

University of Wollongong

Research Online

Faculty of Health and Behavioural Sciences -
Papers (Archive)

Faculty of Science, Medicine and Health

2007

The paradoxical food buying behaviour of parents: insights from the UK and Australia

Gary I. Noble

University of Wollongong, gnoble@uow.edu.au

Sandra C. Jones

University of Wollongong, sandraj@uow.edu.au

Danielle McVie

dlidgard@uow.edu.au

Laura McDermott

Martine Stead

Follow this and additional works at: <https://ro.uow.edu.au/hbspapers>



Part of the [Arts and Humanities Commons](#), [Life Sciences Commons](#), [Medicine and Health Sciences Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Noble, Gary I.; Jones, Sandra C.; McVie, Danielle; McDermott, Laura; and Stead, Martine: The paradoxical food buying behaviour of parents: insights from the UK and Australia 2007, 387-398.
<https://ro.uow.edu.au/hbspapers/1589>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

The paradoxical food buying behaviour of parents: insights from the UK and Australia

Abstract

Abstract Purpose - This article aims to explore the apparent paradox between the nutritional knowledge of parents of pre-school children and their actual food purchase and preparation behaviour. **Design/ methodology/approach** - Two separate qualitative data collection exercises were conducted, an exploratory focus group study in the UK and a projective technique study in Australia. **Findings** - The UK study found that, despite believing that vegetables were good for children's health, mothers also perceived that it was extremely difficult to encourage children to eat them. The results of Australian study suggest that the purchase of unhealthy "treats" or "bribes" is explained through the concept of "expediency" whereas what this study labels as "good parenting" emerged as the main motivational force leading to the purchase of healthy food. **Research limitations/implications** - The authors caution on any inappropriate generalisations being based on the findings of this study. Further qualitative and quantitative empirical research is suggested in settings different to those of this study. **Practical implications** - The authors suggest that information- and education-based campaigns, which simply emphasise the benefits of "healthy" food and the disbenefits of "unhealthy" food for children will have limited impact on childhood obesity. Instead, future interventions need to acknowledge the complex reality of parenting and the barriers and competition to healthy food choices, and to offer parents meaningful help in food purchasing and preparation. An approach suggested by the authors that acknowledges this complexity is that of social marketing. **Originality/value** - This paper provides new insights into the food purchase and preparation behaviour of parents and suggests alternative strategies for addressing the current childhood obesity epidemic. **Keywords** Consumer behaviour, Parents, Children (age groups), Obesity, United Kingdom, Australia **Paper type** Research paper

Keywords

paradoxical, food, buying, behaviour, parents, insights, from, Australia

Disciplines

Arts and Humanities | Life Sciences | Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

Noble, G. I., Stead, M., Jones, S. C., McDermott, L. & McVie, D. (2007). The paradoxical food buying behaviour of parents: insights from the UK and Australia. *British Food Journal: an international multi-disciplinary journal for the dissemination of food-related research*, 109 (5), 387-398.

The paradoxical food buying behaviour of parents: Insights from the UK and Australia

Gary Noble¹, Martine Stead², Sandra Jones³, Laura McDermott⁴, Danielle McVie⁵

¹ Centre for Social Marketing Research, University of Wollongong, Wollongong, Australia

² Institute for Social Marketing, Stirling University, Stirling, UK

³ Centre for Health Behaviour and Communications, University of Wollongong, Wollongong, Australia

⁴ Institute for Social Marketing, Stirling University, Stirling, UK

⁵ Centre for Health Behaviour and Communications, University of Wollongong, Wollongong, Australia

Abstract

This article aims to explore the apparent paradox between the nutritional knowledge of parents of pre-school children and their actual food purchase and preparation behaviour. Two separate qualitative data collection exercises were conducted, an exploratory focus group study in the UK and a projective technique study in Australia. The UK study found that, despite believing that vegetables were good for children's health, mothers also perceived that it was extremely difficult to encourage children to eat them. The results of Australian study suggest that the purchase of unhealthy "treats" or "bribes" is explained through the concept of "expediency" whereas what this study labels as "good parenting" emerged as the main motivational force leading to the purchase of healthy food. The authors caution on any inappropriate generalisations being based on the findings of this study. Further qualitative and quantitative empirical research is suggested in settings different to those of this study. The authors suggest that information- and education-based campaigns, which simply emphasise the benefits of "healthy" food and the disbenefits of "unhealthy" food for children will have limited impact on childhood obesity. Instead, future interventions need to acknowledge the complex reality of parenting and the barriers and competition to healthy food choices, and to offer parents meaningful help in food purchasing and preparation. An approach suggested by the authors that acknowledges this complexity is that of social marketing. This paper provides new insights into the food purchase and preparation behaviour of parents and suggests alternative strategies for addressing the current childhood obesity epidemic.

