Why do adults give food treats to children?



Foreword

In February 2017, *safe*food commissioned University College Dublin, in conjunction with its collaboration partners at Ulster University, The Open University and Dublin Institute of Technology, to conduct a research project to understand treat food behaviours among adults who care for children on the island of Ireland.

The aim of this research was to map out why adults provide treat foods to children on the island of Ireland. This report provides an overview of the main findings and also presents recommendations as to how positive treat food-giving behaviours can be promoted.

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- Principal researcher Dr Celine Murrin and her colleagues Dr Christine Shan and Ms Claire McCafferty, University College Dublin, School of Public Health, Physiotherapy and Sports Science
- Research collaborators Dr Mimi Tatlow-Golden (The Open University, Department of Childhood, Youth and Sport); Dr Clare Corish (University College Dublin, School of Public Health, Physiotherapy and Sports Science); Dr Barbara Livingstone and Dr Kirsty Pourshahidi (Ulster University, School of Biomedical Sciences); Dr John Kearney (Dublin Institute of Technology, School of Biological Sciences); and Mr Robert Mooney and Ms Claire O'Rourke (Amárach Research)
- All the participants the parents, grandparents, teachers, sports coaches, activity leaders, nursery practitioners, crèche practitioners and childminders who took part in the study and pilot tests, without whom this research project would not have been possible.

Executive summary

What does the existing literature show?

In the first phase of this research project, 43 articles on treats and snacks were reviewed from published literature. These were identified by a literature search and through suggestions from the project collaborators.

There was limited research material found that focused explicitly on treats, so the search strategy was widened to include also research on parenting practices, snacking and children's eating behaviour.

- The literature review highlighted that there are only a small number of studies that have focused on treat-giving behaviour.
- An additional audit (that is, a systematic review) of available data for the island of Ireland about children's treat or snack intake was undertaken.
- The research team reviewed all potential data sources and found that, in general, there was limited data available.
- The available data showed that beverages were the most popular snack choice in both the Republic of Ireland and Northern Ireland.
- The age of a child was shown to have a strong impact on snacking behaviours. As the child grows older:
 - Consumption of regular (full-calorie) soft drinks and crisps increases
 - Consumption of low-calorie soft drinks, fruit, yoghurt and dairy desserts decreases.

Focus groups

In the second phase of the research, focus groups were conducted across the island of Ireland with adults who care for children, including parents, grandparents, teachers, sports coaches, activity leaders, crèche and nursery practitioners and childminders. Analysis of the focus group data identified several main themes:

- "Treats" are energy-dense, nutrient-poor foods, justified as "deserved" and perceived as occasional but in reality given too often. This leads to the distinction that there are "regular treats" and "real treats".
- "Snacks" and "treats" are seen as different:
 - "Snacks" are thought of as something "healthy"; however, when given in response to hunger, the actual healthiness of the snack was irrelevant.
 - "Treats" are given as a tool to modify behaviour, driven by both the adult and the child.
 - The type of treat is dependent on the age of the child.

- Treats are given as part of a routine, given in response to social norms (that is, it seems usual and acceptable) and as a result of the environment or setting.
- There was a belief that a societal shift has occurred in treat-giving behaviour because of the convenience and availability of treat food in the modern consumer environment; and that in the past, treats were rare and, as such, were "real treats", whereas children today do not have the same appreciation for treats.
- Carers reported they tend not to use non-food treats because of the perceived time, cost and effort involved with such treats, while also believing that children would not be interested in them. Carers also reported that there were a number of factors that could facilitate (enable or make easier) the use of non-food treats by adults who care for children on the island of Ireland:
 - Having self-efficacy (the belief an individual has that they are capable of doing something or of engaging in a particular set of behaviours)
 - Believing children will enjoy non-food treats
 - Perceiving that unhealthy food treats are negative
 - Understanding that non-food treats can be used as a behavioural tool.

Survey

In the third and final phase of the research, a total of 1,039 participants on the island of Ireland, again including parents, grandparents, teachers, sports coaches, activity leaders, crèche and nursery practitioners and childminders, completed a face-to-face survey in their home.

- Participants primarily defined treats for the children they cared for as
 - "Something nice" (45.2%)
 - "Deserved or earned" (35.1%)
 - "Something special" (32.7%).
- The top 3 motivations for treat food provision were
 - To reward for good behaviour (42.3%)
 - Because the child asks (42.2%)
 - To make the child feel better (29.4%).
- Almost all participants would provide treat foods at celebrations such as birthdays or Christmas.
- In addition, 68% of participants had structured weekly or daily treats for children.
- Treats provided to children were dominated by energy-dense foods. The top 3 treats given were
 - Sweets (45.2%)
 - Chocolate (45.1%)
 - o Ice cream (38.8%).
- Variations in treat-giving behaviour were observed across the different adult groups. The main observation was that treat food provision has become habitual.

- Among all demographic factors, the child's age had the greatest impact on parents' treat-giving behaviour, with children aged between 5 and 12 years receiving treat foods most often.
- The survey also found that treats for preschool-aged children were much healthier than for older children.
- Different behaviours are influenced by sociodemographic factors (that is, age, education and household income and so on) differently. For instance,
 - Treat-giving that is triggered by a child asking is more associated with overweight children.
 - The use of treat foods as rewards was more associated with young parents and young children.

Conclusions

In the current food environment, it would be naive to think that the use of food as a treat could be avoided altogether. However, it is worth considering how the habitual use of "treat foods" could be reduced, and how people's idea of a treat could be reset to a healthier or non-food alternative.

- Greater awareness needs to be created in society that children are being continually "treated" with unhealthy food to such an extent that it is no longer considered to be a "real treat": this behaviour has become normalised into children's daily or weekly routine.
- Strategies should be developed to support adults to reduce their current use of unhealthy foods as treats, taking into account the differences between the different caregivers and their characteristics.

Recommendations

- Create an awareness that treats are "everywhere, every day" for children on the island of Ireland.
- Bridge the gap between the adults' own childhood experience of the "rarity" of treats and the current routine-based, regular provision of treat foods to children.
 - Encourage adults to reintroduce the true definition of a treat regularly referred to by participants as "real treats" – as an event or item that is valued because it is rare or "out of the ordinary" and gives great pleasure.
- Adults, especially parents and childminders, need support to increase their self-efficacy to manage children's requests, and to face the challenge of the current food environment. This could be, for example, through campaigns that aim to put adults in control of the situation.
 - Encourage parents to use alternative tools or strategies other than energy-dense treat foods to respond to their child, especially when rewarding a child's behaviour and when the child requests treat foods.
 - Provide skills and motivation for adults to manage the way they respond with treats to negative emotions (such as anxiety or sadness) in the children they care for.

- Engage adults with positive role modelling (for example, by creating awareness of the way adults eat in response to negative emotions themselves).
- Increase the use of positive reinforcement or verbal praise by adults to reward good behaviour in children.

(Education and behavioural experts should be consulted on this aspect.)

- Communications with adults should refer to the development of strategies to reduce routine treats both at home and outside the home; children need to be "resensitised" to appreciate the experience of "real treats".
- It is, perhaps, unrealistic to suggest removing energy-dense foods entirely from celebrations; however, efforts should be made to encourage adults to be more aware of the total amount of treat foods that children receive at celebrations and special occasions in a given year. For example,
 - Small trials and interventions could be implemented to add novelties to celebrations; for instance, the introduction of non-food treats, such as small toys, in trick-or-treating at Halloween or in an Easter egg hunt.
- Parents should be the key target in treat food-related health interventions.
 - Campaigns should focus on strategies that support parents and caregivers to prepare and provide nutritious and appropriate healthy snacks that reduce or prevent hunger, as these are the 2 main contexts of regular snack consumption reported by children's caregivers.
- Childminders should be included in children's health intervention initiatives. Informal childminders could be a hard-to-reach group, so specific strategies for communications with this group should be developed.
- Schools and childcare centres should adopt policies that promote the use of healthy food or nonfood treats at celebrations and as rewards.
 - The use of fruit and feasible non-food alternatives (for example, stickers, stationery, homework passes, more play time, special activities and special opportunities for individuals) should be encouraged in situations where the habit was to provide an energydense treat food.
- Primary school-aged children should be prioritised in health interventions addressing treat food provision by adults: our research showed that they received more treat foods from adults than other younger or older children.

Glossary of key terms and acronyms

| CAPI | Computer-assisted personal interviewing | | | | |
|--------------------------------|---|--|--|--|--|
| Consumer society | A community that has a strong focus on the buying of particular goods and services, for example having lots of shops and restaurants conveniently located. | | | | |
| ELC | External locus of control. When an individual believes they have no control over certain behaviours or what they do. For example, they may blame something outside of their control for their own behaviour, such as blaming the convenience of local takeaways for their unhealthy diet. | | | | |
| Energy-dense, nutrient-poor | Unhealthy foods that have a high calorie-count (foods high in fat and sugar) and a low nutritional value (few vitamins or minerals). These foods have limited dietary value. | | | | |
| Food environment | Where a person is exposed to food, and how the physical presence of the food they see every day affects their diet; for example, the shops, supermarkets, cafés, restaurants, takeaways, advertising, the canteen at work and the food in their own house. | | | | |
| HFSS | Foods and drinks high in fat, sugar and/or salt | | | | |
| 101 | The island of Ireland | | | | |
| IUNA | Irish Universities Nutrition Alliance | | | | |
| NDNS | National Diet and Nutrition Survey | | | | |
| NI | Northern Ireland | | | | |
| Non-food treats | A treat that is not food; for example, money or a trip to the park. | | | | |
| Parenting behavioural tool | An approach used by a parent to manage the behaviour of their child – something that parents engage with as part of their parenting approach. For example, to get a child t do something a parent might encourage them with the reward of a treat. | | | | |
| "Pester power" | A term used to cover all aspects of a child requesting or asking for something in a persuasive manner (nagging). | | | | |
| Positive affect | A happy emotional state or mood. | | | | |
| ROI | Republic of Ireland | | | | |
| SD | Standard deviation – a measure that is used to quantify the amount of variation or dispersion of a set of data values | | | | |
| SES | Socioeconomic status | | | | |

| | "ABC1" includes people in higher-level managerial and professional roles, mid-level managerial and professional roles, and supervisory, clerical and junior-level managerial roles; and students and farmers. |
|---------------|--|
| | "C2DE" includes skilled manual workers; semiskilled or unskilled manual workers; casual workers; homemakers; retired people; unemployed people or those not working due to long-term sickness; and full-time carers of other household members. |
| Self-efficacy | The belief an individual has that they are capable of doing something or of engaging in a particular set of behaviours. Having self-efficacy is an important factor in being able to achieve goals and carry out certain behaviour; for example, cooking healthy meals or exercising. |
| Social norms | Feeling that your behaviour is "normal" or usual because everyone is doing it, too. Behaviour that is accepted by society, or feeling the need to change your behaviour because it is considered normal in society. |
| UCD | University College Dublin |
| υк | United Kingdom |
| US | United States |

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1 Introduction

Obesity on the island of Ireland

Currently, 1 in 4 children on the island of Ireland (IOI) are obese or overweight (1). Obesity in childhood has been associated with physical and mental health disorders including dental disease, social and psychological problems, diabetes, attention deficit hyperactivity disorder (known as ADHD), sleep problems and asthma. These conditions are known to have long-term implications that may lead to significant health consequences in adult life, including cardiovascular diseases (meaning they affect the heart and blood vessels) and cancer, ultimately reducing life expectancy (2-4). Importantly, these conditions are preventable with the development of positive habits through a healthy lifestyle (5).

One of the potential risk factors for obesity is the regular overconsumption of unhealthy, energy-dense foods. If the pattern of consumption of these foods becomes so frequent that it forms a habit, then it becomes very challenging to change this type of behaviour, particularly if it has been developed in childhood.

Eating habits in children

Research shows that the habits children develop in childhood continue into adulthood (6). Children learn and develop their eating habits from the "significant others" (for example, parents and teachers) around them (7, 8). Many of these eating behaviours are contributing towards poor dietary habits (9). For example, providing food in response to a child being upset may unintentionally teach the child to associate feeling upset with consuming highly palatable foods as a coping mechanism (known as "emotional eating") (10).

Research suggests that 57% of adults engage in emotional eating (11) where energy-dense foods are consumed in response to a negative emotional state; for example, worrying or anxiety (12, 13). Emotional eating, and the consumption of unhealthy foods in childhood, is associated with the development of similar unhealthy eating practices in adult life (14).

Previous research has shown that using unhealthy foods as a reward or an emotion control instrument may reinforce children's preference for those foods, and may increase the risk of dietary disorders, such as bingeeating, emotional eating and dietary restraint (starving) (10, 15, 16). This confirms that positive, healthy eating habits must be developed and nurtured in children, to target childhood obesity.

"Treats" and "snacks"

Despite nutrient-poor, energy-dense snacks contributing up to a fifth of Irish children's calorie intake, studies have failed to find an association between snack food intake and obesity (17). This may be due to

- Poor definitions of "snacks" within the published literature
- Limited research investigating the reasons why parents and caregivers give children snacks
- Almost no knowledge of what distinguishes "snacks" from "treats" most of the literature refers to snacks and treats interchangeably.

The reasons for giving children snacks may be nutritive, such as for promoting growth and for satiation (satisfaction of hunger); but they may also be non-nutritive and emotion-focused, potentially used as a reward for good behaviour, to soothe or placate negative emotions, or to celebrate events or achievements. Snacks given for non-nutritive reasons may be defined as "treats" (18-20).

Longitudinal research (where observations are made and repeated over time) has found that children are more likely to overeat to address negative emotions if their parents regularly use food as a reward, as with emotional eating (10).

Treat-giving behaviour

Factors such as socioeconomic status (SES), education and parents' childhood experiences were found to influence snacks given to children and the reasons why they are given. Boots et al. (17) found SES was related to the nutritional value of snacks given to children: higher SES was associated with greater healthy snack intake and lower unhealthy snack intake. Vereecken et al. (21) showed that SES was not associated with sweet consumption, indicating that certain treat behaviour may be universal, regardless of SES.

To date, very few studies examine treat-giving behaviour directly. The limited existing research does show that treats were given more regularly to obese or overweight children in families with low SES, by their parents. This is for several reasons, including parents' lack of awareness of negative health implications of treat foods and lack of insight into the need to reduce the provision of unhealthy treats to their children. The main contexts for treat-giving found in a study by Pescud and Pettigrew (22) were

- To control the behaviour of their child
- To provide affection
- To resolve beliefs of deprivation (helping their child feel "better", or at least equal)
- Being given as part of a routine.

Similarly, parents in another study (23) believed treat foods could be consumed regularly as part of a balanced diet, with no link made between the consumption of these foods and weight gain in children.

A very recent study conducted in the United States (US), *Friday Night is Pizza Night*, showed that children frequently consumed unhealthy foods and beverages on weekends and they consumed larger portions of these foods. The study found that the goals of health and price are less important on weekend days compared to weekdays (24).

Developing strategies to support caregivers' healthier food choices requires a full understanding of adults' perceptions of treats, and their motivations for providing them. In the absence of clear data internationally and on the IOI, where cultural and generational differences may require tailored interventions for different target groups, this new study will fill that knowledge gap.

2 Aims and objectives

Aims

The aims of this research project are to

- Understand the nature of food treat-giving behaviour in adults who care for children on the IOI
- Provide evidence to inform recommendations for any campaigns to promote healthy food behaviours in relation to treats in children's lives.

Parents, grandparents, sports coaches and activity leaders, teachers, crèche and nursery practitioners and childminders were included in the study to provide a variety of perspectives and experiences in caring for children.

The focus of this research is to

- Determine current evidence and research into treats and treat-giving behaviour
- Explore treats and treat-giving from the perspective of adults who care for children
- Provide a definition of treats
- Determine how often food treats are being given and are made available to children
- Determine the context within which treat foods are being provided
- Explore what foods and non-foods are being used as treats across the IOI.

Objectives

- To explore what is currently known about adults' treat-giving behaviours for both food and nonfood treats
- To provide a comprehensive overview of evidence exploring the social, environmental and individual factors that influence adults' treat-giving behaviours
- To estimate children's consumption of snacks or "treat foods"
- To identify non-food alternatives to energy-dense treat foods for children, with the aim of providing parents with new ideas to replace using unhealthy snacks (sweets, chocolates, ice cream, chips, crisps and so on) for behaviour control or as rewards.

Focus group objectives

The qualitative phase of this study (which looks for information that cannot be simply quantified or counted, such as opinions and feelings) set out to answer 5 questions:

- What is the definition of a treat?
- Do adults distinguish between treats and snacks?
- What are adults' motivations for giving treat foods?
- What are adults' historical reflections of treats?
- What are the barriers and facilitators to using non-food treats?

Survey objectives

The representative survey of children's caregivers on the IOI had 4 objectives:

- To identify the extent to which children receive treat foods from adults: how often and in what context treats were given
- To further understand adults' choice of treats
- To compare different adult groups' treat-giving behaviour
- To examine the influence of sociodemographic factors on parents' treat-giving.

3 Methods and results

Literature review methods

A review of the existing published literature relating to treat foods was conducted to inform, or guide, the focus group discussion topics and survey designs. A systematic review was carried out to identify current international research into treat food-giving behaviours.

The focus was on identifying

- Non-food-based alternatives to energy-dense treat foods for children
- Strategies that can support or promote non-food treats among adults caring for children, and for other stakeholders such as institutions, communities and food retailers.

Data collection and analysis methods

Variations of the project title, "Why do adults give food treats to children?" were searched in various online databases. Due to the lack of research published that is specific to treats and treat-giving behaviour, the search was expanded to include papers on snacking, treat-giving, emotional eating, parental feeding practices and eating behaviour in children. This allowed for a combination of the research that related to treat-giving both directly and indirectly.

PubMed, PsycINFO and Web of Science databases were searched using a broad range of search terms to identify relevant articles. "Grey literature" (that is, non-academic) sources were also examined. Articles were screened to ensure they met the criteria for inclusion in the review (such as research which focused on children) and the same type of data was extracted from each paper.

Following a review of the article titles and abstracts, or summaries, a total of 43 articles were identified for inclusion in this study, to explore the nature of behaviours relating to treat-giving or treat food provision.

Literature review results and discussion

There is very little existing research into why adults give food treats to children. Most of the research concerns parental feeding behaviours, rather than those of other stakeholders and children's caregivers.

Two key studies were identified that directly explored the perceptions and behaviours of parents providing food treats to their children. The studies were both conducted in Australia by Pescud and Pettigrew (22, 25), who aimed to explore beliefs and behaviours surrounding treat-giving. They found that treats were given regularly to obese or overweight children in families with low SES, by their parents, for several reasons. These

include the parents' lack of awareness of negative health implications of treat foods and lack of insight into the need to reduce the provision of unhealthy treats to their children. The main contexts for treat-giving found in the studies by Pescud and Pettigrew were:

- To control the behaviour of their child
- To provide affection
- To resolve beliefs of deprivation (to make the child feel "better", or equal at least)
- Being given as part of a routine.

In the study by Pescud and Pettigrew treats were defined as "extra foods". Petrunoff and colleagues (23) explored parents' understanding and behaviour surrounding the provision of "extra foods" to preschool children through focus groups. The Australian government used the term "extra foods" to cover foods given to children outside of their standard dietary requirements of meals and snacks. Words used to describe "extra foods" by parents were "treats", "sometimes foods" or "junk foods".

In the study by Petrunoff (2014), parents believed these foods could be consumed regularly as part of a balanced diet, with no association made between their consumption and weight gain in children. The word "treats" was spontaneously used by participants across the focus groups with no formal definition. "Treat" was reported by the researchers to have been used by participants to refer to food that was:

- Rare
- Infrequent
- A reward
- For behavioural control of a child
- "Something special" or desirable.

Although what defines a treat was not explicitly discussed within this piece of research, this study reported that many parents provided their children with treats on a daily basis; however this was relative to a perception that their child had a balanced diet.

Further, there was very little research on alternatives to treat foods. The only study found on this topic was an experimental intervention using a convenient (that is, nearby or easily accessible) population sample in the US (26). The study investigated whether children would choose toys over sweets when offered both at Halloween. The results showed that children chose toys such as stretch pumpkin men, large glow-in-thedark insects, Halloween themed stickers and pencils (47.7%) as frequently as sweets (52.3%) during trick-ortreating. The toy and sweet items used in the study were comparable in size, colour and cost. Schwartz and colleagues concluded that children may not be disappointed by treats that are not sweets. The authors also explained that it was possible that children chose toys because they were novel, or a new to them, in the context of trick-or-treating. In addition, a commentary article (27) recommended that in school settings, instead of using food, teachers could reward children by giving them special opportunities. Examples include selecting a song for the group to listen or dance to, choosing a game to play with classmates, or having first choice of equipment for gross motor play (which uses whole-body physical skills such as walking or jumping). Non-food activities, such as bringing a favourite book or game to class to read or share with friends, are other ways to acknowledge individuals.

Audit of children's consumption of snacks or treat' foods using dietary data

In order to estimate children's treat or snack intake on the IOI, the research team reviewed all potential data sources. In general, available data was very limited, and there was no data on treats, so data on snack consumption and behaviours was used as a proxy, or substitute. The studies used different methodologies, and were not specifically designed to identify or measure intake of "treat" foods or snacks.

Dietary data audit and analysis methods

The research team obtained access to certain subsets of the Republic of Ireland (ROI) Irish Universities Nutrition Alliance (IUNA) *National Children's Food Consumption Survey Data (2003–2004)* and the United Kingdom (UK) *National Diet and Nutrition Survey (NDNS) Data (2012–2013)*.

The IUNA dataset includes full-day food diary data from a sample of 594 children aged between 5 and 12 years (28). The data did not specify what foods and drinks were consumed as "snacks". Instead, based on some of the literature they had reviewed (29), the research team used the "eating time" to define snacks for the data audit – foods and drinks consumed between 9 a.m. and 11.59 a.m.; between 2 p.m. and 4.59 p.m.; between 8 p.m. and 9.59 p.m.; and between 10 p.m. and 5.59 a.m.

The original data was "food-level" data, which contains detailed food consumption records from all participants; for instance, a food's name, its given code, food category and, nutritional profile, and by whom and at what time it was consumed. If a person consumed milk 5 times a day (including milk added to tea), it would generate 5 records. Such detailed data does not offer an overview of a person's food consumption within a specified time range; nor does it allow cross-group comparisons (for example, comparing boys' consumption with girls'). Accordingly, with the help of a database manager, the food-level data for each participant at a specified time range (our predefined snack times) was added together, resulting in "person-level" data.

The UK NDNS data includes person-level food consumption records from a 6-year rolling programme (2008–2011 and 2012–2013). The sample size of children from Northern Ireland (NI) is small (around 100 per year). The same eating time slots were used to define "snacks". Foods and beverages were placed in categories, based on a consultation with nutrition experts.

Descriptive data analysis was carried out to generate an overview of children's snack intake. This analysis involves providing counts of how frequently participants ate a particular snack or the average amount of the snack consumed.

Dietary data audit results and key findings

Data from the ROI (Figure 1) showed that, in the year 2003 to 2004,

- The most popular snacks for children aged 5 to 12 years included juice (both fruit juice and cordial), consumed at 58.8 grams per day (g/day), and fizzy drinks (49.4 g/day).
- Chip-based snacks (meaning finger-shaped cuts of potatoes that have been deep-fried and served hot) were consumed at 14.4 g/day.
- The rest of the snacks investigated were consumed at a level lower than 10 g/day.

Data from NI (Figure 2) showed that, during the most recent survey period (2008–2013),

- The most popular snacks for children of all ages were low-calorie soft drinks (46.6 g/day) and regular full-calorie soft drinks (44.6 g/day).
- Next most consumed was fruit (17.9 g/day) and fruit juice (14.9 g/day).
- Other snacks were consumed at around 10 g/day or less.

The NI data also showed the influence of the age of children on snacking: as the child grows older,

- Consumption of regular soft drinks and crisps increases
- Consumption of low-calorie soft drinks, fruit, yoghurt and dairy desserts decreases.

The ROI data and NI data were not directly comparable. This is due to differences in methods used (the ROI data includes a whole week's diary records and NI data includes 4 days' diary records) and the gap in the periods studied for the 2 regions.

Both datasets did not specify which foods were consumed as treats, or which eating occasions were considered as treats, so we were not able to evaluate children's treat food consumption in both regions.

The complete results of the audit of children's snacking are in Appendix 1.

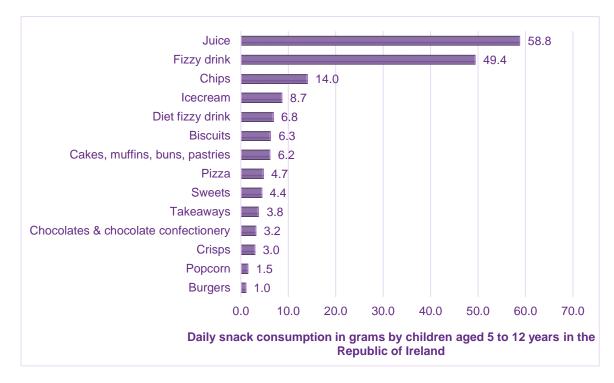


Figure 1: Daily snack consumption in grams by children aged 5 to 12 years in the Republic of Ireland'

¹Note: "Juice" includes fruit juice and concentrated cordials. "Chips" means finger-shaped cuts of potatoes that have been deep-fried and served hot.

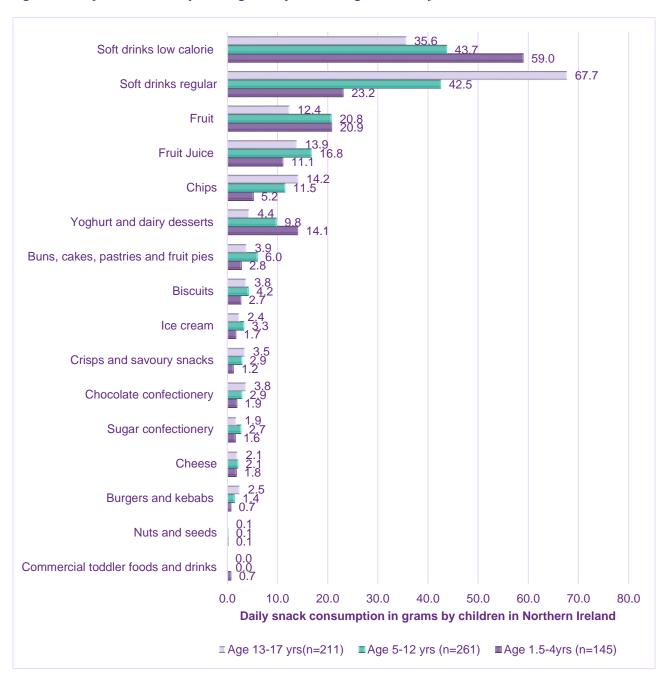


Figure 2: Daily snack consumption in grams by children aged 1.5 to 17 years in Northern Ireland

² Note: "Juice" means fruit juice and concentrated cordials. "Chips" means finger-shaped cuts of potatoes that have been deep-fried and served hot.

