

Student diet and health concerns



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Introduction

The obesity epidemic observed in the UK and other Western nations over the past two decades has increased the focus on eating habits of the nation (James, 2008, p. S120). Obesity, most often caused by prolonged poor diet, is associated with an increased risk of several serious chronic illnesses, including diabetes, hypertension and hyperlipidaemia, as well as possibly being associated with increased risk of mental health issues including depression (Wyatt et al., 2006, p. 166). In an attempt to promote better health of the population and reduce the burden of obesity and related health conditions on the NHS, the recent government white paper Healthy Lives, Healthy People (HM Government, 2010, p. 19) has identified improvements in diet and lifestyle as a priority in public health policy.

The design of effective interventions for dietary behaviour change may rely on having a thorough understanding of the factors determining individual behaviour. Although there has been a great deal of research published on eating habits of adults and school children (e. g. Raulio et al., 2010, p. 987) there has been much less investigation of the university student subpopulation, particularly within the UK. This may be important given that the dietary choices of general populations vary markedly across different countries and cultures, including within the student population (Yahia et al., 2008, p. 32; Dodd et al., 2010, p. 73).

This essay presents a discussion of the current research available on the eating habits of UK undergraduate students, including recent work being undertaken at Coventry University (Arnot, 2010, online). The essay then describes a small study conducted to supplement this research, using data <https://assignbuster.com/student-diet-health-concerns/>

collected from six students at a different university, exploring the influences which underpin the decisions made by students relating to their diet. The results of this study are presented and used to derive a set of recommendations for both a localized intervention and a national plan, targeted at university students, to improve dietary behaviour.

Eating Habits of University Students

It is widely accepted that students leaving home to attend university are likely to experience a significant shift in their lifestyle, including their diet, and this is supported by research evidence from the UK and other European countries (Papadaki et al., 2007, p. 169). This may encompass increased alcohol intake, reduced intake of fruit and vegetables, and increased intake of processed or fatty foods, as well as impacting on overall eating patterns (Arnot, 2010, online; Dodd et al., 2010, p. 73; Spanos & Hankey, 2010, p. 102).

Results of a study including 80 undergraduate students from Scotland found that around a quarter of participants never consumed breakfast (Spanos & Hankey, 2010, p. 102). Skipping breakfast habitually has been shown to be associated with increased risk of obesity and overweight amongst adolescents (Croezen et al., 2009, p. 405). The precise reasons for this are not entirely clear, although it could be due to increased snacking, on energy-dense, high-fat foods later in the day. This is based on the remainder of the results reported by Spanos and Hankey (2010, p. 102) which showed that three-quarters of students regularly used vending machines, snacking on chocolate bars and crisps; this was also shown to be significantly associated with body mass index (BMI).

Some studies have suggested that there may be different patterns of unhealthy eating amongst male and female groups of students. For example research conducted by Dr. Ricardo Costa and Dr. Farzad Amirabdollahian at Coventry University found that male students may be at risk of what they term “disordered eating patterns”. In addition, the study also suggests that males are at greater risk of not eating five portions of fruit and vegetables per day. This research is based on a substantial sample size, using data derived from in-depth interviews with approximately 130 undergraduates, although there are plans to increase this to include nearly 400 participants. It is acknowledged by the researchers that this may represent only those events occurring at one university, although there are also plans to expand the study sample across another two universities in the future (Arnot, 2010, online).

However, not all studies published support the existence of gender differences in eating behaviours. For example, research into risk factors for an unhealthy lifestyle reported by Dodd et al. (2010, p. 75) found that there were no differences in gender when measuring rates of eating five portions of fruit or vegetables per day.

Factors in Dietary Change

It is unsurprising that students’ dietary habits change when leaving home to attend university, since it has been identified that life transitions form a major factor in influencing eating habits (Lake et al., 2009, p. 1200). Studies have suggested that the dietary shift is most likely due to young adults leaving the family home and assuming responsibility for meal planning and preparation for the first time. This is supported by observations that

university students who remain living at the family home may maintain a relatively healthier lifestyle than those moving out of home (Papadaki et al., 2007, p. 169). Early results from a Coventry University study also support this as a major factor, as it has been identified that cooking skills may be very limited amongst undergraduates, with the exception of mature students (Arnot, 2010, online).

Early results from Coventry University suggest that there is little evidence within their sample of any significant differences in eating habits between students from different social backgrounds (Arnot, 2010, online).