Keywords Consumer behaviour, Parents, Children (age groups), Obesity, United Kingdom, Australia

Background

According to the World Health Organisation (WHO, 2003) childhood obesity has reached epidemic proportions in some areas and is rising rapidly in others. It is estimated that there are more than 17.6 million children under five that are overweight worldwide (WHO, 2003). Childhood obesity is a disease that can have both physical and psychological consequences. As with adults, obesity in children has been associated with such conditions as hypertension, Type 2 diabetes, asthma and sleep disordered breathing. Studies also show detrimental psychosocial consequences with obese children being stereotyped as unhealthy, academically unsuccessful, socially inept and lazy, overweight children as young as five years old have been reported as developing a negative self-image (Davison and Birch, 2001; Medeiros-Neto *et al.*, 2003).

The current rise in childhood obesity has been associated with an increase in "obesogenic" environments (Swinburn *et al.*, 1999, p. 568): that is, environments that promote obesity through their impact on the quality and quantity of food eaten and the level of exercise undertaken. Obesogenic environments are the result of changes in our social, cultural, physical and economic conditions over the past several decades. According to Catford and Caterson (2003) obesogenic environments are multifactorial, with a host of factors contributing to the current level of childhood obesity, including:

- changes in family structures and dynamics, including play time with children;
- changing patterns of family eating and physical activity;
- attractiveness of television, videos and computer games amongst children;
- lack of time for cooking because of competing work and other social priorities;
- decline in cooking skills for healthy eating in schools and homes;
- increased food serving sizes along with price incentives to eat more;
- heavy marketing of high energy foods, drinks and takeaways that encourage children to pressure parents to buy unhealthy foods;
- greater availability of high-energy convenience foods, takeaways, and soft drinks; and
- misleading or inadequate food labelling and consumer information.

As the food choices of pre-school children are largely determined by parents (Campbell and Crawford, 2001), attention must be paid to the factors shaping parents' decisions. Parenting style (Morton *et al.*, 1996), time pressures (Mothersbaugh *et al.*, 1993) as well as cultural and socio-economic background (Marquis, 2004) have been found to be important. While some studies find that parents' nutritional knowledge is also an influence in food choice and preparation (Variyam *et al.*, 1999), other studies suggest that the majority of parents know which foods are "healthy" and "unhealthy" (Variyam, 2001; Hesketh *et al.*, 2005). This implies the existence of an apparent paradox in parents' food choices: that is, why do parents who are aware of what represents "healthy" food regularly purchase, prepare and allow their children to eat "unhealthy" food?

This paper explores this apparent paradoxical behaviour of parents in two ways. First, it reports the findings of a UK study that utilised focus groups to identify and examine the barriers confronting parents of pre-school children when attempting to encourage their children to consume more vegetables. Second, it reports findings of an Australian projective technique study designed to identify the motives of parents in the purchase of "healthy" and "unhealthy" food for their pre-school children both generally and in the context of a supermarket shopping experience. Identifying the issues surrounding the purchase, preparation and consumption of "unhealthy" and "healthy" foods by pre-school children has significant implications for future interventions in the area of childhood obesity as well as the more general areas of childhood nutrition and good health.

Methodology

(a) Focus group study

As part of larger exploratory study into attitudes and behaviour in relation to children's vegetable consumption, three focus groups were conducted. Each focus group involved six to eight mothers of children aged three to five from various socio-demographic backgrounds and were conducted in three

locations across the UK (north east and south east England and Scotland). Age of the children was the major selection criteria for participants in this study as mothers of pre-school age children tend to have primary responsibility for food purchase and preparation decisions relating in the UK (e.g. Marshall and Anderson, 2000).