Focus group methods

A series of focus groups were carried out across the IOI. The discussion topic guide developed for this research is in Appendix 2.

Recruitment criteria for focus group participants

Purposive, or selective, sampling (which aims to choose a group of particular interest, rather than a random sample of the population) was conducted to gain a representative sample of caregivers of children across the IOI.

Ten focus groups were conducted with parents, grandparents, teachers, sports and leisure coaches and other caregivers of children such as crèche or preschool carers. 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). Each focus group consisted of 8 participants and discussion lasted approximately 90 minutes.

The focus groups were held in Belfast, Derry/Londonderry, Enniskillen, Dundalk, Dublin (2 groups), Cork (2 groups), Galway and Limerick, in both rural and urban locations (Table 1). Individuals in the focus groups were from different SES cohorts, or population groups, and caring for children of a variety of ages.

| Groups | Stakeholders | Location | Age | Gender | Socioeconomic 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 | | | | |

Table 1: Recruitment criteria for focus group participants

Discussion topic guide design

The discussion topic guide design was informed by the findings from the literature review. A pilot focus group was conducted within University College Dublin (UCD) to further refine and finalise the topic guide. The topic guide was split broadly into 2 halves:

- First, to discuss treats in general and memories of treats from participants' childhoods
- Second, to explore perceptions of participants' treat-giving behaviour.

To prompt discussion of what items were considered "treats", a card-sorting task was designed. (The cards used in the sorting task are in Appendix 3.) Items commonly used as treats were based on the results of the literature review and the dietary data audit.

Participants were asked to sort the cards into 3 piles:

- Items they would use as treats
- Items they would not use as treats
- A third pile for "neither", which included items the child does not like and items that would be considered "normal" daily food.

This focused a discussion around examples of items the participants would provide as treats for the children they cared for, and also exposed a distinction made between "snacks" and "treats".

Items that focus group participants identified as "treats" for children are in Appendix 4.

Data collection

Recruitment and data collection was carried out by Amárach Research in the ROI, and Perceptive Insight Market Research collected the data in NI, on behalf of the research team. To ensure that the sample of individuals interviewed for the face-to-face survey generally reflects or can be applied to the population in terms of age, gender and SES of the IOI, quotas based on the Central Statistics Office 2011 Census were used (30).

Individuals were sampled through the ROI Eircode system and NI postal code system to include geographic coordinate information. Amárach used computer-assisted personal interviewing (CAPI) in the ROI and Perceptive Insights in NI used an established method of recruitment that includes specific cohorts or groups. Both market research companies in ROI and NI have existing panels of individuals from a range of different ages, regions and socioeconomic groups. These panels have developed over time through word-of-mouth recruitment. Individuals from the panels were invited to participate in the focus groups once they met the recruitment criteria for each group.

Data analysis

Following data collection from Amárach, our researchers reviewed the transcripts (the typed-up voice recordings from the focus groups) along with the audio recordings for quality-checking purposes. 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. This process is used to scan the text and identify words or phrases that may have similar meaning with different colours (the words and phrases that the participants used and the codes given to them for the purposes of analysis are in Appendix 5). A pen-and-paper-based technique was used initially, for the first 4 transcripts, as this allows for codes to become clear. Once the codes were clearly established they were then transferred to qualitative analysis software NVivo 11 where the remaining analysis took place. This coding was done deductively and was data-driven, whereby the text within all 10 transcripts was closely examined to see whether similar meanings were provided in response to 5 distinct research questions:

- What is the definition of a treat?
- Do adults distinguish between treats and snacks?
- What is the motivation for treat food-giving?
- What is the historical reflection of treats?
- What are the barriers and facilitators to using non-food treats?

Revision of codes took place where some codes were merged, deleted or renamed for clarity. A different coder reviewed every second code for 50% of the transcripts. A meeting between the first and second coders allowed for discussion about some small amendments to codes or to the general coding structure. Once agreement between coders was reached, theme development began.

Thematic content analysis was conducted according to Braun and Clarke (31):

- Searching for themes and grouping codes together
- Development of early thematic representations
- Reviewing references for each code to check for coherent patterns
- Reworking of some themes and refining names of themes
- Refinement of thematic representations
- Quote identification.

Overall, thematic content analysis was carried out interpreting the dataset as a whole. During theme development, if intricacies of the codes were specific to particular population groups, this was noted and considered in the way in which themes were mapped.

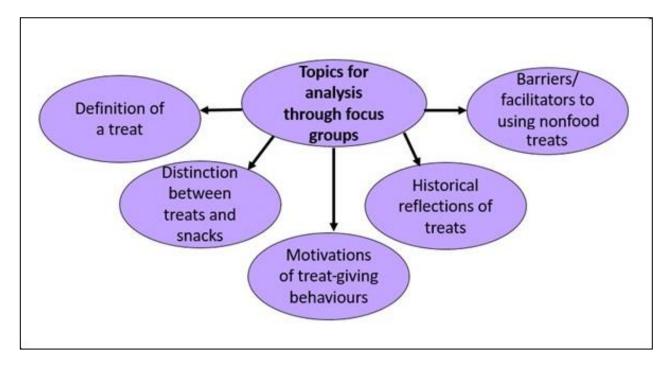
Themes specific to a particular population group are discussed later in the report; otherwise, the themes are an overall representation of the data. For each of the 5 research questions, the main themes identified will be discussed with quotations from the focus group transcripts to support the findings.

Focus group results

The following 5 research topics were addressed by analysing the 8 focus group transcripts and voice recordings (Figure 3):

- The definition of a treat
- The distinction between treats and snacks
- Motivations for treat-giving behaviour
- Historical reflections of treats
- Barriers and facilitators to using non-food treats.

Figure 3: Visual representation of research topics addressed by focus groups



Definition of a treat

Overall, the data from the focus groups suggests that "treats" in Ireland today are the foods found on the top shelf of the Food Pyramid (in the ROI) or in the "Extra Foods" category (in NI) (32). Generally, these are processed food products that are high in fat, sugar and salt.

Participants identified that treats are items that give pleasure and are believed to be deserved, and gave examples of foods that are energy-dense and nutrient-poor. "Treats" were acknowledged as being unhealthy; however, because their consumption was perceived to be an infrequent event, having or giving a treat was always justified (Figure 4).

"Treats" have a positive association and prompt a positive emotional response. A feedback loop that positively affirms the continued consumption and provision of treat foods appears to have developed. This loop is characterised and exists as a result of the abundant and accessible nature of the modern food environment and the positive emotional response (such as pleasure) associated with treat food consumption or provision. As each focus group discussion progressed, almost all participants suggested unprompted that in reality, treat foods are a more frequent occurrence than they had initially considered.

Figure 4 provides a representation of the themes discussed within the focus groups.

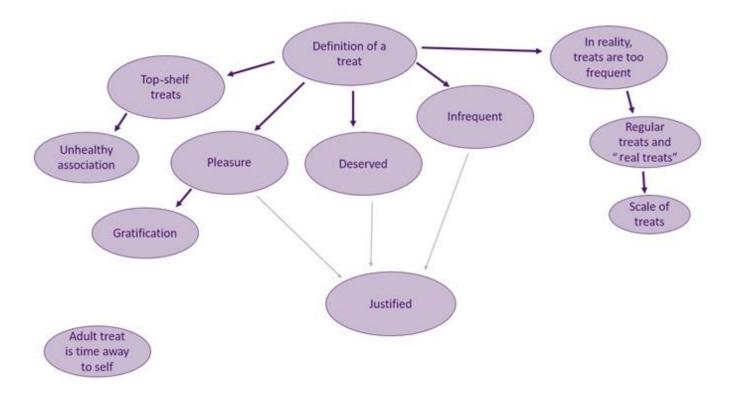


Figure 4: Visual representation of focus group participants' definition of a "treat"

Treats come from the "top shelf" of the food pyramid

When individuals discussed what treats were in general, most participants made reference to energy-dense and nutrient-poor foods that are high in fat, sugar and salt (HFSS). The majority of participants across all focus groups used the word "sweet" to describe their initial definition of what a treat meant to them, which suggests that food is central to the definition of a treat.

"Anything with sugar in it, really." (Cork, Mixed, Male)

"I think when you think of kids and treats, you think 'food'." (Derry/Londonderry, Grandparents, Male)

"Because 'treat' is 'sweet'; it's sugar." (Dublin, Mixed, Male)

"No, because a treat is like something like sugar." (Cork, Mixed, Female)

"Sugar." (Dublin, Parents Female)

"Like sugar." (Dublin, Parents Female)

"That sugar rush!" (Dublin, Parents, Female)

"So, treats: I'm looking at salty, sugary foods, convenience foods, stuff we wouldn't ordinarily give them." (Cork, Parents, Male)

"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 every day." (Dublin, Mixed, Female)

Perception that treats are unhealthy

Participants, throughout the focus groups, provided implicit (indirect or hinted) and explicit (direct, specific) expressions that the foods they considered treats, either for themselves or for children they care for, were unhealthy – "bad for you" or "the unhealthy stuff". The foods they suggested were HFSS foods, with sweet foods often the first to be suggested, such as chocolate.

This discussion was regularly followed by instant justification for consumption due to the pleasure gained from eating these foods.

"You see, anything we like tends to be bad for us." (Belfast, Parents, Male)

"I've wrote down that treats are bad for you." (Belfast, Parents, Male)

"Probably the unhealthy options are more treats and often more enjoyable. But that's where I'm coming from." (Belfast, Parents, Female)

"It's considered almost sinful." (Male, Limerick, Mixed)

Treats are a pleasure

For the majority of participants, there were explicit expressions of pleasure and happiness surrounding the process of having a treat themselves, or how they perceive the children they care for to enjoy a treat. Participants reported non-food treats as giving them *enjoyment*. For food treats, there was a perception of *indulgence*, the food provided a positive taste experience.

"Because a treat is something nice, something that's bad for you. Something you're not allowed." (Dundalk, Parents, Female)

"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, Male)

"Because they are not allowed biscuits, and it's just one day; I had no [named sweet biscuits] so they had a [named chocolate biscuit]. My God, they nearly, you know – the excitement because it was, like, a chocolate biscuit!" (Cork, Mixed, Female)

Gratification, a subtheme of pleasure

Participants in the focus groups discussed positive emotional affect (a happy mood) and pleasure associated with individuals' enjoyment of treats, both food and non-food treats. This links with the expression that treats are desirable and perceived to be special: it gratified and fulfilled individuals to consume treats, with accounts that children experienced these same emotions in having treats. This suggests a positive emotional response for consuming or experiencing treats, which may be encouraging repeated treating or treat consumption.

"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, Female)

"A treat is held more on a pedestal." (Cork, Parents, Male)

"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, Male)

"Because we like them, we do. They are good and 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, Female)

Treats are deserved or earned

There was lengthy discussion between the majority of participants that highlighted a common belief that treats were "deserved". Many participants provided no explicit expression of their rationale, or justification, for this belief. This suggests that there is an internalised core belief (a strong and personal idea, a value, or way of living) that justifies the provision or consumption of treats. Also, treats were considered to be "earned" or to be a "reward". This is fundamentally linked to adults' motivation for providing treats to children; but, for this research question – exploring the definition of a treat – many participants expressed that "reward means treats" (Belfast, Parents, Male). When asked, "What is a treat?" many responded, "A reward".

"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, Male)

"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?" (Enniskillen, Parents, Male)

"Everybody deserves a treat." (Cork, Mixed, Male)

"Yeah, deserves a treat in moderation." (Cork, Mixed Female)

"Most people know if they give people crap, you know." (Cork, Mixed Male)

"You are what you eat." (Cork, Mixed Male)

"Exactly, I think that comes across, now." (Cork, Mixed, Male)



Belief that treats should be infrequent

Initial discussions during the first part of the focus groups about participants' perception of treats highlighted the belief that treats were occasional, rare or that they were restricted; for example, that children are not allowed them too frequently. This discussion was about what individuals perceived a treat to be, rather than an insight into how often treats were given (which was explored in more depth with each focus group).

This element of the definition of a treat related back to participants' memories of treats being rare and infrequent in their own childhoods (see "Historical reflections on treats"): they carried this perception about the nature of treats forward to the present day. This shows that people believe treats are, and should be, infrequent.

"Obviously, as long as they don't ask too often." (Derry/Londonderry, Grandparents Female)

"As long as you don't overdo treats." (Derry/Londonderry, Grandparents, Male)

"I think, while they might get sweets and eat a lot, they don't get them in school anymore, so it mightn't be a treat at home but it's a treat in school ... just the excitement of eating it in class with your friends." (Dublin, Mixed, Female)

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

"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, Male)

In reality, treats are given too frequently

Relative to their belief that treats are (or should be) infrequent events, many participants said that if treats became too frequent they would lose their meaning and could no longer be classified as a "treat". The majority of participants believed they provided and gave treats too often to the children they cared for and that, in reality, treats were a regular occurrence. However, they continue to call and view them as "treats".

Similarly, many participants said they wished to consume less treats themselves and that this was due to a lack of self-control. The participants appeared to hold a perception that there was an appropriate amount of treats to have. They also felt that giving treats to children becomes negative if it becomes a common or regular occurrence; this idea is evident in the implicit suggestions that frequent "treating" is unhealthy or inappropriate. However, this perception was not reflected in participants' reported behaviours in the focus groups: there were few references that adults actually restrict the treats, even though they are aware they are giving treats frequently.

"I probably give them far too much." (Dublin, Parents, Female)

"Really, the whole weekend is a treat." (Dublin, Parents, Female)

"It's hard to classify things as a treat, now, because everything has become so available." (Limerick, Mixed, Male)

"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, Male)

"Sweets are bought as part of the weekly shop, now." (Cork, Parents, Male)

Regular treats and "real treats"

Across the focus groups, many participants began to explore the idea that not all treats are of equal significance. Some treats were perceived as being "*real*", or "*bigger*", as they are more important and special. Other treats were perceived to be "*regular*", "*smaller*" treats. This suggests that "*real treats*" are those that conform to the initial, or true, definition of a treat as something infrequent that provides pleasure.

Treats consumed more often become "regular" treats. They may be perceived as less special and lead to a reduction in appreciation despite still being labelled as treats. This could be considered as "habitual" treating. "Real treats" tend to be given or consumed on more significant occasions, give more pleasure and are linked to rewards.

"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's broad, it's not just one casual small thing." (Belfast, Parents, Male)

"The real treat is getting a pizza or getting a [meal from named fast food outlet], I mean, because they don't have it up where they live. So, they love getting a pizza or a takeaway." (Galway, Grandparents, Female)

"They see [named fast food outlet] as a big, big treat. But on a daily basis it's, "Can I have this sweet? Can I have that?" (Dublin, Mixed, Male)

"Our grandson got [named fizzy drink] for the first time ... he thought it was great, you know, so it's a huge treat for him to taste [it]. 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, Female)



Adult treat is time away or time to themselves

The definition of a treat (taken from these focus groups) was foods considered to be both pleasurable and unhealthy (HFSS foods). However, participants – particularly parents – said that a treat for themselves was time away, or a break from the usual routine. Many parents referred to going out for food or ordering in a takeaway as a break from cooking. They believed this also doubles as a treat for their children, providing further justification.

"I'd never cook on a Sunday. We'd leave the house early and go for breakfast somewhere and then we go for lunch." (Dundalk, Parents, Female)

"And then if we want to go on a Friday, we might bring the kids for something to eat, [to named restaurant], or somewhere like that, for dinner ... and you can actually have a conversation." (Dublin, Parents, Female)

"If you have children, a weekend away or one day in the pub is about also recharging the batteries." (Belfast, Parents, Male)

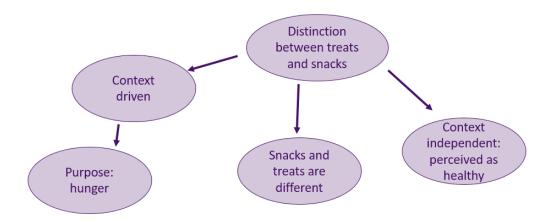
Distinction between "treats" and "snacks"

Participants described clear differences between "treats" and "snacks". The main differences were that treats were perceived as less healthy and were consumed in a different context to snacks. The context of "snacking", and the identification of snacks as being healthy, were 2 distinct topics discussed within the focus groups.

For the majority of participants, a snack was considered to be something healthy. However, when discussion centred around *when* you would provide a child with a snack, the healthiness of the food was less considered. Snacks were often reported to be consumed "on the go" (continuing with activities while eating), and convenience was the main priority for caregivers.

Figure 5 presents a visual representation of these themes.

Figure 5: Visual representation of the distinction focus group participants made between "treats" and "snacks"



Snack choices are driven by context

The majority of the discussion surrounding snacks and snacking was relative to the context, or situation, in which snacks were consumed. Participants reported that snacks were given to children before or after dinner, at "snack time" as part of a routine, and with an emphasis on convenience. Snack choice was therefore associated with a specific function according to the context in which the snacks were given.

"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." (Dublin, Parents, Female)

"Yeah, they are so quick and easy!" (Dublin, Parents, Female)

"Yeah." (Dublin, Parents, Female)

"If you are under stress and have to go somewhere, you want to give the kids something quick and handy. So, you are not really treating them, you are giving them a snack, something quick, you know; you don't have to prepare it for them." (Enniskillen, Parents, Female)

Purpose of "snacks" is to manage hunger

There was a common belief that snacks were needed and necessary to manage children's hunger, to "keep them going " (Belfast, Parents, Female) or to "tide them over" (Cork, Parents, Male) until the next meal. This function of preventing potential hunger was driven by the adult's need to satisfy hunger at the child's request, and to manage parents' own perception of their child's hunger. The context in which the hunger may need to be controlled influences the choice of snack provided to the child.

"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, Fathers, Male)

"You know, so, I'm coming in from school at half-four, so, sort of saying, 'Listen, have a bit of fruit or something, or – just until your dinner is ready in 20 minutes,' or whatever." (Belfast, Parents, Female)

"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." (Belfast, Parents, Female)

"Just to tide them over, nothing big, or, like ..." (Belfast, Parents, Female)



"Treats" and "snacks" are seen as different

Most participants both implicitly and explicitly expressed that treats and snacks were different. They were identified as being different foods, and are eaten or given in different contexts that serve different purposes.

Although the definition of a snack varies according to context, the definition of a treat within these focus groups centres on the pleasure and gratification gained from food.

"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 mealtime." (Cork, Parents, Male)

"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, Male) "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, Male)

"A snack is for nutrition. A treat is for taste." (Limerick, Mixed, Male)

Context-independent, snacks are perceived as a healthy choice

A discussion topic developed where there was the perception that snacks were the "healthy" choice. However, this is independent of, or does not take into consideration, the context through which snacks were given to children (for example, cookies before mealtimes), and more related to snacks and snacking in general.

Without prompting, participants mentioned low-calorie crisps, raw fruit and vegetables, crackers and cheese and yoghurts as examples of snacks, when first asked the difference between a snack and a treat. Several participants defined a banana as "heavy" and crisps as "light", and so a packet of crisps 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] road ... it's low in calories and not really fattening." (Cork, Parents, Male)

"Maybe popcorn, that's a snack. You know, it's healthy, kind of. Unlike jellies or chocolate." (Cork, Parents, Male)

"I'd be thinking slightly healthier, as you said – veg, nuts, berries, something like that, more than, like, you suppose a bag of crisps could be a snack. But I'd be more thinking 'snack' as healthier and more frequent." (Dublin, Mixed, Female)

"It's food; a snack would be healthy, for me." (Dublin, Mixed, Female)



Motivations for treat food-giving

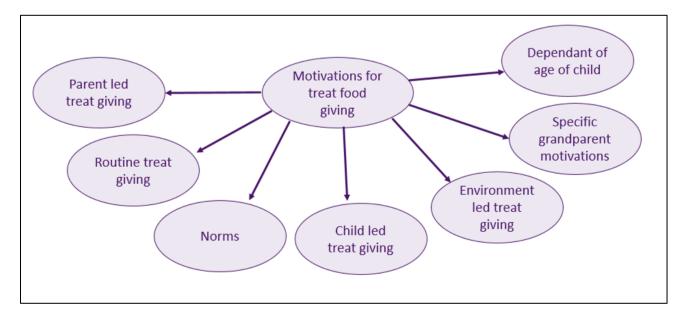
The reasons treats were provided to children were often routine-based behaviours and explicit decisions made by caregivers. The treats given to children most frequently were reported to be from parents and grandparents; this was the caregiving group that provided treats on a routine and habitual basis. It is important to note that the rationale behind grandparents providing food treats to children was different from that of parents. It appears that grandparents have a distinct set of motivations for treat provision.

Teachers, coaches and crèche practitioners reported providing food treats on a Friday, or at the end of school term, which is perceived to be infrequent, routine treat-giving. Caregivers also reported that their treat-giving behaviour changed depending on the age of the child.

A significant theme for this data was the external locus of control (ELC, when an individual believes they have little or no control over what they do, instead blaming other factors for their behaviour) that participants gave as a factor in their treat-giving behaviour, associated with the modern food and consumer environment.

Figure 6 presents a visual representation of the themes of motivation for giving treat foods to children.

Figure 6: Visual representation of focus group participants' motivations for giving treat foods to children



Parent-led treat-giving

The focus group data suggested that parents provided treats most frequently to children, on a daily basis or several times a week. For these occasions, treats were perceived as a functional tool used for various purposes:

- As a behavioural management tool
- To reward
- As a bribe
- To placate, soothe or quieten a child
- Doubling as a treat for the parent; for example, taking the children out for a meal as a treat is also considered a treat for the parent as a break from cooking or their daily routine.

These treating occasions were driven by the parent and their own hierarchical parenting goals (that is, to be *in control*). In this context, treats were a functional tool to allow the parent to manage the behaviour of their

child. The definition of a treat was applied for this context, with many parents reporting that treats are given to children because they deserve them for their good behaviour.

"I suppose it would be fair to say that if they are driving you absolutely crazy and you are tired, you will give them something, just to shut them up, like. If you are going shopping, you just bribe them." (Cork, Parents, Male)

"I think as well, maybe just as a grandparent, you want them to be happy and content and to associate your house with that feeling of contentment or warmth or – you know – sharing; that they get a treat, you know." (Galway, Grandparents, Female)

"I think that every child deserves treats, they do deserve treats. Because a treat is something that you don't get all the time, and, you know, when they are good, and they do good things, they do deserve treats. So, it makes you feel good, then, to see how happy they are, and knowing that they deserve the treat. It makes them feel good about themselves and makes you feel good with yourself. It's all good." (Dundalk, Parents, Female)

Routine treat-giving

Participants said that treats were provided to the children they cared for on a routine basis. For parents, this tended to be weekly, weekend or daily treats; for example, every evening after dinner. Many families recalled that every Friday was "takeaway night", or that every Sunday they would make a trip to buy ice cream as a treat.

For the individuals working in schools, most reported that their school had a "Treat Friday", where the children were allowed to bring in a small bar of chocolate, or something similar, as a treat. This was reported to be an exciting day for the children, as there seemed to be strict healthy eating policies in many schools from Monday to Thursday.

"I always do [treat them] if they eat their dinner, but they have to eat everything on the plate, now. So, they would be, 'I'm full, I'm full; can I have something nice?' and then I say, 'No, you haven't eaten your dinner'. That's the way I would do it." (Dublin, Parents, Female)

"But then on a Friday they'll get a 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, Female)

"She does ask for her treat after her dinner. She knows the word 'treat' [laughing] and most days she'll get one if she eats her dinner: a little biscuit, or a blue one, and it's a [named] biscuit, I'm delighted – there you go. She knows she deserves it, like." (Cork, Parents, Male)

"I pick my son up from school and he's, like, 'Are we going to the sweet shop? Is it sweet shop day?" And I only ever bring them in on a Friday. They get a euro each, and they can pick what they want." (Dublin, Mixed, Male)

Social norms

Participants believed the way in which they provided treats was the same way everyone else did – and that it is "normal". The focus group data suggests that people's perceived overconsumption or provision of HFSS treat foods has become normalised. The participants externalised the control (or lack of control) they feel they have over their treat food-giving behaviour, putting the blame on society. Many participants reported providing food treats at parties, for example, or at celebratory events, because that is what is "expected" of them.

Coaches reported they provided "pizza parties" and treat food-centred celebrations at the end of a season or for winning an important match. This was partially driven by their perception of children's expectations, but was also widely recognised as a treating occasion that occurred in most schools or sports clubs. Similarly, some schools or sports clubs host sports tournaments; coaches reported feeling pressured to provide food treats because it was expected and perceived as normal at these events. Many parents discussed larger, expensive items in the context of feeling pressured to buy these treats or gifts.

"Now it's more intense. If my child walked into school with a [named mobile phone] in high school he would get slagged; everyone has [different named mobile phone], you know. I think it's got more expensive. I wouldn't want to leave them out because he wouldn't fit in, and you pressure yourself to get the latest of the things." (Belfast, Parents, Female)

"I think if you have friends over for a meal, or folks calling by, you do stock up on the goodies. Because you've a good dessert there ... which would be deemed as outside the norm, the regular routine stuff. So, yeah – those things would promote an influx of the good or bad stuff, whichever way you look at it." (Cork, Parents, Male)

"I think in school it's what their friends are doing; they copy. I just think, friends ... if one gets a new thing, gradually it will filter through and they'll all get it." (Dublin, Mixed, Female)

Child-led treat-giving

The focus group data suggests that adults also provided food treats to the children they care for in response to a request from the child: because the child expects to be given a treat, or because of "pester power" (the child nagging). Treat selection may also be influenced by the child.

