The extent and nature of food promotion directed to children in Australian supermarkets

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SUMMARY

The aim of this study was to describe the nature and amount of sales promotion use on food packaging in selected Australian supermarkets, specifically those directed at children through the use of premium offers, such as giveaways and competitions, and cartoon and movie character promotions. The study also examined the promotion of healthy versus unhealthy foods. Nine supermarkets located across the metropolitan area of Sydney, Australia were surveyed to assess the extent and nature of food promotion directed at children. The number and types of promotions were measured within seven food categories: sweet biscuits, snack foods, confectionery, chips/savoury snacks, cereals, dairy snacks and ice cream. Any foods that utilized promotional tactics were categorized as either healthy or unhealthy, according to set criteria. The study found that within the seven food categories between 9 and 35% of food products used promotional tactics. The use of television, movie celebrities and cartoon characters for promotion was most common, making up 75% of all promotions. Giveaways accounted for 13% of all promotions. When used, giveaways were commonly used in conjunction with another promotional method. Data from this study also confirmed that 82% of all food promotions were for unhealthy foods and only 18% were used to promote healthy foods. However, for dairy snacks and ice cream the majority of promotions, 99 and 65%, respectively, were healthier choices. This was the first study to describe the extent and nature of food promotions used in supermarkets. The promotion of unhealthy foods in supermarkets is common and is one of the many factors contributing to today’s obesity promoting environment. Further research is required to determine the impact of food promotions on children’s dietary intake, and to determine the most effective ways to restrict the promotion of unhealthy foods.

Key words: children; food advertising; food marketing; food promotions; obesity

INTRODUCTION

Over the past 20 years rates of obesity in children have risen greatly in many countries, leading some researchers to speak of an ‘international epidemic of obesity’ (Dietz, 1998; Baur, 2002). It is estimated that one in five Australian children and adolescents are now overweight or obese (Baur, 2002). Amongst Australian children, the rate of overweight and obesity combined has more than doubled, and the rate of obesity trebled in all age groups and for both sexes, in the 10 year period from 1985 to 1995 (Magarey et al., 2001).

Obese children have a 25–50% chance of progression to adult obesity (Must and Strauss, 1999) with 80% of overweight adolescents continuing to be overweight into adulthood (Dietz, 2004). The significant risk for childhood overweight and obesity to continue into adulthood and the associated long-term health implications confirm the importance of preventive action.
A joint report prepared by the World Health Organization and the Food and Agriculture Organization concluded that the heavy marketing of fast food and energy-dense micronutrient-poor foods and beverages is a ‘probable’ causal factor in weight gain and obesity in children (World Health Organization, 2003). Six techniques are commonly employed by food companies to market their products: television advertising, in-school marketing, sponsorship, product placement, internet marketing and sales promotions on food packaging (Hawkes, 2004).

The marketing of such foods contributes to an obesity promoting environment that makes healthy food choices difficult and less appealing, especially for children. Children are a vulnerable market and are far less likely to be aware of the health implications of a diet high in fat, sugar and/or sodium (Hastings et al., 2003).

Sales promotions on food packaging are a marketing tool used to entice consumers to buy a product or service at the point-of-sale. Food companies use a range of sales promotion techniques to market food products including premiums, prizes and price discounts. Sales promotions form a large part of the marketing environment. In the United States alone, US $233 700 million was spent on consumer sales promotions in 2002, compared with US $211 700 million on advertising in the same year (Hawkes, 2004).

Children’s food promotion is dominated by television advertising (Morton, 1990; Dibb, 1996; Hill and Radimer, 1997; Young Media Australia, 1997; Wilson et al., 1999; Zuppa et al., 2003; Morton and McDermott, 2004; Morton et al., 2005; Neville et al., 2005). The use of premium offers and cross-promotions with popular television, movie and sports celebrities is also now appearing as a popular way to market packaged foods to children. For example, in the US, US $3 billion is spent on packaging designed specifically for children (Institute of Medicine of the National Academies, 2004). Today’s supermarket shelves contain numerous products that use children’s favourite characters to market food directly to children. Research has shown this ploy to be particularly effective in assisting children’s slogan recall and ability to identify the product (The Henry J Kaiser Family Foundation, 2004).