Focus groups were appropriate to use in this study as they have the potential to explore individual motivations and to yield rich and detailed data (Carson *et al.*, 2001), and are widely used to explore the complex factors influencing food choices (e.g. Birkett *et al.*, 2004; Horodyski and Arndt, 2005). A topic guide was developed covering key themes such as food purchasing, food preparation, mealtime routines, likes and dislikes of family members, mothers' own likes and dislikes, children's eating habits, beliefs and concerns about children's diet, and so on. Discussions lasted one to one-and-a-half hours, were audiotape-recorded and transcribed verbatim with the knowledge of the participants and were conducted following the Market Research Society's Code of Conduct, which meant that each respondent's comments remained confidential and anonymous and were analysed only by the research team.

(b) Projective technique study

Considering the aim of this study - to identify and explore the motivations of parents of pre-school children in the purchase of both "healthy" and "unhealthy" food - the use of projective techniques appears appropriate. An additional reason for the use of projective techniques in this study is the issue of social desirability bias. A number of previous food choice studies (e.g. Hebert *et al.*, 1995) have identified this bias as a potential problem in the general area of nutrition research. The use of projective techniques allows respondents to project their feelings, attitudes or motivations into some form of unstructured stimulus, bypassing their own defence mechanisms and thus lowering the likelihood of social desirability bias (Day, 1989).

As this study focussed on the food decisions of parents of pre-school aged children (three to five-year-olds), that is, the group where parents have the greatest influence, seven child-care centres in a large regional city of New South Wales acted as data collection sites. Data were collected from 116 respondents. All respondents had at least one child under the age of six, the mean age of respondents was 35.7 years, 80 per cent of respondents had post-secondary education and 88.5 per cent of respondents were female.

Both picture response and story response techniques were used to collect data with four separate groups of randomly assigned respondents. In Group I ($n = 35$), respondents were shown a photograph of a mother shopping with her children purchasing carrots and apples in the fruit and vegetable section of a supermarket with one of the children holding a two-litre bottle of milk. In Group II ($n = 26$) respondents were shown a photograph of the same mother and children, in the same supermarket, purchasing chocolate bars in the confectionery aisle of the supermarket with one of the children holding a two litre bottle of cordial. In Group III ($n = 29$), respondents were given a story to read about a mother and her two children which described an after school shopping trip in which the mother purchased an apple, a carrot and milk for the children to snack on. In Group IV ($n = 26$), respondents were given the same story to read except for the fact the mother purchased a "Mars Bar" and a "Pop Top" for the children. In all four groups, respondents were asked the same two questions:

(1) What do you think the woman in this scenario/photo is thinking and feeling? and

(2) What do you think motivates the woman in this scenario/photo?

In both studies the collected data was thematically analysed (Boyatzis, 1998) line-by-line with key patterns and relationships in the data systematically coded and explored. Verbatim anonymous quotes have been used to illustrate the findings.

Research findings

(a) Focus group study

Respondents were in strong agreement about the "healthiness" of vegetables, perceiving vegetables to have three key "healthy" attributes:

- (1) naturalness (they were unadulterated and unprocessed);
- (2) normality (everyone has always eaten them); and
- (3) non-damaging (unlike fat, sugar and salt, they do no actual harm).

Although there was limited knowledge of the specific health benefits of vegetables they were seen to be relevant and beneficial to children's health, particularly in terms of vitamins contributing to their growth and development. Respondents were aware that they themselves probably consumed less than the recommended five portions of fruit and vegetables a day, but worried more about their children's limited consumption of vegetables than their own. Despite this worry, few thought that the target of five portions of fruit and vegetable a day for children was achievable:

"Five portions a day! Chips, potatoes, that's it." "Two at most!"

"It's not realistic."

"Somedays they might eat none at all."

This perception that the target was unrealistic was underpinned by a number of factors that act as barriers to parents attempting to increase the consumption of vegetables and the five a day target, namely:

Natural dislike. There was a belief that it was "normal" for children to dislike vegetables. This was perceived as a normal phenomenon, and was lent credence by respondents' own experiences as children: "Weans just don't want vegetables" (mother of three to five-year-old, Scotland). It was strongly felt that there was little a parent could do to inculcate a liking for vegetables in a child. This was lent support by respondents' experience of having children with widely differing attitudes to vegetables, despite a similar upbringing. Several described how tactics such as "disguising" vegetables, making faces out of them, hiding them in sauces and so on failed to work, fuelling the idea that nothing could encourage children to consume vegetables in the face of strong dislike. As a consequence it was felt by some respondents that children's reluctance to eat vegetables was inevitable and impervious to parental influence.

