Diet and the burden of disease:

a Māori perspective

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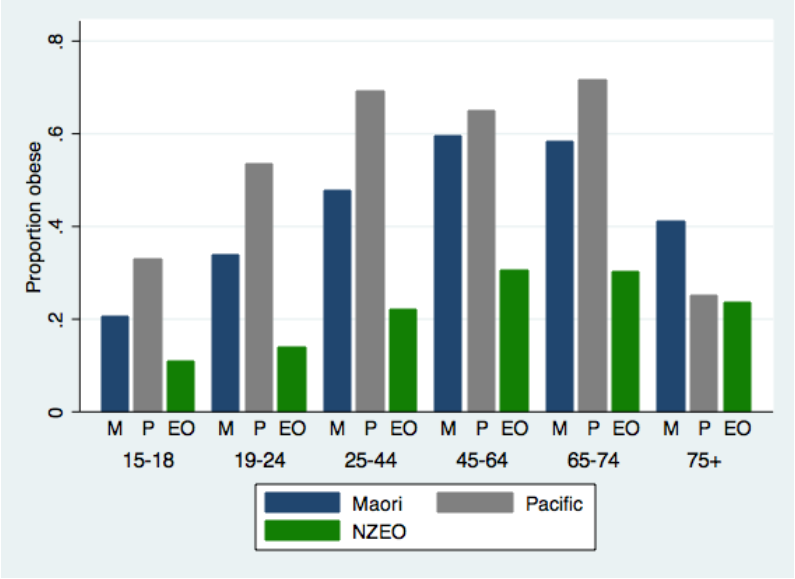
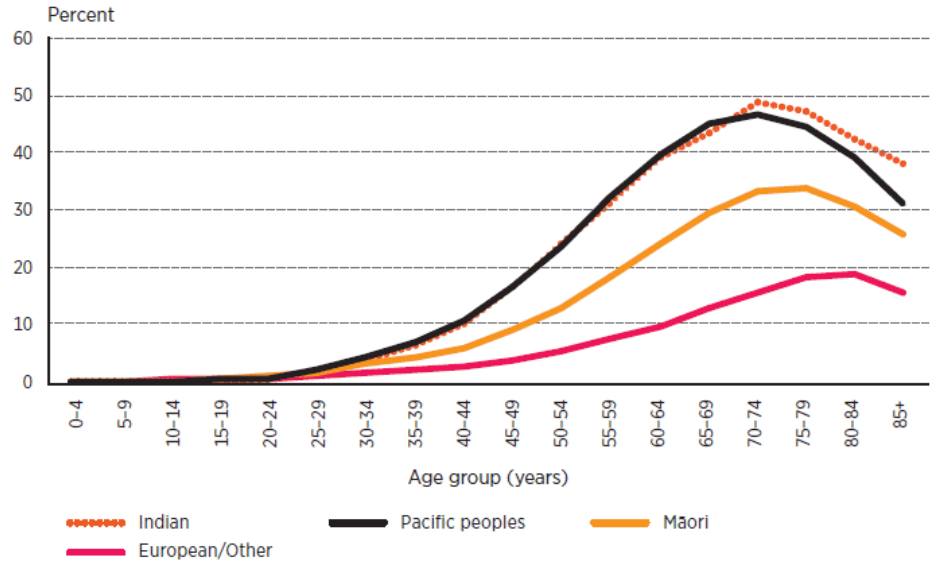
Prevalence of obesity



University of Otago and Ministry of Health 2011

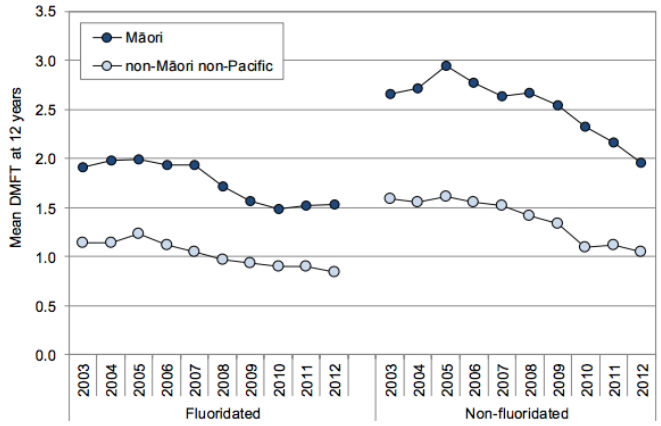
Prevalence of diabetes



Ministry of Health, Health and Independence Report 2015

Tooth decay

Figure 70. Mean scores for the number of decayed, missing or filled permanent teeth (DMFT) at age 12 years by ethnicity, New Zealand 2003–2012



