

Parents and Schoolchildren Talking about Food and Drink Choices – A Focus Group Study

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Objective: We explored parents' and schoolchildren's views on sugary food and drink, and their perspectives on barriers and facilitators bringing about dietary change. **Methods:** Focus groups were conducted in 5 schools in Malta. **Results:** In total, 23 parents and 28 children took part. Children's themes included personal factors, influencers and barriers to healthy eating, rules, and suggestions for change. For parents, personal perspectives, control, the school's role, wider influences, and intervention suggestion themes emerged. Parents expected schools to take a lead role whilst children saw parents as key influencers. **Conclusions:** The study highlighted challenges in parental roles and children's attitudes to consider for improving dietary behavior in pre-adolescent schoolchildren.

Key words: childhood obesity; school health; children's diet; children's food choices; children's drink choices; parents' food choices

Health Behav Policy Rev.™ 2018;5(1):28-39

DOI: <https://doi.org/10.14485/HBPR.5.1.3>

Nutrition in children is crucial for optimal health and future well-being. Childhood obesity has a large range of long-term health consequences,^{1,2} and is now a major public health concern in both developing and developed countries. According to recent estimates, 200 million (14.2%) school aged children around the world are overweight or obese using International Obesity Task Force (IOTF) cut-offs^{3,4} with over 70 million (4.9%) of these being classified as obese.⁵ Projections predict an increase to 15.8% in 2025.⁶ The situation in Malta, a small Mediterranean group of islands south of Italy, is no different, with statistics showing that obesity prevalence is one of the highest reported in Europe.⁷ In the Health Behaviour for School Children (HBSC) study using self-reported data, Maltese children were ranked second to those in the United States in terms of overweight and obesity in the 11- and 13-year-old age group (27.5% and 31% respectively), and in first place at age 15 (30%). Latest data for 10–11-year-old chil-

dren in Malta, established through measured height and weight and using objective standards, show an increase in prevalence from that previously reported in the HBSC study with 20.4% overweight and 14.2% obese, using IOTF criteria.^{7,8}

The pre-adolescent age period is one of the key critical periods during childhood as growing evidence also points at overweight adults being obese during their adolescence too.⁹ There are also concerns for increased morbidity and mortality (particularly cardiometabolic), among other problems, when obesity develops during this critical age period.^{10,11} This suggests that this age period is an important target age group for inclusion into future intervention strategies for obesity prevention and control.

There are numerous studies that have focused on dietary components and their role in the development of obesity in children.¹² Dietary sugars could be one of the contributing factors towards obesity,¹³ although there are also some studies arguing against this link.¹⁴ In any case, a holistic approach should be

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taken when looking at causative dietary factors with dietary sugars to be viewed as a crucial energy source which should be reduced when associated with higher overall dietary energy intakes.^{15,16} To date, there are no published data on habitual dietary intakes in Maltese children but the HBSC study has suggested that sugar intakes, particularly sugar sweetened beverages (SSBs), were particularly high in Maltese pre-adolescent children, compared to other countries which took part in the study.⁸ With current international guidelines moving towards a reduction in total sugar consumption such as the ones issued by the World Health Organisation (WHO),¹⁷ this highlights the need to take action and provide indicators on key strategies aimed towards reducing sugar consumption in this age group.

Research has demonstrated there needs to be an understanding of the physical, social, as well as environmental determinants, that contribute to the development of obesity in children to successfully tackle this problem.^{18,19} A conceptual ecological framework has been presented²⁰ that explains the complexity of eating behaviors, the various contributory factors, that include personal as well as at a wider (macro) level, which together contribute towards the development of obesity. The physical environment relates to the easy accessibility of foods within an increasingly prevalent obesogenic environment, whereas social determinants, that include family patterns, mealtime structures and parental influence and parental feeding styles, are considered to be crucial in influencing children's eating patterns.²¹ A review study that looked at parental attitudes and approaches reported a strong link between parental and children's dietary behaviors and concluded that positive parental examples could be more influential than actual dietary control for improving dietary behavior in children.²² It is today widely acknowledged that parents need to be targeted and actively involved in childhood obesity prevention and treatment programmes, but there is still no overall agreement on how this can be tackled in practical terms²³ and needs to be further explored through more studies to fill in these research gaps that can build on the existing quantitative knowledge to enable and support healthy eating practices.