"My niece – every time I see her, 'Can I get this? Can I get this?' And it would be every day. Or even, when you turn up its, like, 'Is there anything in your handbag, there? What are you giving me because you came to visit, like?" (Dublin, Mixed, Female)

"Yeah, like, well, of course the Mammy does [decide what a treat is], but he could be cute enough to say, 'No, I don't want the biscuit, I want the buttons or jellies.' Okay, we still make the decision, and go, 'Well, you are not,' – but he'd be cute enough to say, 'Well, I don't want that, I want *that*!" (Dublin, Parents, Female)

"I mean, like, for example, my nephew said he got a 'D', and he says, 'What are you getting me?' And my sister says, 'Nothing, you got a 'D'!' [laughing]. So, he said, 'Oh, my friend is getting an [named

games console]; what are going to get me?' This is – to me, it's all getting out of hand, now, the treats and rewards. It really, really is!" (Belfast, Parents, Female)

"They might have something in somebody else's house and then they'll say, 'Look, can we get ...?' If the kids are with you [shopping], like, everything is just, like – when you are not looking into the basket, you get to the conveyor belt and you go, 'Put that back; put that back.'" (Cork, Parents, Male)

Environment-led treat-giving

Individuals described how they provided more treats than they would like to their children, and this overprovision of treat foods was attributed to the food environment. The participants externalised the control (or lack of it) that they felt they had over their treat food-giving behaviour, blaming the convenience and availability of unhealthy foods in combination with low relative cost.

The food environment has changed over time, and has resulted in changes to society's relationship with food, as reflected upon from participants' childhood memories of treats (discussed in "Historical reflections on treats"). Similarly, most participants said that festive periods brought about significant and serious overconsumption of unhealthy food treats, primarily because of society's normalisation and promotion of this behaviour.

Parents felt that it was difficult to manage when bringing their child into a particular food environment. Examples given included going to a sports match where there are fast food outlets; to the cinema, where unhealthy food is available; or to the supermarket, where they reported difficulty in finding a way through this environment without their child requesting foods that parents identified as treats.

"The proliferation of fast food, as well, you know – we are all supposed to be more conscious of our health, but everywhere you go, there's loads of fast-food restaurants." (Cork, Parent, Male)

"I think there's a huge problem, now, with all the pound shops and everything. You can get diabetes with 20 euros ... I think the tray of [named soft drink] for 2 euros, or whatever – there is something seriously wrong. I think they are morally wrong." (Dundalk, Parents, Female)

"You might say, 'Oh, not everybody can afford to go to [named supermarket]', and people might say that, but I think there is something wrong when vegetables cost more than 20 bars of chocolate. That's why we have a problem." (Dundalk, Parents, Female)

"I think regular treats like chocolate for the house, as well – if you go into the supermarket and it's 'buy one, get one free or half price', you would tend to go for them; well, I would, anyway, go towards them." (Belfast, Parents, Female)

"It's so much more frequent. Like you were saying, it *was* a real treat. I just think that there's so much more access [now]." (Dublin, Mixed, Female)

Grandparents' motivations

There was a distinct set of motivations and perceptions surrounding the way in which grandparents provided treats for children. They believed it was their duty to provide treats to their grandchildren, and that it was their "job" to spoil them. This process of providing treat food for their grandchildren creates a positive affect in grandparents and is something they really enjoy.

"Well, on what you said earlier, my kids go over to Nana and she gets a thing of bread and she puts the sugar all the way down the bread with the butter, and you are going, 'Oh my God, don't give them that!' But that's a treat from Nana." (Dublin, Mixed, Male)

"Isn't it actually true that grandparents are supposed to spoil the grandchildren and give them everything that's bad for them?" (Galway, Grandparents, Male)

"They don't have to do anything special to get it." (Galway, Grandparents Female)

"Yeah, it's just part of being there." (Galway, Grandparents Female)

"That's a good point, actually; it is part of the whole attitude towards them." (Galway, Grandparents, Male)

"It's just part of being the grandparent." (Galway, Grandparents Female)

"They feel cared for." (Galway, Grandparents, Female)

Treats are dependent on the age of the child

The groups discussed differences in treat choices and treat-giving contexts depending on the age of the child. Parents reported that younger children tended to be rewarded regularly and appreciated stickers and toys more as treats. This belief was echoed by teachers and crèche practitioners, who reported that younger children would be happy with a pencil or sticker as a treat. Participants who cared for older children suggested that, as a child gets older, they have increased treat choice autonomy – they have the capacity and are allowed to decide for themselves.

"You see, I've probably changed. I would have been – my kids probably would have got biscuits every day when they were younger and, like now, for the same thing: 'Eat your dinner!' But mine are 11 and 14 now, so I don't have to do that." (Dublin, Parents, Female)

"Yeah, no, because I'm just thinking; I'm just realising this now, but we go into [named ice cream shop], we go, 'Right, it's a baby tub for the baby, and then three toppings.' And then the others are picking their own stuff. So, I think, yeah, it's an age thing." (Dublin, Parents, Female)

"Yeah, depending on what age, the small would be satisfied with the [named supermarket own brand juice drink] and whatever, but as they get older that's not going to work." (Limerick, Mixed, Female)

Historical reflections on treats

Participants discussed memories of treats from their own childhood. This provided insight into whether treats have changed over time and how treat-giving was different historically.

Figure 7 provides an overview of the themes that emerged.

Figure 7: Visual representation of focus group participants' historical reflections on treats



Societal shift in treat-giving behaviour

Historical motivations for treat-giving

Older participants, in particular, perceived that their experiences of treats and receipt of treat behaviours as children directly influenced their treat-giving behaviour as adults. Previously, these adults reported experiencing very few treats in their childhood due to lack of availability and relative high cost. They now like to provide plenty of treats, given today's abundant availability and access to these foods, while associating this act with their own memories of enjoying a treat.

Although not expressed explicitly by participants, all themes for this research question could be linked to this experience as a motivational rationale behind adults' treat-giving behaviours.

"Well, I'd say we'll probably do the same, as grandparents, like my own grandfather. I remember very well he spoiled me rotten. So, my father is going to do the same thing." (Cork, Parents, Male)

"We treat them because we weren't treated. We didn't get treats ... We missed out on a lot, because the money wasn't there to treat us, and we could afford it now. We are spoiling them. We're not – we're spoiling them because we didn't get it and we want them to have it." (Derry/Londonderry, Grandparents, Male)

"I think the right answer to that is, 'As often as they deserve them.' But we do give it to them a lot more than they deserve, there's no point in denying that. I think what we want to do is give them what we didn't get." (Enniskillen, Parents, Female)

"Probably something that you didn't get when you were younger, you know what I mean?" (Enniskillen, Parents, Male)

"You want to give your children what you didn't have ... You know, and regardless of what it is, it doesn't necessarily have to be a treat, it could be down to the clothes and toys, you know – everything, everything that you didn't have, you want to give. You want your children to have much better than what you had. Education and everything else, job-wise and everything else." (Enniskillen, Parents, Female)

Consumer society

Perceived changes in society was a major subtheme that formed the basis for discussion on the historical provision of treats. This perception was based upon the belief we have now become a "consumer society". Features of this societal shift are that people now regularly purchase and consume foods that are viewed as treats, such as top-shelf, energy-dense foods; that appreciation for treats has decreased; and that the meaning of treats has changed over time.

The majority of participants reported that society today facilitates increased purchasing of unhealthy foods. This is because of increased convenience (less preparation and cooking time involved), the relatively low cost of such food, and unhealthy foods being more available in the present environment. Many participants reported these factors to be the main promoters of their increased treat-giving behaviour, externalising their control for their own, and wider society's, frequent treat-giving behaviour.

"I think the big difference between treats now and then is the frequency. Treats now, it's almost a treat every day for some children." (Galway, Grandparents, Female)

"They are more readily available now and financially we can afford it now." (Galway, Grandparents, Female)

"And those things are in the house." (Galway, Grandparents, Female)

"That's a fact." (Galway, Grandparents, Male)

"They were never in our house growing up." (Galway, Grandparents, Female)

"No, no. Never." (Galway, Grandparents, Female)

"I often say, 'I think they've a sin to answer for,' because years ago it was, like, 50p for a [named ice cream brand]; you didn't get too many [named ice cream brand]. That was a treat to get the [named ice cream brand], but now you can go in and buy ten of them for a pound." (Female)

"They are more readily available." (Dundalk, Parents, Female)

"But, like, you know there wasn't – we might have got sweets once a week on a Saturday or Sunday, because your parents were so busy working during the week. And they hadn't the money to buy treats. They have more disposable income, now." (Dublin, Mixed, Male)

"Weekend treats"

For the majority of participants, the accounts and stories they recalled from their childhood memories of treats was that treats were given to them at the weekend, and for some this was a weekly occurrence. These occasions were routine based; for example, a treat after going to church on a Sunday, or a parent bringing home a treat after being paid on a Friday. These treats were fondly recalled by participants, sharing their happy memories of the events.

"Our treat on a Saturday night was a bath, sitting in your dressing gown, [named sweet biscuits] and oranges, you know, the big juicy oranges peeled, and the 'boats', we used to call them." (Derry/Londonderry, Grandparents, Female)

"We were treated because it was a Friday. We got the Friday treat, you know, so; but I remember even as far back as nursery school, you know, we had this box, and on a Friday you all – when I was in nursery you went and you picked a treat out of this box ... it was a wee bar of chocolate or a sweet." (Belfast, Parents, Female)

"Yeah, they would be – it was the ritual on the Saturday evening; was more, you know, a van used to come around, and it was a shop, so you'd get your bottle of [named soft drink brand] in the van. And everyone had a bath, and everyone sat around the fire, and then the telly went on ... that was every Saturday night." (Dundalk, Parents, Female)

"When I was at mass, ten-thirty Sunday morning, you'd get money and, you know, go to the shop and buy your treat. So, we always considered mass to [mean] getting a treat." (Limerick, Mixed, Male)

Treats were rare and infrequent

Individuals reflected that treats were rare, for special occasions, out of routine, out of the ordinary or were restricted. Many participants said treats used to cost more, and there was little or poor access to treat foods such as a small bar of chocolate, or fizzy drinks.

"We only ever had treats in the house at Christmas or Easter. We had Easter eggs, the chocolate at Easter and then the [named cereal brand] at Christmas or a selection box; we'd always get a selection box." (Dundalk, Parents, Female)

"I was probably brought up more remote. You know, you couldn't just drive, and things; we didn't have a lot of shops, or Mummy didn't drive, so we didn't get a lot [laughing]. She would have put us on the doorstep, a cup of sugar and some rhubarb [laughing]. That was your treat!" (Enniskillen, Parents, Female)

"Christmas." (Derry/Londonderry, Grandparents, Female)

"Christmas was ..." (Derry/Londonderry, Grandparents Male)

"The only time you got something." (Derry/Londonderry, Grandparents, Female)

"If you had a big family it was the only time you got something." (Derry/Londonderry, Grandparents, Female)

"Apples and oranges and a banana in the bag." [laughing] (Derry/Londonderry, Grandparents, Female)

"There was no pattern, but it would be more infrequent than nowadays. I suppose Christmas and those events stood out more. I remember well, we didn't have birthday parties like they have now, apart from maybe 16, 18 or 21. But beyond that, we didn't have birthday parties every year or anything, so there wouldn't be treats. It would be quite occasionally, and I think I associated it with sweet things and ice cream and lemonade and things like that." (Galway, Grandparents, Male)

Positive affect associated with treats

Most participants, when recalling memories of treats from their childhood, expressed positive emotions and fond reflections. A common association from participants was that treats were special. Detailed accounts of these personal stories evoked positive affect (meaning a happy mood) in many participants. This was particularly clear through their tone of voice and choice of language. Many participants recall that grandparents provided treats.

"Grandparents always had all the junk. They would spoil us." (Male)

"My grandfather, he had a press ... I think they were bull's-eyes [sweets] that were there, but my 2 cousins living on the farm, as I grew up, and they both had false teeth by the time they were in their late 20s! ... I only went there once a year, you know." (Cork, Parents, Male)

"I only had my grandad, the only one, I remember and he had a little shop, you know, a country shop; and he had a little paper bag, and we'd be down, and he'd call you in and he'd put in the bag, [it] was 2 little hard sweets, bull's-eyes, but they were like gold dust. You never got more than 2!" (Galway, Grandparents, Female)

"When the bread man done his rounds, if you got a bun you were ..." (Female)

"Oh, yes, you were swinging!" (Derry/Londonderry, Grandparents, Male)

"There used to be a chip van going around on a Friday or Saturday night. Honest to God, they weren't around then; if I was awake, I'd hear it, and I knew they were getting it, and I'd sneak down and to get a half bag of chips. It was, like, absolutely amazing! And to kids, it's just – they have no idea, you know, really." (Dublin, Parents, Female)

"This fork [granny] had for bread, and they'd toast the bread in front of the fire. And it was great, because that's the nicest toast you'd ever had." (Enniskillen, Parents, Female)

"Real treats"

Focus group participants reported that treats were more significant in the past. Many individuals used the phrase "real treats" to express that certain treats and treating occasions held increased significance with them. This was in comparison with other treats received, and in comparison with the sort of treats given and received today.

This links back to the earlier discussion about the different types of treats, – "real" treats and "regular" treats – suggesting that "real" treats were a rare event that individuals appreciated more. Participants believed that treats today are not what they used to be, and that this change has been driven by a shift in societal culture.

"Sweets are bought as part of the weekly shop, now." (Cork, Parents, Male)

"[It has] just become more normal, whereas they used to be a bit more of a treat." (Cork, Parents, Male)

"I remember, there was 5 of us in the family, and my father would go down to [named shop] and he'd buy a packet of [named crisp brand] for the 5 of us. And it was, like, 'Oh my God!' That was a treat. That was it, like!" (Cork, Mixed, Female)

"At the time, you only got chocolate at Easter – an Easter egg, there was no [named chocolate brand] bars or treats." (Cork, Mixed, Male)

"Different times." (Cork, Mixed, Male)

"So, if I think back to when we got treats, we could nearly taste the stuff before you'd even get it. So, it was a real treat. It was different." (Dublin, Mixed, Female)

"But, back then, there wasn't as much variety, so you knew when you got something it was a treat." (Enniskillen, Female)

Perception that children today do not appreciate treats

Participants perceived that children today were spoilt and do not appreciate treats. They said that treats now do not hold significant value to children, expressing that they are expected and that children are exposed to too many treats.

This discussion revealed discontentment and frustration in many individuals, with participants reflecting that they had high regard for treats when they were children, compared with children today.

"They don't appreciate it the way we did. Doesn't give them satisfaction." (Dublin, Parents, Female)

"It's just they get it all the time, so it's not like a satisfying feeling because they just *get*. I remember being satisfied, and I'd say my mother and father would be delighted to give it to us because we were appreciative of it. We really were." (Dublin, Parents, Female)

"Do you know, it felt actually – not, like, special, but *important*, like [group agreement], and the kids will have none of that. Unless their treat is a €500 phone, or something, you know? Then my child would think he got a treat, you know?" (Dublin, Parents, Female)

"Yeah, so, as kids we were easy to please because we didn't have anything. So, you know treats were treats; you got them and wouldn't see them again for a while. Whereas kids, now, if you don't give them a fizzy orange, a granny or aunt or someone will. And, actually, they feel entitled to it." (Dublin, Mixed, Male)

"I don't know, but that treat thing has gone off the market with the kids; well, for my kids – they wouldn't know what a treat is. Our treat, our experience of a treat, *everything* was a treat. There's no comparison today." (Enniskillen, Parents, Male)

"We probably didn't ask for treats, you know. You didn't expect anything, so when you got something, it was enormous." (Dundalk, Parents, Female)

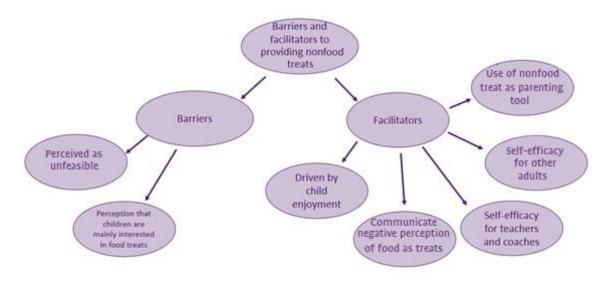
"The times are definitely changed. A treat really was a treat, and it was something like Christmas time, the [named cereal brand], that was our treat, and that would just stand out in my mind." (Dundalk, Parents, Female)

Barriers and facilitators to using non-food treats

Exploration of this research question identified the environmental and social cues that may trigger treat food provision (Figure 8). The main barriers were the perceived effort of using non-food treats and that children would not be responsive to them.

Individuals who reported using non-food treats appeared to have high levels of self-efficacy and believed that children would positively engage with non-food treats. Some participants had knowledge and awareness of the negative health effects of unhealthy food treats and this belief motivated them to use non-food treats. Others, although they did not report using non-food treats, acknowledged that regular or frequent provision of treat foods may be ineffective.

Figure 8: Visual representation of barriers and facilitators to using non-food treats



Barriers

Non-food treats are perceived as unfeasible

Participants reported several functional barriers that they believed prevented them from using non-food treats. It was perceived that non-food treats were expensive, difficult to organise, impractical or hard to work into a routine. Also, given that treats are often used as a means of behavioural control, many adults suggest that the immediate nature of food offers a quick and easy solution to managing children's behaviour.

"Trips out are becoming a problem in primary schools, with the supervision; if you have a parent with you, they have to be Garda vetted, now. So, the principal has this 1-to-5 ratio, so if you are going anywhere you need 6 parents with you, and they all need to be Garda vetted." (Dublin, Mixed, Male)

"That takes time." (Dublin, Mixed, Male)

"So, it just borders on impossible, like, you know. It takes a long time to get Garda vetted, as well." (Dublin, Mixed, Male)

"But then, who's paying for the pencils and cinema tickets? Because the treats normally come out of the teachers' pockets. So the treats are cheaper. They are not going to be buying pencils and cinema tickets if they are going to be at a loss of money every week, like." (Limerick, Mixed, Male)

"But even to go swimming or that, now, it's very expensive." (Female)

"That's it. It's your time and your effort." (Enniskillen, Parents)

"Because sometimes it has to be immediate, so, you know, for whatever reasons. So, for me, the immediacy of it has to be – is mainly covered by the chocolate." (Belfast, Parents, Female)

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Perception that children are mainly interested in food treats

Food treats were held in high regard by the participants, with many adults indicating that children would be more interested in receiving a food treat.

Within the discussion of non-food treats, there was a perception that child engagement in or response to non-food treats would be poor. The adults also expressed poor motivation or self-efficacy for engaging children in treats that are not food.

"I suppose the hard thing is, with the cinema is, as well, is – I've seen it with the likes of nephews and nieces – it's hard to get them from the door of the cinema into the actual, into where the screen is, while all the profit the cinema is making is from the junk they are selling. Trying to get them past without getting the heads turning." (Cork, Parents, Male)

"Now that I think of it, it's the society. The [older] kids, nowadays – you are saying, like, going to the park or whatever, like. Getting a kid 90% of the time to go to the park ... it's a miracle." (Enniskillen, Parents, Male)

"They won't go to the park when they are teenagers, because they went to the park when they're young; so then they'll start to drink in the park!" (Enniskillen, Parents, Female)

"Now, you know, they are sitting in front of the TV, sitting in front of the [named games console], you know. They are glued." (Enniskillen, Parents, Male)

Facilitators

Self-efficacy for teachers and coaches

Some teachers and crèche practitioners have built the regular use of non-food treats into their teaching or caregiving routine. Sports coaches believed that children consuming regular food treats would compromise their sports training. Teachers were aware of the negative behavioural implications of using sugary food treats in a classroom setting. Teachers believed that younger children would be more accepting of and responsive to small non-food treats as rewards, such as stickers and pencils, and older children would appreciate a homework pass, for example.

It is important to note that these practitioners felt supported by the school environment, which facilitated the use of non-food treats.

"I know in our school we would give, instead of treats, homework passes, where you are given a homework pass, or else pencils or cinema tickets. (Limerick, Mixed, Male)

"Yeah, something personal that they would have as a momentum rather than something that is eaten and just a quick thrill." (Limerick, Mixed, Male)

"I think, I would never offer food as a reward to my class. But an immediate reward probably would be no homework. Something easy and you don't have to buy." (Dublin, Mixed, Male)

Communicating a negative perception of food as treats

Many participants acknowledged the overconsumption of food treats by the children in their care. There was a good understanding that treats were unhealthy, and the conversation suggested that providing these treats to children can make the caregiver feel guilty.

This prompted some suggestions as to how greater awareness about the benefits of non-food treats could be communicated, as a strategy to change treat behaviours. However, this conversation took place with individuals who were observed to have self-efficacy³ and practiced less frequent treat-giving behaviours: they may already have a sound, basic knowledge of the benefits of healthy eating.

"If they knew the damage the actual chocolate is doing and the sweets was doing to your child, I'm sure you would think twice." (Belfast, Parents, Male)

"Like, if there was some campaign or advertisement." (Belfast, Parents, Male)

"So, like, if he – if there's other ways he could be rewarded, you know – I'm looking at home, then, as well, and he's a little overweight and so on, so I'd feel guilty about giving him a reward of cake and so on." (Cork, Mixed, Female)

"Depends on what the treat is. If it's sweets, I don't feel good. But, you know, if it's something that makes them happy and cheers them up, it makes you feel good." (Dundalk, Parents Female)

Non-food treats should be driven by child enjoyment

Given that individuals perceived treats as providing pleasure and something to be enjoyed, it was essential that the non-food treats create the same degree of enjoyment in the child.

This would be an important component to allow adults to engage with a potential change in their treating behaviour in a move away from energy-dense foods towards non-food treats.

"The age group that I would be involved with [younger children] would be stickers, they love stickers at the end of the day. If they are good, they get 2. So, it's a reward, kind of, for good behaviour." (Limerick, Mixed, Female)

"That was when she was younger, for instance when we'd go to the shop or whatever. 'Do you want sweets?' 'No, I want a book.' Because, basically, what was in the book then was the stickers. And then she had her wee stickers on her books and stuff." (Enniskillen, Parents, Male)

"A homework pass or, when they were younger, a pencil or rubber or something; but not sweets." (Dublin, Parents, Male)

³ Self-efficacy was characterised by participants who showed implicit or explict perceptions of self-belief about engaging in a certain behaviour. Participants who possessed self-efficacy displayed knowledge, motivation, and an understanding and application of the impact of HFSS foods and drinks – skills for managing and working with children and their behaviours to use nonfood treats.

"They would take a pencil over chocolate." (Cork, Mixed, Male)

"Exactly, or a sticker, we find – even today they were going, 'I'm getting a sticker today!" (Cork, Mixed, Female)

"Yeah, a sticker." [laughing] (Cork, Mixed, Male)

"Depends on trends. We do a term thing, like. We've challenges in school and a trip out would be the thing to win. And they all want to go to that bouncy place [named trampoline park], because everyone is talking about [named trampoline park]; or they want to go to climbing walls or it's – you know – they are the things that are popular." (Dublin, Mixed, Male)

"A sleepover, I find, is a great treat for them to come for a sleepover." (Galway, Grandparents Male)

"Especially, like, my 2 grandchildren live in Dublin and they come to us occasionally and the biggest treat is sleeping in grandma's bed or grandad's bed." (Galway, Grandparents, Female)

Self-efficacy for other adults

Participants who reported using non-food treats appeared confident and motivated to use them. Many parents reported the regular use of non-food treats, and that they were built into their routine.

Facilitators that contributed to self-efficacy of adults in this situation were: having a positive perception of non-food treats; believing that they are important; and being aware of the benefits they served the child.

"We so have banned sweets, totally against them. Maybe on a Sunday they might get something if we are out for a spin or something, but we'd rather take them to the cinema or something like that, more so than treating them [with sweets]. Or if they do a bit of work for us around the house, we give them a few pound. But we'd make sure they buy a game for that." (Dundalk, Parents, Female)

"I'd say other people [let them] stay up for an extra quarter of an hour or something, you know, rather than giving them food ... I'd say, 'Look, I'll give you 15 minutes extra. You can stay up and look on [named video sharing website], or whatever.'" (Cork, Parents, Male)

"Like what he was saying there, you know: the lads might say, 'Listen, I'll go out and kick the ball with you for 20 minutes,' probably as much as I can keep up with them [laughing]. But, yeah, you enjoy that because, you know, you come home from work and you are wrecked and, you know, you'll say, 'Okay, lads, how did you get on in school?' 'We did well.' 'Okay, we'll go out and kick the ball for 20 minutes.'" (Cork, Parents, Male)

"And the cinema is grand, but you don't have to load them up in [named fast food restaurant] beforehand and then have a massive bucket of popcorn on the way in and do all, you know; just try and keep it simple, so they enjoy it for what it is rather than expect it all the time." (Cork, Parents, Male)

Use of non-food treats as a parenting tool or behavioural aid

When a non-food treat is desired and respected by a child, many parents reported that they use this treat as an effective tool for managing their child's behaviour. The child's preference for a particular non-food treat may be a motivating factor for repeated use as a treat by parents, as it provides a functional aid for their parenting style.

"Yeah, it's like stickers or something that he'd really just, you know, his eyes light up with – so, for example now, if he tells us he needs to go potty ... And we are all, 'Yay! Sticker!' ... to reinforce it as a positive thing ... it doesn't always have to be food." (Cork, Parents, Male)

"And then I have the park as a treat, as well; so if they are being bold, I tell them they can't go to the park, or if they were good, they can go." (Dublin, Parents, Female)

"My treat would be, like, the kids going up the cycling track, and I'd load up the bikes, like, and if there's any misbehaving or something like that it's, like, 'No, not going ... you know homework has to be done, everything has to be done." (Dublin, Parents, Female)

"We just use a jar of marbles. So, when they do their chores at home, they get marbles, so many marbles for each chore. So when they fill the jar they'll get a fiver. So then they can spend the fiver on whatever they want. But they are not keen to spend their money on sweets; they'll go in and buy maybe one of those fidget spinners or something in the pound shop, but they won't spend their money on crap." (Dundalk, Parents, Female)

Focus groups results summary

- Participants considered treats to be rare, something that is deserved and something that provides pleasure and enjoyment, and HFSS foods were central to the definition of a treat.
- This definition, proposed by participants, appears to have its origins in the behaviours of previous generations, when treats were rare due to high relative cost and lack of availability. This meant that treats held significance in the past and were a special and memorable event when they were received by a child.
- However, given changes in modern society, foods previously considered a treat are now readily available at a relatively low cost.
- Participants reported providing too many unhealthy food treats to the children in their care. The contexts and motivations through which treat foods are provided are often led by the adult, and driven by social norms and the food environment.
- Justification was a major theme of the focus group research phase. It was related to the context in
 which treats were consumed or provided. It is also central to the definition of a treat, in that a treat
 is easily justified. Participants felt they were able to justify consuming and providing treats. There
 was implicit and explicit expression that this was because individuals were aware that treats were
 unhealthy but, since they provided such pleasure, individuals were able to justify "deserving"
 them because they were a reward, or because they were earned.

