

# Meals and snacks from the child's perspective: the contribution of qualitative methods to the development of dietary interventions

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## Abstract

*Objective:* To explore the everyday consumption of meals and snacks from the child's perspective, among those with healthier *v.* less healthy dietary habits.

*Design:* The sample in this qualitative study comprised two groups of Danish schoolchildren aged 10 to 11 years, one with a healthier diet (*n* 9) and the other with a less healthy diet (*n* 8). Both groups were recruited from respondents to a dietary survey. Semi-structured interviews took their starting point in photographs of their meals and snacks taken by the children themselves.

*Results:* Both subgroups of children had a meal pattern with three main meals and two to four snacks. We found a connection between the nutritional quality of the diet and the social contexts of consumption, especially with regard to snacks. Among children with healthier eating habits, both snacks and meals tended to be shared social events and items of poor nutritional quality functioned as markers of a special social occasion. This was not the case among children with less healthy eating habits. All children described particular rules governing food consumption within their families. Although only some of them had participated in the development of these rules, and despite the fact that rules were different and were perceived as having been developed for different reasons, children from both subgroups tended to accept them.

*Conclusions:* The results of the study suggest that dietary interventions designed to promote children's health should focus more on the different social contexts of consumption and more on the role of parents.

**Keywords**  
Meals  
Children  
Health promotion  
Qualitative methods

Children's eating habits and their level of physical activity are central elements in strategies aiming to address the problem of childhood obesity<sup>(1-3)</sup>. Some of the major challenges associated with the promotion of healthy eating habits among children include increasing the intake of fruit and vegetables<sup>(4)</sup> and decreasing the intake of sweets and soft drinks<sup>(5)</sup>. Recommendations by health authorities specify levels of intake; for example, five servings of fruit and vegetables per day and, in Denmark, a new recommendation for a maximum of half a litre of soft drinks per week<sup>(6)</sup>. While recommendations are based primarily on nutrition and health sciences, nutrition messages and interventions should also be based on scientific and theory-based knowledge of the social and cultural context of consumption. Interventions work best when they take as their point of departure the everyday setting experienced by the population groups at issue<sup>(7-9)</sup>. Qualitative studies can be used to obtain new knowledge about the determinants of behaviour and to

elucidate the cultural patterns associated with particular settings<sup>(10,11)</sup>. The consumption of specific foods and meals is laden with cultural and social meaning<sup>(12,13)</sup>, and it is only when these have been clarified that relevant findings can be incorporated into an intervention plan. As yet, however, relatively few socio-cultural and qualitative studies have been undertaken from the perspective of children with regard to their eating habits in everyday settings<sup>(14-25)</sup>. Moreover, a large proportion of existing studies address only single aspects of children's diets, such as intake of fruit and vegetables, or examine only the character of a particular meal in one setting, such as the school lunch or family dinner.

Some older socio-cultural studies have elucidated the character of family meals and mealtimes, as well as points of connection between the social setting and the food consumed<sup>(26-28)</sup>. The phrase 'a proper meal' as used by informants not only describes the content of a particular kind of meal, but also refers to when, where and by

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whom such a meal is consumed and to the behaviour that is deemed appropriate for its consumption<sup>(28)</sup>. Feeding a family involves much more than just the mere provision of food. It also involves the establishment and re-establishment of the family unit, a social process that is itself promoted by the provision of meals<sup>(29,30)</sup>. These findings make it clear that when meals are examined as social events, their meanings do not merely concern food. Indeed, it is also indicated that structured meals and mealtimes help to structure one's life in general. It has also been pointed out that the role, structure and contents of meals appear to be changing<sup>(31)</sup>. This area of research has therefore also addressed such issues as how and by whom food and mealtimes are controlled, since these issues are intrinsic to everyday decisions that can lead to changes in behaviour<sup>(15,28,32)</sup>.

The overall objective of the present study was to explore the everyday consumption of meals and snacks from the child's perspective in a variety of settings, comparing the habits of children who have a less healthy diet with those who have a more healthy diet, such that the findings can be used to promote healthy dietary habits. The questions taken up in the analysis are:

1. Which meals and snacks do children usually consume at home and in other settings, and how are these experienced by the children?
2. Do children perceive their meals and snacks as being controlled by rules or other means and if so, in what way and by whom?