Arnot (2010, online) identifies that any trends in eating habits within the undergraduate population may reflect a phase, which the individuals may grow out of naturally. Lake et al. (2009, p. 1200) also suggest that changes in eating habits may simply be due to the life transition associated with the general maturation process, moving from adolescence to adulthood. This would then suggest that eating habit changes may be consistent across all groups of young adults, not differentiated within the undergraduate population. However, it is possible that the relationship between other factors such as stress may make the situation more complex, with university students possibly experiencing higher stress levels, therefore at increased risk of weight gain associated with diet change (Serlachius et al., 2007, p. 548).

Barriers and Facilitators to Healthy Eating

A systematic review of studies by Shepherd et al. (2005, p. 239) found that the major barriers to healthy eating included access to healthy foods, relative prices and personal preference, for example liking fast foods. This

study also identified a lack of provision of healthy school meals as a major barrier, reflecting the fact that this review focused on exploring healthy eating in secondary school children, aged 11 to 16 years. It is therefore different barriers are most important in the university student population, as this group take a greater level of responsibility for their own food choices.

For example, evidence from the Coventry University study suggests that while undergraduate males were influenced by media images and were motivated to look good, this did not necessarily translate to improved healthy food choices. Instead, this appears to be associated with an increased risk of disordered eating within this group, alongside increased use of supplements such as protein powders, creatine and amino acids. This approach also led to increased intake of protein-rich foods but very little fruit and vegetable intake. It would be anticipated that factors such as availability and cost may still be important factors in this group.

The systematic review by Shepherd (2005, p. 239) suggested that support from family and friends, high levels of availability of healthy foods, an interest and desire to maintain appearance, and will-power were all major facilitators of eating healthily. Again, it is possible that different factors may be considered important within the university student population, who are older and have greater responsibility for their eating habits.

Methodology

The short review of the literature presented thus far in the essay demonstrates that there is still only a limited understanding of the underlying factors influencing eating habits in undergraduate students. Yet

this is the information which is required if effective behavioural change interventions are to be designed and disseminated.

Research Aims

The aim of this small study was to investigate the decision-making processes which underlie the decisions of undergraduate students with regards to eating behaviours, including influences over these decisions. This could then be used alongside other published material to design a social marketing strategy on both a local and national level to improve healthy eating within this group.

Study Sample

A total of six undergraduate students from Manchester University were recruited to participate in the research. Convenience sampling was used to recruit participants to the study sample. Posters were displayed within the business school at the university, requesting participants to attend research focus groups. Eight participants contacted the researcher, but two subsequently withdrew, leaving a sample of four female and two male students. No further inclusion or exclusion criteria were applied to participants, other than that they were current undergraduate students at the university. This method of sampling may not provide a truly representative sample, therefore it may be difficult to generalize the results to the wider population of interest (Babbie, 2010, p. 192). However, this was the most appropriate recruitment approach given the limited time and budget constraints for the project. The diversity of the study sample would also suggest that there was little bias introduced.

Focus Group Methods

Focus groups were selected for data collection from study participants. Focus groups may be particularly useful for gaining an understanding of topics with a group behaviour element, but have also been shown to be very useful in the field of marketing for understanding the impact of marketing stimuli. They were considered to be of particular use in this instance as they allow integrated exploration of associations between lifestyle factors and reactions to marketing materials (Stewart et al., 2007, pp. 2-9).

The focus group was arranged for a two-hour session on one morning, and was moderated by the author. The entire session was video recorded so as to allow for further analysis of responses and behavioural cues at a later date. All participants were given assurance that their responses would remain anonymous and confidential and permission was sought to record the session before it began. Participants were also given information at the beginning of the session as to the purpose of the data collection, and were given opportunity to ask any questions, before being asked to provide consent for participation (Litosseliti, 2003, pp. 70-71).

The focus group began with some short introductory questions to break the ice between participants (Litosseliti, 2003, p. 73), before moving on to focus on the topic of interest: eating behaviours and potential influences. The questions included in the moderator guide, which was prepared to facilitate the focus group, are included in Box 1.

Box 1: Focus group questions

- Tell me a little about what you would eat in a typical day.

- Do you find that you eat regular meals?
- What types of foods do you most like to eat?
- Would you say that you eat many snacks? What type of snacks do you eat?
- Is there anything you can think of that affects this – for example, do you eat differently on different days of the week?
- How would you describe your cooking abilities – do you find it easy to plan meals and cook and prepare food?
- How does the way you eat now compare to how you used to eat before coming to university?
- Do you find that you eat differently when you go home for the weekend or for holidays?
- Would you say that you have any concerns about the way in which you eat?
- How do you think that the way in which you eat affects your health?
- Are you at all concerned about whether the way you eat affects how you look?
- What type of things affect whether you choose healthy foods over non-healthy foods?
- Do you find it difficult to find/purchase healthy food?
- Would cost have any impact on whether the food you buy is healthy?

