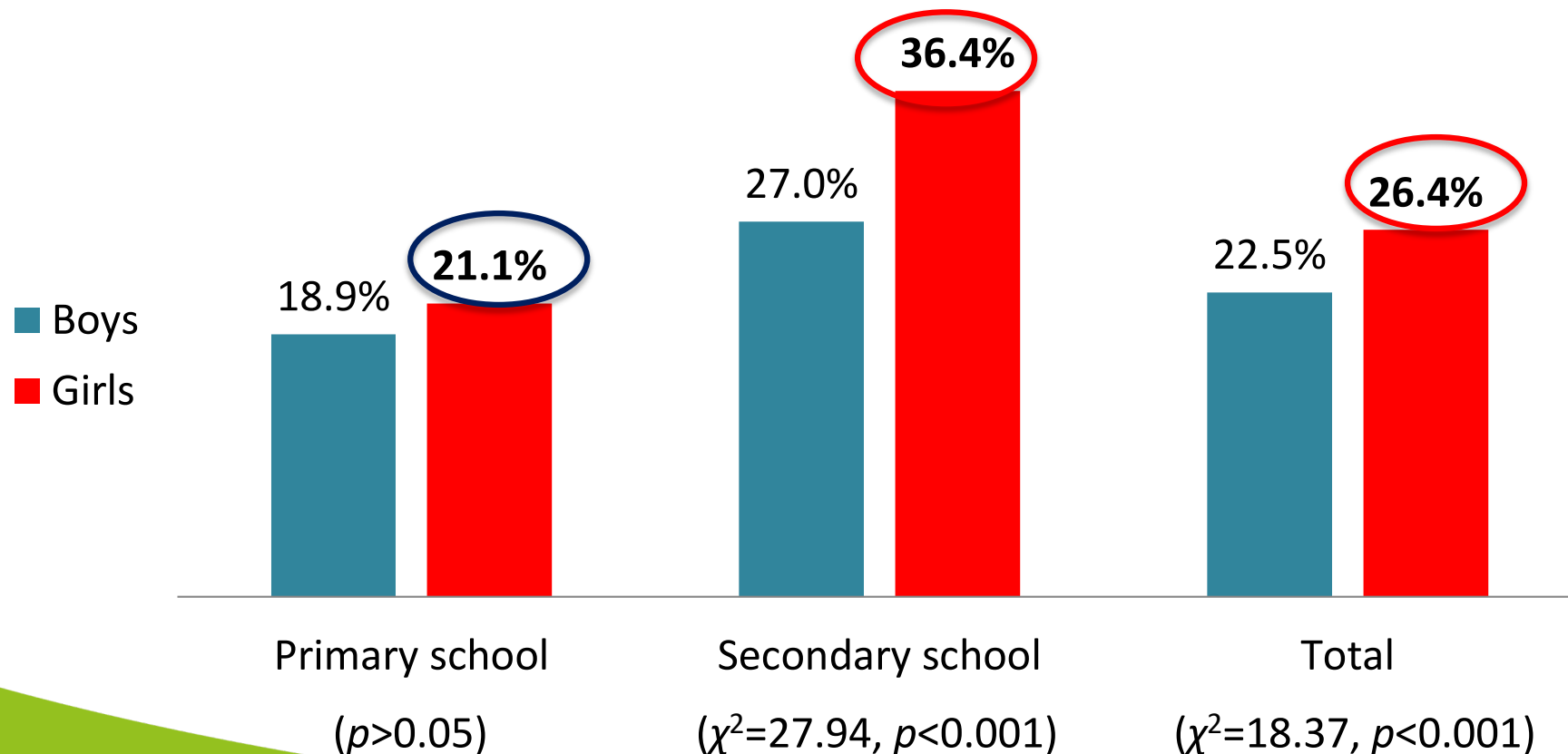


($\chi^2=143.51, p<0.001$)

Key Findings #3

More girls skipped breakfast than boys in both primary and secondary schools

Prevalence of breakfast skipping among primary (Total, $n=5567$; Boys, $n=2520$; Girls, $n=3047$) and secondary (Total, $n=3094$; Boys, $n=1497$; Girls, $n=1597$) school children by sex

