Fizzy drink intake

Introduction

There is a strong association between drinking fizzy drinks and increased risk of obesity (Taylor et al 2005; Vartanian et al 2007; World Cancer Research Fund and American Institute for Cancer Research 2007) as well as type 2 diabetes (Taylor et al 2005; Vartanian et al 2007). Fizzy drinks are high in sugar, have very little nutritional value, and many studies suggest that they displace more nutritional fluids, such as milk, in the diets of children (Harnack et al 1999; Mrdjenovic and Levitsky 2003). In addition, fizzy drinks contain acids that can dissolve tooth enamel, contributing to poor oral health (Ministry of Health 1997).

Although fruit juices also contain large amounts of sugar, the relationship between fruit juice intake and weight gain in children is weak (Taylor et al 2005). As a result, this section only focuses on fizzy drink.

Full-sugar carbonated drinks and energy drinks of all types are recommended as 'treat foods' for children aged 2–12 years by the Ministry of Health, to be given at special times only; for example, birthday parties (Ministry of Health 1997). Fizzy drinks are not recommended for children under the age of two years (Ministry of Health 2000).

What were the survey questions?

Parents and caregivers of children aged 2–14 years in the 2006/07 New Zealand Health Survey were asked if in a typical week their child would usually have a fizzy or soft drink, such as cola or lemonade. The definition of fizzy drink includes diet (artificially sweetened) and energy drinks such as Powerade or V, but does not include powdered drinks made up with water, such as cordial or Raro, and does not include fruit juice such as Just Juice.

Parents and caregivers were then asked how often in the past seven days their child had this type of drink. The results presented here are from this last question regarding the number of drinks consumed in the past seven days.

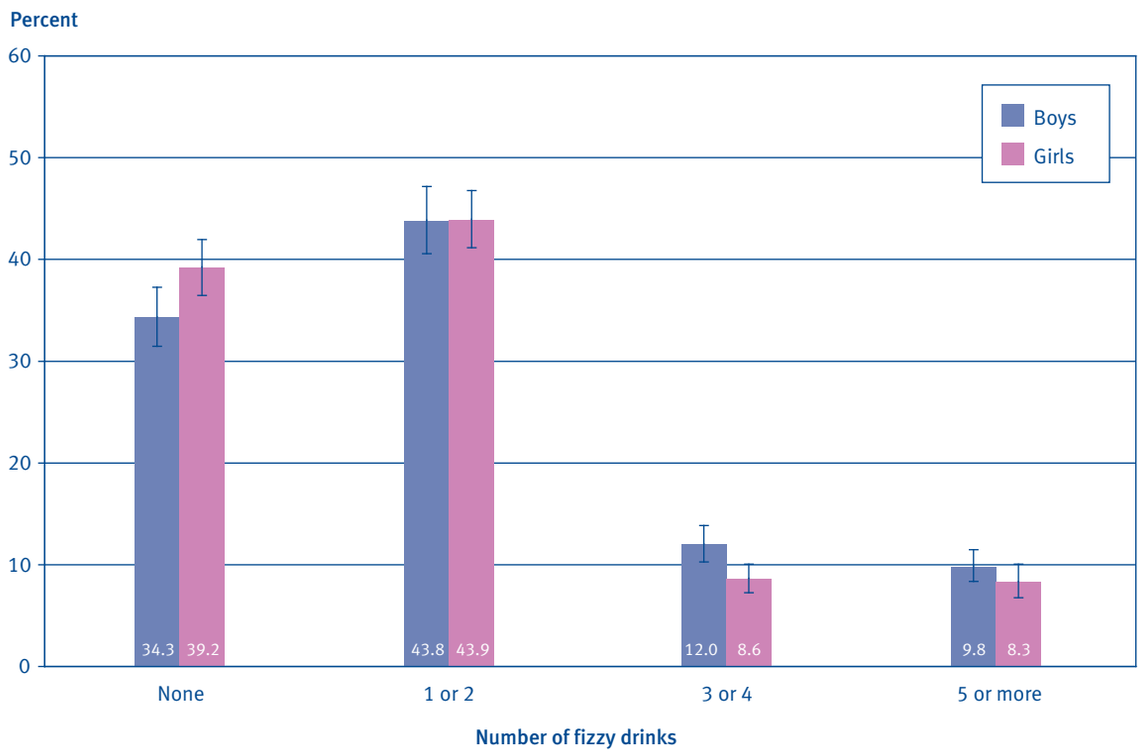
Readers should note that the New Zealand Health Survey collects information on health behaviour rather than measuring food or nutrient intake, so the quantity and type of fizzy drink have not been collected. Refer to the 2002 National Children's Nutrition Survey data for information on dietary intake (Ministry of Health 2003b).

