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"That's his choice not mine!" Parents' perspectives on providing a packed lunch for their children in primary school

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Shortened version of the title: Parents' perspectives on packed lunches

Key words: food choice; school nutrition; children; parents

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Conflict of interests

None.

Abstract

Objective: To examine the factors influencing parents' selection of packed lunches over a school lunch, the food choices made in their preparation, and the role of children therein.

Design: A qualitative approach using semi-structured focus group and individual interviews.

Setting: Four primary schools in a UK local authority.

Participants: Twenty parents providing a packed lunch to their children (age 5-11 years).

Analysis: An inductive thematic approach was used to identify categories and themes. Rigour in the data analysis was maintained through internal discussion and review by researchers, until consensus was reached.

Results: Children emerged as active decision-makers, exerting substantial power particularly in the initial decision to have a packed lunch and then in influencing their contents. The packed lunch could be a source of anxiety for some parents; however, ultimately parents' attitudes and perceptions revolved around their key requirement that the lunch was eaten and providing a lunchbox was a means of achieving this.

Conclusions: This study highlights children's growing authority over everyday food decisions, and further research to explore children's perceptions of their role in food provision is needed. The study's findings have implications for school food, nutrition education and school-based interventions. Frameworks that look to improve children's nutrition in this area should reflect children's growing status as food decision makers and consider how this can be employed to support and sustain positive changes.

Key words: *food choice; school nutrition; children; parents*

INTRODUCTION

Children spend a large proportion of their year in school and a packed lunch brought in from home is the preference for many UK children[1]. As well as contributing an important element to a pupil's diet, packed lunches can represent overall diet and food provision available at home. Studies [2–5] have raised concerns surrounding the nutritional quality of packed lunches, as has a government commissioned review of school food (School Food Plan)[6]. Strategies to improve the quality are gaining momentum at school and local government level. Many UK primary schools implement 'packed lunch policies'. These guidelines vary between schools but generally outline suggestions to parents, and encourage the exclusion of chocolate, crisps (potato chips) and sugar-sweetened beverages.

For pupils, the alternative to bringing in a packed lunch from home, is eating a school lunch (also known as a school dinner) which is provided by school caterers. Typically, this will comprise a hot meal (meat-based, or vegetarian, or baked potato with a filling) or a sandwich, as well as a drink and dessert/pudding. School lunches are subject to school food standards[7], which restrict the food and drinks provided. These standards were reviewed as part of the national School Food Plan[6], and the revised standards become statutory in England at the beginning of 2015. The price of a school lunch in England ranges from £1 to £3, with an average of £2.04[1]; children from low-income families are eligible to receive free school lunches under the Free School Meal (FSM) program.

In addition, the UK government in September 2014 introduced a Universal Infant Free School Meal (UIFSM) program which offered a free school lunch to *all* 4-7 year-old pupils[8].

One of the aspirations behind this initiative was to encourage the uptake of school lunches, as an alternative to a packed lunch. Schools are increasingly utilised in public health interventions, especially around diet and obesity prevention. Accomplishing this via schools can be limited and therefore engagement with parents' perspectives around food provision is critical.

Parents play a key role as nutritional gatekeeper for their children, influencing the provision of food both inside and outside the home. Significantly, parents act as key moderators of food in the home [9], and the influences of a positive home food environment, maternal diet quality and parents' food practice on children's healthy eating behaviour are reported [10–12]. The difficulties that parents face in promoting healthy eating practices at home, and the strategies that they implement are also reported [13]. Previous work indicates parents' desire to have control over their children's diet at school [14], and their ability to make accurate predictions of their likes and dislikes [15].

There is limited research on packed lunches from parents' perspectives, and whilst previous research found a strong preference for packed lunches and emphasised their social aspects for children [9], a greater understanding of parents' perceptions is critical. This is particularly the case given the current drive by local government and schools to improve the quality of the foods provided by parents in packed lunches.