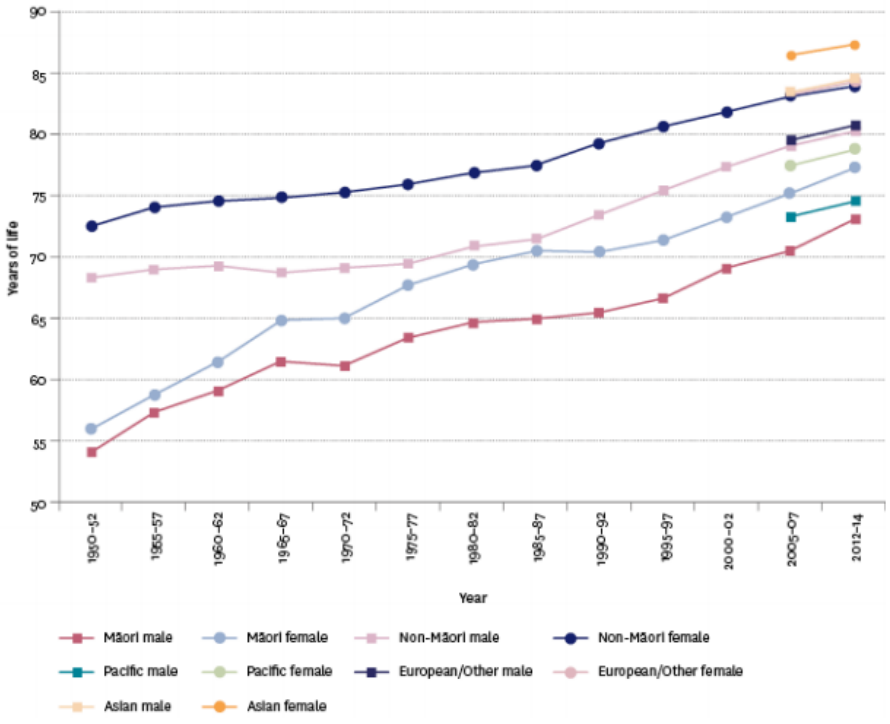
Source: Ministry of Health

	Self reported diabetes	Un-diagnosed	Total diabetes	Pre-diabetes
Maori	7.0%	1.4%	8.4%	16.6%
Pacific	8.1%	2.7%	10.8%	23.0%
Other	4.5%	0.7%	5.2%	15.9%

Coppell et al. NZ Med J 2013

Maori die younger – and the gap's not closing

Figure H1.2 – Life expectancy at birth, by ethnic group and sex, 1950–1952 to 2012–2014



Source: Statistics New Zealand

Notes: Ministry of Health data has been used for 1980–1982 to 1995–1997. It includes an adjustment for the undercount of Māori deaths relative to the Māori population by linking mortality to census records. There is a seven-year gap between 2005–2007 and 2012–2014, which differs from the rest of the time series which has a five-year gap. Life expectancy breakdowns for Pacific, European/Other and Asian populations are available from 2005–2007.

Major causes of death

Women:

1. Lung cancer
2. Heart disease
3. COPD
4. Stroke
5. Diabetes

Men

- Heart disease
- Lung cancer
- Suicide
- Diabetes
- Vehicles crashes

Dietary patterns: Maori vs non-Maori

Less likely to consume

- 5+ Fruit and vegetables
- Low fat foods
- Wholegrain bread

More likely to consume

- Sugary drinks
- Fast food
- Hot chips
- Battered fish
- Fatty meats

Source: ANS 2008/09, NZ Ministry of Health and Statistics NZ

Impacts of colonialisation

2 OF 2

Al Nisbet's cartoon published in The Press on May 30.

- Wide scale land confiscations
- Loss of mātauranga (knowledge) and resources
- Destabilisation of Māori socio-political organisations
- Racism and discrimination
- Loss of access to traditional food sources
- Deliberate exclusion from higher education
- Wide-scale migration into urban centres
  - Increased consumption of cheap processed foods
  - Reduced physical activity levels

