



**AUSTRALIAN CENTRE FOR
HEALTH PROMOTION**

Report to NSW Health

**Food advertising on Sydney television: the extent of
children's exposure**

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Prepared by the Australian Centre for Health Promotion

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EXECUTIVE SUMMARY

The objective of this study was to analyse food and drink advertisements on Sydney commercial television, and compare results to patterns described in 2002. The analyses focused on children's viewing hours, as defined in the 2002 study and as more recently set out in the Commercial Television Industry Code of Practice (July 2004). Patterns of advertising within popular television programs and variations between television channels were also assessed.

This research was commissioned by NSW Health and conducted by a public health research collaboration focused around the Australian Centre for Health Promotion, in collaboration with the NSW Centre for Overweight and Obesity (COO), the NSW Centre for Physical Activity and Health (CPAH) and the NSW Centre for Public Health Nutrition (CPHN).

The project provides a descriptive profile of current patterns of food advertising to children, with comparisons to those identified in 2002. The methods are consistent with those used in the 2002 study. This involved selection of a single week to provide a snapshot of the levels of exposure to food advertising that children may be experiencing. Of particular interest is the general extent of promotion of high fat and high sugar foods, which may influence children's eating habits, and contribute to the problem of overweight and obesity.

While most countries, including Australia, have some form of regulation of food advertising to children, there is substantial variation in arrangements. Australian regulations allow food advertising to children, with some government regulation related to content, and self regulation related to advertising levels. This study provides insights into the extent of food advertising exposure that is prevailing under these arrangements, and whether the current system has brought about substantial changes in advertising practices since 2002.

Methods

This study has involved:

- Establishment of data collection processes and infrastructure
- One day data collection trial and analysis of findings
- Refinement of protocols for data collection, cleaning, storage and coding, as required
- One week data collection from three commercial Sydney television stations (Channels 7, 9 and 10) from Sunday 14th May 2006 to Saturday 20th May 2006 between 6:00 and 23:00 on each day
- Acquisition of data on audience viewing patterns from OzTAM Pty Ltd
- Data cleaning, coding and analyses
- Reporting

The children's television viewing periods were categorised in two ways:

1. Children's television viewing hours one (CV1)
2. Children's television viewing hours two (CV2)

CV1 hours included those times used as children's viewing hours in the 2002 study, as deemed by AC Nielsen market research company, and comprised:

- i. Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30;
- ii. Saturday-Sunday 7:00-11:30.

CV2 included those times that are currently considered children's viewing hours, as per the Commercial Television Industry Code of Practice (July 2004), and comprise:

- i. Monday-Friday 7:00-8:00, 16:00-20:30;
- ii. Saturday-Sunday 7:00-20:30.

Food advertisement coding used the 2002 study's food coding, consisting of 18 major food group categories. These food categories were further extrapolated into minor food groups and sub-categories for more detailed analysis. All food coding was conducted by the research dietitian.

Data on the viewing patterns of children 5 to 12 years, as well as adolescents aged 13 to 17 years, and adults (over 18 years) was obtained from OzTAM. This data describes the viewing patterns by time of day, program and channel for the study week. Additional data on viewing patterns for the period March – May 2006, and for the full year 2005 was used to check that there were no substantive differences in viewing patterns during the study week.

Results

The total time monitored per station over the study period was 119 hours, giving 357 hours total viewing time. The findings show that there were 9991 advertisements on three Sydney commercial television stations in the study week. Total weekly data collected during CV1 was 72 hours for all three channels, while the total for CV2 was 163.5 hours over the same period.

Food advertisements comprised 26.2% of all advertisements, giving a rate of 7.3 food advertisements per hour. Core foods comprised 36%, and high fat/high sugar foods comprised 43% of total food ads.

Advertisements for high fat/high sugar foods were high in children's viewing hours, both the more limited hours that were studied in 2002 (CV1), comprising 47.7% of food advertisements or a rate of 3.0 high fat/high sugar food advertisements per hour; and during the expanded set of children's viewing hours studied (CV2), with 48.6% of food advertisements for high fat/high sugar foods, or a rate of 3.5 per hour. Advertisements for high fat/high sugar foods were, however, most frequent during programs that rate highly with children (constituting 65.9% of food ads during shows popular with 5-12 yr olds; and 66.8% of food ads during programs most viewed by 15-17 yr olds).

Weekend days had a greater proportion of advertisements from the high fat/high sugar category when compared to weekdays across all viewing periods. The time period with the highest proportion of high fat/high sugar advertisements was weekend day mornings in CV1 (54.7%).

Confectionery and fast food restaurants were the two most frequently advertised food categories, with the relative proportion of confectionery ads highest during CV1, and fast food restaurant ads highest during CV2. Examples of high fat/high foods advertised included Cadburys (177 ads over the study week) in particular Cherry Ripe chocolate bars (50 ads/wk), McDonalds (109 ads/wk), KFC (88 ads/wk), Dominos (78 ads/wk), Nestle Nesquick chocolate cereal (61 ads/wk) and Pizza Hut (33 ads/wk).

The proportion of food advertisements varied between channels, with 29.6% food advertisements on channel 10, 25.6% on channel 9 and 23.7% on channel 7. Types of foods advertised also varied substantially between channels, with channel 10 having the highest proportion of advertisements for high fat/high sugar foods, and the lowest proportion of advertisements for core foods.

Overall rates of food advertising on free TV have reduced from 2002 to 2006, from 31.1% to 26.2%. High fat/high sugar foods contributed 48% of all food ads in 2006, compared to 54% in 2002. There was an average of 3.0 ads per hour for foods high in sugar and/or fat in 2006, compared to 4.4 in 2002, during children's viewing hours.

The two most advertised food categories in 2006 were the same as in 2002: confectionery and fast food restaurants. However, the proportions of food advertisements for confectionery and fast food restaurants decreased from 2002. In 2006 there has been a reduction in confectionery advertisements (from 16.6% of all food ads in 2002 to 13.4% in 2006) and fast food restaurant advertisements (from 13% in 2002 to 9.2% in 2006).

Conclusions

- Children's actual time spent watching TV has reduced in recent years (Australian Film Commission data- 2.6 hours television viewing per person per day (2002) to 2.1 hours per person per day (2004), for young people (aged 5-12 and 13-17).
- Overall rates of food advertising on free TV have reduced from 2002 to 2006, from 31.1% to 26.2%.
- The balance of food advertisements remains skewed towards high fat/high sugar foods, although the overall proportion of food advertisements in this category in 2006 has reduced to 43% (compared to 55% in 2002).
- Confectionery and fast food restaurants have remained the two most frequently advertised food categories between 2002 and 2006. However, the overall proportion of confectionery and fast food restaurant advertisements has decreased from 2002.

- The analyses of food advertisements by time, program, channel, audience and food type show that there is precise targeting of food advertisements, and particularly high fat/high sugar foods advertisements to children.
- There are specific peaks in the frequency, rate and duration of food advertisements, particularly for high fat/high sugar food advertisements. Intensive food advertisements occurred during specific times, programs and channels, impacting on children's exposure to these advertisements. In particular:
 - peaks during the programs most popular with children, where the proportion of high fat/high sugar advertisements was 65.9% during programs viewed by younger children and 66.8% in programs viewed by older children (9 ads per hour for 5-12 year olds, 8 ads per hour 13-17 year olds).
 - peaks during children's viewing hours (CV1), comprising 47.7% of food ads (compared to 42.2% at other times)
 - during weekend children's viewing hours (CV1), where high fat/high sugar advertisements comprised 54.7% of food advertisements
 - on Channel 10, where high fat/high sugar advertisements comprised 47.4% of food advertisements, and 14.0% of all advertisements, and particularly during weekday CV2 time periods, where both audience size and numbers of advertisements are at high levels
- Children's overall exposure to TV food advertisements is high. Estimates indicate that 5 to 12 year olds are exposed to up to 96 food ads, including 63 for high fat/high sugar foods, per week, if they were to watch one hour of commercial TV a day, and this occurs during popular programs.
- These high rates of advertising of high fat/high sugar foods to children occur in a context where non-core foods have been found to contribute 41% to children's daily energy intake, which is 2 to 3 times the recommended level (Bell et al 2005).

INTRODUCTION

Background

Over the past two decades there has been a significant increase in the proportion of overweight and obese children in Australia and NSW. The most recent NSW data indicates that 25% of school students (from years 2 to 10) are overweight or obese (Booth et al 2006). Children's overweight and obesity is of concern due to the immediate and longer-term medical consequences, including psychological problems, orthopedic problems, diabetes, cardiovascular disease and cancer.

Television viewing has been identified as a factor contributing to the problem of overweight and obesity. Television viewing promotes sedentary behaviour and has been demonstrated to influence general food consumption patterns and enhance consumption of snack foods (Halford 2003). More television viewing has been associated with increased dietary intakes of energy, total fat, sweet and salty snacks and carbonated beverages and lower intakes of core food groups such as fruits and vegetables (Coon 2002).

A further and more insidious mechanism for television's contribution to excess weight gain is through the effect of food advertisements directed at children. Young children, less than eight years of age, are thought to lack the skills required to differentiate between advertisements and television programs. Thus, they are unable to recognise an advertiser's intent and purpose (McGinnis 2006). The International Code of Advertising Practice from the International Chamber of Commerce states advertisements should not manipulate this inexperience of children. Literature to date has focused solely on food advertisements on free-to-air commercial television and their association with adiposity. Obviously other media approaches, such as cable television, video games, internet and magazines would have additional impact; however, there is little research on their effects (McGinnis 2006) and they are beyond the scope of the current study.

Information on food advertising to children

In 2002 NSW Health conducted research on the extent and nature of food advertising during Australian children's television viewing hours and programs. In that study, half of all food advertisements in the study week promoted foods high in fat and/or sugar, with confectionery and fast food restaurants the most advertised food categories during children's viewing hours (16.6% and 13.% respectively). The rate of confectionery and fast food restaurant advertisements was much greater during children's programs hours than during adults' programs hours.

