

## EMPIRICAL STUDIES

**Obesity treatment—more than food and exercise: a qualitative study exploring obese adolescents' and their parents' views on the former's obesity**

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**Abstract**

The aim of this study was to explore obese adolescents' and their parents' views on the former's obesity; especially to gain knowledge about barriers and motivational factors that influence obese adolescents' ability to lose weight. This is a qualitative study involving field observation and semi-structured interviews with obese adolescents and their parents. The analysis takes a phenomenological–hermeneutic approach. Fifteen obese adolescents aged 13–16 years and their parents/grandparents participated in this study (one father, seven mothers, five sets of parents and two sets of grandparents). The results showed that obese adolescents' are aware that they have unhealthy eating habits and they wish they were able to attain to a healthier diet. Although in poor physical shape, obese adolescents perceive their daily level of exercise as moderate. Obese adolescents blame themselves for being obese and blame their parents for an unhealthy diet, and for being unsupportive regarding exercise. Parents blame their obese child of lacking will power to change eating and exercise habits. As a consequence, the homely atmosphere is often characterised by quarrels and negative feelings. The conclusion is that despite obese adolescents' intention of reducing weight, underlying issues interfere with this goal. This is particularly related to quarrels with parents, self-blame and misguided understanding of eating and exercising habits. These matters need to be addressed when treating obesity among adolescents.

**Key words:** *Adolescents, blame, phenomenological–hermeneutic study, obesity, views on obesity*

(Accepted: 14 February 2010; Published: 16 March 2010)

**Introduction**

This paper deals with matters influencing the behaviour of the obese teenage population. The article is based on a qualitative study exploring obese adolescents' and their parents' views regarding the former's obesity. Specific attention was given to the obstacles and capabilities obese adolescents face while trying to reduce weight by behavioural modification.

Obesity continues to rise globally. For the first time in a century, future generations in the UK are likely to die at a younger age than their parents due to obesity (House of Commons, 2003–2004). Childhood and adolescent obesity is a serious issue with

many consequences for health and social well being and it is widely agreed that obesity in these age groups has to be reduced. However, it is especially important to reduce adolescent obesity since the condition most likely persists into adulthood (Dietz, 2004; Wardle, Brodersen, Cole, Jarvis & Boniface, 2006). Furthermore, due to adolescence' increasing autonomy as well as greater awareness of body image, friendship and self-esteem (Coleman & Hendry, 2000), they might be more easily encouraged to change behaviour compared to other age groups.

Obesity treatment has a depressing history. Although weight loss can be achieved in the short run, the long-term effect is often insignificant

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Citation: Int J Qualitative Stud Health Well-being 2010, 5: 5073 - DOI: 10.3402/qhw.v5i2.5073  
(page number not for citation purpose)

(Byrne, Cooper & Fairburn, 2003; Summerbell et al., 2005). Traditionally obesity treatment focuses on altering the obese individual's diet and exercising habits by behavioural intervention that tries to increase the obese person's knowledge about a healthy diet and the importance of exercising (Doak, Visscher, Renders, & Seidell, 2006; Summerbell et al., 2005). This strategy assumes that greater knowledge of factors leading to obesity generates a change of behaviour which finally leads to weight loss. According to numerous authors this strategy fails to acknowledge the individual needs of the obese person (Müller & Danielzik, 2007; Murtagh, Dixey, & Rudolf, 2006; Thompson & Thomas, 2000). This argument is supported by anthropological and sociological theories on daily life (Bourdieu, 1990; Holy & Stuchlik, 1983) which emphasise that behaviour cannot be successfully modified without paying attention to the context surrounding the specific behaviour. Put simply, in order to influence a person's behaviour in everyday life one must attend to the reasons that stimulate and guide such behaviour.

The reasons that stimulate behaviour could be conceptualised by exploring the person's views on the particular behaviour. Obese people's views regarding their obesity are not fully understood. However, important aspects have been pointed out. Etelson, Brand, Patrick, & Shirali (2003) and Eckstein et al. (2006) found that many parents fail to recognise their child's obesity. He, Irwin, Sangster Bouck, Tucker, & Pollett (2005) found that some parents do not recognise their child's screen viewing as a cause of obesity. It is also shown that although the risk factors leading to obesity (Deforche, De Bourdeaudhuij, Tanghe, Hills, & De Bode, 2004; Murphy, Youatt, Hoerr, Sawyer, & Andrews, 1995; Thakur N & D'Amico, 1999) are known, some families give other explanations like unhealthy genes or social problems to explain their child's obesity (Jackson, McDonald, Mannix, Faga, & Firtko, 2005; Lindelof, 2006). Although these studies are small in size and need to be confirmed in the future, they indicate a discrepancy between (a) the obese population's views on and reasons for their obesity and (b) the more rational perspectives on obesity formulated by the health authorities and operationalised in the traditional intervention strategies. It seems likely that such discrepancy affects the efficiency of the intervention strategies. For example, and related to the above findings, in order to support the obese child to reduce weight, its parents first of all have to perceive the child as obese. This is a perception many parents do not have according to two sets of research teams (Eckstein et al., 2006; Etelson et al., 2003). And further, if a reduction in