Social determinants of health inequities

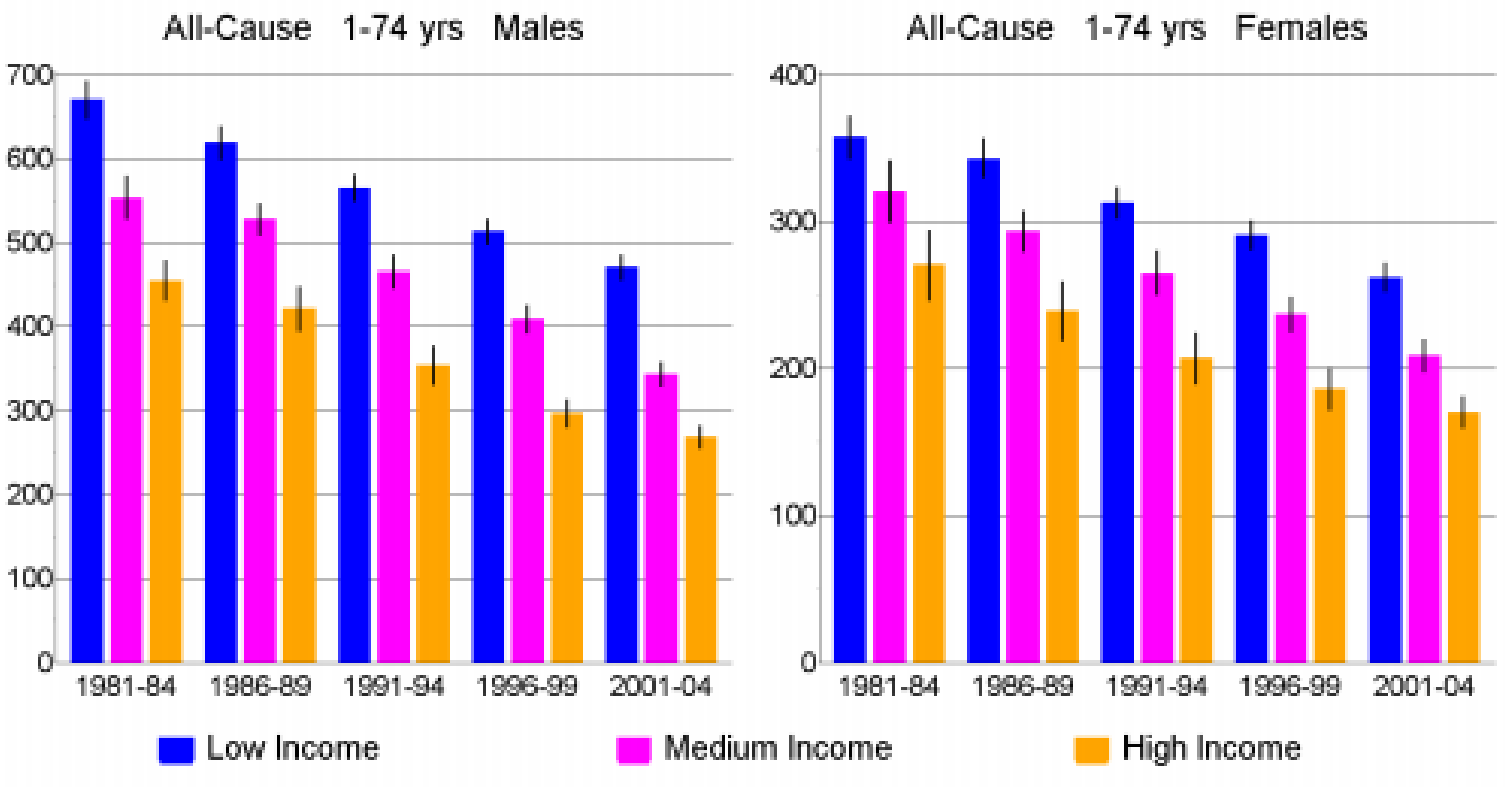
	Maori	Non-Maori
High-school education or less (%)	55	44
Low food security (%)	16	6
Live in most deprived areas (%)	41	15
Median income per week ($)	475	575
Unemployment (%)	16	7
Home ownership (%)	28	50

Between 1997 and 2008:

- Maori reporting being fully food secure decreased from 48 to 35%
- Maori reporting low food security increased from 9 to 17%

Source: ANS 2008/09, NZ Ministry of Health and Statistics NZ, 2013 Census

Wealthier people live longer



Wamala, S., Blakely, T., & Atkinson, J. (2006). *BMC Public Health*, *6*(1), 164.

Lower income households eat less fruit, vegetables, milk, cheese and cereal but more bread.

Table 3. Geometric mean (95% tolerance factor) servings of food groups per month adjusted for age, gender, ethnicity and total energy intake by level of household income.

