

Problems due to someone's gambling, by neighbourhood deprivation

One in 20 adults (5.0%, 4.0–5.9) living in areas of high neighbourhood deprivation (NZDep2006 quintile 5) had experienced problems in the previous 12 months due to someone's gambling, compared to one in 53 adults in NZDep2006 quintile 1 areas (1.9%, 1.2–2.6). There were no other statistically significant differences by neighbourhood deprivation quintile.

Vegetable and fruit intake

Introduction

Vegetables and fruit are highly nutritious and have been shown to protect against heart disease, stroke and high blood pressure (World Health Organization 2003a). There is also evidence that vegetables and fruit protect against cancers of the mouth, larynx, pharynx, oesophagus and stomach, and fruit also protect against lung cancer (World Cancer Research Fund and American Institute for Cancer Research 2007).

In New Zealand, it is recommended that adults eat at least three servings of vegetables and at least two servings of fruit each day (Ministry of Health 2003a). The Minister of Health's target for 2007/08 for vegetable and fruit intake is 70% of adults with adequate vegetable consumption and 62% of adults with adequate fruit consumption (Minister of Health 2007).

What were the survey questions?

In the 2006/07 New Zealand Health Survey, vegetable and fruit intake were measured by asking adult participants two questions: how many servings of vegetables they eat each day on average and how many servings of fruit they eat each day on average. Participants were provided with information on serving size and the range and type of vegetables and fruit to include.

Vegetable and fruit intake for children was not included in the 2006/07 New Zealand Health Survey.