Time and money. In addition, mothers were reluctant to spend money buying and time preparing foods that they perceived children would not eat. This was particularly the case in lower income communities, where respondents tended to "do a big shop" only fortnightly or monthly (often dominated by frozen and processed foods), and had limited economical access to fresh produce.

Avoiding confrontation. Perhaps more importantly than the previous two barriers, mothers were unwilling to subject themselves and other family members to stressful and confrontational mealtimes. Those who had previously "battled" over their children's eating described how meals were prolonged and household routines disrupted when children were forced to sit for hours over a meal they did not want and refused to eat.

He throws hairy fits if it's on the plate. You stick down two peas, and he sees these two peas and goes off his nut. He throws a flaky in the kitchen because o' two peas on a plate.

Some remembered the unpleasantness and misery of being force-fed particular foods themselves during childhood, and felt distaste about inflicting the same on their own children. Others argued that "making an issue" out of it simply reinforced children's intransigence, in that they recognised it was an area in which they could exert power over parents. It was also argued that family mealtimes should be associated with pleasure rather than pressure, and that, where the two were in conflict, it might be more important for children to have enjoyable food experiences than healthy ones.

I couldn't bear it if someone made me eat something that I couldn't stand. I couldn't bear it. That's what made me stop, and I just hope that the time comes when he'll eat a bit more variety.

In the face of these barriers, many mothers opted for pragmatic compromises such as serving vegetables occasionally without particularly expecting children to eat them. However, the underlying disquiet which parents experienced about this "giving in" was revealed by the adoption, by some, of compensatory tactics such as giving their children vitamin supplements. This strategy alleviated concerns about nutritional deficits in children's diets while also avoiding the unpleasantness of mealtime battles. Others simply gave up on serving vegetables to children, arguing that it was a waste of money (to buy the vegetables), time (to prepare them), and emotional effort.

(b) Projective technique study

Before elaborating on the key findings of this study it is of value to note that, as in the focus group study, respondents showed no difficulty in recognising the different nutritional value of the food and drinks shown in the two photographs and stories and labelling them as such through the frequent use of the words "healthy" and "unhealthy". This finding alone supports previous studies (e.g. Variyam, 2001) that have suggested most parents recognise, at a fundamental level at least, what types of foods are "good" and "bad".

The main motivational force underlying the purchase of unhealthy foods was identified in this study as "expediency". Expediency can be described as the force that leads some parents to purchase "treats" or "bribes" in their effort to overcome feelings of guilt and/or avoid conflict with their children whilst shopping. Expediency appears to have four main dimensions, namely:

Keeping the peace. A desire to avoid conflict was seen as a major factor in the purchase of unhealthy food products in a supermarket context. Respondents used phrases such as "anything to keep them quiet", "she's poised to do battle" or "anticipating a conflict" to describe what the mother was feeling and may be motivating her actions. The purchase of a Mars bar, a Pop Top or other similar product was seen as a "treat" or a "bribe" capable of "placating" the children.

[...] her motivation is she doesn't want to say no, and have her children cry and have a tantrum in the supermarket and draw attention to her parenting and have people judge her.

All these chores. Many respondents described the mother as "feeling tired" and as having "so little time" to do the "chores" of which shopping was just one. As a result respondents suggested the mother was thinking that she had to "get her shopping done without any problems". An expedient way to achieve this was through the use of lollies etc. to "bribe or control the children".

She is tired and just wants to get it over and needs to keep them happy...she still has to go home cook dinner, get lunches ready for tomorrow and do the ironing.

Feeling guilty. The mother was often described as a working mother and as feeling "guilty" for "spending time working" and being away from the children. As a result, the motive for the purchase of unhealthy food was described in terms of a "treat" to compensate for her absence.

She looks as though she is struggling with parenthood and being a working mother...it is a way of compensating.