International research has found similar patterns in television food advertising. In a systematic review of primary research studies and reviews by Hastings et al (2003), from all English language sources, particularly UK, US, Canada and Australia, between 1970 and 2003, the five major advertised food groups were found to be: pre-sugared breakfast cereals, soft drinks, confectionery, savoury snacks and fast food outlets. These foods are

classed as types of 'extra foods', to be eaten only in minor quantities due to their total fat, sugar and salt content (Australian Guide to Healthy Eating).

A recent review of food advertisements in New Zealand showed trends towards increasing rates of food advertising. There was an average of 12 food advertisements per hour in 2006, compared with only eight per hour in 1997 (Wilson 2006). Hitherto, no such comparisons can be made with Australian television.

Data from The Australian Film Commission (AFC website) depicts a reduction in viewing patterns for young people (aged 5-12 and 13-17) from 2.6 hours per person per day (2002) to 2.1 hours per person per day (2004).

Links between food advertisements, eating patterns and weight status

Research has shown that commonly advertised foods affect total energy consumption, as dietary intake of advertised food groups is modulated by television viewing. A prospective observation study by Wiecha et al (2006) showed a significant increase in caloric intake with higher television viewing habits (add 167 kcal/day for each additional hour viewing). More importantly, intake of foods commonly advertised on television, in this instance soft drinks, fried foods and snacks, also increased with increased television exposure. The advertising of energy-dense, nutrient-poor foods has been associated with excess body weight. In one study examining the relationship between food advertisement recognition in overweight children and food intake, the quantity of non-core foods was associated with food advertisements (Halford 2003). After viewing television food advertisements subjects consumed more sweet foods and high-fat savoury foods when compared to viewing non-food advertisements (Halford 2003).

A review by Lobstein et al (2005) showed a significantly positive correlation between the number of advertisements, particularly food advertisements, shown on television and the incidence of children's overweight across countries. According to this study, Australia and the US had the highest rates of food advertisements during television viewing (Feb 1996), 39.2% and 44.4% respectively, and the highest prevalence of overweight, 19.9% and 26.0%. Conversely, Sweden had the lowest food advertisements and the lowest prevalence of overweight, 21% food advertisements and 16% prevalence of overweight.

The vast majority of research supports the hypothesis that food advertisements contribute to poor food choices, poor overall diet and thus increased adiposity (Ofcom 2006). While many positive associations have been identified between television advertisements and overweight and obesity, the causative link between these factors remains more difficult to prove. It is argued that food advertisements, studied in isolation, cannot be extrapolated to everyday life, as the incidence of overweight and obesity is multi-factorial and effected by a multitude of different contributing factors in unison. However, the counter argument is that food advertising has an effect on total food choices; and that this is sufficient to warrant substantial changes to reduce children's exposure.

The systematic review by Hastings et al (2003) shows consistent links between advertisements and increasing body weight. Fundamental evidence described caloric intake and snacking was directly related to the number of food advertisements viewed (Hastings 2003). In terms of mechanisms, food promotion influences children's food preferences at both brand and category levels (Zywicki 2004), thus influencing purchasing and consumption (Lobstein 2005). While the strength of this association has been described as modest, Ofcam (2006) points out that a moderate effect size in statistical terms can equate to large numbers of people in real terms.

A report by the US Institute of Medicine (2006) also showed strong evidence that food and beverage preferences and purchase requests from children aged 2-11 years are influenced by television food advertising. In this study, both this younger age group and adolescents, aged 12-18 years, had a positive association between television advertising exposure and adiposity.

Food advertising regulations

A recent survey conducted by The Australian Consumer's Association (2006) indicated 82% of people supported enhanced government regulation of food advertising to children. Television advertising is 'big business' for both manufacturing companies and commercial broadcasters with \$3,289 million generated in advertising revenue in 2003/04 for Australian commercial free-to-air channels alone. This figure has increased by almost 14% since 2000/01 (afc.gov.au). Any restrictions implemented in this area are therefore likely to be met with strong deprecation by those who stand to incur financial losses from such policies. The British Medical Association has proposed an aggregate ban on food advertising to children (2005).

On 1st July 2005, the Australian Communications and Media Authority (ACMA) introduced new standards regarding the amount of advertising that can be broadcast during children's programming, where children are defined as people younger than 14 years. The maximum advertising time is between 10 to 13 minutes per hour for programs aimed at children (<14 years, not including preschool children). Restrictions also apply to the repetition of advertisements shown during these programs, with each advertisement shown a maximum of 2 times in 30 minutes. Those programs aimed at preschool children must have no advertisements. The commercial television industry's code of practice operates alongside these ACMA standards.

Internationally, food advertisement regulations are ubiquitous, with the World Health Organisation (WHO) estimating 85% of surveyed countries having some form of restriction. Between-country regulations vary greatly between voluntary to mandatory policies and restrictions on food type, target groups, timing of advert exposure, portion sizes and complete bans (McGinnis 2006). The WHO's position statement on marketing and advertising, as outlined in the *Global Strategy for Diet, Physical Activity and Health*, contests health messages promoting poor dietary practices and instead focuses on the encouragement of positive health messages.

Government legislation of advertisements has been introduced into a minority of countries including Sweden, Norway and the Canadian province of Quebec. In both Sweden and Norway television advertisements have been banned for children 12 years and younger. Unfortunately, no systematic evaluation of the efficacy of this ban has been performed (McGinnis 2006). In Quebec advertisements have been banned for children aged 13 years and younger. These restrictions do not apply to television stations transmitted from other countries. Research into the value of this ban has produced conflicting results, with some data on a reduction in sweetened breakfast cereal consumption, while advertisements from outside countries transmission still has a negative impact on food choices (McGinnis 2006).

The UK is currently in consultation regarding impending television advertisement restrictions regarding high fat, sugar or salt food products. Restrictions will focus on the quantity and timing of food advertisements aired, with the exclusion of healthy eating campaigns, including a veto on food advertisements during pre-school children programs (Ofcom, Options for New Restrictions 2006).

The voluntary efforts toward restrictions by food marketers in the US have proved ineffective, and Congress has recently introduced mandatory food advertising regulations for both commercial and cable television (McGinnis 2006).

The European Union (EU) has established minimum criteria concerning the restriction of advertisements causing moral or physical harm to minors. Many EU countries impose timing restrictions during children's viewing hours to limit the quantity of advertisements shown. In Ireland regulations include the ban of cartoon characters and celebrities in food promotion and health messages and warnings associated with certain food groups.

Overall, regulations require a concerted approach by government, marketing and consumer groups to improve content and regulation of food promotion to children. Television advertisers could use their marketing power to promote healthy food messages in future rather than the current advertising assault of high sugar, salt and fat foods. The food industry could be used as a medium for the implementation of public health nutrition messages (Hastings 2003). The advertisement of fruits, vegetables, bread and fish has been shown to be somewhat protective against increasing body weight, although disappointingly advertisements for these food groups are often too few to be significant (Lobstein 2005).

Although causal evidence is difficult to establish, health advocates have argued that policy decisions should be based on the available information, which indicates that it is highly probable that advertisements contribute to weight gain (OfCom 2006).

The study brief

The brief listed 5 research questions, which cover the following analyses:

- Analysis of the proportion of advertisements that are related to food and drink
- Analysis of the types of foods that are advertised, according to specified food categories and nutritional qualities (fast food; confectionery, soft drinks, core foods, etc)
- Comparing the pattern of food advertising in the 2002 designated children's TV viewing hours and other viewing hours
- Comparing the patterns of food advertising in the currently designated (and broader) children's viewing hours and other viewing hours
- Comparing the pattern of food and drink advertising during TV programs that are most popular with 5 to 12 year olds and other programs (noting the extent to which these programs are and are not within designated children's viewing hours)
- Describe changes in food advertising patterns between 2002 and 2006
- Describe patterns of food and drink advertising in relation to other aspects of children's viewing patterns, including channel and audience share.

METHODS

Sampling

Data was recorded using the television monitoring infrastructure system at the School of Public Health, University of Sydney. The recorded period comprised the seven days Sunday 14th May 2006 to Saturday 20th May 2006. This data period is comparable to that analysed in 2002. Three commercial Sydney television stations were recorded, namely Channel 7, Channel 9 and Channel 10. Time recorded for each day was between 6:00 and 23:00. The total time monitored per station was 119 hours, giving 357 hours total viewing time.

Data was categorised as:

1. Children's television viewing hours one (CV1)
2. Children's television viewing hours two (CV2)
3. Non-children's viewing hours

CV1 hours included those times used as children's viewing hours in the 2002 study, as deemed by AC Nielsen market research company, and comprised:

- Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30;
- Saturday-Sunday 7:00-11:30.

Total weekly CV1 was 72 hours for all three channels.

CV2 included those times that are currently considered children's viewing hours, as per the Commercial Television Industry Code of Practice (July 2004), and comprise:

- Monday-Friday 7:00-8:00, 16:00-20:30;
- Saturday-Sunday 7:00-20:30.

Total weekly CV2 is 163.5 hours for all three channels.

Coding

Data was assimilated using Microsoft Excel. Advertisements were described with reference to television program name, time slot, number of advertisement breaks per program, number of advertisements per break, advertisement duration and as either a food or non-food advertisement. Food advertisements were further categorised depending on brand name, product name and food type. Three research assistants were used to code this data. Inter-coder correlation was analysed by the research dietitian. Random analysis of time slots over the three channels showed high correlation (<1% difference in advertisement duration and food advertisement description) between the research assistants and the research dietitian.

Food advertisement coding was established using the 2002 study's food coding as a foundation, consisting of 18 major food group categories. These food categories were further extrapolated into minor food groups and sub-categories for more detailed analysis. Food coding was performed for all data by the research dietitian.

Analysis

The proportion of advertisements within each of the children's viewing times (CV1 or CV2) that were promoting foods were compared with the proportion in the corresponding non-children's viewing times. In addition the proportion of total advertising time that was dedicated to promoting foods was compared between children's and non-children's viewing times. Subsequent analysis only included food advertisements and compared the proportion of advertisements of different types of foods (e.g. confectionery, dairy products, fast food restaurants), and the proportion of total food advertising time dedicated to different food types, between the children's and non-children's viewing times. For exploratory purposes the pattern of food advertising was also examined within each of the children's viewing times to identify any differences between morning and afternoon, weekday and weekend time slots.

