How do adults define the treats they give to children? A thematic analysis

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Abstract

One in four children on the Island of Ireland are overweight or obese. The consumption of energy-dense, nutrient-poor foods such as snacks, contribute to one fifth of children's calorie intake. However the snack food literature has failed to draw firm conclusions between snack food intake and obesity. Within this literature, the word snack and treat are used interchangeably, inconsistently and in differing contexts, which may explain the poor link between snacks or extra foods, and overweight or obesity. There is currently no academic definition of the word 'treat' relevant to an Irish population. Defining how adults perceive the treats they give children is of particular importance in the context of children's diets, and may provide insight into the relative contribution of treats to energy intakes. With ten focus groups of adult caregivers of children, across the Island of Ireland, this study aimed to investigate treat giving behaviour. This research highlights a paradoxical definition of treats: a treat was identified as an energy-dense food that gave pleasure, was deserved and believed to be infrequent; participants perceived this to be the true definition of treats which was coined "real treats". However, in reality, treats were given and consumed frequently, downgrading the status of these treats to "regular treats" which reflected their real-life use. Developing the definition of treats for an adult population may enhance our understanding of why adults give food treats to children, the role this has on the development of eating habits, the design of interventions, and communication strategies to reduce the consumption of non-nutritive foods, labelled by adults as treats.

Keywords Childhood obesity, treats, snacking, health behaviour, reward, food environment

1 Introduction

In the Republic of Ireland, childhood obesity continues at a high level of one in four (Bel-Serrat et al., 2017). Increased risk of overweight or obesity in adulthood is linked to higher childhood weight which is associated with poor diet in children, as eating behaviours and habits formed in childhood are known to continue into adult life (Birch & Fisher, 1998; Birch, Savage, & Ventura, 2007; Kerr et al., 2008). It is widely hypothesized that energy-dense, nutrient-poor snacks contribute to childhood obesity, however the literature has failed to find a consistent association between the two (Boots, Tiggemann, Corsini, & Mattiske, 2015; Hartmann, Siegrist, & van der Horst, 2013; Larson & Story, 2013; Nicklas, O'Neil, & Fulgoni, 2014; Piernas & Popkin, 2009). The evidence for associations between parental and child caregiver food behaviours, such as snack choice, and childhood overweight or obesity is scarce (Davis et al., 2007; IUNA, 2005; Larson & Story, 2013). One possible explanation for the lack of evidence is the use of inconsistent definitions of snacks. Furthermore, there is a paucity of literature on what distinguishes a snack from a treat, and the parental and child behaviours associated with giving and receiving food treats (Davison et al., 2015; Turner, Kelly, & McKenna, 2006; Younginer et al., 2016).

There is an extensive body of research on parental feeding behaviours, however, the role or definition of treats tends to be undefined (Bante, Elliott, Harrod, & Haire-Joshu, 2008; Birch et al., 2007; Blaine et al., 2016; Blake et al., 2015; Brown, Ogden, Vogele, & Gibson, 2008; Pescud & Pettigrew, 2014; Petrunoff, Lwilkenfeld, King, & Flood, 2014; Younginer et al., 2016). Broadly speaking, foods given to children other than their main meals, is typically for either nutritive reasons (promoting growth or satiety) or non-nutritive/ emotion-focused purposes (such as a reward, for behavioural control, to manage emotion or to celebrate events or achievements) (Musher-Eizenman & Holub, 2007). Despite the nurturing intentions of adults, longitudinal research has shown that children given food to manage their emotions may present with emotional-related eating problems (emotional eating) in adulthood (Blissett, Haycraft, & Farrow, 2010; Braden et al., 2014; Farrow, Haycraft, & Blissett, 2015; Watkins & Jones, 2014). Treats tend to be given for non-nutritive reasons; however the behavioural motivations of adults and the long-term impact of treat giving behaviours requires further investigation. Understanding the reasons and context in which caregivers give treat foods to children, as well as their definitions of treats, is central to shaping the way children learn to eat, form eating habits and develop attitudes toward food, all of which may continue into adulthood (Carnell, Cooke, Cheng, Robbins, & Wardle, 2011; Farrow et al., 2015; Herman, Malhotra, Wright, Fisher, & Whitaker, 2012; Jain et al., 2001; Larson & Story, 2013).

There is a paucity of research into why adults give treats to children. Much of the published work has predominantly been conducted in Australia where the government has adopted the phrase “extra foods”, to define foods that are extra to dietary requirements (Johnson, Bell, Zarnowiecki, Rangan, & Golley, 2017; Rangan, Schindeler, Hector, Gill, & Webb, 2009). One such qualitative study

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that explored the beliefs and behaviours surrounding treat-giving, reported that treats were given regularly to low socio-economic status (SES) obese/ overweight children by their parents for multiple reasons; these included parental lack of awareness of the negative health implications of unhealthy treat foods for their children, and the need to limit provision of these foods. Treat-giving was found to be used routinely to control children's behaviours, to provide affection and to resolve beliefs of deprivation (Pescud & Pettigrew, 2014). Another qualitative study focussed on how parents understood treats and in what circumstances they would provide treats to their children. No formal definition was employed and parents described these extra foods as 'treats', 'sometimes foods' or 'junk foods'. Parents believed these foods could be consumed regularly as part of a balanced diet and did not perceive an association between the consumption of these foods and weight gain. This study reported that many parents provided their children with treats daily with the belief that their child had a balanced diet. (Petrunoff et al., 2014).

Developing strategies to support caregivers' healthier food choices requires a full understanding of adults' perceptions of treats, and their motivations for providing them. Understanding the reasons why caregivers give treats to children, particularly energy-dense foods, is central to shaping the context in which children form eating habits as they progress to adulthood (Birch & Fisher, 1998). Given the lack of a formal and robust definition of a treat, this research seeks to understand adults' perception of the treats they give to children and to define treats on the island of Ireland (IOI) through qualitative exploration.

2 Materials and Methods

A series of focus groups was carried out across the IOI to explore adults' perceptions and motivations for providing food and non-food treats to children as part of a larger research project (Shan et al., 2018). The consolidated criteria for reporting qualitative research (COREQ) checklist was used to ensure comprehensive reporting of this research (Tong, Sainsbury, & Craig, 2007).