Fizzy drink intake for children aged 2–14 years old

Two out of three children had a fizzy drink in the previous week (63.6%, 61.5–65.6), with no difference by gender adjusted for age. Most of these children had one or two fizzy drinks in the previous week, again with no difference by gender (Figure 2.6).

One in five children aged 2–14 years had three or more fizzy drinks in the previous week (19.6%, 18.1–21.2), which equates to 145,800 children, with nearly half of these children having had five or more fizzy drinks in the previous week.

Figure 2.6: Number of fizzy drinks consumed in the past 7 days for children aged 2–14 years, by gender (age standardised prevalence)



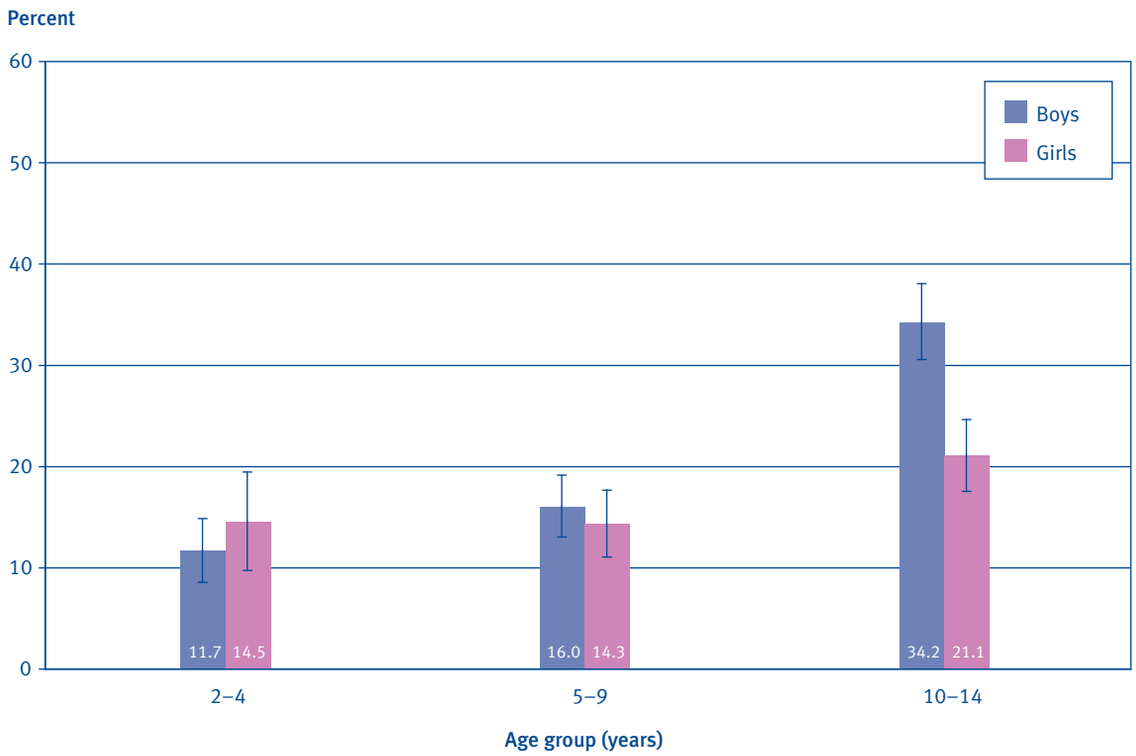
Source: 2006/07 New Zealand Health Survey

The remainder of this section focuses on those children who had three or more fizzy drinks in the previous seven days.