In September 2003, the UK Food Standards Agency published a systematic review on the topic of food promotion to children (Hastings et al., 2003). The review found that food promotion does affect the food choices and dietary habits of children, particularly in the context of food preferences and purchase behaviour (Hastings et al., 2003). They also reported that these effects operate at both brand (e.g. which chocolate bar) and category level (e.g. confectionery versus fruit) (Hastings et al., 2003). Themes of fun and fantasy or taste were commonly used to promote particular foods to children, rather than health and nutrition (Hastings et al., 2003).

Although the causes and solutions of childhood obesity are multifactorial, the direct marketing of food to children is one area of concern where action is needed. The various strategies used by food manufacturers to market food products to children shape food preferences and cultivate brand loyalty that will affect future purchases (Coon and Tucker, 2002; Hastings et al., 2003).

The aim of this research was to define the nature and extent of food promotion directed at children in Sydney supermarkets, in terms of premium offers, and cartoon and movie character promotions. The research also examined whether food promotions were used to market healthy or unhealthy foods.

METHODS

A survey tool was developed to record the amount and type of food promotion within seven specific food categories. The seven categories were sweet biscuits, snack foods, confectionery, chips/savoury snacks, cereals, dairy snacks and ice cream, which were chosen based on the systematic review by Hastings et al., commissioned by the UK Food Standards Agency (Hastings et al., 2003). The review stated that a ‘great majority of promotion’ is seen on presugared breakfast cereals, confectionery, chips/savoury snacks, cereals, dairy snacks and ice cream, which were chosen based on the systematic review by Hastings et al., commissioned by the UK Food Standards Agency (Hastings et al., 2003). The review stated that a ‘great majority of promotion’ is seen on presugared breakfast cereals, confectionery, chips/savoury snacks, cereals, dairy snacks and ice cream, which were chosen based on the systematic review by Hastings et al., commissioned by the UK Food Standards Agency (Hastings et al., 2003). The review stated that a ‘great majority of promotion’ is seen on presugared breakfast cereals, confectionery, chips/savoury snacks, cereals, dairy snacks and ice cream, which were chosen based on the systematic review by Hastings et al., commissioned by the UK Food Standards Agency (Hastings et al., 2003). The review stated that a ‘great majority of promotion’ is seen on presugared breakfast cereals, confectionery, chips/savoury snacks, cereals, dairy snacks and ice cream, which were chosen based on the systematic review by Hastings et al., commissioned by the UK Food Standards Agency (Hastings et al., 2003). The review stated that a ‘great majority of promotion’ is seen on presugared breakfast cereals, confectionery, chips/savoury snacks, cereals, dairy snacks and ice cream, which were chosen based on the systematic review by Hastings et al., commissioned by the UK Food Standards Agency (Hastings et al., 2003).
a product at the point-of-sale (Hawkes, 2004). Promotions included premium offers, such as giveaways and competitions, celebrity endorsements, and cartoon and movie character promotions (Hawkes, 2004). Nutrient and health claims and price discounts were not included as promotional techniques in this study.

The survey tool measured the total number of products available on the shelves of the surveyed supermarkets within each of the seven food categories. This number was then subdivided into food products that used promotional tactics and those that did not. The type of promotional method used was categorized as a premium offer (a giveaway or competition), cartoon character, sports or movie celebrity or character promotion. All premium offers were recorded.

It was established whether children were the target of the promotion techniques used on each food item. The use of fun and fantasy themes to make the product exciting and intriguing to children, popular children’s celebrities or characters from a children’s television programme or movie, and premium offers that would appeal to children were taken into account when determining whether children were the intended market. ‘Children’ were defined as being aged 5–12 years.