2.1 Research Team and Reflexivity Statement

The interdisciplinary research team combined expertise in health psychology, psychology, public health, sociology, and nutrition. The three facilitators (two female and one male) of the focus groups had extensive experience in focus group moderation and facilitation skills. Male and female facilitators were alternated between the focus groups. Facilitators met the participants for the first time at the start of the focus groups, describing themselves as having a personal interest in the topic, and experience of having or working with children. Participants were made aware that there were no right answers and that those moderating the interviews were an external company.

The study was positioned within a phenomenological perspective, with an interest in participants' individual experiences of their worlds. (Hammersley, 2004). Our interpretation of the findings takes place within a social constructionist frame, in that we believe that the results arise from

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

constructions of participants' experience with others in their social worlds, as well as with other participants and the group facilitators.

2.2 Study Design

Ethical approval was sought and received from the Human Research Ethics Committee, University College Dublin (LS-17-12 McCafferty-Murrin). This approach focused on how individuals experienced treats and their treat giving behaviours. A qualitative methodology was employed using focus groups to explore adults' beliefs, behaviours and experiences (Morgan, 1996). Purposive sampling was conducted to recruit a diverse sample of caregivers of children across the IOI.

2.3 Participants

Participant recruitment was carried out by two market research companies; Amárach and Perceptive Insights. Amárach were responsible for the participant recruitment and data collection in the Republic of Ireland (ROI) while their collaboration partners Perceptive Insights collected the data in Northern Ireland (NI). NI is a separate jurisdiction to ROI and therefore, to yield high quality data, facilitators were based in their national jurisdiction (either NI or ROI), which allowed for a comfortable group dynamic to evolve. The market research recruiter had large panels of individuals, developed over time through word-of-mouth and snowballing, which were recruited for the focus groups in this study based on project specifications (detailed in Table 1). These panels include people aged across the lifespan, with social, economic and geographic spread. Individuals were invited to participate based on whether they met the specification for each group (see Table 1). These individuals were then asked if they were available to participate in a focus group on the given date and time. At this point, they were asked any additional project-specific screening criteria. Once they qualified, they were asked whether they are happy to talk about treat giving to children, in a group setting for 90 minutes. The academic researchers have previously partnered with Amárach on two grant applications.

Ten focus groups were conducted with 80 participants: parents, grandparents, teachers, sports and leisure coaches and other caregivers of children such as crèche or preschool carers. These groups of individuals were selected to represent the majority of adult stakeholders likely to be responsible for treat food provision. The focus groups were split into parents only, grandparents only, and mixed groups, made up of coaches and teachers, some of whom were also parents or grandparents. These focus groups were representative of the population living on the IOI, and took place in Belfast, Derry/ Londonderry, Enniskillen (Northern Ireland), Dundalk, Dublin (two groups), Cork (two groups), Galway and Limerick (Republic of Ireland) (see Table 1). Individuals in these focus groups were from predefined diverse socioeconomic groupings, and cared for children of a variety of ages. All 80 participants who agreed to participate, did so.

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

How do adults define the treats they give to children?

Table 1: Recruitment criteria for focus groups

Groups	*Stakeholders*	*Location*	*Age*	*Gender*	*Socio-economic status**
Republic of Ireland					
Group 1	Parents	Dublin	18 – 50	Female	C2DE
Group 2	Mixed	Dublin	Mixed	Mixed	ABC1
Group 3	Parents	Cork	18 – 50	Male	ABC1
Group 4	Mixed	Cork	Mixed	Mixed	C2DE
Group 5	Grandparents	Galway	Mixed	Mixed	Mixed
Group 6	Parents	Dundalk	Mixed	Mixed	C2DE
Group 7	Mixed	Limerick	Mixed	Mixed	Mixed
Northern Ireland					
Group 1	Parents	Belfast	Mixed	Mixed	C2DE
Group 2	Grandparents	Derry/ Londonderry	Mixed	Mixed	Mixed
Group 3	Mixed	Enniskillen	Mixed	Mixed	Mixed

***** Socio-economic status (SES) is the social status or class of a group of people or of an individual and is determined using a combination of education, income and occupation. The recruitment of individuals for this study were grouped into ABC1, C2DE and Mixed, according to the UK National Readership Survey social grade: ABC1 – upper middle class, middle class and lower middle class; C2DE – skills working class, working class and non-working; & mixed was a group of varied SES.

2.4 Procedure

The focus group topic guide was designed and refined by the findings from a review of the literature. A pilot focus group was conducted by CMc within University College Dublin to finalise the topic guide. During the recruitment phase, the participants each filled in a demographic questionnaire. Each participant received a participant information sheet and thereafter signed a consent before commencing the focus group. Each focus group consisted of eight participants and lasted approximately 90 minutes. The focus groups took place in office spaces at each location. CMc and LCS attended one Dublin focus group (mixed) to monitor quality. The participants were aware that two members of the research team were observing at the back of the room. No other non-participants were present. The topic guide was split broadly into two halves; firstly, the discussion of treats in general and childhood memories of treats and secondly, participants' perceptions of their own treat giving behaviours. To prompt discussion of what items they would provide as a treat to the child/ children they cared for, a card sorting task was designed. Items commonly used as treats on the IOI were selected from a review of data in the Irish Children's Food Consumption Survey (IUNA, 2005). Participants were asked to sort cards into items they would use as treats, would not use as treats, or into a third group if the item did not apply to them. This focussed discussion around examples of items that participants would provide as treats for the children they cared for, and to elicit a distinction between snacks and treats. The focus groups were digitally audio-recorded using a digital Dictaphone (Phillips). As part of the verbatim transcription, each participant was characterised as male or female, noting the label and location of the focus group, and as such, their quotes were de-identified.