• Overall, it can be concluded from the focus group data that most individuals perceive that a shift in treat-giving behaviour has occurred as a result of the change in the nature of the food environment over recent decades. Individuals have held on to their childhood definition of a treat, which is not in keeping with the current societal value of food or the current food environment.

A note on "snacking"

Although participants reported that snacks should be energy-dense in the context of managing hunger, for example before or after sports, lighter options were considered when snacks were eaten as part of a routine. An interesting observation was that individuals used the words "lighter" to mean that such snack foods are "healthy". However, this was not always the case; for example, a participant stating that crisps were a lighter snack than a banana.

Survey methods

The overall aim of the survey was to obtain quantitative (that is, measurable) data of adults' treat-giving behaviour on the IOI,

- To identify the extent to which children receive treat foods from adults: how often and in what context treats were given
- To further understand adults' choice of treats
- To compare different adult groups' treat-giving behaviour
- To examine the influence of sociodemographic factors on parents' treat-giving

This new knowledge may help to develop targeted strategies to encourage different groups to modify their habitual treat food behaviour.

Recruitment criteria for survey participants

A search for adults (people aged 18 and above) who lived on the IOI and had responsibilities in rearing children aged between 2 and 17 was conducted. Grandparents were eligible to participate if they saw one or all of their grandchildren at least fortnightly.

"Quota sampling" was employed, which aims to match the proportions of the whole population rather than surveying a random selection of people. The quotas included

- Geographic area (Republic of Ireland = 75% of the sample, Northern Ireland = 25%)
- Family role (parents = 60% of the sample, grandparents = 20%)
- Crèche or preschool carers, childminders, teachers and sports coaches (20% of the sample)
- Gender (females = 60% of the sample, males = 40%)
- Socioeconomic status (ABC1s = 40% of the sample, C2DEs = 60%).

Participants were recruited from 104 sampling districts across the IOI. Based on power calculation, a sample size of 1,000 (around 10 participants per sampling point) was considered to be sufficient to estimate the behavioural patterns of the whole population and the three subgroups of parents, grandparents and other adults.

Survey administration and data collection

The survey was administered by professional fieldworkers through face-to-face interviews in participants' homes, using computer assisted personal interviewing (CAPI) technology. Each interviewer was given one or more sampling districts. They selected a street within that district and attempted to interview a person at every third house until the quotas were filled and they had completed the 10 interviews. The fieldwork was conducted between October 2017 and January 2018.

The questionnaire (in Appendix 6) was designed based on existing relevant literature (22, 33-35) and findings from the focus group study. Four different sections addressed:

- Adults' definition of treats.
- Motivations and occasions for treat food provision
- Overall frequency of treat food provision to children
- Type of treats used and the most used treats.

Additional measures were also included that explored

- Adults' emotions and perceptions attached to treat-giving
- The influence of sociodemographic factors on parents' treat-giving.

The questionnaire was tested and refined in 2 pilot tests.

Data analysis

The study sample population (total number, or "N" = 1,039) was made up of

- Parents (number in this group, or "n" = 651, 62.6%)
- Grandparents (n = 210, 20.2%)
- Childminders (n = 61, 5.9%)
- Education practitioners, such as nursery practitioners, teachers and sports coaches (n = 117, 11.3%).

Both females (n = 634, 61.0%) and males (n = 404, 38.9%) were represented from both the ROI (n = 789, 75.9%) and NI (n = 250, 24.1%). Almost all counties within the IOI were represented within the study. (A map of the geographic distribution of participants is in Appendix 7.)The differences in urban and rural populations for the regions were close to the population-level statistics (36, 37). Participants' characteristics are detailed in Appendix 8.All statistical analyses were conducted using IBM SPSS® software. Pearson Chi-square tests were used to examine differences across groups. (These tests assess how likely it is any differences observed in the data could have arisen by chance.)A series of univariate logistic regression analyses were used to examine the impact of sociodemographic factors on parents' treat food practices.

Survey results

Adults' definition of treats for children

Participants were asked to choose up to 3 terms from a list of possible terms to define a treat for children. The results of their choices are shown in Figure 9.

• Participants primarily defined a treat for children as "something nice" (45.2%), followed by "deserved or earned" (35.1%), "something special" (32.7%) and "fun" (27.6%).

- Treats were less frequently defined by cost (23.1% selected "affordable" and 3% "expensive"); size (1.4% selected "big" and 22.7% "small"); or nutrition (16.6% selected "healthy" and 4.1% "unhealthy or bad for you").
- Terms indicating spoiling, bribery and low frequency of treating (12.7% selected "usually forbidden" and 8.3% "rare") were rarely chosen.

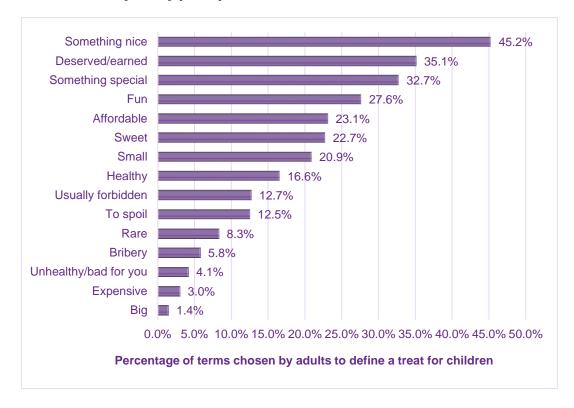


Figure 9: Terms chosen by survey participants to define a treat for children

The definition of a treat varied between groups of respondents (Figure 10).

- Education practitioners favoured "deserved or earned" (42.7%); were less likely to define treats as "something nice" (23.1%); and were more likely to consider them "rare" (21.4%).
- Interestingly, "to spoil" was among the top 4 terms used by childminders (27.9%), but was less frequently selected by other respondents, including grandparents (18.6%).

The complete results of terms that different groups of participants selected to define treats for children is in Appendix 9.

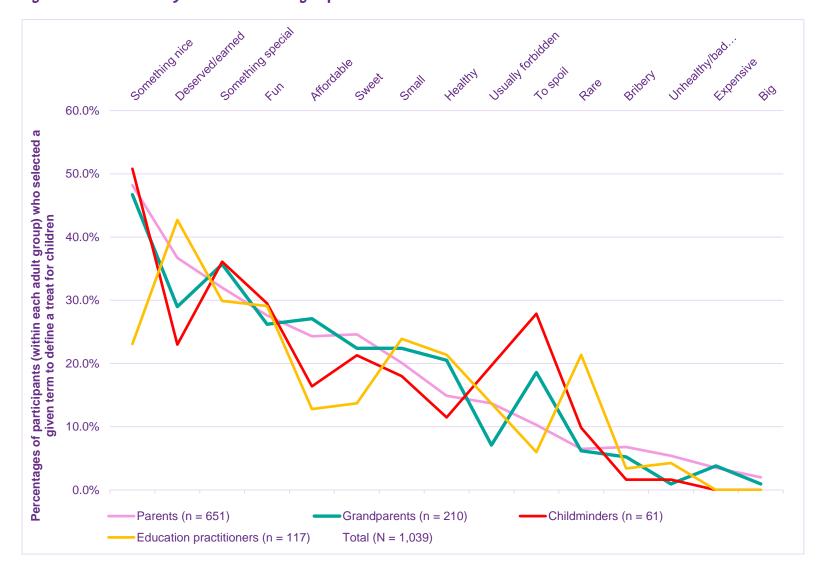


Figure 10: Terms chosen by the different adult groups to define a treat for children

Motivations and occasions for treat food provision

In relation to their motivations, participants were first asked about whether they provided treat foods in a particular context. For example, a participant would be asked, "Would you use treat foods to reward a child's or children's behaviour?". If the participant answered "yes", they were then asked about treat food provision frequencies (that is, how often this happens). Results are shown in Figure 11.

- Participants primarily offered treat foods "to reward good behaviour" (42.3%) and "because the child asked" (42.2%), followed by "to make the child feel better" (29.4%) and "to encourage eating of dinner or healthy foods" (26.2%).
- Treat foods were least used for occupying the children (14.4%), and gaining affection (12.8%).
- Nearly all participants (92.0%) reported that they would give treat foods to children at celebrations, and 52.5% always did so.
- More than two-thirds of participants had structured weekly (64.7%) and/or daily treat foods (22.6%) for children. (A "structured weekly treat" referred to a "Friday treat", "weekend treat", or any habitual "treat day" within a week. A "structured daily treat" referred to an "after-school treat", after "meal treat", or any other scheduled treat-giving on a daily basis.)

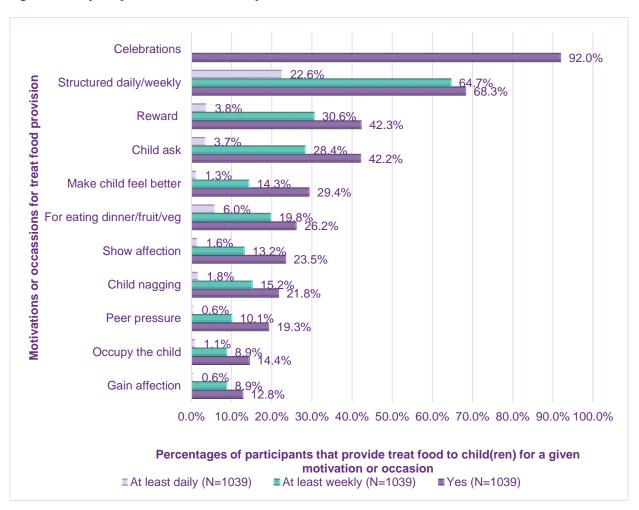


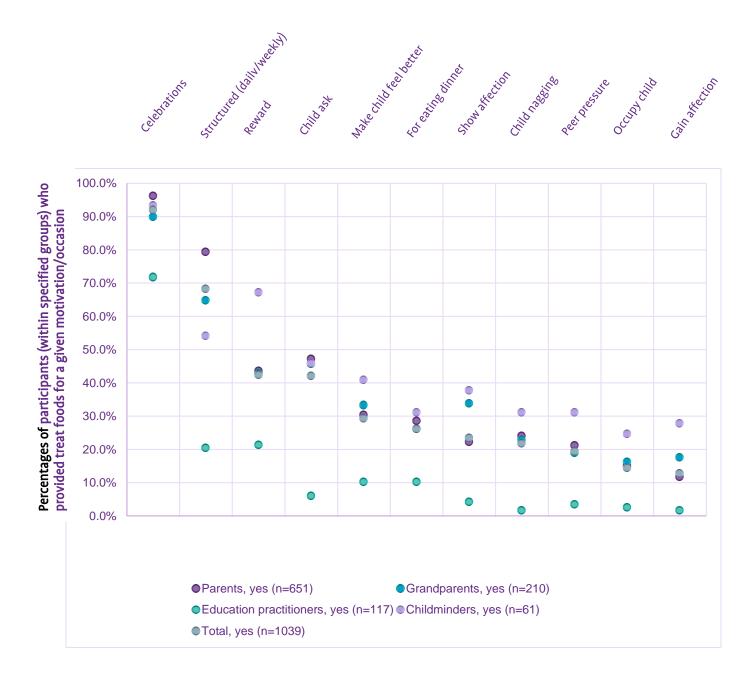
Figure 11: Frequency of adults' treat food provisions for each motivation or occasion

Treat-giving behaviour varied between groups (Figure 12).

- Teachers and crèche practitioners did far less treat-giving than other groups (21.4% provided treats as a reward compared to 67.2% childminders).
- Parents were more likely to provide structured weekly treats (75.7%)
- Childminders were more likely to provide treat foods to reward the child (67.2%, and 52.5% at least weekly) and to make the child feel better (41.0%).
- Childminders (37.7%) and grandparents (33.8%) were more likely than parents (22.3%) to use treat foods to show love or care.

The complete results of motivations and occasions for participants' treat provision are in Appendix 10.

Figure 12: Variations between the different adult groups' motivations and occasions for treat provision



48

Overall frequency of adults' treat food provision

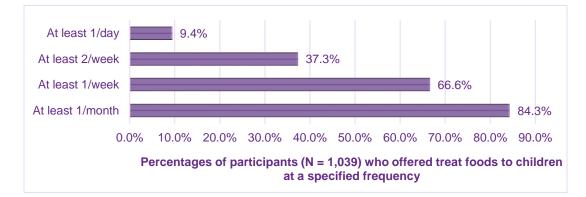
• Overall, two-thirds (66.6%) of participants gave treat foods to children at least weekly, 37.3% at least twice a week and around 10% on a daily basis (Figure 13).

Large variations were found across the participants (Figure 14).

- Parents provided treat foods most often, with 78.5% of them doing so at least once a week.
- Educational practitioners gave treat foods least often, with 18.1% providing them at least once a week.

The complete results of overall frequency of participants' treat provision are in Appendix 11.

Figure 13: Overall frequency of survey participants' treat food provision



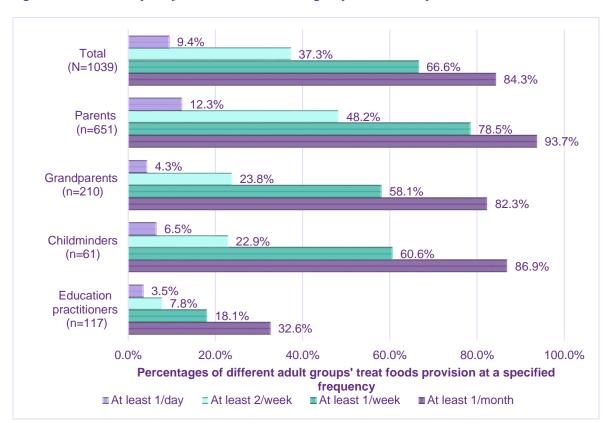


Figure 14: Overall frequency of the different adult groups' treat food provision

Influence of sociodemographic factors on frequency of parents' treat food provision

Overall, the age of the child had the biggest influence: primary school-aged children received treat foods from caregivers most often.

- Other significant influencers included sociodemographic factors such as the parents' education; the household income; the main income earner's occupation; the parents' age; the size of the family; and the perceived weight status of the child.
- Factors such as gender, whether the family lived in an urban or rural area, and the parents' weight, had very little influence on treat-giving.
- Different behaviours were influenced by sociodemographic factors differently. For instance:
 - Treat food provision triggered by the "child asking" was associated with a perceived overweight or obese child.
 - Treating as a "reward" or because of "peer pressure" was associated with younger parents and younger children.
 - Structured daily or weekly treats were provided more among primary school children and families with lower SES (measured by the occupation of the main earner in the family).
- In general, a higher overall frequency of treat food provision was linked to younger parents, primary school-aged children and a bigger family size.

The influence of sociodemographic factors on parents' provision of treats (based on based on results from univariate regression analysis) are shown in Table 2.

| | | Child | Ask | Rew | ard | Emotion | Control | Eating Dinner | |
|---------------------------------------|-----|-------|-----------------|-------------------|------|----------------|---------|-------------------|------|
| Characteristics ¹ | Ν | %² | OR ³ | % | OR | % | OR | % | OR |
| Age (years) | | | | | ** | | | | |
| 18-34 | 172 | 48.8 | | 52.3 [♭] | 1.00 | 29.1 | | 37.2 | |
| 35-44 | 327 | 47.7 | | 43·7 ^b | 0.71 | 32.7 | | 26.6 | |
| 45 and above | 152 | 44.1 | | 33.6ª | 0.46 | 27.0 | | 23.0 | |
| Living Area | | | | | | | | | * |
| Urban or Suburban | 447 | 48.1 | | 44.3 | | 31.8 | | 26.2 | 1.00 |
| Rural | 204 | 45.1 | | 42.2 | | 27.5 | | 33.8 | 1.44 |
| Education Completed | | | | | | | | | |
| Beyond Secondary | 322 | 44.1 | | 41.9 | | 30.7 | | 28.0 | |
| Secondary or Lower | 322 | 50.3 | | 44.7 | | 30.1 | | 29.2 | |
| Number of Children | | | | | | | | | |
| 1 Maria Than a | 194 | 47.4 | | 41.2 | | 25.8 | | 24.2 | |
| More Than 1 Occupation of Main | 457 | 47.0 | | 44.6 | | 32.4 | | 30.4 | |
| Income Earner (SES) | | | | | | | | | |
| ABC1 | 294 | 44.6 | | 43.9 | | 31.3 | | 26.2 | |
| C2DE | 357 | 49.3 | | 43.4 | | 29.7 | | 30.5 | |
| Perceived Current Household Income | | | | | | | | | |
| Comfortable | 283 | 44.5 | | 41.7 | | 29.7 | | 27.2 | |
| Uncomfortable | 362 | 49.7 | | 45.0 | | 31.2 | | 29.8 | |
| Perceived Weight | | | | | | | | | |
| Thin or Normal | 443 | 47.4 | | 44.7 | | 30.5 | | 30.2 | |
| Heavy | 208 | 46.6 | | 41.3 | | 30.3 | | 25.0 | |
| Gender of Child | | | | | | | ** | | |
| Female | 303 | 45.5 | | 45.2 | | 35.6 | 1.00 | 28.1 | |
| Male | 348 | 48.6 | | 42.2 | | 25.9 | 0.63 | 29.0 | |
| Age of Child (Years) | | | | | ** | | * | | ** |
| Preschool (2–4) | 147 | 39.5 | | 48.3 ^b | 1.00 | 25.2ª | 1.00 | 31.3 [♭] | 1.00 |
| Primary School (5–12) | 360 | 50.8 | | 46.9 [♭] | 0.95 | 34 ∙ 7⁵ | 1.58 | 32.5 ⁵ | 1.06 |
| Secondary School | 144 | 45.8 | | 30.6ª | 0.47 | 25.0ª | 0.99 | 16.0ª | 0.42 |
| (13–17) | | | | | | | | | |

Table 2: Influence of sociodemographic factors on reasons for parents' treat food provision

| Perceived Weight of Child | | | * | | | * | | |
|------------------------------|-----|------|------|------|------|------|------|--|
| Thin or Normal | 609 | 45.8 | 1.00 | 43.0 | 29.2 | 1.00 | 28.9 | |
| Heavy | 42 | 66.7 | 2.37 | 52.4 | 47.6 | 2.20 | 23.8 | |

Table 2 continued:

| | | Child Na | gging | Show Af | ffection | Peer Pr | essure | Occ | upy |
|---|-----|----------|-----------------|---------|----------|-------------------|--------|------|------|
| Characteristics ¹ | Ν | %² | OR ³ | % | OR | % | OR | % | OR |
| Age (Years) | | | | | | | *** | | |
| 18-34 | 172 | 25.0 | | 21.5 | | 24.4 ^b | 1.00 | 15.7 | |
| 35-44 | 327 | 26.3 | | 22.3 | | 25.1 ^b | 1.04 | 16.5 | |
| 45 and above | 152 | 18.4 | | 23.0 | | 9.2ª | 0.31 | 11.2 | |
| Living Area | | | | | | | | | |
| Urban or Suburban | 447 | 24.8 | | 23.3 | | 22.1 | | 14.8 | |
| Rural | 204 | 22.5 | | 20.1 | | 19.1 | | 15.7 | |
| Education Completed | | | * | | | | | | * |
| Beyond Secondary | 322 | 20.8 | 1.00 | 20.5 | | 19.6 | | 11.8 | 1.00 |
| Secondary or Lower | 322 | 27.6 | 1.45 | 23.6 | | 23.3 | | 18.3 | 1.68 |
| Number of Children | | | | | * | | | | |
| 1 | 194 | 24.7 | | 28.4 | 1.00 | 21.1 | | 15.5 | |
| More Than 1 | 457 | 23.9 | | 19.7 | 0.62 | 21.2 | | 14.9 | |
| Occupation of Main Income Earner (SES) | | | | | | | | | ** |
| ABC1 | 294 | 23.5 | | 20.7 | | 20.4 | | 10.5 | 1.00 |
| C2DE | 357 | 24.6 | | 23.5 | | 21.8 | | 18.8 | 1.96 |
| Perceived Current Household income | | | ** | | | | | | ** |
| Comfortable | 283 | 19.1 | 1.00 | 21.9 | | 19.1 | | 9.9 | 1.00 |
| Uncomfortable | 362 | 28.2 | 1.67 | 22.9 | | 22.9 | | 19.3 | 2.18 |
| Perceived Weight | | | | | | | | | |
| Thin or Normal | 443 | 25.1 | | 21.4 | | 23.0 | | 16.3 | |
| Heavy | 208 | 22.1 | | 24.0 | | 17.3 | | 12.5 | |
| Gender of Child | | | | | | | | | |
| Female | 303 | 24.8 | | 24.1 | | 24.4 | | 15.8 | |
| Male | 348 | 23.6 | | 20.7 | | 18.4 | | 14.4 | |
| Age of Child (Years) | | | * | | | | *** | | |

| Preschool (2–4) | 147 | 21.8 ^{a,b} | 1.00 | 19.7 | 19.7 ^b | 1.00 | 15.6 | |
|-----------------------------|-----|---------------------|------|------|-------------------|------|------|--|
| Primary School (5–12) | 360 | 28.1 ^b | 1.40 | 25.3 | 26.4 ^b | 1.46 | 16.7 | |
| Secondary School (13–17) | 144 | 16.7ª | 0.72 | 17.4 | 9.7ª | 0.44 | 10.4 | |
| Perceived Weight of Child | | | | | | | | |
| Thin or Normal | 609 | 23.6 | | 21.5 | 21.2 | | 14.6 | |
| Heavy | 42 | 31.0 | | 33.3 | 21.4 | | 21.4 | |

| | | | ain ction | Celebra | ation | Wee Trea | | Daily 1 | Freat |
|---|-----|------|-----------------|----------------------------|-------|----------------------------|------|----------------------------|-------|
| Characteristics ¹ | n | %² | OR ³ | % | OR | % | OR | % | OR |
| Age (Years) | | | | | | | | | |
| 18-34 | 172 | 12.8 | | 95.3 | | 74.4 | | 27.3 | |
| 35-44 | 327 | 11.3 | | 96.3 | | 76.1 | | 27.2 | |
| 45 and above | 152 | 11.8 | | 96.7 | | 76.3 | | 25.0 | |
| Living Area | | | | | | | | | |
| Urban or Suburban | 447 | 12.8 | | 95.7 | | 75.2 | | 26.8 | |
| Rural | 204 | 9.8 | | 97.1 | | 77.0 | | 26.5 | |
| Education Completed | | | * | | | | | | *** |
| Beyond Secondary | 322 | 9.0 | 1.00 | 97.2 | | 74.2 | | 20.2 | 1.00 |
| Secondary or Lower | 322 | 14.3 | 1.68 | 95.3 | | 77.6 | | 33.2 | 1.97 |
| Number of Children | | | | | | | ** | | |
| 1 | 194 | 11.9 | | 94.8 | | 68.0 | 1.00 | 22.7 | |
| More Than 1 | 457 | 11.8 | | 96.7 | | 79.0 | 1.77 | 28.4 | |
| Occupation of Main Income Earner (SES) | | | | | | | | | *** |
| ABC1 | 294 | 10.9 | | 96.3 | | 72.1 | | 20.1 | 1.00 |
| C2DE | 357 | 12.6 | | 96.1 | | 78.7 | | 32.2 | 1.89 |
| Perceived Current Household Income | | | | | * | | ** | | * |
| Comfortable | 283 | 9.9 | | 97.9 | 1.00 | 71.4 | 1.00 | 23.0 | 1.00 |
| Uncomfortable | 362 | 13.5 | | 94.8 | 0.39 | 80.1 | 1.62 | 30.1 | 1.44 |
| Perceived Weight | | | | | | | | | ** |
| Thin or Normal | 443 | 13.3 | | 96.2 | | 75.6 | | 30.5 | 1.00 |
| Неаvy | 208 | 8.7 | | 96.2 | | 76.0 | | 18.8 | 0.53 |
| Gender of Child | | | | | | | | | |
| Female | 303 | 10.9 | | 97.4 | | 77.2 | | 26.7 | |
| Male | 348 | 12.6 | | 95.1 | | 74.4 | | 26.7 | |
| Age of Child | | | | | * | | ** | | ** |
| Preschool (2–4) | 147 | 11.6 | | 92.5° | 1.00 | 67.3ª | 1.00 | 17.7 ^ª | 1.00 |
| Primary School (5–12) | 360 | 12.8 | | 97.8 [♭] | 3.56 | 80.0 ^b | 1.94 | 31.1 ^b | 2.10 |
| Secondary School (13–17) | 144 | 9.7 | | 95.8 ^{a,b} | 1.86 | 73.6 ^{a,b} | 1.35 | 25.0 ^{a,b} | 1.55 |
| Perceived Weight of Child | | | | | | | | | |

Table 2 continued:

| Thin or Normal | 609 | 11.5 | 95.9 | 76.0 | 26.1 | |
|----------------|-----|------|-------|------|------|--|
| Heavy | 42 | 16.7 | 100.0 | 71.4 | 35.7 | |

Table 2 continued:

| Table 2 continued. | | Overall Treat Provision Weekly or More Often | | | at Provision Aore Often |
|---|-----|--|-----------------|---------------------|----------------------------|
| Characteristics ¹ | Ν | %² | OR ³ | % | OR |
| Age | | | | | * |
| 18-34 | 172 | 78.5 | | 17.4 ^b | 1.00 |
| 35-44 | 327 | 78.0 | | 12.2 ^{a,b} | 0.66 |
| 45 and above | 152 | 79.6 | | 6.6 ª | 0.33 |
| Living Area | | | | | |
| Urban or Suburban | 447 | 78.3 | | 12.8 | |
| Rural | 204 | 78.9 | | 11.3 | |
| Education Completed | | | | | |
| Beyond Secondary | 322 | | | | |
| Secondary or Lower | 322 | | | | |
| Number of Children | | | *** | | * |
| 1 | 194 | 69.6 | 1.00 | 7.2 | 1.00 |
| More Than 1 | 457 | 82.3 | 2.03 | 14.4 | 2.17 |
| Occupation of Main Income Earner (SES) | | | | | |
| ABC1 | 294 | 78.6 | | 10.5 | |
| C2DE | 357 | 78.4 | | 13.7 | |
| Perceived Current Household Income | | | | | |
| Comfortable | 283 | 78.8 | | 13.1 | |
| Uncomfortable | 362 | 79.3 | | 11.9 | |
| Perceived Weight | | | | | |
| Thin or Normal | 443 | 77.4 | | 13.1 | |
| Heavy | 208 | 80.8 | | 10.6 | |
| Gender of Child | | | | | |
| Female | 303 | 79.2 | | 10.2 | |
| Male | 348 | 77.9 | | 14.1 | |
| Age of Child | | | | | * |
| Preschool (2–4) | 147 | 74.8 | | 7.5ª | 1.00 |
| Primary School (5–12) | 360 | 81.4 | | 15.3 ^b | 2.23 |
| Secondary School (13– 17) | 144 | 75.0 | | 9.7 ^{a,b} | 1.33 |
| Perceived Weight of Child | | | | | |

| Thin or Normal | 609 | 78.5 | 12.0 | |
|----------------|-----|------|------|--|
| Heavy | 42 | 78.6 | 16.7 | |

¹The gender of the participants was not included in the table because, according to the results, there was no significant difference found between females and males in any of the measurements.