Fizzy drink intake, by age group

Boys aged 10–14 years were the most likely to have consumed three or more fizzy drinks in the previous seven days (Figure 2.7).

Figure 2.7: Three or more fizzy drinks consumed in past 7 days for children aged 2–14 years, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

Fizzy drink intake, by ethnic group

Table 2.2 gives an indication of the proportion and number of children in New Zealand's main ethnic population groups who had three or more fizzy drinks in the previous seven days.

Table 2.2: Three or more fizzy drinks in the past 7 days for children aged 2–14 years, by ethnic group (unadjusted)

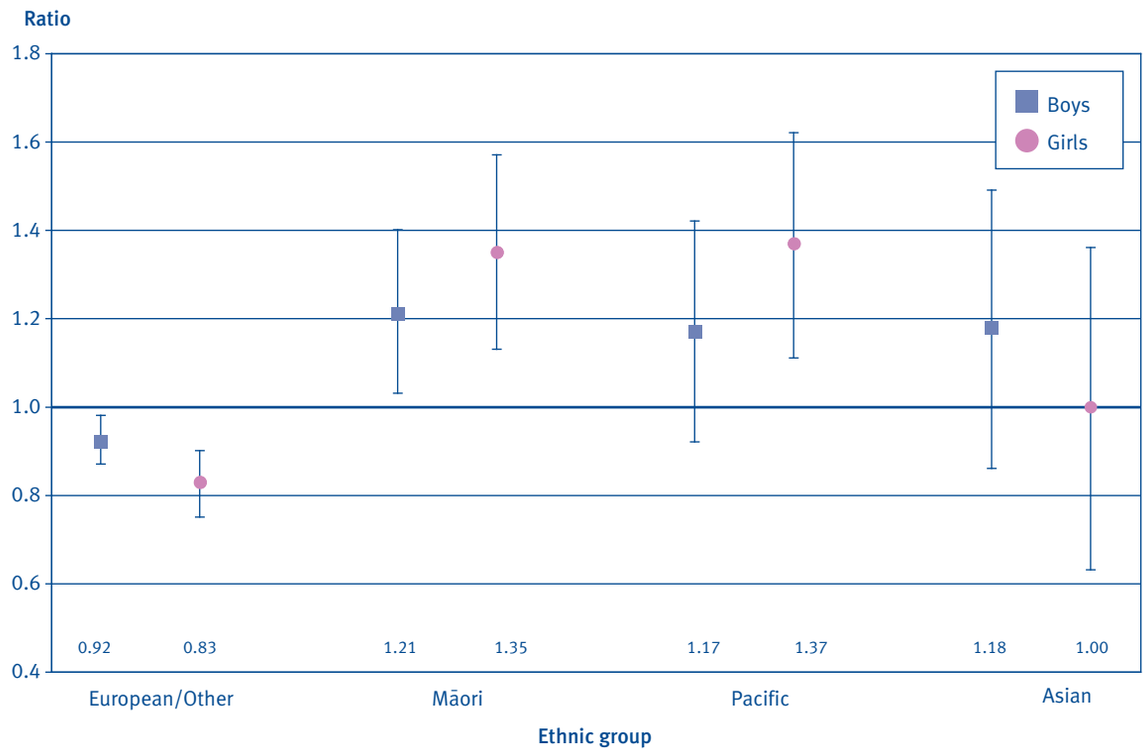
Ethnic group	Prevalence (95% CI)	Number of children
European/ Other	17.5 (15.8–19.2)	98500
Māori	24.6 (21.5–27.8)	41300
Pacific	24.1 (20.5–27.7)	20400
Asian	21.7 (16.5–26.9)	14300

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori and Pacific girls and Māori boys were significantly more likely to have had three or more fizzy drinks in the past week compared to girls and boys in the total population. European/Other children were significantly less likely to have had three or more fizzy drinks, and Asian children and Pacific boys showed no significant difference from boys and girls in the total population (Figure 2.8).