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

2.5 Data Analysis

Following data collection and verbatim transcription, the transcripts were reviewed with the audio recordings for quality checking purposes. Data analysis was conducted by CMc and second coded by LCS. Analysis began by listening to each of the audio recordings for all 10 focus groups multiple times for familiarisation. The transcripts were analysed for code development using colour coding, pen and paper-based technique initially for the first four transcripts, and then transferred to qualitative analysis software NVivo11 where the remaining analysis took place. Throughout this process, multiple meetings with individual members of the research collaboration team, and with the whole team, took place to allow for discussion of and generation of themes. This coding was conducted deductively, working through all 10 transcripts. Revision of codes took place where some codes were merged, deleted or renamed for clarity. A second coder reviewed every 2nd code for 50% of the transcripts. A meeting between first and second coder allowed for discussion about some small amendments to codes or to the general coding structure. Once agreement between coders was reached, theme development was undertaken by CMc. The first author CMc discussed the coding and theme development process at length in an iterative process with the second author LCS (second coder), CM and MTG, then also with the wider research team. Thematic analysis was conducted according to principles described by Braun and Clarke (2006).

3 Results

3.1 Participant Characteristics

Table 2 describes the participant demographics. Half were parents and just over 50% were female. Reflecting the demographic make-up of Ireland, the majority of participants were Irish (83.8%) and aged between 26 and 55 years (78.8%).

Table 2: Characteristics of the focus group participants (n=80)

Characteristics	n (%)
Sex	
Male	39 (48.8%)
Female	41 (51.2%)
Other	0 (0.0%)
Age	
18-25	3 (3.8%)
26-35	14 (17.5%)
36-45	27 (33.8%)
46-55	22 (27.5%)
56-65	6 (7.5%)
65+	7 (8.8%)
Not stated	1 (1.2%)

How do adults define the treats they give to children?

Living areas	
Dublin (ROI)	16 (20.0%)
Galway (ROI)	8 (10.0%)
Cork (ROI)	16 (20.0%)
Dundalk (ROI)	8 (10.0%)
Limerick (ROI)	8 (10.0%)
Belfast (NI)	8 (10.0%)
Derry/ Londonderry (NI)	8 (10.0%)
Enniskillen (NI)	8 (10.0%)
Nationality	
Irish	67 (83.8%)
British	12 (15.0%)
European	1 (1.3%)
Role	
Parents/guardian	40 (50.0%)
Grandparents	16 (20.0%)
Teachers, crèche/pre-school carers, sports, leisure coaches or leaders (mixed group)	24 (30.0%)
Occupation	
Higher/ Intermediate managerial, professional	18 (22.5%)
Supervisory or clerical and junior managerial	13 (16.3%)
Skilled manual, Farmer < 50 acres	20 (24.1%)
Semi-skilled, unskilled manual, casual work,	13 (15.3%)
Retired and living on state pension	6 (7.5%)
Unemployed, stay at home parent or not working due to long-term sickness, full time carer	9 (11.3%)
Not Stated	1 (1.3%)

NB: There was no representation for categories ‘Student’ and ‘Farmer >50 acres”

3.2 Themes

There was good consistency across the focus groups, and the themes presented are an accurate representation of the data collected.

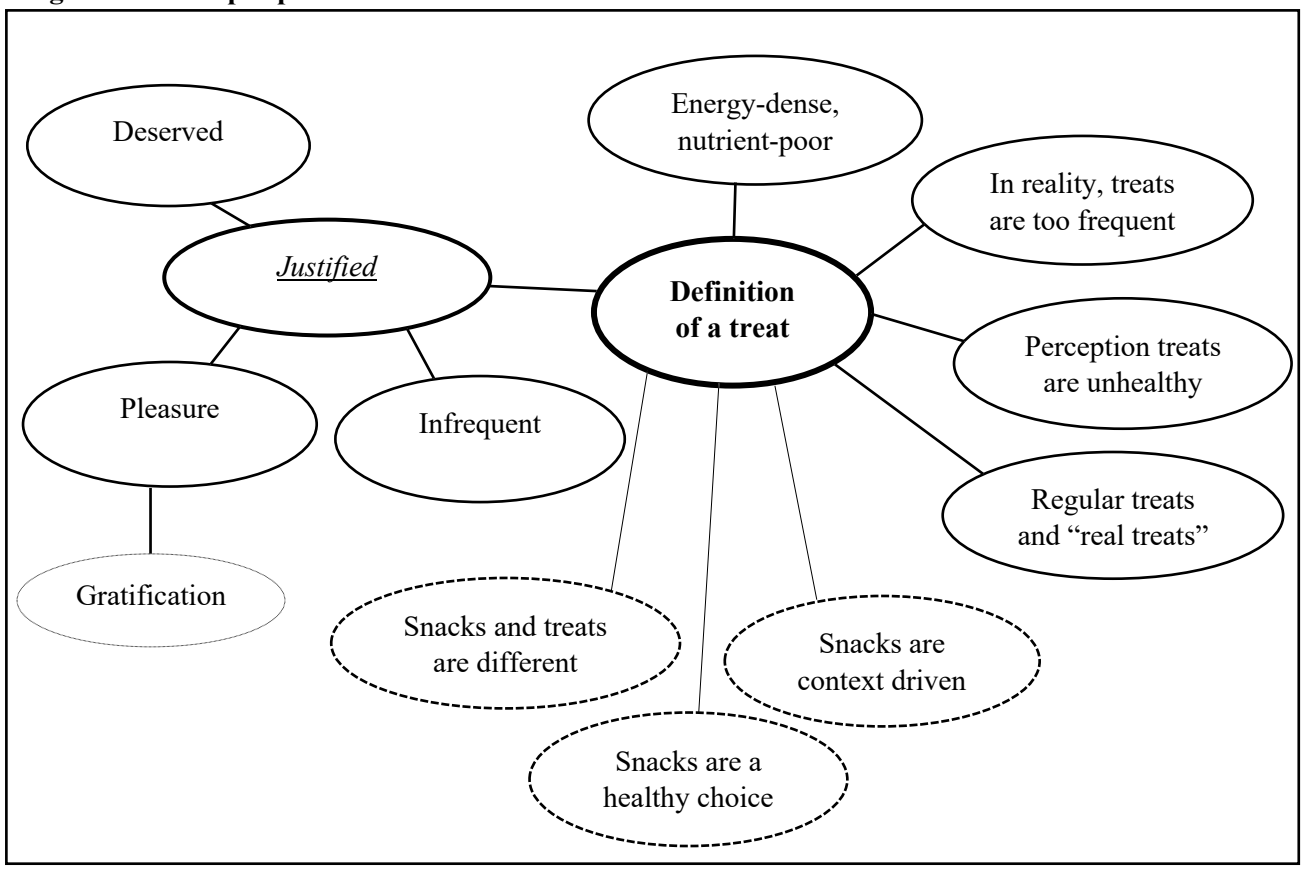
Overall, the data suggested that treats were defined as energy-dense, nutrient-poor foods which gave pleasure and were believed to be deserved. Treats connote a positive association and prompt a positive emotional response. Treats were acknowledged as being unhealthy. However, because their consumption was perceived to be infrequent, having or giving a treat was always justified. As each focus group discussion progressed, most participants spontaneously verbalised that, in reality, treat foods were a more frequent occurrence than they initially considered. This was agreed as the true nature of treats in today’s society. Furthermore, a distinction between treats and snacking was elicited.