Qualitative research on dietary behavior can help provide some of the answers. It is an understudied area and goes a step beyond traditional quantitative methods by investigating the 'why' and the 'how'

of human behavior and relationships²⁴ and can be used to enhance the quality of intervention design in each population. Focus groups have been used to gain insights into children's (and their parents') nutrition knowledge and concepts of healthy eating and beyond, to develop effective interventions by understanding the ideals and beliefs of the recipients of the intended programs and their perceptions on what could be done to change behavior.^{25,26} A study in the United Kingdom, for example, looked at 9–11-year-old children's perceptions on healthy eating, consequences of unhealthy eating as well as barriers to eating well.²⁷ The authors concluded that children need to be seen as active participants in their own health education which allows the development of specific child-centred messages that may have better success. Furthermore, qualitative research including both parental and children's perceptions and attitudes enables a better understanding and a combined effort to develop health messages, tools and interventions that work better in obesity prevention and management.²⁸

The aim of this study was to explore Maltese parents' and schoolchildren's views on sugary food and drink, and their perspectives on barriers and facilitators to bringing about dietary change. Focus groups were selected as the more suitable way of retrieving the in-depth information for this study, which could not possibly be gained from quantitative studies.

METHODS

Participants

The sample was mainly purposeful as there was pre-determined selection of schools from different geographical localities in Malta. Four state schools (non-fee-paying) and one independent school (fee-paying) were included to take part in the study. Parents of 10–11-year-old children attending these 5 schools received information about the study together with consent forms. Parents who returned the consent forms and agreed to attend the focus groups took part in the study.

Study Design

Focus groups were carried out during the 2010–2011 school year and were facilitated by the principal researcher in the presence of a moderator who took field notes, and provided additional

probes and overall support when required. The moderator's discussion guide consisted of 4 main subject areas drafted using methods suggested by Krueger,²⁹ each topic containing prompter questions for further discussion. Parental topics were: (1) perceptions and knowledge about sugary snacks and drinks; (2) what they believed to be their children's choices for sugary drinks and snacks; (3) what they felt were the main barriers and facilitators for reducing sugary snacks and drinks in their children's diet; and (4) any suggestions or thoughts they had about what could be done to bring about dietary change. The topic guide for the children encouraged discussion about: (1) their overall knowledge and perceptions on sugary snacks and drinks; (2) their personal choices for sugary drinks and snacks; (3) the main barriers and facilitators which were stopping them from reducing sugary food and drink consumption; and (4) any ideas for the promotion of more water and less sugary drinks and snacks both at school, at home or within their community. The study was committed to maintain good research conduct at all times, in accordance with the Policy and Code of Conduct on the Governance of Good Research Conduct.³⁰

Data Analysis

All focus group discussions were held in the school premises, were audio-recorded and then later transcribed. This resulted in a total of 46 pages of transcript for the parents' groups and 34 pages for the children's groups. Familiarization of the emergent themes was carried out using the method by Spencer et al³¹ which utilizes the 'Framework' approach whereby key subject themes are identified and then categorized into further sub-categories or sub-themes. This resulted in the creating of 2 so-called thematic charts, one for the parents' themes and the other for the children's. The entire data set was then indexed, summarized (reduced) and charted in the respective thematic charts, according to the method presented by Ritchie and Spencer.³² Sub-themes within each theme were then identified to further categorise the data, identify the elements and dimensions of each theme. This process was carried out manually.

The Constant Comparative Method, as described by Silverman,³³ was used, whereby the resulting hypothesis from one section of the data was applied

to different sections and then compared and tested. Deviant case analysis also was applied to ensure that the 'outliers', or alternative views, were identified. External validation by triangulation through multiple analysis was carried out after the preliminary coding by the principal researcher. This was carried out by 2 external reviewers who compared and checked a sample of the transcripts for the emerging themes and sub-themes and their interpretation. Contextualization took place where common patterns were considered and themes that emerged widely from several subjects were derived, whilst looking for exceptional themes relevant to a few people or groups. The themes were compared and connected together to develop a significant narrative. The research team then discussed the themes to reach final agreement.