Any foods that were marketed using promotional tactics were categorized as either healthy or unhealthy, based on criteria formulated by the NSW Healthy School Canteen Strategy (NSW Department of Health and NSW Department of Education and Training, 2004) and CHOICE magazine (Australian Consumers Association, 2005) (Table 1). These criteria considered the amount of energy, fat, saturated fat, sugar, sodium and dietary fibre found in each of the products by category type.

Nine supermarkets located across the Sydney metropolitan area were surveyed to assess the extent and nature of food promotion directed at children. An equal number of supermarkets were chosen from each of the main supermarket chains: Woolworth’s (Penrith, Baulkham Hills and Castle Hill), Coles (Miranda, Castle Hill and Parramatta) and Franklins (Penrith, Castle Hill and Miranda) located in family-orientated shopping areas. Each of the suburbs where the supermarkets are located whilst geographically

### Table 1: Criteria for classifying foods as unhealthy

<table>
<thead>
<tr>
<th>Food category</th>
<th>Criteria</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast cereals</td>
<td>Per 100 g:</td>
<td>Australian Consumers Association (2005)</td>
</tr>
<tr>
<td></td>
<td>≥27% sugar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥600 mg sodium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥9% fat (&gt;1/2 sat fat)</td>
<td></td>
</tr>
<tr>
<td>Snack food bars and sweet</td>
<td>Per serving size:</td>
<td>NSW Department of Health and NSW Department of Education and Training (2004)</td>
</tr>
<tr>
<td>biscuits (per serving size)</td>
<td>≥600 kJ (energy)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥3 g saturated fat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≤1.0 g dietary fibre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥600 kJ (energy)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥3 g saturated fat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥200 mg sodium</td>
<td></td>
</tr>
<tr>
<td>Dairy snacks and ice cream</td>
<td>Per serving size:</td>
<td>NSW Department of Health and NSW Department of Education and Training (2004)</td>
</tr>
<tr>
<td></td>
<td>≥600 kJ (energy)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥3 g saturated fat</td>
<td></td>
</tr>
<tr>
<td>Other foods</td>
<td>All confectionery, soft drinks, energy drinks, flavoured mineral waters, all deep fried foods, chocolate coated and premium ice creams, croissants, doughnuts, cream filled buns/cakes and slices, sweet pastries and crisps are considered a Red category food by the NSW Healthy School Canteen Strategy; hence, they fall into the unhealthy category used in this study</td>
<td>NSW Department of Health and NSW Department of Education and Training (2004)</td>
</tr>
</tbody>
</table>
separate are socio-economically similar. All of the supermarkets were in areas in the highest one-third of local government areas for socio-economic status in NSW as measured by the SEIFA Index of Relative Socio-Economic Disadvantage (Australian Bureau of Statistics, 1996).

A protocol was developed to govern how the survey would be undertaken. Two of the study investigators (K.C. and D.B.) piloted the survey tool in one supermarket. A student dietitian (D.B.) then visited each of the nine supermarkets over a 1 week period (from 11/08/05 to 18/08/05) to complete the survey; permission to visit each supermarket and record information was sought from the supermarket manager.

RESULTS

A list of all the products that carried some form of food promotion is available from the author.

The amount of sales promotion used on food packaging to market food in Sydney supermarkets

Table 2 shows the number of products available and the level of food promotion used within each food category, across the nine supermarkets. All supermarkets surveyed carried products that use food promotion techniques. The confectionery category had the greatest variety of products with 145–190 different products available in the supermarkets surveyed. Confectionery had the highest proportion of promoted products with an average of 35%. High proportions, 30 and 31%, respectively, of products in the snack food and dairy snack categories also used promotions. Promotional methods were used by less products in the chips/savoury snacks (9%), breakfast cereal (15%) and ice cream categories (15%) (Figure 1). These differences in proportions of foods promoted were statistically significantly different with a p-value less than 0.001 ($\chi^2 = 29.8$, 6 df).