Ten main themes were evidenced in the data to define a treat (energy-dense, nutrient-poor; perception that treats are unhealthy; in reality, treats are too frequent; regular treats and ‘real treats’; deserved; pleasure; infrequent) one over-arching theme (justified) and one sub-theme (gratification); while three themes emerged which distinguish snacks relative to treats (snacks and treats are different;

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

snacks are a healthy choice; snacks are context driven). The over-arching theme encompasses three of the main themes of the research while the sub theme is smaller and stems from one of the main themes (see Fig. 1).

Fig. 1: Mind-map representation of themes



3.3 Energy-dense, nutrient-poor

As part of the general discussion, the focus group participants discussed what constituted a treat. Most participants made initial reference to foods classed as nutrient-poor, energy-dense, high sugar, high fat, citing that, to them, treats could be characterised as sweet foods. This was the first verbalisation that the majority of participants made when asked what a treat was, which suggests that energy-dense food is central to the definition of a treat.

> *"Anything with sugar in it really." (Cork mixed group, male participant)*

> *"I think when you think of kids and treats, you think food." (Derry/ Londonderry grandparents group, male participant)*

> *"Because treat is sweet, it's sugar." (Dublin mixed group, male participant)*

How do adults define the treats they give to children?

"A treat is like something like sugar." (Cork mixed group, female participant)

"So treats, I'm looking at salty, sugary foods, convenience foods, stuff we wouldn't ordinarily give them." (Cork parents group, male participant)

"Yeah sugary or fatty stuff are more treats, you'd hope you wouldn't have them all the time. You are not going to give a kid a burger everyday." (Dublin mixed group, male participant)

3.4 Perception that treats are unhealthy

Participants, throughout all focus groups, provided implicit, for example through circumlocution or tone of voice, and explicit acknowledgement that the foods they considered as treats (either for themselves or for the children they care for) are, "*bad for you*", or "*the unhealthy stuff*".

"You see, anything we like tends to be bad for us." (Belfast parents group, male participant)

"I've wrote down that treats are bad for you." (Belfast parents group, male participant)

"But it seems to be the suggestion that treat in food terms isn't an apple or banana or fruit or whatever…It has to be something with lots of calories, something you enjoy." (Belfast parents group, male participant)

"It's considered almost sinful." (Limerick mixed group, male participant)

"In treats, I suppose it would be more unhealthy stuff you know, the pizzas, again the muffins, favourite cereals, crisps and ice lollies, takeaways, all those things you sort of associate as unhealthy." (Enniskillen parents, female participant)

3.5 Over-arching theme - Justified: Deserved, Pleasure, Infrequent

Justification was an over-arching theme, comprised of three key themes: pleasure (with a sub-theme of gratification), deserved and infrequent. Participants expressed that they were able to justify consuming and providing treats. Individuals implicitly and explicitly, expressed that treats were inherently unhealthy, however given that these treats provide pleasure, participants were easily able to justify deserving them for example as reward or because they were earned.

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

How do adults define the treats they give to children?

3.6 Pleasure

For the majority of participants, there were explicit expressions of pleasure and happiness surrounding the process of having or giving a treat. Treats were perceived as indulgent, and consuming a food treat provided a positive taste experience.

> *"Because a treat is something nice, something that's bad for you. Something you're not allowed." (Dundalk parents group, female participant)*

> *"It has to be something with lots of calories, something you enjoy." (Belfast parents group, male participant)*

> *"I'm similar, again more sugary foods, or foods that you just, I suppose, wouldn't have every day would be more treat. Probably the unhealthy options are more treats and often more enjoyable." (Belfast parents group, female participant)*

> *"Because they are not allowed biscuits and it's just one day I had no Rich Tea [plain biscuit] so they had a Bourbon [chocolate biscuit], my god they nearly, you know, the excitement because it was like a chocolate biscuit!" (Cork mixed group, female participant)*

3.6.1 Sub-Theme of Pleasure: Gratification

Positive emotional affect was combined with explicit verbalisations of pleasure in discussions of the enjoyment associated with treats. Treats were expressed as desirable and special and it gratified individuals to consume treats. Participants considered that children experience the same emotional response in having a treat. This suggests a positive emotional response for consuming (or experiencing treats), suggesting a feedback loop whereby this pleasures promotes repeated treating behaviour.

> *"I actually wish I would feel guilty for eating chocolate but I don't. I enjoy it and so I feel fine about it." (Cork mixed group, female participant)*

> *"A treat is held more on a pedestal. "(Cork parents group, male participant)*

> *"So I suppose like you were saying in primary school it's still definitely a reward to get sweets, treats there's a big respect on them. It's amazing what a packet of sweets can do." (Dublin, mixed group, male participant)*

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

How do adults define the treats they give to children?

> *"Because we like them...you feel good when you are eating them, you don't feel good after but you still want them and they look good and the packaging, they are just calling to you, buy me now! (laughing) it's hard to resist them sometimes." (Dublin mixed group, female participant)*

3.7 Deserved

Lengthy discussions among most participants highlighted a common-sense belief that treats were deserved although few could explicitly express a rationale behind this belief. This suggests 'deserving' a treat was a core belief which justified the provision or consumption of treats.

