Abstract

Increasingly, academic and lay discussion of children's nutrition has focused on the role of the media, and marketing more generally, in influencing children's food choices. While numerous studies have focused on the direct effects of children's exposure to advertisng on their food preferences and choices, there have been fewer studies on the role of marketing in influencing parent's decisions about what foods they give to their child. We surveyed parents about their children's food requests and the perceived influences on their food choices; and found that parents experience, or perceive, a number of external pressures on them in making food choices for their children.

Introduction

Concerns about childhood obesity are increasingly voiced in the media and in academic and policy debates. The prevalence of obesity in Australia is increasing, as it is in other developed and developing countries (Reilly, 2005), with approximately a quarter of Australian children reported to be overweight or obese (Booth et al, 2001).

The 2007 Australian National Children's Nutrition and Physical Activity Survey found that a large proportion of children (including more than half of those aged nine and over) consumed insufficient serves of fruit, less than one-quarter consumed adequate amounts of vegetables, over 80% exceeded the recommended levels of consumption of saturated fat and over 60% exceeded recommended levels of sugar consumption (DOHA, 2008).

A variety of factors have been reported as influencing food choice, including physiological, psychological, social, environmental, and cultural factors. Researchers have attempted to develop conceptual models to predict individuals' food choices. While these models are limited in their capacity to predict food choice they demonstrate the complexity of these decisions (Furst et al, 1996; Wetter et al, 2001).

It is well-established that parents are an important influence on children's eating patterns. This includes both direct controls over food (e.g., restrictions on intake of unhealthy foods) and controls using food (i.e., providing or restricting foods as reward and punishment) (Campbell and Crawford, 2001); and indirect influences via parents' own food chocies and attitudes towards food (e.g., Wardle, 1995; Vereecken, Keukelier and Maes, 2004).

Increasingly, academic and lay discussion has focused on the role of the media, and marketing more generally, in influencing children's food choices. While the majority of studies have focused on the direct effects of children's exposure to advertisng on their food preferences and choices (Halford et al., 2004; Harris, Bargh and Brownell, 2009; Linn and Novosat, 2008), there have been fewer studies on the role of marketing in influencing parent's decisions about what foods they will (or will not) give to their child.

Exposure to advertisements can lead to an increased awareness of products and brand loyalty (Calvert, 2008; Story and French, 2004). As a consequence of this exposure children are more likely to request the advertised product (Chamberlain, Wang and Robinson, 2006; Story and French, 2004). Future food/drink requests have been linked with past exposure to screen

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advertisements, and limiting viewing reduces the number of requests for purchases (Calvert, 2008). Food marketing to children has an impact on the purchasing choices made by parents and the food stocked in family homes (Buijzen, Schuurman and Bomhof, 2008; Calvert, 2008).

Children's influences on the decision making process of their parents has been referred to as 'pester power' or the 'nag factor' (Kelly, Tuner and McKenna, 2006). Previous studies suggest a relationship between advertisements and nagging of parents to purchase the food, especially in supermarkets where it is very difficult for a parent to resist persistent demands (Buijzen and Valkenburg, 2003; Kelly, Turner and McKenna, 2006; Moore and Moschis, 1983). Not unsurprisingly increased demands for advertised products results in more pressure on parents and the likelihood of conflict between the parent and child (Buijzen and Valkenburg, 2003; Preston, 2005). When making decisions about food, parents commonly consider what their children want and prefer; as such, advertising directed at children may be indirectly influencing parents' consumer behaviour (Buijzen, Schuurman and Bomhof, 2008; Calvert, 2008).

Method

The participants in this study were parents of primary school aged children attending one of three primary schools in New South Wales, Australia. The children were taking part in a related experimental study on responses to food advertising and all children (n=176) were given a take-home survey at the end of the experiment, with instructions to give the survey to one of their parents. This survey asked the parent to respond to a series of questions regarding food consumption and food requests, in relation to the child who brought home the survey. All data were collected in March 2010, and the study protocol was approved by the university's Human Research Ethics Committee.