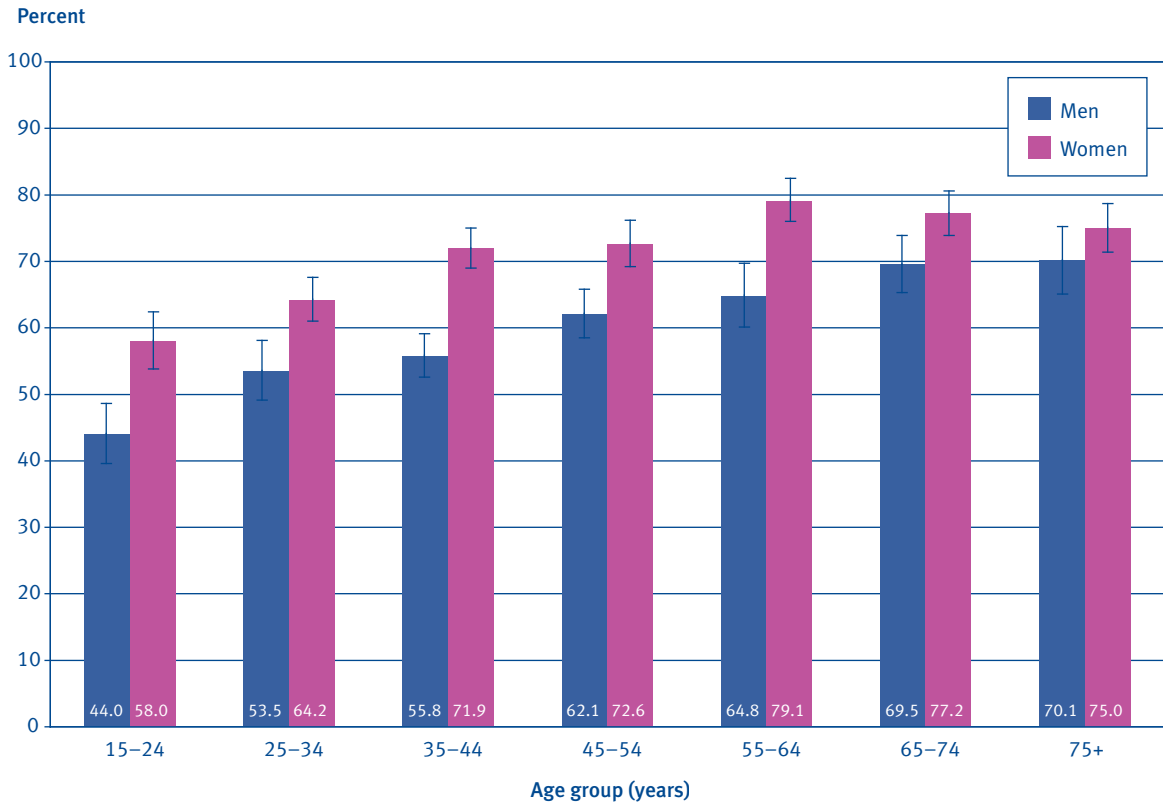
Vegetable intake for adults

Two out of every three adults (64.1%, 62.8–65.3) ate the recommended three or more servings of vegetables each day. Women (68.6%, 66.8–70.4) were significantly more likely than men to eat enough vegetables per day (56.1%, 54.4–57.9) when standardised for age.

Adequate vegetable intake, by age group

The proportion of men who ate the recommended three or more servings of vegetables each day increased as age increased, and for women the same pattern was evident, although with a levelling in the older age groups (Figure 2.42). Young men were the least likely to eat vegetables, with less than half of men aged 15–24 years consuming the recommended intake.

Figure 2.42: Adequate vegetable intake for adults, by age group and gender (unadjusted prevalence)

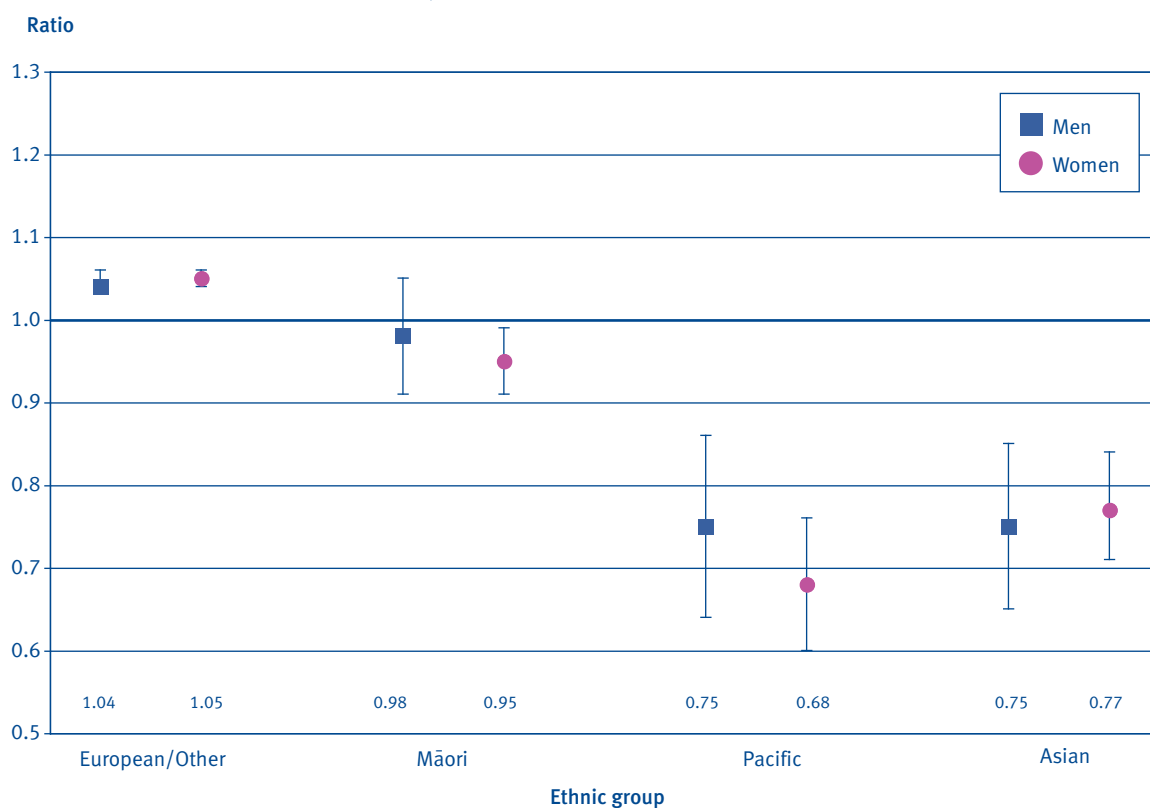


Source: 2006/07 New Zealand Health Survey

Adequate vegetable intake, by ethnic group

After adjusting for age, Pacific and Asian men and women were less likely to eat the recommended three or more servings of vegetables a day compared to men and women in the total population (Figure 2.43). Māori women were also slightly less likely than all women to have adequate vegetable intake.