sedentary activities, such as screen viewing, is beneficial in order to lose weight, the obese person and his/her relatives need to acknowledge the association between screen viewing and obesity—an association He et al. (2005) failed to prove in their study.

### *Aim*

The aim of this study was to qualitatively explore obese adolescents' and their parents' views on the former's obesity. Especially to gain knowledge about barriers and motivational factors that influence adolescents' ability to lose weight.

### **Theoretical framework**

We hypothesise that insights into obese individual's views are essential if a lasting change of behaviour is to be encouraged. In short, the obese person cannot adopt a healthier lifestyle if his/her views contradict this behaviour. Our theoretical standpoint is inspired by the French sociologist Pierre Bourdieu's (1930–2002) theories of practice, in particular his notion of habitus (Bourdieu, 1990). Among others, Bourdieu develops habitus to understand why there are behavioural similarities within different social classes, e.g., ballet and white wine are enjoyed by the upper class while the lower class watch soccer and drinks beer. Bourdieu argues that behaviour is mediated by habitus, which at a pre-conscious level organises the individual's behaviour in certain patterns reflecting the habitus. Habitus is formed in the individual's past by material, cultural and social conditions, and experiences. However, childhood and youth are of central importance to the formation of habitus. Thus, habitus cannot be grasped as it constantly changes as time goes and new experiences are integrated. In Bourdieu's theory, habitus therefore takes the past and directs it into the future as specific way of acting in everyday life.

Related to obesity and the implementation of healthier eating and exercising habits, the understanding of habitus indicates that it is not sufficient to educate the obese about the nutritionally correct way of eating and the importance of exercising. If the obese individual is to adopt a healthier living, he/she needs to have a habitus that can generate healthy behaviours. Thus, obesity intervention also needs to focus on underlying factors that might interfere with the implementation of healthier habits.

### **Material and methods**

“Views” as an outcome are hard to quantify and largely unknown at the beginning of an investigation

which makes a qualitative approach, involving field observations and different kinds of interviews suitable (Fitzpatrick & Boulton, 1996). In a scientific frame, the study takes a phenomenological–hermeneutic approach and is inspired by the French philosopher Paul Ricoeur’s (1913–2005) theory of interpretation (Lindseth & Norberg 2004; Pedersen 1999; Ricoeur, 1976) and used in several qualitative explorations.

*Setting*

Participants were enrolled on a three-week summer camp which aimed to reduce adolescents’ obesity by behavioural modification. In full, 28 obese adolescents attended the camp. All camp participants perceived themselves as obese and participated voluntarily in order to lose weight. The camp took place in Denmark in the summer of 2006 at a “Julemaerkehjem” which is a Danish institution, which normally provides socially troubled and mostly overweight and obese children a 10 weeks’ stay free of charge. Besides a nutritious healthy diet, the camp programme featured a daily, compulsory morning run (1.2 km) and different physical activities like canoeing, dancing, fitness, athletics and boxing.

*Sampling*

Two months prior to the start of the camp, all 28 camp participants and their parents/relatives attended an information meeting about the camp. In addition to camp information, the present study was introduced and all camp participants were invited to join. Besides the teenager being obese and attending the summer camp, inclusion criteria in the study were that he/she and his/her parents were willing to be interviewed. The exclusion criteria were lack of motivation or other obstacles to attend the camp. In all, 15 adolescents (eight girls and seven boys) and their parents: one father, nine mothers, three sets of parents and two sets of grandparents chose to participate in the study (Table I). The camp participants not wanting to participate in the study did not have to give an explanation to do so. The two sets of grandparents had custody of the child and functioned as parents. In both cases the child did not know its biological father and the mother had proven incapable of taking proper care of the child when an infant. The poor parental skills of the mother had led the grandparents to intervene and be in charge of the child’s upbringing. The two children raised by their grandparents did not in any significant way differ from the other participants and there will be no

Table I. List of participations.