In considering parents' perceptions and practices related to packed lunches and the primary theoretical considerations of food provision by parents, parent-child interaction and school settings, the socioecological model[16] highlights the complex relationship between individuals and the environment, with behaviour being influenced by multiple levels[16], some proximal

and others more distal. The inner level of influence captures the individual's setting and interactions with those closest, e.g. with parents, family members and with peers. The next level of influence comprises the interactions between components e.g. between parents and the school community, packed lunch policies. More distal factors comprise settings that have indirect contact but nevertheless influence, e.g. parents' work patterns, as well as the social and cultural values and customs exerting influence. Reciprocal determinism is relevant to the socioecological model, whereby environment and behaviour influence each other and the individual can also influence environment, e.g. home food environment. The socioecological model has been used previously to consider dietary behaviour including obesogenic dietary intake in young children[17], fruit and vegetable intake in a preschool setting[18], and maternal considerations regarding how much food to offer their children[19]. Reciprocal determinism also forms the central principle of social cognitive theory which emphasises the interaction between the individual, environmental influences, and behaviour[20,21]. Social cognitive theory has been used widely to examine nutrition behaviour, including fruit and vegetable intake in children[22], farm-to-school programs[23] and parental attitudes and barriers to healthy eating[24]. Other work has focussed on modelling and control theories of parental influence, and revealed children modelling parents' eating behaviour and attitudes, as well as the role of control, e.g. parents imposing control over food or using food in an attempt to control behaviour[25].

Given the paucity of studies examining parents' perspectives with respect to packed lunches, this study sought to explore parents' perceptions and practices related to packed lunches, their experience of providing a packed lunch, and children's roles therein. More specifically the factors relevant to the decision to opt for a packed lunch (as opposed to a school meal)

105 and the choice of items included, were central to this work. The study was informed by
106 theory considered most relevant, and in particular was guided by socioecological theory.

METHODS

Due to the exploratory nature of the study, a qualitative approach using an inductive thematic methodology [26] was considered most appropriate. Focus group interviews were selected to promote discussion between parents and to gain an understanding of contrasting viewpoints, i.e. to benefit from the group effect [27]. Groups were limited to 5 participants to encourage in-depth discussion, leading to more relevant and interesting data [28]. While focus group discussions were the primary interviewing method, where a parent had difficulty attending, an individual interview was offered and conducted. The latter afforded detailed insight into parents' experiences of providing a packed lunch, and a deeper understanding of their attitudes and behaviour. To support consistency across individual and focus group interviews, both were based on the same semi-structured interview format, and guided by the same interview guide. Data collection was conducted until saturation was considered reached, and no new relevant information was emerging, with themes and categories well defined [29]. Four focus groups (12 parents) and 8 individual interviews (8 parents) were held. All were conducted in English, audio recorded following informed consent, and took place October 2014 – November 2015, with the majority lasting 50-60 minutes.

Participants and recruitment

A pragmatic approach was taken to recruit parents via their children's school, with a key requirement being that they provided a packed lunch for their children on most days of a typical week. Primary schools within an urban local authority formed the sampling frame for

this study. In order to enhance the generalisability of the work, a strategy of sampling based on Free School Meals profile was adopted. This is the percentage of pupils eligible for free school meals (FSM), which is a means-tested entitlement and is utilised as a measure of socioeconomic disadvantage. Accordingly, primary schools were approached in sequential order based on their FSM profile and their closeness to the national average (17.0%) [30]. Initial contact was made via telephone and email; this was followed by a school visit and face-to-face discussion with the Head Teacher or other senior leader with specific responsibility for school food. For consenting schools, an information pack was sent by 'pupil post' to all parents, outlining the study and inviting parents providing packed lunches on most days of a typical week to participate. Ethical approval for this study was granted by the University's Faculty of Health and Social Sciences' Research Ethics Committee.

Data collection

An interview guide was developed in advance; this was based on relevant concepts from literature and informed by theory considered most pertinent, and drawing on the socioecological model. The emphasis in the interviews was on exploring specific key topics: reasons for selecting a packed lunch; foods and beverages included and their selection; thoughts on the packed lunch provided; role of children in preparation; and packed lunch policies. A semi-structured format was chosen according to recommended practice[31]. The guide was reviewed by the researchers and tested with 4 parents of primary school children taking packed lunches. Between successive focus group and individual interviews researchers reviewed and refined the interview guide where necessary, based on evolving insights.

The first and second authors were both trained in qualitative data collection methods and conducted the focus group and individual interviews. These began with an opening which introduced participants to the study and the format of the data collection method. This was followed by introductory questions which were designed to encourage participants to engage (e.g. *"I'd like to start by asking about how many children you have at school, and what years they're in?"*). The main questions revolved around the focus of the study, e.g. *"How many days a week does your child take a packed lunch to school?"; "*What would you say are the *main reasons for your son or daughter having a packed lunch?"; "What are the main priorities when it comes to what's included in your child's packed lunch?"; "What are the main foods and drinks that are typically included in a packed lunch?"; "Overall, how would you say you feel about the packed lunch?".* These were interspersed with probes and follow-on questions as necessary. Throughout the discussion and interviews, topics, questions and probes were flexible depending upon the progress of the interview and emerging issues. At the end of all discussions and interviews, participants were asked about any topics or issues that had not already come up, which they felt were important to include. In addition, a verbal summary was offered to participants to assess data adequacy.