Figure 2.43: Adequate vegetable intake for adults, by ethnic group and gender (age standardised rate ratio)



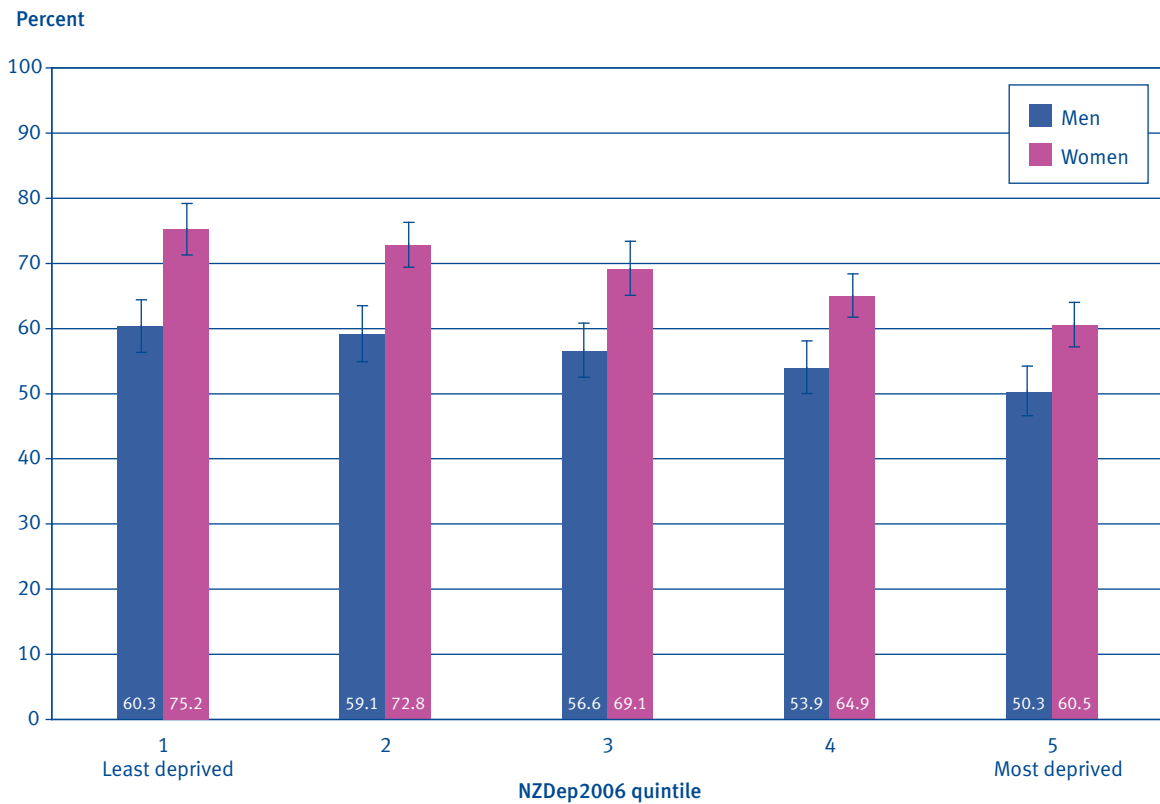
Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

Adequate vegetable intake, by neighbourhood deprivation

There was a decrease in the prevalence of adequate vegetable intake by NZDep2006 quintile in both men and women. Only half of men living in areas of high neighbourhood deprivation (NZDep2006 quintile 5) had adequate daily vegetable intake (Figure 2.44).