## Methods

Using a comparative design, the present qualitative study is based on photo-based personal interviews with children aged 10 or 11 years. Similarities and differences between two subgroups were studied, one with healthier and the other with less healthy dietary habits. Photo-based interviews are frequently used in child research<sup>(33,34)</sup> since this method enables children to utilise images from their everyday lives, making it easier for them to focus on concrete details and aspects of atmosphere while recalling and narrating their experiences, thus improving the reliability of data collection. These are

among the important strengths of this method in a study focused on experiences of actual diet and the social settings of meals and snacks.

## Population and sample

The children recruited to the study lived in a suburb of Copenhagen, Denmark. In a dietary study undertaken in 2002, their parents had recorded the diets of their children using a 7 d diary ( $n$  293). Twenty-four of these children were followed up in 2006, when they were 10 or 11 years old, with a view to recruitment to the present study. Inclusion criteria for participation in the present study were that the diet of one subgroup of children (those with a healthier diet), as identified from the study in 2002, met official recommendations with respect to an intake of maximum 10% of energy from added dietary sugar (refined sugars) and a daily dietary fibre intake of 15–25 g. The other subgroup (those with a less healthy diet) had an average intake of 15–25% of energy from added dietary sugar and dietary fibre intake of less than 15 g/d. Sugar and dietary fibre were selected as indicators of the healthiness of the children's diets because intakes of these nutrients are seen as central challenges in public health nutrition in Denmark<sup>(35,36)</sup>. Sex and other socio-demographic characteristics such as education were distributed between the two subgroups of children as shown in Table 1. Six of the twenty-four families contacted declined to participate, among whom four children had been identified as belonging to the subgroup with a less healthy diet. The nutrient profile of the children was recalculated after a recent update of nutrient assessments in the dietary survey. One boy from the subgroup of children with a healthier diet was excluded because his intake of added sugar was estimated to 13% of energy, which was higher than the inclusion criterion of 10%.

## Interviewing procedure

In 2006 the children and their parents were sent a letter informing them about the aims of the study as concerning children's experiences of food and eating habits. The families were then contacted by telephone approximately one week later and seventeen families consented to participate. These were subsequently visited in their homes, where they were given more information both

**Table 1** Characteristics of study participants: Danish schoolchildren aged 10–11 years, Copenhagen, 2006

Characteristic	Healthier diet ( $n$ 9)	Less healthy diet ( $n$ 8)
No. of boys	4	5
No. of girls	5	3
No. of single-parent families	1	3
No. with household income below 600 000 DKK ( $\approx$ 79 200 €)	3*	5†
No. with longest education among parents of 15 years or more	5*	0‡

\*Data available for eight of nine families only.

†Data available for seven of eight families only.

‡Data available for six of eight families only.

orally and in writing. In accordance with the ethical guidelines for child research<sup>(37)</sup>, written permission was obtained from the child as well as from their parents. During this initial visit, the child was given a disposable camera capable of taking thirty-seven pictures. Each was asked to take photographs of his/her meals and snacks throughout the following week, including different kinds of eating events at home and in other places. The camera was collected and the photographs developed. Semi-structured interviews focusing on the life-world of the child<sup>(38)</sup> were conducted using the child's own photographs as the point of departure and structured by an interview guide common to both subgroups of children. Main points in the interview guide referred to items of food and drink, the settings in which meals and snacks had been consumed, the child's role in these settings, food rules and the exercise of control with regard to foods, drinks and mealtimes. Interviews lasted between 40 and 65 min, following the rhythm with which the photographs were presented. Interviews were conducted in the child's home with the child alone, while parents were given the opportunity to see the photographs and to ask questions afterwards. All interviews were undertaken by the same researcher (I.H.) during May and June 2006, and were audio-recorded and transcribed in full. Observations made during the home visit were also noted. The participants as reported herein have been given fictitious names.

### **Analysis**

The analysis of transcribed interviews has been inspired by the procedure of template analysis<sup>(39)</sup>, in which a priori points guide initial interpretations of data and the development of codes. Index coding was undertaken with the help of ATLAS.ti qualitative data analysis software (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany). Meaning condensation with respect to selected points was also undertaken. Comparative analysis was designed to reveal common traits, variation and differences between the two subgroups of children and between the sexes. Quotations are used to illustrate the main findings. When text is omitted it is because of irrelevance to the point at issue, such omissions are marked with ellipses (...). Explanatory text appears within square brackets.

### **Results**

Three main themes emerged during the analysis. Meal structure with particular regard to when and where foods are consumed is described first. Next, we analyse differences with respect to the ways in which the children's consumption is embedded in a social context. Finally, we examine the children's experience of control and influence over their food, drinks, meals and snacks.