The amount of food promotion directed at children

Children were the main target audience for food promotions (Figure 2), with 100% of promotional activity within the confectionery, sweet biscuit, chips/savoury, dairy snacks and ice cream categories directed at children.

Of the seven food categories, only two, snack foods and cereals, targeted a small number of promotions at adults. These promotions made up 5% of cereal and 9% of snack food promotions.

The promotion of healthy versus unhealthy food

The use of promotional methods to market unhealthy foods far outweighed the use of promotional methods to sell healthy foods (Figure 3). The total number of promotions amounted to 231, of which 82% ($n = 189$) were used to market unhealthy foods and 18% ($n = 42$) to promote healthy foods.

Figure 3 shows the level of promotion of healthy versus unhealthy food within each of the seven food categories. The confectionery, chips/savoury snacks and sweet biscuit categories were found to only promote foods that were categorized as unhealthy. However, the promotion of healthy alternatives within the dairy snacks were significantly higher than in unhealthy alternatives with 89% ($z = 4.04$, $p < 0.0001$) of promotions for healthier choices. For ice cream, 65% of promoted ice creams were

<table>
<thead>
<tr>
<th>Food category</th>
<th>Products available in all supermarkets</th>
<th>Promoted products available</th>
<th>Average (%) amount of food promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
<td>Range</td>
</tr>
<tr>
<td>Sweet biscuit</td>
<td>91–166</td>
<td>128</td>
<td>10–32</td>
</tr>
<tr>
<td>Snack food</td>
<td>84–126</td>
<td>105</td>
<td>20–43</td>
</tr>
<tr>
<td>Confectionery</td>
<td>145–190</td>
<td>167</td>
<td>45–71</td>
</tr>
<tr>
<td>Chips/savoury</td>
<td>104–156</td>
<td>130</td>
<td>8–15</td>
</tr>
<tr>
<td>Breakfast cereals</td>
<td>96–118</td>
<td>107</td>
<td>12–20</td>
</tr>
<tr>
<td>Dairy snacks</td>
<td>40–102</td>
<td>71</td>
<td>16–27</td>
</tr>
<tr>
<td>Ice cream</td>
<td>67–140</td>
<td>103</td>
<td>7–23</td>
</tr>
</tbody>
</table>
healthier choices although this was a large proportion, the result was not statistically significant ($z = 1.45, p = 0.14$).

**The types of promotion used**

A variety of promotional methods were used to market products within each food category (Table 3). The use of multiple promotion methods on individual products was quite prevalent. The snack food category showed the greatest level of multiple food promotion usage on a single product. It was common to find a snack food that not only used cartoon characters to promote their product but also provided a free giveaway and a chance to win a competition. Although only 15% of breakfast cereals were found to use food promotions, it was common for multiple promotion methods to be used on those promoted cereals. Confectionery had the largest number of products and the highest amount of promotion use, but most promotions were run singularly on each product.

The most commonly used method of promotion was the use of cartoon characters unique to food packs, that is not seen on television or in the

**Fig. 1:** The average amount of food promotion used in Sydney supermarkets.

**Fig. 2:** The total amount of promoted foods and their targeted audience.
movies, which were used to market 48% of promoted foods. However, the use of cartoon characters for promotion was not uniform across food types ($p < 0.0001$, $\chi^2 = 30.5, 6$ df). Three-quarters (75%) of confectionery products used cartoon characters. Cereal companies tended to use well-known characters to promote their products. Consumers in various countries around the world tend to identify these characters and immediately associate them with a specific product.

Television/movie characters were used in 27% of promoted foods. Promotions that fell within the television/movie category were commonly found to be cartoon based with the exception of The Wiggles and Star Wars characters.

All of the promoted products in the dairy snacks, ice cream, sweet biscuits and chips/savoury snacks categories used a cartoon character or television/movie character.

Giveaways were used by 13% of all promoted products across all seven food categories; however, they were not used uniformly ($p < 0.0001$, $\chi^2 = 41.0, 6$ df). Snack foods utilized this method the most with 35% of promoted snack foods offering a giveaway. Giveaways included items such as stickers, tazos and games on the back of packaging.

