

# ***“Treats, sometimes food, junk..”: Report of a study exploring ‘extra’ food with parents of young children***

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January 2011



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January 2011

**Acknowledgements:** This study was funded by Health Promotion, Lower North Shore, Northern Sydney Central Coast Area Health. We would like to thank Dr. Deana Pagnini for assistance with development of the focus group questions and prompts, Dr. Stacy Carter for suggesting that framework analysis would be appropriate for our research questions. We would also like to thank the study participants as well as the Directors of the early childhood education and care services who hosted the focus groups in their centres.

**Recommended citation:** *Petrunoff N, Wilkenfeld R, King L, Flood V (2011). “Treats, sometimes food, junk..”: Exploring ‘extra’ food with parents of young children.* Sydney: Nutrition Service, Royal North Shore Hospital.

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## ***Executive summary***

Excessive consumption of energy-dense and nutrient-poor (EDNP) foods by children is associated with poorer diet quality and increased risk of overweight and obesity.[1, 2] Poor eating habits during childhood track into adulthood.[3] In adolescence poor eating habits are associated with increased risk of overweight or obesity and there is evidence that overweight and obese Australian children are at significantly higher risk of chronic conditions.[4] In the Australian Guide to Health Eating (AGHE), EDNP foods are described as ‘extra foods’, although they in fact comprised 40% of Australian children’s daily energy intake in 1995 [5, 6], and 35% in 2007.[7] Understanding more about the consumption patterns and behaviours related to ‘extra’ foods could assist in identifying strategies to promote reductions in consumption and ensure that they are acceptable to parents.

This report presents the findings from an exploratory qualitative study which investigates parents’ understanding and approaches to providing energy-dense and nutrient-poor ‘extra foods’ to their preschool aged children. The study also explores the extent to which there is variation between parents of low and high socio-economic status (SES) in relation to these issues. The study involved 13 focus groups with 88 parents of 3-5-year-old children in distinctly socially disadvantaged and socially advantaged areas. Data from transcripts were analysed using framework analysis, which is an approach to qualitative thematic analysis that explicitly aims to generate practice and policy relevant findings.

This report is designed to disseminate the findings of the study to health promotion professionals prior to publication in a peer-reviewed journal. A separate report summarising the findings and providing practical information on the topic has been created for parents who participated in the study and child care directors who hosted the focus groups at their centres.

The findings show that the 3 most common terms parents identified to describe foods that are not ‘everyday’ foods, were ‘treats’, ‘sometimes foods’ and ‘junk’. Examples of ‘everyday’ and ‘sometimes foods’ provided by parents were consistent with categorisations of these foods in dietary guidelines suggesting parents’ understanding of what these foods are and whether they should be eaten ‘everyday’ or ‘sometimes’ is good. The lack of a widely used term to refer to ‘extra’ or EDNP foods is apparent, suggesting that there is scope for further refinement of nutrition communication messages through formative work with community members including parents.

Parents’ discussions indicate that they want to provide a balanced healthy diet for their children, but that there are a range of influences for them to balance, according to the situations, contexts and settings of their lives. Parents’ perceptions regarding what influences them in providing food to their children included nine sub-themes, and these were grouped as either personal/dispositional influences or environmental/situational influences. Dispositional influences identified include: the influence of the child; food-related parenting practices; health considerations; and desire to provide food variety. Situational influences included food costs and convenience; external factors perceived as influencing their child; factors related to centre-based child care; commercial and community environments; and, social influences and occasions. The implication is that any health promotion strategies and actions should address behavioural influences (dispositional) as well as environmental influences (situations, contexts and settings).

In discussing their decision-making processes regarding provision of ‘extra’ foods and drinks, parents’ conversation centered on moderation and balance. Parents generally expressed the position that as long as a child is eating healthy foods, then treats are appropriate; and, for many parents, this might apply everyday or frequently. For some parents this balance is related to avoiding being overly restrictive. Given that the belief provision of these foods can be frequent as long as children are eating a healthy, balance

of foods is factored into parents' decision making. Challenging this belief may be an important strategy for reducing consumption of ‘extra’ foods by young children.

Overall, parents feel they are ultimately responsible for the food they provide their children, but some assistance would be helpful.

Key differences between low and high SES groups included more frequent references to take-away meal choices and regular sugar-dense drink provision in low SES groups; and low SES groups were more likely to describe immediate concerns (dental health, behaviour) in relation to avoiding excessive sugar-dense food or drink. Low SES groups used language that reflected general well-being versus nutrients and disease states in high SES groups; and cost was discussed in most groups, but was referred to as a primary influence for parents in low SES groups.

### **Recommendations for health promotion practice and policy:**

#### ***Communication with consumers on the topic of ‘extra’ foods***

##### **Recommendation 1**

Challenge parents' perceptions that frequent provision of 'extra' foods is acceptable provided their child is consuming a healthy diet using messages and media tested via formative and evaluation research.

##### **Recommendation 2**

Formative research with consumers on nutrition communication is warranted. This should consider life stages of target consumers, media for message delivery; and needs to take account of the different types of ‘extra’ food and drinks, including categories of packaged ‘extra’ foods that can be difficult to categorise, so that any images, messages and terms resonate with target consumers.

##### **Recommendation 3**

Formative research with consumers on nutrition communication on the topic of 'extra foods' should consider the communication differences between socially advantaged and socially disadvantaged groups, including the immediate concerns of parents from socially disadvantaged areas (teeth, behavior) and using language reflecting general wellbeing rather than nutritional terms or disease states highlighted in the discussion section of this paper.

##### **Recommendation 4**

Evaluate whether messages and communication strategies reach target consumers and result in any changes in target behaviours.

##### **Recommendation 5**

Keep health professional terminology and communication consistent across the current major public health channels of communication (i.e. dietary guidelines, social marketing campaigns, programmatic messages, front of packet labeling of foods, menu labeling at point of sale in quick service restaurants) to avoid confusing consumers.

### **Recommendation 6**

Campaigns to reduce sugar-dense drink consumption amongst children need to take into account that parents may consider regular provision of juice and cordial to be normal and acceptable, and therefore countering it may require intensive intervention.

#### **Associated considerations for communicating with consumers on the topic of ‘extra’ foods:**

Strategies and actions aimed at addressing the issue of ‘extra’ foods could consider addressing parents’ concern regarding additives in processed foods by making high quality consumer information accessible, without distracting from the main issue of energy-dense and nutrient-poor foods could be considered.

When promoting fresh foods as an alternative to packaged foods, attempts to address the misconception that healthy food is expensive should consider acknowledging parents sensitivity to price fluctuations of fresh fruit and vegetables.

#### **Actively disseminate and promote consistent and reliable information on ‘extra’ foods**

### **Recommendation 7**

Develop and disseminate high-quality consumer reviews of product categories some parents find difficult to categorise as ‘every day food’ or ‘sometimes food’ (e.g. packaged snack foods such as muesli bars and yoghurts) because of large variation in the nutritional value of processed food products within a category.

### **Recommendation 8**

Promote currently available high-quality consumer reviews of product categories some parents find difficult to categorise as ‘every day food’ or ‘sometimes food’ (e.g. breakfast cereal) because of large variation in the nutritional value of processed food products within a category.

### **Recommendation 9**

Promote conveniently delivered information on food-related parenting practices that provides parents with the ‘how to’ rather than the ‘what’ for each childhood development stage (contact Royal North Shore Hospital Community Nutrition for more information).

### **Recommendation 10**

Incorporate information on food-related parenting practices into existing communication channels with parents of young children (e.g. newsletters, policy discussions) via early childhood settings.

### **Recommendation 11**

Promote and support interventions relating to menu labeling in quick service restaurants, as they are created in 2011/2012.

### **Recommendation 12**

Actively disseminate and promote consumer resources relating to the new Australian dietary guidelines as they become available.

### **Recommendation 13**

Distribute ‘peer-support’ strategies for dealing with the numerous social influences and occasions in innovative ways such as peer-based discussion forums (e.g. Junk Busters and Essential Baby website), media releases to local newspapers or articles in women’s magazines.

### **Support advocacy efforts relating to ‘extra’ foods**

### **Recommendation 14**

Advocate for government and food industry to introduce food pricing and taxation strategies such as the 10% tax on EDNP foods recommended in the recently published ACE Prevention report.