Data on audience patterns

Data on the viewing patterns of children 5 to 12 years, as well as adolescents aged 13-17 years, and adults (over 18 years) was obtained from OzTam. This data describes the viewing patterns by time of day, program and channel for the study week. Additional data on viewing patterns for the period March – May 2006, and for the full year 2005 was used to check that there were no substantive differences in viewing patterns during the study week.

Using audience reach data for the study period, the 25 television programs that were most popular among 5-12 years olds and 13-17 year olds were identified. The proportion of advertisements and total advertising time during these high ratings periods were compared with the corresponding lower ratings periods for each of the age groups. In addition the proportion of the food advertisements, and of food advertising time, dedicated to different food types were compared between the high and low ratings periods.

RESULTS

Overall pattern of food advertising

In the one week study period there was a total of 9991 advertisements on three Sydney commercial television stations, with 2621 food advertisements. Food advertisements comprised 27.5% of total ads on weekdays, and 23% on weekends, giving an overall frequency of 26.2% and a rate of food advertisements of 7.3 per hour.

Core foods comprised 36%, and high fat/high sugar foods comprised 43% of total food advertisements. The most frequently advertised food groups for all viewing times were confectionery (12.9%), fast food restaurants (11.1%), bread, cereals, rice and pasta (9.7%) and dairy products (8.4%). A miscellaneous group, including tea, coffee, alcohol, supermarkets, local restaurants/cafes, supplements, yeast extracts and throat lozenges, comprised 13.9% of food advertisements.

The proportion of food advertisements varied between channels, with 29.6% food advertisements on channel 10, 25.6% on channel 9 and 23.7% on channel 7. Types of foods advertised also varied substantially between channels, with channel 10 having the highest proportion of advertisements for high fat/high sugar foods, and the lowest proportion of advertisements for core foods (see Table 1).

Table 1: Advertisements for different food groups by channel

Food groups	Channel 7		Channel 9		Channel 10		All Channels	
	% of total food ads	% of all ads	% of total food ads	% of all ads	% of total food ads	% of all ads	% of total food ads	% of all ads
Core foods	40.9	9.7	45.1	11.5	23.2	6.9	35.8	9.4
High fat/sugar foods	39.8	9.4	42.3	10.8	47.4	14	43.4	11.4
Miscellaneous foods	19.3	4.6	12.6	3.2	29.4	6.2	20.8	5.5

Frequency of food advertisements in children’s viewing hours

Comparison of children’s viewing times versus non-children’s viewing hours

The proportion of food ads was similar in children’s viewing hours and other viewing hours, as shown in Table 2 below. This similarity was also seen between CV1 and CV2, at 25.9% and 25.5% respectively. In terms of rates, there were 6.3 food ads per hour in CV1 and 7.2 food ads per hour in CV2.

Table 2: The proportion of food advertisements during different children’s viewing hours

	CV1 ^a		CV2 ^b	
	CV1	Non-CV1	CV2	Non-CV2
Food ad (% frequency)	25.9	26.3	25.5	26.9
Non-food ad (% frequency)	74.1	73.7	74.5	73.1

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b CV2 includes Monday-Friday 7:00-8:00, 16:00-20:30; and Saturday-Sunday 7:00-20:30

Comparing weekdays and weekends, CV1 weekdays had the highest proportion and rates of food advertisements at 29.7%, 7.0 ads per hour (see Table 3 and 4). Comparing times, the proportion of food ads was highest during the CV1 afternoon time period at 38.3% (Table 3), which equates to 9.9 food ads per hour (Table 4).

Table 3: The proportion of food advertisements during children’s viewing hours by morning and afternoon/evening and weekday/weekend time slots.

	% food ads	
	CV1 ^a	CV2 ^b
AM	19.8	20.4
PM	38.3	27.2
Weekday	29.7	28.3
Weekend	20.2	22.4
<i>Total time</i>	25.9	25.5

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b CV2 includes Monday-Friday 7:00-8:00, 16:00-20:30; and Saturday-Sunday 7:00-20:30

Table 4: Rate of food advertisements per hour during children’s viewing hours

Rate of food ads	CV1 ^a	Non CV1	CV2 ^b	Non CV2
AM	4.7	6.0	5.3	5.6
PM	9.9	8.2	8.0	8.8
Weekday	7.0	8.0	8.3	7.6
Weekend	5.2	6.4	6.2	5.8
<i>Total time</i>	6.3	7.6	7.2	7.4

Types of foods advertised

Comparison of children's viewing hours versus non-children's viewing hours

The proportion of advertisements for high fat/high sugar foods was higher in children's viewing hours (47.7% in CV1 and 48.6% in CV2) (see Table 5).

The proportion of high fat/high sugar food advertisements was highest in the morning periods for both CV1 and CV2, with greater than 50% of food advertisements from this category at these times (53.7% in CV1 and 54.3% in CV2) (see Figure 3).

The time period with the highest proportion of food advertisements for high fat/high sugar foods was CV1 weekend mornings, at 54.7% or a rate of 4.3 ads per hour.

The proportion of food group advertisements for different times is shown in Table 5, and Figures 1, 3 and 5.

The rate of food advertisements per hour for the high fat/high sugar food group was highest in CV2, at 3.5 advertisements for high fat/high sugar foods per hour (Table 6). The afternoon periods at all viewing times had a higher rate of food advertisements for all food categories.

High fat/high sugar foods were advertised at the highest rate during CV1 afternoon period (at 12.3 advertisements per hour).

Confectionery and fast food restaurants were the two most frequently advertised food categories overall. Examples of high fat/high foods advertised included Cadburys (177 ads over the study week), McDonalds (109 ads/wk), KFC (88 ads/wk), Dominos (78 ads/wk), Nestle Nesquik chocolate cereal (61 ads/wk) and Pizza Hut (33 ads/wk).

Confectionery The frequency of advertisements for confectionery products was highest in CV1 and non-CV2 periods (13.4% of food advertisements for both time periods). However, they were at their highest in CV2 weekend days, at 14.8% of food advertisements (note that this time period spans almost the entire day).

Fast food restaurant advertisements were most common in CV2, with 14.5% of food advertisements from this group. The afternoon/evening time period in CV2 showed the highest proportion of fast food restaurant during CV2, with 15.0% of food advertisements.

Sugared drinks were most heavily advertised in CV2, with 3.6% of advertisements at this time relating to this food group. Again CV2 afternoon/evening showed the highest frequency for this food group, with 4.3%. Relatively few advertisements for this group were shown in CV1.

The proportion of confectionery, fast food restaurant and sugared drink advertisements is shown in Figure 2, 4 and 6.

Table 5: The proportion of food groups advertised during different children’s viewing hours

	CV1 ^a Foods advertised (%) frequency		CV2 ^b Foods advertised (%) frequency	
	CV1	Non-CV1	CV2	Non-CV2
Core foods				
Dairy	6.8	8.7	9.6	7.4
Fruit and vegetables	2.4	3.0	3.0	2.8
Meat, fish, poultry	6.8	4.3	4.4	5.0
Breads, cereals ^c , rice, pasta	13.2	9.0	8.7	10.6
Baby foods	2.2	2.3	1.1	3.3
Core food combined	8.1	7.8	7.4	8.1
Subtotal	39.5	35.1	34.2	37.2
High fat/high sugar foods				
Confectionery	13.4	12.7	12.2	13.4
Fast food restaurants	9.2	11.5	14.5	8.3
Cakes, biscuits, muesli bars	11.0	4.7	6.7	5.1
High fat/high sugar spreads	0.0	0.0	0.0	0.0
Breakfast cereals (>20% sugar)	11.4	4.2	6.1	5.0
Sugared drinks	0.2	2.6	3.6	1.1
Frozen/fried potato products	0.0	0.0	0.0	0.0
Juice	0.9	2.3	1.0	2.9
Savoury crisps and pastries	0.9	2.9	3.1	2.1
Desserts	0.7	1.3	1.4	1.1
Subtotal	47.7	42.2	48.6	39.0
Miscellaneous				
Recipe helpers	3.7	7.6	6.6	7.2
Miscellaneous ^d	9.0	15.0	10.7	16.6
Subtotal	12.7	22.6	17.3	23.8

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b CV2 includes Monday-Friday 7:00-8:00, 16:00-20:30; and Saturday-Sunday 7:00-20:30

^c Includes breakfast cereals with <20% sugar

^d Includes tea, coffee, alcohol, supermarkets, local restaurants/cafes, supplements, vegemite, throat lozenges

Figure 1: The proportion of food groups advertised during children’s viewing hours.

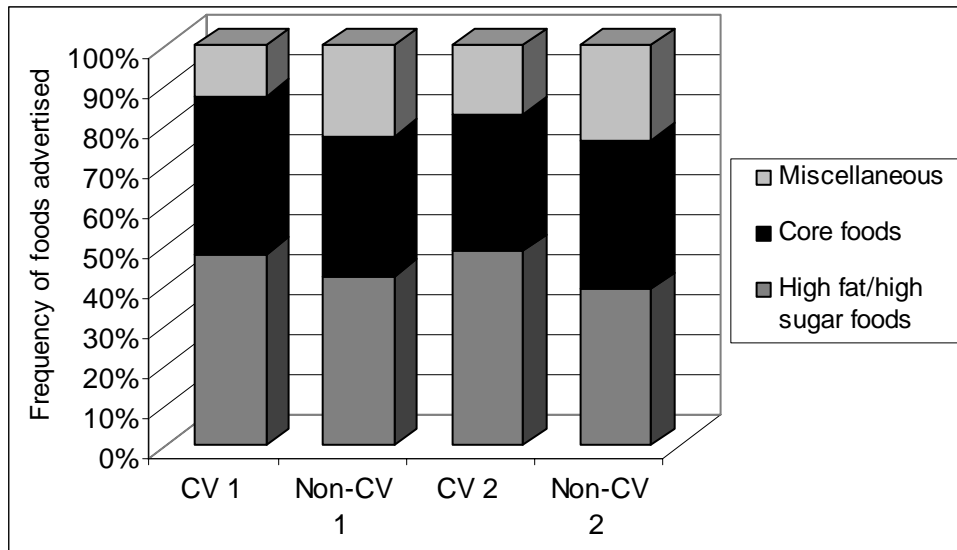


Figure 2: The proportion of confectionery, fast food restaurant and sugared drinks groups advertised during children’s viewing hours.