RESULTS

Participant and Focus Group Characteristics

Overall, 5 schools agreed to take part in both the children and parent focus groups. However, one school opted out of carrying out a children's focus group and one school did not complete a parent focus group because of low turnout on the day. There were 32 parental consents and 35 consents for children. However, only 23 parents and 28 children attended on the day and took part in the study. Table 1 shows the total number of participants in the respective schools. Three of the children's focus groups were mixed sex and there was a one all-female group (Table 2). All participating parents were mothers except for one attending father in one school. The duration of the children's focus groups ranged from 23.7 minutes to 26.3 minutes (mean time 24.7 minutes) and between 27.8 minutes and 41.8 minutes with a mean time of 35.2 minutes for the parents' groups.

Main Themes for Children's Focus Groups

All the main themes were categorized and summarized into general themes. Anonymous illustrative quotes are used to describe emergent themes. Five main themes emerged from the children's focus group transcripts: (1) children's favorite foods and other personal factors; (2) the role of the parents, siblings, and personal food choices; (3) children talking about barriers and resistance to change; (4) issues related to control, rules and regulations; and

Table 1
School and Participant Details

School	Forms sent (N)	Consents Received (N)		Attendance (N)	
		Parents	Children	Parents	Children
School 1	16	9	9	5	7
School 2	40	7	10	7	10
School 3	30	9	9	5	5
School 4	10	7	n/a	6	n/a
School 5	29	n/a	7	n/a	6

Note.

n/a = not applicable

(5) ideas and suggestions to help children reduce sugar consumption.

Children's favorite foods and other personal factors. The children were asked to describe foods and drinks they believed contained sugar, and chocolate, sweet packets, cakes and biscuits were cited as the main food examples whereas sugary drinks and energy drinks were the main examples for drinks. Personal favorites varied from water to juices and soft drinks for most children, but energy drinks, although mentioned by both girls and boys, were considered personal favorites by many boys in nearly all focus groups attended. Juices were considered healthier, containing less sugar than a soft drink, for example:

'No (fruit juice is healthier) because it's made out of fruit—it still has sugar but less than a soft drink.'

(School 3, Girl 1)

Taste preference was quoted as a main reason for choosing a product by many children; this was a commonly emerging theme across all the groups and is illustrated in the following example:

'They taste good to me.'

(School 1, Girl 1)

The role of the parents, siblings, and personal food choices. There were 3 sub-themes identified within this theme and these were: people who influenced them, personal choice, and the school/home

environment. Parents seemed to bear an important role in explaining health effects to the children and caught their attention by commenting on issues related to food and health. In all of the schools, children spoke easily about who the main decision makers were, these being mainly their mothers, particularly in one focus group, or their mothers together with their fathers but for some there was also a certain degree of negotiation between themselves and their mothers. Siblings' bad habits also seemed to influence their children, but to a lesser extent:

'My brother is a big boy and he always has sweets and Mummy tells him he's going to become diabetic like his Daddy.'

(School 1, Girl 3)

Table 2
Participating Children's Sex Details

School	Boys (N)	Girls (N)
School 1	1	6
School 2	7	3
School 3	4	1
School 4	n/a	n/a
School 5	0	6

Note.

n/a = not applicable

'I drink soft drinks but not as much as my brother, he drinks a whole thing (bottle) in a day.'

(School 1, Girl 6)

However, there were a few children who claimed that their food choices were largely their personal choice exhibiting personal control, and spoke about self-regulation when consuming sugary food and drink at home and during special occasions, choosing particular instances when to consume sugary drinks such as during meal times.

'I drink soft drinks when it's time for dinner.'

(School 2, Boy 8)

'Or at parties or maybe if someone comes home and I see them having it I get a craving so I have a little bit.'

(School 1, Girl 6)

The school also played an important role in determining their sugar intake, this was a common theme displayed in all the schools. It seemed that school was the place where children accepted rules that forbid or limited the amount of sweets and sugary drinks they could consume. The school was also described in terms of it being a place where healthier choices were offered in fact the fruit and vegetable scheme that was currently running was featured in the following quote:

'We even have a fruit break and on Friday they give us fruit.'