Figure 2.44: Adequate vegetable intake for adults, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Adequate vegetable intake, by DHB area

Vegetable intake varied by DHB area. Adults living in the South Island DHBs, including Canterbury, and in Northland / Lakes / Tairāwhiti / Hawke's Bay / Whanganui and Waikato, were more likely to eat three or more vegetables a day, whereas adults living in Counties Manukau, Auckland and Waitemata DHBs were less likely to have adequate vegetable intake (Table 2.18).

Table 2.18: Adequate vegetable intake for adults, by DHB area (unadjusted)

DHB area	Prevalence (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	70.6 (67.9-73.3) +	265200
Waitemata	55.7 (51.1-60.3) –	211000
Auckland	56.1 (51.6-60.6) –	181000
Counties Manukau	51.8 (47.5-56.1) –	167000
Waikato	70.8 (67.3-74.3) +	183600
Bay of Plenty / Taranaki / MidCentral	65.5 (62.4-68.7)	230200
Wairarapa / Hutt Valley / Capital and Coast	63.2 (59.2-67.1)	218900
Canterbury	69.4 (65.1-73.7) +	257600
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	72.4 (69.4-75.5) +	284600
New Zealand total	64.1 (62.8-65.3)	1999300

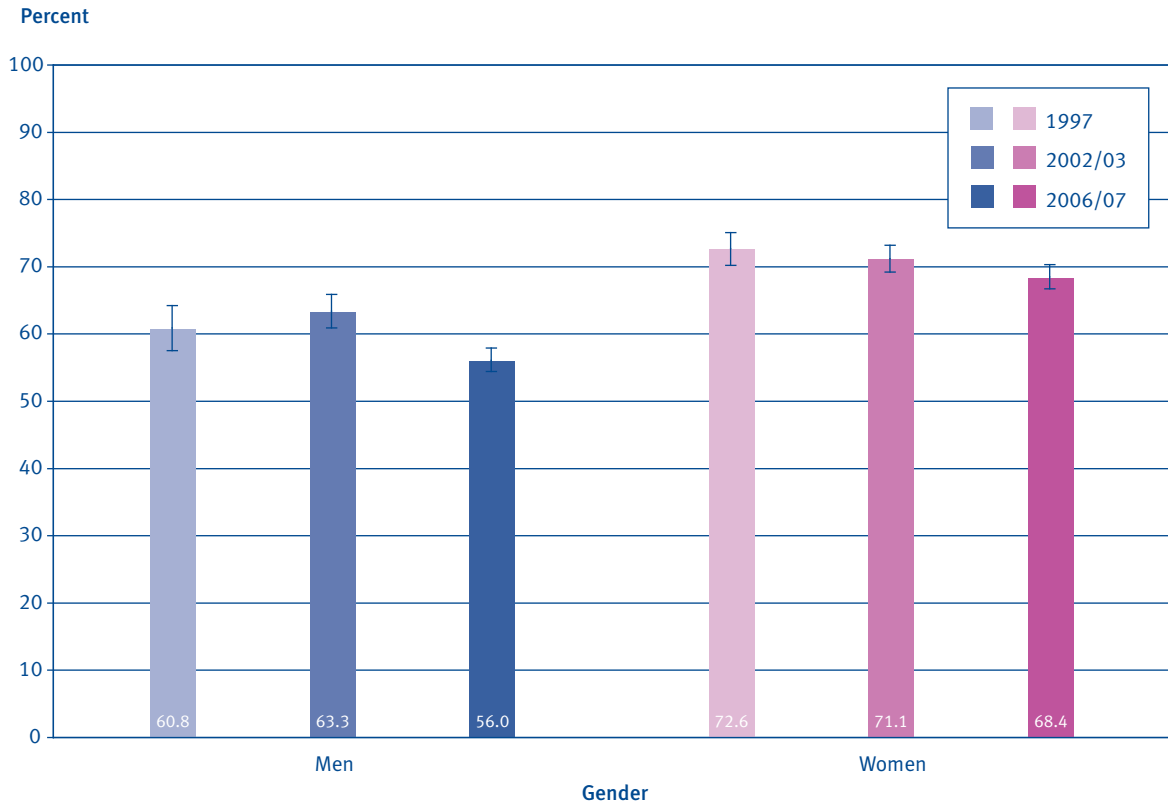
Source: 2006/07 New Zealand Health Survey

Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Time trends in adequate vegetable intake for adults

Between 2002/03 and 2006/07 there was a significant decline in the proportion of men who consumed the recommended three or more servings of vegetables a day, adjusted for age (Figure 2.45). For women, there was a decline between 1997 and 2006/07 but no significant change between 2002/03 and 2006/07.