### **Meal structure and social settings**

Both subgroups of children described a similar structure of meals and snacks as comprising five to seven eating events on a daily basis. All but one girl usually ate three main meals, of which two were eaten at home and one at school on weekdays. The majority also ate two snacks away from home on weekdays. While some also ate one or two snacks at home on a daily basis, most did so during weekends.

#### *Breakfast and morning snack*

All of the children in the study ate breakfast at home. They ate cornflakes, coco-pops, porridge oats or bread with jam or chocolate spread. Five of the children with a less healthy diet and one with a healthier diet ate breakfast alone, while the remainder usually ate breakfast in the company of their family. Common to all of the children was the fact that their parents prepared breakfast for them whether they were present at the meal or not. The children had a short mid-morning break at school, when they typically ate a piece of fruit, some bread or a sandwich brought from home.

#### *Lunch and afternoon snacks*

The children ate a packed lunch at school, which their parents had also provided. This comprised sandwiches, some vegetables and sometimes something sweet, accompanied by a glass of water, milk or chocolate-milk. Only one of the girls did not have lunch every day. Some children occasionally bought lunch in the school canteen. All usually ate their food in the classroom, where they chatted about the topics of the day or listened to music. Some of the girls with a healthier diet described this lunch break as a free space, in which they not only shared experiences with their school friends but also swapped items of food.

We don't just go over and take someone else's food, but we do like to taste each other's. If I have a pizza, I might say: 'Would you swap a bit for a few grapes?' or something like that. (Camilla, Healthier diet)

Another girl described how leftovers from lunch packets were often offered to hungry schoolmates. The social aspects associated with this meal appeared to be more important for girls than for boys. Some children also told how they took it in turn to bring cakes for their class on a weekly basis.

After school, the children attended an after-school institution, where a snack comprising fruit or bread was provided. On arriving home, most also had a further snack, which they usually prepared themselves, particularly if their parents had not yet returned from work. This snack could comprise a piece of bread with spread, fruit, cake, popcorn or an extra serving of a breakfast cereal.

*Evening meal and snack*

It was a common trait that the children ate the third main meal of the day at home with their family. The timing of this meal could vary in order to accommodate recreational activities and working hours. In some families it was usual for the family to eat together in the dining room or, if this was not possible due to recreational activities, the children ate together with their mother or father later in the evening. Some families ate together in front of the television or did so only on occasions when a special programme was being shown, such as an international sports event. In other families, particularly among the subgroup with a less healthy diet, the individual members tended to eat alone; for example, in front of a computer, television or games console.

Some children had an additional snack in the course of the evening, comprising fruit, cake or sweets. This was a common pattern during weekends, particularly with regard to sweets and drinks.

*Social context of consumption*

There were no marked differences between the two subgroups of children with regard to their meal structure as such. Differences between those with a healthier diet *v.* those with less healthy dietary habits concerned the extent to which the meals and snacks consumed at home were socially shared events. This difference was especially clear with regard to the consumption of snacks. Among the subgroup that had a less healthy diet, food consumption was less frequently embedded in a shared social context.

Almost all children from both subgroups indicated very clearly that they enjoyed the social aspects of eating with others. They enjoyed the lunch meal at school and dinner at home. Not least, they particularly enjoyed special meals to which guests had been invited ‘...when we sit together here at this table and talk and everything’. They enjoyed listening to and participating in adult conversation, and they enjoyed chatting with friends. It was particularly girls who focused on the social aspect of sharing in their descriptions of meals and snacks.

*The social aspects associated with eating*

Children with healthier eating habits ate meals at home together with their parents, when their parents were home. Especially evening meals were a shared event, while breakfast and a late afternoon snack were more frequently eaten alone. Children with less healthy eating habits also ate some meals with their family, but they also relatively frequently ate alone, even when other members of the family were at home. One respondent from the former subgroup accounted for this pattern in the following way:

I just think that it is because we should, if we are home. Not just sitting ... for example, my sister in her bedroom, and me sitting in the living room, and my mum and dad sitting out here [in the

kitchen–dining room]! ... So, we sit together. Well, sometimes I am allowed to sit in there, but not often. It's only when there is something I really want to see [on the television]. (Katrine, Healthier diet)

Children with a healthier diet ate sweets, chocolate, cakes and crisps and they drank soft drinks, but when they did so it was usually in the company of family or friends. Furthermore, it was clear that these items functioned as a marker of a particular kind of social event such as the viewing of a special programme on television or the presence of visitors. These children said that they did not eat sweets in their own rooms unless it was in connection with a visit from a friend. If they had some sweets, these were offered to the whole family. The social context of this pattern of consumption was described in the following way:

Yeah, it's something we get sometimes at parties [soft drinks], or when we are going to have a really nice time. We keep it in the fridge, for when we decide to have a cosy evening – if there is something on the television that we really want to see, not just an ordinary kind of serial. (Frederik, Healthier diet)

Both subgroups of children explained that it was their parents who bought and served sweets and soft drinks, etc. This was a common pattern, even in those instances when the child did not want these items, as illustrated by the following exchange.