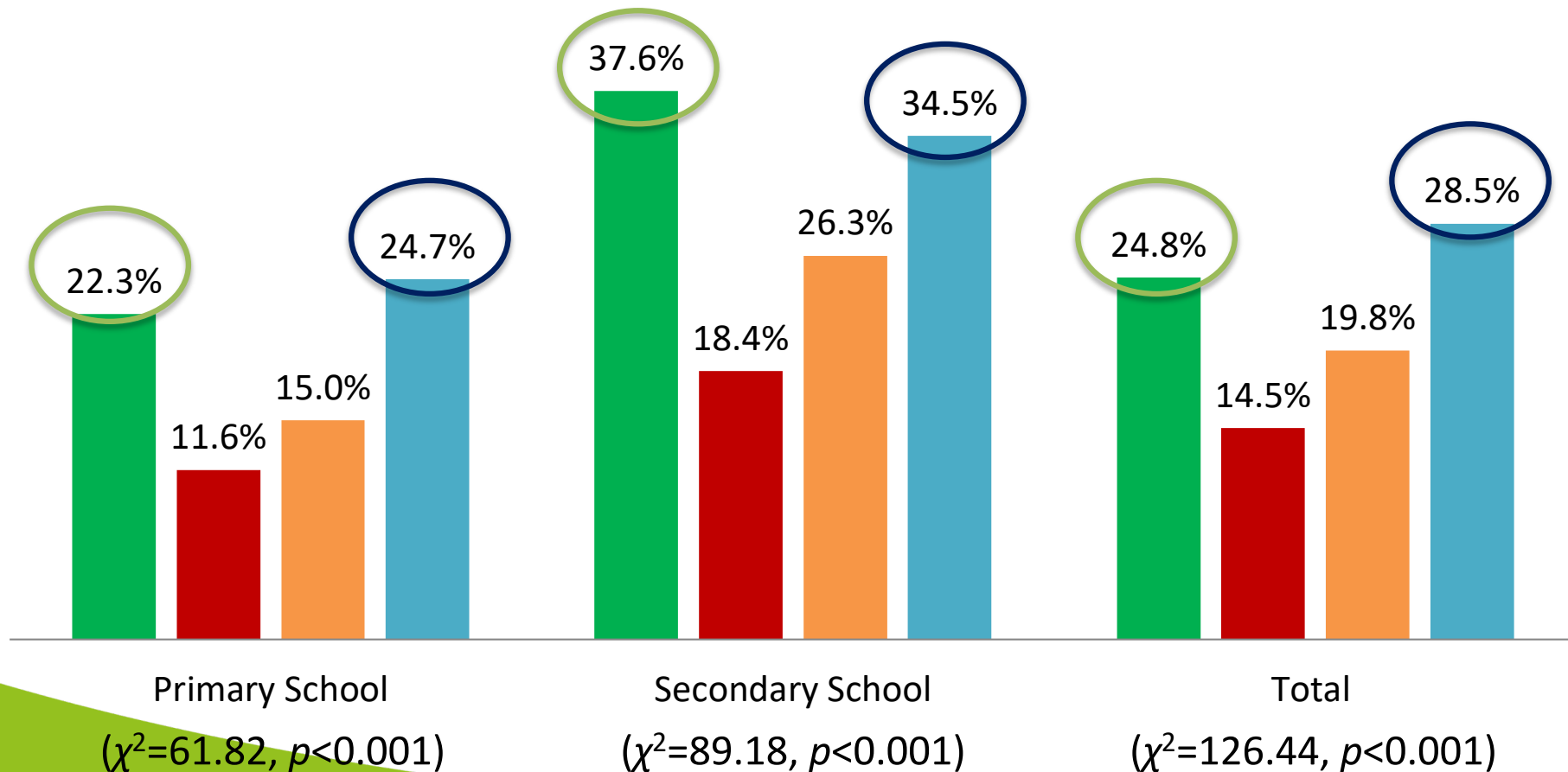


Key Findings #4

Breakfast skipping was more prevalent among Bumiputera Sabah/ Sarawak and Malay compared to Indian and Chinese Children

Prevalence of breakfast skipping among primary ($n=5567$) and secondary ($n=3094$) school children by ethnic groups