Study Results

Overall, the results of the focus group suggested that the students in the sample had experienced a significant change in eating habits since leaving home to attend university. Although the daily eating patterns of participants differed significantly, all felt that they ate a less healthy diet since leaving

home. The main difference noted was that regular meals were eaten less often, with several participants reporting that they skipped breakfast regularly, and that other meals were eaten based on convenience rather than at a regular time each day.

Most participants agreed that their eating patterns did differ on a daily basis. In particular, weekends were noted to follow more regular eating patterns, but often involve higher levels of alcohol and unhealthy foods such as takeaways. Participants also generally agreed that they returned to a healthier way of eating when returning home for the weekend or for holidays.

The actual components of diet varied widely across participants. While some participants reported that they regularly ate five portions of fruit and vegetables per day, others indicated that they ate only low levels. Four participants agreed that they ate convenience foods and takeaways on a regular basis, and it was acknowledged that these were usually calorie-dense, high fat foods.

All participants also agreed that they ate snacks on a regular basis, particularly where it was inconvenient to eat meals at regular intervals, and where breakfast was skipped. One participant reported that they felt that their snacking was healthy, however, as they usually snacked on fruit, nuts or seeds rather than chocolate bars or crisps. Given the small sample size and selection procedures, it was difficult to determine whether differences could be attributed to characteristics of the participants, for example gender (Babbie, 2010, p. 192).

There were a number of factors which influenced food choices which emerged from the focus group. The major factor appeared to be convenience. The patterns of meals which were eaten were largely driven by having the time to prepare and food, or having access to healthy foods which could be purchased and eaten within the university campus. Participants also agreed that cost played a major factor.

Only two participants agreed that their low level of cooking ability had any role in how healthy their diet was. The other participants claimed that while they could cook, convenience, cost and motivation were major barriers to doing so.

Food preferences were also a major factor in determining food choices, with all except one participant agreeing that they enjoyed fast food and several reporting that they preferred unhealthy foods to healthy ones. In spite of this, three participants reported that they did try to limit how often they ate fast foods, as it was acknowledged that it was bad for their health to eat them regularly.

In spite of this, the food choices of participants did not appear to be driven overall by concern over their health. Participants suggested that while they were aware of how their diet could impact on their health, other factors were more important influences. Similarly, only one participant agreed that maintaining the way that they looked played any role in influencing their dietary choices.

Social Marketing Strategy Design

Social marketing, first proposed as a public health tool in the 1970s, refers to the application of marketing techniques, using communication and delivery to encourage behaviour change. Such a strategy follows a sequential planning process which includes market research and analysis, segmentation, setting of objectives, and identifying appropriate strategies and tools to meet these objectives (DH, 2008, online). The literature review and focus group discussed thus far comprise the market research and analysis components of this process, with the remaining steps addressed below.

Market Segmentation

Market segmentation may be performed according to geographic distinctions, demographics or psychographic characteristics (Health Canada, 2004, online).

Based on the limited amount of information which is available so far, it would be difficult to segment the market geographically, as it is unclear whether differences exist according to which university is attended.

The demographics of undergraduate students may also be largely shared, with literature indicating that social background may hold little influence over eating habits within this subpopulation, and only limited evidence of any difference between genders (Arnot, 2010, online; Dodd et al., 2010, p. 75).

Instead, it may be preferential to segment on the basis of psychographic characteristics, according to shared knowledge, attitudes and beliefs with regard to changing dietary behaviour. The “ Stages of Change” model
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proposed by Prochaska and DiClemente may be a useful tool to guide this segmentation, in which any change in behaviour is suggested to occur in six steps: precontemplation, contemplation, preparation, action, maintenance and termination (Tomlin & Richardson, 2004, pp. 13-6).

Those in the precontemplative stage do not see their behaviour as a problem (Tomlin & Richardson, 2004, p. 14), therefore targeting this segment could be targeted with a marketing campaign to increase knowledge. Evidence from the US would appear to indicate that higher levels of knowledge regarding dietary guidelines may be associated with better dietary choices, although there is little evidence which shows direct causality (Kolodinsky et al., 2007, p. 1409). Given the many different factors which appear to contribute to unhealthy diets amongst students, simply increasing knowledge may be insufficient to generate any significant improvements. This is further supported by current healthy eating initiatives aimed at the general population, such as the 5 A Day campaign, which incorporates additional, practical information, rather than simply educating people on the need to eat more fresh food (NHS Choices, 2010, online).