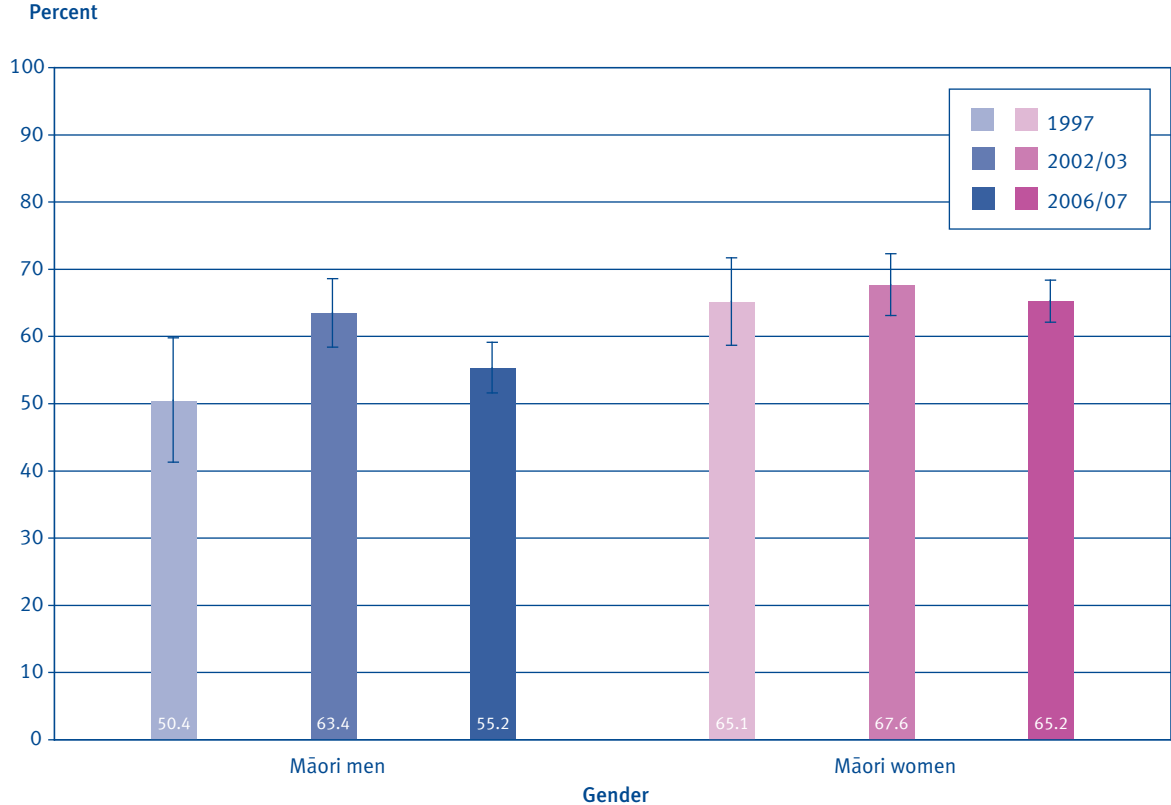
Figure 2.45: Adequate vegetable intake for adults, by gender, 1997, 2002/03 and 2006/07 (age standardised prevalence)



Source: 2002/03 and 2006/07 New Zealand Health Surveys, and 1997 National Nutrition Survey
 Note: Data from previous years have been reanalysed to allow for comparability.

For Māori, there was a significant decrease between 2002/03 and 2006/07 in the proportion of men who consumed the recommended three or more servings of vegetables a day, adjusted for age (Figure 2.46). There was no change for Māori women since 1997, adjusted for age.