### **Recommendation 15**

Support and promote ongoing advocacy efforts that involve parents (e.g. Junk Busters Campaign), and aim to reduce unhealthy food marketing that targets young children.

### **Recommendation 16**

Advocate for consistent front of package labeling that can be easily understood by parents to assist parents limiting ‘extra’ foods.

### **Recommendation 17**

Advocate for intensive campaigns targeting sugar-dense drinks and consider complimentary local actions to support these campaigns (e.g. resource distribution via settings).

### **Support for universal programs including emphasis on strategies relating to limiting ‘extra’ foods**

### **Recommendation 18**

Provide or facilitate training for workers in the early childhood care and education sector on communicating with parents on ‘extra’ foods and food-related parenting practices consistent with recommendations relating communicating with parents on nutrition and physical activity in the ‘Get Up & Grow: healthy eating and physical activity for early childhood’ director/coordinator book (pages 30-43).

### **Recommendation 19**

Support the implementation of more intensive delivery of universal strategies or activities in relatively socially disadvantaged areas, as parents in groups conducted in relatively socially disadvantaged areas described greater permissiveness relating to energy-dense and nutrient poor take away foods (“fast foods”), and sugar-dense drinks, and monitoring data supports consumption is higher in these areas.

### **Recommendation 20**

Incorporate relevant recommendations from all categories listed above into local support of universal program delivery in multiple settings.

## **Introduction**

Excessive consumption of energy-dense and nutrient-poor (EDNP) foods by children is associated with poorer diet quality and increased risk of overweight and obesity.[1, 2] Poor eating habits during childhood track into adulthood.[3] In adolescence poor eating habits are associated with increased risk of overweight or obesity, and there is evidence that overweight and obese Australian children are at significantly higher risk of chronic conditions.[4] In the AGHE, EDNP foods are described as ‘extra foods’, although they in fact comprised 40% of Australian children’s daily energy intake in 1995 [5, 6], and 35% in 2007.[7] In another study, weighed food records from 16-24-month-old Australian children showed that children in the highest quintile of ‘extra food’ intake have significantly lower nutrient intakes than those in the lowest, suggesting that these foods displace nutrients.[8] Observation of Australian preschool children’s lunch boxes also indicates a high frequency and volume of consumption of extra foods.[9]

The Australian Guide to Healthy Eating defines ‘extra foods’ as ‘foods that do not fit into the five main food groups’ and ‘are not essential to provide the nutrients the body needs’, and advises ‘choose these foods sometimes or in small amounts’(Smith, 1999).[10] The Australian Guide to Health Eating (AGHE) specifically recommends that children aged 4- 7 years consume no more than 1-2 serves of extra foods daily, where a serve is defined as 600kJ, and it is estimated this will provide 10-20% of young children’s daily energy intake. These foods include cakes or buns, sweet biscuits, chocolates, potato crisps, pizza, soft drink or cordial, ice cream, meat pie or pastries and jam or honey.

The research literature on food-related parenting practices recommends that parents offer their preschool children a healthful variety of foods, and allow children to be responsible for deciding what and how much they want to eat from what they are offered.[11-13]

Qualitative studies have investigated parental strategies and young children’s snacking behaviours (Morton, 1999)[14]; socio-economic differences in parental lay nutrition knowledge [15]; the perceptions of parents of preschool aged children regarding overweight, including parenting practices and food [16]; parents’ views regarding factors that influence children’s food choices and parents’ decision making regarding the food they provide their children [17]; and, mothers’ understanding of health-promotion recommendations for healthy eating in socio-economically deprived communities.[18] Quantitative studies have sought to assess associations between elements of the family food environment and a range of obesity-promoting dietary behaviours in 5-6-year-old children [19], the kinds of changes parents would like to see in settings that impact on children’s risk of obesity [20] and parental concern about children’s diets, activity and weight status.[21] Findings of qualitative and quantitative research conducted with parents describe obesity, nutrition and physical activity being important issues to parents of young children[16, 21], and provide a wide range of parent-perceived personal and environmental factors influencing parents’ food-related practices.[10, 16, 19, 21] Three of these studies have purposively selected parents of low socio-economic status (SES). One compared and contrasted findings relating to how parents of different SES expressed their lay knowledge about food and health [15], another study’s purposive selection technique resulted in a diverse range of views of parents of different SES that were not systematically compared or contrasted by different SES of participants [17], and another study described mothers’ of low SES interpretation of health promotion recommendations for healthy eating.

To develop communication, programs and policy that address the issue of excessive consumption of ‘extra’ foods by young children that are well understood and accepted by parents, we need to understand parents’ perceptions about ‘extra’ foods, and the environmental personal factors that influence them in their ‘extra food’ provision to young children. This is consistent with the socio-ecological model of health behaviour.[22]



This study seeks to investigate parents’ understanding and approaches to providing ‘extra foods’ to their preschool aged children. The study also seeks to explore the extent to which there is variation between parents of low and high socio-economic status in relation to these issues.

### **Project aim**

The project aim was to explore parents’ understanding and approaches to the provision of ‘extra’ foods to their 3-5-year-old children.

### **Research questions**

**The research questions reflect a socio-ecological model for understanding parent’s perceptions and behaviours, and specifically investigate external and personal factors influencing parents.**

1. How do parents describe and understand ‘extra’ foods?
2. What factors do parents perceive as influencing them in their provision of ‘extra’ foods?
3. What are parents’ decision making processes regarding their provision of ‘extra’ foods?
4. What do parents think would assist them in limiting their provision of ‘extra’ foods?
5. Do these patterns vary on the basis of parents’ socioeconomic status (as assessed by where they live)?

### **Methods**

Focus groups were used as an appropriate means of exploring parents’ understanding and perceptions, as well as how they present these ideas amongst peers.[23]

Focus groups were organised through child care centres, with each group comprising volunteer parents and carers from the same child care setting.

#### **Selection of study sites, child care centres and parents**

To recruit parents of low and high socio-economic status (SES) with children aged 3-5 years, the sampling process involved identifying child care centres in 2 distinctively low SES and 2 distinctively high SES local government areas (LGAs) within a metropolitan Area Health Service of New South Wales, Australia. The socio-economic status of LGAs was identified using the Socio Economic Index for Areas (SEIFA).[24]

A mix of both pre-schools and long day care centres were purposefully selected, as they provide different child care and educational arrangements and thus may attract parents of different social characteristics. All centres in target low SES LGAs were phoned and invited to participate. In high SES LGAs, centre directors were invited to participate after a presentation unrelated to the study topic was made at one of their network meetings. The process of recruiting parents was discussed in detail with centre directors. Both child care centres and parents were required to provide written consent to participate.

Inclusion criteria for focus group participants were that they were the primary carers of a 3-5-year-old child attending pre-school or long day care in the area, and were involved in food provision. Although study staff recognized the importance of being inclusive with regard to language and culture, centres where the majority of parents spoke English were selected, as the study did not have the resources to conduct focus groups in languages other than English.

### Focus group questions

A set of discussion questions and prompts to use in the focus group discussions, based on the research questions, were formulated. The focus group guide organized the discussion into four topic areas, with prompts within each (Appendix A). The focus group guide was designed to allow conversation to flow between the facilitator and the group, whilst ensuring the main topics were explored in sufficient depth.

A pilot focus group was conducted to check that the questions were understood and elicited the types of information that addressed the research questions.

### Conduct of the focus groups

All focus groups were held in rooms at child care centres; refreshments were provided. Care was taken in introducing the groups to discussion to emphasise that the study was not about the food provided in their children’s centre-based child care and education services, and that parents’ discussion would be kept confidential. The two lead investigators alternated roles as moderator and taking notes. They are male and female, similar in age to parents in focus groups, reside and work in high SES LGAs in Sydney, and one moderator is a parent of young children.

The role of the note-taker was to note important characteristics of group members not otherwise known, non-verbal points of emphasis such as body language, group interaction and other key points that could be used to help interpret transcripts. The investigators conducting the focus groups de-briefed after each group and summarized this in a diary.

Participants provided consent for the interviews to be taped, and the full interview was digitally recorded. Interviews were transcribed in full, usually within a week of the group. Participants were also asked to complete a form providing demographic information (to assist with determining the relative level of social disadvantage and social advantage amongst groups). Transcription processes retained the identity of the group. Digitally recorded files were erased once transcribed files were saved.