In control. Some respondents suggested that the woman in the photograph and story had a strong "need to be in control" and the use of lollies etc. allowed her to keep control over the children whilst in the supermarket. As one respondent stated "she is beginning to tense up as her two toddlers begin to exert their willpower".

[...] she has boundaries and will do anything to keep the kids inside those boundaries.

The dimensions of expediency suggest that respondents recognise that the purchase of unhealthy food for their children may not be the most appropriate behaviour or in the best interests of their children. However, respondents appear capable of justifying and overcoming their concerns at this behaviour on grounds such as it is a "treat" that, as one respondent stated, "all mums do once in a while".

In contrast to the concept of "expediency" and the purchase of unhealthy food, respondents associated the decision to purchase "healthy" food with what is labelled here as "good parenting". Good parenting involves providing an environment that nurtures and meets the needs of children. The concept of good parenting is encapsulated by the following quotes:

To provide the best environment for children, in health and welfare...to give them a good grounding for their future.

To provide a caring, loving environment for the development of the children.

A desire to have a well adjusted life with happy healthy children.

Good parenting can be conceptualised as having four main dimensions, namely:

Sense of duty. Some respondents regarded the purchase of healthy food as "the right thing to do". That is, parents are perceived as having a social responsibility to ensure they provide their children with "healthy" food.

This woman is motivated by a strong sense of responsibility...it is her responsibility to buy the family food and ensure that her family eat well.

A parent's affection for their children. The love and affection by a parent for their children was seen by many respondents as a motivating force in the purchase of healthy food. Respondents used terms such as the "love of her children" to describe what motivated the mother in both the healthy photograph and story.

She wants them to feel loved and allow them to develop without the insecurities that can be caused by weight and lack of parental attention when young.

Quality time. Many respondents associated the purchase of healthy food with having quality time with the children. The woman in the healthy photograph and story was often described as either thinking or being motivated by "spending quality time with her children". In turn, quality time was described by one respondent as a feeling of being "fulfilled and content".

She is thinking about good nutrition and feeling happy at being able to spend so much quality time with her children.

Education. The desire to teach children what represents "healthy eating" was seen as a motivating factor by some respondents who associated the purchase of healthy food with, to quote one respondent, the desire to "instil healthy eating habits".

[...] she wants to ensure her children know what healthy foods are.

In this study, good parenting equates with a belief that healthy food leads to healthy children and this in turn can provide parents with a sense of fulfilment and is a reflection of their love for their children. However, of interest, good parenting also has dimensions that reflect a need to conform to perceived social norms. The dimensions of "sense of duty" and "education" suggests that some respondents consider a parent's purchase of healthy food for their children, along with the education of these children on healthy eating habits, is a social obligation of parents. This social pressure appears to be a strong factor in motivating some parents in the purchase of healthy food for their children.

Discussion

Although the two studies had different foci and utilised different research methods they were conducted in countries of similar cultural backgrounds and together they provide a more complete picture of the purchase, preparation and consumption of "unhealthy" and "healthy" foods by pre-school children with similarities in the sets of findings being evident. Respondents in both studies were aware of the nutritional implications of providing their children healthy and unhealthy food, as well as what represents these two categories of food. Therefore, a lack of nutritional knowledge cannot be used to explain why some parents purchase unhealthy food for their young children, and why children are allowed to eat meals which parents know are lacking a healthy balance. This finding supports the view of other researchers that improving knowledge may be insufficient to achieve behavioural change because nutrition knowledge and behaviour are often poorly related (Variyam, 2001; Donovan and Henley, 2003; Rasanen *et al.*, 2003). Given that lack of knowledge is not the issue, messages stressing the health benefits of children eating more vegetables and fewer sugary sweets are likely to do little other than make parents feel worse about a situation which already causes anxiety and stress.

In both studies a shortage of time emerged as a factor in the purchase, preparation and consumption of unhealthy food. This finding is consistent with other studies (e.g. Videon and Manning, 2003; Inglis *et al.*,

2005) that suggest a perceived shortage of time contributes to the increasing intake of convenience foods and a decline in the time spent preparing family meals. This is exacerbated by decreased confidence in traditional food preparation skills (Stead *et al.*, 2004).