Figure 2.8: Three or more fizzy drinks in the past 7 days for children aged 2–14 years, by ethnic group and gender (age standardised rate ratio)



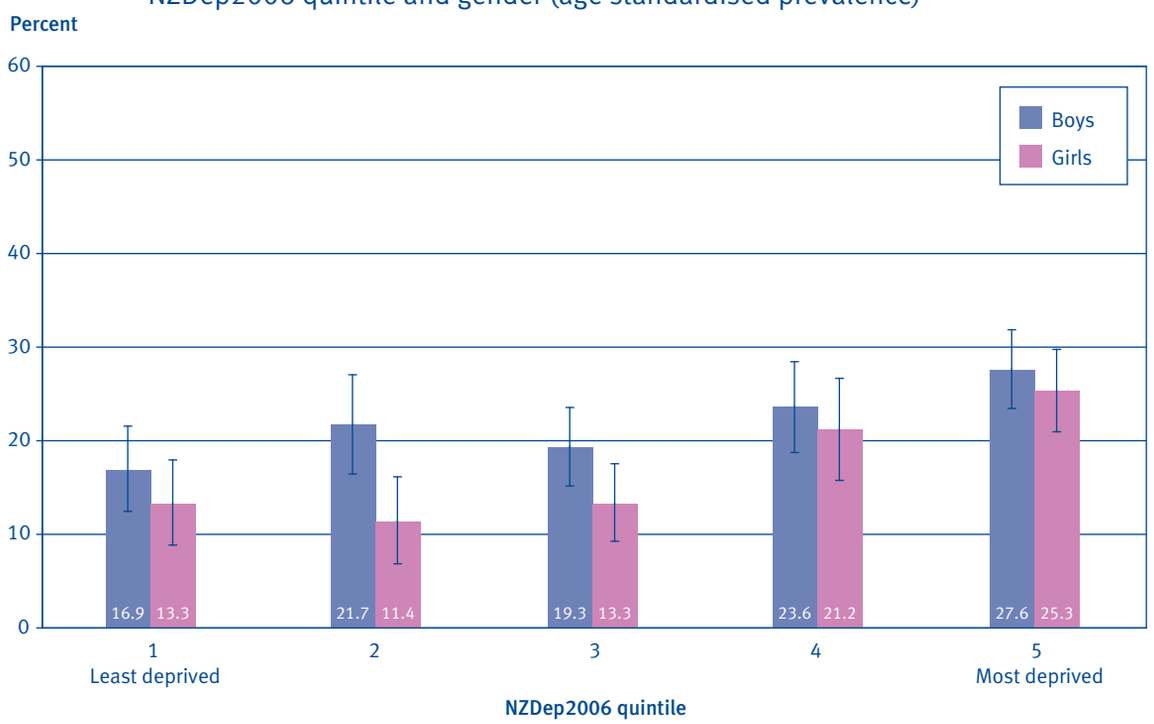
Source: 2006/07 New Zealand Health Survey

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 from 2-14 years. Total response standard output for ethnic groups has been used.

Fizzy drink intake, by neighbourhood deprivation

In both boys and girls, the proportion of children who had three or more fizzy drinks in the past week was significantly higher in the most deprived neighbourhoods (NZDep2006 quintile 5) than in the least deprived neighbourhoods (quintile 1), adjusted for age. This association was stronger for girls than boys, with girls in NZDep2006 quintile 5 neighbourhoods nearly twice as likely to have consumed three or more fizzy drinks in the previous week than girls living in NZDep2006 quintile 1, 2 or 3 neighbourhoods (Figure 2.9).