### Coding and Analysis

Data were coded and analysed according to the methods of framework analysis and thematic analysis [23, 25], which are summarised in Table 1.

**Table 1 - Framework analysis steps and an explanation of each step**

Analysis step	Explanation
1. Familiarisation	Two investigators read the transcripts and field notes repeatedly, recording initial impressions they presented to the team.
2. Thematic framework	Themes were identified and a coding scheme was developed by all investigators.
3. Indexing	Codes were applied to the whole data set in a systematic way by two investigators who checked for discrepancies in coding before agreeing which code would be applied.
4. Charting	Rearranging summaries of the data by code and group in tabular formats with reference to the original transcripts, enabling investigators to view the data across groups and by theme.
5. Mapping and interpretation	Charts were used to explore similarities and differences in the discussion from LS and HS groups.

To generate codes and a thematic framework, one lead investigator and one co-investigator each reviewed half of the transcripts and generated a list of codes. All investigators met to review the combined lists of codes before generating a final list that could be applied to the complete data set.

Throughout coding and analysis, group identity and socio-economic status was identifiable.

Framework analysis was used to address research questions 2, 3 and 4. This facilitated rigorous, systematic and transparent exploration of similarities and differences between low and high SES groups. Data were summarised into tables for each of the major themes and sub-themes by low and high SES groups for each study team member to review. These were used by the two lead investigators to create overall summaries for low and high SES groups, as well as creating a final summary that highlighted key similarities and differences which all study group members reviewed.[25]

Some of the data relevant to research question 1 was simple descriptions of food types (‘extra foods’ or ‘sometimes foods’ and ‘everyday foods’) and terms used to describe ‘extra foods’, therefore step 5 in framework analysis was not conducted. Instead, the descriptions of food types and terms were charted separately for low SES and high SES groups to assess the most common terms and food types by low and high SES sub-groups and overall.

Ethics approval was obtained from the Harbour Human Research Ethics Committee and ratified by the University of Sydney Human Research Ethics Committee. All participants received information about the study and its purpose, and signed a consent form. A supermarket voucher and a full colour cookbook were provided as an incentive for parents to participate.

## **Results**

### **Group and participant characteristics**

Overall, there were 88 participants, 44 from low SES (LS) and 44 from high SES (HS) areas. Thirteen focus groups were conducted, 6 were in low SES and 7 in high SES areas, and with similar numbers across preschools (6) and long day care centres (7). There were 3 to 11 participants in each group, with an average of 7.

Table 2 provides a summary of the demographic characteristics of participants for LS and HS groups separately. The socioeconomic differences were reflected in differences in participants’ education levels, with 59.1% of LS participants having completed Year 12 and 84.1% of HS completed Year 12. Most participants were female (93.2%). The majority (79.5%) of participants recruited from centres located in LS areas resided in this same postcode; for HS participants, this was not the case although their postcodes of residence matched that of the childcare centre they attended in almost all cases (96.7%). Participants from LS groups were predominantly from English-speaking backgrounds, with one group containing participants from Aboriginal and Torres Strait Islander backgrounds. Participants from HS groups comprised a mix of people from English-speaking backgrounds and people who spoke a language other than English at home.

**Table 2. Demographic profile of participants by low and high SEIFA deciles of the areas the centres they were recruited from were located**

			SEIFA Deciles 2,3 (n = 44)	SEIFA Deciles 10 (n = 44)	
	Age of participants	(Mean)	33.8	38.7	
		(Range)	25-47	30-58	
Sex	Female	(%)	90.9	95.5	
	Children	(n)	2.6	2.3	
		(Max)	6.0	3.0	
Marital status	Married	(%)	70.5	97.7	
		De Facto	(%)	22.7	0.0
		Not married	(%)	6.8	2.3
	Year 12 completion	(%)	59.1	84.1	
Highest level of post- school education	N/A	(%)	25.0	2.3	
		Certificate	(%)	45.5	11.4
		Diploma	(%)	11.4	25.0
		Undergrad degree	(%)	5.0	31.8
		Post grad degree	(%)	6.8	29.5

### Summary of focus group discussions

Focus group discussion is summarised under sub-headings reflecting the research questions listed on page 9.

#### How do parents understand and describe ‘extra’ foods?

In response to the question asking them to describe those foods that they consider as ‘not everyday’ foods, parents most frequently used the terms ‘treats’ and ‘sometimes’ foods. In general discussion throughout the focus groups the term ‘treat’ was most frequently used.

In many groups, parents specifically identified the terms ‘sometimes’ and ‘everyday’ foods as those that were explicitly used and taught by the preschool or long day care centres that their child attended.

*“A treat..” “Yeah.” “Sometimes food..” “Yeah.” “I think that is from here [preschool]” (LS)*

While other terms, such as ‘junk food’ or ‘party food’, were mentioned in some groups, they were not in widespread use in the discussions that occurred in these groups, and ‘treat’ was the most commonly used term throughout discussion.

The 10 top ranking foods parents most frequently nominated or referred to as examples of ‘extra’ or ‘sometimes’ foods comprised of chips, ice cream, lollies, chocolate, cakes/donuts, sweet biscuits, take away, soft drink, savoury biscuits and spreads.

Note that at this point in the group discussion, prompts specifically asked about food, which may explain why no types of beverages were mentioned. Separate prompts sought information on parents’ understanding of drinks (see below).

When asked if they could identify foods that don’t easily fit into either ‘everyday’ or ‘sometimes’ food categories, parents discussed the amount of sugar and salt as well as the presence of additives as a basis for determining food category. Examples of foods less easily categorized included breakfast cereals, muesli bars, rice crackers, some flavoured dairy snacks, cheese sticks, some biscuits and fruit juices.

### **Drinks**

‘Everyday’ drinks were consistently identified as water and milk, or as water, milk and juice. In a smaller number of cases, parents described juice or cordial as everyday drinks.

Participants were asked to discuss whether they find it easy or difficult to provide milk and water specifically. There was a range of responses, with some finding it easy to get their child to drink water and milk, and others finding it difficult. Parents described how they responded to difficulties in getting children to drink water or milk, specifically referring to watering down juice/cordial and flavouring milk as common practices. Encouraging the consumption of water through use of a bottle and fridges with dispensers was also mentioned. In this context, some parents described being strict about which drinks they permitted, while others found it challenging to limit sugar-dense drinks and increase milk consumption.

Soft drinks were consistently perceived as ‘sometimes’ drinks, that should be limited or not provided. There was variation in whether participants described providing soft drinks, with this mentioned in 4/6 LS groups, as compared to 1/7 HS groups. Some parents reported that they limited consumption of the sugar-dense drink “treat” to special occasions; and less frequently, some mentioned that they did not have sugar-dense drinks in the house. In other cases, soft drinks, cordial and juice were diluted, in order to limit consumption: *“...and then at dinner, so a little bit of Coke in the water and then milk before bed that is pretty much what they drink.” (LS)*

There was acknowledgement by parents in some groups (2 LS, 2 HS) that they provide juice/cordial/soft drink because they themselves drink it.

*“I usually have like a glass of soft drink with my tea most nights that is sort of I suppose my treat, and my kids will all both of them will have a mouthful out of my cup every night but that is all they have one mouthful they always want to come back for more, but I sort of think no you can have one sort of sip and that is it.” (LS)*

### **Take away and pre-prepared meals**

In response to a prompt about main meals they provide that are not prepared by them, parents gave examples of take away, convenience and restaurant meals that they purchase. Overall there was more discussion on take away and convenience foods than eating out, with eating out more common in HS groups.

Participants in all groups expressed an awareness that food prepared outside the home may not be as nutritious as home prepared food, and many parents responded that they rarely eat either or don’t eat these kinds of foods/meals often. However, most groups had substantial discussions about the choice to have take away and pre-prepared meals. This choice was related to convenience, cost and children’s preferences. Three groups described rituals such as:

*‘..we have take-away at least once a week, it just makes it so much easier (LS)*

*“take away night on Saturday night that is a treat” (HS)*

Parents described energy-dense and nutrient-poor take away purchased from quick service restaurants as “fast food”. These energy-dense and nutrient-poor “fast foods” (as opposed to healthier take-away choices) were discussed in all LS groups (6/6). Fast food was mentioned in 4/7 HS groups, with people in 3 groups stating they only ate fast food when traveling in the car for holidays, or when away from home and one parent stating that their children only went with their father. HS participants were more likely to refer to restaurants and other forms of eating out, and discussed this choice in terms of expanding children’s food “repertoire”, teaching “restaurant manners” and the value of the “experience”, rather than convenience.