After each focus group discussion or interview, initial insights were noted and these contributed to the data to be analysed. Audio files were transcribed using a denaturalised approach, with an emphasis on the content and meaning of the discussions and the perceptions created and shared [32] (rather than features of speech such as pause length, intonation etc.). Transcripts were checked against the audio recordings for accuracy before analysis. Strict measures to safeguard data and anonymisation were implemented.

180 **Data Analysis**

181

182 Parents' perceptions and practices related to packed lunches, and the main factors that
183 encourage their usage and determine their contents were the focus of the data analysis. An
184 inductive thematic approach [26] was used and robust data analysis provided relevant themes
185 and categories. At the outset, familiarisation (listening to the audio files, reading the
186 transcripts and notes made immediately following focus group and individual interviews)
187 provided an overview, and allowed the analysis to begin. Initially, patterns, features or
188 aspects were identified. These were then used to systematically code the data [33], using
189 software (NVivo10, QSR International, Victoria, Australia) which also supported data
190 management and analysis. Data analysis was conducted by the first and second author, both
191 trained in qualitative data analysis and NVivo. Coding was reviewed in an iterative fashion
192 until the complement of themes and their respective grouping categories was finalised. All
193 themes and categories were named with a phrase or quote. Rigour in the data analysis was
194 maintained through internal discussion and ongoing review of codes by researchers. This was
195 to gain consensus when considering and confirming themes and categories, and was done
196 until the data were satisfactorily described and represented. The quotations provided have
197 been chosen to represent the emergent themes and categories. All quotations have been
198 anonymised using unique identifiers with a prefix P1, P2 etc.

RESULTS

All participants were from 4 urban primary schools; 2 schools had FSM profiles below the national average and 2 above (16.8%, 13.3% and 18.3%, 22.5%, respectively). Key demographic characteristics of the parents are given in the Table 1. All (19 mothers, 1 father) were actively involved in preparing packed lunches for their primary school age children (age 5- 11 years), who ranged in year group (years 1 - 6) and had an almost equal split of boys and girls. The most common household comprised 2 adult and 2 children. Almost all participants were White British, and most were degree educated.

The themes fell into 4 broad categories: Child as decision-maker; Priorities when preparing a packed lunch; Parents' anxieties and reassurance; School factors. Themes are explored and described below, alongside representative quotes from different parents (P1 – P20).

Child as decision-maker

Child chooses packed lunch – "That's his choice not mine!" Parents reported the decision to provide a packed lunch originated from children themselves.

> *He just wants to carry on having a packed lunch – it's what he likes and it's just how he likes it . . . P16*

> *I let them … I just see what they want to do [. . .] I just go with what they want to do . . . P4*

> *. . . he feels he's more satisfied by being in charge of what his own food is. P20*

Many parents expressed their *own* preference for school lunches and recounted how they had tried to persuade their children.

> *I have tried to persuade him and I've talked about the menus and shown him how many different options actually he would like to eat on that, and actually [there's] a big range of food he'd like. He really just doesn't want to go from a packed lunch to school dinners. P16*

> *I was saying to him, "You get pudding. If you get a packed lunch I'm not going to be giving you pudding every day!" P18*

Ultimately however, parents were reticent to insist.

> *. . . she has chosen this year to have packed lunches. And I just didn't think it was worth the arguing and the upset to make her have school dinners [. . .] It's pointless to keep going . . . everyday, you have a conversation, "I want a packed lunch; I don't like the school dinners." In the end [I agree]. P17*

Parents viewed the introduction of the UIFSM program (which offered a free school lunch to 4-7 year-old pupils) as an opportunity to 'take up the offer', and 'give them a go'. Some parents explained however that they had not been able to persuade their children.

> *My little boy - he could've had free meals from the start and I have tried to get him to do that just 'cause I think it would make life a bit easier and it might be a bit more interesting for him...but he's not very keen… P16*

> *. . . so now it's free every day and I encourage her . . . but she will not [have a school meal]. P10*

Child-centric content. Children were central to what was provided in the packed lunch. This ranged from parents being mindful of children's personal preferences, parents giving options

to children whilst making packed lunches, to children themselves making specific requests when shopping. Parents were aware of what would be 'acceptable' and explained that children were "not shy about giving feedback about anything they don't like." P8

> *So yes, if we put tomato it will spoil the sandwich for him, so he'll have cucumber more frequently. P20*

> *they will [say] "Can we get some yogurt", "Can we get some of these cereal bars" or "Can I have tuna in my lunch this week?" P16*

> *...we do Frubes (fromage frais product) ...but he won't eat own brand ones...he will only eat Frubes – apparently they taste different! [laughs] P6*

Priorities when preparing a packed lunch

What will be eaten – "Ultimately you want the child to eat at lunchtime, don't you?" It was vital for parents, first and foremost, that the packed lunch was eaten.