Figure 2.9: Three or more fizzy drinks in the past 7 days for children aged 2–14 years, by NZDep2006 quintile and gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

Fizzy drink intake, by DHB area

Children aged 2–14 years living in Counties Manukau DHB area had a significantly increased fizzy drink intake compared to the national rate, with one in four children having had three or more fizzy drinks in the previous week. Children living in Waitemata and Wairarapa / Hutt Valley / Capital and Coast DHB areas were significantly less likely to have had three or more fizzy drinks in the previous week (Table 2.3).

Table 2.3: Three or more fizzy drinks in the past 7 days for children aged 2–14 years, by DHB area (unadjusted)

DHB area	Prevalence (95% CI)	Number of children
Northland / Lakes / Tairawhiti / Hawke's Bay / Whanganui	20.0 (16.2–23.8)	19900
Waitemata	15.1 (11.3–18.8) –	13500
Auckland	21.6 (15.7–27.6)	14100
Counties Manukau	25.5 (21.3–29.8) +	24200
Waikato	19.9 (15.7–24.1)	13200
Bay of Plenty / Taranaki / MidCentral	19.4 (14.6–24.3)	16800
Wairarapa / Hutt Valley / Capital and Coast	15.2 (10.9–19.4) –	11500
Canterbury	19.2 (13.3–25.0)	15400
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	20.4 (14.5–26.4)	17300
New Zealand total	**19.6 (18.1–21.2)**	**145800**

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.

Fast food intake

Introduction

Evidence suggests that eating fast food more than twice a week is associated with an increased risk of weight gain, overweight and obesity (World Cancer Research Fund and American Institute for Cancer Research 2007). In addition, fast food is generally high in fat, salt and sugar, and low in fibre (Ministry of Health 1997). Diets that are high in fat and salt and low in fibre are associated with heart disease and hypertension (Ministry of Health 1997).

Fast food is defined as food purchased from fast food places or takeaway shops; for example, burgers, fried chicken, pizza, or fish and chips.

What were the survey questions?

In the 2006/07 New Zealand Health Survey, parents and caregivers of children aged 2–14 years were asked if in a typical week their child would usually eat any food purchased from a fast food place or takeaway shop, such as fish and chips, burgers, fried chicken or pizza. This includes snacks as well as mealtimes.

Parents and caregivers were then asked how often in the past seven days their child ate this type of food. The results presented here are from this last question regarding the number of times fast food was eaten in the past seven days.

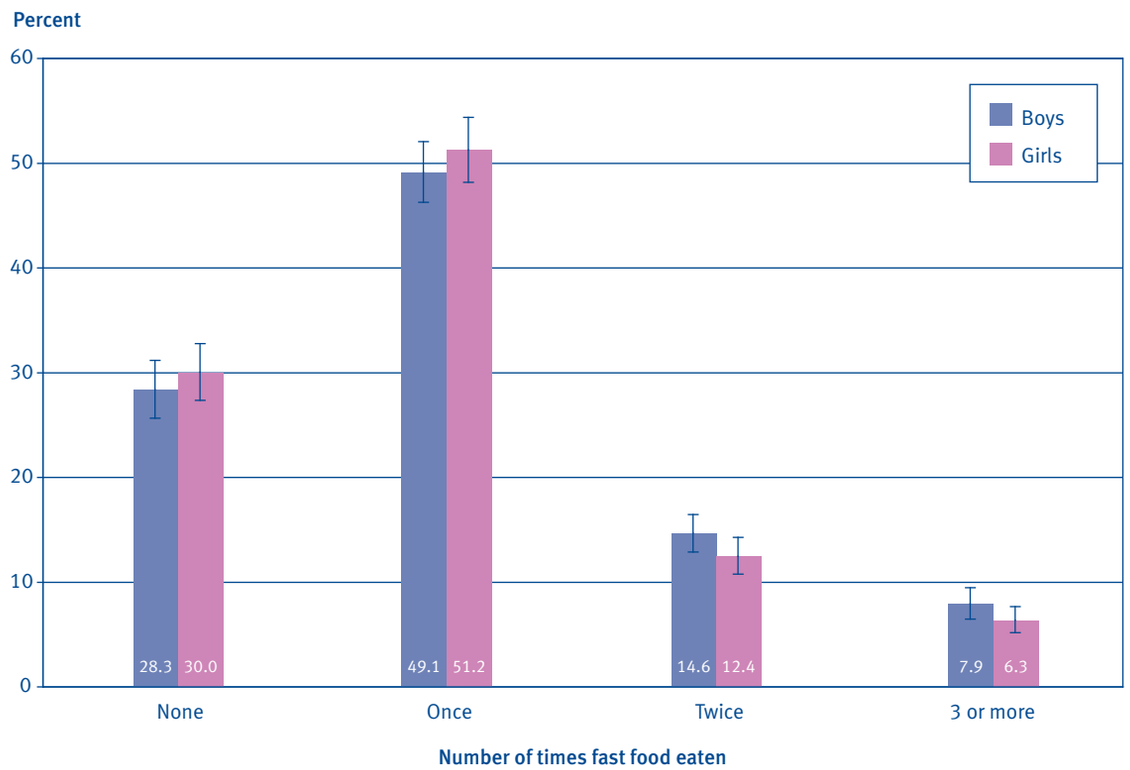
Readers should note that the New Zealand Health Survey collects information on health behaviour rather than measuring food or nutrient intake, so the quantity and type of fast food have not been collected. Refer to the 2002 National Children's Nutrition Survey for information on dietary intake related to fast food (Ministry of Health 2003b).