**What factors do parents identify as influencing them in their provision of ‘extra’ foods?**

Parents’ perceptions regarding what influences them in providing food to their children have been coded into nine sub-themes, and these can be grouped as either personal, dispositional influences or environmental, situational influences. The dispositional influences identified include: the influence of the child; food-related parenting practices; health considerations; and desire to provide food variety. Situational influences include food costs and convenience; external factors perceived as influencing their child; factors related to centre-based child care; commercial and community environments; and, social influences and occasions.

Figure 1 depicts whether the 9 parent-perceived influences on their provision of ‘extra’ foods promote the parents’ provision of ‘extra’ foods (that is, negative from a nutritional perspective (-)); or positive influences, that lead parents to limit their provision of extra foods (+), or both (+/- or -/+). Each of these influences is described in detail below.

**Figure 1 - Parents descriptions of what influences their provision of ‘extra’ foods divided into situational and dispositional influences**

Negative influences that promote parents provision of ‘extra’ foods are depicted by a minus sign (-). Positive influences that lead parents to limit their provision of extra foods are depicted by a plus sign (+). Those that do both are depicted by a plus/minus sign (+/-) or minus/plus sign (-/+).

Dispositional influences (intentions)	Situational influences (settings and contexts)
<ul style="list-style-type: none"> <li>- <b>Child:</b> children’s likes, fussiness, allowing children to make food decisions</li> <li><b>+/- Food-related parenting practice*</b></li> <li><b>+ Health</b> – general healthy eating, additives, allergies/intolerance</li> <li>- <b>Variety</b></li> </ul>	<ul style="list-style-type: none"> <li>- <b>Cost and convenience</b></li> <li>- <b>Parents’ perception of what influences their children:</b> supermarkets, advertising, peers and siblings.</li> <li><b>+ Centre-based child care:</b> a strong an helpful influence or helpful, but restrictive</li> <li>- <b>Commercial and community environments:</b> supermarkets, restaurants, sporting venues.</li> <li><b>-/+ Social influences and occasions:</b> friends, families, parties and other occasions.</li> </ul>

\*Appendix B



### **(i) Influence of the child**

Parents’ frequent descriptions of how their children influence the food they provide highlight this as a significant influence. This influence took a number of forms, such as children’s taste preferences and fussiness, children making decisions on the type of food provided, persistent requests or pestering for certain foods, fussiness/faddishness, or general descriptions of children as an influence. Most of the discussion in the majority of groups (11/13) was about how children’s taste preferences influenced the food parents provided: *“Your child can influence how you feed them definitely depending on their likes and dislikes..”*. (HS)

### **(ii) Food-related parenting practice**

Parents’ food-related parenting approaches were expressed throughout the focus group discussions and represented a dominant theme, in terms of discussion time and inclusion of all participants. The main areas of parenting practices discussed are listed in Appendix B.

Using food as a bribe, treat or reward was frequently discussed (6 LS, 5 HS). According to parents’ comments, it was common practice to use food as a reward to encourage children to finish all the food on a plate or to eat certain healthy foods.

*“I use a bribe especially for my little boy, three year old, if I have to go up the shops...if you are a good boy you can have a lollypop..”* (HS) In a small number of groups (1LS, 2HS), parents noted that they sometimes referred to healthy foods as ‘treats’.

The practice of controlling the home food environment by not having extra foods or drinks available in the house was discussed as a common food-related parenting practice (6 LS, 5 HS), raised in discussions about ‘extra’ drinks (soft drink in LS, cordial and juice across areas) and specific ‘extra’ foods (e.g. chocolate and chips).

Parents in a number of groups expressed a fear of overly restricting foods and the potential consequences of this for their children, saying that this might lead to over-consumption of these foods in situations where children are permitted to eat them (e.g. parties). Conversely, being restrictive with certain food was described in 10 groups.

In most groups (10/13) there were comments that reflected the recommended divisions of responsibility around food provision, where a parent provides healthful foods and young children decide how much and when they eat.[11, 12] In a small number of groups (3/13) the discussions indicated that parents’ practices did not reflect this division of responsibility, and children were allowed to determine the range of foods that parents provided. For example: *“So I pick my arguments basically, if she wants a cheese and vegemite sandwich every day who am I to argue..”* (HS)

*“..people say sometimes foods and treat foods well realistically it should be all food and they should be able to make the choice and it shouldn’t be just a treat.., and when you are limiting it that makes the whole goal almost impossible..”* *“You are taking the choice away..”* *“You are taking the choice away so it is very difficult for me to get them to make the right choice on their own.”*(LS)

### **(iii) Health considerations**

Overall, health considerations generated a lot of discussion across all groups, as an influence on their provision of extra foods. Although general healthy eating concerns were discussed most, concerns about food additives and preservatives were also discussed by all groups, generally with passion. Food allergy and intolerance was another common health-related sub-theme. General healthy eating concerns related to immediate concerns (e.g. dental health, children’s behaviour) or general well-being in low SES groups *“health factor is a big thing for us, you know you want to eat food that makes you feel good and gives you energy and...”* (LS). In some high SES groups, participants described being influenced by what they read,

and often discussed specific nutrients (sugar, salt, fat, calcium, good and bad fats, eggs and cholesterol), additives (sulphide, sulphur nitrites), and specific disease states related to excessive food consumption (Type 2 Diabetes Mellitus, obesity, hypertension and hypercholesterolaemia).

#### **(iv) Food variety**

In about half of the groups, parents expressed a desire to provide a variety of foods, implying that ‘extra’ foods contribute to the variety of foods.

#### **(v) Cost and convenience**

Cost was reported as a major concern and primary influence in most groups, particularly in low SES groups (6 LS, 4 HS). One group member commented: *“Oh we definitely spend most of our money on food”*(LS). Many groups discussed the high costs of specific fruit that their child liked. The belief that healthy food was expensive was reflected in comments by most low SES groups (4/6). The convenience of take away or packaged foods was often weighed up with cost, with cost determining how often and whether or not these foods were purchased for parents in low SES groups.

The majority of groups (6 LS, 4 HS) made comments on convenience considerations. Convenience was often weighed up with health, comparing less convenient, healthier options with less healthy, but convenient foods. EDNP snacks, fast foods and packaged foods were discussed as convenient in LS groups. Packaged foods were considered convenient, as they reduce time in food preparation and mess, compared to fresh food options. Parents referred to using them when eating on the run between after school activities with multiple children, or to keep a child at bay whilst out shopping:

*“Like rice crackers..” “a convenience thing, usually it is in between meals or you know as we say we are on the go so if you are going out to their activities...to keep the other one occupied or to have them quickly afterwards..”*(LS)

#### **(vi) Social influences – friends, family and occasions**

The power of parental role modeling was acknowledged across most groups (5 HS, 5LS), and considered negative if a parent (mostly fathers and grandparents) consumed a particular ‘treat’ food and the children want it. Alternatively, it was viewed as a positive where it involved healthier foods.

The influence of friends and social occasions on food provision was discussed almost exclusively in high SES groups. Social influences were discussed in positive terms (e.g. new ideas for healthy snack and recipe options), and as creating challenges. For example, some parents found “going with the flow” to be challenging, when this involved providing foods that they considered inappropriate (e.g. provision of soft drink or regularly meeting socially at fast food restaurants). However, most parents feel that a bit of lenience around social occasions with friends is acceptable most of the time.

The range of social occasions with friends included mother’s group meetings, organised activity (e.g. dancing, children’s yoga), barbeques, parties, mid-week play dates and play dates generally, after church and socializing around children’s sport. Occasions themselves (e.g. play dates, children’s parties and organised sporting activities) were described by parents as being a strong influence, particularly in HS groups.

#### **(vii) Centre-based child care as an influence**

There was a large volume of discussion on centre-based child care as an influence, with the majority (5LS, 6 HS) discussing this as helpful. For example, *“Yeah I actually find it easy because I mean you have got your sort of rules what you follow”*. Parents listed many ways preschool environment and policies are helpful including educating children; laying the foundations of healthy eating for school and life; taking the guesswork out of food purchasing; assisting parents increasing food variety; increasing parents knowledge of foods and drinks appropriate for young children; and, avoiding negative peer influence since most children bring the same foods the policy allows. Parents were also able to list many



actions centres use that assist them providing healthy food for their children including newsletters with nutrition information; displays of food help with understanding appropriate portions; providing menus and checklist of what a child consumes that day helps increase variety; education and exposure to new foods; and, eating socially which provides positive peer influence, increasing likelihood of children trying new foods and drinks.