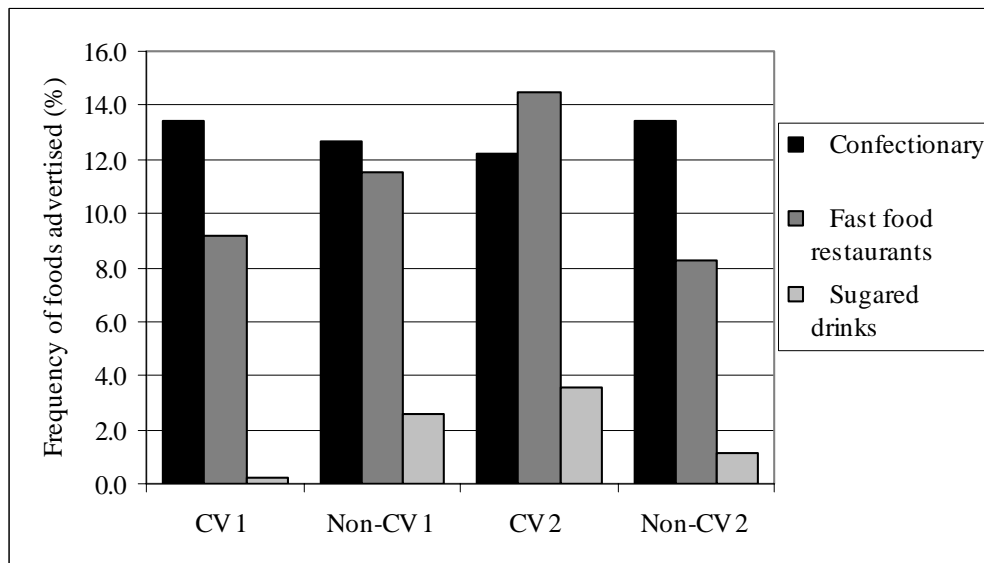


Figure 3: The proportion of food groups advertised during children’s viewing hours by morning and afternoon/evening time slots.

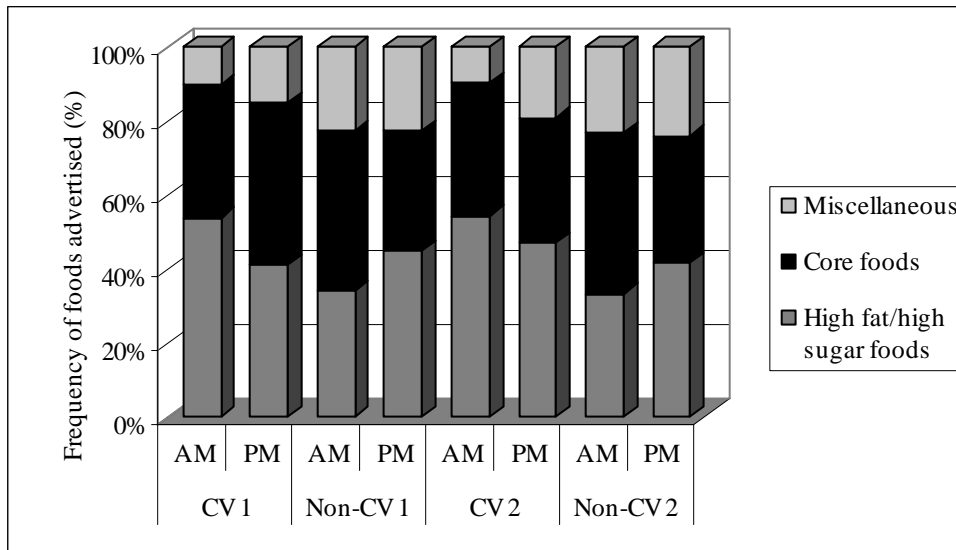


Figure 4: The proportion of confectionery, fast food restaurants and sugared drinks advertisements during children’s viewing 2 hours by morning and afternoon/evening time slots.

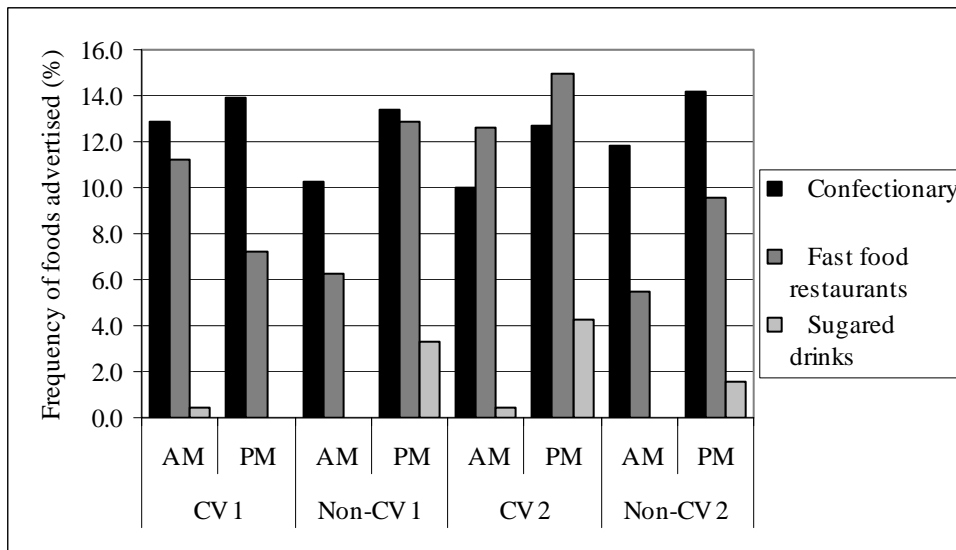


Figure 5: The proportion of food groups advertisements during children’s viewing hours by weekday and weekend day time slots.

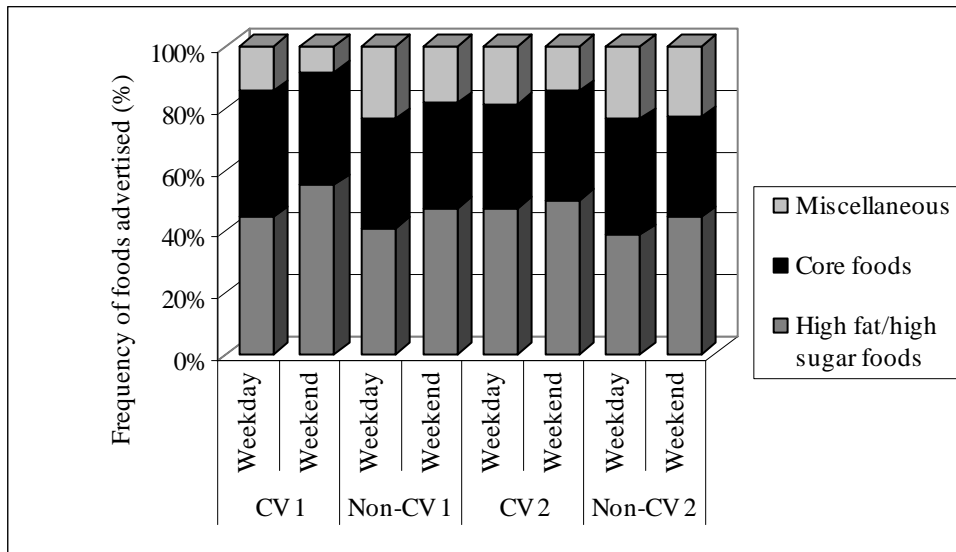


Figure 6: The proportion of confectionery, fast food restaurants and sugared drinks advertised during children’s viewing hours by weekday and weekend day time slots.

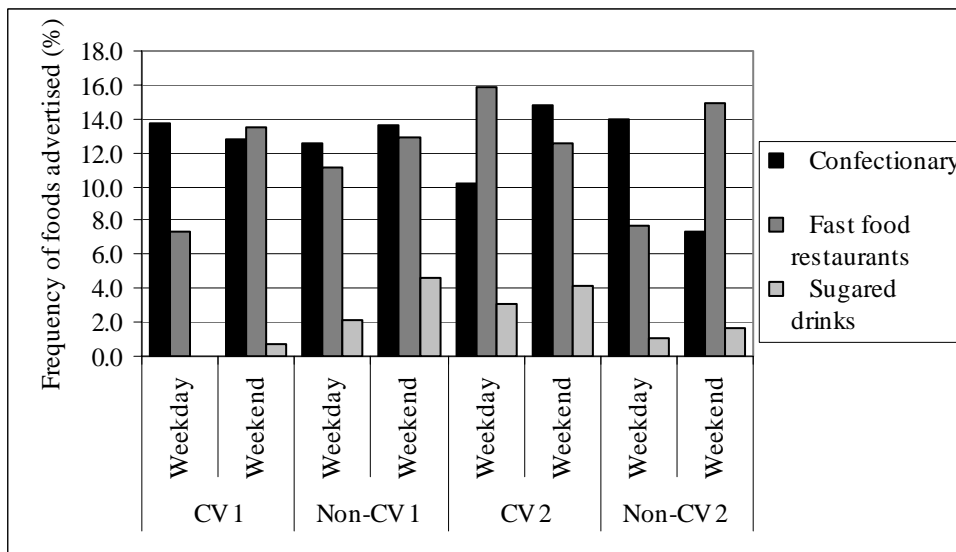


Table 6: The rate of food group advertisements per hour during children’s viewing hours.