Overall, 12% of promoted products used competitions as a marketing tool. Competitions were used mostly by promoted products in the cereal and ice cream categories, with 50% of promoted cereals and 35% of promoted ice creams offering a chance to win a competition. In the cereal category, the competitions mainly appeared on larger sized packs.

Only one promoted product in the cereal category utilized sports stars. This equated to 5% of promoted breakfast cereals.

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**Fig. 3:** Amount of promoted healthy and unhealthy foods within each specified food category.

**Table 3:** Breakdown of the actual amounts of different promotions used in each food category

<table>
<thead>
<tr>
<th>Food category</th>
<th>Sweet biscuits</th>
<th>Snack foods</th>
<th>Confectionery</th>
<th>Chips/savoury</th>
<th>Breakfast cereals</th>
<th>Dairy snacks</th>
<th>Ice cream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of promoted products</td>
<td>32</td>
<td>43</td>
<td>71</td>
<td>15</td>
<td>20</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>Breakdown of the types of promotion used</td>
<td>Cartoon characters</td>
<td>21</td>
<td>20</td>
<td>53</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>TV/Movie character</td>
<td>11</td>
<td>17</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Sports star</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Giveaways</td>
<td>3</td>
<td>19</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Competitions</td>
<td>0</td>
<td>11</td>
<td>8</td>
<td>0</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note:* Owing to the use of multiple promotion methods on single food packages, the numbers in the lower half of Table 2 consistently add up to be greater than the total number of promoted products.
This study found that of the seven food categories analysed, 9–35% of food products within each category used promotional tactics. Results further established that nearly all the promotions used on food packaging within the categories examined were targeted at children.

Children were commonly targeted by use of promotions based on television/movie characters and cartoon characters, with these methods being used by 75% of all promoted products. Television and movie characters were commonly found to be cartoon based, where the themes of fun and fantasy were apparent and lacked any reference to good health and nutrition.

Sports stars made up <1% of promotions currently used on promoted foods.

Giveaways were used on 13% of promoted foods in the supermarkets surveyed. When used, giveaways were commonly used in conjunction with a related television, movie or cartoon character to further entice customers. For example, one brand of potato crisps used Marvel characters such as Spiderman on the package design to promote their product, with Marvel Tazos also given away. Tazos are not only toys but also collectables, requiring children to continue to purchase the product to attain the whole Tazo collection.

Twelve per cent of promoted products used competitions. The chance of winning most of the competitions was limited, with many offering prizes of substantial value. The use of competitions by the breakfast cereal category was commonly restricted to the larger package sizes. The greater amount of food available in larger packs may encourage larger portion sizes during meal times (Nestle, 2002).

The present study identified an additional issue of concern whereby food promotions were overwhelmingly used to market unhealthy foods, with 82% of all promoted foods in the categories examined being unhealthy choices and only 18% were healthier alternatives.

Seventeen (85% of promoted cereals) cereal promotions were targeted at children, of which all were unhealthy cereals. Two different cereals used the healthy eating pyramid as a game on the back of the cereal pack. The game allowed children to discover what foods made up the different levels of the healthy eating pyramid. Surprisingly, the two cereals that utilized this healthy eating promotion were themselves not categorized as healthy cereals due to their high sugar content. This highlights the use of misleading techniques by food advertisers and the difficulty consumers face in making healthy food choices in the supermarket.

Popular children’s television or movie characters were commonly used to market food in the dairy snack category. It was common for food packages to also include giveaways relating to the character graphics. There was a wide variety of promotions in the dairy category with some being gender specific. Dairy products also introduced an element of novelty in the way their products were actually consumed, with yoghurt available in a tube that can be squirted into the mouth.

Healthy foods low in saturated fat, sugar and/or sodium were only promoted in the snack food, cereals, dairy snacks and ice cream categories. In the dairy snack category, 24 out of 27 of promoted products (89%) were for healthier choices, this was a statistically significant result ($p < 0.001$, $z = 4.04$). Of the promoted products in the ice cream category, 65% ($n = 15$) were for healthier choices; however, this result was not statistically significant ($p = 0.144$, $z = 1.46$).