At the same time, it was common for parents to describe centre-based child care policies as restrictive in relation to food provision: “*Well it is hard to find snacks that you can actually pack to come here..*” (LS). The discussions highlighted restrictions related to allergies (e.g. nut free policies), the difficulty of providing food variety, the lack of options that are convenient and healthy and, for some parents, the desire to provide a treat. “*So it is really hard to find something special to put in the lunch box.*” (LS)

#### **(viii) Parents’ perceptions of what influences their children**

Media and advertising were spoken about in most groups, as significant influences on children’s food preferences. Parents in most groups (5 LS groups and 4 HS groups) specifically spoke about the strong effect of promotional characters on packaging on their children, with yoghurts consistently mentioned as an example. There was also a consistent view that supermarkets encourage children to ask for ‘extra’ foods by marketing practices directed to children.

The majority of groups (4 LS, 6 HS) referred to the influence of peers and siblings. In the low SES groups, the influence was discussed most often as a positive, but in high SES this was more mixed “*like he wants what everyone else has and everybody else has the packet stuff but he can’t have that so yeah..*”. Participants in over half of the groups (4 LS, 3 HS) spoke about their fears that their children would be exposed to more unhealthy foods at school.

#### **(ix) Commercial and community environments**

The majority of all groups (7/13) made comments about the influence of large supermarkets on the food they purchase for their children, and many of these comments explicitly described supermarket advertising and product placement that targeted young children: “*If you take a child into the supermarket it’s got it’s eyes fixed on something...the direct marketing is towards the child, it is not towards the adult..*” “*..it is all about making money and the big business.*” (LS) Other commercial or community food environments that were mentioned were those at sporting events (1 group) and children’s menus at restaurants (2 groups).

#### **Relationship of frequency of provision of extra foods and drinks with dispositional and situational influences**

When asked to discuss how frequently they provide extra foods, participants’ responses were balanced between describing situations or contexts when ‘sometimes’ foods are consumed (12/12), and discussion reflecting their parenting approach or behavioural patterns (10/12). There was more discussion related to situations in high SES groups (6/6); and less discussion on situations amongst low SES groups (4/6).

While participants referred to seeking a balance of foods across a day or week, they adopted different approaches for different foods or drinks. No participants referred to fixed rules about frequency of consumption for extra foods or drinks. The exception was soft drink, for which parents in some groups expressed a fixed rule of never offering them to their children.

#### **What are parents decision-making processes regarding provision of ‘extra’ foods?**

Parents’ decision-making processes regarding provision of ‘extra’ foods and drinks were not described directly. Rather, their decision-making processes were embedded in their responses about food provision and the practical ways in which they balanced competing influences.

Parents were concerned with moderation and balance in their food provision to children, and their comments referred to a high degree of thought, time and effort around food provision. Parents’ generally

expressed the position that as long as a child is eating healthy foods, then treats are appropriate; and, for many parents, this might apply everyday or frequently: *“something little as a treat isn’t a problem, ... as long as I know that my children are getting good nutritious meals then in between those meals I don’t mind them having extra things”*. For some parents this balance related to avoiding being overly restrictive and the fear that this may result in their child being excessively focused on certain foods.

Decisions to provide ‘extra’ foods or not were also discussed in relation to parents’ time management. Parents spoke about the need to be highly organized, due to their work or family commitments, as well as for child behaviour management. For example, parents described providing ‘extra’ foods or drinks when busy rushing between activities to manage young children’s behaviour. Parents across all groups discussed the various strategies they use to prepare for when they go out, or for compensating for occasions when less healthy foods are eaten (e.g. parties and contact with grandparents). Parents in 2 HS groups discussed deliberate strategies they used to ensure children are less exposed to extra foods (shop on-line, not taking children shopping).

### **What do parents think would assist them in limiting their provision of ‘extra’ foods?**

#### **i. Strategies or actions parents state would help them limiting provision of ‘extra’ foods**

Appendix C: Table (i) provides a summary of strategies and actions to support parents limiting ‘extra’ foods. Parents frequently referred to the need for education for both parents and children, as well as food supply actions, such as product re-formulation, food pricing and labeling (mentioned in 11/13). In HS groups (5/7) the focus was on provision of information generally, while in LS groups (6/6) parents specified that practical information would be helpful to them. The influence of schools and centre-based child care on children, and potential to complement what parents teach their children, was presented as the basis for the suggestion for educational strategies directed to children: *“I also think that it is important that schools educate children .. they spend so much time there and I think school is a big influence on them..”* LS.

Pricing was the most common food supply strategy discussed by parents (6/13 groups), and more commonly discussed in LS groups (4/6) than in HS groups (2/7) *“Yeah but look at the obesity levels obviously people aren’t educated because look at the society and so if they made junk food more expensive made the healthy food cheaper people wouldn’t just do and buy a bottle of Coke for a dollar because it is cheaper than milk.”* (LS). Government was seen as primarily responsible for pricing strategies. Groups mentioned specific pricing strategies including increasing the price of ‘extra’ foods, or reducing the cost of fresh foods e.g. fruit and vegetables.

Policy or policy relevant issues were referred to as a potentially helpful approach in a majority of groups (6 LS, 3 HS). The majority of HS groups who provided comment felt that it was not as simple as government creating a policy. Almost all of the groups that discussed policy (8/9) discussed regulation to limit food advertising to young children. Whilst it was debated in many groups and parents acknowledged it is “tricky”, there was a strong sense that parents are aware and very unhappy about advertising targeting their young children and that self-regulation by industry is not successful:

*“The majority of it (should be the parent’s role) yeah otherwise advertisers basically, and the manufacturers too I suppose..”* *“That would be good if they did but I can’t see it..”* *“Yeah we can’t see it ever happening.”* *“..that is right because it sells the product..”* (LS)

Campaigns were mentioned in a small number of groups (1 LS, 1 HS) in reference to more of the same ones they were aware of e.g. ‘Go for 2 and 5’ and ‘Measure Up’.

## ii. Spectrum of responsibility and stakeholders who could assist parents

When probed to discuss who they felt was responsible for limiting the provision of ‘extra’ food and drinks to children, comments ranged from the belief that responsibility was primarily extra-parental to parents being primarily responsible. Within and across groups, comments were mixed along this spectrum. However, the majority of discussion in almost half of the groups (3 HS, 2 LS) reflected a strong consensus it was primarily parents’ responsibility, but that some support would make it easier. Three HS groups expressed the view that parents in LS areas may require more support.

Parents directly identified government, industry and advertising bodies as stakeholders who could play a role in making it easier for parents to provide less ‘extra’ foods. However, parents’ views suggested they believe they are ultimately responsible. Descriptions of the types of strategies summarised above also reflected that educators in centre-based child care and schools as well as health professionals are also key stakeholders. Whilst it was common for parents to describe advertising and product placement making their role very difficult, there was no consensus on whether or not government should intervene.

### Do these patterns vary according to parents’ socioeconomic status?

There were more similarities than differences between low and high SES parents.

Overall, parents’ understanding of what constitutes an ‘extra’ food was accurate and in accordance with professional knowledge; and this was the case in both LS and HS groups. The terms used to describe extra foods were also consistent across groups. References to take-away meal choices were more common in low SES groups and their discussions indicated that they were more accepting of providing these foods. When mentioned in high SES groups, EDNP take-away was usually associated with travelling for holidays. More parents from LS groups described providing soft drink; and regular provision was only discussed in these groups. Provision of caffeinated or cola drinks to young children was discussed in two low SES groups, and watering down soft drink or cola was mentioned in two low SES groups. Daily practices of providing cordial, diluted soft drink and cola drinks were more commonly described in the low SES groups.

