RUNNING HEAD: Barriers to healthy eating in adolescence

# Adolescents' views of food and eating: identifying barriers to healthy eating.

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Abstract

Contemporary western society has encouraged an obesogenic culture of eating amongst youth. Multiple factors may influence an adolescent's susceptibility to this eating culture, and thus act as a barrier to healthy eating. Given the increasing prevalence of obesity amongst adolescents, the need to reduce these barriers has become a necessity. Twelve focus group discussions of single-sex groups of boys or girls ranging from early-to-mid adolescence (N=73) were employed to identify key perceptions of and influences on healthy eating behaviour. Thematic analysis identified four key factors as barriers to healthy eating. These factors were: physical and psychological reinforcement of eating behaviour; perceptions of food and eating behaviour; perceptions of contradictory food-related social pressures; and perceptions of the concept of healthy eating itself. Overall, healthy eating as a goal in its own right is notably absent from the data and would appear to be elided by competing pressures to eat unhealthily and to lose weight. This insight should inform the development of future food-related communications to adolescents.

Key words: Adolescents; healthy eating; dieting; food choice; barriers;
eating behaviour

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Over the last few years, the quality of the adolescent diet in the western world has become of increasing concern to researchers and health professionals. Obesity rates have doubled in the UK and USA in the last twenty years (e.g. British Medical Association [BMA], 2003; Flegal, Carroll, Kuczmarski, & Johnson, 1998) and obesity is now considered to be the most common childhood health problem in Europe (International Obesity Taskforce & European Association for Obesity, 2002). This is particularly important given the link between childhood and adult obesity and the associated increase in morbidity risk. Despite concerns regarding this problem of 'epidemic proportions' (e.g. BMA, 2003; Irving, & Neumark-Sztainer, 2002), the psychosocial factors that contribute to the development of obesity in children and adolescents are not fully understood.

Evident changes in diet in the Western world have been linked to the prevalence of obesity. Increasingly, diets are marked by the consumption of high fat, high sugar and high salt foods which in turn are linked to cardio-vascular disease and sodium hypertension (e.g. Food Standards Agency [FSA], 2004). The identification of the underlying causes of such wide scale behaviour changes in adolescence is central to understanding the rise in obesity. These changes have variously been attributed to the contemporary environment which encourages indulgent consumption of energy-rich foods, the promotion of such foods by the media and commercial concerns and their increasing centrality in a variety of social contexts (BMA, 2003). Thus it can be argued that these obesogenic patterns of eating have become integrated into youth culture and are normative. While anthropological and sociological research has examined these

influence at the level of society (eg Counihan and Van Esterik, 1998; Murcott, 1983) the role of subjective perception has been under researched.

The various understandings of what healthy eating actually means are likely to have different implications for eating behaviour. Indeed, Ajzen and Madden (1986) argue that the influence of norms can only ever be understood in the context of subjective perceptions. This is particularly important in relation to health behaviour as young peoples health concerns depart substantially from those of health professionals (Coleman and Hendry, 2000). This is in part due to the manifestation of the ill-effects of unhealthy behaviour in later life and to the different meanings and functions of risk-taking behaviour in adolescence but also to the relative salience and importance of other social and personal issues at this time (Coleman, & Hendry 2000). However, although adolescents' understandings of healthy eating cannot be assumed to match parents' or professionals' views, few studies have set out to examine young peoples own views (Nichter, 2003; Story, Neumark-Sztainer, Sherwood, Stang, & Murray, 1998). Studies of dieting behaviour indicate that dieting and healthy eating may be perceived to be similar behaviours by adolescents (Nichter, 2003; Story et al., 1998). Roberts, McGuinness, Bilton, and Maxwell (1999) found that British adolescent girls viewed "dieting" as being "good for their health"; in fact adolescent girls perceive dieting as healthy eating behaviour. Several studies indicate that adolescents perceive dieting to mean eating healthy food and cutting out unhealthy foods (e.g. Lytle et al., 1997; Roberts, Maxwell, Bagnall, & Bilton, 2001; Story et al., 1998) and this is reflected in the increased consumption of fruit and vegetables reported by dieting adolescents (e.g. Lattimore, & Halford, 2003; Nowak, 1998). This superficially suggests a largely positive relationship between dieting and healthy eating. More generally, given the

variety of messages encountered by young people in relation to healthy eating, understanding what 'healthy eating' actually means to adolescents would appear to be crucial in elucidating barriers to healthy eating.

Eating behaviour in adolescence is influenced by multiple individual, social, physical, environmental and macrosystem influences (Neumark-Sztainer, Story, Perry, & Casey, 1999; Story, Neumark-Sztainer, & French, 2002). There are also important developmental factors influencing food choice uniquely associated with being an adolescent. Adolescence is one of the greatest periods of change throughout the lifespan with changes in body shape (e.g. Spear, & Kulbok, 2001), cognitive processes (Piaget 1970), and personal autonomy and yet these various maturational factors have not been fully integrated in research into adolescent eating behaviour (Hill, 2002). For example, adolescence is a period of development associated with striving for independence through making rebellious or non-conformist statements and adopting social causes (Ministry of Health New Zealand, 1998). One of the ways in which independence or rebellion may be expressed is through eating less healthy foods or not eating as an act of parental defiance (e.g. Hill, Oliver, & Rogers, 1992).