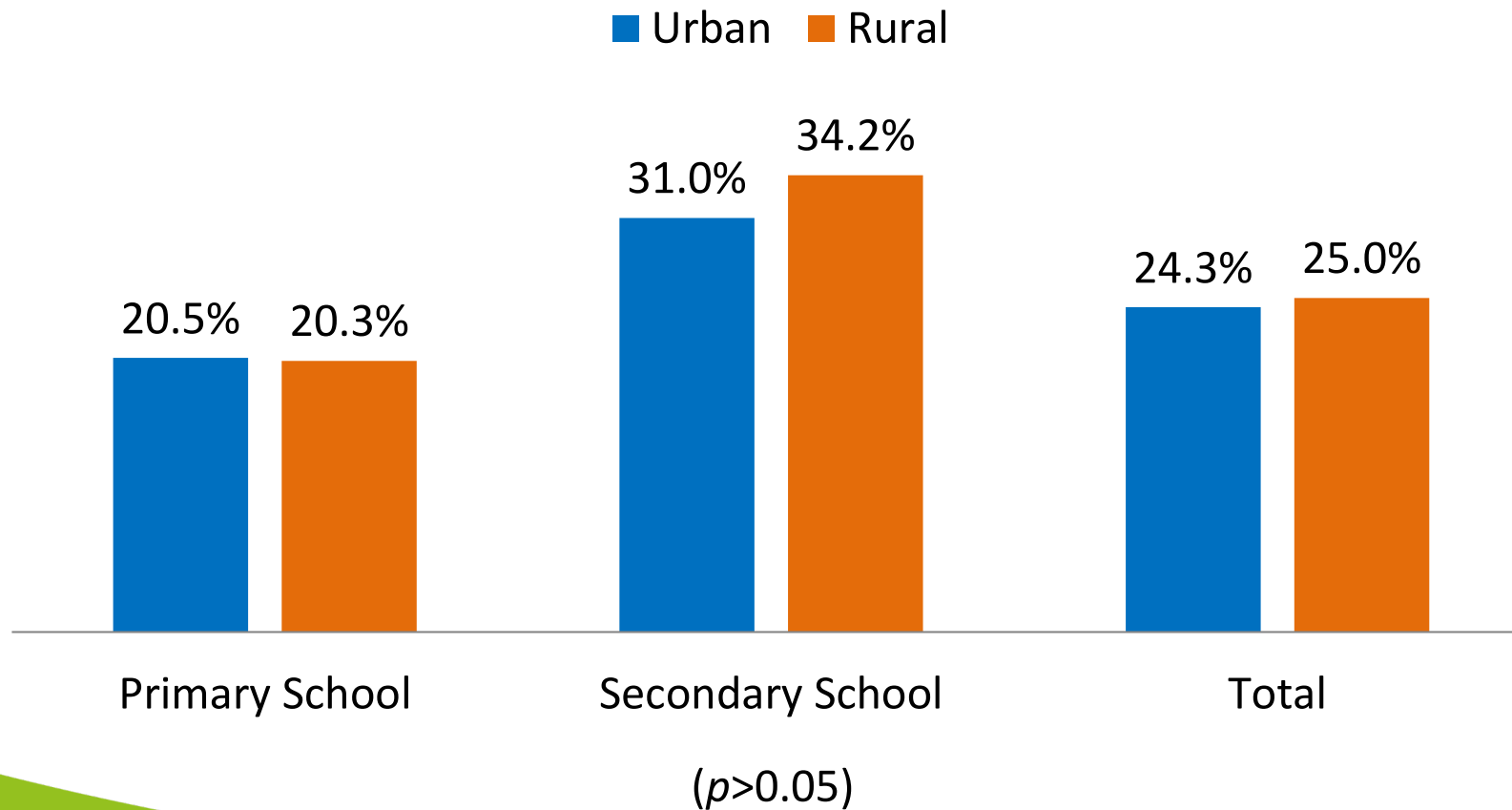
■ Malay ■ Chinese ■ Indian ■ Bumiputera Sabah/ Sarawak