However, both studies suggest that parental action is influenced by more than a perceived shortage of time or food preparation skills. Interestingly, tensions emerged around the concepts of "good parenting" and "quality time". In the projective technique study, good parenting and quality time were identified as motivating influences for the healthy food selection, but the focus group study suggested that a desire for harmonious family mealtimes and for children to feel pleasure in connection with eating - for food not to be "an issue" - could also lead parents to buy and prepare unhealthy foods. Other qualitative research has found that protecting the "social aspect of mealtimes" can take priority over concerns with the nutritional quality of children's food (e.g. Hart *et al.*, 2003). Perhaps most importantly, the two studies suggest that decisions relating to the purchase and consumption of "unhealthy" foods are often underpinned by a need to solve problems (a lack of time and/or guilt) or avoid future problems (conflict avoidance in the supermarket or at meal time).

Traditional strategies to address childhood obesity have utilised conventional dietary interventions in conjunction with a reduction of sedentary behaviour. More recently, the use of parents and adult caregivers as the agents of change, what are often labelled as "family-based approaches", has received extensive support in the literature (Golan and Crow, 2004). This emphasis on targeting parents and caregivers would seem to be appropriate given their potential influence on the emotional and physical environment in which a child's obesity may or may not be encouraged. Family-based intervention strategies often involve instructional sessions on altering a family's sedentary lifestyle, the provision of a "healthy" diet and decreasing the family's exposure to food stimuli (Golan *et al.*, 1998). The findings from these studies suggest that family-based approaches to addressing childhood obesity could benefit from "practical" sessions on problem solving and conflict avoidance/resolution in the context of what the projective technique study labels as "good parenting".

More fundamentally, this research demonstrates the importance of understanding the complex and often contradictory factors which underpin consumers' food decisions, and the barriers or competition to making and enacting healthy choices. In both studies, parents were motivated by perceived non-dietary benefits (such as pleasurable mealtimes and treat-giving), and competition to buying and serving healthier food for children was found in the form of expediency and the desire to avoid conflict. Even within the notion of good parenting, different aspects of the concept (being a good parent by buying healthy food vs. being a good parent by making family mealtimes pleasurable) posed competition to healthier behaviour. Future interventions to encourage healthier food purchasing and preparation need to acknowledge the complex reality of parenting, and to recognise that parents' decisions are driven by more than simple nutritional concerns. Messages about the long-term benefits of feeding children healthily are likely to be less motivating, and less effective, than interventions which are based on a real understanding of what it is like to go shopping with and consume meals with a pre-school child, and which offer practical help in these everyday stressful situations (Hart *et al.*, 2003).

Programmes using social marketing principles may be a particularly promising approach (McDermott *et al.*, 2005) to addressing the complex and contradictory factors underpinning parental food decisions. Social marketing interventions are based on a detailed understanding of and empathy with consumer needs and

motivations ("consumer orientation"), use strategies to minimise competition to the desired behaviour change, and offer the target group meaningful benefits ("exchange") in return for making the change (Andreasen, 2002). In the context of this study, addressing the "competition" might include building parents' repertoire of skills for dealing with conflict during shopping and mealtime experiences. Similarly, meaningful "exchange" might involve showing parents how to incorporate treats and family pleasure - attributes of being a good parent which were valued by most respondents - into healthier meals and shopping trips, by, for example, involving children in the choice and preparation of vegetables.

The findings from the projective technique study that parents perceive shopping with children as stressful, and that the desire to minimise parent-child disagreement and conflict can lead parents knowingly to make unhealthy purchase decisions in the interests of keeping the peace, is supported by other research (e.g. Stoneman and Brody, 1982; Taras *et al.*, 1989). As a consequence, a suitable target for "upstream" intervention is the retail environment itself (BMA, 2005). Policy interventions such as removing confectionery from checkouts and other prominent positions can potentially reduce temptation and parent-child conflict (Hastings *et al.*, 2000), while marketing actions such as packaging and displaying fruit and vegetables in supermarkets in ways that are attractive to children, or offering children the opportunity to taste fruit and vegetables while shopping, may increase the appeal of healthier foods for children while also potentially making food shopping more enjoyable.