E.: That's someone called Peter – he sits across from me. He nearly always has sweets or something like that with him.

I.H.: Would you like that too?

E.: No, but my father sometimes gives me sweets anyway. ... He [Peter] eats an awful lot [of sweets]. I don't like to eat that much, but I do eat them sometimes. I don't want too much, otherwise I can't play football. ... Yeah, but it is because I can't run quickly. I can't run flat out straight away and such like. ... During the breaks at the football club we just eat apples and pears; we can choose ourselves what we want. I think one gets more energy from that actually. (Emil, Less healthy diet)

It was a characteristic of those children with less healthy eating habits that they ate meals and snacks alone relatively often. The children had photographed main meals, as well as sweets, cakes, etc. which had been eaten in their own bedrooms while watching television or playing computer. All children were asked whether they ate sweets and similar snacks in their own rooms, and those from the subgroup with less healthy eating habits gave several examples of doing so.

Usually I eat them when I am playing with my PlayStation. I also have games and a computer in my room. (Mads, Less healthy diet)

Children in this subgroup commonly ate sweets alone, and this consumption was not linked to any particular or special occasion.

#### *Working days and weekends*

Eating sweets on Friday evenings was a common pattern, and a majority of children in both subgroups stressed that they were given more sweets during weekends than on weekdays. The pattern once again was such that for children from the subgroup with healthier eating habits eating sweets on Fridays was an event shared by the whole family, while this was not the case among those with less healthy eating habits.

A boy with less healthy eating habits explained that he was given sweets every day, but that he was sometimes given pineapple on Fridays. This fits very well with the fact that sweets are convenient to serve and eat, while fruit can require some preparation.

M.: ... sometimes on Fridays, in the evening. I ask a few times. ...

I.H.: Why do you not get pineapple on other days?

M.: No I don't, because Mum couldn't be bothered to cut it up ...

I.H.: Why don't you just cut it up yourself, the pineapple?

M.: I can't. ... No, but it's also because I mustn't. My big sister says I have to be careful with sharp knives, that's why. (Mads, Less healthy diet)

Apart from sweets on Fridays, some families also had soft drinks during weekends. A girl from the group with less healthy eating habits explained that, during the days following a weekend, she was given free access to any soft drinks that had been left over. Her photograph of the family dinner table taken on a Monday showed that approximately 5 litres of soft drinks had been left over.

Common to the children with less healthy eating habits was an extensive and less structured consumption of sweets and soft drinks, while children with healthier eating habits recounted how their consumption of similar items was embedded in a social context, in which the family shared the event or celebrated a special occasion together.

#### ***Rules and roles with regard to food and meals***

All children in the present study explained that their families had particular practices or rules regarding food and meals. A common rule was that one should not eat anything during the half hour preceding the evening meal. But there were also other rules regarding for example when and how often children were allowed soft drinks.

Most children were required to ask permission before they took something to eat. Children with less healthy eating habits recounted that they most often received a 'yes' in reply. Some of the children with healthier eating habits commented that they did not bother to ask when

they knew that the answer was likely to be 'no'. Children in both subgroups claimed to know the reasons for such rules. These were tied to a number of considerations including the cost of the items at issue, health, the parent's wish to know which items were in and out of stock in the household and the view that appetites should not be spoiled just before the evening meal was served.