² This column shows the percentage of participants who indicated "yes" to the specified treat food provision behaviour, such as "to reward" or "because the child asks".

³ This column shows "odds ratios" from the regression analysis, showing (in comparison with the reference group, which is labelled as "1.00") how much more or less likely the group is to have certain behaviour. The P (Probability) Value helps indicate whether the results are significant or not. P<0.05 is significant while P>0.05 is not significant. *P<0.05, ** P<0.01, ***P<0.001

Type of treats adults choose for children

Participants were asked to choose items they provided as treats for children. Results are in Figure 15.

- Sweets (45.2%) and chocolates (45.1%) were the most popular treats, followed by ice cream (38.8%), time on screen (31.2%), crisps (31.1%), takeaways and fast foods (29.3%) and biscuits (29.0%).
- Slightly over one-quarter of participants reported using healthier options, such as fruit (27.2%) and trips out (25.9%) as treats for children.

Participants were asked to indicate the treat they provided most often.

• A majority (57.8%) opted for unhealthy foods, rather than non-food treats (24.4%) and healthy foods (14.8%).

Significant differences were observed across the adult groups (Figure 16). For instance,

- Money was particularly favoured by grandparents (36.2%).
- In contrast to other groups, education practitioners used less treats for children. Fruit (27.4%) and stickers or stationery (27.4%) were among their top treats; however, unhealthy choices such as sweets (37.6%), chocolates (23.9%) and time on screens (23.1%) were equally favoured by them.

The complete results of items that adults chose as treats for children are in Appendix 12.



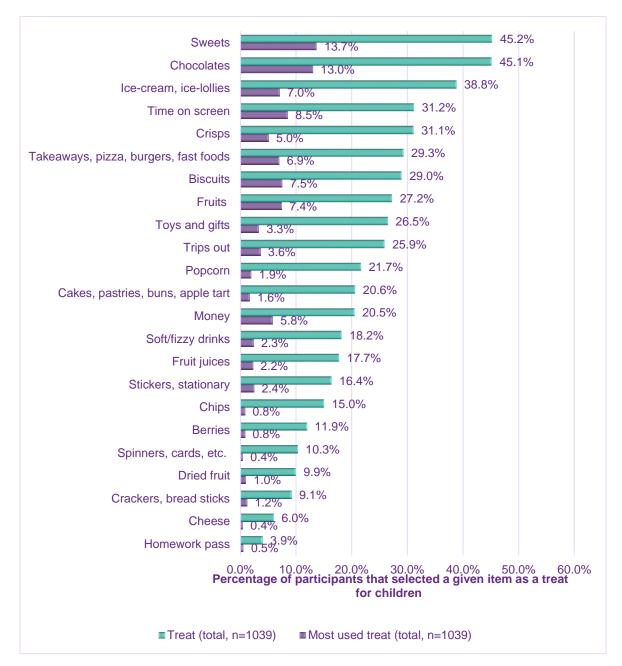
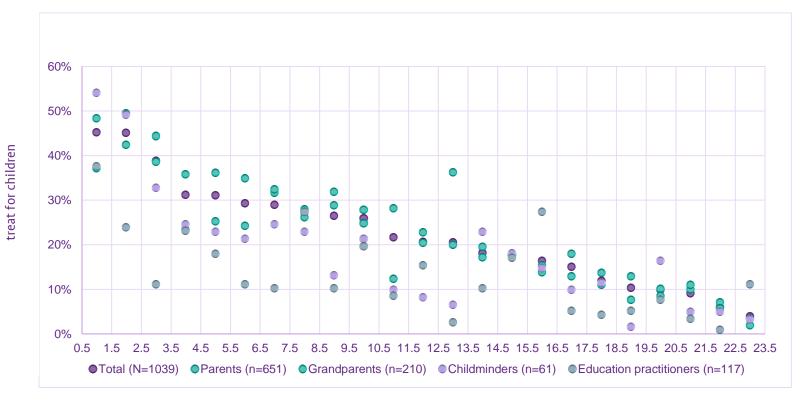




Figure 16: Variations between the types of treats that different adult groups chose for children



Percentages of participants who would use a given item as a

Influence of sociodemographic factors on parents' choice of treats for children

The age of the child and socioeconomic factors demonstrated the biggest influence on parents' choice of treats.

- Parents' treat foods for preschool children were much healthier than for older children.
 - Fruit, berries, dried fruit and cheese were used more often as treats for preschool children
 - Takeaways and fast foods, popcorn, soft fizzy drinks and chips (meaning fingershaped potato pieces that have been deep-fried and served hot) were provided less often as treats for the younger children (Table 2).
- Parents with higher SES were more likely to report using certain unhealthy items (chocolates, ice cream or lollies, biscuits, cakes and pastries) and certain healthy items (fruits, berries, dried fruit, crackers and bread sticks) as treats.
- In comparison, those with lower SES were more likely to use takeaways or fast foods and soft still or fizzy drinks as treats for children.
- It is also worth noting that takeaways or fast foods were used more often as treats for children who are perceived as overweight by their parents (61.9%) than for thin or normal-weight children (33.0%).

The influence of sociodemographic factors on parents' choice of treats for children (based on univariate regression analysis) is shown in Table 3.

| | Choco | olates | Swe | ets | Ice Creat | m or Ice ies | Takeawa Foods an | | Bisc | uits | Рорс | orn | Fru | its |
|---------------------|----------------|-----------------|------|------|-----------|-----------------|---------------------|----|------|------|------|-----|------|------|
| Characteristics | % ¹ | OR ² | % | OR | % | OR | % | OR | % | OR | % | OR | % | OR |
| Gender | | | | | | | | | | | | | | |
| Female | 47.7 | | 48.7 | | 44.6 | | 34.4 | | 31.5 | | 30.0 | | 28.1 | |
| Male | 52.5 | | 47.9 | | 44.1 | | 35.7 | | 31.9 | | 24.8 | | 27.7 | |
| Age (Years) | | | | | | | | | | | | | | |
| 18-34 | 51.7 | | 49.4 | | 47.7 | | 31.4 | | 35.5 | | 27.9 | | 29.7 | |
| 35–44 | 48.9 | | 48.3 | | 44.0 | | 34.9 | | 31.8 | | 29.7 | | 29.7 | |
| 45 and above | 48.0 | | 47.4 | | 41.4 | | 38.8 | | 27.0 | | 25.0 | | 22.4 | |
| Living Area | | | | ** | | | | | | | | | | |
| Urban or Suburban | 47.9 | | 44.3 | 1.00 | 42.1 | | 34.2 | | 30.0 | | 26.0 | | 26.2 | |
| Rural | 52.9 | | 57.4 | 1.69 | 49.5 | | 36.3 | | 35.3 | | 32.8 | | 31.9 | |
| Education Completed | | | | | | * | | | | * | | | | ** |
| Beyond Secondary | 50.3 | | 48.8 | | 49.7 | 1.00 | 31.7 | | 35.4 | 1.00 | 30.1 | | 33.9 | 1.00 |
| Secondary or Lower | 49.1 | | 48.1 | | 39.8 | 0.67 | 37.9 | | 27.6 | 0.70 | 26.1 | | 22.4 | 0.56 |
| Number of Children | | | | | | | | | | | | | | |
| 1 | 49.0 | | 47.9 | | 40.2 | | 30.4 | | 27.8 | | 26.3 | | 28.4 | |
| More Than 1 | 49.7 | | 48.6 | | 46.2 | | 36.8 | | 33.3 | | 28.9 | | 27.8 | |

Table 3: Influence of sociodemographic factors on parents' choice of treats for children

| Occupation of Main Income Earner (SES) | | | | | | | | | * | | | | |
|---|------|------|------|------|------|-------------------|------|----------------------------|------|----------------|------|-------------------|------|
| ABC1 | 51.4 | | 49.0 | 45.6 | | 36.4 | | 36.4 | 1.00 | 31.6 | | 31.3 | |
| C2DE | 47.9 | | 47.9 | 43.4 | | 33.6 | | 27.7 | 0.67 | 25.2 | | 25.2 | |
| Perceived Current Household Income | | ** | | | ** | | *** | | * | | * | | |
| Comfortable | 55.8 | 1.00 | 47.3 | 50.9 | 1.00 | 27.9 | 1.00 | 37.1 | 1.00 | 32.9 | 1.00 | 30.4 | |
| Uncomfortable | 45.0 | 0.65 | 49.4 | 39.8 | 0.64 | 40.6 | 1.77 | 27.6 | 0.65 | 24.9 | 0.68 | 26.2 | |
| Perceived Weight | | | | | | | * | | * | | | | |
| Thin or Normal | 51.5 | | 46.0 | 43.1 | | 32.3 | 1.00 | 34.8 | 1.00 | 26.2 | | 28.2 | |
| Heavy | 45.2 | | 53.4 | 47.1 | | 40.4 | 1.42 | 25.0 | 0.63 | 32.2 | | 27.4 | |
| Gender of Child | | | | | | | | | | | | | * |
| Female | 49.5 | | 49.2 | 45.2 | | 32.0 | | 31.4 | | 28.4 | | 32.3 | 1.00 |
| Male | 49.4 | | 47.7 | 43.7 | | 37.4 | | 31.9 | | 27.9 | | 24.1 | 0.67 |
| Age of Child | | | | | | | *** | | * | | ** | | ** |
| Preschool (2–4) | 46.9 | | 47.6 | 42.2 | | 12.9ª | 1.00 | 35 . 4 ^b | 1.00 | 16.3ª | 1.00 | 38.8 ^b | 1.00 |
| Primary School (5–12) | 51.4 | | 51.9 | 48.3 | | 41.7 ^b | 4.81 | 33.6 ^b | 0.92 | 32.5 ⁵ | 2.47 | 25.6ª | 0.54 |
| Secondary School (13– 17) | 47.2 | | 40.3 | 36.8 | | 40.3 ^b | 4.54 | 22.9ª | 0.54 | 2 9.2 ⁵ | 2.11 | 22.9ª | 0.47 |
| Perceived Weight of Child | | | | | | | *** | | | | | | |
| Thin or Normal | 48.6 | | 47.9 | 44.2 | | 33.0 | 1.00 | 32.0 | | 27.9 | | 28.2 | |
| Heavy | 61.9 | | 54.8 | 47.6 | | 61.9 | 3.30 | 26.2 | | 31.0 | | 23.8 | |

Table 3 continues:

| | Past | kes, tries so on | Soft S Fizzy D | | Chi | ips | Fruit | Juice | Ber | ries | Dried | l Fruit | | kers, Isticks | Che | ese |
|---|----------------|------------------------|-------------------|------|------|-----|---------------------|-------|------|------|---------------------------|---------|------|------------------|------|-----|
| Characteristics | % ¹ | OR ² | % | OR | % | OR | % | OR | % | OR | % | OR | % | OR | % | OR |
| Gender | | * | | ** | | | | | | | | | | | | |
| Female | 25.7 | 1.00 | 22.8 | 1.00 | 17.2 | | 17.4 | | 14.0 | | 10.4 | | 9.7 | | 7.7 | |
| Male | 17.6 | 0.62 | 13.9 | 0.55 | 19.3 | | 18.5 | | 13.0 | | 9.7 | | 10.5 | | 5.9 | |
| Age (Years) | | | | | | | | * | | | | * | | | | |
| 18-34 | 25.0 | | 19.2 | | 20.3 | | 24.4 ^b | 1.00 | 15.1 | | 11.6 ^b | 1.00 | 9.3 | | 10.5 | |
| 35-44 | 22.9 | | 20.5 | | 16.2 | | 17.1 ^{a,b} | 0.64 | 15.0 | | 11 .9 ^b | 1.03 | 10.4 | | 6.4 | |
| 45 and above | 19.7 | | 17.8 | | 19.1 | | 11.8ª | 0.42 | 9.2 | | 4.6 ª | 0.37 | 9.9 | | 4.6 | |
| Living Area | | | | | | | | | | | | | | * | | |
| Urban or Suburban | 20.6 | | 20.4 | | 18.1 | | 18.1 | | 13.9 | | 9.2 | | 11.6 | 1.00 | 7.6 | |
| Rural | 27.5 | | 17.6 | | 17.6 | | 17.2 | | 13.2 | | 12.3 | | 6.4 | 0.52 | 5.9 | |
| Education Completed | | ** | | * | | | | * | | ** | | *** | | ** | | |
| Beyond Secondary | 27.6 | 1.00 | 16.5 | 1.00 | 18.3 | | 14.9 | 1.00 | 17.7 | 1.00 | 15.8 | 1.00 | 14.0 | 1.00 | 8.7 | |
| Secondary or Lower | 18.0 | 0.58 | 23.0 | 1.51 | 17.7 | | 21.1 | 1.53 | 9.9 | 0.51 | 4.3 | 0.24 | 6.2 | 0.41 | 5.6 | |
| Number of Children | | | | | | | | | | | | | | | | |
| 1 | 21.6 | | 20.1 | | 21.6 | | 16.5 | | 12.9 | | 10.8 | | 10.8 | | 8.8 | |
| More Than 1 | 23.2 | | 19.3 | | 16.4 | | 18.4 | | 14.0 | | 9.8 | | 9.6 | | 6.3 | |
| Occupation of Main Income Earner (SES) | | * | | | | | | | | | | | | | | |

| ABC1 | 27.2 | 1.00 | 17.7 | | 16.7 | | 16.3 | | 15.3 | | 12.6 | | 11.6 | 6.5 | |
|---------------------------------------|------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|------|-------------------|------|
| C2DE | 19.0 | 0.63 | 21.0 | | 19.0 | | 19.0 | | 12.3 | | 8.1 | | 8.7 | 7.6 | |
| Perceived Current Household Income | | | | ** | | | | | | * | | *** | | | |
| Comfortable | 26.1 | | 14.5 | 1.00 | 19.4 | | 18.4 | | 17.0 | 1.00 | 15.5 | 1.00 | 11.7 | 8.1 | |
| Uncomfortable | 20.2 | | 23.5 | 1.81 | 17.1 | | 16.9 | | 11.0 | 0.61 | 6.1 | 0.35 | 8.6 | 6.4 | |
| Perceived Weight | | | | | | | | | | | | | | | |
| Thin or normal | 21.9 | | 18.7 | | 18.1 | | 19.0 | | 14.0 | | 11.7 | | 11.3 | 6.8 | |
| Heavy | 24.5 | | 21.2 | | 17.8 | | 15.4 | | 13.0 | | 6.7 | | 7.2 | 7.7 | |
| Gender of Child | | | | | | | | | | | | | | | |
| Female | 23.8 | | 19.8 | | 15.2 | | 18.2 | | 15.2 | | 11.6 | | 10.9 | 7.9 | |
| Male | 21.8 | | 19.3 | | 20.4 | | 17.5 | | 12.4 | | 8.9 | | 9.2 | 6.3 | |
| Age of Child | | | | *** | | * | | *** | | *** | | ** | | | ** |
| Preschool (2–4) | 19.7 | | 7.5ª | 1.00 | 10.2 ^ª | 1.00 | 29.9 [°] | 1.00 | 23.1 ^b | 1.00 | 16.3 ^b | 1.00 | 12.2 | 13.6 ^b | 1.00 |
| Primary School (5–12) | 25.8 | | 23.9 ^b | 3.88 | 19.7 ^b | 2.16 | 16.4 ^b | 0.46 | 12.5ª | 0.48 | 10.3 ^b | 0.59 | 10.8 | 5.3ª | 0.35 |
| Secondary School (13–17) | 18.1 | | 20.8 ^b | 3.25 | 21.5 [♭] | 2.41 | 9.0ª | 0.23 | 6.9ª | 0.25 | 3·5ª | 0.18 | 5.6 | 4.9° | 0.32 |
| Perceived Weight of Child | | | | | | | | | | | | | | | |
| Thin or Normal | 22.3 | | 18.7 | | 17.6 | | 18.2 | | 14.3 | | 10.8 | | 10.3 | 7.1 | |
| Heavy | 28.6 | | 31.0 | | 23.8 | | 11.9 | | 4.8 | | 0.0 | | 4.8 | 7.1 | |

¹This column gives the percentage of parent participants who selected a given item as a treat for their child.

² This column gives the "odds ratios" from the regression analysis, showing (in comparison with the reference group, labelled as "1.00"), how more or less likely the group is to have certain treat food provision behaviour. The P (Probability) Value helps indicate whether the results are significant or not. P<0.05 is significant while P>0.05 is not significant. *P<0.05, ** P<0.01, ***P<0.001

Places where adults felt treat foods were unavoidable

- The cinema (56.1%) was the place where participants felt treat foods were most unavoidable, followed by supermarkets (38.2%), shopping centres or in town (35.3%) and coffee shops and restaurants (32.9%) (Figure 17).
- Around 10% of participants also specified other places where they felt it was difficult to avoid treats; for example, at home, at grandparents' houses, at friends' houses or when friends were around, and at parties or celebrations.

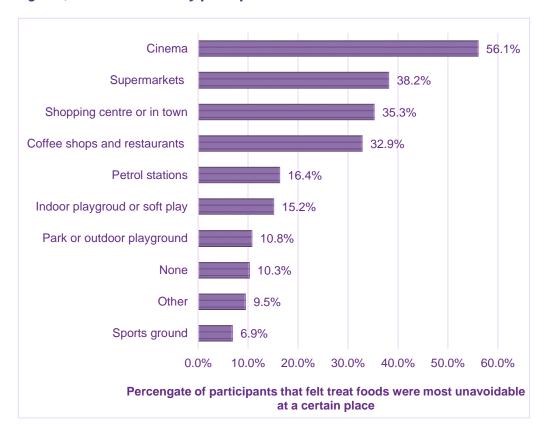


Figure 17: Places where survey participant felt treat foods were unavoidable

Adults' emotions attached to treat food provision

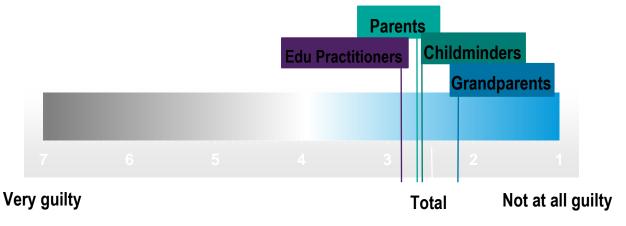
Overall, participants did not report attaching emotions to their treat food provision (Figure 18).

- Most participants did not feel guilty at all; neither did they feel happy about their treatgiving.
- Grandparents felt the least guilty, and were significantly happier than other adults about their treat food provision.
- Education practitioners were the opposite

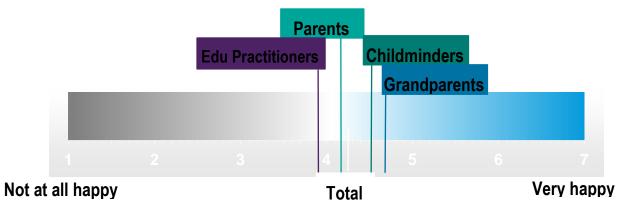
(The complete results of participants' emotions attached to food provision are in Appendix 13.)

Figure 18: Survey participants' emotions attached to treat food provision

Question: "To what extent would you feel guilty/not guilty after giving treat foods to children?"



Question: "To what extent would you feel happy/not happy after giving treat foods to children?"



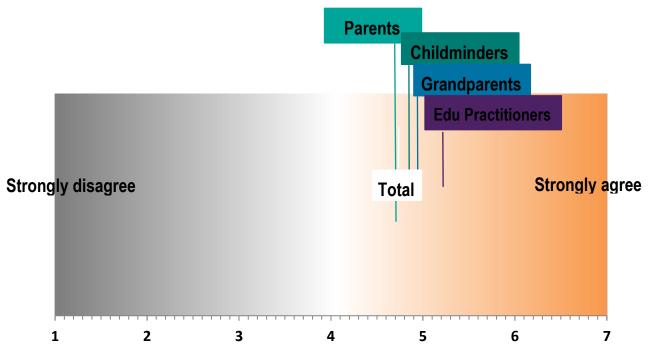
Adults' perceptions of treat food provision at celebrations

Almost all participants reported that they provide treat foods to children at celebrations (Figure 19).

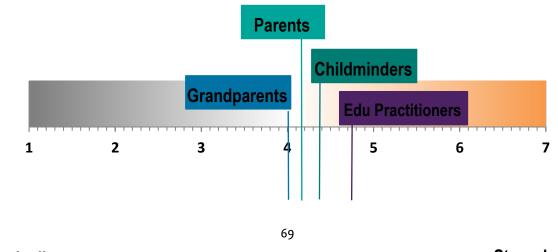
- The majority of participants thought treat foods had been overused at celebrations.
- However, the majority of participants also indicated that they had not made much effort to reduce the amount of food treats provided on these special occasions.
- Education practitioners were more active than other adults in trying to reduce treat foods at celebrations.

Figure 19: Survey participants' perceptions of treat food provision at celebrations

Agree or not: "I feel treat foods are over used for children at celebrations or special events"



Agree or not: "I have tried to reduce the treat foods given on these special occasions."



Survey results summary

- Participants defined treats for children primarily as "something nice", "deserved or earned" and "something special".
- The top 3 motivations for treat food provision were
 - "To reward for good behaviour"
 - "Because the child asks"
 - "To make the child feel better".
- Almost all participants would provide treat foods at celebrations, and 52.5% always did so.
- In addition, 68% of participants provided structured weekly and/or daily treats for children.
- Adults' treat food provision has become habitual.
- Treats provided to children were dominated by energy-dense foods.
- The top 3 treat foods were sweets, chocolate and ice creams.
- Variations in treat-giving behaviours were observed for the different adult groups, with parents providing treat foods more than other adult group.
- Among all the sociodemographic factors that were tested for, child age had the biggest influence on parents' treat-giving:
 - Parents were more likely to give treat foods to primary school-aged children than preschool or secondary school-aged children.
- Lastly, adults did not attach particularly strong emotions to treat food provision to children.



Adults' definition of a "treat"

- When participants in the survey were asked what a treat was, the most popular answers were "something nice" and "something special". The focus groups drew out implicit and explicit expressions of happiness and pleasure, and a lively discussion on positive experiences, surrounding giving and receiving treats. This reflects the cultural heritage of food on the IOI as a central component to celebrations and occasions.
- "Something sweet" or "sweet foods" are phrases used by participants in the focus groups to describe treats. The meaning of these phrases runs deeper than the sweet taste of the food, to also mean a highly palatable food; a food that is known to be and is considered unhealthy; and a food that gives such pleasure that it is exciting to even think about consuming it.
- Justification was a major theme underpinning the qualitative research phase, which revealed that participants felt they were able to justify consuming and providing food treats.

"Normalisation" of treats means treat foods are being provided more frequently

- The focus group data showed that treating occasions were in fact more frequent than the participants initially considered. They first thought that treat food provision should be infrequent and therefore special. However, after reflecting on their actual behaviour, the majority of participants perceived that, in reality, they gave treat foods to children too often, and that this had led to a reduction in the children's appreciation of treats.
- The quantitative data showed that treats were primarily energy-dense, nutrient-poor foods, and treat foods had become a normal part of participants' routine, widely used for different purposes and at different occasions.
- This was in contrast with participants' historical reflections during the focus groups: that treats had been rare, special and "out of the ordinary" when they were a child. For these people, there had always been positive emotions, strong appreciation and satisfaction associated with treats.
- Many individuals used the phrase "real treats" to describe the significance of treats in the past.

*All planned campaigns should keep in mind that treats are easily, and always justifiable.

Adult-led treat-giving

Adults use treat foods as a tool to manage children's behaviour

- The focus group data suggested that parents frequently used treat foods as a functional tool to manage their child's behaviour.
- Similarly, the survey data showed adults primarily offered treat foods to reward good behaviour, to make the child feel better, and to encourage consumption of dinner or healthy foods.

Adults are providing food treats routinely

- In the focus group discussions, many participants reported consuming and providing daily treats, such as "after-dinner" or "after-school" treats, and "weekend treats" such as "Friday night takeaway".
- The survey data showed that the majority of parents provided structured weekly treat foods for their children, and just over a quarter provided daily treats.

Adults with self-efficacy provide less treat foods

- Some participants in the focus groups reported giving less treat foods. These individuals displayed self-efficacy, a confident belief in themselves and their ability to manage and effect change; for instance, in their child's behaviour.
- It was also found that individuals who reported "banning" treat foods, or who were using non-food treats, appeared to have high levels of self-efficacy.

Child-led treat-giving

- The focus group data suggested that adults also provided treat foods in response to the child asking; because the child expected to be given a treat; or because of the child's nagging, or "pester power".
- Treat selection may also be influenced by the child.
- The survey data revealed that "child asking" ranked as high as "rewarding" as the top reasons that triggered parents, grandparents and childminders to provide treat foods to children.

Environment-led treat-giving

- Focus group participants attributed their overprovision of treat foods to the food environment: the convenience and wide availability of unhealthy foods, with low relative cost.
- The survey results showed that the place where participants felt treat foods were most unavoidable was the cinema, followed by supermarkets, shopping centres or in town, and coffee shops and restaurants.

Treat foods at celebrations

- The survey data suggested that nearly all adults would give treat foods to children at celebrations such as birthdays, Christmas, Halloween and Easter, and just over half always did so at these special occasions.
- The majority of participants thought too much treat food was provided at celebrations; however, they also indicated that they had not made much effort to reduce their provision of treats on special occasions.
- Some studies have suggested that the number of celebrations in a given year could be quite substantial for many children, and so the overall significance on dietary behaviour should be recognised (26, 38-40). For instance, an observational study has shown that on public school campuses, fundraising, celebrations and classroom rewards are substantial sources of unhealthy foods and beverages (38). Another study suggests that caloric intake from unhealthy foods and beverages offered during classroom celebrations could contribute 20% or more of children's daily caloric intake.
- There is very little research exploring possible strategies to reduce treat foods used at celebrations, but one study found children were just as likely to choose toys as sweets at Halloween (26).