Gender	Adolescents			Parents/ grandparents
	Age (year) at camp start	Weight (kg) at camp start	Weight loss (kg) at the camp	Mother (M) Father (F) Grandparents (GP)
♂	14	95	5	M, F
♂	14	112	7	GP
♂	15	123	6	M
♂	15	95	3	M
♂	15	118	4	M, F
♂	15	95	6	M
♂	16	87	4	M
♀	14	73	3	M, F
♀	14	92	5	M, F
♀	14	80	3	GP
♀	15	103	4	M
♀	15	83	4	F
♀	15	95	5	M
♀	16	86	4	M, F
♀	16	91	6	M

further distinction between grandparents and parents, with the latter term being used.

The degree of obesity of the adolescents that participated in the study varied. They were asked to describe how many kilograms they were above their self-perceived ideal weight: two noted 10 kg or less, three noted 10–20 kg, six noted 20–30 kg and four wanted to lose more than 30 kg. The obese adolescents who participated in the study were enrolled in lower secondary schools (8th or 9th grade). The parents had different educational levels: one had an academic degree, eight had a level of education corresponding to being a teacher at a primary school, social educator, etc. The rest did not have any education besides compulsory schooling. When asked at the interview, nine of the 15 parents/couples perceived themselves as overweight or obese. All but three parents were employed. The three unemployed received welfare payments. All participants lived in the greater municipal area of Copenhagen, Denmark.

*Data collection*

Field observation (Spradley, 1980) and semi-structured interviews (Kvale, 1996) were used to collect data. Field observation was conducted at the camp during all three weeks. During this period the researcher lived at the “Julemaerkehjem” and participated in the daily activities scheduled for the adolescents. Besides gathering information by observations and informal conversations, he also established trusting relationships with the obese adolescents. In order to get to know the parents, the researcher socialised with them at weekends

when they visited their children at the camp. Field notes (Emerson, Fretz, & Shaw, 1995) were written regularly.

On the basis of interaction with the participants, a semi-structured interview guide was constructed during the first two weeks of the camp (Table II). The guide used when interviewing adolescents covered subjects, such as daily life living as an obese, matters related to food and exercise, relation to parents and friends, and so on. When interviewing the parents, the guide covered similar subjects related to their child's obesity, although more attention was paid to the child's motivation to engage in healthy habits. The same interviewer conducted all the interviews and he adopted a consistent approach in attitude and to questions. The guide served as the researcher's checklist, meaning that he looked through it when interviewing to make sure the topics in the guide was covered in the interview. Thus, the participants did not receive the exact same questions but all were asked about the same topics, e.g., if the participant was freely talking, only a few questions within the topics were necessary, while more questions were asked if the interviewee needed more guidance on a given subject. Questions were always asked openly and non-judgementally, and adjusted to the specific interview.

Interviews with the adolescents were conducted during the last week of the camp. To stimulate both a broader dialogue and to reduce any sense of discomfort, the adolescents were encouraged to be interviewed in small, self-chosen groups. One group of three, and six groups of two adolescents were formed. To establish these groups, the adolescents were asked to find their closest friend at the camp. The fact that the groups consisted of close friends made sensitive topics easier to discuss compared to a

Table II. Themes of the interview guide.

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Topics of interests, adolescents and parents
<ul style="list-style-type: none"><li>● Obesity anamnesis; when and why, possible episodes related to the obesity.</li><li>● Attitudes to food; amount and type of food intake, food bought in secret.</li><li>● Attitudes to exercise; type and time spent on exercise.</li><li>● Previous attempts to lose weight; why, how, motivation to do so.</li></ul>
Related to the adolescents
<ul style="list-style-type: none"><li>● Parents' and friends involvement in the handling of the obesity.</li><li>● Hopes for the future regarding the obesity.</li></ul>
Related to the parents
<ul style="list-style-type: none"><li>● The obese child's motivation to lose weight.</li><li>● Parents' support; what do they do, could they do more/something else.</li></ul>

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Note: This is not to be seen as questions but as themes the interviewer covered while interviewing.

normal in-depth single interview. Besides supporting each other on sensitive topics, the friends could discuss topics with each other and thereby supplement and encourage each other. At the group interviews the researcher made the interviewees answer the same question before they were encouraged to discuss within the group. The researcher then commented, added follow up questions and juxtaposed previous answers in these discussions.

The parents were interviewed in their private homes when their children were not in the house/room. The interviews with the parents were always preceded by informal conversation. This, and the fact that the researcher had shown interest in socialising with them at the camp made the parents less tense and more eager to discuss matters of importance during the interview.

The average length of the interviews for both adolescents and parents was 72 minutes. Interviews were audio-taped and transcribed word by word by the same researcher who conducted the interviews.