Fast food intake for children aged 2–14 years

Seven out of ten children aged 2–14 years had eaten fast food in the previous seven days (70.9%, 68.9–73.0), the majority of whom ate fast food once during that week. There was no difference between boys and girls in the number of times fast food was eaten (Figure 2.10).

One in seven children aged 2–14 years had eaten fast food twice in the previous seven days (13.6%, 12.4–14.8), and 1 in 14 children, which equates to 53,400 2–14-year-olds, had eaten fast food three or more times in the previous seven days (7.2%, 6.2–8.2).

Figure 2.10: Number of times fast food eaten in the past 7 days for children aged 2–14 years, by gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

The remainder of this section focuses on those children who ate fast food three or more times in the past seven days.

Fast food intake, by age group

Boys aged 10–14 years were more likely (10.4%, 7.6–13.2) than boys aged 2–4 years (5.8%, 3.7–8.0) to have eaten fast food three or more times in the previous seven days, with no difference compared to 5–9-year-old boys (6.8%, 4.3–9.4). There was no significant difference by age for girls.

Fast food intake, by ethnic group

Table 2.4 gives an indication of the proportion and number of children in New Zealand's main ethnic population groups who ate fast food three or more times in the previous week.

Table 2.4: Fast food eaten 3 or more times in past 7 days for children aged 2–14 years, by ethnic group (unadjusted)