	CV1 ^a		CV2 ^b		Total viewing time
	CV1	Non-CV1	CV2	Non-CV2	All hours
Core foods ^c rate (ads/hour)	2.5	2.7	2.5	2.8	2.6
High fat/high sugar foods ^d rate (ads/hour)	3.0	3.2	3.5	2.9	3.2
Miscellaneous foods ^e rate (ads/hour)	0.8	1.7	1.2	1.8	1.5

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b CV2 includes Monday-Friday 7:00-8:00, 16:00-20:30; and Saturday-Sunday 7:00-20:30

^c Includes dairy, fruit and vegetables, meat, fish, poultry, breads <20% sugar cereals, rice, pasta, baby foods, core foods combined

^d Includes confectionery, fast food restaurants, cakes, biscuits, muesli bars, high fat/high sugar spreads, >20% sugar cereals, sugared drinks, frozen/fried potato products, juice, savoury crisps and pastries, desserts

^e Includes tea, coffee, alcohol, supermarkets, local restaurants/cafes, supplements, vegemite, throat lozenges, recipe helpers

Duration of food advertisements in children’s viewing hours

The results on patterns of food advertising were similar for analyses conducted on proportion of time and proportionate number (as presented above).

Comparison of children’s viewing hours versus non-children’s viewing hours

The proportion of time allocated to food advertisements was similar during children’s viewing hours (CV1 and CV2) and other times. The results for the proportion of time allocated for all food advertisements are shown in Table 8 and Figure 7.

The proportion of advertising time given to high fat/high sugar foods was higher in both CV1 and CV2 time periods compared to other times. High fat/high sugar foods again comprised almost 50% of food advertisement time during these periods (47.5% CV1, 49.4% CV2). However, the advertisement time for core foods was higher in CV1 than non-CV1 hours, with the biggest difference in advertisements between these periods for breads, cereals, rice and pasta (12.6% and 8.7% of time respectively). Results for the proportion of time for advertisements for different food groups are shown in Table 7, and Figures 8, 10 and 12.

The time period with the highest time allocated to confectionery advertisements was CV1 afternoon, with 15.7%. Fast food restaurants had more time during CV2 weekdays, with 12.9% of food advertising time, although the period with the longest time was non-CV2 weekend days. Sugared drinks had the highest proportion of food advertisement time in non-CV1 weekend days, with 6.7%, followed by CV2 afternoon/evening time period, with 6.4%. Data for the proportion of confectionery, fast food restaurants and sugared drink advertisement duration is shown in Figures 9, 11 and 13.

Table 7: The proportion of time of food advertisements during children’s viewing hours

	CV1 ^a		CV2 ^b		All viewing hours
	CV1	Non-CV1	CV2	Non-CV2	All hours
Food ad (% duration)	25.4	25.5	24.9	26.0	25.5
Non-food ad (% duration)	74.6	74.5	75.1	74.0	74.5

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b CV2 includes Monday-Friday 7:00-8:00, 16:00-20:30; and Saturday-Sunday 7:00-20:30

Figure 7: The proportion of time for food advertisements during children’s viewing hours

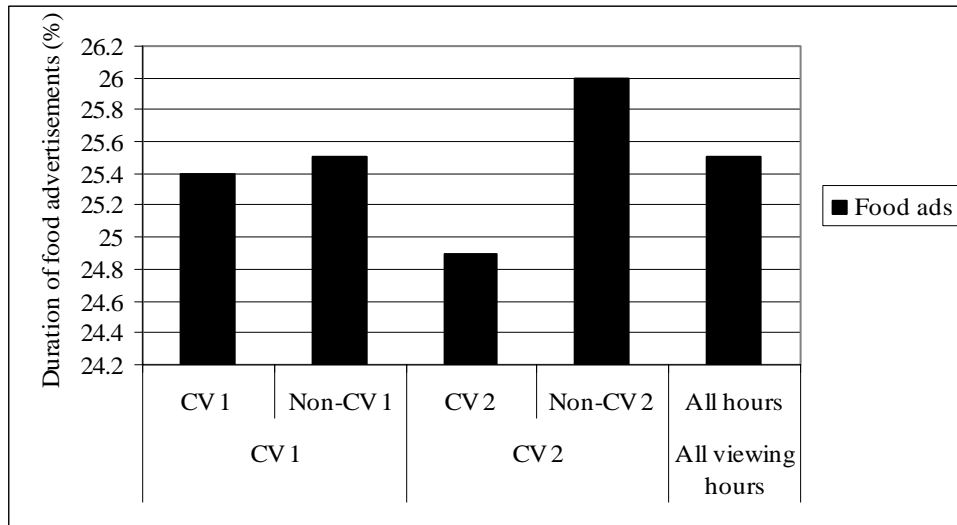


Table 8: The proportion of time for food group advertisements during children’s viewing hours.

	CV1 ^a Foods advertised (%) duration		CV2 ^b Foods advertised (%) duration	
	CV1	Non-CV1	CV2	Non-CV2
Core foods				
Dairy	7.6	9.4	10.5	8.0
Fruit and vegetables	1.5	2.5	2.4	2.3
Meat, fish, poultry	5.8	3.2	3.8	3.6
Breads, cereals ^c , rice, pasta	12.6	8.7	8.5	10.1
Baby foods	2.6	2.9	1.4	4.0
Core food combined	9.8	8.2	7.4	9.4
Subtotal	39.9	34.9	34.0	37.4
High fat/high sugar foods				
Confectionery	14.4	13.5	12.8	14.4
Fast food restaurants	6.9	10.2	11.6	8.0
Cakes, biscuits, muesli bars	11.4	5.2	7.4	5.4
High fat/high sugar spreads	0.0	0.0	0.0	0.0
Breakfast cereals (>20% sugar)	11.9	3.9	6.6	4.3
Sugared drinks	0.3	3.6	5.2	1.3
Frozen/fried potato products	0.0	0.0	0.0	0.0
Juice	1.1	2.9	1.3	3.6
Savoury crisps and pastries	0.8	3.0	3.4	2.1
Desserts	0.7	1.1	1.1	1.1
Subtotal	47.5	43.4	49.4	40.2
Miscellaneous				
Recipe helpers	3.2	6.3	5.5	6.0
Miscellaneous ^d	9.5	15.2	11.3	16.4
Subtotal	12.7	21.5	16.8	22.4

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b CV2 includes Monday-Friday 7:00-8:00, 16:00-20:30; and Saturday-Sunday 7:00-20:30

^c Includes breakfast cereals with <20% sugar

^d Includes tea, coffee, alcohol, supermarkets, local restaurants/cafes, supplements, vegemite, throat lozenges

Figure 8: The proportion of advertisements for food groups during children’s viewing hours.

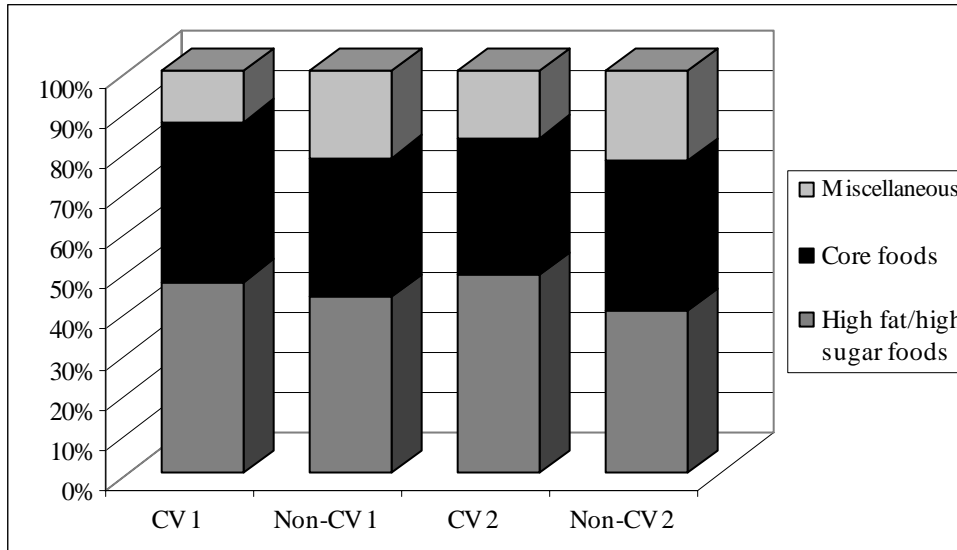


Figure 9: The proportion of confectionery, fast food restaurant and sugared drinks advertisements during children’s viewing hours

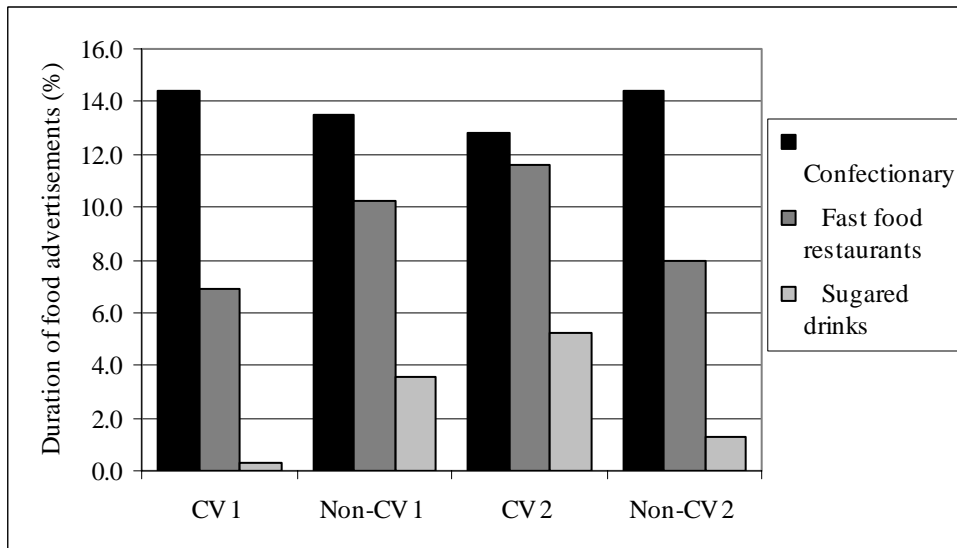


Figure 10: The proportion of time for advertisements for food group during children’s viewing hours by morning and afternoon/evening time slots.