Any one of these multiple influences on food choice may act as a barrier to healthy eating. The present study will qualitatively examine potential conceptual, physical, individual, developmental and social barriers to healthy eating in focus group discussions with adolescents.

## Method

### *Data collection: Focus Groups*

The present research was part of a larger study examining the efficacy of dietary communications to young people. Focus group discussions were chosen as this method has a number of distinct advantages for the study of shared understandings and normative pressures. They provide a comfortable environment that facilitates disclosure, stimulates debate, encourages elaboration and allows for adolescent attitudes and perceptions to be explored within the social environment in which they were constructed (Wilkinson, 2003). Whilst the focus group is guided by an interview schedule of key questions, the development of the conversation is driven by the group. This frees the discussion from existing preconceptions and allows the researcher to engage with unforeseen topics that may arise during the course of the discussion (Nicolson, & Anderson, 2003).

Of course this methodology has specific drawbacks as highlighted in Puchta and Potter's recent study of commercial focus groups (2002). Poorly conducted focus groups can encourage the artefactual production of stand-alone opinions, whilst analyses which take these statements as evidence of underlying trans-contextual attitudes do lose the rhetorical significance of these utterances in the context of their production (cf Potter & Wetherell, 1987). With these warnings in mind, the purposes of the focus groups were threefold: to map out the terrain of adolescents knowledge and attitudes towards food; to see how these opinions are articulated in the flow of the focus group conversation and finally to examine how they are accepted or contested by other group members with a view to elucidating the shared barriers to healthy eating.

*Materials*

A semi-structured interview schedule was developed to guide the focus group discussion. The schedule consisted of a series of core questions to ensure a degree of comparability between resultant transcripts. Around this a more flexible and open approach was taken to ensure that the moderator merely facilitated, whilst the group dictated the direction of the discussion (e.g. Wilkinson, 2003). Core questions were constructed using issues highlighted in the dietary, adolescent and risk communication literature thereby asking participants to comment upon the various factors affecting food-choice and food-related risk (e.g. Hill et al., 1992; Nowak, 1998; Story et al., 1998). These issues were discussed within the framework of five key topic areas which had been given media coverage at the time of the study. These topics included: Fast food and healthy eating, The Atkins Diet, Vegetarianism, Organic foods, Processed and Genetically Modified (GM) foods. The present paper will focus on those key topics and issues related to the theme of perceptions of and barriers to healthy eating.

*Participants*

Given the aim of the research, to map out the variety of understandings of healthy eating among adolescents, recruitment of participants took place from a range of socioeconomic groups and rural/urban locations via second level schools across Ireland, North and South. This was done in order to span demographic axes known to be of relevance to the issues under consideration, though clearly the respondents cannot be taken to be representative of each of these social groupings and comparisons between groups must be treated with caution. Individuals were recruited from and divided into 3 distinct age group covering early-to-mid-adolescence to allow a consideration of the developmental differences in adolescent's understandings of the issues. Boys and girls

were interviewed in single-sex focus group to facilitate franker discussions. A total of 12 focus groups, representing 73 participants, with 5-8 individuals per group were recruited. This is in line with the consensus that 6-8 participants for each focus group is optimum to enable effective discussion within the group (Morgan, & Krueger, 1998). Each focus group consisted of a group of boys or group of girls of age 12-13 years, 13-14 years or 14-15 years old. A more detailed breakdown of the focus groups is provided in Table 1.

*Procedure*

Five to eight young people were selected by a designated teacher from each school to participate in the focus groups. Parental consent was obtained for each participant prior to conducting the focus groups.

All focus groups were conducted in an office or classroom, with chairs placed in a circle in the middle of the room. A microphone was placed on a small table or chair in the middle of the circle to ensure optimal recording of the focus group interviews. It was explained that the groups were being recorded so that we could correctly represent what was said and participants were reassured regarding their anonymity. Each focus group was conducted by two investigators. The moderator conducted the interview whilst the other investigator was responsible for taking notes during the session. During discussions the interviewing moderator probed the groups with questions and asked for clarification on issues to ensure an in-depth articulation of the group's views. The moderator was able to direct conversation to the less vociferous members of the group in an attempt to span the diversity of all experiences and opinions. Though this was not always entirely successful with less forthcoming participants, it did prevent an

overrepresentation of the views of small numbers of more vocal members. Each discussion lasted approximately 40-50 minutes.

*Analysis*

Focus group interviews were transcribed from the tape recordings into both electronic and printed form. Each transcript was read several times before beginning the analysis initial notes summarising and paraphrasing the resultant texts were made. Comments on similarities, differences, connections and contradictions within each text were included. After each transcript had been read, comments on similarities, differences, associations and connections between texts could be made.