I ask my mother, 'Mum, may I have some sweets?' and she says 'yes'. She doesn't often say 'no' – only when we are going to eat soon. ... I take a few more, I take as many as I like. She says nothing. She just throws it [the box] out afterwards. (Mads, Less healthy diet)

In other families, however, the children perceived restrictions as being based on economic considerations. A number of families had rules about when one could drink carbonated soft drinks, but no restrictions on the consumption of soft drinks diluted with water. This appeared to reflect a difference in the cost of these products, which are otherwise similar in terms of their nutritional value. This pattern is illustrated here with regard to the consumption of ice cream in different price categories:

... If I have already taken an ice cream when I came home from school, then I ask sometimes, and then she says 'no'. ... It depends on what sort of ice cream it is. If it's a cheap kind, then I am allowed. If it is a really expensive type – if my Mum has bought some Mars ice cream – we say that it is a sort of Friday ice cream, and then I'm allowed to have that on a Friday. And then the cheap one is one I can eat on weekdays. (Sofie, Less healthy diet)

In a number of families, children experienced different rules with regard to different food types that were due to considerations regarding health. This was most frequently mentioned with regard to the absence of restrictions regarding the consumption of fruit. Some children from the subgroup with healthier eating habits expressed this consideration in more general terms, for example:

Because it is the unhealthy things I have to ask about. (Cecilie, Healthier diet)

Another child from this subgroup said that he seldom ate sweets or took soft drinks. As this boy experienced it, he himself controlled what he ate and drank. With reference to soft drinks, for example, he first said that he was not allowed to have them, and then added: 'It is myself that started that rule'. He explained that the rules they had in his family were so much a part of his everyday life that he did not question them.

According to the children, rules had been worked out by means of discussion in some families, while parents alone had made the rules in others. Although not all children had experienced themselves as participants in the development of rules, and despite the fact that rules were different and were perceived as being based on

different reasons, children in both subgroups were content to accept the particular rules that had been established in their own family.

The children also made it clear that they exerted influence on the food they ate in their families. With respect to their lunch packets, for example, they explained how much control they had and how they exercised it. If there was something they were not happy with, they simply informed their parents about it, and this was enough to bring about the desired changes:

If I don't like what he gives me in my lunch packet, I ask: 'Can you give me something else?' And he says: 'Yes, I will'. (Emma, Healthier diet)

The children generally did not take an active part in housework. They sometimes set the table or helped with a limited task, such as chopping items for a salad. It was the parents who shopped, cooked, prepared lunch packets and cleared away meals, while children for the most part merely contributed by being present. None the less, some children from both subgroups recounted occasions when they had made food, baked a cake or helped with washing up. These experiences were told with a great deal of enthusiasm and pride, just as it was stressed that grown-ups had expressed delight at the children's contribution.

In general, the children did not experience the families' rules with regard to access to and control of food and meals as a power struggle or area of conflict. They saw no need to change familiar rules. Nor did they question their relatively passive role in family meals, although they had clearly enjoyed the occasions on which they had contributed more actively to these. There were no marked differences between the two subgroups of children and between boys and girls on these points.

## Discussion

The results of the present study show both differences and similarities between the two subgroups of children. The implications of these findings for the design of dietary interventions among children are discussed. Regarding methodology, it was found that the children's own photographs of their meals and snacks yielded a fruitful point of departure for gaining insight into the eating habits seen from the child's perspective. The photographs were valid snapshots of actual events, which assisted the interviews by showing concrete details and suggesting aspects of atmosphere. A qualitative research design can offer important insight and understanding that can be exploited in the design of health promotion interventions.

### ***Snacking: a focus of health promotion initiatives***

We found a meal structure comprising three main meals and from two to four snacks. In a pattern characterised by

five eating events, three of these were consumed away from home, while additional snacks were consumed at home. With the exception of one afternoon snack provided by the after-school institution, all meals and snacks were, however, prepared in the child's home. This indicates the need to focus more on the dietary environment of the home, including food preparation, when planning health promotion interventions. The findings indicate that children in this age group tend to consume more snacks than the number noted in official dietary recommendations<sup>(35)</sup>, in which a pattern comprising one to three snacks is identified. Other studies have found that snacking is very common<sup>(40)</sup> and the prevalence of snacking is increasing<sup>(41)</sup>. Furthermore snacks often contain more sweets, soft drinks and biscuits than main meals<sup>(42,43)</sup>. Assuming there are no health-related reasons why a greater number of snacks should not be consumed, health promotion initiatives should recognise a meal structure that includes more snacks than the number recognised hitherto, and develop strategies and methods relevant to this.

