

### Schoolchildren's Body Mass Index and Dietary Practices Vary Across Socio-Economic Status in Kenya

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**Objectives:** We conducted a cross-sectional study to examine the prevalence and determinants of overweight and obesity among schoolchildren at different levels of socio-economic status in Kenya. We explore children's weight status and dietary practices in the current analysis.

**Methods:** The research study was conducted in Nairobi and Kisumu, the largest and the third-largest cities in Kenya. Three public schools, catering to children from households at low, medium and high socio-economic status were purposively selected to participate in the study in each city. Data was collected among children within the ages of 10–12 years enrolled in grades 4–6 at each school. Trained enumerators measured children's weights and heights. Parents, with the help of their respective schoolchildren, completed questionnaires on schoolchildren's dietary practices including consumption of fruits,

vegetables, snacks foods, confectioneries, beverages and restaurant foods. Completed sets of body measurements and dietary practices data were available for 390 children. We used Wilcoxon-Mann Whitney, Kruskal Wallis and chi-square tests to compare schoolchildren's weight status and dietary practices across cities and school income status.

**Results:** Over 15% of the schoolchildren were overweight, 5.5% were obese and 3% were stunted. Schoolchildren's weight status did not significantly differ across cities. However, % of overweight or obese children were significantly higher among children attending high-income schools compared to those in middle- and low-income schools. Frequency of consumption of red meats, fries and take-away foods, and amount of fruit juice consumed per week were significantly higher among children enrolled in high-income schools. Frequency of consumption of breakfast, eating meals in front of a screen and amount of milk consumed per week were significantly lower among children enrolled in low-income schools.

**Conclusions:** This study increases our understanding of dietary practices and overweight and obesity patterns among schoolchildren, and contributes to obesity prevention efforts in Kenya. Additional analysis will explore the relationship between dietary practices, and overweight and obesity.

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