Further analysis was then carried out using NVivo v2.0 (qsr, 2002), a text-tagging software program that can be used to code and categorise responses in the original transcripts thus providing a direct means by which emergent themes can be checked against and identified with the source material. In particular, returning to the original texts was important in interpreting the participants' responses in the context of the flow of the focus group conversation. Thus the themes were developed inductively and explanatory accounts were developed in recursive engagement with the data set. Specifically, deviant cases or instances which did not conform to the accounts of the data were used to inform and amend these explanations (Seale, 1999; Silverman, 2001). Extracts were not exclusively assigned to separate themes and the overlap between themes in the data was used to inform the broader analysis.

## Results

The analysis resulted in the development of four key themes and attendant explanations of barriers to healthy eating:

1. Influences on food choice: physical and psychological rewards
2. The unbalanced diet: ,perceptions of food and eating behaviour.
3. Perceptions of contradictory messages
4. Conceptual issues: 'healthy eating' and perceptions of dieting

*Theme 1: Influences on food choice: physical and psychological rewards*

A longstanding finding in the study of food attitudes and eating behaviour is that knowledge about nutrition and food risks does not often translate into more healthy eating behaviour (Brown, McIlveen & Strugnell, 2000). Our focus group discussions indicated that whilst adolescents do have a good knowledge of what is healthy, nutritional knowledge may not be the central motivation for food choice. Rather, adolescent eating behaviour is more often reported as determined by physical factors inherent in the food and psychological factors inherent in the individual.

Food aesthetics, in terms of taste, texture, appearance and smell, was often reported as one of the most powerful physical reinforcers of food choice. For many adolescents, unhealthy foods were reported to be intrinsically rewarding because of their physical properties such as taste. Conversely, many foods perceived as healthy, including green vegetables were disliked due to their unpleasant or bland taste. In the following extract we see a fairly typical exchange between the moderator and a focus group in which food preference is unequivocally linked to taste.

Extract 1 (A2M)

ORLA: So, can you tell me something you would normally like to eat?

PARTICIPANT1: Ice-cream.

PARTICIPANT2: Sweetie stuff that tastes nice.

ORLA: Sweet stuff and taste. Anybody else? Anybody else not keen on sweet stuff, or would prefer something else?

PARTICIPANT3: No.

Notably, though the moderator offers the floor to any participant willing to say they do not like 'sweet stuff', they decline to do so. In fact, though the question is posed to elicit an affirmative response, one participant feels it appropriate to respond negatively. This suggests a strong shared normative expectation among the group of preference for sweets. In contrast the following extract evidences a common trend to depict more healthy foods as tasteless.

Extract 2 (A3M)

ORLA: Right, you think there is more flavour into chocolate than coleslaw, broccoli or beans?

PARTICIPANT: Yes.

ORLA: So what do you…

PARTICIPANT: The taste.

ORLA: The taste?

PARTICIPANT: There is none.

ORLA: There is no taste?

ALL PARTICIPANTS: No.

The group has previously been negotiating the balance between healthiness and tastiness of foods as determinants of food preference and here one participant is particularly vocal about the tastelessness of healthy foods. Though the moderator

directly questions his opinions he stands firm and at the end of the extract receives a chorus of endorsement from the rest of the participants. This equating of tastiness with sweets, chocolate and other energy-dense foods was clearly established as a consensus within most other groups.

Though aesthetic qualities (including smell and appearance as well as taste) were often presented as inherent characteristics of particular foods, it was notable that participants' responses were usually accompanied by a display or reports of 'visceral' or emotional responses to specific foodstuffs. Emotive phrases such as 'slimy' smelly', 'makes me sick' were sometimes accompanied by noises of distaste 'urgh'. For some adolescents, physical aesthetic qualities of the food were explicitly reported to act as a trigger for strong emotional reactions identifiable as neophobia, mood alteration as well as disgust. Such reactions were occasionally mentioned as a barrier to trying novel or unfamiliar foods by individuals who reported themselves as 'fussy' or 'picky' eaters. This was usually but not exclusively linked to foods considered as more healthy by respondents. For example, in the following extract we see a respondent admitting the unfounded nature of his dislike of a potentially less healthy food 'I haven't even tasted it' to emphasise the visual cues:

Extract 3 (A3M)

ORLA: Why do you think you don't like those things?

PARTICIPANT1: They don't look nice.

PARTICIPANT2: I haven't even tasted brown sauce before but I just don't like it.

ORLA: Why don't you like it? The look of it?

PARTICIPANT2: Agh, the look of it.

Emotion was also reported as a barrier to the consumption of certain foods. In the present study, moral disgust can be seen as a major factor influencing eating behaviour and was particularly evident in some of the female groups. Many meat-eating girls refused to eat meat that reminded them of its animal source. They expressed disgust at the thought of eating meat with bones in it, whole fish or fish fillets with skin yet were quite happy to consume these foods otherwise. This could have the consequence of a preference for processed rather than fresh foods.