(School 1, Girl 5)

Parents were also viewed as supporting overall lifestyle change, together with the schools, and improving the home environment to support a healthy lifestyle:

'My parents told me they are going to put training things in our garage (training equipment to do exercise).'

(School 2, Boy 4)

Children talking about barriers and resistance to change. The main barriers discussed included

the easy availability and access to unhealthy foods and fast food relating to the obesogenic environment, as well as taste preferences and other factors. Resistance to change was mainly related to the taste of sugary drinks and sugary snacks, an opinion emphasized by many children, and to a smaller extent, because changing dietary habits was perceived to be a huge personal sacrifice.

'I like it, it sticks to your teeth and it tastes good.'

(School 2, Boy 2)

'I don't want to change because I like it and I don't like being sad.'

(School 2, Boy 2)

'I'll try to stop but I'll want the taste of something different and I won't know what to take.'

(School 3, Boy 3)

Issues related to control, rules, and regulations.

We identified 2 sub-themes within this theme and these were: rules and self-control or deceiving practices. Rules seemed to play an important role in affecting food choice and driving change a few children spoke about rules being imposed by their parents.

'When you go and buy and you ask your Mummy to buy you a chocolate biscuit she tells you 'no' because it's not good for you – so she can help to reduce.'

(School 1, Girl 3)

Existing rules and policies at school were also present and this was reflected in all the schools taking part in the study where prohibition of sweet foods was in force with consumption allowed only on special occasions.

'They're (schools) not going to let us get cake everyday, only when it's your birthday.'

(School 1, Girl 1)

However, many children also described exercising a degree of self-control and many confirmed that in most cases, there existed a balance in deci-

sion making between themselves and their parents. This was a common finding which was found in all the schools.

I choose but then when I eat a lot of junk food I ask Mummy to make me some vegetables because it's not good to eat a lot of junk food.'

(School 2, Boy 8)

Sometimes my Mummy (decides) and sometimes me too.'

(School 2, Boy 5)

I'd rather choose myself when and where to change my habits.'

(School 3, Boy 1)

Hiding food and drink also seemed to be common practice, the children seemed to be quite sure of what they liked and were resourceful by finding ways of eating what they wanted, even by hiding their preferences from their parents and even teachers, for example:

They warn us about it (at school) but some people still bring (soft drinks) with them. It just doesn't show when it's in the (colored) bottle.'

(School 2, Boy 8)

Ideas and suggestions to help children reduce sugar consumption. The main sub-themes were: ideas for schools, ideas which included the home setting and ideas related to the environment and the media. Most of the children felt that the school was a place which helped and encouraged them to eat healthier for example:

To encourage us to get fruit we get points and then we win something.'

(School 1, Girl 2)

Other ideas which were presented that the children felt could motivate them and support them included access to free water at school, and holding some fun healthy eating competitions during school hours. Family involvement was evident in

the children's discussions – more rules, less availability of sweets and soft drinks at home, traditions and family members setting good examples were all quoted by the children as being important to elicit change, for example:

(Parents can help) by not letting us have sugary snacks and drinks at home.'

(School 2, Boy 3)

The children talked about having playgrounds, and pathways for safe walking, in their neighborhood. Advertising material, depicting healthy and attractive food instead of unhealthy food, and role models/famous people advertising healthy food were viewed by the kids as important to make healthy foods more appetizing and more popular.

Main Themes for Parents' Focus Groups

Five main themes emerged from the parent focus group discussions: (1) parental knowledge and perspectives on sugary food and drinks; (2) Issues of control and children's food choices; (3) The role of the schools in improving children's diets; (4) Wider influences influencing their children's diets; and (5) Ideas and suggestions to bring about dietary behavior change.

Parental knowledge and perspectives on sugary food and drinks. The following sub-themes were identified: subjects' perspectives, examples of sugary food and drink, knowledge and nutrition claims and labels, views on their children's favorite food, and fears of ill health. Most parents could give some examples of sugary food and drink when probed, with soft drinks being the most popular answer, but with juices and iced teas also mentioned. With respect to knowledge about food and its link to health, most parents thought that sugary food and drink were not harmful if taken in the right amounts. Examples are these quotes:

Sugar in large amounts is bad for you, but we all need some of it anyway.'