> *So I know if I put ham in the sandwiches, or salami, or whatever… I know that that's what she likes and there's a good strong chance she's gonna eat it. P11*

> *I know that he will eat what I put in his packed lunch[...]It was more that, that I could guarantee he would eat his packed lunch because I'd put something in there that he'd like. P13*

Providing a treat. Providing 'a treat' in the packed lunch was important to parents, and interestingly they often qualified the inclusion of a treat, e.g. it was small, or "along the same lines" as school lunches, because the "kids on school dinners will be having a pudding".

...we tend to buy multipacks of Kit Kats or Twixes, tend not to go for the big chocolate bars but the two-fingered ones, or the single Twixes or sometimes it might be something like a 'Mr Kipling cake', or something like that, always have something like that. P20

I just put a flapjack in there...it's not chocolate - just raisins, stuff like that, just put ... that's a treat for that. P12

I let him have one kind of treat thing so whether it's like a small chocolate bar like a 2-fingered Kit Kat, or a Penguin, or like half a bag of crisps… P19

Some parents talked about a 'treat lunchbox' on Fridays or for school trips.

And then on Fridays she has a treat lunchbox...where she will have say a cookie or a muffin...and a bag of crisps...but there's no crisps the rest of the week. P9

Price. When shopping for packed lunch contents, parents selected items based on supermarket offers, whilst also ensuring items were "acceptable" to their children.

... it is mainly price and offers […] so I know which kind of brand yoghurts they like… I'd always look for them if they're on offer… P6

. . . it varies . . . I'll often use the squeezy tube yoghurt……..Frubes yeah [laughs]… Sometimes they will have Petits Filous or Little Stars (yogurt or fromage frais), very often – whatever is on sale in ASDA (supermarket retailer) in that range. P4

Generally parents avoided "expensive" pre-packaged lunch products, reserving these for special occasions only.

Parents' anxieties and reassurance

Parents' anxieties. The pressure to make an interesting lunchbox was raised by parents.

> *it's a hard job with children now – they've got more choices – I don't like that. You know I suppose in the 70s you got your sandwich spread sandwich, you got your fish paste sandwich or chicken slices…that was all you got. That was tough – you didn't have a choice. And now children are going, "I don't like this! I don't like that!" and it's kind of, I think it's added pressure for parents. P14*

> *I'd like to provide more variety than a sandwich as such but they don't eat it when I do so … you know I think I've accepted that now after years and years. P8*

Ultimately parents were pragmatic and pointed to the fundamental aim that the lunch was eaten.

> *I think you can get a bit wrapped up in trying very hard to make their lunch always seem exciting...but if you step back from that, you think, "Actually it doesn't really matter if they're eating pretty much the same thing every day - 'cause it is just their lunch" - I quite often just eat the same thing – so it doesn't really matter. P16*

> *She's [daughter] fine with it. I personally think it's a bit boring to have pretty much the same thing every day: I wouldn't want to eat pretty much the same thing every day, but then I'm not 8...so it does the job and she's alright with it. P17*

Checking afterwards. Parents highlighted the ability to monitor lunchboxes and feel reassured that what they provided was eaten, or alternatively change the contents accordingly.

> *. . . and we say that, "Your yoghurt pot and your wrappers or anything like that: put them back in the box, because then [you can] go out and make [the] most of your time*

316 *to play", but really of course we said that so that we know what's been opened, what*
317 *she's eaten, what she's left . . . So I'd sooner find half chewed this [or] that and the*
318 *others in there to sort out and know what she's had. P9*

319 *You can always check in at the end of the day, "Did you like it?" and change what*
320 *you've done there. P20*

321 This ability to monitor was seen as a distinct advantage over school lunches where "you don't
322 know how much they're eating" and "you take their word for it". Indeed, several parents
323 (with one of their children on school lunches) voiced concerns over not knowing how much
324 their child on school lunches was eating.
325 For some parents, the packed lunch not only provided valuable feedback but also then served
326 as a focal point for parent-child interaction; parents appreciated the 'connection' a packed
327 lunch provided:
328 *There is something about parents being involved with their children and in what*
329 *they're eating and talking about it, enjoying putting it together. P20*

330 *He likes me to show him, in the morning, before we leave the house . . . what's in his*
331 *lunch box, so he knows. He just likes that; it's kind of become part of our little morning*
332 *routine. P19*

333
334 **School factors**
335
336 **Time to play – "he's in such a rush to eat and get out**". Children rushing lunch was
337 perceived as an important issue with parents reporting their children keen to consume their
338 lunch quickly to maximise time in play.

