

ABSTRACT

Childhood Obesity among Trinidadian Preschoolers: Implications for Body Composition, Lifestyle Factors, Parental Feeding Strategies and School Food Policy

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Background / Objectives: Childhood obesity remains a public health challenge globally. In Trinidad, its prevalence and determinants among preschoolers are unknown. There is also a lack of good convenient screening tools for diagnosis and intervention. This study therefore sought to (i) quantify the prevalence of obesity, (ii) determine the best indicator of excess adiposity for Trinidadian preschoolers, and (iii) examine the possible linkages among parental feeding strategies, school nutrition policy and child weight.

Methods: Five hundred and ninety-six (596) preschoolers from thirty four (34) schools had anthropometry done, and percentage body fat (PBF) estimated using foot-to-foot bioelectric impedance. A cut-point of $\geq 25\%$ body fat defined excess adiposity. Ethnicity/race was categorized according to East Indian (E), African (A) and Mixed (M) ancestry. Sixty parents whose children were part of the preschool cohort voluntarily completed feeding questionnaires and a child dietary assessment. A representative from each school answered questions on school policy. All analyses were conducted using SPSS version 15 for Windows (SPSS, Chicago, IL).

Results and Discussion: The overall prevalence of overweight and obesity was 14.6%, with boys being twice as likely as girls to have excess adiposity. Preschoolers of African descent were taller, heavier and had higher abdominal fat. WHO-based cut-off provided the best overall diagnostics, while all cutoffs effectively identified as normal, participants whose adiposities were in the normal range. Ashwell's ratio identified 20.6% of preschoolers over the normal range. Girls displayed overall healthier lifestyles, and the indulgent feeding style was related to increased fruit consumption. Public schools were more likely to have 'fruit times' and 'no soda' policies.

Conclusion: Ethnic and gender differences in adiposity and feeding styles do exist in this population. The indulgent style was associated with more positive outcomes, while unwritten policies were linked to negative outcomes. Future research is recommended to discover which cut-offs are associated with obesity-related health outcomes in Trinidadian preschool children.

Keywords: pediatric obesity; Trinidadian preschoolers; anthropometry; diagnostics; feeding strategies; policy.