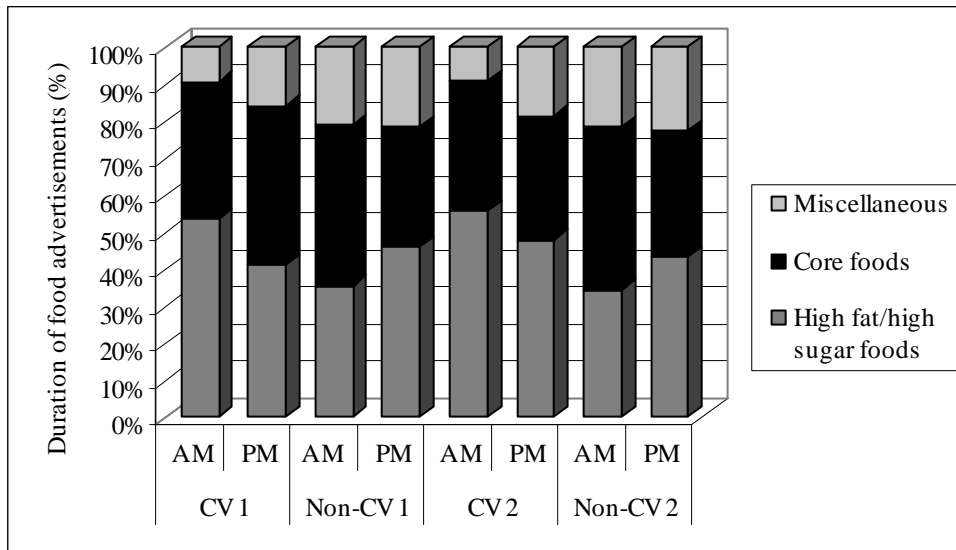


Figure 11: The proportion of time for confectionery, fast food restaurant and sugared drinks advertisements during children’s viewing hours by morning and afternoon/evening time slots.

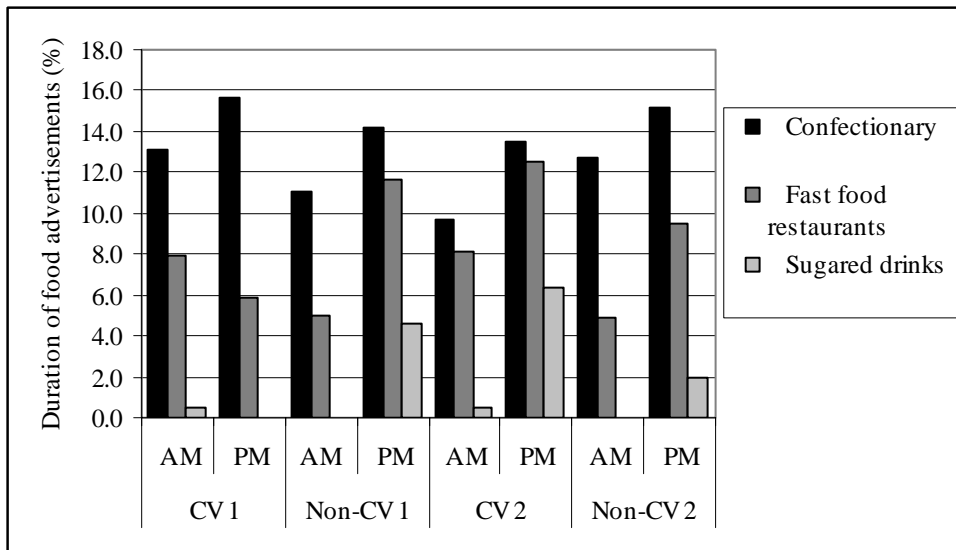


Figure 12: The proportion of time for advertisements for food groups during children’s viewing hours by weekday and weekend day time slots.

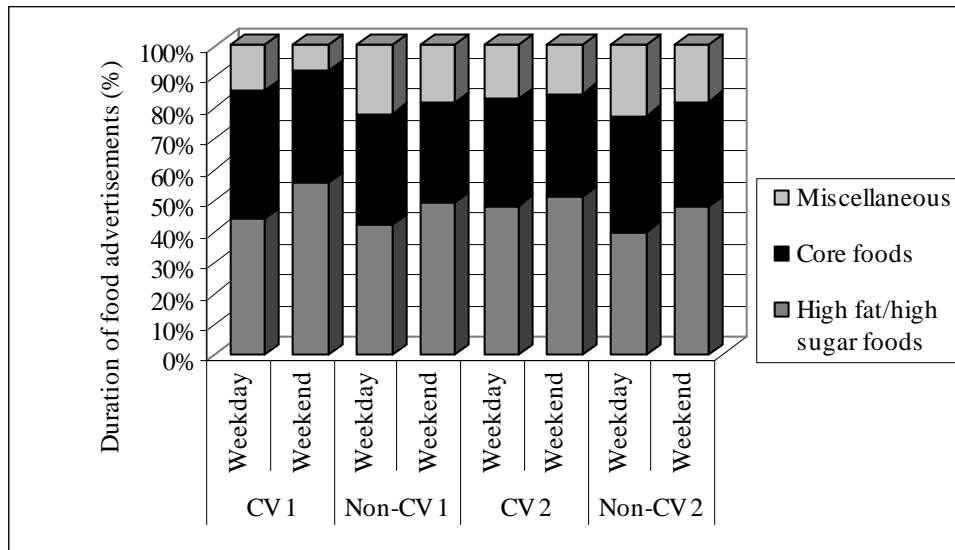
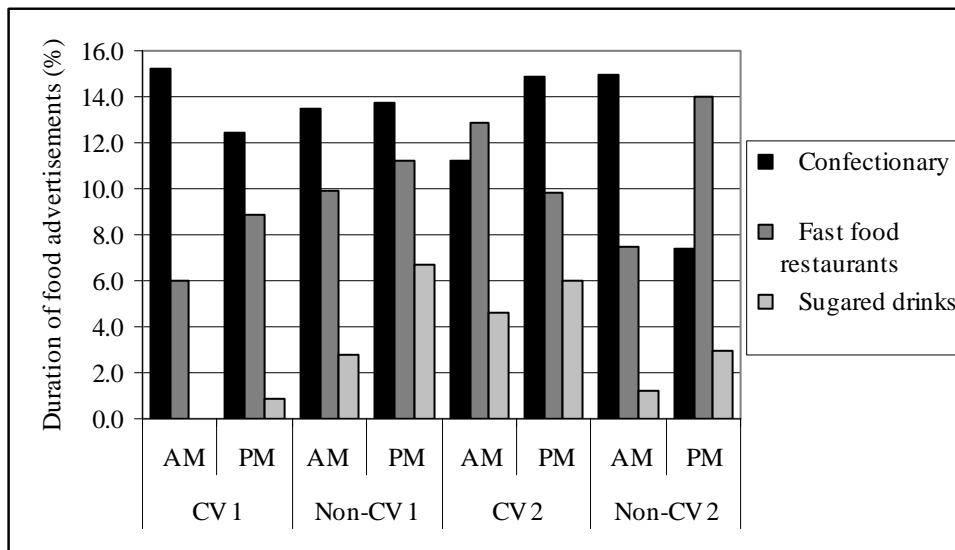


Figure 13: The proportion of time for confectionery, fast food restaurant and sugared drinks advertisements during children’s viewing hours by weekday and weekend day time slots.



The mean duration of food advertisements is given in Table 9. The differences in time allocated to food ads was similar across viewing times, with the least advertising time in CV1. The mean time allocated to advertisements for high fat/high sugar foods was greatest during CV2 (at 4min 8sec/hour) (see Table 9).

Table 9: The mean time per hour (shown in minutes and seconds) of food group advertisements in children’s viewing hours

Food group	CV1 ^a		CV2 ^b	
	CV1	Non-CV1	CV2	Non-CV2
Total food ads (min, sec/hour)	7min 39sec	8min 58sec	8min 23 sec	8min 58sec
High fat high sugar ads (min, sec/hour)	3min 37 sec	3min 54sec	4min 8sec	3min 36sec
Core food ads (min, sec/hour)	3min 1sec	3min 8sec	2min 51sec	3min 21sec
Miscellaneous food ads (min, sec/hour)	59sec	1min 55sec	1min 24 sec	2min 36sec

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b CV2 includes Monday-Friday 7:00-8:00, 16:00-20:30; and Saturday-Sunday 7:00-20:30

Comparison with 2002 study data

Overall, food advertisements accounted for 26.2% of all ads in 2006, compared to 31.1% in 2002. Data for the comparison of food groups advertised in these study periods is shown in Table 10, Figure 14-15.

During the 2006 study period, there was an average of 6.3 food advertisements per hour in children's viewing 1, compared to 8.2 in 2002. In 2006, there was an average of 2.6 minutes of food advertisements per hour on each station during CV1.

Similar to 2002, the weekday afternoon children's viewing time slot (15:00-16:30) had the largest proportion of food advertisements. Despite the differences between 2002 and 2006 in total numbers and rates of food advertisements, the proportion of food advertisements in CV1 weekday afternoon timeslot in 2006 was 38%, which is similar to the 37% found in 2002. In 2006, during the weekday afternoon viewing time there was an average of 3.7 minutes of food advertisements per channel.

High fat/high sugar foods contributed 47.7% of all food ads in 2006, compared to 53.7% in 2002. There was an average of 3.0 ads per hour for foods high in sugar and/or fat in 2006, compared to 4.4 in 2002, during children's viewing hours.

The two most advertised food categories in 2006 were the same as in 2002: confectionery and fast food restaurants. However, the proportions of food advertisements for confectionery and fast food restaurants decreased from 2002. In 2006 there has been a reduction in confectionery advertisements (from 16.6% to 13.4%) and fast food restaurant advertisements (from 13% to 9.2%).