All parents were concerned about the general health of their children, but parents in low SES groups were more likely to describe practical and immediate concerns and influences (dental health, behaviour) in relation to avoiding excessive sugar-dense food or drink. Although concern about additives and preservatives was common across groups, the immediate effects of additives and preservatives in foods and drinks on children’s behaviour was more commonly mentioned in low SES groups. Cost was discussed in most groups, but was a major concern and primary influence for parents in low SES groups. Many of the parents in the low SES groups expressed the belief that healthy food is more expensive. Convenience was also important for all groups, but parents in low SES groups were more likely to weigh cost over convenience (that is, providing less pre-packaged snacks, convenient but expensive fruit such as blueberries, strawberries and bananas and buying take away). The influence of friends and social occasions was discussed almost exclusively in high SES groups, with multiple occasions being more of an issue for participants from high SES groups.

The most common food supply action mentioned was pricing, with these actions discussed in more low SES groups. Most of the discussion focused on government responsibility, with suggestions for price increases on unhealthy food and subsidies for healthy food both mentioned.

## ***Discussion***

Parents in all groups referred to foods they do not consider everyday foods as ‘treats’ or ‘sometimes’ foods; and the term ‘extra’ foods, which is used in the AGHE, was not used by parents. The use of the term ‘sometimes food’ may reflect the impact of health programs conducted through childcare and education settings. The term ‘sometimes food’ seems well accepted by parents of young children, and some parents state that it is also well understood by preschool aged children. There is no expert consensus on the most appropriate term to use to communicate to consumers about ‘extra foods’.[6, 8] However, some consumer testing of images and messages including the statement ‘choose these foods sometimes and in small amounts’ in reference to ‘extra’ foods in consumer resources related to the Australian Guide to Healthy Eating has been described in peer-reviewed literature.[10]

The lack of currency of the term ‘extra’ foods amongst parents and the absence of any widely accepted term to distinguish those foods that do not provide core nutrients poses a challenge for nutrition education. While the term ‘sometimes’ food was well understood by parents, this term is ambiguous and may not be acceptable to older children or adults generally. The term ‘treat’ is problematic from a nutrition education or health professional perspective, as it has a positive connotation. The absence of a precise descriptor is apparent in other English-language countries. The United Kingdom’s national dietary guidelines refer to foods high in fat, sugar and salt [26] and in the US the use of the terms ‘extra foods’ and ‘discretionary calories’ refer to foods high in sugar and fat and low in essential nutrients.[27]

Apart from take away foods which parents in this study listed as an ‘extra’ food, and meat pies which are described as an ‘extra’ food in the AGHE, the ten most commonly identified ‘extra’ foods are consistent with the Australian Guide to Healthy Eating [10], suggesting that parents’ identification of these foods is good. Parents found it difficult to classify some foods for good reason, and were aware of inconsistencies in the amounts of sugar and salt between different products in the same category. For example, total energy or fat content of foods was not identified by parents as a way of categorising ‘extra’ foods. This may reflect the age of their children, as full fat dairy was recommended until age five until recently in Australia. A previous qualitative study exploring parental strategies and young children’s snacking behaviour conducted with mothers of young children found the range of snack foods mothers considered healthy to be consistent with nutritional guidelines, and mothers’ greatest concern to be the sugar content of snack foods.[14]

The results of this study show that juice and cordial were accepted as ‘everyday’ drinks by many parents, while soft drinks are not. The majority of systematic reviews and meta-analyses support the view that sugar-dense drinks have a causative role in obesity.[28, 29] The findings from this study show that regular provision of sugar-dense drinks to young children may be a socially normative behaviour that presents a barrier to reducing consumption of these drinks by young children at the population level. However, parents’ immediate concerns related to dental health, additives (colours and sodium benzoate) and the behaviour of their children and the consistent negative perception of soft drinks suggest that parents could be responsive to strategies targeting parents and young children to further reduce sugar-dense drink consumption.

When asked to discuss what influences their provision of ‘extra’ food, parents described more negative influences that lead them to provide ‘extra’ foods, and more of the influences parents described related to situations, contexts and settings than their own dispositions or intentions.

Young children’s dislike of new foods and preference for high sugar, high salt foods is well-established as a developmental stage [30]. The strong influence of the child and their food preferences on parents’ food practices that was described in this study reflects this developmental stage. However, the findings suggest that parents may not always be aware of this as a developmental issue, and that nutrition information and appropriate parenting responses that is presented according to developmental stage may be valuable.[12, 13]



The observed differences between low SES and high SES groups, in their use of language and approach to health considerations, is highly consistent with findings from another Australian qualitative study exploring socio-economic differences in parental lay knowledge of food and health. That study found parents in the high-income suburbs were more likely to discuss food and health in technical terms informed by contemporary nutritional or medical priorities; while parents in the low-income suburbs were more likely to discuss food in terms related to children’s outward appearance or functional capacity.[15]

Most groups in this study (6 LS, 3 HS) discussed food allergy or intolerance, with seven groups (4 LS, 3 HS) referring to children who had food allergies or intolerance. It may be the case that the study attracted parents with children with food allergies or intolerance, disproportionate to the general population. It is also possible these results reflect general views in a population where food allergy has a prevalence of 6% in 0-5-year-old children [31] and is increasing rapidly [32], and where the prevalence of food intolerance is estimated at 5-20% [31]. Around the time of the study, there had been considerable media attention [33] on the voluntary ban of certain food colourings and sodium benzoate in the European Union following recent important studies of a causal link between these additives, food intolerance and behavioural effects in young children [34-36]. Either way, the interest in additives in these groups and the general population is likely to be linked to the unexplained increases in prevalence of allergies, as well as media attention on certain food additives.

In this study, much of the discussion about the cost of healthy foods related to the price of certain fruits (e.g. bananas, blueberries, strawberries) that young children like, and recent spikes in the prices of these foods. Australian economic data confirms that the prices of fresh food, and in particular fruit and vegetables, do fluctuate to a greater extent than other foods.[37] Given that price strongly influences people’s choices and purchases [38], high food prices have the potential to limit people’s access to healthy foods, and this is particularly the case for socioeconomically disadvantaged groups.[39] The convenience of take away or packaged foods was often weighed up with cost (cost winning) in low SES groups. This most likely reflects lower income levels in households from low SES areas, as well as a larger average family size (2.6 children compared to 2.3 in high SES).

When discussing frequency of provision of ‘extra’ foods, parents were clear that their decisions were dependant on the occasion. The number of occasions discussed was used to illustrate how these occasions can add up; although many parents had a variety of approaches to dealing with the accumulated occasions.

The belief that provision of ‘extra’ foods can be frequent, as long as children are eating a healthy, balance of foods, appears to be part of parents’ decision-making. In Australia, nutrition campaigns and dietary guidelines have tended to focus on positive nutrition messages around increasing fruit and vegetable consumption. The issue of reducing consumption of ‘extra’ foods has not received the same level of attention to date, with the exception of a short, one-off campaign to promote water and reduce sugary drink consumption in 2008.[40] Messages to reduce energy consumption in addition to messages to increase fruit, vegetable and water consumption, in order to effectively prevent excessive weight gain at population level may be warranted.[27] Consideration should be given to specifically addressing the issue of excessive provision and consumption of ‘extra’ foods.

In this study, the ability to explore individual’s precise motivations was limited by conducting the analysis at the level of the group. However, the level of participant interaction and high degree of engagement of all participants around the key themes means that we were confident we captured the full range of ideas. Social desirability bias may have influenced the results, as participants may have been influenced by peers in the groups and the presence of the researchers. However, an a-priori assumption was made when choosing focus groups as a methodology that a strength of focus groups is they provide access to how people display their social knowledge as well as what the content of the knowledge is, and this aligned well with the study research questions. Groups were not conducted in rural areas or with culturally and linguistically diverse groups, therefore findings may not be generalisable to these population segments. The method of analysis allowed exploration of sub-groups in a rigorous, transparent and reproducible way. This strength increases confidence in findings relating to similarities and differences between low SES and high SES groups.

## ***Conclusions and implications***

Overall, the study indicates that understanding of ‘extra’ foods is good, but we lack precise words to describe foods’ nutritional characteristics. Formative work on terminology that could be informative and acceptable to parents and children is warranted. This work may need to consider life stages of target consumers, media for message delivery; the different types of ‘extra’ food and drinks, including categories of packaged ‘extra’ foods that can be difficult to categorise, so that any images, messages and terms resonate with target consumers. Given that consumption of ‘extra foods’ is high and understanding is good, any messages may need to challenge parents’ decision-making. Attention could also be given to the ways in which parents in low SES groups consider health, in crafting health promoting messages that resonate with low SES groups.