In contrast, respondent's invocation of mood was generally associated with the active consumption of perceived unhealthy foods. Adolescents stated an association between emotion and the consumption of certain types of food, with particular foods such as chocolate, being associated with specific mood state and the consumption of such food was reported to have physically rewarding properties, providing a positive mood elevation when the young people were feeling upset, depressed or bored.

Overall, this first theme suggests that superficially, the polarisation of foods into tasty, gratifying energy-dense foods and tasteless or aversive healthy foods is in itself a barrier to healthy eating. Insofar as taste is interpreted as recommending an unbalanced diet and adolescents allow taste to dictate their choices, this is obviously the case. More subtly though, taste and preference do not exist in isolation from other factors and the data also suggests that food choices are bound up with understandings of the social desirability of specific foods, the normative expectations of peers and the complex relationship between subjective mood, active choice and self concept. These various factors are each unpacked in the other themes below.

*Theme 2: The balanced diet, perceptions of food and eating behaviour.*

As noted above, the polarisation of foods into tasty and tasteless foods was accompanied by a strong normative preference for the former. When asked what foods they liked and disliked, foods such as burgers, chips, processed foods, pizza, chocolate and sweets ranked high amongst the likes and foods such as fruit, vegetables, unprocessed meat and seafood ranked high amongst the list of dislikes. This was accompanied by a parallel recognition that the less preferred foods were more healthy than the preferred alternatives, but that taste was more important than healthfulness in personal food preference. However, it was also apparent that these participants attached evaluations to these foods such that paradoxically, desired foods were described as 'bad', 'junk' or 'rubbish' and disliked foods as 'good' or 'good for you'.

Although having a desire for 'unhealthy' foods forms part of common-sense thinking about young people's food preferences, this can be seen to have two consequences. Firstly, the division of food into 'good' and 'bad' means that many adolescents, rather than considering their diet as a whole, viewed healthy eating as located within particular foods. When asked how they would define healthy eating, most of the groups offered a definition based on the exclusion of unhealthy foods: 'not eating too much junk food' such as, crisps, snacks, chocolate, sweets and fast food. Even where healthy and unhealthy foods were considered together, the concept of each foodstuff contributing to an overall balance was limited. In the following extract Orla has been discussing foods deemed as unhealthy and here attempts to switch focus to healthy foods:

Extract 4 (A2M)

ORLA: … Em, what do you think people mean by healthy eating?

PARTICIPANT1: Em, pieces of fruit and veg in a day.

ORLA: Right. Anything else?

PARTICIPANT1: More vegetables.

PARTICIPANT2: A more balanced diet, with only a wee bit of the bad stuff and more the good things.

Thus although participant 2 employs the notion of 'balanced diet', the use of this term is clearly predicated on the understanding of 'good' foods as nullifying rather than complementing 'bad' food.

The second consequence of this negative evaluation of preferred foods is that respondents therefore took a negative view of their own food preferences and eating behaviours. In fact in response to the standard question of how healthy respondents viewed their diet to be, the majority reported that they viewed themselves as 'unhealthy eaters'. As nutritional knowledge and evaluation of foodstuffs indicate which is the good and healthy choice and healthy eating was often reported as an intention, giving in to their cravings was said to be a source of guilt and failure. As one boy stated, "You know that it is bad but it is nice stuff, you still want to eat it" (C3M). Thus the categorisation of foods into 'good' and 'bad' tended to pathologise the tastes and preferences held by these young people.

One potential consequence of this widespread understanding was that some respondents subverted this negative self-perception and this could be actively mobilised in conversation as an identity:

Extract 5 (B1F)

ORLA: Right, okay, and you two over here looked guilty when I asked.

PARTICIPANT 1: Well I do eat healthy stuff but I do eat loads of sweets and …

PARTICIPANT 2: I hardly ever eat healthy stuff, unless if my mummy makes me dinner and I eat like junk food all the time and I haven't had a piece of fruit in years.

The first respondent clearly interprets the moderator's statement as negative as she confesses that she does eat unhealthily, but defends herself with a claim to eat some 'healthy stuff'. The second participant also reports an unhealthy diet, but does so in an extreme way ('hardly ever', 'all the time', 'in years') thus making the claim that unhealthy eating is a stable and longstanding part of her identity, rather than an occasional lapse. This allows her to reject the accusation of guilt as, if she is essentially an unhealthy eater, such behaviour is not an aberration.

At the other extreme, the few who perceived themselves as 'healthy eaters' reported a constellation of additional attributes. Firstly, they usually indicated being either interested in cooking or involved in sports activities. Moreover, they perceived themselves to have control over their eating behaviour, were highly motivated to eat healthily and reported eating healthily of their own volition. These characteristics suggest that healthy eating may be part of a more diffuse attitude to health and food but also draws our attention to the central role of autonomy in food related issues and specifically to the role of parents in the influence and control of their children's diet.