(School 3, Parent 1)

A little, just for the energy, doesn't do much harm.'

(School 1, Parent 1)

However, some parents also thought that they could have some mistaken ideas about what was the right thing to do or not. For example, in one school, some parents expressed they were unsure about certain aspects relating to diet and overall health:

'We'll probably be giving it to them thinking it's healthy, but it isn't.'

(School 2, Parent 7)

'For health, for sure it's not good, but for weight, I'm not too sure.'

(School 2, Parent 3)

There was also some degree of uncertainty on which food and drinks contained the most sugar and a few actually admitted that they could be offering something which was unhealthy, but with the best intentions, because of their lack of knowledge:

'I thought diet ones were better (pause), or are they not healthy?'

(School 2, Parent 4)

Few parents could discuss their children's favorite foods but those who did spoke about sweets and chocolates being their favorites. Main reasons for liking or consuming these foods were similar to the children's responses, that is, mainly because they tasted good or even to provide energy. Many parents believed that sugary products were not healthy and linked the consumption of sugary food and drink to health problems in future such as:

'They can get diabetes later in life.'

(School 4, Parent 3)

Issues of control and children's food choices. The sub-themes generated were related to parental control versus children's choices, environmental and other issues related to loss of control. Parents spoke about the effort they made to be role models and wanted to exert some control on their children's eating habits in most cases doing this by controlling the food and drinks they kept at home in varying degrees as demonstrated in the following example:

'Sugary drinks do not enter the house.'

(School 1, Parent 1)

However, these responses were contradicted by some other parents who believed that it was really their children's choice whether to eat a healthy or unhealthy diet. From this perspective, parents also felt that it was not right to deny children food and drink which tasted good and that there was too much external pressure to eat right. Some parents were not eager to reduce consumption, either because they did not believe they were consuming too much or because they thought some consumption of sugary foods was important for the body for energy and also thought they tasted good and therefore it was hard to limit their consumption.

'I like the amount I give him, he doesn't take too much.'

(School 4, Parent 6)

'Everyone wants them (soft drinks), you'll only find a few people who don't really like them.'

(School 3, Parent 4)

'There's so much pressure to eat healthy. He asks for a chocolate and it's like he's asking for the world.'

(School 4, Parent 2)

This seemed to be particularly evident in the accounts of a few individual parents who indicated that they did not think they were good role models, as they liked to consume these types of food themselves. An example is:

'It would be a bit difficult to reduce consumption because I'm the first one to sit there and take.'

(School 3, Parent 2)

However, the home environment was overall viewed as a place where children could have freshly prepared food and drink, for example, some talked about preparing healthier drinks, such as smoothies, for example. Parents wanted to do something to help reduce consumption and were keen to know more about what was planned or being done currently to support this issue. This was a popular

sentiment and was mentioned by most parents in all the schools attended.

Regarding loss of control, the most prominent concern that emerged here was the issue of helplessness and fears about losing control of their children's diet, as well as some discomfort on stopping their children from eating what they wanted in their own home. Some parents also felt that, this pre-adolescent age was a time when children started to exert their independence and own control as they moved on to secondary school, where unhealthy food was more readily available for sale.

'Mine just takes'... (Laughs).

(School 2, Parent 4)

'I feel a bit odd, I mean it's his house too and he's coming to ask me if he can have (biscuits).'

(School 2, Parent 3)

'But when they go to the secondary school they have a tuck shop.'

(School 3, Parent 1)

Grandparents preparing or offering their children sugary snacks or treats were seen by a few parents as hindering their efforts to present healthy foods to their children and which they felt they could not control.

The role of the schools in improving children's diets. Parents presented contradictory feelings and talked both about concerns within the school setting as well as their perceptions of the school as a place to develop good habits. The easy availability of unhealthy food and drink within and close to the school was also seen as a barrier to their children's healthy eating habits as were particular school occasions such as the following example:

'Before, at school they used to have doughnut day, thank goodness they took it off now. That's been removed because I got really angry at them.'