Key Findings #7

There was no difference in breakfast skipping between urban and rural children

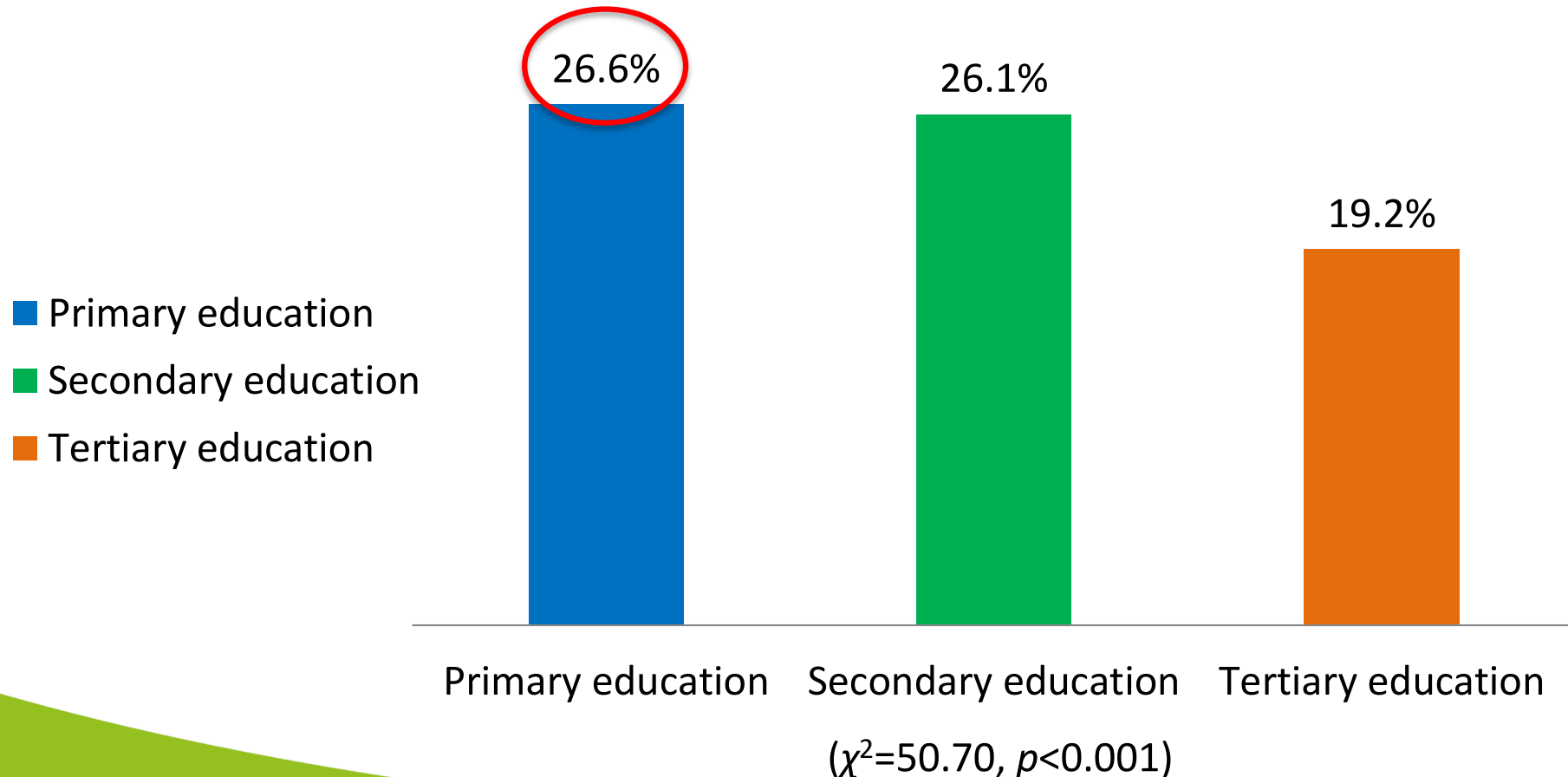
Breakfast skipping among primary (n=5567) and secondary (n=3094) school children by location



Key Findings #5

Breakfast skipping was higher among school children whose father had lower educational level