'Healthy eaters' only constituted a small minority of respondents and in contrast, the majority of 'unhealthy eaters' perceived their healthy eating habits to be dependent on parental food preparation skills, such that without this control and guidance they did not feel that they would be able to maintain a healthy diet. Those who reported high levels of parental control were more likely to make gross and undifferentiated distinctions between good and bad foods and to describe forbidden foods as more desirable. Taken in isolation, this is relatively uninteresting, but against the background

of other findings outlined here, we would argue that a lack of a positive, efficacious healthy eating identity independent of parental control does constitute a serious barrier to healthy eating. Consider the extract below in which normative desire for unhealthy food, a negative food identity and the notion of parental control are co-articulated:

Extract 6 (C1F)

JULIE: When do you have, you said you got chips everytime, why wouldn't you want chips everytime?

PARTICIPANT 1: I prefer like chips. They are cheaper and all.

JULIE: Okay.

[participants all talk at once]

PARTICIPANT 2: I wouldn't be able to keep it up for a week, getting my own food.

JULIE: Yes, and what do you think you will cook yourself when you are older?

PARTICIPANT 2: Chips and lasagne.

The preceding discussion concerned what foods the participants would eat if they were given the choice for a week; 'chips' was the consensualised preference. The extract here begins with the moderator attempting to elicit some reasons for why this diet may be undesirable. Participant 1 resists this lead by actively justifying her choice on the basis of personal preference as well as economy. Participant 2 develops this negative self-perception by implying that she would be unable to eat properly if unaided. Furthermore, when Julie offers the explanation that this is due to youth, the respondent resists by asserting that her preference will persist (albeit with an accompaniment of lasagne) in the absence of external control.

Thus we would argue that the convergence of a normative preference for unhealthy foods and the understanding of particular foods as 'bad' precludes an

understanding of dietary balance among our respondents and is associated with a negative self image for many (though not all). In turn, this negative self image appears to be associated with a lack of belief in one's own ability to eat healthily independent of external control and may well lead to a self-fulfilling cycle of self-depreciation and a failure to evolve personal responsibility for healthy eating. More worryingly, this occasionally takes the form of an endorsement and validation of an unhealthy diet as a stable part of self concept (as in extract 5 above) which may well serve some function for adolescents in the short-term, but have negative long-term consequences.

*Theme 3: Perceptions of contradictory messages*

The first two themes have concentrated on adolescent's own opinions and self concepts without reference to the wider social influences on their eating behaviours. Though our participants exhibited a good degree of nutritional knowledge, an examination of their accounts of food and eating revealed that the information they receive is by no means straightforward and we would argue that contradictory and inconsistent messages and social pressures especially in relation to diet may constitute another barrier to healthy eating.

The most obvious inconsistency stems from the tension between desirable and healthy foods outlined above, as participants reported that parents, schools and the media actually reinforce the consumption of foods they know to be unhealthy. Specifically, adolescents perceived snack and fast foods as 'a treat', something provided by teachers, parents and peers on special occasions positively reinforcing their consumption and making them socially rewarding.

The social rewards of foods high in fat and sugar were further emphasised by reference to fast food advertising on television. Some boys in the focus group discussions described the impact this had on their behaviour:

Extract 7 (A3M)

ORLA: (So fast food is) greasy food.

PARTICIPANT2: You know it is bad for you but you just can't resist it, like McDonalds. I was in Dublin on Saturday and we came up into Newry and like even if you don't like it, you can't resist McDonalds, just the way it is publicised on the telly.

ORLA: You don't actually like McDonalds?

PARTICIPANT2: It is alright like, but…it is not somewhere where you would like to go to, but you always seem to go there because like of all the ads and everywhere.

In this discussion of fast food we see the typical contrast between nutrition knowledge and the desire for unhealthy foods. Participant 2 acknowledges that fast food is greasy and unhealthy, but contrasts this to its allure or 'irresistibility', thus invoking the low level of self-control we are familiar with from the previous theme. Notably, when the moderator asks if the respondent likes 'McDonalds', the respondent avoids disclaiming his own preference for fast food by criticising the aggressive marketing of the restaurants instead. Thus these respondents appear to be in a double-bind, whereby they wish to criticise the influence of the media, but cannot deny their own fast-food desires.

A further tension in media messages reported by adolescents was that between desirable foods and weight control. Whilst they reported that media messages encourage eating pleasure through the active promotion of energy-dense foods, media images also reinforced a contradictory image of thinness as the attractive ideal. Adolescent girls in particular often expressed a desire to emulate the looks and figures of the models and

celebrities promoted by the media and reflexively discussed the social pressures involved:

Extract 8 (B2F)

| | |
|---|---|
| ORLA: | You would worry more about eating? Okay. What do you, why do you think you worry more about eating? |
| PARTICIPANT1: | Because there is a lot of pressure in this society of being really thin, and you just don't want to be fat. |
| PARTICIPANT2: | You don't want to be fat because then you are not as nice as the thin people |

Here we see a direct report of the social pressure towards thinness as well as the generalised negative attitude towards obesity. Specifically, the articulation of the 'beautiful is good' stereotype (cf Dion, Berscheid, & Walster, 1972) by participant 2 suggests that thinness and obesity are taken to reflect aspects of the person's own character over and above their physical appearance. As with reports of media advertising, adolescents seem consciously aware of the coercive pressures involved, but unable to critically distance their own opinions from them.