(School 4, Parent 1)

The short time dedicated to physical activity lessons was also a concern to parents. However, the school setting also was regarded by most parents as

an ideal place for promotion of good eating habits, organization of healthy eating days, hands-on activities, and cooking sessions.

Wider influences influencing their children's diets. In terms of wider influences, parents were aware that there were other factors apart from the home and school environment that influenced diet and these were categorized into 3 main sub-themes: societal and environmental factors, the role of the media, and the availability of healthier food. Environmental factors were regarded as being generally beneficial, such as the introduction of sports equipment in the community which encouraged children to do more physical activity:

'Now they're putting outdoor gyms instead of swings (in the playgrounds).'

(School 4, Parent 2)

There was awareness of the role the media played in depicting unhealthy foods and drinks as attractive and there was consensus across all the schools that there should be less advertising of unhealthy food and drink, as reflected in the following quotes:

'Media affects them a lot.'

(School 3, Parent 1)

'They have adverts about cigarettes that they're not good... we need ones like that with food.'

(School 2, Parent 4)

Parents were consistent in their beliefs across all the groups that there should not be such easy availability of fast foods. Food (all types) seemed to be easily available, according to the parents, and sweets and soft drinks are easy and cheap to buy.

'You go to the supermarket and they're full of chocolate and sugar.'

(School 3, Parent 4)

Ideas and suggestions to bring about dietary behavior change. Most parents highlighted the importance of the role of the school as a major influencing factor to bring about change in their children's eating habits, as teachers were perceived

to be important influencers for the children's dietary choices, with some parents suggesting they were sometimes more influential than the parents themselves.

'They pay more attention to what other people tell them, they pay more attention to the teacher than to me.'

(School 1, Parent 3)

Other less prevailing suggestions were related to exerting more control as parents and introducing more rules and regulations, both at school and at home. One parent spoke about the need for schools and homes to combine forces and work together with a common scope so there would be a continuity between the school and home setting.

DISCUSSION

This is the first study of its kind in Malta and its results show a similarity to findings in different international studies carried out but has also generated new insights for further scrutiny. Pre-adolescent children are shown to be active consumers and have a certain degree of control over their food intakes as has been previously documented.³⁴ In general, the children in this study could grasp the concept of a healthy diet and spoke relatively easily about what constituted a healthy or unhealthy diet and other issues of importance related to dietary behavior. This finding also has been expressed in other studies,²⁷ implying that children should be considered as active contributors in dietary interventions.

Taste seemed to be an important consideration when it came to food choices for children, expressed frequently in all the groups, a result which was also highlighted in a study on Irish children and adolescents carried out by Fitzgerald et al.³⁵ Other emotions and feelings that manifested themselves at a personal level have also been previously uncovered in adolescents and require further investigation to understand further the reasons for this and whether this is related to peer pressure or is more of a genetic predisposition.³⁶ Sex-specific consumption practices have been uncovered which suggests certain policy or health promotion initiatives could be targeted specifically at different sexes. Further inquiry into consumption practices, and what induces con-

sumption of specific sugary drinks, such as energy drinks for example, which are popular among children in this age group, also is recommended.

The parent focus groups gave rise to some honest discussions about parental struggles to do what's right, and their occasional personal conflicts to go ahead. All parent groups spoke freely about their children's food choices and some were direct about their uncertainty when it came to specific information about sugary foods and drinks. One recommendation would be to include nutrition education for parents focusing on specific information such as nutrition labeling and claims or dietary skills for example. The struggles faced by the parents as the children moved to independence were verbalized strongly in these discussion groups and one needs to look at how parents can be supported through this changeover. Further research on this important transitional phase is encouraged. In others, however, the concept of 'self-efficacy'³⁷ was uncovered as there was no internalization of the knowledge by translating this into healthy eating behaviors for their children. This finding has also been reported in a similar focus group study.³⁸ The findings also highlight some specific challenges when considering the role of the parents, who are widely acknowledged as having a strong impact on children's food choice and in creating a suitable eating environment. The home environment is crucial and there does not seem to be a consistent relationship between the work done in schools and the home setting.