Those in the contemplative stage are aware that they need to change, but don't really want to. It would be unlikely that targeting a marketing campaign at this group would have any significant effect (Tomlin & Richardson, 2004, p. 15). Once individuals reach the action stage, they are actively initiating or maintaining a change, until the initial issue is finally resolved in the termination stage (Tomlin & Richardson, 2004, pp. 15-6). Instead, it would be better to target those in the preparation stage, who have made the decision to change but may be unclear about how to initiate this

change. Here, improving knowledge, but also providing information on effective ways in which to change behaviour, may be the most appropriate strategy, as that adopted by the 5 A Day campaign.

Strategy Objectives

Based on the information generated from the focus study, along with that from other research, the main aim of the strategy should be to improve the overall diet of undergraduate students. There already exist campaigns such as the 5 A Day campaign which aim to encourage eating more fruit and vegetables (NHS Choices, 2010, online). The main issues within the undergraduate group instead appear to lie in choosing unhealthy foods, or skipping meals, due to convenience and cost. Therefore this is where the campaign should focus. The following objectives may therefore be identified:

1. Reduce the number of undergraduate students experiencing disordered eating patterns.
2. Improve knowledge and awareness within the undergraduate student population of tasty, cost-effective, convenient alternatives to takeaways and other junk foods.

National Plan

The national strategy would comprise of two main arms. The first would be an educational campaign, which would be targeted specifically at the segment described above, therefore focusing on providing practical information to assist healthy eating choices amongst students. This appears to have been moderately successful with the 5 A Day campaign within the general population (Capacci & Mazzocchi, 2011, p. 87). Evidence from the US suggests that within the undergraduate population specifically, providing <https://assignbuster.com/student-diet-health-concerns/>

information which is directly relevant to their lifestyle may also be effective (Pires et al., 2008, p. 16).

This campaign would be run through national media, as the evidence suggests that such campaigns are associated not only with increased knowledge, but also moderate levels of behaviour change (Noar, 2006, p. 21). Online and social media campaigns may also be effective based on previous case studies. For example, the Kirklees Up For It project found that running a campaign which utilized Facebook alongside its own Website was a successful way of reaching a moderate audience of 18 to 24 year olds (NSMC, 2010, online). Therefore social media such as Twitter and Facebook would provide a simple means of providing weekly tips to students on how to create easy, cheap healthy meals.

Tips could also be given on how to choose healthier snacks which cost less, for example by preparing them at home. By tailoring the advice to the motives of the group, which appear to be related to convenience and cost, previous research would suggest that this should be more effective in changing snacking behaviour (Adriaanse et al., 2009, p. 60).

The second arm of the national campaign would involve lobbying of the government to introduce regulation on the food choices offered by university campuses, particularly where food is provided as part of an accommodation package. This is based on similar recent moves to improve school meals, which has been suggested to be an effective means of improving diet, even if obesity levels have not yet seen any impact (Jaime & Lock, 2009, p. 45). It is also consistent with the data collected in this study, which suggested that

access to healthy foods and convenience were major barriers to healthy eating for students.

Localised Intervention

In addition to the national strategy, a local project aimed at providing food preparation workshops would also be piloted in Manchester. This concept is based on the observation that students mostly select unhealthy choices due to convenience and cost, and may not be aware of ways in which healthy food may also be prepared quickly and cheaply. Previous case studies have shown that these practical activities may be an effective means of reaching this target audience. For example a healthy living project called Up For It, run by Kirklees Council in association with NHS Kirklees, found on surveying young adults aged between 16 and 24 years that interventions which were fun and social were preferred to those which focus too much on health (NSMC, 2010, online). Provision of one-off sessions which provide information on where to eat healthily on campus have also shown some success within the undergraduate population in the US (Pires et al., 2008, p. 12).

Based on the budget for the Up For It project, it would be anticipated that approximately £100 000 would be required to set up and run this local section of the strategy (NSMC, 2010, online). It would be assumed that lobbying and media coverage required as part of the national strategy would be managed by the Department of Health.

Conclusions

It is clear that there is some truth to the assumption that undergraduate students in the UK live on a relatively unhealthy diet. While the reasons for this may be somewhat complex, convenience and cost appear to play a

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major role in the diet decisions which are made by this group. It is also clear that many are aware of the health impact which their diet is likely to have, although this is overridden by other factors. Targeting students who recognize the need to change their diet, by providing information on how to prepare healthier food quickly and cheaply, may help to overcome the barriers of cost and convenience, thereby improving health within this population.

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