Figure 2.46: Adequate vegetable intake for Māori adults, by gender, 1997, 2002/03, 2006/07 (age standardised prevalence)



Source: 2002/03 and 2006/07 New Zealand Health Surveys, and 1997 National Nutrition Survey

Note: Data from previous years have been reanalysed to allow for comparability.

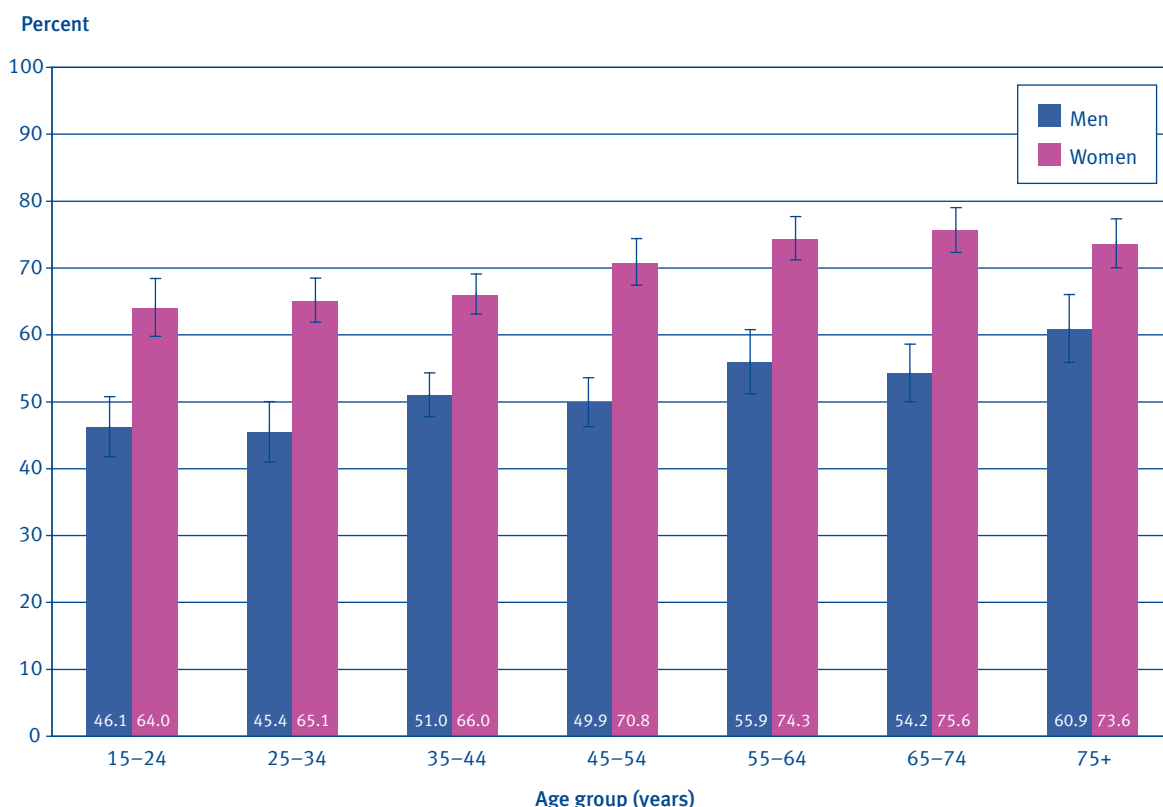
Fruit intake for adults

Two out of every three adults (60.0%, 58.8–61.3) ate the recommended two or more servings of fruit each day. Women (68.0%, 66.2–69.8) were significantly more likely than men (49.6%, 47.8–51.5) to have adequate fruit intake.

Adequate fruit intake, by age group

The prevalence of adequate fruit intake increased with age in both men and women (Figure 2.47). In all age groups, women were significantly more likely than men to eat two or more servings of fruit a day than men. Less than half of men aged under 55 years met the daily recommendation of two or more servings of fruit each day.