Parents want to provide a balanced healthy diet for their children, but there are a range of influences to balance according to the situations, contexts and settings. The implication is that multi-setting, multi-strategic interventions that enhance positive influences and counteract negative influences will be necessary to reduce the consumption of ‘extra’ foods at the population level. Consistent with a socio-ecological approach, strategies and actions that address behavioural influences (dispositional) as well as environmental influences (situations, contexts and settings) need to be considered. Behavioural strategies targeting parents of young children could consider promoting food-related parenting practices appropriate to developmental stages, as the ‘how to’ address the strong influence of preschool children on provision of food. Given that parents from low SES and high SES groups also described a range of strategies that would be helpful in assisting them to limit provision of ‘extra’ foods, there are many strategies likely to be acceptable to parents. Further formative work would be necessary to determine feasibility and acceptability of possible strategies.

The belief that provision of these foods can be frequent as long as children are eating a healthy, balance of foods is factored into parents' decision making. Challenging this belief may be an important strategy for reducing consumption of ‘extra’ foods by young children. Health promotion campaigns and programs could consider messages and actions that reduce consumption of ‘extra’ foods, as well as increasing consumption of tap water, fruit and vegetables.

## ***Recommendations for health promotion practice and policy***

The framework analysis that was conducted for this study explicitly sets out to identify practice and policy implications. These recommendations were collated by investigators conducting the analysis and further refined by all investigators.

### ***Communicate with consumers on the topic of ‘extra’ foods***

#### **Recommendation 1**

Challenge parents’ perceptions that frequent provision of ‘extra’ foods is acceptable provided their child is consuming a healthy diet using messages and media tested via formative and evaluation research.

#### **Recommendation 2**

Formative research with consumers on nutrition communication is warranted. This should consider life stages of target consumers, media for message delivery; and needs to take account of the different types

of ‘extra’ food and drinks, including categories of packaged ‘extra’ foods that can be difficult to categorise, so that any images, messages and terms resonate with target consumers.

### **Recommendation 3**

Formative research with consumers on nutrition communication on the topic of ‘extra foods’ should consider the communication differences between socially advantaged and socially disadvantaged groups, including the immediate concerns of parents from socially disadvantaged areas (teeth, behavior) and using language reflecting general wellbeing rather than nutritional terms or disease states highlighted in the discussion section of this paper.

### **Recommendation 4**

Evaluate whether messages and communication strategies reach target consumers and result in any changes in target behaviours.

### **Recommendation 5**

Where possible, health professional terminology and communication should be kept consistent across the current major public health channels of communication (i.e. dietary guidelines, social marketing campaigns, programmatic messages, front of packet labeling of foods, menu labeling at point of sale in quick service restaurants) to avoid confusing consumers.

### **Recommendation 6**

Campaigns to reduce sugar-dense drink consumption amongst children need to take into account that parents may consider regular provision of juice and cordial to be normal and acceptable, and therefore countering it may require intensive intervention.

### **Associated considerations for communicating on the topic of ‘extra’ foods with consumers:**

Strategies and actions aimed at addressing the issue of ‘extra’ foods could consider addressing parents’ concern regarding additives in processed foods by making high quality consumer information accessible, without distracting from the main issue of energy-dense and nutrient-poor foods could be considered.

When promoting fresh foods as an alternative to packaged foods, attempts to address the misconception that healthy food is expensive should consider acknowledging parents sensitivity price fluctuations of fresh fruit and vegetables.

### **Actively disseminate and promote consistent and reliable information on ‘extra’ foods**

### **Recommendation 7**

Develop and disseminate high-quality consumer reviews of product categories some parents find difficult to categorise as ‘every day food’ or ‘sometimes food’ (e.g. packaged snack foods such as muesli bars and yoghurts) because of large variation in the nutritional value of processed food products within a category.

#### **Recommendation 8**

Promote currently available high-quality consumer reviews of product categories some parents find difficult to categorise as 'every day food' or 'sometimes food' (e.g. breakfast cereal) because of large variation in the nutritional value of processed food products within a category.

#### **Recommendation 9**

Promote conveniently delivered information on food-related parenting practices that provides parents with the 'how to' rather than the 'what' for each childhood development stage.

#### **Recommendation 10**

Incorporate information on food-related parenting practices into existing communication channels with parents of young children (e.g. newsletters, policy discussions) via early childhood settings.

#### **Recommendation 11**

Promote and support interventions relating to menu labeling in quick service restaurants, as they are created in 2011/2012.

#### **Recommendation 12**

Actively disseminate and promote consumer resources relating to the new Australian dietary guidelines as they become available.

#### **Recommendation 13**

Distribute 'peer-support' strategies for dealing with the numerous social influences and occasions in innovative ways such as peer-based discussion forums (e.g. Junk Busters and Essential Baby website), media releases to local newspapers or articles in women's magazines.

#### **Support advocacy efforts relating to 'extra' foods**

#### **Recommendation 14**

Advocate for government and food industry to introduce food pricing and taxation strategies such as those recommended in the recently published ACE Prevention report.

#### **Recommendation 15**

Support and promote ongoing advocacy efforts (e.g. Junk Busters Campaign) aimed at reducing food advertising of unhealthy foods targeting children to parents.

#### **Recommendation 16**

Advocate for consistent front of package labeling that can be easily understood by parents to assist parents limiting 'extra' foods.



### **Recommendation 17**

Advocate for intensive campaigns targeting sugar-dense drinks and consider complimentary local actions to support these campaigns (e.g. resource distribution via settings).

### **Support for universal programs including emphasis on strategies relating to limiting ‘extra’ foods**

The powerful influence of early childhood and schools settings on young children was acknowledged by parents in the study. Current strategies to health promoting the centre-based child care setting are filtering through to parents, despite limited activity targeting parents directly. The use of the term ‘sometimes’ foods by parents in this study and specific reference to it coming home via the centres described in this study provides some evidence of this.

### **Recommendation 18**

Provide or facilitate training for workers in the early childhood care and education sector on communicating with parents on ‘extra’ foods and food-related parenting practices consistent with recommendations relating communicating with parents on nutrition and physical activity in the ‘Get Up & Grow: healthy eating and physical activity for early childhood’ director/coordinator book (pages 30-43).

### **Recommendation 19**

Support the implementation of more intensive delivery of universal strategies or activities in relatively socially disadvantaged areas, as parents in groups conducted in relatively socially disadvantaged areas described greater permissiveness relating to energy-dense and nutrient poor take away foods (“fast foods”), and sugar-dense drinks, and monitoring data supports consumption is higher in these areas.

### **Recommendation 20**

Incorporate relevant recommendations from all categories listed above into local support of universal program delivery in multiple settings.

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Appendix A: Focus group schedule

Broad topic area	Probes and prompts
1: Types of food and context	<p>Out of the three main meals (breakfast, lunch, &amp; dinner), which do you find the easiest to prepare for your children? Why?</p> <p>Tell us about main meals you provide that are not prepared by you? Prompt: take away, heat and eat foods, etc.</p> <p>What about snacks? How easy/difficult is it for you to prepare or find snacks which your children will eat? Is it different when you're out somewhere? Prompt: Pre-packaged snacks, snacks on the run.</p> <p>How easy/difficult do you find packing your child's lunchbox for preschool? <b>Alternative for long day care centres (LDC) where food is provided</b> is: If you pack food for your children when you go out how easy or difficult do you find that? Prompts: How about pre-packaged snacks/drinks?</p> <p>Does information/policies from the centre influence your decisions?</p> <p>Is it easy to get your child/ren to drink water or milk? Prompt: How about others in the group?</p> <p>What do you think about the foods and drinks other people give your children? Prompts: Extended family, friends, LDC.</p>
2: Influences on food provision	<p>What <b>influences</b> the types of foods and drinks you give your kids?</p> <p>How does your child influence your decisions? In what ways?</p> <p>Prompts: Tantrums? What other children have?</p> <p>Amongst all the competing demands on your time, where does providing food for your child fit?</p>
3: “Every day and sometimes foods”	<p>What <b>term</b> would you use to describe foods that are not every day foods? Prompts: What about everyone else?</p> <p>People talk about “everyday foods” or “sometimes or extra foods” when describing what children eat. What would you consider these “sometimes or extra foods” to be? What about “everyday foods”? (<b>Frequency</b>) Getting back to sometimes foods, how often do you think kids should have “sometimes or extra foods”? Does it vary by the <b>type</b>? (e.g. chips, lollies, biscuits, muesli bars, jam) Why?</p> <p>Which drinks would you call “everyday drinks” and which would you consider “sometimes or extra drinks”? How often do you think kids should have “sometimes or extra drinks”?</p> <p>Prompts: Types e.g. What about fruit juice? How about cordial?</p> <p>Are there foods that don't clearly fit in either category?</p> <p>Prompts: every day vs sometimes e.g. cereal, muesli bars</p> <p>We had a lot of good discussion about sometimes or extra foods. Some parents find it hard to limit sometimes or extra foods or drinks. Do you find hard? Why? Prompts: time poor, to reward.</p>
4- Strategies – What could make it easier to limit ‘extra’ foods?	<p>Do you think there is anything that can be done to support parents limiting the amount of sometimes or extra foods they provide their young children? Prompts: Whose role is it? How far do you go?</p>