#### Data analysis

Transcripts and field notes from observations were used equally in the analysis and both types of information are referred to as "data". Although field observations compared to interviews could be interpreted as of lesser importance in the analyses, such data is of great value as it in many ways serve as the basis for the questions asked in the interview. For example, based on the field observations, the researcher could ask about a given observed behaviour or relate a participant's answer to an observed behaviour. Thus, besides having value of its own field observations were integrated in the interviews. The analysis of the data is inspired by Ricoeur and consists of three levels, i.e., naive reading, structural analysis, and critical interpretation and discussion (Angel, Kirkevold, & Pedersen, 2009; Pedersen, 1999; Ricoeur, 1976).

*Naive reading.* According to Ricoeur, naive reading is a process where the interpreter reads all the written data several times while taking a phenomenological approach, i.e., the researcher remains non-judgemental and open-minded in order to grasp the meaning of the data as a whole. The naive reading is regarded as the first conjecture of the analysis and it has to be validated or invalidated by the subsequent structural analysis.

*Structural analysis.* The intention of the structural analysis is to clarify the dialectics between naive reading on the one hand and interpretation of what

the data is about on the other. This part of the analysis will move from units of meaning to units of significance and generates themes and subthemes related to the overall aim of the investigation.

*Critical interpretation and discussion.* The themes and subthemes identified by the structural analysis are interpreted and discussed in the critical interpretation and discussion. This level of the analysis is related to the overall treatment of obesity with special attention on how to increase the efficiency of the behaviour modification approach. To validate the analysis, the themes and subthemes are reflected against the background of the naive understanding, exploring whether the themes validate or invalidate the naive understanding; if the structural analysis invalidates the naive understanding, the whole text is read again and a new understanding is formulated and checked by a new structural analysis. In Ricoeur's terminology this process reflects a dialectic process between explanation and comprehension, also known as the hermeneutic spiral.

## **Ethics**

All applicable institutional and governmental regulations concerning the ethical use of human volunteers were followed during this research. All participants were informed orally and in writing about the study, including the purpose of the study, the methods used (i.e., interviews, observations with fieldnotes). All participants were told that they could withdraw from the study with out any notice or consequences. Anonymity was guaranteed by ensuring strict confidentiality of any material related to the study. The Central Danish Committee on Biomedical Research Ethics had no objections against the study (nr: 123/2007). Data gathering were always done in a polite and tactful manner and in respect to the individual being interviewed/observed. To limit participants' potential discomfort after an interview, the researcher finished an interview with friendly and everyday small talk.

## **Results**

### *Naive reading*

A thorough naive reading of the data (transcripts and field notes) elicited several interesting impressions related to the adolescent's obesity. The analysis revealed that habits relating to food and exercise were of particular interest. Furthermore, the analysis showed the both adolescents and parents were occupied by thoughts of responsibility; i.e., the adolescents blamed themselves for being obese

and the parents blamed their child for not being motivated and determined to lose weight. These thoughts influenced the adolescents' ability to reduce weight through behavioural modifications.

### *Structural analysis*

The structural analysis first presents themes and subthemes related to the adolescents and then to the parents. Tables III and IV show the movement in the analysis with adolescents and parents, respectively. Table III presents the structural analysis based on interviews and field observations with adolescents.

Although the substance of the statements differed between the obese adolescents and their parents, the overall themes were similar. Table IV presents the structural analysis based on interviews and field observations with the parents.

The themes and subthemes identified in the structural analysis and shown in Tables III and IV are elaborated in the following sections.

### *Attitudes towards diet*

Compared to the diet at the camp the adolescents ate larger quantities of food and unhealthier food in everyday life. They defined unhealthy food as food high in sugar, fat and white flour. The adolescents were fully aware that their diet was unhealthy and they wished they were able to alter this behaviour. "I wish I didn't do it [eat unhealthy food] but I just forget everything about losing weight when I'm buying it". To explain their unhealthy eating habits they (a) accused their parents for buying and serving unhealthy food, and (b) blamed themselves for consuming fast food, snacks, soft drink, etc., when not at home/with their parents on a daily basis. The food consumed when alone was primarily done when sad, hungry or with peers in social gatherings. The adolescents tried to hide their intake of unhealthy products from their parents, as they believed their parents would be upset if they knew the quantity of unhealthy food they consumed. "She [mother] would be furious if she knew how much food I buy so I don't tell her anything".

The parents disagreed with their children's complaints about unhealthy food at home and believed they served healthy food and had done this for the past years. "All our homely food is adjusted to her being obese. But we cannot fully control what she does by herself." The parents primarily focused on a diet low in fat and sugar, and rarely on size and numbers of portions. The parents were aware that their child ate unhealthy food when not with them and believed this was a major reason for the child's obesity. "He has to want to lose weight . . . I think he

Table III. Adolescents. Findings of the structural analysis with units of significance, themes and subthemes and examples of meaningful units shown as quotations derived from the text in the naive reading.