Though salience and importance of body image was particularly pronounced among girls, anti-fat attitudes occurred throughout both boys and girls focus groups. This was apparent through name calling (e.g. "fatties", "beer belly") and occasional reports of the social-exclusion of over-weight peers. This anti-obesity preoccupation dominated conversations about dieting behaviour for both boys and girls. 'Looking good', either in terms of attracting members of the opposite sex or presenting a positive social profile, seemed to be an important factor in initiating dieting behaviour in young people and especially among girls. Furthermore, adolescents reported employing different means of coping with the contradiction of messages on weight-related social

norms and social reinforcement of energy-dense foods. Intermittent weight control behaviour was seen by some individuals as being the most viable way of maintaining appearance. For boys this tended to be sporadic exercise with the express aim of losing weight while some girls did report restrictive dieting and watching what or how much they ate.

Overall, adolescents were well aware of the competing and contradictory messages concerning food and weight and were conscious of their adverse effects on their own and their peers' lives. However they seemed unable to challenge these societal pressures and indeed our data would suggest that most have incorporated the inconsistent messages into their own attitudes and practices. The barrier to healthy eating here would appear to result from the conflicting pressures towards eating unhealthily and against obesity which result in a focus on weight rather than health as the motivating factor in dietary choice.

*Theme 4: Conceptual issues: Healthy eating and perceptions of dieting*

The final barrier to healthy eating discerned in the data concerns how young people actually understand the concept of 'healthy eating' itself and can be seen to follow from the preceding themes. Healthy eating was mainly mentioned within the context of sensible weight control and was predominantly viewed as a quick-fix solution to the problem of obesity rather than a long term health strategy. While adolescents were aware of the long-term consequences of obesity, such as diabetes and cardiovascular disease, these consequences were linked to pathological obesity itself rather than unhealthy eating behaviour. In the following extract respondents are asked an open question:

Extract 9 (C3M).

GLENDA: I was going to ask is there anything, you think would make you eat more healthily? What do you think we could do to make you eat more healthily? That is a difficult question…

PARTICIPANT1: (If I had a) heart attack or something (then I'd) start eating carefully.

PARTICIPANT2: If I was really obese, if I was overweight I would eat healthily.

Thus for these participants, paying attention to diet is only appropriate when one's health has deteriorated to the point where there is a critical threat to wellbeing.

More generally, willingness to engage with healthy eating behaviour seemed to be linked to perception of weight and attitudes to weight control behaviours rather than short-term or long-term health. While thinness was highly valued, views on weight control behaviours in adolescence were negative. Attitudes towards extreme dietary practices, such as vomiting, skipping meals, diet pills and using laxatives, and commercial diets such as the Atkins diet were particularly hostile. For the majority, dieting was perceived as negative unless a person was really overweight and even at that, the only acceptable form of dieting was healthy eating. In other words, healthy eating was very rarely viewed as positive in its own right, but as a temporary necessity to avoid the negative consequences of obesity.

The final major issue in relation to dieting behaviour was once more that of parental control. Notably, the only young people to express positive attitudes towards dieting behaviour were those girls and boys whose parents and close family were dieting, suggesting that this fostered a 'diet-supportive' culture at home. These infrequent occurrences highlight the more usual responses in which parents were described as exerting a restraining role on dieting behaviour. Take for example the

following extract in which two respondents discuss their dieting behaviour in relation to their parents:

Extract 10 (B2F)

PARTICIPANT1: If I said, oh mum I am on a diet, like that would be, she would say, no, no, you are not. You know, they would say no, but em, I would maybe see a diet as maybe cutting out all you know all bad foods but I would say that people our age would get carried away easier, easier than older people would.

PARTICIPANT2: Yeah, a while ago I was on a diet and you know because I wanted to loose some weight and when I said to my mum she said you don't need to go on a diet as in starving yourself, just cut down, you know don't (eat) rubbish and don't eat junk food, and don't eat sweets and you will be fine.

Superficially, both respondents report that their mothers would disagree with dieting and this would seem to suggest that parental regulation is a positive influence here. However, on closer inspection we see many of the same characteristics of negative eating identities: a dichotomisation of foods into good and bad, a characterisation of young people's own eating and dieting tendencies as excessive and irrational as well as the need for parental influence rather than developing one's own autonomy. Once more we would argue that social pressures are converging to tell adolescents that they have unhealthy desires and need external controls to regulate their behaviour and that this may well prohibit young people coming to see themselves as responsible regulators of their own healthy eating.