> *"So you are going against yourself by giving things you shouldn't be giving them, but at the end of the day, they are children and everybody deserves a bit of a treat now and again." (Cork mixed group, male participant)*

> *"That's it too, like, where there's food wise, if you have been eating healthy all week or whatever and then all of a sudden you need just a sweet binge, you'd call that a treat day now, you know what I mean?"*
> *..."That's basically it, like you are eating healthy most of the week I supposedly or whatever or you know, and you fancy a treat day, so it'd be call the Chinese or a café." (Enniskillen parent group, male participants)*

> *"Everybody deserves a treat." (Cork mixed group, male participant)*

Treats were also considered to be earned or provided as a reward. This was intrinsically linked to the motivation for providing treats to children, many participants expressed "*reward means treats*", or when asked, 'what is a treat?', many responded, "*a reward*".

> *"But as I said earlier if you earned a reward it would be a treat." (Cork mixed group, male participant)*

> *"Something they want, something they've earned." (Dublin parents group, female participant)*

3.8 Infrequent

Early discussions centred around the belief that treats were occasional, rare or that they were restricted, for example, children were not allowed them frequently. Participants reflected on their childhood memories of treats and reminisced that treats were a rare and infrequent occurrence in their youth. This provided insight into individuals' beliefs that treats were, and should be, infrequent.

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

How do adults define the treats they give to children?

"Obviously as long as they don't ask too often." (Female)
"As long as you don't overdo treats." (Male) (Derry/ Londonderry grandparents group)

"I think while they might get sweets and eat a lot they don't get them in school any more so it mightn't be a treat at home but it's a treat in school" (Dublin mixed group, female participant)

"A treat is something that you don't have every day of the week, or on a regular basis." (Belfast parents group, female participant)

"Sweets really are a treat, but a treat that they wouldn't get too often, it would be a really special one but obviously for reasons of teeth and other things." (Derry/ Londonderry grandparents group, male participant)

"I'm similar again, more sugary foods, or foods that you just I suppose you wouldn't have every day would be a treat" (Dublin mixed group, male participant)

3.9 In reality, treats are too frequent

Relative to the belief that treats were infrequent, individuals stated that if treats became too frequent, they would lose their meaning and could no longer be classified as a treat. Yet most participants believed they provided and gave treats too often to the children they cared for and that in reality, treats were a regular occurrence. Participants believed there was an appropriate quantity of treats to have, and that treating loses its positive association if it is a common or regular occurrence.

"But then on a Friday, they'll get bar in school and Friday, Saturday, Sunday they'll get, they probably make up for it in the whole weekend what they don't have here, Monday to Thursday." (Dublin parents group, female participant)

"I probably give them far too much."
"Yeah I do."
"Yeah." (group agreement)
"I'm sitting here look at it going oh god, as treats…really like the jellies!"
"Really the whole weekend is a treat." (Dublin parents group, female participants)

"Sweets are bought as part of the weekly shop now."
"Just become more normal. Whereas they used to be a bit more of a treat." (Cork parents group, male participants)

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

Similarly, many participants said they wished to consume less treats and that their reasons for not doing so were linked to failures in self-control. Many cited the food environment as a cause of frequent treat giving and consumption.

> *"It's hard to classify things as a treat now because everything has become so available." (Limerick mixed group, male participant)*

> *"And I'm like come on, you know, they become so desensitised to these treats that you know, they get so much they get sick of them." (Cork parents group, male participant)*

> *"Oh I'm every day, I wish I could be just weekend. But no, I'm every day." (Cork mixed group, female participant)*

3.10 "Regular treats" and "Real treats"

Some treats were perceived as being "bigger" or "real"; they were seen as more important and special than "regular treats". Other treats were perceived to be "regular", "smaller" treats. This suggests a distinction between an infrequent treat that provides pleasure, whereas frequent treats become "regular treats" and may be perceived as less special. This is also linked to the context for treat giving: "real treats" tend to be given or consumed for more significant occasions, give more pleasure, and are linked to reward.

> *"I think there's different levels of treats you can give them, in terms of daily, there's after your dinner or weekly or after exams. It broad, it's not just one casual small thing." (Belfast parents group, male participant)*

> *"The real treat is getting a pizza or getting a [meal from named fast food outlet] I mean…because they don't have [named fast food outlet] up where they live." (Galway grandparents group, female participant)*

> *"As they see that as a big, big treat but on a daily basis it's, can I have this sweet can I have that." (Dublin mixed group, male participant)*

> *"Our grandson got coke for the first time at camp and it was his friend shared the can of coke …he thought it was great, you know, so it's a huge treat for him to taste the coke. But they would never he wouldn't have had it and they wouldn't get it at home. So it would be considered a real treat." (Galway grandparents group, female participant)*

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

How do adults define the treats they give to children?

3.11 Snacks and treats are different

Most participants both implicitly (for example through use of language, laughter or tone) and explicitly indicated that treats and snacks were different. Snacks were identified as being a variety of foods eaten or given in different contexts, which served multiple purposes. Although the definition of a snack varied according to context, the definition of a treat was centred around pleasure and gratification.

> *"Parties, rewards, keeping them quiet, bribery that sort of thing is in the treat zone. I suppose a snack is if you're hungry and it's not meal time." (Cork parents group, male participant)*

> *"I think they think there's definitely a difference between them. Or there should be you know. The snack can be a regular daily or multiple times a week thing. But a treat you want to hold that up a bit high, something like a reward." (Cork parents group, male participant)*

> *"A treat can be something sweet, it can be ice cream whereas to me a snack has to be something really nourishing." (Derry/ Londonderry grandparents group, male participant)*

> *"A snack is for nutrition, a treat is for taste." (Male)*
> *"Yes that's it." (Female)*
> *"Yes that's the nail on the head." (laughing) (Female) (Galway grandparents group)*

3.12 Snacks are perceived as the healthy choice (context independent)

Participants spontaneously cited low calorie crisps, raw fruit and vegetables, cheese and crackers, and yogurts as examples of snacks when initially asked the difference between a snack and a treat. Participants used the word healthy and light interchangeably. For example, participants cited a banana as heavy and crisps as light, and therefore the latter was perceived to be a better choice of snack.

> *"Yeah that's a snack, banana is a snack. It's a huge snack. Maybe like if you go down the [named crisp brand] … It's low in calories and not really fattening."*
> *"They are low calorie kind of things but I would consider a snack anyway." (Cork mixed group, male participants)*

> *"I'd be thinking slightly healthier as you said veg, nuts, berries, something like that more than like…suppose a bag of crisps could be a snack, but I'd be more thinking snack as healthier and more frequent." (Dublin mixed group, female participants)*

> *"It's food, a snack would be healthy for me." (Dublin mixed group, female participants)*

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How do adults define the treats they give to children?