Units of meaning—what they say (quotations)	Units of significance—what it speaks	Themes and subthemes
<p>“They [parents] know that I sometimes buy unhealthy food, but not that I do it three or four times a day”.</p> <p>“She [mother] would be furious if she knew how much food I buy so I don’t tell her anything. You know, I wish I did not eat it but I just cannot stop doing so”.</p> <p>“I wish I didn’t do it but I just forget everything about losing weight when I’m buying it”.</p> <p>“Once I stopped eating unhealthy food for nearly one week. I was really proud of myself. But it kind of stopped after that week”.</p>	<p>Large amounts of unhealthy food intake. Ashamed of eating in such a way and hide it from parents.</p> <p>Wish current eating habits were healthier.</p>	<p>Attitudes towards diet</p> <ul style="list-style-type: none"> <li>● Unhealthy food habits.</li> <li>● Ashamed of this behaviour and want to change it.</li> </ul>
<p>“I often think at night that tomorrow I am going to go for a run. And I really mean it . . . but then something else comes up and I don’t”.</p> <p>“I have nearly always been a member of a sports club . . . in the last three years I have tried perhaps six different clubs but I didn’t like them. Now I’m using the gym”.</p> <p>“I go to the gym . . . Well, I have only been there a few times this year. I am going to use it more, I am sure”.</p> <p>“I don’t think I get enough exercise but I have physical education in school and sometimes I go to the gym”.</p>	<p>Exaggerate the daily level of exercise—perceive it as moderate.</p> <p>Wish current exercising habits were healthier.</p> <p>Associate exercise with formalised sport or the gym.</p>	<p>Attitudes towards exercise</p> <ul style="list-style-type: none"> <li>● Discrepancy between the actual level of exercise and the perception of it.</li> <li>● Want to increase level of exercise.</li> <li>● Exercise is perceived as formal and club-based.</li> </ul>
<p>“If I am gaining weight it is because I have been lazy and not been pulling myself together”.</p> <p>“My parents have tried to help me although not very well I think. But I am 15 now and I should be able to control myself.”</p> <p>“Once I lost three kilos and I was much happier and also a little bit proud. But then some problems came up and I did not have energy to do the right things. So it is my own fault, I guess I am weak.”</p> <p>“When you are slim everything is much easier. No one looks at you, your clothes fit”.</p>	<p>Feel guilty for being obese and accuse themselves for not being capable of reducing weight.</p> <p>Believe life at normal weight is better.</p>	<p>Responsibility and obesity</p> <ul style="list-style-type: none"> <li>● Blame themselves for being obese.</li> <li>● Associate a slim life as more enjoyable.</li> </ul>

forgets about it when I am not there to tell him”. Compared to the adolescents’ statements, the parents underestimated the quantity of unhealthy food the adolescents consumed on their own. The parents were convinced that they had done and still did everything they could to reduce their child’s undesirable eating habits.

*Attitudes towards exercise*

Field observations revealed that the adolescents were in poor physical shape. They were only capable of engaging in intensive physical activity, like running, for few minutes. None could complete the morning run (1.2 km). In spite of their poor physical skills, they perceived their daily level of exercise as moderate although not sufficient to lose weight. This perception was based on the fact that they were or

had been members of a gym or sports club and had a weekly lesson (90 minutes) of sports in school. “I do some sport, not much though. But you know, I have it in school and I also go to the gym once in a while”. When asked about their membership to the sports or gym club, the adolescents explained that they often changed activity, either because they felt they lacked the appropriate skills or because other club members bullied them. The majority of the adolescents disliked these activities and attended to lose weight and satisfy their parents’ wishes. “. . . in the last three years I have tried perhaps six different clubs but I didn’t like them”. The adolescents did not relate non-club-based exercise like walking, playing, bike riding, etc., with “proper exercise” and weight reduction. In order to reduce weight, they wanted to be more active but believed they lacked motivation “to pull themselves together” and start exercising regularly.

Table IV. Parents. Findings of the structural analysis with units of significance, themes and subthemes and examples of meaningful units shown as quotations derived from the text in the naive reading.