## Discussion.

In line with previous research our results suggest that there are many interwoven factors influencing adolescents' eating behaviour, from personal and cognitive factors to peer, parental and media influences (cf Neumark-Sztainer et al, 1999; Story et al, 2002) and furthermore that these converge to constitute barriers to healthy eating. The strength and pervasiveness of these barriers is reflected in an almost complete absence of a positive understanding of an attainable and balanced healthy diet in the data. Given the recognition of the importance of diet for long-term health and the sensitivity of this particular age-group to the establishment of long-term eating behaviours, this is a profoundly unsettling picture. However, these results also speak to previous research in the area and in doing so indicate ways in which these barriers may be negotiated.

The first set of barriers is manifest at the personal level and includes taste and emotions. The ubiquity of preference for energy-dense foods and the resistance of participants to challenges to their likes and dislikes suggest that in line with previous research, these desires are heavily ingrained such that taste is a strong predictor of food choice (eg Story et al, 1998, 2002). This is especially evident in the report of visceral reactions to foodstuffs. While there is some evidence that this may reflect an adaptive predisposition (eg Cooke, 2004), our data would suggest that, at the very least, there are adolescent peer norms in operation which support these preferences. In addition the use of these foods as treats by schools and parents may operate to reinforce this disposition. Previous literature indicates that conditioning strongly impacts on food choice (e.g. Rozin, & Zellner, 1985). Ironically, social conditioning of food consumption is provided by those sources that deliver healthy eating communications to the adolescents.

The preference for energy dense foods by itself would of course be one barrier to healthy eating, but its effect is also compounded a pervasive classification of foods as ‘good’ and ‘bad’ which precludes a proper conceptualisation of dietary balance. Were energy dense and nutrition rich foods seen as complementary rather than mutually exclusive, the healthy regulation of diet would probably be seen as more possible. In effect though, the failure of young people to appreciate that they can include foods they like, such as ‘forbidden’ and ‘treat’ foods in a balanced diet may mean that young people believe that adopting a healthy diet is beyond them or more trouble than its worth.

This apparent immutability of taste and food classificatory systems may however not be an insuperable barrier to healthy eating and we would suggest it may be possible to work with adolescents’ limited understanding of food and nutrition to overcome these. Firstly, though the classification system of ‘good’ and ‘bad’ mapped closely onto perceptions of healthy and unhealthy foods the correspondence is not entirely accurate. For example, Chinese and Indian food was often classified as ‘unhealthy’, though this is clearly not necessarily the case. This would suggest that focusing on foods which have attracted the taste of adolescents and producing them in a more healthy fashion may actually harness the emotional and visceral responses associated with less healthy options. Given the resistance of adolescents to the challenges to their ingrained tastes, this may be a more viable way of altering behaviour, though for reasons outlined below, we would argue that this should always be done through offering adolescents choice rather than regulating their eating behaviour.

Another set of personal barriers concern self perception and we would argue that the negative self-perception generated by classifying adolescents preferred foods as

'bad' may lead to a self fulfilling pattern of unhealthy eating. Though the study of food-identities is in its early stages (though see Bisogni, Connors, Devine, and Sobal, 2002) and has not yet been applied to adolescents as a group in their own right, our results suggest that self-perception may well be a better determinant of food preference and dietary behaviour than nutritional knowledge or food attitudes alone.

Taking the few self identifying 'healthy eaters' in our groups it is likely that involvement in sport and cooking is in some way linked to food-related self-perception. The former may be the result of a better experience of the relationship between energy intake and output among very active adolescents which may in turn lead to a more fully developed model of dietary balance than in their counterparts. Cooking, on the other hand taps into the other major component of healthy-eating identity of perceived control and efficacy and may allow young people to actively engage and experiment with a wider variety of foodstuffs.

By way of contrast, the rest of our respondents reported lower levels of control over their dietary regulation which leads to the second set of barriers evident in our results, concerning the role of parental regulation of diet. Adolescence is recognised as a time when individuals begin to establish their personal independence and when parents facilitate the development of skills necessary for life outside the parental home. However, our results suggest that in the realm of food this is rarely the case. Parents are only very occasionally reported as encouraging a perception of their children as healthy eaters or as fostering dietary independence. More commonly, parents were reported to use energy dense foods as treats and luxuries, ironically reinforcing these 'bad' desires, while the majority of adolescents reported little or no involvement in the selection or preparation of food in their home.

While total parental control may ensure a healthy diet in the short-term, it is likely to prevent the development of the sense of efficacy and control which are clearly evident in our few 'healthy eaters'. Instead adolescents come to see their healthy diet as completely dependent on their parents and view their pending autonomy as likely to result in less healthy eating. This potentially results in the situation noted by Hill et al (1992) whereby adolescents can mobilise unhealthy eating as a form of rebellion and a way of establishing their independence from parental control.