## Appendix B: Food-related parenting practices

Food-related parenting practices are the ‘how to’ ways of addressing the strong influence that young children have on food provision by parents. Many parents in the study understood the value of establishing these practices early. The summary below is adapted from two narrative reviews. \* The seven practices listed below were used for categorical analysis of parent’s comments relating to this theme.

### 1. Food environment

Parents and carers control what food is available in the home, methods of preparation and selection of where to eat out. Children’s preferences are learned through repeated exposure to foods. Formal childcare facilities can support this role through nutrition policies and discussing healthy choices with parents on induction.

### 2. Role models

Parents and carers are role models for their children. Young children are more likely to eat healthy foods and participate in physical activity through repeated exposure to other people adopting such behaviours, encouragement and familiarisation.

### 3. Establishing eating patterns: in/out, cooking, fast food

Eating patterns have changed. We eat out more often, cook less and eat more fast food. Parents can instil an appreciation of cooking, sharing a meal together and enjoying a restaurant meal that takes more than a few minutes to prepare.

### 4. Socialisation, bonding and etiquette

Meals are so much more than nourishment, making the time to share meals with our children is very important for the sense of family. In this way, children learn to socialise, grow stronger family bonds and learn etiquette

### 5. Preservation of positive food culture

Western diet, fast food and heavily processed nutrient poor foods are very pervasive in our society. Preserving our food cultures, or passing on traditions, may be may help provide our children a love of real food that will see them avoid choosing less wholesome options as frequently.

### 6. Parenting/caring style relating to food

There are positive and negative parenting styles. Positive parenting styles include being authoritative and responsive with clear divisions of responsibility where a parent of a child of this age provides a range of healthful foods to their child, and young children select from these options and decide how much and when they eat. Negative styles include over-emphasising rewards, treats or special foods; being overly controlling and not responsive to child cues (e.g. “you must finish all the food on your plate”), not providing healthy snacks in between meals; and using language that creates negative psychological perspective on food, e.g. “good” and “bad” foods.

### 7. Parent and carer knowledge

Knowledge of food-related parenting practices, together with nutrition knowledge helps to foster healthy lifestyle habits in our children.

\*Adapted from narrative reviews by Lindsay (2006) and Golan and Crow (2004) referenced above



**Appendix C: Table (i) Strategies and actions parents felt may assist them limiting ‘extra’ foods**

<b>Strategies and activities or actions to support parents limiting ‘extra’ foods</b>	
Campaigns/a wareness – raising	2 groups, 1 low SES and 1 high SES group, specified increasing advertising of fruit and vegetables as a strategy to support parents providing less sometimes foods. The low SES groups specified this would be government’s role, and this may be implied with the other since they cite a government funded campaign.
No parent education	1 parent from one high SES group stated that education is not the way to support parents providing less sometimes foods, but could not specify alternative suggestions.
Parent/child education and behaviour focused interventions	6 low SES and 5 high SES groups felt education was a good way to support parents limiting sometimes food to their children. Although more high SES groups mention parent education (3 groups) than educating children (2 groups), comments are almost half parent education and half education targeting children. Whilst education in high SES groups refers exclusively to information provision, some comments in Low SES groups focus on practical resources as well. Most groups who mention education of children feel this supports them since schools and or preschools exert a powerful influence that supplements what parents teach <b>“But I also think that it is important that schools educate children .. they do spend so much time there and I think school is a big influence on them..”</b> LS. Education and promotion of fruit and vegetables is most commonly specified, although water and food additives is also mentioned. There was lengthy discussion with some parents providing examples of how it had helped them provide healthier food for their child, with many groups able to recall specific education – e.g Healthy Harold, Q4 Passport activity, fruit breaks. Parents felt the government, schools and preschools could provide this education, as well as parents themselves (parent to parent and parent to child). One parent felt parent education needed to start early at child and family health clinics.
Food supply strategies (Environmental, food product re-formulation, food pricing strategies, food labeling)	11 groups, 5 low SES and 6 high SES discussed strategies that would assist them limiting sometimes foods within this category of environmental, food product re-formulation, food pricing strategies, labeling. They discussed these strategies at great length providing a lot of detail. Pricing strategies was the most common strategy discussed by parents (6/13 groups), and they were more commonly discussed in low SES groups (4/5) compared to high SES groups (2/6). <b>“Yeah but look at the obesity levels obviously people aren’t educated because look at the society and so if they made junk food more expensive made the healthy food cheaper people wouldn’t just do and buy a bottle of Coke for a dollar because it is cheaper than milk.”</b> LS  Responsibility for pricing strategies was seen to be governments, but groups mentioned multiple strategies (subsidising companies who produce healthy products, subsidizing fresh foods, reducing food miles through for reducing cost of healthy food and one group mentions taxing “junk” food). Food product reformulation by companies or companies offering more healthy options was another popular strategy (5 groups, 3 high SES, 2 low SES), and many strategies were discussed in terms of making it easier for parents to make informed choices easier. High SES groups provided a broader, less uniform mix of strategies and responsibility. Discussion about strategies that are effective at changing consumer demand taking a long time to take effect were unique to two High SES groups (12, 13). Both groups could see these changes were already happening, and both of these thought that government initiatives at the school level could make a contribution to generational change.
Policy or policy relevant actions	9 groups, 6 low SES and 3 high SES groups spoke about policy or policy relevant issues. 8/9 groups discussed regulation to limit food advertising to young children, and whilst it was debated in many groups and parents acknowledged it is “tricky”, there was a strong sense parents are highly aware and very unhappy about advertising targeting their young children, and that self-regulation by industry is not successful: <b>I think the advertising of children’s junk food in general I have a bit of a problem with but it is I don’t know how you can police that you know unless you are going to come down hard as a government, then you start to think well actually these people they are companies and they have got a right to advertise their products as well, so it is a tricky one.”</b> (LS). A broad range of issues of policy relevance were discussed including:  Advertising (8 groups, 6 LS, 2 HS); Regulating food product formulation for stricter rules relating to additives (4 groups, 1 LS, 3 HS); Regulating availability of EDNP foods available at organized sport (2

<b>Strategies and activities or actions to support parents limiting ‘extra’ foods</b>	
	HS groups); Schools having similar guidelines to preschools (2 groups, 1 HS, 1 LS); Hospital food for inpatients and visitors (1 LS group); More work to do in school canteens since parent aware of canteen policy (1 LS group); Paid maternity leave (1 HS group); Availability of EDNP food supply outlets in the community (1 HS group)
Multiple strategies	4 groups, 1 low SES and 3 high SES, spoke about multiple interventions or complexity in strategies to assist parents limiting sometimes foods. These were lengthy discussions that identified multiple strategies are necessary, it is not a simple fix, there are supply and demand side issues and it may take a generation to be effective in battling the “fast food revolution”. Two HS groups acknowledge more intensive efforts may be necessary in areas that are not as well resourced.
Nothing	No responses
Other	4 groups 3 low SES and 1 high SES groups provided ideas that did not fit any category. They included more research on technological issues in food production (e.g. GM), government funding opportunities for extra-curricular PA and insurance companies distributing the cost of registration more equitably, Interactive websites where parents can exchange ideas and recipes in discussion forums, advertising cool healthy food, the opportunity to speak with a dietitian one to one or in a group and education for grandparents. As with all other categories of strategies parents suggest to make limiting sometimes foods easier for them discussion was very, very lengthy...