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A Quantitative and Qualitative Study of Lifestyle and Obesity in Asian Adolescents in New Zealand

Shirin Foroughian

Abstract

Overweight and obesity in childhood is a major and growing public health concern with short and long term physical and psychological consequences. Historically obesity was seen as a non-Asian phenomenon, hence this research focused on looking at issues of overweight and obesity in twelve to eighteen year old Asians in New Zealand. Particular emphasis was given to investigating the nutritional and exercise behaviours of young New Zealand Asians, in order to suggest a health promotion approach to empower and improve the health of young people.

The research was based on both quantitative (structured individual interviews and anthropometry measurements with 821 students) and qualitative approaches (semi-structured interviews with 12 focus groups comprising 46 students) of South Asian, East Asian and European ethnicity who lived and attended high schools in South Auckland. The findings suggest that being overweight is a concern faced by Asian adolescents at the same level as European adolescents. The results show no significant difference in mean body mass index or mean waist to height ratio amongst the three ethnic groups; and no difference in fat mass between South Asian and European adolescents when using same cut-off points for all ethnicities. Additionally, there are a number of other risk factors affecting the weight status of Asian adolescents including: missing breakfast or lunch; consumption of junk food such as chips, biscuits, chocolates and pies while at school or at home before dinner; purchasing food from school canteens or dairies; discrimination of traditional foods at school; high consumption of sugary drinks, fried and fast foods; having access to more food and more variety than in their traditional cultures; lack of exercise and opportunities to be active; and hours spent watching television or playing computer or electronic games. There are also a number of factors that play a protective role for all adolescents in maintaining a healthy weight including: having breakfast and lunch; bringing food from home; walking to school; and doing sports at school or being involved in an organised or team sport.

Empowering and culturally appropriate ‘educational and physical activity interventions’ for young people and their families are recommended; but to deal with the issue of obesity in Asian adolescents, family, school, community and government all have to play a role.
Dedication

To my loving and supportive parents
Acknowledgements

I wish to express my sincere gratitude for the untiring support, encouragement, and guidance of my supervisor, Associate Professor Robert Scragg, I will forever be indebted to you. I would also like to express my special thanks to my second supervisor Professor David Thomas, for his continuous advice and expertise.

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I would like to offer my gratitude to the participating schools especially James Cook High School for generously giving their time to share their experiences, as well as the National Heart Foundation of New Zealand, Health Research Council of New Zealand, the Centre for Asian Health Research and Evaluation, and the University of Auckland Scholarships Office, without their support this study would not have been attempted.

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<th>Description</th>
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<tbody>
<tr>
<td>%BF</td>
<td>Percentage Body Fat</td>
</tr>
<tr>
<td>A</td>
<td>Age (y)</td>
</tr>
<tr>
<td>AQoL</td>
<td>Assessment of Quality of Life</td>
</tr>
<tr>
<td>BIA</td>
<td>Bioelectrical Impedance Analysis</td>
</tr>
<tr>
<td>BMI</td>
<td>Body Mass Index</td>
</tr>
<tr>
<td>CF</td>
<td>Consent Form</td>
</tr>
<tr>
<td>CMDHB</td>
<td>Counties Manukau District Health Board</td>
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<tr>
<td>CVD</td>
<td>Cardiovascular Disease</td>
</tr>
<tr>
<td>DBP</td>
<td>Diastolic Blood Pressure</td>
</tr>
<tr>
<td>DOHaD</td>
<td>Developmental Origins of Health and Disease</td>
</tr>
<tr>
<td>DVD</td>
<td>Digital Video Disc</td>
</tr>
<tr>
<td>E</td>
<td>Ethnicity</td>
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<tr>
<td>FOAD</td>
<td>Foetal Origins of Adult Disease</td>
</tr>
<tr>
<td>FFM</td>
<td>Fat Free Mass</td>
</tr>
<tr>
<td>FM</td>
<td>Fat Mass</td>
</tr>
<tr>
<td>H</td>
<td>Height (cm)</td>
</tr>
<tr>
<td>HDLC</td>
<td>High Density Lipoprotein Cholesterol</td>
</tr>
<tr>
<td>HEHA</td>
<td>Healthy Eating Healthy Action</td>
</tr>
<tr>
<td>IOTF</td>
<td>International Obesity Task Force</td>
</tr>
<tr>
<td>LBD</td>
<td>Let’s Beat Diabetes</td>
</tr>
<tr>
<td>LTSA</td>
<td>Land Transport Safety Authority</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>NCNS</td>
<td>National Children’s Nutrition Survey</td>
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<tr>
<td>NHMRC</td>
<td>National Health and Medical Research Council</td>
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<tr>
<td>NZHS</td>
<td>New Zealand Health Survey</td>
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<tr>
<td>OPIC</td>
<td>Obesity Prevention In Communities</td>
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<tr>
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<td>Personal Digital Assistant</td>
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<td>Paediatric Quality of Life</td>
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<td>PEOPLE</td>
<td>Planning and Evaluation of People-Led Endeavours</td>
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<td>PIS</td>
<td>Participant Information Sheet</td>
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<td>Socioeconomic Status</td>
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<td>Sport and Recreation New Zealand</td>
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<td>TBCA</td>
<td>Tanita Body Composition Analyser</td>
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<td>Total Body Water</td>
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<td>TG</td>
<td>Triglyceride</td>
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<td>Television</td>
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<td>Waist Circumference</td>
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<td>WHO</td>
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<tr>
<td>WHR</td>
<td>Waist to Height Ratio</td>
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<tr>
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