INVESTIGATING CHILDHOOD OBESITY IN A HINDU TRINIDADIAN POPULATION

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2014

**Background:** The implication of childhood obesity in Trinidad and Tobago has raised concerns for its prevention but little evidence exists for diverse diet practices of ethnic groups in Trinidad and Tobago. Worldwide, vegetarianism has been praised for its protective effects against obesity.

**Objectives:** To estimate (1) the prevalence of overweight and obesity in the Trinidadian Hindu school-aged and adolescent population (2) To assess the weight status of Hindu school-aged Trinidad children, using the nutrition assessment techniques of BMI for age, Body fat Percentage (BF%) through Bioelectrical Impedance Analysis and Waist to Height Ratio, in relation to non-meat consumption and low-meat consumption practices (3) to determine the association between practiced diets and excess adiposity (4) to obtain clues for prevention of overweight in Hindu vegetarian and non–vegetarian Trinidadian school-aged children.

**Design:** The cross-sectional survey used a self-administered food frequency and lifestyle questionnaire and collection of anthropometric measurements. A convenient sample of 12 temples was selected and a total of 173 participants volunteered. Prevalence of obesity was determined by calculating BMI from weights and heights, Waist Circumference (WC) to Height Ratio and Body Fat Percentage (BF %) readings. The results were analysed using SPSS version

**Results:** Overall prevalence of excess adiposity was 30.2% of participants aged 10-18 years. Non-vegetarians (20%) were more obese than vegetarians (12.1%), with average BF% of 29.4% and 26% respectively. Males (47.4%) had significantly higher BF%, WC and Height. Obese and underweight participants consumed higher levels of meat; non-vegetarians consumed more fast food, fruit and starch than non-meat eaters. Home-cooked meals were eaten daily by 67.5% of participant and 2.9% eating out daily. Physical activity requirements were met by 57.8% of the population.

**Conclusion:** New and alarming frequencies of excess adiposity were concluded, thus this thesis should be treated as pilot study to guide extensive multi-sectorial research and policy change in the near future.