	Household Income				
	≥$70,001	$50 - $70,000	$30 - $50,000	<$30,000	Missing
Number	1206	846	635	981	339
Red meat	27.8 (1.06)	26.4 (1.08)	26.0 (1.07)	23.7 (1.09)	22.6 (1.23)
Chicken	3.7 (1.06)	4.1 (1.08)	4.1 (1.08)	4.2 (1.09)	3.8 (1.17)
Fish	7.1 (1.06)	6.6 (1.08)	7.0 (1.08)	6.7 (1.09)	6.0 (1.18)
Vegetables	141.5 (1.03)	132.3 (1.05)	129.0 (1.04)**†	122.7 (1.05)**	139.5 (1.09)
Fruit	55.5 (1.07)	51.2 (1.10)	47.3 (1.11)	40.5 (1.10)**	48.4 (1.24)
Eggs	6.8 (1.07)	7.5 (1.09)	7.8 (1.08)	7.3 (1.10)	6.2 (1.16)
Cheese[1]	10.2 (1.09)	8.6 (1.10)	9.0 (1.10)	6.3 (1.11)**	5.7 (1.22)**
Milk	68.6 (1.13)	61.6 (1.17)	53.7 (1.16)	47.5 (1.17)**	37.1 (1.39)**
Bread	17.2 (1.05)	18.8 (1.08)	19.9 (1.07)*†	20.3 (1.08)**†	20.2 (1.18)
Cereal	10.2 (1.11)	8.5 (1.14)	7.3 (1.14)**	6.1 (1.14)**	5.2 (1.26)**
Wine	7.8 (1.11)	3.8 (1.14)**	2.7 (1.12)**	2.0 (1.13)**	2.1 (1.27)**
Beer	2.4 (1.09)	2.1 (1.11)	1.9 (1.12)	1.6 (1.12)**†	1.5 (1.21)*
Spirits	1.5 (1.10)	1.2 (1.11)	1.0 (1.11)*†	0.7 (1.09)**	0.7 (1.17)**

*P < 0.01; **P < 0.001 compared to income ≥$70,001. [1]Excludes cottage cheese. †No longer significant after adjusting for NZSEI96, NZDep2001 and education.

Metcalf et al. Health, 2014, 6, 1201-1211 http://dx.doi.org/10.4236/health.2014.611147

People in lower income neighbourhoods have better access to fast food outlets than in higher income neighbourhoods.