This is the first Australian study to investigate and report on the extent and nature of child focused food promotion in supermarkets. The results from the current study can be used for comparative purposes by future studies to determine any trends in the amount and type of promotional techniques used by advertisers to market products. The current study mainly investigated non-core/unhealthy food groups. To strengthen the findings, the promotion of both core/healthy food categories and non-core/unhealthy food groups should be investigated and compared. This study recorded the level of promotions during a 1 week period in August. It would be interesting to note if there are any seasonal differences in the level of promotions, particularly during the summer school holidays when children are more likely to be present in the supermarket with their parents and when the summer release movies are showing. Further research is required to determine the impact of the promotion of food on both children and their parents, in terms of knowledge, attitudes and behaviour.

The use of multiple food promotions on individual products emphasizes how important
promotion techniques are to advertisers, especially when marketing food to children.

Although the aim of marketing is clear, no explicit evidence shows that food promotion causes childhood obesity. However, the current availability of products that use child-targeted promotion undoubtedly makes healthy food choices more difficult and hence contributes to our obesity promoting environment (Lobstein and Dibb, 2005). Sixty-five per cent of children in an American study stated that including a free toy or game would have the most impact on encouraging them to try new healthy foods (Story and French, 2004). ‘Pester power’ plays an important role in determining the products purchased by parents. Studies have shown that exposure to advertising increases the number of attempts made by children to influence food purchases by parents, with requests for specific brands found to directly relate to advertising frequency (Coon and Tucker, 2002). A reduction in the direct marketing of unhealthy food products to children is one necessary strategy for promoting healthy food choices for Australian children.

Regulations governing sales promotion techniques exist as both statutory regulations and self-regulatory codes. Statutory regulations exist for the purpose of protecting consumers from deceptive tactics (e.g. falsifying a prize), ensuring transparency and ensuring fair competition. Some statutory regulations for sales promotions are based on the recognition that children have less experience and understanding of sales promotions, and are thus a more vulnerable audience (e.g. for tobacco and alcohol) but none exist specifically for the promotion of food (Hawkes, 2004). Self-regulatory codes, such as the International Chamber of Commerce Code of Sales Promotion (http://www.iccwbo.org/policy/marketing/), exist to uphold principles of ethics in sales promotions. The Australasian Promotion Marketing Association (http://apma.com/category.php?category_id=9) has specific guidelines for children and young people:

- Promotions directed at or likely to attract children or young people should not take advantage of their natural credulity or lack of experience. Special care should be taken to avoid any risk of mental, moral or physical harm to children or young people.
- Children should not be eligible for promotions where prizes may cause problems between parent(s) or guardian(s) and their child (such as holidays, live pets, cash or goods of high value) unless the rules require parent(s) or guardian to give written permission for the child to enter. Prizes of whatever value, which by their nature are unsuitable for use by children or young people, should not be offered in promotions addressed to them.

Given the concern about childhood obesity and the probable contribution of unhealthy food marketing to obesity (World Health Organization, 2003), more effective guidelines are necessary to protect children from targeted sales promotions on the packaging of unhealthy foods.

The use of marketing techniques directed at children that encourages them to consume unhealthy foods was found to be widespread in the supermarkets surveyed. Child-focused food promotion is not only prevalent but currently utilized unchecked.

The link between energy dense foods and obesity reinforces the need for tighter regulation of the promotion of these types of foods to children. Children require special consideration in this regard as they are less able to understand the intent of food promotion and other marketing techniques (Hastings et al., 2003). Further research into the impact of food promotion on children and the development of public policy are suggested as possible approaches to assist in the reduction of unhealthy food promotion. It would be beneficial to increase the promotion of healthy alternatives, as one aspect of a wide-ranging approach to decrease the level of obesity amongst Australian children.

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