Units of meaning—what they say (quotations)	Units of significance—what it speaks	Themes and subthemes
<p>“All our homely food is adjusted to her [child] being obese. But we cannot fully control what she does by herself. We keep telling her not to but she just continues. We have really done everything we could”.</p> <p>“We have done everything at home. We do not have butter, white bread . . . If she [child] is not motivated . . . I mean, we cannot lose weight for her”.</p> <p>“I know he [child] buys candy and soft drinks. I tell him not to, but he does not seem to care. He has to want to lose weight I think.”</p>	<p>Believe the food served at home is healthy.</p> <p>Blame the child for unhealthy dieting when by themselves.</p>	<p>Attitudes towards diet</p> <ul style="list-style-type: none"> <li>● Believe the home is an environment where healthy food is prioritised.</li> <li>● Blame the child for unhealthy eating habits.</li> </ul>
<p>“It happened after he [child] entered puberty. He has become really lazy. He doesn’t even want to vacuum clean because it is too much exercise”.</p> <p>“To be honest I don’t think she [child] likes to exercise but she does get some. Now she’s a member of the gym and last summer she played soccer at the club”.</p> <p>“He [child] cycles sometimes but I think it is because I tell him to do so. He is a member of the gym. But he does not use it”.</p>	<p>Perceive the child as lazy and living a sedentary life.</p> <p>Believe the child has a moderate level of daily, physical exercise.</p> <p>Associate exercise with formalised activities like the sports club or the gym.</p>	<p>Attitudes towards exercise</p> <ul style="list-style-type: none"> <li>● Blame the child for being lazy.</li> <li>● Perceive the child as having a moderate level of exercise.</li> <li>● Consider exercise as sport or work out</li> </ul>
<p>“He [child] is 15 years old now and should be old enough to make the right decisions.”</p> <p>“You know, I have done everything I could. It is up to her [child] now; she needs to be motivated. She really needs to want to lose weight.”</p> <p>“I think she [child] will mature and start taking some responsibility to her life. I am pretty sure she will grow up in that sense.”</p>	<p>Believe the child is fully supported to engage in a healthier life-style.</p> <p>Perceive the child as lacking motivation and will power to lose weight.</p>	<p>Responsibility and obesity</p> <ul style="list-style-type: none"> <li>● Believe the child needs to make a bigger effort to reduce his/her weight.</li> <li>● Cannot support more than already doing.</li> </ul>

All parents characterised their child as lazy and a person who did not enjoy exercise. “She [child] just watches TV or is at the computer. She has always been so lazy”. In spite of this they agreed with their obese child and believed he/she had a moderate level of daily exercise. Like the adolescents, the parents based this assumption on the fact that the child had been or was a member of a sport club/gym and attended a weekly session of sport in school. The parents believed they fully supported their obese child to increase physical activity. This was primarily done by verbal encouragement and rarely by joint family trips involving physical activity. “I daily tell him [child] to go for a run. But I cannot join him because of my knees”. When asked about their last family trip involving physical activity (walking, bike rides, etc.), none of the families had done so within the last year. The parents viewed their family as an active family who enjoyed walking, bike rides, etc. One parent had been riding a bike for the last week. Neither the adolescents nor the parents considered exercise as important as food when trying to reduce weight. In addition, the parents were less

enthusiastic when trying to increase physical activity/ reduce sedentary activities compared to their efforts in influencing their child’s eating habits.

*Responsibility and obesity*

The obese adolescents believed their lives would be more enjoyable if they were slim; with more self-confidence, more friends and an easier daily life. Therefore, their desire for weight loss was significant. “When you are slim everything is much easier”. They were fully aware that their eating and exercising habits were unhealthy and counteracted a weight reduction. They held themselves responsible for not being capable of changing their habits and believed they were incompetent in taking care of themselves. “It is my own fault. I’m lazy and eat too much”. The adolescents did not blame their parents for their obesity but they wished for better parental support. In particular, they wanted the food served at home to be healthier and the parents being better at encouraging them to exercise. Lastly, they thought the parents were too focused on them being obese

and they lacked a non-accusing dialogue about their weight. They believed they would be more motivated and eager to engage in a healthier lifestyle if the home atmosphere was pleasant and not characterised by quarrels and accusations of being lazy and lacking motivation to lose weight. "She [mother] constantly tells me what not to do and blames me for what I am doing ... It really upset me".

The parents on the other hand perceived themselves as fully supporting their child in losing weight. Although they knew the child had difficulties in changing behaviour and reduce weight, the parents perceived their child as immature and in lack of motivation and willpower. "It is up to her [child] now; she needs to be motivated". Therefore, they criticised their child for not engaging in a healthier behaviour. The parents believed the child would be more motivated and successful in reducing weight when he/she matured through adolescence into adulthood.