3.13 Snack choices are context driven

Similarly to the discussion of the definition of treats, the discussion surrounding snacks also exposed a paradox. Although treats and snacks are not mutually exclusive (a treat item can also be a snack), there was an implicit suggestion that snacks were healthy and treats were not. The definition of a snack changed when discussed regarding provision for children. Participants reported that snacks were given to children before or after dinner, at snack time (part of a routine) and for convenience. Snacks were therefore associated with a specific function according to the context in which they were given. There was a belief that snacks were needed and necessary to manage hunger, to "keep them going" or to "tide them over". This function of preventing potential hunger was driven by the necessity to satiate at the child's request and to manage parents' perception of their child's hunger, with healthfulness an irrelevant factor.

> *"Or you know what, I have given a snack because they are dead handy like that when they come back from football as well, is them hotdogs, they are rubbish as well."*
> *"Yeah they are so quick and easy!" (Dublin parents group, female participants)*

> *"Yeah I would, yeah, I mean toast you know it's…"*
> *"It's between meals."*
> *"Yeah it's to tide them over, if he's heading out to football and he had his meal but there's a gap there potentially and he needs the calories so you give him the slice of toast. Or the pancake, those little mini-pancakes you can buy so they are not too crazy on the sugar, not too fancy, but they have the starch and carbs to tide them over. That's how I would view a snack rather than a treat." (Cork parents group, male participants)*

> *"In between, like if one of mine came in from school and said they were hungry I'd let them go in the cupboard and get like one cookie, or you know, even something." (Female)*
> *"In between." (Male)*
> *"Just to tide them over, nothing big, or like…" (Female) (Belfast parents group)*

4 Discussion

Overall, treats are primarily considered as energy-dense, highly palatable foods. This research found that participants felt that treats were deserved, and they had a positive relationship with both giving and eating food treats. Treats were acknowledged as being unhealthy however, because their consumption was perceived to be infrequent, having or giving a treat was easily justified. Participants spontaneously verbalised that, in reality, treat foods were a more frequent occurrence than they initially considered. This was agreed upon as the true nature of treats in today's society. Additionally, the data evidenced a distinction between treats and snacking.

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This novel piece of research addresses a significant gap in the literature where a formal definition of treats is necessary to precede future research into this topic. On the IOI, as elsewhere, it is recommended that consumption these energy-dense nutrient-poor foods should be limited, as they promote excess energy intake and are associated with comorbidities in adults and children (Safefood, 2017). The literature base on treat giving behaviours suggests that many parents lack insight, knowledge and awareness into the negative health implications of the treats they provide their children (Pescud & Pettigrew, 2014). Our research however suggests that adults were aware that treats were intrinsically unhealthy, yet this awareness was moderated though justification of treat giving and treat consumption. The positive relationship that individuals have with treats, whether as a provider or as a consumer, presents challenges for intervention design, as the definition of a treat is that it is always justified.

It could be argued that the justifications sought to mediate any guilt experienced by adults and outweighs consideration for healthfulness in treat choice as a cause of pleasure, deservedness and gratification (Birch & Fisher, 1998). Parents seemed to struggle to verbalise the conflict between knowing that treats are unhealthy while providing these foods to their children frequently and in a positive context. This exposed associated cognitive dissonance, reflected in work by Watkins and Jones (2014) who found parents struggle with the idea of 'being a good parent', experiencing ambivalence and cognitive dissonance associated with doing what they think is right for their child, and doing what their child would like them to do.

All participants reflected on their memories of treats as children, when treats were rare because of low availability and relative high cost. Treats were an infrequent event and gratifying because individuals believed that they could justify having or giving a treat, thereby eliciting a positive emotional response (Petrunoff et al., 2014). However, treating occasions today were more frequent than initially described by participants, a matter they reflected upon as the focus groups progressed. This suggests a paradoxical contemporary definition of treats: "real treats" conform to the concept of a treat as something infrequent that provides pleasure, yet treats are consumed more often than perceived, thus becoming "regular treats", which are downgraded as less special (despite their perpetual consumption). This is also linked to the context where "real treats" tend to be given or consumed for more significant occasions, give more pleasure and are linked to reward.

A positive feedback loop of treating behaviour appears to have developed in adults' provision and consumption of treats. This may result from the combination of the abundant and accessible nature of energy dense foods in the food environment, and the positive emotional response associated with treat foods, reinforcing the habitual use of treats in today's society. With evidence that eating habits developed in childhood are linked to those in adulthood, the frequent consumption of energy-dense foods combined with the positive association of treats may be contributing to the development of emotional-related eating behaviours in children. Further, evidence from the focus groups indicates that adults are consuming treats frequently too, and thus that modelling of this behaviour is taking place

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

How do adults define the treats they give to children?

(Birch & Fisher, 1998; Birch et al., 2007; Blissett et al., 2010; Faith, Scanlon, Birch, Francis, & Sherry, 2004).

4.1 Snacks

A novel component of this research was the formal consideration of the distinction between snacks and treats. The literature presents challenges in developing this definition, as highlighted by Hess and colleagues (2016), who posit that the definition of snacks depends upon a variety of individual, social and environmental factors such as time of day, the motivation/ purpose of the snack and food availability (Hess, Jonnalagadda, & Slavin, 2016). Interestingly, these authors highlight that the most popular types of foods for snacks are energy-dense, nutrient-poor foods, which are the same types of foods defined in our research as treats. This suggests that the difference between snacks and treats is context related.

Participants in the current study were asked how they would define a snack. This question was not framed specifically to address child feeding practices and was independently discussed in the contexts through which snacks were provided to children. It is important to note that although participants perceived snacks as healthy, this may not reflect the actual nutritional content of the food as often participants use the word healthy and light interchangeably. The discussion surrounding snacks also exposed a paradox in the definition; participants perceived the concept of snacking to be a 'healthy' or 'light' food choice, but in the context of a busy lifestyle, snacks needed to be functional, energy-dense, satiating and convenient with little regard for healthfulness. These subtle distinctions in the definition of snacking may go some way to explaining why research has been unable to demonstrate associations between snacking and weight status (Boots et al., 2015; Gregori, Foltran, Ghidina, & Berchialla, 2011). Further research should be developed to explore these variations in the definition of snacking and particularly the contexts in which snacks given or consumed.