Population groups to target with treat food reduction campaign

Grandparents

It is important to consider grandparents, because they remain a source of childcare on the island of Ireland (41).

Parents

Quantitative data showed that parents' frequency of treat food provision was much higher than that of grandparents, childminders and teachers. Almost 80% of parents provided treat foods at least once

a week, 48.2% at least twice a week, and 12.3% on a daily basis. Parents were also more likely to have routinised weekly and/or daily treats for children.

Childminders

Childminders demonstrated a substantial use of treat foods: 67.5% would use treat foods to reward good behaviour (52.5% did so at least weekly). Childminders were also more likely than other adults to provide treat foods for other reasons.

Informal childminding arrangements are a substantial area for consideration: 30% of families use childminders, but there is little regulation of this group, and a lack of training that includes nutrition education (42, 43).

School teachers and other child education practitioners

It is crucial to include childcare, crèche and education practitioners when planning strategies to reduce treat food provision. This is because it has been reported that treats are commonly used for rewarding, funding-raising and classroom celebrations in preschool settings (27, 41, 44).

The data showed nursery practitioners, teachers and sport coaches provided much fewer treats to children. Also, this group selected much healthier treats, such as fruits, stickers and stationery, than other adults. However, there is still room to improve: sweets were education practitioners' top choice of treats. They used food treats mainly for celebrations and rewarding, and 20.5% of them had structured daily or weekly food treats for children.

As alternatives to energy-dense foods, some teachers and sport coaches reported using homework passes, extra play time and some special activities, such as playing an old movie or old-fashioned, "less-trendy" game as treats for children. Eliassen (27) suggested that teachers could reward children by giving them special opportunities; for example, selecting a song for the class to sing, or choosing a game to play.

Primary school-aged children

In the focus groups, parents, crèche practitioners and teachers reported that younger children tended to be rewarded more and appreciated stickers and toys as treats.

The survey data showed that, among all sociodemographic factors, child age has the biggest influence on parents' treat-giving behaviour. Compared to other age groups, children aged between 5 and 12 years – the primary school age range – received treat foods most often from parents, and the treats they received were less healthy than for preschool-aged children.

safefood should initiate research into children's perspectives on treats

Our focus group participants implied that the treats they provided to children were not necessarily viewed as treats by children themselves: as children grow up, they develop their own preferences and start to specify what they want as treats.

The current study only investigated adults' perspectives and treat food behaviours. Ultimately, alternatives to treat foods would only be successful if they were well accepted by children.

Therefore, *safe*food should initiate further research into children's perspectives on "treats".

*safe*food should initiate an advertising campaign on the reality of "treats" and treating behaviour

The focus of a future social marketing campaign should be on restoring meaningful "real treats" and highlighting that regular, normalised and routine food treats are not actually functioning or appreciated as treats.

The data revealed that it takes adults time to reconsider their treat-giving, and to realise that it may not actually be as rare and special as they first thought. When designing an advertising campaign, it is important to allow the people time to reflect on this – the idea that their perceived reality is not the true reality.

It is also important to allow people time to consider that they may be imposing their own definition of a treat on the child; and, combined with the high frequency with which children today are receiving these foods, it is important to allow adults to pause and consider that, to children, these may not be valued as treats but considered "normal".

5 Recommendations

- 1. Create an awareness that treats are currently "everywhere, every day" for children on the island of Ireland.
- 2. Bridge the gap between the adults' own childhood experience of the rarity of treats and the current routine-based, regular provision of treat foods to children. Encourage adults to reintroduce the true definition of a treat regularly referred to by participants as "reals treats" which are an event or item that is out of the ordinary and gives great pleasure.
- 3. Adults, especially parents and childminders, need support to increase their self-efficacy to manage children's requests, and to face the challenge of the modern food environment, for example, through campaigns aimed at putting adults in control of the situation.
- 4. Encourage parents to use alternative tools or strategies other than energy-dense treat foods to respond to their child, especially when rewarding a child's behaviour and when the child requests treat foods.
 - Provide skills and motivation for adults to manage the way they respond with treats to negative emotions in the children they care for.
 - Engage adults with positive role modelling; for example, create an awareness of the way adults eat in response to negative emotions themselves.
 - Increase the use of positive reinforcement, such as encouragement or verbal praise, by adults to reward good behaviour in children.

Education and behavioural experts should be consulted on these aspects.

- 5. Communications with adults should aid and encourage the development of strategies to reduce routine treats, both at home and outside the home; children need to be resensitised to the experience of "real treats".
- 6. It is, perhaps, impractical to suggest removing energy-dense foods entirely from celebrations. However, efforts should be made to encourage adults to be more aware of the total amount of treat foods that children receive at celebrations and special occasions in a given year. Small trials and interventions could be implemented to add novelties to celebrations; for instance, the introduction of non-food treats, such as small toys, in trick-or-treating at Halloween and in an Easter egg hunt.
- 7. Parents should be the key target group in any treat food-related health interventions. For example, campaigns should focus on strategies that support parents (and the caregivers they

use) to prepare and provide nutritious and appropriate healthy snacks, aimed at reducing or preventing hunger, as these are the 2 main contexts of regular snack consumption as reported by child caregivers.

- 8. Childminders should be included in children's health intervention initiatives. In particular, informal childminders could be hard to reach, so specific strategies for communications with this group should be developed.
- 9. Schools and childcare centres should adopt policies that promote the use of healthy food or non-food treats at celebrations, or as rewards. The use of fruit and feasible non-food alternatives – for example, stickers, stationery, homework passes, more play time, special activities and special opportunities for individuals – should be encouraged in situations where it had been the norm to provide an energy-dense treat food.
- 10. Primary school aged children should be prioritised in health interventions addressing treat food provision by adults, because this research showed that this age-group of children received more treat foods from adults than other younger or older children.



1. Heinen M, Murrin, C., Daly, L., O'Brien, J., Heavey, P., Kilroe, J., O'Brien M., Scully, H., Mulhern, L., Lynam, A., Hayes, C., O'Dwyer, U., Eldin, N., Kelleher, C. The childhood obesity surveillance initiative (COSI) in the Republic of Ireland: findings from 2008, 2010 and 2012. Health Service Executive (HSE) and Department of Health,; 2014.

2. Peeters A, Barendregt JJ, Willekens F, Mackenbach JP, Al Mamun A, Bonneux L. Obesity in adulthood and its consequences for life expectancy: a life-table analysis. Ann Intern Med. 2003;138(1):24-32.

3. Pulgarón ER. Childhood obesity: a review of increased risk for physical and psychological comorbidities. Clinical therapeutics. 2013;35(1):A18-A32.

4. World Health Organisation. Why does childhood overweight and obesity matter 2013 [Available from: <u>https://www.who.int/dietphysicalactivity/childhood_consequences/en/</u>.

5. safefood. The food pyramid and the eatwell guide Cork: Safefood; 2017 [Available from: http://www.safefood.eu/Healthy-Eating/What-is-a-balanced-diet/The-Food-Pyramid.aspx.

6. Steptoe A, Pollard, T.M., Wardle, J. Development of a measure of the motives underlying the selection of food: the food choice questionnaire. Appetite. 1995;25(3):267-84.

7. Bandura A. Social learning theory. Cliffs E, editor. New York: Prentice-Hall; 1977.

8. Birch LL. Effects of peer models' food choices and eating behaviors on preschoolers' food preferences. Child Development. 1980;51(2):489-96.

9. Birch L, Savage JS, Ventura A. 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 = Revue canadienne de la pratique et de la recherche en dietetique : une publication des Dietetistes du Canada. 2007;68(1):s1-s56.

10. Farrow CV, Haycraft E, Blissett JM. Teaching our children when to eat: how parental feeding practices inform the development of emotional eating—a longitudinal experimental design. The American Journal of Clinical Nutrition. 2015;101(5):908-13.

11. Péneau S, Ménard E, Méjean C, Bellisle F, Hercberg S. Sex and dieting modify the association between emotional eating and weight status. The American Journal of Clinical Nutrition. 2013;97(6):1307-13.

12. van Strien T, Cebolla A, Etchemendy E, Gutiérrez-Maldonado J, Ferrer-García M, Botella C, et al. Emotional eating and food intake after sadness and joy. Appetite. 2013;66:20-5.

13. Fox S, Conneely S, Egan J. Emotional expression and eating in overweight and obesity. Health Psychology and Behavioral Medicine. 2017;5(1):337-57.

14. Larson N, Story M. A review of snacking patterns among children and adolescents: what are the implications of snacking for weight status? Child Obes. 2013;9(2):104-15.

15. Benton D. Role of parents in the determination of the food preferences of children and the development of obesity. Int J Obes Relat Metab Disord. 2004;28(7):858-69.

16. Puhl RM, Schwartz MB. If you are good you can have a cookie: How memories of childhood food rules link to adult eating behaviors. Eat Behav. 2003;4(3):283-93.

17. Boots SB, Tiggemann M, Corsini N, Mattiske J. Managing young children's snack food intake. The role of parenting style and feeding strategies. Appetite. 2015;92:94-101.

18. Blaine RE, Fisher JO, Taveras EM, Geller AC, Rimm EB, Land T, et al. Reasons Low-Income Parents Offer Snacks to Children: How Feeding Rationale Influences Snack Frequency and Adherence to Dietary Recommendations. Nutrients. 2015;7(7):5982-99.

19. Turner JJ, Kelly J, McKenna K. Food for thought: Parents' perspectives of child influence. . British Food Journal. 2006;108(3):181-91.

20. Carnell S, Cooke L, Cheng R, Robbins A, Wardle J. Parental feeding behaviours and motivations. A qualitative study in mothers of UK pre-schoolers. Appetite. 2011;57(3):665-73.

21. Vereecken CA, Keukelier, E., Maes, L. Influence of mother's educational level on food parenting practices and food habits of young children. Appetite. 2004;43(1):93-103.

22. Pescud M, Pettigrew S. Treats: low socioeconomic status Australian parents' provision of extra foods for their overweight or obese children. Health Promot J Aust. 2014;25(2):104-9.

23. Nicholas A Petrunoff RLW, Lesley A King, Victoria M Flood. 'Treats', 'sometimes foods', 'junk': a qualitative study exploring 'extra foods' with parents of young children. Public Health Nutrition. 2014;17(5):979-86.

24. Hoffmann DA, Marx JM, Burmeister JM, Musher-Eizenman DR. Friday Night Is Pizza Night: A Comparison of Children's Dietary Intake and Maternal Perceptions and Feeding Goals on Weekdays and Weekends. Int J Environ Res Public Health. 2018;15(4).

25. Pescud M, Pettigrew S. 'I know it's wrong, but . . .': a qualitative investigation of lowincome parents' feelings of guilt about their child-feeding practices. Maternal & child nutrition. 2014;10(3):422-35.

26. Schwartz MB, Chen EY, Brownell KD. Trick, treat, or toy: Children are just as likely to choose toys as candy on Halloween. J Nutr Educ Behav. 2003;35(4):207-9.

27. Eliassen EK. The impact of teachers and families on young children's eating behaviours. Young Children. 2011;66(2):84-9.

28. Irish Universities Nutrition Alliance (IUNA). National children's food survey 2005 [Available from: <u>http://www.iuna.net/?p=27</u>.

29. Duffey KJ, Pereira RA, Popkin BM. Prevalence and energy intake from snacking in Brazil: analysis of the first nationwide individual survey. European Journal of Clinical Nutrition. 2013;67(8):868-74.

30. Central Statistics Office. Census 2011 Ireland and Northern Ireland. 2014.

31. Braun V, Clarke, V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77-101.

32. Healthy Ireland Healthy food for life In: health Do, editor. Dublin 2016.

33. Davison KK, Blake CE, Blaine RE, Younginer NA, Orloski A, Hamtil HA, et al. Parenting around child snacking: development of a theoretically-guided, empirically informed conceptual model. International Journal of Behavioral Nutrition and Physical Activity. 2015;12.

34. Gevers DWM, Kremers SPJ, de Vries NK, van Assema P. Patterns of Food Parenting Practices and Children's Intake of Energy-Dense Snack Foods. Nutrients. 2015;7(6):4093-106.

35. Raaijmakers LGM, Gevers DWM, Teuscher D, Kremers SPJ, van Assema P. Emotional and instrumental feeding practices of Dutch mothers regarding foods eaten between main meals. Bmc Public Health. 2014;14.

36. Central Statistics Office of Ireland. Census 2016 summary results - part 1 2017 [Available from: http://www.cso.ie/en/media/csoie/newsevents/documents/census2016summaryresultspart1/Census2016SummaryPart1.pdf.

37. Northern Ireland Department of Agriculture Environment and Rural Affairs. Rural/urban statistics infographic 2017 [Available from: <u>https://www.daera-ni.gov.uk/publications/rural-urban-statistics-infographic</u>.

38. Caparosa SL, Shordon M, Santos AT, Pomichowski ME, Dzewaltowski DA, Coleman KJ. Fundraising, celebrations and classroom rewards are substantial sources of unhealthy foods and beverages on public school campuses. Public Health Nutrition. 2014;17(6):1205-13.

39. Porter GP, Grills NJ. The dark side to Halloween: marketing unhealthy products to our children. The Medical Journal of Australia 2013;199(8):528-9.

40. Isoldi KK, Dalton S, Rodriguez DP, Nestle M. Classroom "cupcake" celebrations: observations of foods offered and consumed. J Nutr Educ Behav. 2012;44(1):71-5.

41. Share M, Kerrins L. The role of grandparents in childcare in Ireland: towards a research agenda. Irish Journal of Applied Social Studies. 2009;9(1):33-47.

42. O'Hagan C. Who cares? The economics of childcare in Ireland. Journal of Motherhood Initiative. 2012;3(1):203-16.

43. Irish Congress of Trade Unions. Who cares? Report on childcare cost and practices in Ireland2016. Available from:

https://www.ictu.ie/download/pdf/report_on_childcare_costs_practices_congress_2016.pdf.

44. Causton J, Tracy-Bronson CP, MacLeod K. Beyond treats and timeouts: humanistic behavioral supports in inclusive classrooms. International Journal of Whole Schooling. 2015;11(1):68-84.

7 Appendices

Appendix 1: Audit of children's snacking on the IOI

Daily consumption of snacks in the ROI by children aged 5 to 12 years, based on IUNA Children's Nutrition Survey 2003–2004

| Republic of Ireland Data | Mean | SD |
|---------------------------------------|------|------|
| Juice (Fruit Juice and Cordial Juice) | 58.8 | 69.3 |
| Fizzy Drinks | 49.4 | 68.9 |
| Chips | 14.0 | 19.7 |
| Ice Cream | 8.7 | 14.8 |
| Low-calorie Fizzy Drinks | 6.8 | 23.0 |
| Biscuits | 6.3 | 7.7 |
| Cakes, Muffins, Buns, Pastries | 6.2 | 9.6 |
| Pizza | 4.7 | 11.5 |
| Sweets | 4.4 | 8.0 |
| Takeaways | 3.8 | 9.4 |
| Chocolate | 3.2 | 6.0 |
| Crisps | 3.0 | 4.5 |
| Popcorn | 1.5 | 4.2 |
| Burgers | 1.0 | 3.8 |

| Northern Ireland Data | Total Nu in Grou 617 | p (N = | Age 1. Years 145 | (n = | Age 5 Years 26 | (n = | Age 1 Years 21 | (n = | Difference Between Age- groups |
|---|----------------------------|--------|------------------------|-------|----------------------|------|----------------------|------|---|
| | Mean | SD | Mean | SD | Mean | SD | Mean | SD | One-way ANOVA |
| Regular soft drinks | 46.6 | 61.9 | 23.2 | 45.3 | 42.5 | 52.1 | 67.7 | 74.9 | *** |
| Low-calorie soft drinks | 44.6 | 75.2 | 59.0 | 117.1 | 43.7 | 50.9 | 35.6 | 61.3 | * |
| Fruit | 17.9 | 18.0 | 20.9 | 15.8 | 20.8 | 20.2 | 12.4 | 14.9 | *** |
| Fruit juice | 14.5 | 23.2 | 11.1 | 18.5 | 16.8 | 25.6 | 13.9 | 22.8 | Ns |
| Chips, fried and roast potatoes and potato products | 10.9 | 10.5 | 5.2 | 5.4 | 11.5 | 9.6 | 14.2 | 12.5 | *** |
| Yoghurt, fromage frais and dairy desserts | 9.0 | 11.8 | 14.1 | 12.1 | 9.8 | 12.7 | 4.4 | 8.5 | *** |
| Buns, cakes, pastries and fruit pies | 4.5 | 5.8 | 2.8 | 3.7 | 6.0 | 6.3 | 3.9 | 5.9 | *** |
| Biscuits | 3.7 | 3.9 | 2.7 | 2.7 | 4.2 | 3.7 | 3.8 | 4.7 | ** |
| Chocolate confectionery | 2.9 | 4.0 | 1.9 | 2.2 | 2.9 | 3.6 | 3.8 | 5.1 | *** |
| Crisps and savoury snacks | 2.7 | 3.3 | 1.2 | 1.5 | 2.9 | 3.1 | 3.5 | 4.1 | *** |
| Ice cream | 2.6 | 4.8 | 1.7 | 2.9 | 3.3 | 5.4 | 2.4 | 4.8 | ** |
| Sugar confectionery | 2.2 | 4.0 | 1.6 | 2.4 | 2.7 | 4.5 | 1.9 | 4.2 | * |
| Cheese | 2.0 | 2.8 | 1.8 | 2.5 | 2.1 | 2.9 | 2.1 | 3.0 | Ns |
| Burgers and kebabs | 1.6 | 4.2 | 0.7 | 1.9 | 1.4 | 3.2 | 2.5 | 5.9 | *** |
| Commercial toddler foods and drinks | 0.2 | 1.8 | 0.7 | 3.7 | 0.0 | 0.5 | 0.0 | 0.0 | *** |
| Nuts and seeds | 0.1 | 0.6 | 0.1 | 0.6 | 0.1 | 0.6 | 0.1 | 0.7 | Ns |

Daily consumption of snacks in NI by children aged 1.5 to 17 years, based on the UK National Diet and Nutrition Survey 2008–2013

P*<0.05; *P*<0.01; ****P*<0.001

One-way ANOVA: Analysis of variance (ANOVA) is a method that is used to detect significant differences in the averages of at least 2 unrelated categories of data.

Ns: not significant

Appendix 2: Focus group discussion topic guide

Questions in BOLD are the main questions Bullet points underneath are follow up questions Constructs for Consideration

ACTION: During the waiting period, guide participant to fill the consent form attached with the information sheet, and ask them to fill demographic questionnaire (in case some participants may leave early or rush to go in the end)

Introduction

Explain research, Amárach/UCD

Thank you very much for agreeing to take part in our study. This study is initiated by University College Dublin. The purpose is to understand why adults are giving treats to children.

My name is _____. I am a researcher based in Amárach, which is a market research agency. Together with my colleagues, we are helping UCD with their data collection.

It's important to be aware that we are an independent research team and we are not promoting anything. The only purpose that we are here for today is to hear a bit about your thoughts and opinions. It's important to know this is a space where you can be completely honest, and anything you say will be anonymised.

Introduction for focus group, 'rules' and confidentiality issue

Today we are going to have a focus group discussion. A focus group is a group discussion that focuses on a particular topic in depth. In the following hour and a half or so, we will be talking about issues related to treats. I am here to learn from you, to learn about your ideas, thoughts and comments on these issues.

It's important that I hear what EACH of you thinks. There are no right or wrong answers; there are neither stupid nor smart answers. It's a valuable answer as long as it's an HONEST answer.

As it's an informal group discussion, you are strongly encouraged to interact with other people at the table. However, in order to hear each person clearly, may I ask you that ONE PERSON SPEAKS AT A TIME?

Please feel free to speak up when you disagree with someone else here. It's okay to disagree, and it's okay to have different opinions and ideas from others in the group; your thoughts might be similar to those of many people who are not here at the table. Also, it's helpful for us to hear different points of view.

Also, it's my job to see that everyone has a chance to voice their opinions, as well as to keep us moving along so that we have time to discuss all of the questions. So, at times, it might seem as though I am cutting you off, and this is not meant to be rude but rather to make sure that we have time to hear from everyone on each question.

We will be tape-recording our discussion. This is because we want to get everything that all of you say and we simply can't write fast enough to get it all down!

I want to assure you that all of your comments will be used only for the purpose of this research. We have created participant IDs for each of you. By doing this, you will never be named or identifiable in any of the reports released from this research.

In case anyone needs to use the bathroom, they are located _____. And if any of you has to leave early, please let us know, and we'll let you go.

One last thing, would it be okay if we could ask you to put your mobiles on silent, just so it doesn't interrupt our discussion? Thanks.

Does anyone have any questions? You can always get back to me later.

I am now going to turn on the audio recorder.

| ACTION: Turn on the recorder | | Introduction |
|--|---|---|
| Warm up - Okay so just to start, can each | | |
| person tell us your name, how many kids do you have/care for, and how old are they? | | |
| you have/cale for, and now old are they: | | |
| What do you think of when I say the word | | Definition of treats |
| treat? | | |
| Can you please give me examples? | | |
| What makes something a treat? (missing) | | |
| Thinking back to your own childhood, what was a treat to you? | – Would there be any other treats you can | Adult's memories of treats |
| Can you tell me what memories you had of treats? | remember getting as a child? | |
| | Can you name a few of the treats you remember from your childhood? | |
| Can you tell me on what occasions you had food treats? | How often would you have a treat when you were younger? Daily, weekly, only on special occasions? | |
| Who gave you treats growing up? | – Grandparents/parents, teachers, other adults, other family members? | |
| | – Did you have free access to treat foods? | |
| | – Who controlled your accessed to these foods? | |
| Thinking of now, can you please tell me how often and on what occasion you would treat yourself? | – When would you treat yourself? How often? | Adults' emotional regulation/hedonic response to food |
| What would you treat yourself with? | – If you were to treat | |
| Fruit/ shopping/ chocolate/ wine/ spa? | yourself with food, what | |
| How do you feel when you have a treat? | sorts of foods would you have? | |
| | Can everyone give a few examples of things they'd treat themselves with? | |
| MAKE IT CLEAR TO PARTICIPANTS THAT WE ARE N | treat themselves with? | THEIR CHILDREN/ THE |

MAKE IT CLEAR TO PARTICIPANTS THAT WE ARE NOW MOVING ON TO DISCUSS THEIR CHILDREN/ THI CHILDREN THEY CARE FOR

Now let's move on to your children/ the children you care for. We are interested to know what would be a treat to them? To answer this question, I have a small task for you.

[Mixed group]: Emphasise that this task is to focus on their work practice in schools/pre-schools, i.e., as a teacher or as a coach (rather than their capacity as parent)

You'll each have a pack in front of you. In each pack you'll have a set of cards. At the top of each of your pile of cards, there's three label cards which say "Treats", "Not Treats" and "Neither" and as part of this task you'll place the rest of the cards under these three categories.

ACTION: Hand out the card sorting materials; the card sorting sheet should be labelled with participant ID (for photo taking)

So you have around 30 cards which include pictures of both food items and non-food items. Can you lay them face up around or below the three label cards according to the three categories: 1) Treats that you'd give your children

2) Things that would not be treats for them

3) "Neither", for example, foods your child/ child you care for does not eat, or is allergic to.

If some items you think are treats to your children are missing, then please use the Post-it notes and the pen provided in the pack to write them on, and stick the Post-it under the appropriate label. Similarly, if there's a heading you think is missing, or that'd be a useful way to categorise the cards, then please feel free to write this on a Post-it as well.

The pictures on these cards are just for illustrative purposes only, so if the picture doesn't exactly represent an item you're familiar with, then just use your imagination!

You can put as many and as few cards into one category. And you can use a pen to draw a border between these three categories. After you have finished the sorting, we will take photos of your sorting.

I'm setting a stop clock here just for a few minutes as this should be just a quick sorting task and we can chat about it afterwards.

Set stop clock and inform participants they have around 3 minutes to complete this task.