The other thing is he bolts his food and then he's straight out in the playground to play football. P13

I get the impression there's a little gang of them – they sit down, they wolf down what they can as quick as possible and then they're straight out. And I think sitting down to actually enjoy your meal is just not kind of happening. P18

I don't know whether it's because also there's an element maybe that children want to eat it as fast as they can so they can go have extra playtime . . . P8

This rush to eat had implications for packed lunch contents, as this parent explains:

I can really sense with him: it's the easiest thing to eat as quickly as possible. So if I put a carrot in...well I've stopped putting as much veg in because I've just found he just doesn't want to eat – he obviously doesn't want to spend the time to sit and eat it...sitting and chewing. P18

Packed lunch policy. Parents relayed varying levels of knowledge and detail for their child's school's 'Packed Lunch Policy', with crisps, chocolate and fizzy drinks commonly quoted as prohibited. Overall, parents were in favour of the guidance, and felt the restricted items were "all the things you'd assume" and was "fair enough".

Nevertheless, parents asserted that the contents of children's packed lunches were parents' responsibility ultimately, and questioned whether enforcement was possible in any case.

... not supposed to have sweets and chocolates but I don't know if that's a policy and what would happen if they did? I don't think they'd get whipped out the bag, but...[laughs]. . . P14

I kind of think as a parent I guess you want that freedom of choice, don't you really?...and if you want to give your child something they're gonna eat at the end of the day and obviously if children don't want to eat anything healthy then you still want them to eat - so you're gonna give them something they're gonna eat - whether it's healthy or not. P18

Interestingly, an incident that happened a few years ago was brought up; parents seemed reassured that it hadn't happened since:

And I do remember there was a bit of a furore...when somebody came round and took out of children's packed lunches everything that they considered to be chocolate, so that included things like, I think chocolate coated biscuits - not even a chocolate bar - and that did cause a bit of a...because it's not a Nazi state; you can put in what you want in your child's packed lunch - regardless of whether they think it's right or not. That did happen once but that hasn't happened since. P16

Parents referred to children being aware of what was allowed with the packed lunch policy, with some children trying to persuade parents to contravene the policy by reporting *other* children bringing in restricted items.

I followed it [policy] all of last year…didn't put any chocolate or you know Kit Kats or anything like that. I didn't put any crisps in. . . . from talking to my son: he said to me every day for a year, "But everybody else has this! Everybody!" P6

[daughter] insists that they are in everybody else's packed lunches but not hers [laughs] […]I thought she were lying to me, I thought she were fibbin', that everyone else has crisps and she doesn't. P5

DISCUSSION

In this study, parents' perceptions revealed children as active decision-makers in their selection of foods for their lunch in school. These findings indicate a shift in the prominence of children in everyday food decisions. Whilst previous research has reported how children can negotiate food choice with parents including 'pester power' [34], and exert influence over family diets [35], the *extent* of the authority as shown in this study is revealing. This was most clearly seen in the initial decision to have a packed lunch (and not a school lunch). Further research to explore the perceptions of primary school age children themselves and their role as active decision-makers in packed lunches and more generally in food provision at home, is required.

Parents' focus was on fulfilling children's needs, preferences and specific requirements in providing a packed lunch. This concurs with other work [36 37], as does the importance that parents in this study placed on packed lunch contents being eaten [38]. The inclusion of 'a treat' has been observed previously [37], and this study revealed parents qualifying the inclusion of a treat. This may reflect the growing scrutiny that packed lunches have attracted in recent years and parents wanting to explain their rationale.

Children were keen to consume their lunch quickly in order to maximise time in play, reflecting prior work to varying degrees[34,39]. This study indicated how this influenced what parents provided, in particular the exclusion of certain foods, e.g. vegetables.

In accordance with other research [38], the lunchbox could be perceived as a source of anxiety. Ultimately however, parents in this study were pragmatic and as long as their child was happy with the contents, then providing a lunchbox fulfilled their objective; parents had come to accept what they were providing and felt they should not "beat themselves up about it". This may signal a shift in parents' views, and reflect the growing status of children in food decisions.