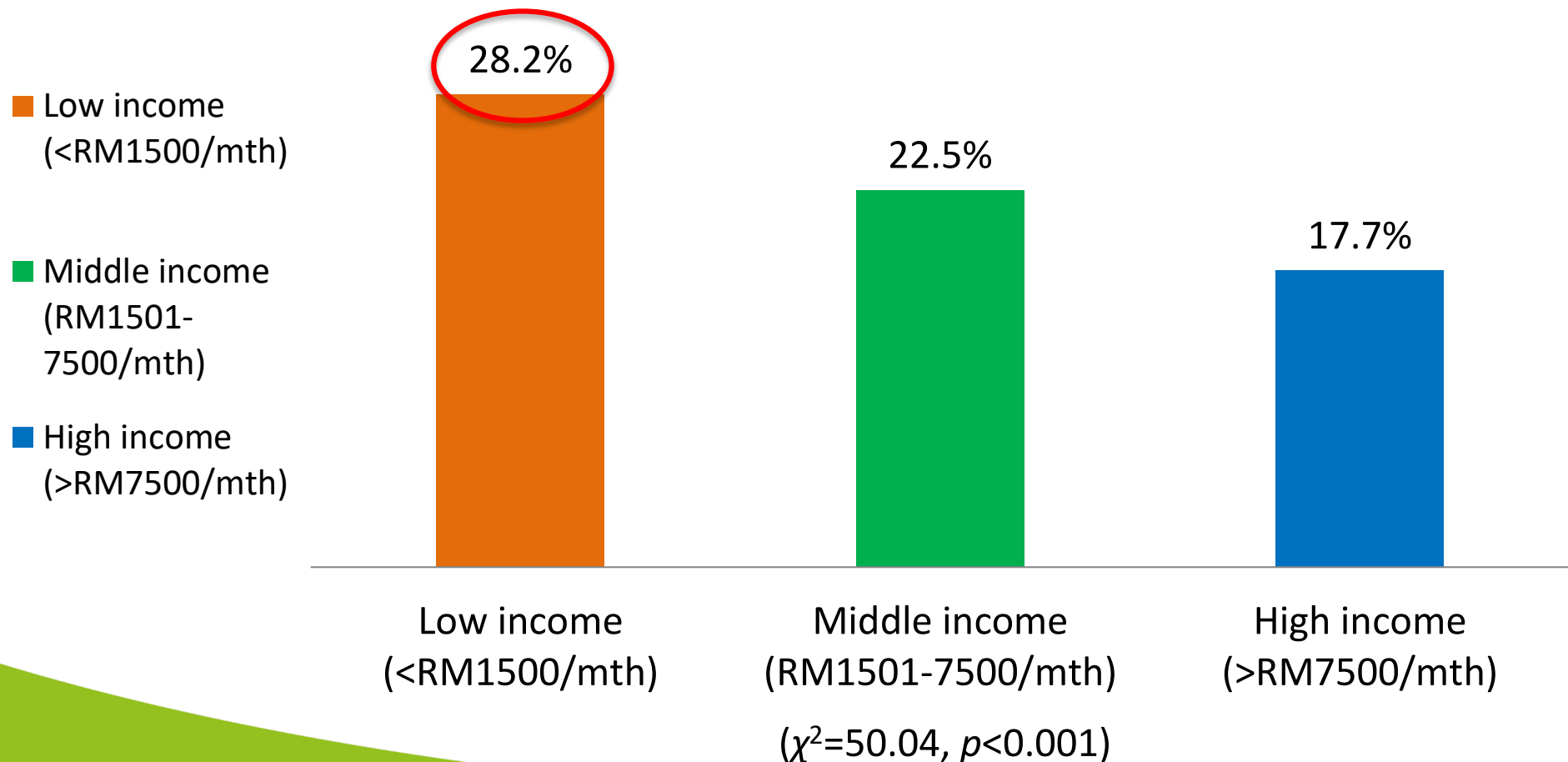
Prevalence of breakfast skipping among primary and secondary school children by fathers' educational level ($n=8046$)