#### *Critical interpretation and discussion*

The title of this article indicates that obesity treatment to be successful needs to focus on more than exercise and a healthy diet. In line with Bourdieu's notion of habitus, attention must be paid to the underlying mechanism that generates the unfortunate behaviour leading to obesity. In short, people do not change behaviour because they are told that another behaviour is better. They change behaviour, we believe, because they are motivated and have the premises for establishing the new behaviour. In other words, if obese individuals are to adopt a healthier lifestyle, they need to have a habitus that can stimulate and generate these healthier habits. The following pinpoints areas of interest that might, if targeted, influence obese individual' habitus and thereby increase the efficiency of intervention strategies aiming at reducing teenage obesity.

The study revealed a discrepancy between obese adolescents' and their parents' perception of the health of the food served at home: the former believed the food could be healthier while the latter disagreed with this. The study did not measure the correctness of this, but it seems likely that reality differs from parents' perception since people generally tend to underestimate the amount of unhealthy food they eat (Maurer et al., 2006). Besides this, many parents in the study were themselves obese which might indicate that the family diet could be healthier. The apparent imbalance between reality and parents' perception of it is problematic since it cannot be expected that parents will change their diet as long as they erroneously perceive it as healthy. Therefore, parents need

support to realise that the food consumed at home is not as healthy as they consider it to be. As others have pointed out (Glanz, Brug, & Assama, 1997), this is the first and most basic step towards a healthier diet. The change towards a healthier family diet is important in regard of the amount of unhealthy food the adolescent are exposed to. However, in line with Bourdieu's concept of habitus, an unhealthy family diet is also important to alter as the eating habits learned as a child/adolescent will be brought into adulthood. Similar argument regarding pre-school children's consumption of fruit and vegetables is made elsewhere (Cooke et al., 2004).

Another topic that needs attention is the understanding of what characterises healthy dieting. This study showed that a healthy diet is associated with meals low in fat, sugar and white flour, and not with portion size. Therefore, it is rare for parents to discuss with their obese child quantities of food consumed. This is problematic since portion sizes have increased during the recent years with a parallel increase in energy intake (Ledikwe, Ello-Martin, & Rolls, 2005). Dietary guidelines and public campaigns therefore need to include portion sizes as a central element as advocated elsewhere (Matthiessen, Fagt, Biloft-Jensen, Beck, & Ovesen, 2003).

Besides the food served at home, obese adolescents consume large quantities of unhealthy food when alone, feeling sad, bored, hungry or with peers. As mentioned, they are aware that these actions increase their weight and they are ashamed of having such needs. In relation to future intervention strategies, an important message is that besides dietary guidelines it is equally important to implement basic behavioural skills in order to help the obese population to make healthier choices in everyday life. One example could be that the obese person learns different coping strategies in order to handle peer pressure or avoid emotional eating. This assumption is supported by recent studies (Forman et al., 2007; Goossens, Braet, Vlierberghe, & Mels, 2008).

Ekelund et al. (2002) have shown that obese adolescents are less physically active compared to a non-obese control group. Our study did not measure the daily level of activity but based on the fact that all the adolescents were in poor physical condition, Ekelund et al.'s finding might characterise the adolescents participating in this study. In spite of their poor physical capabilities, adolescents and their parents believe they live a moderate active life, although aware that in order to reduce weight they need to increase their level of exercise. The discrepancy between the actual daily level of exercise and the perception of it is problematic: a person who believes he/she enjoys a moderate active life might not be as motivated to increase physical activity,



compared to the person who perceives him/herself as living a fully sedentary life. Therefore, in order to stimulate obese adolescents to increase their level of physical activity, they and their parents need to understand that the actual level is low and not moderate. Another issue related to exercise that needs to be considered when treating obesity is that both adolescents and their parents associate exercise with membership in the local gym or sport club. Even though obese adolescents dislike these activities, they are members of such clubs. However, they often change activity which means that they do not get familiar with the activity but end up with feeling of not being good at sports and exercising. Our suggestion is that instead of promoting club-based activities, non-formal exercise such as cycling, walking, social activities involving fun and playfulness should be encouraged. Participating in such activities is not dependent on skills and compared to activities in the local sports club will not lead to a sense of failure. Therefore, these non-club-based activities have better chances of success, as pointed out elsewhere (Poirier & Despres, 2001). In addition, long-term compliance might be higher if they engage in activities they like instead of club-based exercise they dislike.