### ***The social context of snacking: a new focus***

The relationship between the nutritional quality of the diet and participation in family meals has been reported in a number of studies regarding children and adolescents<sup>(44-46)</sup>. In the present study we found an association between the nutritional quality of the diet and the tendency to consume snacks in the company of others. Snacks as well as meals tended to be shared social events among children with healthier eating habits, and items of poor nutritional quality tended to function as markers of a particular social occasion rather than as constituents of everyday consumption. This pattern was not found among children with less healthy eating habits, and it would seem highly likely that this difference in the social context of consumption is a factor that maintains sugar consumption at a low level among members of the former subgroup. Anthropological and sociological research<sup>(31)</sup> highlights the importance of sharing food in the company of others as an activity that promotes the experience of belonging to a particular social group. On the basis of the present study, supplemented by findings from other socio-cultural studies, it would therefore seem relevant to consider the extent to which dietary interventions among children should focus on the social contexts of consumption, quite apart from the current focus on the consumption of particular items of food such as fruit, vegetables and soft drinks.

A focus on social contexts of consumption, however, may run the risk of seeking to promote a particular set of social norms that in fact differ from one social class to another. Further studies are therefore needed to learn more about the relationship between socio-economic position, social contexts of consumption and the nutritional quality of diets. Health promotion interventions that seek to incorporate the social context of children's food consumption should be

approached with care. A high degree of respect for social and cultural differences and awareness of the need to avoid any tendency to stigmatise particular social groups should be central concerns of health promotion and public health nutrition interventions.

### ***Parents as the key to change***

Other qualitative studies have found that sweets, soft drinks and fast foods are considered as being a part of one's childhood<sup>(20,47)</sup>, and it has also been found that parents give sweets in order to comfort and calm children, a pattern termed 'emotional eating'<sup>(48)</sup>. These results are supported by the finding of the present study that children's consumption of sweet snacks tends to be initiated or supported by parents. It was found earlier that sweet foods were sometimes perceived as a disruptive factor, tending to create conflict between parents and children. There was little evidence of this pattern in the present study, however. This may be due to the fact that Danish adults appear to have a relatively high level of intake of sweets. The population as a whole consumes 16 kg per person per year, while Danish children have a relatively low level of intake of sweets and soft drinks compared with other European countries<sup>(49)</sup>. Danish children may therefore have less need to demand access to sweets insofar as their parents ensure that sweets are readily available. An alternative explanation may concern differences in child-rearing practices. A number of quantitative studies<sup>(46,50,51)</sup> confirm the importance of parenting styles for children's eating habits and that an authoritative parenting style is connected with a healthy diet. In an American study Kaplan<sup>(15)</sup> found that class differences impact on children's role at mealtimes, such that only children from middle-class families tend to play an active participatory role in cooking. Such differences were not observed in the present study. A core finding of our study was that children aged 10–11 years were aware of the different rules governing food consumption in their families, adapted to the roles accorded to them, and tended to accept both without conflict. On this basis, the role of parents in providing access to items of food and drink of poor nutritional quality should be given further consideration. It would seem that parents, by establishing or developing practices in which food consumption is a socially shared event, can do a great deal to promote healthy eating habits among their children. The character of these events tends to restrict access to sweet foods and soft drinks, insofar as these items function as markers of a particular kind of occasion rather than that of an ordinary, everyday consumption. This new finding suggests the need to focus on parental roles in dietary interventions designed to promote children's health.

### **Conclusion**

The present study among 10–11-year-old children shows a connection between the overall nutritional quality of

the food consumed and the social context of eating. We found a relationship between the nutritional quality of the diet and the practice of eating together, especially regarding the tendency to eat snacks together with others. Among children with a healthier diet, snacks containing sweets and soft drinks were consumed in the company of others as a shared social event. Furthermore, items of poor nutritional quality functioned as markers of a particular social occasion. On the other hand, children with a less healthy diet consumed snacks as well as meals alone, and the consumption of sweets and soft drinks was not embedded in any particular kind of social occasion. There appears to be an association between the social context of eating snacks of poor nutritional quality and a tendency to restrict the overall consumption of soft drinks and sweets. All of the children described particular rules governing food consumption in their families. Common to the children was their acceptance of such rules without conflict. Sweets and soft drinks were not seen as an area of conflict. It would seem relevant to consider that dietary interventions among children should focus on the social embeddedness of consumption and on parental roles.

In order to design and implement effective interventions<sup>(52)</sup>, it is essential to gain insight into the cultural norms of any given society. The present study investigated the cultural and social norms of children and their experience of meals and snacks, the social context of their consumption, as well as food rules and roles. Qualitative methodology was used, because the aim was to understand and explain the children's behaviour and practice within the context of their everyday lives. It was found that the children's own photographs yielded a fruitful, concrete and valid point of departure for gaining insight into eating habits as seen from the child's perspective. The study illustrated how qualitative research methods can contribute to the development of dietary interventions designed to prevent the childhood obesity epidemic.

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