In 2006, the least advertised food groups were high fat/high sugar spreads and frozen/fried potato products, with no advertisements for these groups during the entire study period. This compares to 5.3% and 2.0% of food advertisements for these groups respectively in 2002. Meanwhile, fruit and vegetable advertisements had increased to 2.4% of food advertisements, from 0.1% in 2002.

Table 10: Comparison of proportion of food advertisements for different food groups in 2002 and 2006 during children’s viewing hours (CV1) data.

	CV1 ^a (2002) Foods advertised % frequency	CV1 ^a 2006 Foods advertised % frequency
Core foods		
Dairy	10.3	6.8
Fruit and vegetables	0.1	2.4
Meat, fish, poultry	0.9	6.8
Breads, cereals ^b , rice, pasta	6.1	13.2
Baby foods	4.9	2.2
Core food combined	5.8	8.1
Subtotal	28.1	39.5
High fat/high sugar foods		
Confectionery	16.6	13.4
Fast food restaurants	13.0	9.2
Cakes, biscuits, muesli bars	5.5	11.0
High fat/high sugar spreads	5.3	0.0
Breakfast cereals (>20% sugar)	5.1	11.4
Sugared drinks	2.8	0.2
Frozen/fried potato products	2.0	0.0
Juice	1.8	0.9
Savoury crisps and pastries	1.5	0.9
Desserts	0.1	0.7
Subtotal	53.7	47.7
Miscellaneous		
Recipe helpers	6.2	3.7
Miscellaneous ^c	12.0	9.0
Subtotal	18.2	12.7

^a CV1 includes Monday-Friday 6:30-7:30, 9:00-9:30, 15:00-16:30; and Saturday-Sunday 7:00-11:30

^b Includes breakfast cereals with <20% sugar

^c Includes tea, coffee, alcohol, supermarkets, local restaurants/cafes, supplements, vegemite, throat lozenges

Figure 14: The proportion of food advertisements for different food groups advertised during children’s viewing hours (CV1) in 2002 and 2006.

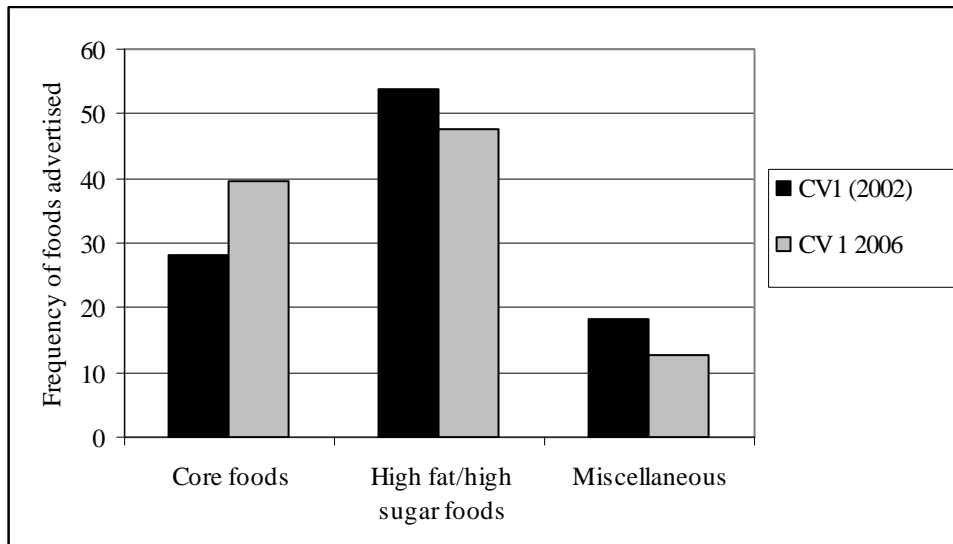
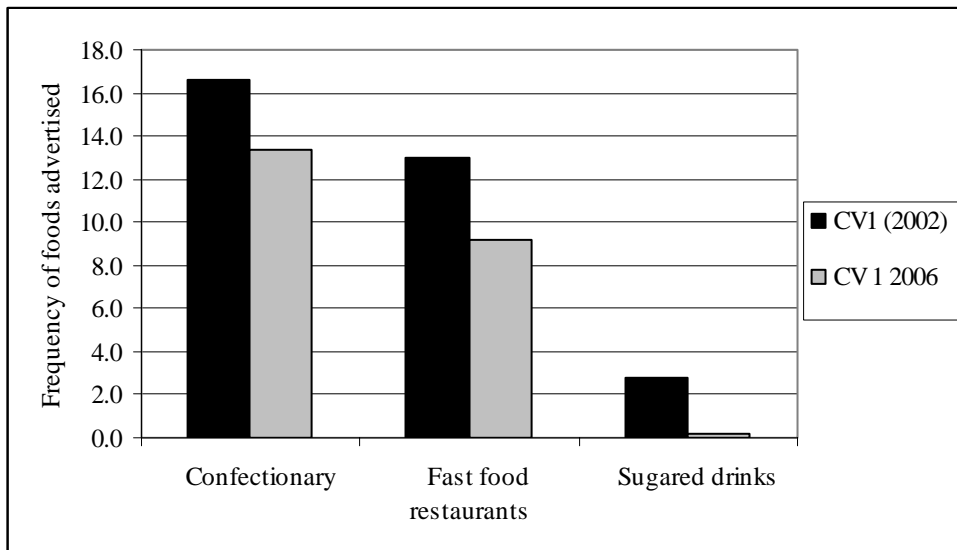


Figure 15: The proportion of food advertisements for confectionery, fast food restaurant and sugared drinks in 2002 and 2006 during children’s viewing hours (CV1)



Food advertising patterns in higher rating versus lower rating programs

Data supplied from OzTAM identified the 25 most popular programs for 5 to 12 year olds, and the 25 most popular programs for 13 to 17 year olds during the study period. Of the 25 programs most popular with 5 to 12 year olds, 20 were on commercial channels; and for 13 to 17 year olds, 24 were on commercial channels. Some of the popular programs are shown in multiple episodes throughout the week. Each episode has been analysed as a separate program. The 20 most popular programs/episodes for the study period are shown in Tables 11 and 12.

Analyses were conducted to characterise the food advertising patterns during these programs, compared to other times. Popular program time periods were a composite of CV1, CV2 and other viewing hours. The majority of these programs fell in the afternoon/evening time periods, where food advertising was most concentrated. The popular programs account for 13.5 hours of viewing time per week for 5-12 year olds and 16 hours per week for 13-17 year olds.

A greater proportion of popular programs were aired on channel 10 (90% for both younger and older children), which was also found to have the highest proportion of food advertisements overall.

The proportion of food advertisements was greater during children's high rating programs, at 41.0% in the programs popular with younger children and 36.5% during programs popular with older children, compared to 26.2% overall (see Table 13). The rate of food ads during programs most popular with 5-12 year olds was 13.7 food ads per hour, including 9 high fat/high sugar ads per hour. This compares to 7.3 food ads per hour, including 3.1 high fat/high sugar ads in programs most popular with adults (over 18 years age group). In terms of duration, the results were similar: with food advertisements at 42.9% of advertising time during programs popular with younger children and 38.3% during programs popular with older children.

The balance of core and high fat/high sugar foods advertised also changed during high rating programs. High fat/high sugar foods were the subject of 65.9% of food advertisements during programs viewed by younger children and 66.8% of food advertisements viewed by older children. This compares to the proportion of these ads during children's viewing times CV1 (47.7%) and CV2 (48.6%). Again, data for advertisement duration was similar with 68.4% and 67.9% high fat/high sugar foods for younger and older children respectively (see Table 13, Figures 16 and 17).

Table 11: OzTAM data on the top 20 rated programs on commercial channels (ranked by audience) for 5-12 year olds in the Sydney market in the study week.

Popular program rating	Description (grouped)	Channel	Episode Counter	Time period
1	THE SIMPSONS	Network TEN	5	CV2
2	BIG BROTHER - INTRUDERS GO IN	Network TEN	1	CV2
3	FLIPPER AND LOPAKA – THE SEARCH FOR NEPTUNES TRIDENT	Network 7	1	CV1/CV2
4	AUSTRALIA'S FUNNIEST HOME VIDEO SHOW	Network 9	1	CV2
5	BIG BROTHER LIVE NOMINATION	Network TEN	1	CV2
6	NEIGHBOURS	Network TEN	5	CV2
7	BIG BROTHER - FRIDAY NIGHT LIVE	Network TEN	1	CV2
8	BIG BROTHER SUN	Network TEN	1	CV2
9	BIG BROTHER	Network TEN	4	CV2

Table 12: OzTAM data of the top 20 rated programs on commercial channels (ranked by audience) for 13-17 year olds in the Sydney market in the study week.