Food and exercise were discussed by both groups of informants. These topics were often related to blame and responsibility. Many parents of obese adolescents believe they fully support their child in losing weight and they are convinced that the reason why their child does not reduce weight is because he/she lacks motivation to do so. Parents therefore blame their teenage child for being obese. Obese adolescents agree with this and blame themselves for not being able to live a healthier life. When trying to do so, for example, going on a diet and/or joining a new sports club/gym, they lose motivation after a few weeks and return to their old habits. This reinforces their self-perception as a person who is lazy, lacks basic human skills and has a weak character. Therefore, the unsuccessful lifestyle changes led the adolescents to internalise society's perception of obese people as weak and incapable of taking care of themselves as shown in numerous studies (Latner & Stunkard, 2003; Puhl & Brownell, 2001). We presume this makes weight loss even harder. A similar consideration related to chest pain has been made by Richards and colleagues (Richards, Reid, & Watt, 2003). In order to stimulate adolescents to reduce weight, our suggestion is that obesity treatment needs to focus on areas such as victim blaming. One example could be that realistic goals are set and both parents and adolescents are aware that failure to achieve these goals is not synonymous with poor skills. At the same time it is important to encourage

the family to keep a pleasant homely atmosphere, as this is more motivating than quarrels, accusations and the like when trying to change behaviour.

This paper deals with matters that influence the behaviour of the obese teenage population. Insight into such areas is important because behaviour, as social scientists like Pierre Bourdieu have theorised, does not exist in a vacuum but is generated by underlying factors. Therefore, to stimulate a permanent change of behaviour it is these underlying factors that need to be influenced and not the behaviour itself. In other words and related to the treatment of obesity, the effect of solemnly addressing the inappropriate consumption of certain products or living a sedentary life is limited because the obese person does not alter the motives for living an unhealthy life. In our discussion we have paid attention to obese adolescents' and their families' unfavourable views regarding their habits of diet and exercise. Furthermore, we have addressed matters related to blame and responsibility within the family. In line with the concept of habitus, our argument is that obesity treatment needs to encourage obese individuals and their relatives to reflect on these unfavourable views as it is these views that in many ways generate the unfortunate behaviour leading to obesity.

For example, in spite of obese adolescents' wish for more parental support in losing weight, their parents believed they fully support their child to live a healthier life. Such discrepancy is problematic: as long as parents perceive their support as sufficient they will not comply with their child's wish of being more supportive. Therefore, and in this case, we argue that treatment strategies profitably could (1) support the parents to reflect on their way of perceiving their support and (2) make room for an alternative way of support which meets the adolescents' needs. If these two goals are achieved a better understanding between the obese child and its parents could be established which is necessary to improve the obese adolescents' overall conditions. We believe such treatment approach is necessary to stimulate the individual towards more favourable behaviours.

#### *Limitations*

To ensure the quality of this study, data were collected by conducting both fieldwork and different types of interviews (group and individual). The limitation of the study lies within the recruitment strategy. First of all, since all young participants recruited in the study participated voluntarily at the camp, they perceived themselves as obese and in need of help to lose weight. Such awareness might

differ from the obese population in general, since many parents perceive their child as slim although they are in fact obese (He & Evans, 2007). Secondly, since the young participants at the camp were exposed to behavioural interventions and counselling that aimed to reduce obesity, they might be more aware of such factors compared to an obese person who has not recently been exposed to such advice. The researcher sought to minimise this by both the personal acquaintance between the researcher and the adolescents at the camp and the group interviews where the adolescents discussed their daily lives with a like-minded person. An example: a camp participant recently exposed to the “correct” healthy way of living might unknowingly overstate the amount of daily exercise he/she performs. But because of the confidentiality between the researcher and the person being interviewed, the researcher could easily sense if the responses seemed unrealistic and if so continue asking until a more truthful answer is given. At the same time the group discussions during the interviews validated the reports given, since the adolescents experienced that their obese friends had roughly the same problems as themselves. This reduced the fear of telling about their actual level of exercise. Therefore, we do not expect that this study’s recruitment strategy and subsequent data collection compromise the results. On the contrary we believe that fieldwork involving observation and a personal relationship with the participants is essential when gaining insights into personal matters, such as views and behaviour.

## Conclusions

Obese adolescents wish to reduce weight but have trouble doing so. In particular, they need coping strategies to avoid the intake of unhealthy food when alone or with peers. They also need a healthier homely diet. Regarding exercise, obese adolescent have to accept that they do not like formalised sport and instead engage in non-formalised activities such as cycling and walking. Another topic that interferes with their wish of weight reduction is constant quarrels with their parents about their weight and weight loss. These daily fights do not motivate the obese teenager to engage in a healthy living but instead fills the adolescent with self blame and a bad mood. As indicated in our title of this paper, we therefore believe that obesity treatment will have better chances of success if attention is given to matters influencing the daily habits of the obese population.

## Conflict of interest and funding

The authors have not received any funding or benefits from industry to conduct this study.

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