4.2 Strengths and Limitations

We recognise that a focus group can inform opinions verbalised through group-think or social conformity (Leung & Savithiri, 2009). Individuals whose views were different to those expressed by more vocal participants may not have felt comfortable articulating their perspectives. However, the focus group facilitators in this study were trained to prompt individuals to share their views if they remained quiet for any period of time. Furthermore, qualitative studies aim, at most for theoretical generalisability, however purposive sampling elicited a representative sample of caregivers of children across the IOI with a range of population groupings, allowing for some generalisability to similar populations (Sim, 1998). As such, the focus group methods employed and data analysis, may be considered to have appropriate external validity, given the varied perspectives. The findings will require replication elsewhere, as they reflect perspectives from two countries (ROI and NI in the UK) that share many cultural views and eating behaviours. The primary strengths of this study lie in the rich range of participant perspectives; the multidisciplinary insights brought to the analysis of participants'

phenomenological experiences; and the novel findings for how a 'treat' is conceptualised within contemporary, affluent Western European countries.

4.3 Recommendations for future research

Future research should explore the definition of treats from children's perspectives, using a qualitative methodology to gather in-depth data on children's' experiences of treats. The topic guide for this research could be adapted for children of all ages, to specifically explore their definition of a treat, and how they experience receiving treats from adults in different contexts and situations.

5 Conclusion

Treats are an energy-dense food acknowledged as unhealthy by the majority of focus group participants in this study. Treats give implicit or explicit pleasure and are consumed and given because individuals believe they are deserved, earned or are a reward. At the core of this definition is that treats are traditionally infrequent or rare. Treating oneself provokes gratification (positive emotional response). It could be argued that this gratification/ pleasure in combination with society's treat-promoting culture and environments facilitates a feedback loop, which ultimately results in a normalisation of treating behaviour and increased treat frequency. Given the high frequency provision of energy-dense, nutrient-poor foods, to children, it could be argued that adults should be given the tools to manage their treat food giving as a potential contributor to of reducing childhood obesity on the IOI.

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Declaration of Interest

We declare that no authors or collaborators had any personal or financial conflicts of interest.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.appet.2018.10.027

References

Bante, H., Elliott, M., Harrod, A., & Haire-Joshu, D. (2008). The use of inappropriate feeding practices by rural parents and their effect on preschoolers' fruit and vegetable preferences and intake. *J Nutr Educ Behav, 40*(1), 28-33. doi:10.1016/j.jneb.2007.02.007

Bel-Serrat, S., Heinen, M., Murrin, C., Daly, L., Mehegan, J., Concannon, M., . . . Heinen, M. (2017). The Childhood Obesity Surveillance Initiative (COSI) in the Republic of Ireland: Findings from 2015/2016.

Birch, L. L., & Fisher, J. O. (1998). Development of eating behaviors among children and adolescents. *Pediatrics, 101*(3 Pt 2), 539-549.

Birch, L. L., Savage, J. S., & Ventura, A. (2007). Influences on the Development of Children's Eating Behaviours: From Infancy to Adolescence. *Canadian Journal of Dietetic Practice and Research : A Publication of Dietitians of Canada 68*(1).

Blaine, R. E., Fisher, J. O., Blake, C. E., Orloski, A., Younginer, N., Bruton, Y., . . . Davison, K. K. (2016). Conditioned to eat while watching television? Low-income caregivers' perspectives on the role of snacking and television viewing among pre-schoolers. *Public Health Nutr, 19*(9), 1598-1605. doi:10.1017/s136898001500364x

Blake, C. E., Fisher, J. O., Ganter, C., Younginer, N., Orloski, A., Blaine, R. E., . . . Davison, K. K. (2015). A qualitative study of parents' perceptions and use of portion size strategies for preschool children's snacks. *Appetite, 88*, 17-23. doi:10.1016/j.appet.2014.11.005

Blissett, J., Haycraft, E., & Farrow, C. (2010). Inducing preschool children's emotional eating: relations with parental feeding practices. *Am J Clin Nutr, 92*(2), 359-365. doi:10.3945/ajcn.2010.29375

Boots, S. B., Tiggemann, M., Corsini, N., & Mattiske, J. (2015). Managing young children's snack food intake. The role of parenting style and feeding strategies. *Appetite, 92*, 94-101. doi:10.1016/j.appet.2015.05.012

Braden, A., Rhee, K., Peterson, C. B., Rydell, S. A., Zucker, N., & Boutelle, K. (2014). Associations between child emotional eating and general parenting style, feeding practices, and parent psychopathology. *Appetite, 80*, 35-40. doi:10.1016/j.appet.2014.04.017

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.

Brown, K. A., Ogden, J., Vogele, C., & Gibson, E. L. (2008). The role of parental control practices in explaining children's diet and BMI. *Appetite, 50*(2-3), 252-259. doi:10.1016/j.appet.2007.07.010

Carnell, S., Cooke, L., Cheng, R., Robbins, A., & Wardle, J. (2011). Parental feeding behaviours and motivations. A qualitative study in mothers of UK pre-schoolers. *Appetite, 57*(3), 665-673. doi:http://dx.doi.org/10.1016/j.appet.2011.08.009

Davis, M. M., Gance-Cleveland, B., Hassink, S., Johnson, R., Paradis, G., & Resnicow, K. (2007). Recommendations for prevention of childhood obesity. *Pediatrics, 120*(Supplement 4), S229-S253.

Davison, K. K., Blake, C. E., Blaine, R. E., Younginer, N. A., Orloski, A., Hamtil, H. A., . . . Fisher, J. O. (2015). Parenting around child snacking: development of a theoretically-guided, empirically informed conceptual model. *Int J Behav Nutr Phys Act, 12*, 109. doi:10.1186/s12966-015-0268-3

Faith, M. S., Scanlon, K. S., Birch, L. L., Francis, L. A., & Sherry, B. (2004). Parent-child feeding strategies and their relationships to child eating and weight status. *Obesity, 12*(11), 1711-1722.