Figure 2.47: Adequate fruit intake for adults, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

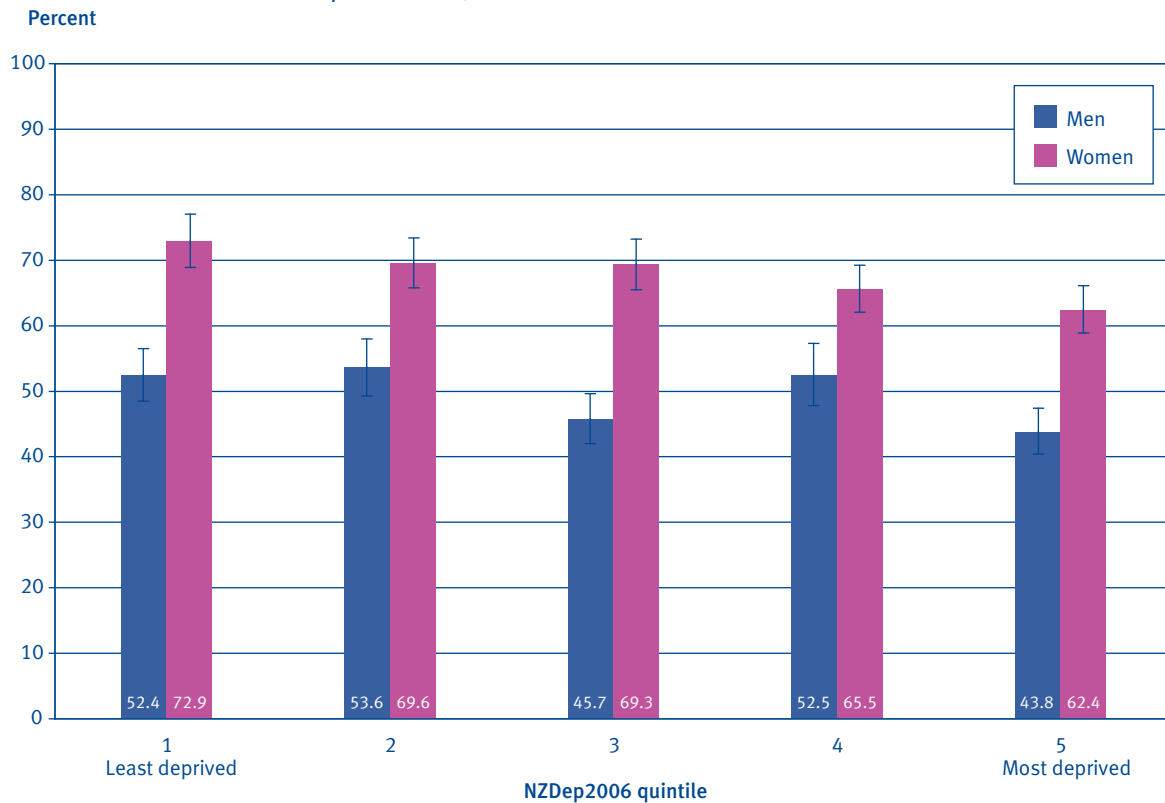
Adequate fruit intake, by ethnic group

After adjusting for age, Māori women (SRR: 0.93, 0.88–0.97) and Asian women (SRR: 0.92, 0.86–0.98) were slightly less likely to meet the daily requirement of two or more servings of fruit a day compared to women in the total population. There were no other significant differences in adequate fruit intake by ethnic group.

Adequate fruit intake, by neighbourhood deprivation

Women living in the least deprived areas of NZDep2006 quintile 1 were significantly more likely to meet the daily recommendation of two or more servings of fruit than women living in the most deprived areas of quintile 5. This correlation with deprivation is not as clear for men, but is still significantly higher in quintile 1 compared to quintile 5 (Figure 2.48).

Figure 2.48: Adequate fruit intake for adults, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Adequate fruit intake, by DHB area

Only Waikato DHB had a significant difference in adequate fruit intake compared to the national rate, with relatively fewer adults in this DHB area meeting the recommended intake of two or more servings of fruit per day (Table 2.19).