The connection provided by a lunchbox including the ability to monitor, is an interesting outcome – especially alongside parents' apparent 'delegation' of food decisions to their children. Previous research has described the lunchbox in the context of some parents' attempt to maintain influence over their children [38] and retain control [14]. In the presented study, the lunchbox may also provide more of a reinforcement of the connection between child and parent.

Whilst this study's findings indicate that the child plays an important role in whether a packed lunch is taken to school and its contents, this should be placed within the context of the home food environment and family in forming these preferences in the first place. Parents create home food environments that may influence eating behaviour [10], likewise the influence of maternal diet quality on children's has been reported [11], as has the importance of parents modelling food practice [12].

The theory informing the study design, most notably socioecological theory, was effective in identifying emergent relationships and describing parents' observations of their children's behaviour related to packed lunches. Reciprocal determinism, where environment and

behaviour influence each other and the individual can also influence environment, was evident, e.g. home food environment, parent-child interaction related to the packed lunch.

The study design enabled insights into parents' perspectives regarding packed lunches for their children (age 5- 11 years) at primary school. The potential for individual participants to exert influence within the focus group discussions however, is acknowledged. Further, the findings should be considered in the context of the sample and school characteristics. Whilst thematic saturation was evident, parents interviewed may not reflect other parents' perspectives, and the full scope of parents' perceptions should be explored in further research. In addition, quantitative empirical work to examine the presence of the identified themes and parent-child interaction around food choice is recommended.

IMPLICATIONS FOR RESEARCH AND PRACTICE

Children's role in their packed lunch provision highlights their growing authority over everyday food decisions. This has implications for staff involved in school food (e.g. lunchtime supervisors, catering managers) and nutrition education (e.g. senior leadership, class teachers), and provides an opportunity to develop initiatives to promote better food choice and subsequent nutrition.

The introduction of UIFSM had influenced parents to encourage their children to try school lunches, concurring with reported increases nationally [40]. The overriding factor however was

458 acceptability by children, and some parents reported not being able to convince their children
459 to take up the offer of a free school lunch. This may be reflective of the current take up rate
460 of 85% [41]. Closer pupil engagement in school meals is worthy of further consideration, as is
461 the promotion of meals to children themselves.
462
463 Another issue of interest is the timing of playtime. Switching playtime to before lunch
464 removes the incentive to finish lunch quickly and may have a positive influence on pupils'
465 lunchtime consumption. Some US studies [42,43] have indicated promise in this approach.
466 Whilst this has inevitable follow-on implications on the school day, it is an approach that is
467 worthy of consideration here.
468
469 Schools' unparalleled access to parents means that they are often called upon to support or
470 engage with parents. Increasingly they are utilised in public health interventions, especially
471 around diet and obesity prevention. Packed lunches provide a unique medium, as they
472 connect the school, parent and pupil. Given the central role of children in the food provided,
473 as highlighted in this study, efforts targeting children and parents together may be
474 particularly effective. Similarly, efforts to support parents in modulating children's authority
475 and for example, requests for foods, could be valuable.
476
477 In conclusion, this study has highlighted how children (age 5- 11 years) explicitly make
478 decisions about having a packed lunch in the first place, and also its contents. Further
479 research to explore children's perceptions of their role as active decision-makers in food
480 provision is needed. The growing authority of children over everyday food decisions has
481 implications for school food and nutrition education, and should inform the development of
482 public health initiatives looking to improve children's food choice behaviour. This is

specifically relevant given the ongoing utility of schools as arenas for public health interventions, and for example co-targeting parents and children may provide a way forward in improving children's food choice and subsequent nutrition.

REFERENCES

1. Wollny I, Lord C, Tanner E, Fry A, Tipping S, Kitchen S. *School Lunch Take-up Survey 2013 to 2014*. London: Department for Education; 2015.
2. Evans CEL, Greenwood DC, Thomas JD, Cade JE. A cross-sectional survey of children's packed lunches in the UK: food- and nutrient-based results. *J Epidemiol Community Health*. 2010;64(11):977-983.
3. Pearce J, Harper C, Haroun D, Wood L, Nelson M. Short communication Key differences between school lunches and packed lunches in primary schools in England in 2009. *Public Health Nutr*. 2011;14(8):1507-1510. doi:10.1017/S1368980010003605.
4. Golley R, Pearce J, Nelson M. Children's lunchtime food choices following the introduction of food-based standards for school meals: observations from six primary schools in Sheffield. *Public Health Nutr*. 2011;14(2):271-278. doi:10.1017/S1368980010002120.
5. Harrison F, Jennings A, Jones A, et al. Food and drink consumption at school lunchtime: the impact of lunch type and contribution to overall intake in British 9–10-year-old children. *Public Health Nutr*. 2013;16(6):1132-1139. doi:10.1017/S1368980011002321.
6. Dimbleby H, Vincent J. *The School Food Plan.* London: Department for Education: London; 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/251020/The_School_Food_Plan.pdf.
7. Department of Education and Employment. *Statutory Instrument 2014 No. 1603. The Requirements for School Food Regulations 2014*. London, UK: The Stationery Office;

2014.