-----BEGIN CARD SORTING TASK------

ACTION: Take photos of the card sorting results when each participant is finished, ensuring that their participant ID, and their writings on blank cards are visible in the picture

| So first, can everyone tell us what you have included under the 'treat' category? And can you give us a rough idea of why you've sorted the items into this category? | | What treats are provided to children |
|--|---|--|
| 6. a) Look at those items you sorted as treats; when would you give them to children? | – How often do you think children should have treats? | Context/when/why treats are provided to children |
| Would these treats be given for special occasions? | – How often would you give them to your child/ children you care for? | |

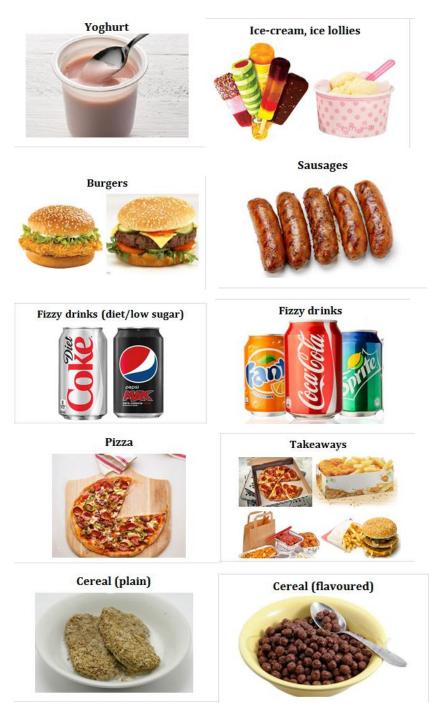
| Would these treats be given for as a reward/ for good behaviour/ for achievements/ for school etc.? | What sort of occasions would you give your child a treat? Is there any other | |
|---|--|---|
| On a regular basis? Weekends, Fridays, daily routine? | occasion when you would give a child a treat? | |
| Would the treats you give your child at home be any different to the treats they'd get while out and about? | What sorts of foods would they have while out and about compared to at home? Why do you give | |
| Who decides what a treat is? | different treats? – Would you or your child choose what treat they have? | |
| | – What about for other family members? | |
| 6. b) What do you think food treats are for? Why do you give them? | PROMPT ON FREQUENCY THROUGHOUT | Food as a means of behavioural control [Motivate – food] |
| Focus on this topic; try to elicit WHY they give treats. | If they've eaten up their food (dinner, veg etc.)? If they've been good If they carry out desired activities (clean up, finish homework) What about to refrain from bad behaviour? (For example, don't fight with siblings!) What about to cheer them up? (For example, sad, disappointed – prompt on mood, occasions, frequency) Or to celebrate? As part of our routine – 'Lunchbox' 'After dinner' 'Friday night' 'going to Granny's' (daily, | [Motivate – behaviours] [Motivate - inhibition] [Mood altering] [Mood amplification] [Routine] |
| | weekly routines)? What about on other occasions such as in nice weather, or if it's snowing; special occasions – like Christmas, Easter, family birthdays, outings etc.? What about 'just because'? | |

| 6. c) How do you feel after you've given a treat to your child/ the children you care for? | [If necessary] – guilty; enjoy children's pleasure; feel like a good parent/etc., other | Cognitive dissonance |
|---|---|--|
| How do you feel if you've said 'no' to a treat for your child/ the children you care for? | [If necessary, prompt] Feel guilty/like a bad parent OR positive/good parent, etc. [Parents only] – Would you say no to treat-giving because you know other relatives/ adults are giving treats to your children? Does their treat-giving to your children mean you change what and when you give treats to your children? | |
| Looking back, how did you feel when you were younger, when you got treats? | – How does that relate to | |
| How do you think treat-giving has changed since you were younger? | how you feel now about children getting treats? - Changes in society? - Do you think the way that you give treats now is because of what treats you got when you were a child? | |
| 6. d) What kinds of things influence the treats you buy? What influence do your children have on the treats you buy? | [Only focus on this if it has not been covered previously from the WHY question] | Peer influence, e.g. via other family practices |
| How about if a treat is on promotion or on offer in the shops, are you more likely to buy it? | – How about treats their friends have – does that make a difference? | Consumer behaviour – impact of marketing factors |
| What about TV or the internet; do your kids ask for things they've seen? | [Prompt for other marketing] – Is there an influence of the media on parent/carer, child OR | |
| Do you have a 'treat bowl'/ cupboard etc. at home? | peers? – Do you think, if your | – Healthfulness of |
| Do your children choose what treats they have? | children/ children you look after are old enough, that Social Media | food considerations here? |

| | influences what treats they want? | |
|---|--|--------------|
| | – What else influences the treats you buy? | |
| 6. e) When you are giving treats, would you be influenced by anybody else? [For parents] Would other family members give treats to your children differently than you do? | [For parents] - What about others around you; what sorts of treats do you think they give their children? E.g., other parents at your child's school? | Social norms |
| What sort of response do you get from the children when you give them treats? Does how your child/children react when you give them treats or change what sort of treats you give them? | – Would anybody else give your child treats? E.g., other family members? Fathers/ mothers, aunts/ uncles, godparents, grandparents? | |
| | - Do you think you have a different point of view compared to others? E.g., grandparents, teachers, family, other parents, other adults? | |
| [For teachers/crèche/ preschool practitioners] Would other members of staff at your school/ crèche/ preschool, etc., give treats to your children differently than you do? | [For teachers/crèche/ preschool practitioners] – What about other colleagues around you, what sorts of treats do | |
| What sort of response do you get from the children? | you think they give the children they care for? | |
| How does/do the child/children react when you give them treats or change what sort of treats you give them? | Do you have the freedom to give children treats in the workplace, i.e., in the crèche/ school? Would the way that you give treats to the children you care for in the workplace be different to the way you would give treats to your own children? | |
| <i>[For all]</i> Do you think there should be any rules or legislations in schools/nurseries about treats children are given? | Is there any legislation or rules in your workplace about the sorts of treats you're allowed to give the children you care for? | |

| In your option, what would you say is a snack? Do you see a difference between a treat and a snack? Do your children know the difference between a snack and a treat? What foods do you think other parents give their children as snacks? Now let's move attention the non-food treats. [Refer to examples participants mentioned]. What do you think could be done to encourage more caregivers to use these sorts of things as treats for the children they care for? | Can you give me examples? – Frequency, occasion, price, because of your childhood? etc. | Snacks vs treats Non-food treats – barriers and facilitators to using non-food treats (relevance for recommendation) |
|--|---|--|
| Closing After discussing different aspects of treats, is there anything else you'd like to add? Thank you very much for your participation in our focus group today, we really appreciate your time. For confidentiality concerns, what is shared in the room stays in the room. ACTION: Make sure everyone has handed in the signed consent form and demographic/ pre-task questionnaire ACTION: Hand out the A3 food pyramid posters | Closing and thank you | |

Appendix 3: Cards used by focus group participants in sorting task to identify items considered "treats'







Vegetables







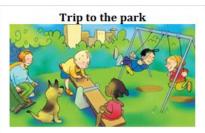










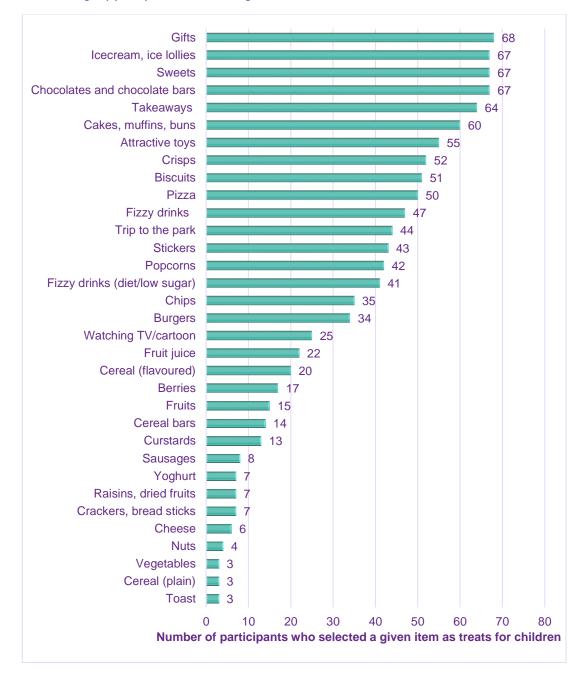






Appendix 4: Results of card-sorting task that identified items considered by focus group participants as "treats" for children

Number of focus group participants who selected a given item as a treat for their child



Appendix 5: List of codes used to analyse focus group participants' words and phrases

Definition of a treat (Coded in all 10 transcripts, 776 references) • Adult treat - time away or time to self Adult wishes to consume less (self-control failure) 0 Deserved • Desirable Earned (definition) • Given too often (insight into giving too many treats than perceived appropriate) Increased frequency = not a treat 0 Indulgent 0 Justified Occasional 0 In moderation Out of the ordinary Parent or adult perceives as a treat but MAY not be seen as a treat to the child 0 Pleasure or enjoyment 0 0 Rare Infrequent . **Regular frequency** 0 • Restriction, i.e. not allowed all the time, makes it a treat Reward 0 • Scale of treats – some bigger, some smaller Special • Taste – pleasure • Top-shelf treats (food pyramid) Sweet foods Unhealthy association – acknowledgement or perception of being unhealthy 0 Distinction between treat and snack (Coded in all 10 transcripts, 134 references) Healthfulness is irrelevant \circ •

- Can be healthy or unhealthy
 - "On the go" functional to "keep them going"
 - Perceived as small or light
 - Small and savoury
 - Snack consumed as part of routine
- Regularly eaten daily
- Snacks are food eaten while having a break or while relaxing •
 - Snacks and treats are different
 - Snacks are convenient
 - Snacks are fruit or raw veg
 - Snacks are perceived as healthy choices
 - Snacks for pleasure or positive taste experience
 - To satiate

To tide over until meal

Motivations for treat-giving (Coded in all 10 transcripts, 1014 references)

- o After dinner
- Age related changes with age of child
- o Balance important
- Because it's easy
- Because the child asks
- Bi-directional enjoyment of giving and receiving treats between adult and child
- o Bribery
- Celebrate an occasion e.g. birthday
- Child has easy access
- Children should be treated or should have treats (common sense)
- Treats are part of being a child (motivation)
 - Common sense treating
 - Dictated by what child wants or likes preference
 - Appropriate treat-giving varies for all children
 - Driven by school policy or structure
 - Earned (motivation)
- Deserved (motivation)
 - ELC obesogenic environment
- ELC availability

•

- ELC convenience
 - ELC societal changes
 - End of year, term or sports season
 - Expectation driven
 - Exposure to treat foods (perceived) through TV advertising or social media
 - Festive period motivates increased treat-giving
 - For eating their dinner
 - For good behaviour
 - Friday treats
 - Grandparents parents dictate treat choice
 - Grandparents allow free access
 - Grandparents common sense understanding of treat-giving
- Grandparents' sense of duty (common sense)
 - Hard to say no
 - Justified if children engage in physical activity
 - No reason
 - Older children engage in increased treat food consumption (perception)
- Older children prefer top-shelf treats (perception)
 - Older children have increased treat choice autonomy
- ELC Parental control reduces as children get older
 - Older children less interested in top shelf treats (perception)
 - Out shopping

- Positive reaction from children (treating driven by)
- Relative low cost
- Reward (motivation)
- Routine treat-giving
- o Social norms or it's normal
- Because other children have it
 - Taste pleasure (motivation)
 - To feel good positive affect
 - To placate or soothe or quieten child
 - Tool parenting or behavioural
 - Treat for parent or adult is treat for child motivated by parent wanting treat
 - Treating children so they aren't left out
 - Weather (when the weather is good)
 - Weekend (given because it's the weekend, routine)
 - What's in the house
 - Winning a sports match or final
 - Younger children more interested in top-shelf treats (perception)

Historical reflection of treat-giving (Coded in all 10 transcripts, 339 references)

- Appreciated more then
- Convenient now more than then
- Direct influence of treats adult experienced, are now the treats they give as parents or grandparents
- Expectation that grandparents provided treats
- Grandparents provided treats (memories)
- Easy to access treat foods from grandparents growing up (then)
 - More available now than then
 - More frequent now
 - Out of routine, out of the ordinary
 - Positive affect reflection on memories
 - Positive shift in society, consume more healthy foods e.g. increased education re healthier choices
 - Rare due to financial limitations and high relative cost then
 - Relative cost is lower now
 - Restricted
 - Reward then
 - Societal shift in treat-giving behaviours
 - Treats had increased significance in the past
 - Treats were rare
 - Treats were special
 - Weekly weekend treats then

Barriers and facilitators to using non-food treats (Coded in all 10 transcripts, 280 references)

• Adults' positive association and perceived benefits of outdoor non-food treat

- Barrier Non-food treats given less often because of perceived impracticalities
- Barrier Perceived effort of engaging in activity non-food treat
- Barrier Perception that children have no interest in ideas for certain activity based treats
- o Built into school structure
- Driven by child choice, expectation or request
- Driven by enjoyment (of child, perceived)
- Justification for treat-giving buying toys of perceived benefit to the child
- Look forward to it
 - Duty to provide big non-food treat
 - Fitness and physical activity training mediates treat-giving
 - Food treats perceived negatively (acknowledgement of) due to behavioural implications on the child
 - Ideas for promoting non-food treats
- Facilitators success of public health campaigns, e.g. Operation Transformation
- Perceived benefits of food dudes
- Perceived need to educate children and parents about unhealthy food and food treats
 - Knowledge of how unhealthy treat food is would put parents off
 - Low self-efficacy for avoiding food treats
 - Not built into routine
 - Older children less interested in activity non-food treat with parents or younger sibling
 - Over-consumption of food treats as negative
- Guilt in giving food treats due to behavioural implications for child
 - Perceived benefits of positive reinforcement instead of food treats
 - Perceived cost
 - Positive perception of non-food treats
- Perceived as important (having non-food treat)
 - Routine or habitual non-food treat-giving
 - Self-efficacy re providing and engaging with non-food treats
 - Using trip or non-food treat as behavioural parenting tool
 - Younger children appreciate small non-food treats, e.g. pencils

Appendix 6: Survey questionnaire

We are hosting a survey on behalf of a group of researchers based in University College Dublin. The purpose is to understand why adults give treat foods to children. We are asking people who care for children, such as parents, grandparents, childminders, teachers, sports coaches etc.

The survey should take about 10 to 15 minutes to complete. Your inputs will be very much appreciated. Your responses are completely anonymous, and you will not be identifiable in any output from this study.

As we are asking many individuals to take part in the survey, some questions may not be relevant to you. Please feel free to answer 'no' if the question does not apply to you.

ASK ALL

QA Do you agree to be a participant in this survey?

| <u>.</u> | | |
|----------|---|------------------------|
| | Yes (Consent obtained) | 1 |
| | No [Screen out] | 2 |
| | Section 1 – Screening and participa | ant information |
| Ask all | | |
| QB Hav | re you lived on the island of Ireland for the past 3 years? | |
| | Yes | 1 |
| | No [Screen out] | 2 |
| Ask all | | |
| ŌC | Are you ever in a position where you care for children | aged between 2 and 13? |
| | Γ | |
| | Yes | 1 |
| | No [Screen out] | 2 |
| Ask all | | |
| QD | a) Which, if any, of the following groups do you belong to? (multicode) | |
| | Parent/guardian | 1 |
| | Grandparent | 2 |
| | Crèche/pre-schooler carer | 3 |
| | Childminder, babysitter, nanny | 4 |
| | Primary school teacher | 5 |
| | | |
| | Secondary school teacher | 6 |
| | Secondary school teacher Sports, leisure coach and leader | 7 |

b) With which do you most identify?

From QD b) Code to group:

Group 1 = Parent group (option 1)

Group 2 = Grandparent group (option 2)

Group 3 = Mixed group (option 3, 4, 5, 6, 7)

[Quota control] ROI: parent 450; grandparent 150; mixed 150 NI: parent 150; grandparents 50; mixed 50

Ask all group 2

QE

Do you usually see one/all of your grandchildren every second week or more?

| Yes | 1 |
|-----------------|---|
| No [Screen out] | 2 |

Ask all

QF

| To which gender do you most identify? |
|---------------------------------------|
|---------------------------------------|

| Female | | 1 | |
|----------|----------------------|---|--|
| Male | | 2 | |
| Other (O | r prefer not to say) | 3 | |

[Quota control]

ROI: 112+ males in the parent group, 38+ males in the grandparent group, 38+ in the mixed group NI: 38+ males in the parent group, 12+ males in the grandparent group, 12+ males in the mixed group The overall aim is to have at least 25% males in each group.

Ask all

| OG | Which age group do you belong to? |
|----|-----------------------------------|
| 20 | |

| Under 18 [Screen out] | 1 |
|-----------------------|---|
| 18-24 | 2 |
| 25-34 | 3 |
| 35-44 | 4 |
| 45-54 | 5 |
| 55-64 | 6 |
| 65 and above | 7 |

Ask all

QH Where do you live?

| Carlow | 01 | Leitrim | 12 | Waterford | 23 |
|---------|----|----------|----|-----------|----|
| Cavan | 02 | Limerick | 13 | Westmeath | 24 |
| Clare | 03 | Longford | 14 | Wexford | 25 |
| Cork | 04 | Louth | 15 | Wicklow | 26 |
| Donegal | 05 | Мауо | 16 | Antrim | 27 |
| Dublin | 06 | Meath | 17 | Armagh | 28 |

| Galway | 07 | Monaghan | 18 | Derry/Londonderry | 29 |
|----------|----|-----------|----|-------------------|----|
| Kerry | 08 | Offaly | 19 | Down | 30 |
| Kildare | 09 | Roscommon | 20 | Fermanagh | 31 |
| Kilkenny | 10 | Sligo | 21 | Tyrone | 32 |
| Laois | 11 | Tipperary | 22 | | |

Ask all

QI How would you describe your living area?

| Urban/Suburban | 1 |
|----------------|---|
| Rural | 2 |

Section 2 – About child/children you care for

Ask all group 1

Q1a

How many children do you have within the age group 2 to 18 years?

| 1 | 1 |
|-----------|---|
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 or more | 6 |

Ask all group 2

Q1b

| How many grandchildren do you have within the age group 2 to 18 years? | | |
|--|----|--|
| 1 | 1 | |
| 2 | 2 | |
| 3 | 3 | |
| 4 | 4 | |
| 5 | 5 | |
| 6 | 6 | |
| 7 | 7 | |
| 8 | 8 | |
| 9 | 9 | |
| 10 or more | 10 | |

Ask all group 3

Q1c

How many children do you care for as a **<insert response** @ QD>?

| 1–5 | 1 |
|-------|---|
| 6–10 | 2 |
| 11–15 | 3 |

| 16-20 | 4 |
|-------|---|
| 21-25 | 5 |
| 26-30 | 6 |
| 30+ | 7 |

Ask all group 1 and 2

Q2a

[Parent group] [Grandparent group]

For the rest of the survey, we would like you to only focus on one of your children (group 1)/ on one of your grandchildren that you see at least twice a month (group 2). Can you please focus on the child whose birthday comes next?

Instruction to interviewer: Ask about the name of the child, and then refer to this child's name in the following.

| Female | 1 |
|----------------------------|---|
| Male | 2 |
| Other or prefer not to say | 3 |

Ask all group 3

Q2b

[Mixed group]

What's the gender of the pupils/children you care for as a **<insert response** @ QD>?

| All girls | 1 |
|-------------|---|
| All boys | 2 |
| Mixed group | 3 |

Ask all group 1 and 2

Q3a

[Parent group] [Grandparent group]

How old is [the child]?

| Preschool age (Year 2 to 4) | 1 |
|--------------------------------------|---|
| Primary school age (Year 5 to 12) | 2 |
| Secondary school age (Year 13 to 18) | 3 |

Ask all group 3

Q3b

[Mixed group]

Which of the following best describe the age range of children you care for as a **<insert response @ QD>**?

| Preschool age (Year 2 to 4) | 1 |
|--------------------------------------|---|
| Primary school age (Year 5 to 12) | 2 |
| Secondary school age (Year 13 to 18) | 3 |

Ask all group 1 and 2

Q4 Does [the child] have any particular dietary needs/requirements or medical conditions? (multicode)

Ask all group 1

| Food allergies | 1 |
|----------------|---|
|----------------|---|

| Gluten intolerance | 2 |
|--|----|
| Lactose intolerance | 3 |
| Vegan or vegetarian | 4 |
| Diabetes | 5 |
| Swallowing difficulties | 6 |
| Physical disabilities | 7 |
| Autism | 8 |
| Attention Deficit Hyperactivity Disorder (known as ADHD) | 9 |
| None of the above | 10 |
| Don't know | 11 |
| Other: please specify() | 99 |

Q5 [Parent group]

Please indicate which of the following best describes [the child]'s childcare schedule (without parental care).

| | Tick | Number of days per week | Number of hours per day |
|--|------|----------------------------|----------------------------|
| Group care, e.g. crèche, nursery, afterschool care | | | |
| (slightly different wording for NI participants: e.g. crèche/ day nursery, afterschool care) | | | |
| Preschool, e.g. Montessori school, Playschool | | | |
| (slightly different wording for NI participants: preschool, e.g. nursery school, playschool) | | | |
| Primary school | | | |
| Secondary school | | | |
| Childminder/Nanny (in your home) | | | |
| Childminder/Nanny (in another home) | | | |
| Relative (in your home) | | | |
| Relative (in another home) | | | |
| Other | | | |

Section 3 – Context of treat foods

Ask all

Q6a Would you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods for eating their dinner or for eating fruit and vegetables?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q6a

Q6b How often do you use treat foods to reward your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) for eating fruit and vegetables?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2-3 times per month | 4 |
| Once a week | 5 |
| 2–4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q7a Would you use treat foods to reward your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) for good behaviour?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q7a

Q7b How often do you use treat foods to reward your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) for good behaviour?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2–3 times per month | 4 |
| Once a week | 5 |
| 2-4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q8a Would you use treat foods to make your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) feel better?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q8a

Q8b How often do you use treat foods to make your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) feel better?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2–3 times per month | 4 |
| Once a week | 5 |
| 2-4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q9a Would you use treat foods to occupy your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3)?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q9a

Q9b How often do you use treat-foods to occupy your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3)?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2–3 times per month | 4 |
| Once a week | 5 |
| 2-4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q10a Would you use treat foods to show your love or care for your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3)?

| Yes | 1 |
|-----|---|
| Νο | 2 |

Ask all code 1 @Q10a

Q10b How often do you use treat foods to show your love or care for your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3)?

| Rarely or never | 1 |
|--------------------|---|
| A few times a year | 2 |
| Once a month | 3 |

| 2–3 times per month | 4 |
|----------------------|---|
| Once a week | 5 |
| 2–4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q11a Would you give treat foods so that your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) will love/like you?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q11a

Q11b How often do you use treat foods so that your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) will love/like you?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2–3 times per month | 4 |
| Once a week | 5 |
| 2–4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q12a Would you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods because they say/ you know other children are given it?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q12a

Q12b How often do you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods because of pressure from other children?

| Rarely or never | 1 |
|---------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2-3 times per month | 4 |
| Once a week | 5 |
| 2–4 times per week | 6 |
| Daily | 7 |

More than once a day

8

1

Ask all

Q13a Would you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods because they ask?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q13a

Q13b How often do you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods because they ask for them?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2-3 times per month | 4 |
| Once a week | 5 |
| 2–4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q14a Would you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods because they kept requesting/nagging you for it?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q14a

Q14b How often do you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods because they kept asking?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2-3 times per month | 4 |
| Once a week | 5 |
| 2-4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q15 Name up to 3 places where you cannot avoid giving [the child] treats.

(DP: multicode, no more than 3 answers, rotate)

Cinema

| Supermarkets | 2 |
|---------------------------------|----|
| Shopping centre/ in town | 3 |
| Coffee shops and restaurants | 4 |
| Indoor playground, soft play | 5 |
| Park/outdoor playground | 6 |
| Sports ground (when at a match) | 7 |
| Petrol stations | 8 |
| Other, please specify | 98 |
| None of the above | 99 |

Ask all

Q16 Would you normally give treat foods to your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) every day (e.g. when the child comes home from school, after a meal)?

| Yes | 1 |
|-----|---|
| No | 2 |

Q17 Would you normally give treat foods to your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) each week (e.g. Friday treat or weekend treat)?

| Yes | 1 |
|-----|---|
| Νο | 2 |

Q18a Would you provide your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods at celebrations (e.g. birthday, Christmas, Halloween, Easter)?

| Yes | 1 |
|-----|---|
| No | 2 |

Ask all code 1 @Q18a

Q18b Overall, how often do you provide your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods at celebrations (e.g. birthday, Christmas, Halloween, Easter)?

| Always | 1 |
|-----------------|---|
| Often | 2 |
| Sometimes | 3 |
| Rarely or never | 4 |

Ask all

Q19 To what extent do you agree or disagree with the following statements? Please indicate on a scale from 1 to 7, where 1 means strongly disagree and 7 means strongly agree.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|----------|----------|----------|----------|----------|-------|----------|
| | Strongly | Disagree | | Neither | Slightly | Agree | Strongly |
| | disagree | | disagree | agree | agree | | agree |
| | | | | nor | | | |
| | | | | disagree | | | |

| <i>I feel treat foods are over-used for children at celebrations or special events</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|---|---|---|---|---|---|---|
| <i>I have tried to reduce the food treats given on these special occasions</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Ask all

Q20 In general, how often would you give your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods?

| Rarely or never | 1 |
|----------------------|---|
| A few times a year | 2 |
| Once a month | 3 |
| 2-3 times per month | 4 |
| Once a week | 5 |
| 2-4 times per week | 6 |
| Daily | 7 |
| More than once a day | 8 |

Ask all

Q21 To what extent would you feel guilty or not guilty after giving your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods? Please respond on a scale of 1 to 7 where 1 means not at all guilty and 7 means very guilty.

| 1 = Not at all guilty | 1 |
|-----------------------|---|
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 = Very guilty | 7 |

Q22 To what extent would you feel happy or not happy after giving your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3) treat foods? Please respond on a scale of 1 to 7 where 1 means not at all happy and 7 means very happy.

| 1 = Not at all happy | 1 |
|----------------------|---|
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 = Very happy | 7 |

Ask all group 1

Q23a To what extent do you agree or disagree with the following statement? Please indicate on a scale from 1 to 7, where 1 means strongly disagree and 7 means strongly agree.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|----------------------|----------|----------------------|--------------|-------------------|-------|-------------------|
| | Strongly disagree | Disagree | Slightly disagree | agree nor | Slightly agree | Agree | Strongly agree |
| | | | | disagree | | | |
| A good, caring parent gives their child treat foods regularly | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Ask all group 2

Q23b To what extent do you agree or disagree with the following statement? Please indicate on a scale from 1 to 7, where 1 means strongly disagree and 7 means strongly agree.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|----------------------|---|----------------------|-------------------------------------|-------------------|-------|-------------------|
| | Strongly disagree | | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| A good, caring grandparent gives their grandchild regular treat foods | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Section 4 – Type of treats

Ask all

Q24a Which of the following items do you use as treats for your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3)?