Results

Of the 176 parents, 43.2% (n=76) completed and returned the survey. Their children ranged from six to 12 years old, with an average age of 9.1 (SD=1.3). Approximately half of the children were female (50.7%), although the gender of four was not stated. This was consistent with the age range of the children participating in the experimental study (mean age 9.3 years, range six to 14); and the gender balance was similar (55.1% of the children were female).

Media exposure

On an average weekday, the majority of children spent between two and three hours watching television (52.6%), one to two hours on the internet (50.7%), one to two hours playing computer games (58.7%), and less than one hour looking at children's magazines (70.7%). Therefore for the average child in this sample, this amounts to 6.76 hours exposure to some form of media *per weekday*, and therefore potentially an enormous amount of advertising. To enable this calculation to be made, a response of '2-3 hours' has been considered as 2.5 hours on average. The overall average could therefore vary by up to 2.0 hours (0.5 hours for each of the four media types) – that is, the true average could be anywhere between 4.76 hours or as much as 8.76 hours per weekday. Interestingly, this drops on weekend days, with the average child spending 5.07 hours in total watching television, on the internet, playing computer games or looking at children's magazines (again, the true average may vary from 3.07 to 7.07 hours per weekend day). Drawing from this, it seems that the average child in this sample is

exposed to nearly 44 hours of media per week. It must be acknowledged that, since it is possible to be exposed to more than one form of media at a time (for example, watching TV while surfing the internet or listening to the radio while viewing billboards when travelling in the car), the raw number of hours may be less than 44, but that does not reduce the potential impact of marketing via these mediums.

Food Consumption Patterns

The majority of parents indicated that their child consumed one or more pieces of fruit per day (70.3%), and ate vegetables with dinner five or more times per week (60.0%), while nearly half of the children ate cereal five or more times per week (48.0%). Consumption of snack foods and less healthy foods was more uncommon (although information about serving sizes of these foods was not available): 46.7% ate takeaway foods three or more times per week, more than half of the children ate chocolate (64.5%), lollies (63.2%), or potato chips (61.3%) "at least once a week", while less than half drank soft drink (47.4%) or cordial (41.3%) at least once a week.

Parents most commonly reported that their child ate packaged snacks less than daily (61.3%) or once or twice daily (34.7%) on weekdays, which remained fairly consistent on weekend days, with their children predominantly eating packaged snacks less than daily (59.5%) or once or twice daily (39.2%).

Food Requests

As may be expected, children were more likely to request that their parents buy chocolate or other confectionary (all but two of the respondents' children requested these products at some stage) than fruit or vegetables (all but nine requested these at some stage). Interestingly however, children who did ever request these foods were more likely to *often* request that their parents buy fruit and vegetables (40.8% requested this often) and dairy products (38.2%) than chocolate or other confectionary (32.9%), as well as takeaway foods (24.0%), and packaged snack foods (27.6%). So while it may not be as regular a request (as for fruit and vegetables), almost all children ask their parents to buy confectionary, takeaway and snack foods at some stage.

Perhaps this indicates a balance between their desire for those products (which of course could be influenced by friends, family, or marketing), but also pressure to more regularly consume products that they perceived as being 'healthy'. Or it is entirely possible, of course, that children ask for the products they perceive their parents are likely to acquiesce to (e.g., fruit and vegetables) or even that they prefer eating these healthier foods more often than they do snack foods like chocolate and lollies.

Parents believed that advertising was the most common reason that their children requested such foods, with 37.8% stating that advertising is 'often' the reason for these requests, and 45.9% stating that advertising is 'sometimes' the reason for these requests, meaning only 16.2% of parents did not believe advertising ever influences their children's food requests. Parents were believed to be slightly more likely to influence these requests (68.1% were 'sometimes' or 'often' a source of influence) than the children's friends (64.4% were 'sometimes' or 'often' a source of influence).

Perceived sources of 'pressure'

Less than half of parents who responded indicated that they felt any pressure to buy fruit and vegetables (36.8%), dairy products (34.2%), or dairy-based confectionary (48.7%). However, more than half of the parents felt pressured at some stage to buy chocolate or confectionary (64.5%), packaged snack foods (59.2%) and takeaway foods (59.2%).