Conclusion

This paper has presented findings from two separate studies in the UK and Australia that provide qualitative insights into the food decision choices of parents of pre-school children. Taken together, the results of the two studies show that despite being aware of what constitutes a "healthy" diet, parents regularly purchase and allow their children to eat unhealthy foods. The desire to minimise stress and conflict, both in the supermarket and at mealtimes, competes powerfully with the desire to feed children healthily.

We argue that the findings of these two studies suggest that campaigns designed to educate parents and children of the nutritional value of different foods and recommended dietary intakes alone will not significantly address the childhood obesity epidemic. We advocate a broad, integrated approach that assists parents to address the underlying socio-cultural motivations for their behaviour whilst promoting the positive aspects of healthy food choice. Interventions should address the complex reality of parenting and seek to make parents feel better, not worse, about their food choices. Practical solutions which focus on minimising conflict when shopping and during mealtimes are likely to be more motivating and effective than messages about nutritional benefits. In addition, interventions need to target the wider social surroundings in which food choices are made, particularly the retail environment.

Both studies contain several limitations that need to be acknowledged and suggest the possibility of further research. First, inappropriate generalisations should not be made from the findings reported in this paper as this was an exploratory study of the paradoxical food purchase and preparation of parents. Second, the findings only relate to the contextual environments of the respondents in these two studies. More detailed formative research needs to be conducted to investigate this issue so as to more fully inform any social marketing intervention. Further research could take the form of a broader quantitative study or additional qualitative studies in geographic, cultural and socio-economic locations beyond those employed in the two studies reported here.

References

- Andreasen, A.R. (2002), "Marketing social marketing in the social change marketplace", *Journal of Public Policy and Marketing*, Vol. 21 No. 1, pp. 3-13.
- Birkett, D., Johnson, D., Thompson, J.R. and Oberg, D. (2004), "Reaching low-income families: focus group results provide direction for a behavioral approach to WIC services", *Journal American Diet Association*, Vol. 104 No. 8, pp. 1277-80.
- Boyatzis, R.E. (1998), *Transforming Qualitative Information: Thematic Analysis and Code Development*, Sage, London.
- BMA (2005), *Childhood Obesity*, British Medical Association, London.
- Campbell, K. and Crawford, J. (2001), "Family food environments as determinants of pre-school aged children's eating behaviours: implications for obesity prevention policy. A review", *Australian Journal of Nutrition and Dietetics*, Vol. 58, pp. 19-25.
- Carson, D., Gilmore, A., Perry, C. and Gronhaug, K. (2001), *Qualitative Marketing Research*, Sage, London.
- Catford, J.C. and Caterson, I.D. (2003), "Snowballing obesity: Australians will get run over if they just sit there", *Medical Journal of Australia*, Vol. 179, pp. 577-9.
- Davison, K.K. and Birch, L.L. (2001), "Weight status, parent reaction, and self-concept in five-year-old girl", *Paediatrics* 2001, Vol. 107, pp. 46-53.
- Day, E. (1989), "Share of heart: what is it and how can they be measured?", *The Journal of Consumer Marketing*, Vol. 6 No. 1, pp. 5-12.
- Donovan, R. and Henley, N. (2003), *Social Marketing. Principles and Practice*, IP Communications, Melbourne.
- Golan, M. and Crow, S. (2004), "Targeting parents exclusively in the treatment of childhood obesity: long-term results", *Obesity Research*, Vol. 12, pp. 357-61.
- Golan, M., Fainaru, M. and Weizman, A. (1998), "Role of behaviour modification in the treatment of childhood obesity with the parents as the exclusive agents of change", *International Journal of Obesity*, Vol. 22, pp. 1217-24.
- Hart, K.H., Herriot, A., Bishop, J.A. and Truby, H. (2003), "Promoting healthy diet and exercise patterns amongst primary school children: a qualitative investigation of parental perspectives", *Journal of Human Nutrition Diet*, Vol. 16 No. 2, pp. 89-96.
- Hastings, G., MacFadyen, L. and Anderson, S. (2000), "The broader potential of social marketing", *Social Marketing Quarterly*, Vol. 6 No. 2, pp. 46-58.

Hebert, J.R., Clemow, L., Pbert, L., Ockene, I.S. and Ockene, J.K. (1995), "Social desirability bias in dietary self-report may compromise the validity of dietary intake measure", *International Journal of Epidemiology*, Vol. 24, pp. 389-98.