Table 2.19: Adequate fruit intake for adults, by DHB area (unadjusted)

DHB area	Prevalence (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	60.4 (58.1–62.7)	226800
Waitemata	61.6 (58.6–64.7)	233500
Auckland	61.8 (58.1–65.5)	199300
Counties Manukau	58.0 (54.0–62.0)	187000
Waikato	55.9 (52.1–59.7) –	145000
Bay of Plenty / Taranaki / MidCentral	59.7 (56.4–62.9)	209600
Wairarapa / Hutt Valley / Capital and Coast	61.3 (57.2–65.4)	212400
Canterbury	61.9 (57.8–66.0)	229800
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	58.6 (55.0–62.2)	230300
New Zealand total	60.0 (58.8–61.3)	1873700

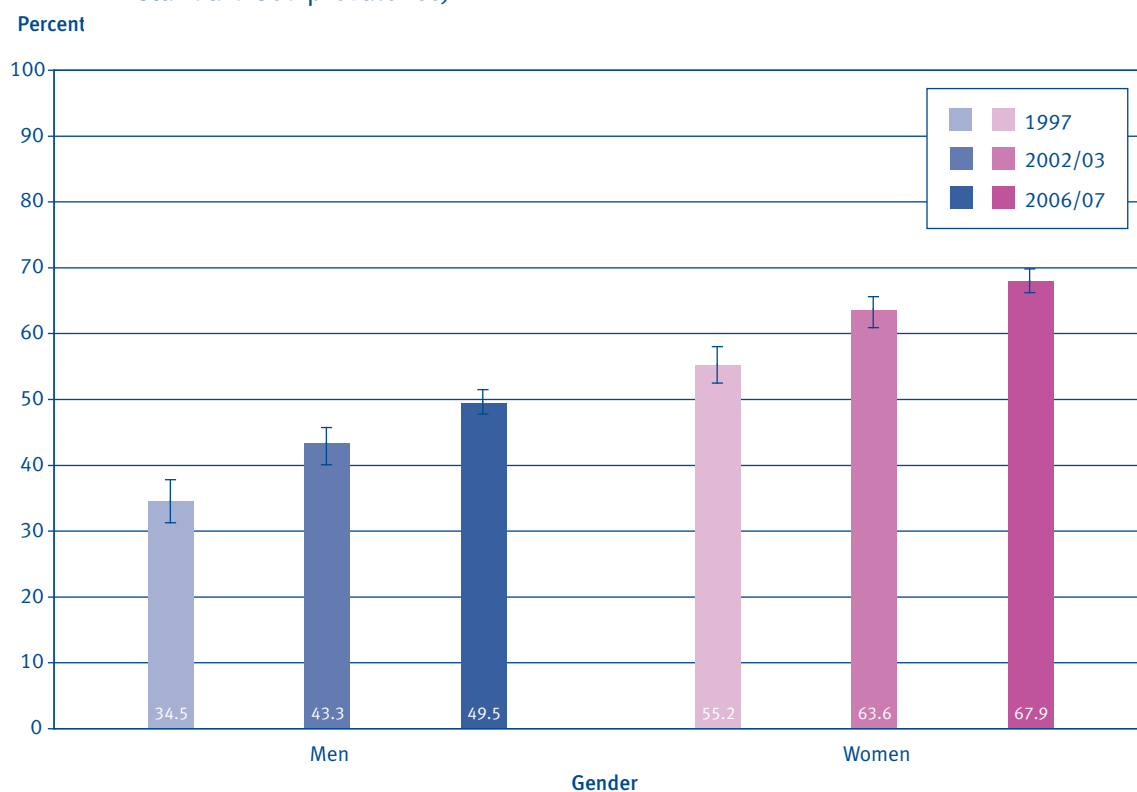
Source: 2006/07 New Zealand Health Survey

Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Time trends in adequate fruit intake for adults

From 1997 to 2006/07 there was a significantly increasing trend in the prevalence of adequate fruit intake in both men and women, adjusted for age (Figure 2.49). For Māori, a similar trend can be seen (graph not shown).

Figure 2.49: Adequate fruit intake for adults, by gender, 1997, 2002/03 and 2006/07 (age standardised prevalence)



Source: 2002/03 and 2006/07 New Zealand Health Surveys, and 1997 National Nutrition Survey

Note: Data from previous years have been reanalysed to allow for comparability.