Key Findings #6

Breakfast skipping was higher among school children from lower income families

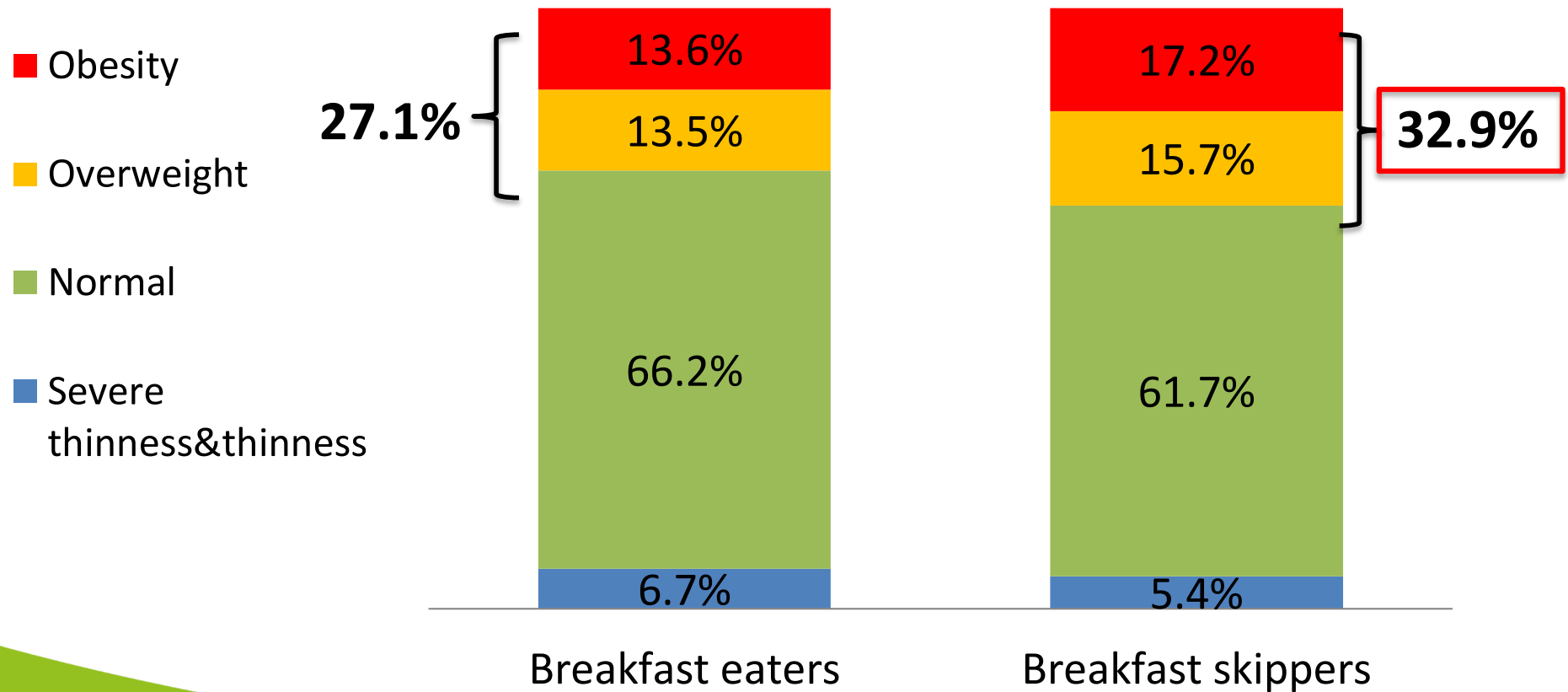
Prevalence of breakfast skipping among primary and secondary school children by income groups ($n=8284$)



Key Findings #7

There was a higher prevalence of overweight & obesity among breakfast skippers than breakfast eaters

Bodyweight status among breakfast eaters ($n=6536$) and breakfast skippers ($n=2125$)



($\chi^2=29.15, p<0.001$)



**Breakfast skippers
were 1.34 times more
likely to be
overweight/obese***

*adjusted for potential confounders including age, sex, ethnicity,
father's education level, income and physical activity
(CI=1.15-1.57, $p<0.001$)

Recommendations

- Interventions to **promote regular breakfast consumption** including through schools, should be one of the approaches undertaken **to combat the serious problem of overweight and obesity** in the country.
- **Parents should make an effort to prepare breakfast** for children and encourage them to consume it **before school**.
- **Parents and family members** should play a role in encouraging breakfast consumption and should be **role models for children** by consuming breakfast themselves.

References

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Thank You