8. *Children and Families Act 2014*. London: Queen's Printer of Acts of Parliament

9. Briggs L, Lake AA. Exploring school and home food environments: perceptions of 8–10-year-olds and their parents in Newcastle upon Tyne, UK. *Public Health Nutr*. 2017;14(12):2227-2235. doi:10.1017/S1368980011001984.

10. Scaglioni S, Salvioni M, Galimberti C. Influence of parental attitudes in the development of children eating behaviour. *Br J Nutr*. 2008;99 Suppl 1:S22-5. doi:10.1017/S0007114508892471.

11. Fisk CM, Crozier SR, Inskip HM, Godfrey KM, Cooper C, Robinson SM. Influences on the quality of young children's diets: the importance of maternal food choices. *Br J Nutr*. 2011;105(2):287-296. doi:10.1017/S0007114510003302.

12. Blissett J. Relationships between parenting style, feeding style and feeding practices and fruit and vegetable consumption in early childhood. *Appetite*. 2011;57(3):826-831. doi:10.1016/j.appet.2011.05.318.

13. Nepper MJ, Chai W. Parents' barriers and strategies to promote healthy eating among school-age children. *Appetite*. 2016;103:157-164. doi:10.1016/j.appet.2016.04.012.

14. Goodchild GA, Faulks J, Swift JA, Mhesuria J, Jethwa P, Pearce J. Factors associated with universal infant free school meal take up and refusal in a multicultural urban community. *J Hum Nutr Diet*. January 2017. doi:10.1111/jhn.12442.

15. Mata J, Scheibehenne B, Todd PM. Predicting children's meal preferences: How much do parents know? *Appetite*. 2008;50(2):367-375. doi:10.1016/j.appet.2007.09.001.

16. Bronfenbrenner U. Ecological models of human development. *Int Encycl Educ*. 1994;3(2):37–43.

17. Mazarello Paes V, Ong KK, Lakshman R. Factors influencing obesogenic dietary intake in young children (0-6 years): systematic review of qualitative evidence. *BMJ*

Open. 2015;5(9):e007396. doi:10.1136/bmjopen-2014-007396.

18. Ray C, Maata S, Lehto R, Roos G, Roos E. Influencing factors of children's fruit, vegetable and sugar-enriched food intake in a Finnish preschool setting e Preschool personnel's perceptions. 2016. doi:10.1016/j.appet.2016.03.020.

19. Johnson SL, Goodell LS, Williams K, Power TG, Hughes SO. Getting my child to eat the right amount. Mothers' considerations when deciding how much food to offer their child at a meal. *Appetite*. 2015;88:24-32. doi:10.1016/j.appet.2014.12.004.

20. Bandura A. Health promotion from the perspective of social cognitive theory. *Psychol Heal*. 1998;13(4):623-649.

21. Redding CA, Rossi JS, Rossi SR, Velicer WF, Prochaska JO. Health Behavior Models. *Int Electron J Health Educ*. 2000;3:180-193.

22. Resnicow K, Davis-Hearn M, Smith M, et al. Social-cognitive predictors of fruit and vegetable intake in children. *Heal Psychol*. 1997;16(3):272-276. doi:10.1037/0278-6133.16.3.272.

23. Berlin L, Norris K, Kolodinsky J, Nelson A. The Role of Social Cognitive Theory in Farm-to-School-Related Activities: Implications for Child Nutrition. *J Sch Health*. 2013;83(8):589-595. doi:10.1111/josh.12069.

24. Porter L, Shriver LH, Ramsay S. Maternal Perceptions Related to Eating and Obesity Risk Among Low-Income African American Preschoolers. *Matern Child Health J*. 2016;20(12):2565-2572. doi:10.1007/s10995-016-2082-1.

25. Brown R, Ogden J. Children's eating attitudes and behaviour: a study of the modelling and control theories of parental influence. *Health Educ Res*. 2004;19(3):261-271. doi:10.1093/her/cyg040.