Table 1 shows the percentage of parents who ever felt pressured by different sources to buy 'healthy' and 'unhealthy' foods for their children. Interestingly, those parents who did feel pressured to buy *healthier* products such as fruit and vegetables or dairy products were much more likely to state that that source of pressure was their children than sports advertising/sponsorship, friends and family or, to a lesser extent, advertising.

These percentages rose for every group when parents reported perceived pressure on them to buy less healthy foods such as takeaway foods and lollies. In particular, parents were significantly more likely to report experiencing pressure from their children to purchase 'unhealthy foods' (m = 2.01; SD = .813) than pressure to purchase 'healthy foods' (m = 2.39; SD = .616).

	Te			П
	Fruit and	Takeaway Foods;	Z-score	p
	Vegetables;	Confectionary, Packaged		
Source of Pressure	Dairy Products	Snack Foods		
Children	54.2%	66.7%	-2.353	0.02*
Advertising	46.8%	49.3%	-1.000	0.32
Friends or Family	23.3%	36.0%	-1.604	0.11
Sports	26.7%	33.3%	-1.508	0.13
Advertising/Sponsorship				

Table 1: Sources of pressure by food type

Discussion

There is considerable evidence that most parents have a reasonable understanding of which foods are beneficial and which foods are deleterious to their children's health (Variyam et al., 1999). Parents consistently report being concerned about their children's diet (Contento et al., 1993) and claim that the food choices they offer their children reflect these concerns; however, studies have shown that they feed their children a less healthy diet than that they consume themselves (St John Alderson and Ogden, 1999). The available evidence suggests that in many families there is a discrepancy between the stated attitudes and behaviours of parents and the actual food provided to and consumed by the children.

One possible explanation for this is the range of pressures on parents in relation to the foods they provide their children. Previous studies using projective techniques have shown that parents associate providing 'healthy' foods for their children with being a good parent, and providing 'unhealthy' foods with being stressed, pressured for time, and rewarding or bribing their children for good behaviour (Noble et al 2007; Jones, McVie and Noble, 2008).

In this study we note that parents experience, or perceive, a number of external pressures on them in making food choices for their children. Parents most commonly reported feeling pressured by their children and by advertising, but also by friends or family and by sports advertising/sponsorship. It is important to note that, for all sources, parents felt more

^{*} p < .05

pressured to provide 'unhealthy' foods (takeaway food, confectionery, packaged snack foods) than 'healthy' foods (fruit and vegetables, dairy products). One of the issues this raises, in the context of marketing, is the messages used to sell food products which can create both overt and covert pressure; a topical example is the LCM (cereal-based snack bar) television advertisements which convey an overt message that children will eat the LCM in their lunch box (but not other 'healthy' items such as fruit) and a covert message that children with LCMs in their lunchbox will be more popular (and the mother who provides this ticket to the in-crowd will be more loved by their child).

Whilst our findings support previous research that children influence purchase decisions of parents as a result of advertising, they also highlight that pressure from advertising is but one of many sources parents are subjected to (Kelly, Tuner and McKenna, 2006). Parents in their quest to raise healthy and happy children are directly and indirectly placed under pressure to feed their children unhealthy foods. Attempts to be what is considered a 'good parent' are undermined even by those close to them, that is, their family and friends. Consequently parents are placed in a no-win situation where they experience conflict and stress for caving to pressure and providing unhealthy foods, or conflict and stress for not allowing the requested purchase, or inner anxiety about how the choices they make for their child position them socially in environments external to the home.

In a society wanting what is best for future generations and one facing an epidemic of obesity it is timely to ask the question of what is the role of advertising in contributing to such pressures? Advertising aimed at children places parents under pressure to provide 'unhealthy' foods, and is an area that has the potential to further increase stress and conflict for parents. Advertising can also be pitched at parents as emotive desires for their child to "fit in" and be "popular" are equated to the food choices made by parents and represented in their child's school lunch box. However, if regulated properly, these negative impacts can perhaps be minimized and food advertisers can contribute to educating parents, and children, about healthy food choices.

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