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**An in-depth investigation of Pacific young people's eating habits and  
dietary diversity as related to the pathways of obesity**

**A thesis presented for the partial fulfilment of the requirements for the**

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Master of Science  
In  
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## ABSTRACT

**Background:** Prevalence of obesity is high amongst Pacific youth aged 16-24years. To understand obesity amongst Pacific youth, exploration into their social realities, culture, diet quality and food habits is needed.

**Aim:** To explore dietary diversity and eating habits as well as cultural factors that influence food consumption of Pacific youth aged 16-24 years using a qualitative approach.

**Methodology:** A sample of 30 Pacific youth was purposively selected. Diet quality was assessed using a newly developed dietary diversity questionnaire specific to Pacific people, based on guidelines from the FAO. Eating habits, meal patterns, food choices and related cultural and social influences was explored using a qualitative face-to-face interview.

**Results:** Dietary diversity scores (DDS) were calculated by counting the number of established food groups (total of 26 food groups divided into 15 nutritious and 11 discretionary food groups). Food variety scores (FVS) were calculated by counting the number of individual food items consumed (n=227 foods in total; 129 nutritious foods and 98 discretionary foods) as well as within each food group. The eating habits data was analysed using a content analysis approach where trends in meal patterns, consumption at social occasions and weight status were identified.

Dietary diversity: the mean total DDS was 23.1; the mean DDS of nutritious and discretionary food groups was 14.3 and 8.83 respectively. The mean total FVS was 91, the mean FVS of the nutritious and discretionary foods was 51.7 and 39.3 respectively. The most variety in the nutritious category was identified in the Vitamin A and Vitamin C rich fruit and vegetable groups, however, only moderate amounts of food items were consumed from these groups. The most variety in the discretionary category was identified in the drinks group where intakes ranged between four and ten items out of a total 14 identified items. Eating habits: a two-meals/day pattern was observed, with over half the participants skipping breakfast and consuming snacks during the day. For sixteen participants, their food intake increased due to the availability of a large variety of freely available food in their social environments.

Weight: over half (57%) of the participants were unhappy with their weight and many of these participants have tried diet and exercise to manage their weight. Many participants perceived their unhealthy lifestyles to be the cause of overweight and obesity.

**Conclusion:** dietary diversity was high amongst Pacific youth, however, the variety of nutritious foods consumed were moderate in comparison to discretionary foods; indicative of a moderate diet quality. Lack of time for meal preparation, convenience, low cost and taste were the reasons for established eating habits. Vast availability of foods as well as cultural values around food consumption were reasons contributing to increased food intake at social occasions.

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## CONTRIBUTORS TO THE STUDY

<b>Researchers</b>	<b>Contributions</b>
Nikita Deo– Student	Main researcher, developed dietary diversity questionnaire (DDQ), standards of practice for use of DDQ, data analysis, statistical analysis, interpretation and discussion of results, author of thesis.
Rozanne Kruger– Supervisor	Co-investigator on the larger study, main academic supervisor, development of dietary diversity questionnaire, study design, assistance with data analysis, interpretation of results and reviewed thesis.
Professor Bernhard Breier– Co-supervisor	Co-investigator on the larger study and Co-supervisor for this thesis project
Ridvan Firestone- Centre of Public Health Research, Massey University	Principal investigator and research co-ordinator of the larger study called “chewing facts on fats- what does it say about you”

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## **ABBREVIATIONS**

AICR: American Institute for Cancer Research

AHS: Annual Health Survey

BMI: Body mass index

CVD: Cardiovascular disease

DDQ: Dietary Diversity Questionnaire

DDS: Dietary diversity score

FAO: Food and Agriculture Organisation

FVS: Food variety scores

MOH: Ministry of Health

NNS: National Nutrition Survey

NZ: New Zealand

OECD: Organization for Economic Cooperation and Development

SES: Socio-economic status

T2DM: Type 2 diabetes mellitus

WCRF: World Cancer Research Fund

WHO: World Health Organisation