26. Thomas DR. A General Inductive Approach for Analyzing Qualitative Evaluation Data. 2011. doi:10.1177/1098214005283748.

27. Tracy SJ. *Qualitative Research Methods : Collecting Evidence, Crafting Analysis, Communicating Impact*. Wiley-Blackwell; 2013.

28. Liamputtong P. *Focus Group Methodology: Principles and Practice*. London: SAGE Publications Ltd; 2011.

29. Silverman D. *Interpreting Qualitative Data : Methods for Analyzing Talk, Text, and Interaction*. SAGE Publications; 2006.

30. Department for Education. *Schools, Pupils and Their Characteristics: January 2014 – Statistical First Release SFR 15/2014.*; 2014. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335176/2014_SPC_SFR_Text_v101.pdf.

31. Krueger R. *Developing Questions for Focus Groups*. 2455 Teller Road, Thousand Oaks California 91320 United States : SAGE Publications, Inc.; 1998. doi:10.4135/9781483328126.

32. Oliver DG, Serovich JM, Mason TL. Constraints and Opportunities with Interview Transcription: Towards Reflection in Qualitative Research. *Soc Forces*. 2005;84(2):1273-1289. doi:10.1353/sof.2006.0023.

33. Fade SA, Swift JA. Qualitative research in nutrition and dietetics: data analysis issues. *J Hum Nutr Diet*. 2011;24(2):106-114. doi:10.1111/j.1365-277X.2010.01118.x.

34. Roberts EM-L. Negotiating food choice: parents' perception of children's eating behaviour. *Anthropol NOTEBOOKS*. 2006;12(1):63–77.

35. Dixon J, Banwell C. Heading the table: parenting and the junior consumer. *Br Food J*. 2004;106(3):182-193. doi:10.1108/00070700410528772.

36. Harman V, Cappellini B. Mothers on Display: Lunchboxes, Social Class and Moral Accountability. *Sociology*. 2015;49(4):764-781. doi:10.1177/0038038514559322.

37. Harman V, Cappellini B. Unpacking fun food and children's leisure: mothers'

perspectives on preparing lunchboxes. *Young Consum*. 2014;15(4):312-322. doi:10.1108/YC-11-2013-00410.

38. Metcalfe A, Owen J, Shipton G, Dryden C. Inside and outside the school lunchbox: themes and reflections. *Child Geogr*. October 2008.

39. Bathgate K, Begley A. "It's very hard to find what to put in the kid's lunch": What Perth parents think about food for school lunch boxes. *Nutr Diet*. 2011;68(1):21-26. doi:10.1111/j.1747-0080.2010.01488.x.

40. Department for Education. Ad-hoc Notice: Universal infant free school meals: Take up by infant pupils based on the autumn (October) census 2014. 2014.

41. DfE. *Schools, Pupils, and Their Characteristics*. London, UK; 2016. https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2016. Accessed December 15, 2017.

42. Price J, Just DR. Lunch, recess and nutrition: responding to time incentives in the cafeteria. *Prev Med (Baltim)*. 2015;71:27-30. doi:10.1016/j.ypmed.2014.11.016.

43. Hunsberger M, McGinnis P, Smith J, Beamer BA, O'Malley J. Elementary school children's recess schedule and dietary intake at lunch: a community-based participatory research partnership pilot study. *BMC Public Health*. 2014;14(1):156. doi:10.1186/1471-2458-14-156.

606 **Table 1** Demographic Characteristics of Research Participants in Focus Group Discussions
607 and Individual Interviews on their Provision of Packed Lunches for their Children in Primary
608 School

Gender		Child's gender†	
Female	19	Female	12
Male	1	Male	13
Age		Child's year group†	
20-24 years	1	Y1 (age 5-6 years)	5
25-29 years	0	Y2 (age 6-7 years)	3
30-34 years	4	Y3 (age 7-8 years)	8
35-39 years	6	Y4 (age 8-9 years)	3
40-44 years	6	Y5 (age 9-10 years)	5
45-49 years	3	Y6 (age 10-11 years)	1
Education *			
No formal qualifications	1	Household	
GCSE/O Level/ CSE	2	1 adult 1 child	3
A Levels or equivalent	4	1 adult 2 children	3
Degree or equivalent	12	2 adult 2 children	8
Ethnicity		2 adult 3 children	5
White British	17	3 adult 1 child	1
White Irish	1		
Any other white	1		
Asian/Asian British: Indian	1		

609 *not all participants provided all information
610 †children within the household, at primary school and taking packed lunches (currently or
611 recently)
612