Farrow, C. V., Haycraft, E., & Blissett, J. M. (2015). Teaching our children when to eat: how parental feeding practices inform the development of emotional eating--a longitudinal experimental design. *Am J Clin Nutr, 101*(5), 908-913. doi:10.3945/ajcn.114.103713

Gregori, D., Foltran, F., Ghidina, M., & Berchialla, P. (2011). Understanding the influence of the snack definition on the association between snacking and obesity: a review. *Int J Food Sci Nutr, 62*(3), 270-275. doi:10.3109/09637486.2010.530597

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

Hammersley, M. (2004). Action research: a contradiction in terms? *Oxford Review of Education, 30*(2), 165-181.

Hartmann, C., Siegrist, M., & van der Horst, K. (2013). Snack frequency: associations with healthy and unhealthy food choices. *Public Health Nutr, 16*(8), 1487-1496.

Herman, A. N., Malhotra, K., Wright, G., Fisher, J. O., & Whitaker, R. C. (2012). A qualitative study of the aspirations and challenges of low-income mothers in feeding their preschool-aged children. *International Journal of Behavioral Nutrition and Physical Activity, 9*(1), 132. doi:10.1186/1479-5868-9-132

Hess, J. M., Jonnalagadda, S. S., & Slavin, J. L. (2016). What Is a Snack, Why Do We Snack, and How Can We Choose Better Snacks? A Review of the Definitions of Snacking, Motivations to Snack, Contributions to Dietary Intake, and Recommendations for Improvement. *Adv Nutr, 7*(3), 466-475. doi:10.3945/an.115.009571

IUNA. (2005). Irish Universities Nutrition Alliance, National Children's Food Survey. *Health*.

Jain, A., Sherman, S. N., Chamberlin, D., A., L., Carter, Y., Powers, S. W., & Whitaker, R. C. (2001). Why Don't Low-Income Mothers Worry About Their Preschoolers Being Overweight? *Pediatrics, 107*(5), 1138-1146. doi:10.1542/peds.107.5.1138

Johnson, B. J., Bell, L. K., Zarnowiecki, D., Rangan, A. M., & Golley, R. K. (2017). Contribution of Discretionary Foods and Drinks to Australian Children's Intake of Energy, Saturated Fat, Added Sugars and Salt. *Children (Basel), 4*(12). doi:10.3390/children4120104

Kerr, M. A., Rennie, K. L., McCaffrey, T. A., Wallace, J. M. W., Hannon-Fletcher, M. P., & Livingstone, M. B. E. (2008). Snacking patterns among adolescents: a comparison of type, frequency and portion size between Britain in 1997 and Northern Ireland in 2005. *British Journal of Nutrition, 101*(1), 122-131. doi:10.1017/S0007114508994769

Larson, N., & Story, M. (2013). A review of snacking patterns among children and adolescents: what are the implications of snacking for weight status? *Child Obes, 9*(2), 104-115. doi:10.1089/chi.2012.0108

Leung, F.-H., & Savithiri, R. (2009). Spotlight on focus groups. *Canadian Family Physician, 55*(2), 218-219.

Morgan, D. L. (1996). *Focus groups as qualitative research* (Vol. 16): Sage publications.

Musher-Eizenman, D., & Holub, S. (2007). Comprehensive Feeding Practices Questionnaire: validation of a new measure of parental feeding practices. *J Pediatr Psychol, 32*(8), 960-972. doi:10.1093/jpepsy/jsm037

Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L., 3rd. (2014). Snacking patterns, diet quality, and cardiovascular risk factors in adults. *BMC Public Health, 14*, 388. doi:10.1186/1471-2458-14-388

Pescud, M., & Pettigrew, S. (2014). Treats: low socioeconomic status Australian parents' provision of extra foods for their overweight or obese children. *Health Promot J Austr, 25*(2), 104-109. doi:10.1071/he13093

Petrunoff, N. A., Lwilkenfeld, R., King, L. A., & Flood, V. M. (2014). 'Treats', 'sometimes foods', 'junk': a qualitative study exploring 'extra foods' with parents of young children. *Public Health Nutr, 17*(5), 979-986. doi:10.1017/s1368980012005095

Piernas, C., & Popkin, B. M. (2009). Snacking Increased among US Adults between 1977 and 2006–3. *J Nutr, 140*(2), 325-332.

Corresponding Author: Claire McCafferty Email: claire.mccafferty@ucdconnect.ie

Rangan, A. M., Schindeler, S., Hector, D. J., Gill, T. P., & Webb, K. L. (2009). Consumption of 'extra' foods by Australian adults: types, quantities and contribution to energy and nutrient intakes. *Eur J Clin Nutr, 63*(7), 865-871. doi:10.1038/ejcn.2008.51

Safefood. (2017). Food Pyramid and Eatwell Plate. Retrieved from http://www.safefood.eu/Healthy-Eating/The-Food-Pyramid-and-The-Eatwell-Guide.aspx

Shan, L. C., McCafferty, C., Tatlow-Golden, M., O'Rourke, C., Mooney, R., Livingstone, B., . . . Murrin, C. (2018). Is it still a real treat? Adults' treat provision to children. Appetite. doi:https://doi.org/10.1016/j.appet.2018.08.022

Sim, J. (1998). Collecting and analysing qualitative data: issues raised by the focus group. *J Adv Nurs, 28*(2), 345-352.

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care, 19*(6), 349-357.

Turner, J. J., Kelly, J., & McKenna, K. (2006). Food for thought: parents' perspectives of child influence. *British Food Journal, 108*(2-3), 181-191. doi:10.1108/00070700610651007

Watkins, F., & Jones, S. (2014). Reducing adult obesity in childhood: Parental influence on the food choices of children. *Health Education Journal, 74*(4), 473-484. doi:10.1177/0017896914544987

Younginer, N. A., Blake, C. E., Davison, K. K., Blaine, R. E., Ganter, C., Orloski, A., & Fisher, J. O. (2016). "What do you think of when I say the word 'snack'?" Towards a cohesive definition among low-income caregivers of preschool-age children. *Appetite, 98*, 35-40. doi:10.1016/j.appet.2015.12.002

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