A key subject that was not raised in these discussions was the concept of affordability of healthy foods as a barrier to a healthy diet. This may suggest the need to investigate individually specific barriers to healthy eating looking into the particular needs and socio-economic dynamics of targeted populations before embarking on any dietary intervention. Grandparents also seem to play a role by frequently offering treats, while also being involved in meal preparation, as has been reported in other international studies.³⁹ Inclusion of the extended family in dietary interventions is also a research topic that warrants further investigation.

Previous focus group studies describing influential factors for dietary behavior in younger children have shown that parents from countries around the Mediterranean region (Italy, Spain, Cyprus) also felt, as in this study, that the schools had the most

important role and were there to set rules, provide education and support parents.²⁶ Parents, like their children, also spoke of the media as having a negative influence on their children's eating habits, an issue highlighted in other qualitative investigations of this type.⁴⁰ Again this looks at the vulnerability of children to foods high in fats, sugar and/or salt and echoes recommendations by others³⁴ on the need to look at advertising and media regulation in this age group and beyond.⁴¹

Limitations

As with any research study there were inherent limitations that should be noted when interpreting the results. As with most qualitative research studies, the sample size was small, and the findings cannot be generalized to the whole population. In the children's focus groups, there were some instances where some comments were not clearly audible in the recordings because of the noisy atmosphere generated by the children. Detailed demographic information, such as family size and other cultural characteristics, was not recorded and this may have revealed some interesting family patterns although school selection was from different areas. Another challenge seems to be the motivation and engagement of parents, and finding a suitable time for them to be involved. This research study has reflected only maternal and not paternal views, with one exception, this issue has also been highlighted in other similar research studies.^{42,43}

Conclusions

This is possibly the first local qualitative study of its kind that provides insights into the views of parents and children on sugary food and drink consumption in Malta, where childhood obesity levels are particularly high, and provides some key findings and practical suggestions for future more detailed consideration.

IMPLICATIONS FOR HEALTH BEHAVIOR OR POLICY

This study has highlighted key areas relating to perspectives in dietary behavior in parents and schoolchildren in a Mediterranean setting. It is already well known that interventions need to be integrated for some success to occur at the popula-

tion level, but it is also crucial to understand what works in the individual level within the community that is being targeted. Time and human resources are key factors to consider, and this study highlights the need to consider the right factors to target for the selected population. One key recommendation is to extend this research to incorporate further age groups and develop more sex-specific studies to see how these could impact specific feeding behaviors. Behavior change will be difficult to achieve, as has been shown by the existing obesity prevalence data, without looking at the specific circumstances that drive eating choices in a population.

There seems a disconnect between parental and school role perspectives, which will not be solved by 'business-as-usual' type approaches. School-home partnerships need to be looked at as parents need to carry over the work that is initiated by teachers, and extend it to the home setting, as this could have positive effects on children's weight and overall health behaviors.⁴⁴ Interventions to improve children's knowledge are well documented⁴⁵ but this study draws attention to the possible need for more education initiatives aimed at helping parents make informed choices and supporting them through their children's key feeding behavior development phases.

In terms of society in general, one also needs to include the wider social determinants as first described by the Dahlgren and Whitehead model.⁴⁶ Maybe one could encourage more public and community discussions and create a schema for change, starting off by opening a novel conversation with the public on issues that might make some progress regarding change. The schema also could provide thinking space for parents and community members to talk more and share information about the structural, socioeconomic, and cultural changes that are needed to support a change in behavior at the community/societal level, which is necessary in turn for sustained behavior change at the individual level. This study features the hard reality when looking at public health strategies and designing interventions for dietary change, and must be factored into any policy development aimed at addressing children's food consumption practices.

Acknowledgements

This work was supported by the University of

Malta and the Rural and Environmental Science and Analytical Services Division (RESAS) program of the Scottish Government. We thank the Directorate for Quality and Standards in Education, Heads of Schools, all parents and children who took part in the project. We are also appreciative of assistance from colleagues at the University of Malta who acted as moderators in the focus groups.

Human Subjects Approval Statement

The study was approved by the University of Malta's Research Ethics Board (UREC) and the University of Aberdeen's College Ethics Review Board (CERB) in 2010. Written informed consent was obtained from all the parents prior to the discussions.

Conflicts of Interest Declaration

All authors declare they do not have any conflict of interest.

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