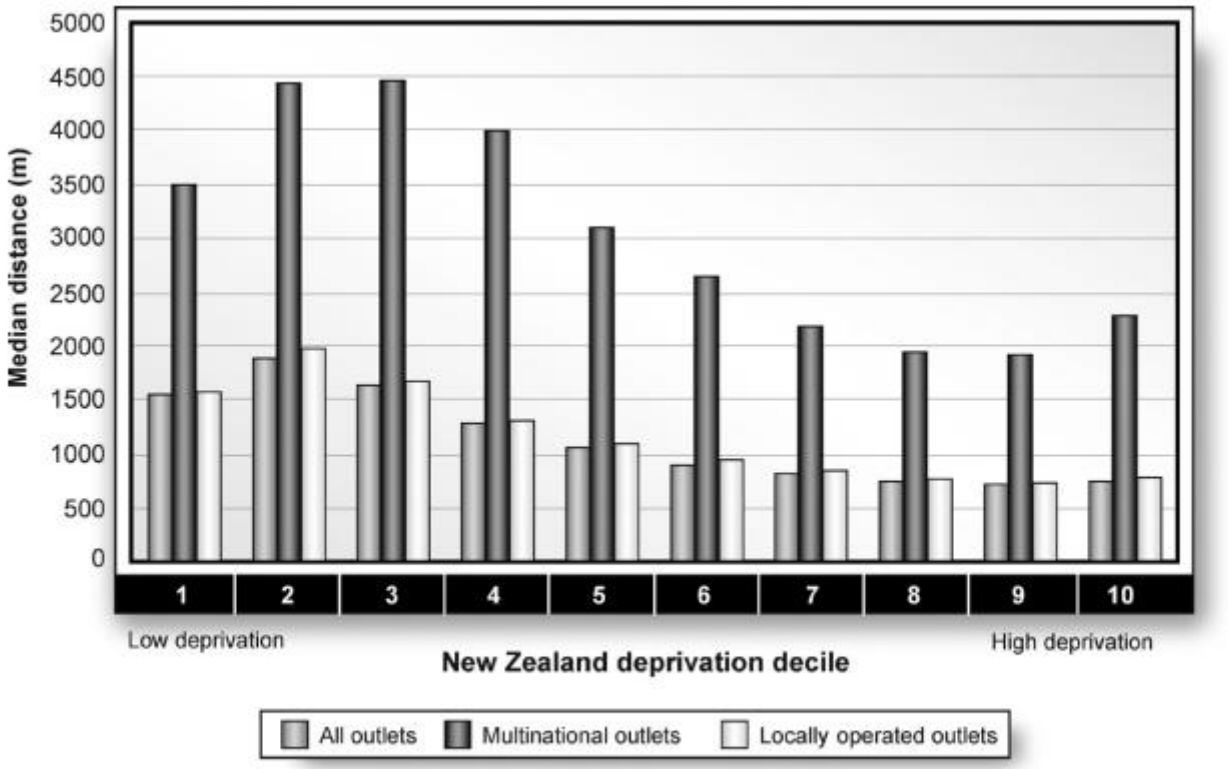


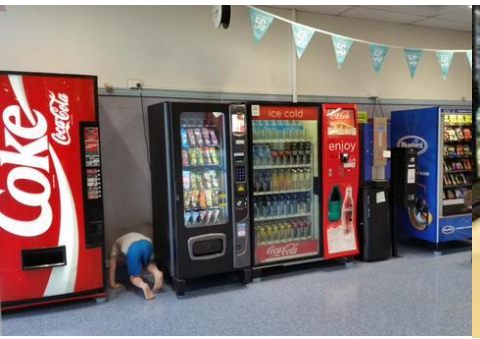
Figure 1. Median travel distance to closest fast-food outlet for New Zealand deprivation deciles. Median travel distances: all, 99 m; multinational, 2827 m; locally operated, 1025 m (analysis of variance, p=0.000).

Pearce et al. Am J Prev Med 2007

Previous Government's priorities

"Health Minister Jonathan Coleman said programmes involving **personal responsibility**, **education** around healthy eating and **exercise** were the answer, not regulating the food industry."

Radio NZ, 27 Nov 2015 http://www.radionz.co.nz/news/national/290689/despairing-obesity-battler-quits-fight





health

Global Drug Survey

Karl du Fresne: The rise of the moral crusaders of academia

KARL DU FRESNE
Last updated 05:00, August 21 2015

Supplied

Otago University nutritional scientist Dr Lisa Te Morenga.

The Dunedin campus produces self-righteous finger-waggers the way Ethiopia produces marathon runners.

A previously unfamiliar one popped up a few days ago on Radio New Zealand.

Dr Lisa Te Morenga of Otago's Department of Human Nutrition said an improvement in Maori health required a reduction in the socio-economic gap between them and non-Maori.

Introducing class politics into the health debate is nothing new, but it was what she said next that particularly interested me.

According to Te Morenga, it's difficult to make healthy choices when constrained by poverty.

This is nonsense. It recycles the tired old mantra that people are trapped into eating unhealthy food because it's cheap.

Plenty of nutritious food – potatoes, rice, pasta – is much cheaper than the Big Macs and KFC that a lot of people eat.

If some Maori don't know how to cook healthy food, then let's address that.

McGill et al. BMC Public Health (2015) 15:457
DOI 10.1186/s12889-015-1781-7

BMC Public Health

RESEARCH ARTICLE Open Access

Are interventions to promote healthy eating equally effective for all? Systematic review of socioeconomic inequalities in impact

Rory McGill[1*], Elspeth Anwar[1], Lois Orton[1], Helen Bromley[1], Ffion Lloyd-Williams[1], Martin O'Flaherty[1], David Taylor-Robinson[1], Maria Guzman-Castillo[1], Duncan Gillespie[1], Patricia Moreira[1], Kirk Allen[1], Lirije Hyseni[1], Nicola Calder[1], Mark Petticrew[2], Martin White[3,4], Margaret Whitehead[1] and Simon Capewell[1]

- Interventions manipulating **prices** of healthy and unhealthy foods DECREASE inequalities

- Interventions providing individual-based **education** (e.g. cooking lessons, tailored nutritional education, or nutrition education in schools) INCREASE inequalities

Structural interventions: a Treaty right

- Cross-sectoral ‘health-in-all’ policies
- Healthy food procurement policies & restriction of access to unhealthy foods in schools, workplaces, hospitals and Government institutions
- Reformulation of processed foods
- Restriction of junk food marketing particularly to children
- Subsidies for healthy foods
- Health-related food taxes
- Limits on commercial interests in policy-making
- Continued investment in obesity monitoring