TV Item	Description (grouped)	Channel	Episode Counter	Time period
1	HOUSE	Network TEN	1	Other viewing time
2	THANK GOD YOU'RE HERE	Network TEN	1	CV2
3	BIG BROTHER LIVE EVICTION	Network TEN	1	CV2
4	BIG BROTHER - FRIDAY NIGHT LIVE	Network TEN	1	CV2
5	BIG BROTHER - INTRUDERS GO IN	Network TEN	1	CV2
6	DESPERATE HOUSEWIVES	Network 7	1	Other viewing time
7	BIG BROTHER SUN	Network TEN	1	CV2
8	LOST	Network 7	1	Other viewing time
9	THE O.C.	Network TEN	1	Other viewing time
10	BIG BROTHER LIVE NOMINATION	Network TEN	1	CV2
11	BIG BROTHER	Network TEN	5	CV2
12	THE SIMPSONS	Network TEN	5	CV2

Table 13: The proportion of food advertisements during the top 20 rated programs

	During Top 20 programs		Other viewing times	
	% food ads/total ads	% high fat/high sugar ads/food ads	% food ads/total ads	% high fat/high sugar ads/food ads
5-12 yrs	41.0	65.9	25.5	41.6
13-17 yrs	36.5	66.8	25.7	41.5
18+ yrs	25.0	41.9	26.3	43.4

Figure 16: The proportion of food advertisements for different food groups advertised during popular programs

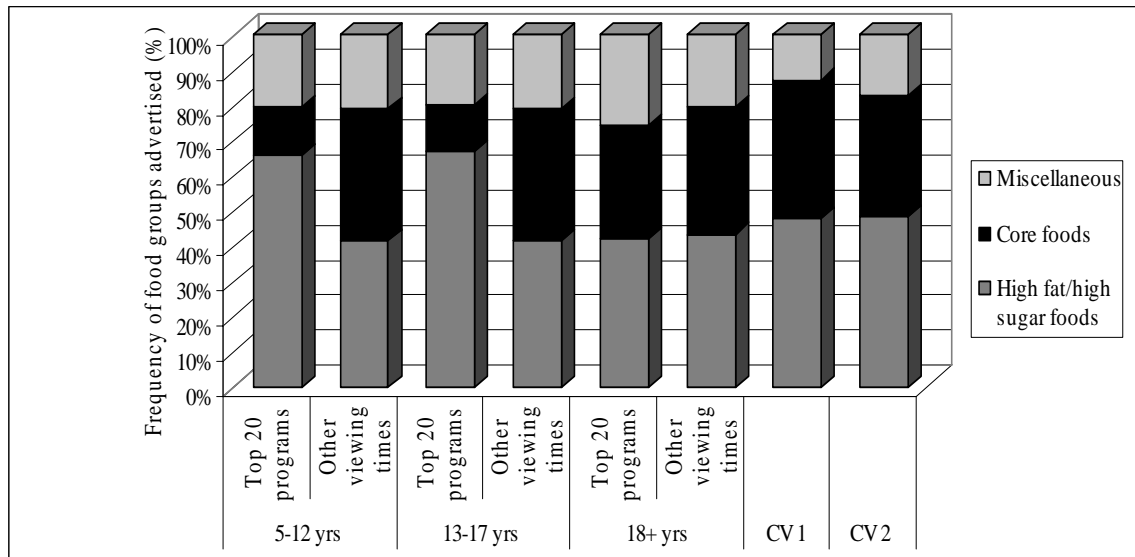
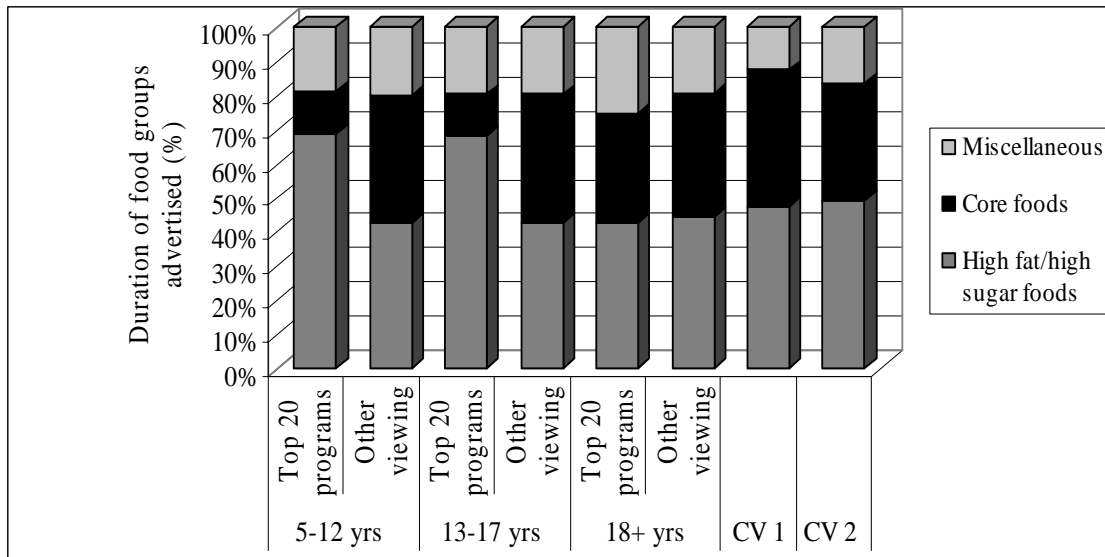


Figure 17: The proportion of time on advertisements for food groups during the 20 rated programs in the study week.



Estimating children's exposure to food advertisements

Assuming children aged 5-12 years view an average of one hour of commercial Free TV per day and that this is during high rating programs, it is estimated that they would be exposed to 96 food ads, including 63 high fat/high sugar ads per week.

Estimates of exposure that assume children are viewing TV during specified children's TV viewing hours, and not during the most popular programs, produce significantly lower estimates. For example, if viewing occurred during CV1, it is estimated that 5-12 year olds would be exposed to 44 food ads, including 21 ads for high fat/high sugar foods, per week (7 hours commercial TV per week at a rate of food ads of 6.3 per hour, with 47.7% high fat/high sugar foods during CV1). If this viewing occurred during the broader band of children's viewing hours (CV2), then the child would be exposed to 50 ads, including 24 high fat/high sugar food per week (7 hours commercial TV per week at a rate of food ads of 7.2 per hour, with 48.6% high fat/high sugar foods).

DISCUSSION

What is the proportion (time and frequency) of food advertisements within all advertisements during children's TV viewing hours?

Overall, about 1 in 4 advertisements are for food. The proportion of food advertisements was similar across children's viewing hours and other viewing hours; this pattern was consistent for both frequency and duration of advertisements.

What is the proportion of advertising for food categories within all food ads?

High fat/high sugar foods were the most frequently advertised food group, accounting for 43.4% of food advertisements in all viewing hours. Within this category, the specific foods predominantly contributing were confectionery (30% of high fat/high sugar ads) and fast food restaurants (26% of high fat/high sugar ads). These food groups had 2.5 times more advertisements than meat, fish and poultry and 4 times as many advertisements than those for fruit and vegetables.

Are food advertisements more likely to be broadcast during children's television programs/viewing hours (all food and confectionery and fast food advertisements)?

Viewing hours

While children's viewing hours had a similar proportion of food advertisements as other viewing hours, the foods advertised during children's viewing hours were more likely to be high fat/high sugar foods. High fat/high sugar food ads were substantially higher during both categories of children's viewing hours, at around 48%. This is about 25% more high fat/high sugar food advertisements than during other times (non-CV2).

Within the high fat/high sugar food group, confectionery was advertised more in CV1 than non-CV1. Fast food restaurants were advertised almost twice as much in CV2 compared with non-CV2. CV2 also had the highest proportion of sugared drink advertisements, at 3.6% of food advertisements; this was more than three times the frequency in non-CV2. The total proportion of sugared drink advertisements was low over the study period (2.2% of all food advertisements). CV1 had the highest proportion of core food group advertisements, this was due mostly to differences in the advertisement of lower sugar (<20%) breakfast cereals between viewing times.

Programs viewed by children

The proportion of food advertisements was substantially greater during children's high rating programs, at 41.0% in the programs popular with younger children and 36.5% during programs popular with older children (compared to 26.2% overall).

The difference in levels of core and high fat/high sugar foods advertised was also greater during high rating programs, with high fat/high sugar foods the subject of 65.9% of food advertisements during programs popular with younger children and 66.8% of food advertisements popular with older children. This compares unfavourably to the proportion of these ads during children's viewing times CV1 (47.7%) and CV2 (48.6%).

Peak times for high fat/high sugar food ads included:

- during children's viewing hours, (47.7% in CV1 and 48.6% in CV2) of food ads (compared to 42.2% at other times)
- during weekend children's viewing hours (CV1), where high fat/high sugar advertisements comprised 54.7% of food advertisements
- during the programs most popular with children, where the proportion of high fat/high sugar advertisements was 65.9% during programs viewed by younger children and 66.8% in programs viewed by older children
- during weekday CV2 viewing hours, as both audience size and the total number of high fat/high sugar advertisements are highest at this time.

Are there any significant changes of TV advertising patterns (all advertisements; all food advertisements and confectionery and fast food advertisements) between 2002 and 2006?

Upon comparison of overall data from 2002 and 2006, food advertisements appear to be shifting in a more healthful direction. There has been an overall reduction in total food advertisements to 26% from 31% over the four year period. The advertisement for non-core foods, including high fat/high sugar foods and its constituent foods, confectionery, fast food restaurants and sugared drinks, also decreased accordingly. The advertisement of high fat/high sugar food has decreased by 11% in the four year period, giving a 2.75% reduction per year. The advertisement of core food groups, and particularly fruit and vegetables, has also increased from 2002 to 2006.

Nevertheless, the actual proportion of unhealthy food advertising to children remains high, with high fat/high sugar foods the subject of about 50% of overall food advertisements, and higher at peak viewing times. This occurs in a context where non-core foods have been found to contribute 41% to children's daily energy intake, which is 2 to 3 times the recommended level (Bell et al 2005). Given that the recommended contribution of non-core food/beverages to daily energy intake for children 5 to 12 years is 14%, then this would appear to provide a more appropriate rate of advertising for non-core foods.

Confectionery and fast food restaurant advertisements are still markedly more frequent than those for nutritious foods, such as fruit and vegetables and meat, fish and poultry (6-fold and 4-fold more respectively). If this trend were to continue at the same rate it would take a further 17 years to eliminate high fat/high sugar food advertisements on commercial television. By this time it is predicted that 50% of Australian children will be overweight (Australasian Society for the Study of Obesity, 2004).

As noted above, detailed analyses of actual viewing patterns by program and channel share show that despite reduced overall levels of food advertising, there is precise targeting of advertisements for high fat/high sugar foods to children. This selective targeting to children means that overall exposure of children to food advertisements remains high.

Are there any significant changes of TV watching patterns of 5-12 year old children between 2002 and 2006?

Data from The Australian Film Commission (AFC website) depicts a reduction in viewing patterns from 2.6 hours per person per day (2002) to 2.1 hours per person per day (2004), for young people (aged 5-12 and 13-17).

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