The implications of these identity-related findings are two-fold. On the one hand it would appear to be essential to define and disseminate a stereotype of adolescents as healthy eaters rather than unhealthy eaters. Focusing on the talk of our healthy eaters suggests that emphasising adolescence as a time of growth and energy expenditure which requires a good diet may well have a positive effect. Secondly, and perhaps more importantly for those adolescents who are not sporty, an active involvement in cooking should not only increase an understanding of nutritional knowledge, but foster a sense of efficacy and empowerment among adolescents necessary to develop and maintain a healthy eater identity. Thirdly, establishing an independent identity from parents necessitates having the choices available to exercise autonomous self-control outside of the home. Creating the desire for more healthy foods and empowering adolescents to make responsible choices would be in vain if these options were not readily available in the few arenas of social independence enjoyed by these young people. Ensuring a variety of fresh fruit and healthy snacks in addition to less healthy options is essential to facilitate this choice.

The third set of barriers concern the social pressures towards eating energy-dense foods on the one hand and against obesity on the other. This constitutes the crux

of social attitudes towards healthy eating among this age group as reflected in the importance and the pervasiveness of these issues in the discussion. While the normative pressures on adolescent body image have been well documented (cf Heinberg & Thompson, 1995; Maddox & Liederman, 1969; Tiggemann, Gardiner & Slater, 2000, Wertheim, Paxton, Schutz & Muir, 1997), the tensions between these and norms of energy dense food consumption have not. Our results suggest that as a result of this tension adolescents clearly exhibited negative attitudes towards obesity in general and dietary regulation in particular. Healthy eating was generally viewed as an unnatural, unpleasant short-term activity to avoid the stigma of obesity or to enhance attractiveness. As noted above, some previous literature assumes that the association of healthy eating with dietary regulation is a positive element in adolescent food related attitudes (Lytle et al., 1997; Roberts, Maxwell, Bagnall, & Bilton, 2001; Story et al., 1998) such that dieting involves cutting out foods considered to be unhealthy and eating more healthily. However, the previous findings of dieting adolescents report a higher consumption of fruit and vegetables (eg Lattimore, & Halford, 2003; Nowak, 1998) appear, in the light of our focus groups, to be incidental to adolescents' understandings of dietary health and were more likely to be reported as an artefact of weight control practices. In fact, the idea that a healthy diet was an end in itself, or indeed had anything to do with health other than as a remedy for the most severe obesity-related conditions, was almost entirely absent from the data. Thus the societal opprobrium against obesity per se would appear to have ironic effects in diverting attention from the more serious health issues underlying diet. We would argue that the collision of two tectonic social pressures, the 'aesthetic' and the 'self-indulgent', have squeezed issues of health and healthy eating from the menu of relevant social concerns for adolescents.

Again, ways in which to address these societal level issues can be derived from an understanding of the dynamics of the problem itself. On the one hand the desire for energy dense foods is created and sustained by societal understandings of adolescents as nutritionally irresponsible and in need of protection from themselves. As we have outlined above, involving and empowering adolescents in their own food choices is one possible way in which this self-fulfilling cycle may be disrupted. On the other hand adolescents are held accountable for their physical appearance as if they do have absolute control over how they look and as if their appearance is a veridical reflection of their personality. To challenge this illusion and outline the realistic level of responsibility an adolescent should take for their appearance the link between food and health needs to be established more clearly, with a secondary focus on how consumption may affect weight gain and loss. Though educational programmes are in force highlighting the ideal proportion of different foodstuffs, additional information outlining the role of exercise and diet in the overall economy of energy intake and expenditure could provide adolescents with the realistic sense of efficacy and responsibility associated with the more positive eating identity of the small minority of 'healthy eaters' in our sample.

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Table 1: Demographic characteristics of focus group participants

| Location | Group | Gender | N | Age group (yrs) |
|---|---|---|---|---|
| Northern Ireland | A1M | male | 8 | 12-13 |
| | A2M | male | 6 | 13-14 |
| | A3M | male | 6 | 14-15 |
| | B1F | female | 6 | 12-13 |
| | B2F | female | 6 | 13-14 |
| | B3F | female | 6 | 14-15 |
| Republic of Ireland | C1M | male | 6 | 12-13 |
| | C2M | male | 6 | 13-14 |
| | C2M | male | 8 | 14-15 |
| | C1F | female | 5 | 12-13 |
| | C2F | female | 6 | 13-14 |
| | C3F | female | 6 | 14-15 |

# Appendix A

*Examples of Core Questions in Interview Schedule Related to Eating Behaviour and Dieting*

What do people mean when they talk about “healthy eating”?

Do you feel like you have a healthy diet?

Could you describe the things that you usually like or do not like to eat?

How much do you get to choose what you eat?

If you were to do the shopping for your family, what types of food would you buy?

What do you think fast food is?

What are the good or bad things about of fast food?

What does being on a diet mean?

What are the reasons people of your age go on a diet?

What would your parent and friends think if you went on a diet? Have you ever heard of the Atkins Diet? What is it?

What do you think of the Atkins Diet?

Is the Atkins Diet good or bad for your health?

Where have you heard about this diet?