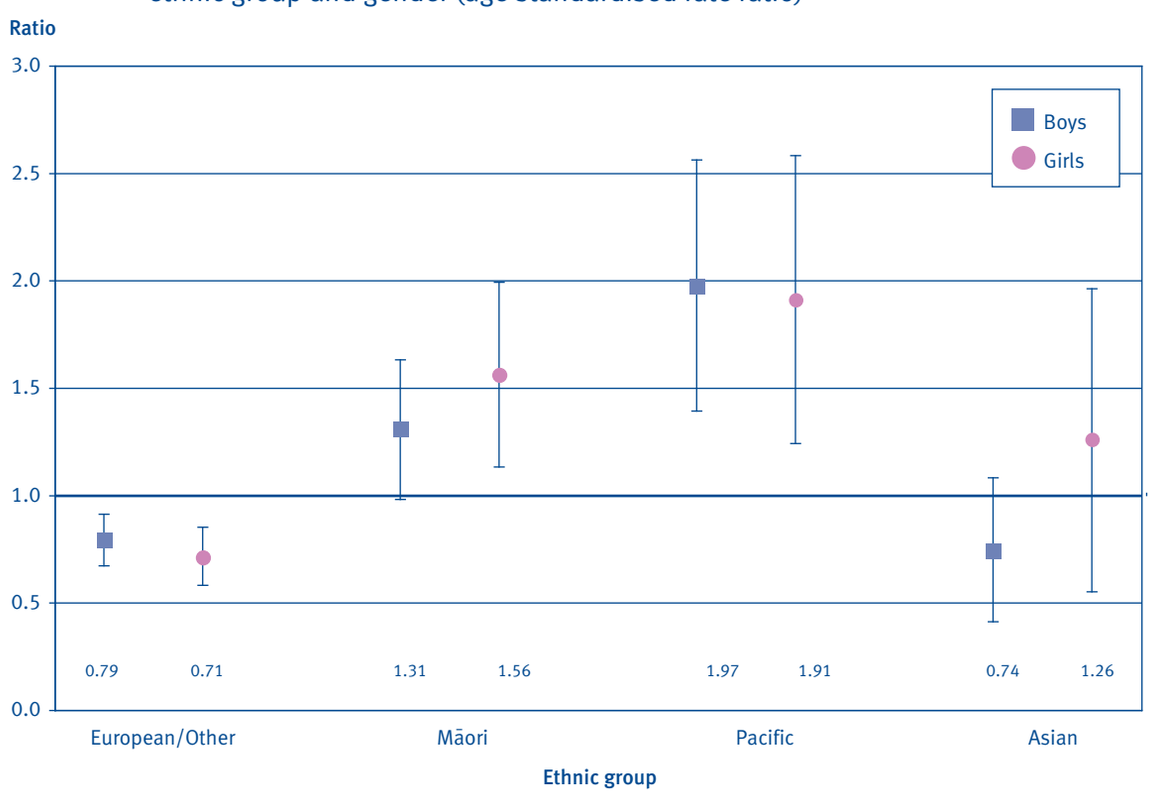
Ethnic group	Prevalence (95% CI)	Number of children
European/ Other	5.5 (4.4–6.6)	30900
Māori	10.1 (8.3–11.9)	17000
Pacific	13.8 (10.3–17.4)	11700
Asian	7.0 (4.4–9.7)	4600

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Pacific boys and girls were twice as likely to have eaten fast food three or more times in the previous seven days compared to boys and girls in the total population. Māori girls were 1.5 times more likely than all girls. European/Other boys and girls were significantly less likely to have eaten fast food three or more times in the previous seven days compared to boys and girls in the total population (Figure 2.11).

Figure 2.11: Fast food eaten 3 or more times in the past 7 days for children aged 2–14 years, 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 from 2-14 years. Total response standard output for ethnic groups has been used.

Fast food intake, by neighbourhood deprivation

Children living in areas of high deprivation (NZDep2006 quintile 5) were much more likely to have eaten fast food three or more times in the previous seven days (13.9%, 11.2–16.6), compared to children living in areas of low deprivation (NZDep2006 quintile 1) (3.4%, 1.9–4.9).

Fast food intake, by DHB area

Waitemata DHB area showed the only significant difference from the national rate, with 1 in 20 children in this DHB having eaten fast food three or more times in the previous seven days, which was lower than the national rate (Table 2.5).

Table 2.5: Fast food eaten 3 or more times in the past 7 days for children aged 2–14 years, by DHB area (unadjusted)

DHB area	Prevalence (95% CI)	Number of children
Northland / Lakes / Tairawhiti / Hawke's Bay / Whanganui	7.5 (5.5–9.6)	7500
Waitemata	4.9 (2.9–7.8) –	4400
Auckland	6.0 (3.2–8.8)	3900
Counties Manukau	10.1 (6.7–13.6)	9600
Waikato	6.7 (4.0–9.4)	4400
Bay of Plenty / Taranaki / MidCentral	10.4 (6.5–14.3)	9000
Wairarapa / Hutt Valley / Capital and Coast	6.4 (3.9–8.8)	4800
Canterbury	6.1 (2.6–11.9)	4900
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	5.7 (3.0–9.7)	4800
New Zealand total	**7.2 (6.2–8.2)**	**53400**

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.