(DP: rotate, multicode)

| Ice cream, ice lollies | 1 |
|---|----|
| Chocolates | 2 |
| Sweets | 3 |
| Fruit juices | 4 |
| Soft/fizzy drinks (e.g. Coke, 7up, slushies) | 5 |
| Chips | 6 |
| Crisps | 7 |
| Takeaways, pizza, burgers, fast food (e.g. McDonalds, Supermac's) | 8 |
| Cheese | 9 |
| Biscuits | 10 |
| Crackers, breadsticks | 11 |
| Popcorn | 12 |

| Cakes, pastries, buns, apple tarts | 13 |
|--|----|
| Berries | 14 |
| Fruit (e.g. apples, bananas, oranges etc.) | 15 |
| Dried fruit (e.g. raisins) | 16 |
| Toys and gifts | 17 |
| Time on iPad/screens/TV/DVD/PlayStation etc. | 18 |
| Fidget spinners/dabbing/collectable cards/JoJo Bows etc. | 19 |
| Stickers, stationery | 20 |
| Homework pass | 21 |
| Trips out (e.g. beach, park, match, soft play) | 22 |
| Money | 23 |
| Other, please specify | 98 |

Ask all

Q24b Which item do you use MOST OFTEN as a treat for your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3)? (Single code)

Section 5 – Concept of a treat

Ask all

Q24 From the words below, please select up to 3 words you feel defines a treat for your child (group 1) / grandchild (group 2) / children/pupils you are caring for (group 3). (DP: rotate, multi code, no more than 3 answers)

| Courset this wa | - |
|------------------------|----|
| Sweet things | 1 |
| Usually forbidden | 2 |
| Fun | 3 |
| Rare | 4 |
| Something nice | 5 |
| Something special | 6 |
| Unhealthy/ bad for you | 7 |
| Healthy | 8 |
| To spoil | 9 |
| Bribery | 10 |
| Deserved/ earned | 11 |
| Small | 12 |
| Big | 13 |
| Affordable | 14 |
| Expensive | 15 |

| | No other | 99 |
|----|---|----|
| QJ | What ethnic group do you closely identify with? | |
| | White British | 1 |
| | White Irish | 2 |
| | White Irish Traveller | 3 |
| | White European | 4 |
| | Any other White background | 5 |
| | Black or Black Irish African | 6 |
| | Black or Black Irish – any other Black background | 7 |
| | Asian or Asian Irish – Chinese | 8 |
| | Asian or Asian Irish – any other Asian background | 9 |
| | Other, including mixed background | 10 |
| | Don't know/ refuse to answer | 99 |

QK Please indicate to which occupational group the main income earner in your household belongs, or which group fits best. The main income earner is the person in your household with the largest income; this could be you. If the main income earner is retired and has an occupational pension please answer for their most recent occupation. If the main income earner is not in paid employment but has been out of work for less than 6 months, please answer for their most recent occupation. **SINGLE CODE**

| 1 |
|----|
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 13 |
| |

QL What is the highest level of education you have completed to date? (single code)

For ROI participants

| | Some primary (not complete) | 1 |
|--|-----------------------------|---|
|--|-----------------------------|---|

| | r |
|---|----|
| Primary or equivalent | 2 |
| Intermediate/Junior/Group Certificate or equivalent | 3 |
| Leaving Certificate or equivalent | 4 |
| Leaving Certificate Applied | 5 |
| Apprenticeship/Trade Certificate | 6 |
| Primary degree/nursing qualification | 7 |
| Postgraduate/higher Degree | 8 |
| Other, please specify | 98 |

For NI participants

| Some primary (not complete) | 1 |
|--------------------------------------|----|
| Primary or equivalent | 2 |
| GCSE or equivalent | 3 |
| GCE 'A' Level or equivalent | 4 |
| Apprenticeship/Trade Certificate | 6 |
| Primary degree/nursing qualification | 7 |
| Postgraduate/higher Degree | 8 |
| Other (please specify) | 98 |

Ask code 1 @ QD (b)

QM How would you describe your family situation? (multicode)

| Living together with your spouse or partner | 1 |
|---|----|
| Living alone with the children | 2 |
| Living with parents | 3 |
| Other, please specify | 98 |

Ask code 1 @ QD (b)

QN Which of the following descriptions come closest to how you feel about your household's income nowadays?

| Living very comfortably on present income | 1 |
|---|----|
| Living comfortably on present income | 2 |
| Coping on present income | 3 |
| Finding it difficult on present income | 4 |
| Finding it very difficult on present income | 5 |
| Don't know/ refuse to answer | 99 |

Ask code 1 @ QD (b)

QO How would you describe yourself in terms of weight status?

| _ | | _ |
|----------|---------|---|
| I | oo thin | 1 |

| A little bit too thin | 2 |
|------------------------|---|
| Normal weight | 3 |
| A little bit too heavy | 4 |
| Too heavy | 5 |

Ask code 1 @ QD (b)

QP How would you describe your child in terms of weight status?

| Too thin | 1 |
|------------------------|---|
| A little bit too thin | 2 |
| Normal weight | 3 |
| A little bit too heavy | 4 |
| Too heavy | 5 |

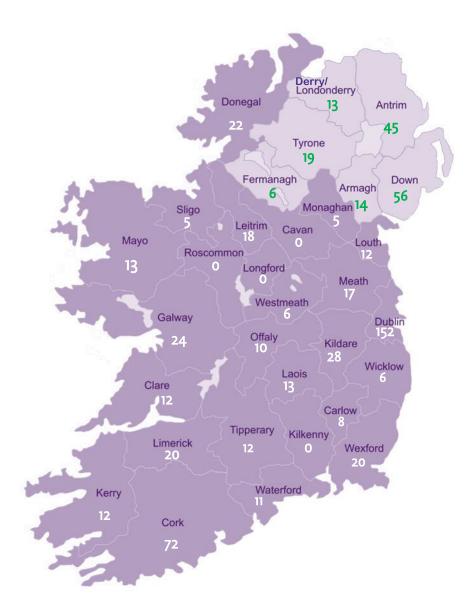
Ask all

QQ To what extent do you agree or disagree with the following statement, on a scale of 1 to 5 where 1 means you strongly disagree and 5 means you strongly agree?

"Childhood obesity represents a serious problem on the Island of Ireland."

| Strongly disagree | 1 |
|-------------------------|---|
| Disagree | 2 |
| Neither agree/ disagree | 3 |
| Agree | 4 |
| Strongly agree | 5 |

Appendix 7: Geographical distribution of survey participants across the IOI included in the survey sample



Appendix 8: Characteristics of survey participants across the IOI

Characteristics of survey participants

| | Total number (N) of participants 1,039 | | | | | | |
|---|---|-----------------|--|--|--|--|--|
| Characteristic | Number (n) of | Percentage (%) | | | | | |
| | participants | of participants | | | | | |
| Country | | | | | | | |
| Republic of Ireland | 789 | 75.9 | | | | | |
| Northern Ireland | 250 | 24.1 | | | | | |
| Gender | | | | | | | |
| Female | 634 | 61.0 | | | | | |
| Male | 404 | 38.9 | | | | | |
| Other | 1 | 0.1 | | | | | |
| Age (years) | | | | | | | |
| 18-34 | 240 | 23.1 | | | | | |
| 35-44 | 374 | 36.0 | | | | | |
| 45-54 | 201 | 19.3 | | | | | |
| 55 and above | 124 | 21.6 | | | | | |
| Role | | | | | | | |
| Parent or guardian | 651 | 62.7 | | | | | |
| Grandparent | 210 | 20.2 | | | | | |
| Childminder, babysitter or nanny | 61 | 5.9 | | | | | |
| Education practitioners (Crèche/pre- schooler carers, teachers, sports coaches and leaders) | 117 | 11.3 | | | | | |
| Living area | | | | | | | |
| Urban or suburban | 703 | 67.7 | | | | | |
| Rural | 336 | 32.3 | | | | | |
| Education completed | | | | | | | |
| Primary or lower | 61 | 5.9 | | | | | |
| Secondary* | 491 | 47.2 | | | | | |
| Apprenticeship/trade certificate | 107 | 10.3 | | | | | |
| Primary degree/nursing qualification | 201 | 19.3 | | | | | |
| Postgraduate/higher degree | 170 | 16.4 | | | | | |
| Other | 9 | 0.9 | | | | | |

| Ethnicity | | |
|--|-----|------|
| White Irish | 806 | 77.6 |
| White British | 126 | 12.1 |
| Other backgrounds | 107 | 10.3 |
| Age-range of child(ren) being reported | | |
| Preschool age (year 2 to4) | 231 | 22.2 |
| Primary school age (year 5 to12) | 580 | 55.8 |
| Secondary school age (year 13 to 18) | 228 | 21.9 |

*For ROI participants, secondary-level education includes 'Leaving Certificate or equivalent' and 'Leaving Certificate Applied'; for NI participants, 'GCSE or equivalent', 'GCE A level or equivalent', and 'Leaving Certificate Applied'.

| Characteristics o | f parent | participants | in the | survey |
|--------------------------|----------|--------------|--------|--------|
|--------------------------|----------|--------------|--------|--------|

| | Total number in group (N) | | | | | | | |
|--|---------------------------|---------------|--|--|--|--|--|--|
| | 651 | | | | | | | |
| Characteristic | Number in | Percentage of | | | | | | |
| | group (n) | group (%) | | | | | | |
| Country | | | | | | | | |
| Republic of Ireland (ROI) | 498 | 76.5 | | | | | | |
| Northern Ireland (NI) | 193 | 23.5 | | | | | | |
| Gender | | | | | | | | |
| Female | 413 | 63.4 | | | | | | |
| Male | 238 | 36.6 | | | | | | |
| Age (years) | | | | | | | | |
| 18-34 | 172 | 26.4 | | | | | | |
| 35-44 | 327 | 50.2 | | | | | | |
| 45 and above | 152 | 23.3 | | | | | | |
| Living area | | | | | | | | |
| Urban or suburban | 447 | 68.7 | | | | | | |
| Rural | 204 | 31.3 | | | | | | |
| Education completed | | | | | | | | |
| Beyond secondary | 322 | 49.4 | | | | | | |
| Secondary or lower | 322 | 49.4 | | | | | | |
| Refused to answer | 7 | 1.1 | | | | | | |
| Number of children between 2 and 18 years | | | | | | | | |
| 1 | 194 | 29.8 | | | | | | |

| More than 1 | 457 | 70.2 |
|--|-----|------|
| Family situation | | |
| Living together with spouse or partner | 507 | 77.9 |
| Living alone with children | 122 | 18.7 |
| Other | 22 | 3.4 |
| Occupation of main household income earner (SES) | | |
| ABC1 | 294 | 45.2 |
| C2DE | 357 | 54.8 |
| Perceived household income | | |
| Comfortable | 283 | 43.5 |
| Not comfortable | 362 | 55.6 |
| Don't know or refused to answer | 6 | 0.9 |
| Self-perceived weight status | | |
| Thin or normal | 403 | 61.9 |
| Неаvy | 208 | 32.0 |
| Ethnicity | | |
| White Irish | 487 | 74.8 |
| White British | 76 | 11.7 |
| Any other white background | 52 | 8.0 |
| Other | 29 | 4.5 |
| Gender of child | | |
| Female | 303 | 46.5 |
| Male | 348 | 53.5 |
| Age of child | | |
| Preschool age (year 2 to 4) | 147 | 22.6 |
| Primary school age (year 5 to 12) | 360 | 55.3 |
| Secondary school age (year 13 to 18) | 144 | 22.1 |
| Perceived weight status of child (by parent) | | |
| Thin or normal | 609 | 93.5 |
| Heavy | 42 | 6.5 |

| Definition of Treats | Total number in group (N = 1039) | | Parents (n = 651) | | Grandparents (n = 210) | | Childminders (n = 61) | | Education practitioners (n = 117) | | Group differences† |
|-----------------------------|--|-------|----------------------|-------|---------------------------|-------|--------------------------|-------|---|-------|-----------------------|
| | %* | Top 5 | %* | Top 5 | %* | Top 5 | %* | Top 5 | %* | Top 5 | |
| Something nice | 45.2 | 1 | 48.2 | 1 | 46.7 | 1 | 50.8 | 1 | 23.1 | 5 | P<0.001 |
| Deserved or earned | 35.1 | 2 | 36.7 | 2 | 29.5 | 3 | 23.0 | 5 | 42.7 | 1 | P<0.05 |
| Something special | 32.7 | 3 | 32.0 | 3 | 35.7 | 2 | 36.1 | 2 | 29.9 | 2 | |
| Fun | 27.6 | 4 | 27.6 | 4 | 26.2 | 5 | 29.5 | 3 | 29.1 | 3 | |
| Affordable | 23.1 | 5 | 24.3 | | 27.1 | 4 | 16.4 | | 12.8 | | P<0.05 |
| Sweet | 22.7 | | 24.6 | 5 | 22.4 | | 21.3 | | 13.7 | | |
| Small | 20.9 | | 20.1 | | 22.4 | | 18.0 | | 23.9 | 4 | |
| Healthy | 16.6 | | 14.9 | | 20.5 | | 11.5 | | 21.4 | | |
| Usually forbidden | 12.7 | | 13.7 | | 7.1 | | 19.7 | | 13.7 | | P<0.05 |
| To Spoil | 12.5 | | 10.3 | | 18.6 | | 27.9 | 4 | 6.0 | | P<0.001 |
| Rare | 8.3 | | 6.5 | | 6.2 | | 9.8 | | 21.4 | | P<0.001 |
| Bribery | 5.8 | | 6.8 | | 5.2 | | 1.6 | | 3.4 | | |
| Unhealthy or bad for you | 4.1 | | 5.4 | | 1.0 | | 1.6 | | 4.3 | | P<0.05 |
| Expensive | 3.0 | | 3.5 | | 3.8 | | 0.0 | | 0.0 | | |
| Big | 1.4 | | 2.0 | | 1.0 | | 0.0 | | 0.0 | | |

Appendix 9: Terms survey participants from the different adult groups selected to define treats for children

| Abbreviation of motivation | ltem* | Total number in group (N = 1,039) | | | | | Grandparents (n = 210) | | Childminders (n = 61) | | Group differences† | |
|--|---|--------------------------------------|---------------------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|---------|
| or occasion | | Yes (%) | At least weekly (%) | Yes (%) | At least weekly (%) | Yes (%) | At least weekly (%) | Yes (%) | At least weekly (%) | Yes (%) | At least weekly (%) | |
| Reward | Use treat foods to reward [] for good behaviour | 42.3 | 30.6 | 43.6 | 33.8 | 42.9 | 25.2 | 67.5 | 52.5 | 21.4 | 11.1 | P<0.001 |
| Child ask | Give [] treat foods because they ask | 42.2 | 28.4 | 47.2 | 34.1 | 45.7 | 25.2 | 45.9 | 27.9 | 6.0 | 2.6 | P<0.001 |
| Emotion control | Use treat foods to make [] feel better | 29.4 | 14.3 | 30.4 | 15.2 | 33.3 | 16.2 | 41.0 | 21.3 | 10.3 | 2.6 | P<0.001 |
| For eating dinner, fruit or vegetables | Give [] treat foods for eating their dinner or for eating fruits and vegetables | 26.2 | 19.8 | 28.6 | 23.3 | 26.2 | 17.1 | 31.1 | 21.3 | 10.3 | 4.3 | P<0.001 |
| Show affection | Use treat foods to show your love or care for [] | 23.5 | 13.2 | 22.3 | 12.7 | 33.8 | 18.1 | 37.7 | 21.3 | 4.3 | 2.6 | P<0.001 |
| Child nagging | Give [] treat foods because they kept | 21.8 | 15.2 | 24.1 | 17.5 | 22.9 | 14.3 | 31.1 | 19.7 | 1.7 | 1.7 | P<0.001 |

Appendix 10: Motivations and occasions for survey participants' treat food provision

| | requesting or nagging you for it | | | | | | | | | | | |
|----------------|---|------|--------|------|--------|------|--------|------|--------|------|--------|---------|
| Peer pressure | Give [] treat foods because they say or you know other children are given it | 19.3 | 10.1 | 21.2 | 11.1 | 19.0 | 9.5 | 31.1 | 18.0 | 3.4 | 1.7 | P<0.001 |
| Occupy child | Use treat foods to occupy [] | 14.4 | 8.9 | 15.1 | 9.1 | 16.2 | 10.0 | 24.6 | 16.4 | 2.6 | 1.7 | P<0.001 |
| Gain affection | Use treat foods so that [] will love or like you | 12.8 | 8.9 | 11.8 | 8.4 | 17.6 | 11.4 | 27.9 | 18.0 | 1.7 | 1.7 | P<0.001 |
| | | Yes | Always | |
| Celebrations | Provide [] treat foods at celebrations (birthday, Christmas, Halloween, Easter and so on) | 92.0 | 52.5 | 96.2 | 60.2 | 90.0 | 49.5 | 93.4 | 27.9 | 71.8 | 27.4 | P<0.001 |

| Abbreviation of motivation or occasion | ltem* | | number in (N = 1,039) | Paren | ts (n = 651) | | oarents (n = 210) | Childm | Childminders (n = 61) | | Group differenc † | |
|--|---|------------|---------------------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|---------|
| | | Yes (%) | At least weekly (%) | |
| Structured treat provision‡ | | 68.3 | | 79.4 | | 64.8 | | 54.1 | | 20.5 | | P<0.001 |
| Weekly treat | Normally give treat foods to [] each week ("Friday treat", "weekend treat" and so on) | 64.7 | | 75.7 | | 59.0 | | 54.1 | | 18.8 | | P<0.001 |
| Daily treat | Normally give treat foods to [] every day (when the child comes home from school, after meals and so on) | 22.6 | | 26.7 | | 20.5 | | 18.0 | | 6.0 | | P<0.001 |

*For parents and grandparents, the child's name was inserted in "[]". If they had multiple children or grandchildren, only one child was selected. For childminders and educational practitioners, "children/pupils you are caring for" was inserted in "[]".

†Levels of significance from Pearson χ 2 tests of differences between the 4 groups (parents, grandparents, childminders and education practitioners) in terms of the proportion of participants who answered "yes" on a given treat-giving behaviour.

+"Structured treat provision" was computed from "weekly treat" and "daily treat", meaning a participant who answered yes to either the weekly treat question or the daily treat question was considered as having structured food treats for children.

| | Total number of participants (N = 1,039) | Parents (n = 651) | Grandparents (n = 210) | Childminders (n = 61) | Education practitioners (n = 117) |
|----------------------------------|---|----------------------|---------------------------|--------------------------|---|
| Rarely or Never (%) | 8.8 | 3.8 | 9.0 | 3.3 | 38.5 |
| A few times a year (%) | 7.1 | 2.5 | 8.6 | 9.8 | 29.1 |
| Once a month (%) | 6.4 | 3.8 | 9.0 | 14.8 | 11.1 |
| 2 to 3 times per month (%) | 11.3 | 11.4 | 15.2 | 11.5 | 3.4 |
| Once a week (%) | 29.3 | 30.3 | 34.3 | 37.7 | 10.3 |
| 2 to 4 times per week (%) | 27.9 | 35.9 | 19.5 | 16.4 | 4-3 |
| Daily (%) | 8.6 | 11.8 | 2.9 | 4.9 | 2.6 |
| More than once a day (%) | 0.8 | 0.5 | 1.4 | 1.6 | 0.9 |

Appendix 11: Overall frequency of treat food provision among survey participants

| ltem | Total number in group (N = 1,039) | | Parents (n = 651) | | | Grandparents (n = 210) | | | Childminders (n = 61) | | | Educat practit | | Group differences‡ | | |
|--|--------------------------------------|----|-------------------|--------|----|---------------------------|--------|----|-----------------------|--------|----|-------------------|--------|-----------------------|-------|---------|
| | Used a | IS | Most | Used a | s | Most | Used a | S | Most | Used a | S | Most | Used a | S | Most | |
| | treat* | | used† | treat* | | used† | treat* | | used† | treat* | | used† | treat* | | used† | |
| | % | | % | % | | % | % | | % | % | | % | % | | % | |
| Sweets | 45.2 | 1 | 13.7 | 48.4 | 2 | 13.4 | 37.1 | 3 | 10.5 | 54.1 | 1 | 14.8 | 37.6 | 1 | 20.5 | P<0.01 |
| Chocolates | 45.1 | 2 | 13.0 | 49.5 | 1 | 13.8 | 42.4 | 1 | 12.9 | 49.2 | 2 | 14.8 | 23.9 | 4 | 7.7 | P<0.001 |
| Ice cream or Ice lollies | 38.8 | 3 | 7.0 | 44.4 | 3 | 7.8 | 38.6 | 2 | 7.6 | 32.8 | 3 | 3.3 | 11.1 | 10 | 3.4 | P<0.001 |
| Time on iPad, screens, TV, DVD, PlayStation and so on | 31.2 | 4 | 8.5 | 35.8 | 5 | 9.5 | 23.3 | | 2.9 | 24.6 | 4 | 13.1 | 23.1 | 5 | 10.3 | P<0.001 |
| Crisps | 31.1 | 5 | 5.0 | 36.1 | 4 | 6.6 | 25.2 | 8 | 3.3 | 23.0 | 7 | 0.0 | 17.9 | 7 | 1.7 | P<0.001 |
| Takeaways, pizza, burgers, fast foods | 29.3 | 6 | 6.9 | 34.9 | 6 | 7.1 | 24.3 | 10 | 8.6 | 21.3 | 10 | 6.6 | 11.1 | | 3.4 | P<0.001 |
| Biscuits | 29.0 | 7 | 7.5 | 31.6 | 7 | 7.1 | 32.4 | 5 | 11.0 | 24.6 | 5 | 9.8 | 10.3 | | 2.6 | P<0.001 |
| Fruit | 27.2 | 8 | 7.4 | 28.0 | 10 | 6.9 | 26.2 | 7 | 8.1 | 23.0 | 6 | 11.5 | 27.4 | 2 | 6.8 | |
| Toys and gifts | 26.5 | 9 | 3.3 | 28.9 | 8 | 3.5 | 31.9 | 6 | 4.3 | 13.1 | | 0.0 | 10.3 | | 1.7 | P<0.001 |
| Trips out (beach, park, sports match, soft play and so on) | 25.9 | 10 | 3.6 | 27.8 | | 4.0 | 24.8 | 9 | 3.8 | 21.3 | 9 | 1.6 | 19.7 | 6 | 1.7 | |
| Popcorn | 21.7 | | 1.9 | 28.1 | 9 | 2.8 | 12.4 | | 1.0 | 9.8 | | 0.0 | 8.5 | | 0.0 | P<0.001 |

Appendix 12: Items survey participants used as treats for children

| Cakes, pastries, buns, apple tarts | 20.6 | 1.6 | 22.7 | 1.4 | 20.5 | | 1.9 | 8.2 | | 0.0 | 15.4 | 9 | 3.4 | P<0.05 |
|--|------|-----|------|-----|------|---|------|------|---|-----|------|---|------|---------|
| Money | 20.5 | 5.8 | 20.0 | 4.0 | 36.2 | 4 | 15.2 | 6.6 | | 1.6 | 2.6 | | 0.9 | P<0.001 |
| Soft still or fizzy drinks | 18.2 | 2.3 | 19.5 | 2.5 | 17.1 | | 1.0 | 23.0 | 8 | 6.6 | 10.3 | | 1.7 | |
| Fruit Juices | 17.7 | 2.2 | 17.8 | 2.5 | 17.6 | | 0.5 | 18.0 | | 3.3 | 17.1 | 8 | 3.4 | |
| Stickers, stationery | 16.4 | 2.4 | 15.4 | 0.9 | 13.8 | | 1.4 | 14.8 | | 1.6 | 27.4 | 3 | 12.8 | P<0.01 |
| Chips | 15.0 | 0.8 | 18.0 | 1.1 | 12.9 | | 0.0 | 9.8 | | 0.0 | 5.1 | | 0.9 | P<0.01 |
| Berries | 11.9 | 0.8 | 13.7 | 0.9 | 11.0 | | 0.5 | 11.5 | | 1.6 | 4.3 | | 0.0 | P<0.05 |
| Fidget spinners, dabbing, collectable cards, JoJo bows | 10.3 | 0.4 | 12.9 | 0.5 | 7.6 | | 0.5 | 1.6 | | 0.0 | 5.1 | | 0.0 | P<0.01 |

| ltem | Total nur participai 1,03 | ants (N = | Paren | nts (n = 651) | | Grandparents (n = 210) | | | Childminders (n = 61) | | | | ducation ioners (n = | = 117) | Gro | | |
|--------------------------|---------------------------------|---------------|-------------------|---------------|-----------|------------------------------|------|-----------|-----------------------|------------|-----------|-------------------|-------------------------|-----------|------|--|---------|
| | Used as treat* | Most used† | Used as treat* | Most | used† | Used as Most used† treat* | | used† | Used as treat* | Most used† | | Used as treat* | Most used† | | | | |
| | % | Top 10 | % | % | Тор 10 | % | % | Тор 10 | % | % | Тор 10 | % | % | Тор 10 | % | | |
| Dried fruit | 9.9 | | 1.0 | 10.1 | | 1.4 | 8.6 | | 0.0 | 16.4 | | 1.6 | 7.7 | | 0.0 | | |
| Crackers, breadsticks | 9.1 | | 1.2 | 10.0 | | 0.8 | 11.0 | | 2.9 | 4.9 | | 1.6 | 3.4 | | 0.0 | | |
| Cheese | 6.0 | | 0.4 | 7.1 | | 0.3 | 5.7 | | 0.5 | 4.9 | | 1.6 | 0.9 | | 0.0 | | |
| Homework pass | 3.9 | | 0.5 | 3.4 | | 0.0 | 1.9 | | 0.0 | 3.3 | | 0.0 | 11.1 | | 4.3 | | P<0.001 |
| Most used treats | | | | | | | | | | | | | | | | | |
| Unhealthy foods | | | 57.8 | | | 60.7 | | | 56.7 | | | 55.7 | | | 45.3 | | P<0.05 |
| Healthy foods | | | 14.8 | | | 15.5 | | | 13.3 | | | 21.3 | | | 10.3 | | |
| Non-food treats | | | 24.4 | | | 22.4 | | | 28.1 | | | 18.0 | | | 31.6 | | |

*The proportion of the participants (within the specified participant group) who selected a given item as a treat for the child(ren) they were caring for. The "Top 10" ranks were based on the percentages.

†The proportion of the participants (within the specified participant group) who selected a given item as the most used treat for the child(ren) they were caring for. Participants were instructed to select only one item as the "most used treat".

 \pm Levels of significance from Pearson χ_2 tests of differences between the 4 groups (parents, grandparents, childminders and education practitioners) in terms of the proportion of participants who selected a given item as a treat for children.

STo offer top line results regarding participants' most used treats, the items were divided into 3 categories:

- Unhealthy foods (sweets, chocolates, ice cream or ice lollies, crisps, takeaways and so on, biscuits, popcorn, cakes and so on, soft or fizzy drinks, and chips)
- Healthy foods (fruit, popcorn, fruit juices, berries, dried fruit, crackers or breadsticks, and cheese)
- Non-food treats (time on digital devices, toys or gifts, trips out, money, stickers or stationery, fidget spinners and so on, and homework passes).

The division between unhealthy foods and healthy foods was based on the Food Pyramid (32).

| | Rating on the "guilty" feeling: Mean, or Average, Standard Deviation (SD) | Rating on the "happy" feeling: Mean, or Average, Standard Deviation (SD) |
|---|---|--|
| | 1 = Not at all guilty; 7 = Very guilty | 1 = Not at all happy; 7 = Very happy |
| Total number of participants (N = 1,039) | 2.51 (1.65) | 4.27 (1.55) |
| Parents (n = 651) | 2.58 (1.67) | 4.18 (1.44) |
| Grandparents (n = 210) | 2.15 (1.44) | 4.66 (1.68) |
| Childminders (n = 61) | 2.56 (1.52) | 4.52 (1.47) |
| Education practitioners (n = 117) | 2.78 (1.86) | 3.93 (1.76) |

Appendix 13: Survey participants' emotions attached to treat food provision

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