Hesketh, K., Waters, E., Green, J., Salmon, L. and Williams, J. (2005), "Healthy eating, activity and obesity prevention: a qualitative study of parent and child perceptions in Australia", *Health Promotions International*, Vol. 20 No. 1, pp. 19-26.

Horodynski, M. and Arndt, M.J. (2005), "Eating-together mealtimes with African-American fathers and their toddlers", *Applied Nursing Research*, Vol. 18 No. 2, pp. 106-9.

Inglis, V., Ball, K. and Crawford, D. (2005), "Why do women of low socioeconomic status have poorer dietary behaviours than women of higher socioeconomic status? A qualitative exploration", *Appetite*, Vol. 45, pp. 334-43.

McDermott, L.M., Stead, M., Hastings, G.B., Kent, R. and Banerjee, S. (2005), "Social marketing interventions for changing nutrition behaviour: a systematic review", *Preventive Medicine*, (forthcoming).

Marshall, D.W. and Anderson, A.S. (2000), "Who's responsible for the food shopping? A study of young Scottish couples in their 'honeymoon' period", *International Review of Retail, Distribution and Consumer Research*, Vol. 10 No. 1, pp. 59-72.

Marquis, M. (2004), "Strategies for influencing parental decisions on food purchasing", *Journal of Consumer Marketing*, Vol. 21 No. 2, pp. 134-43.

Medeiros-Neto, G., Halpern, A. and Bouchard, C. (2003), *Progress in Obesity Research: 9*, John Libbey Eurotext, Esher.

Morton, H., Santich, B. and Worsley, A. (1996), "Mother's perspectives on the eating habits of two-year-olds: a pilot study", *Australian Journal of Nutrition and Dietetics*, Vol. 53, pp. 100-5.

Mothersbaugh, D.L., Herrmann, R.O. and Warland, R.H. (1993), "Perceived time pressure and recommended dietary practices: the moderating effect of knowledge of nutrition", *The Journal of Consumer Affairs*, Vol. 27 No. 1, pp. 106-27.

Rasanen, M., Niinikoski, H., Keskinen, S., Helenius, H., Talvia, S., Ronnema, T., Viikari, J. and Simell, O. (2003), "Parental nutrition knowledge and nutrient intake in an atherosclerosis prevention project: the impact of child-targeted nutrition counselling", *Appetite*, Vol. 41 No. 1, pp. 69-77.

Stead, M., Caraher, M., Wrieden, W., Longbottom, P., Valentine, K. and Anderson, A. (2004), "Confident, fearful and hopeless cooks. Findings from the development of a food-skills initiative", *British Food Journal*, Vol. 106 No. 4, pp. 274-87.

Stoneman, Z. and Brody, G.H. (1982), "The indirect impact of child-oriented advertisements on mother-child interaction", *Journal of Applied Developmental Psychology*, Vol. 2, pp. 369-76.

Swinburn, B.A., Egger, G.J. and Raza, F. (1999), "Dissecting obesogenic environments: the development and application of a framework for identifying and prioritising environmental interventions for obesity", *Preventative Medicine*, Vol. 29, pp. 563-70.

Taras, H., Sallis, T., Patterson, T., Nader, P. and Nelson, J. (1989), "Television's influence on children's diets and physical activity", *Journal of Developmental and Behavioural Paediatrics*, Vol. 10 No. 4, pp. 176-80.

Variyam, J.N. (2001), "Overweight children: is parental nutrition knowledge a factor?", *Food Review*, Vol. 24 No. 2, pp. 18-22.

Variyam, J.N., Blaylock, J., Lin, B., Ralston, K. and Smallwood, D. (1999), "Mother's nutritional knowledge and children's dietary intakes", *American Journal of Agricultural Economics*, Vol. 81 No. 2, pp. 373-84.

Videon, T.M. and Manning, C.K. (2003), "Influences on adolescent eating patterns: the importance of family meals", *Journal of Adolescent Health*, Vol. 32 No. 5, pp. 365-73.

WHO (2003), *Obesity and Overweight*, World Health Organisation, available at: www.who.int/hpr/NPH/docs/gs_obesity.pdf (accessed September 2006).