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Title: Fit for public consumption: An exploratory study of the reporting of nutrition
research in UK tabloids and public attitudes towards it

Date: November 2005

Originally published as: University of Liverpool MSc dissertation

Example citation: Basu, A. J. (2005). *Fit for public consumption: An exploratory
study of the reporting of nutrition research in UK tabloids and public attitudes
towards it*. (Unpublished master's thesis). University of Liverpool, United Kingdom.

Version of item: Submitted version

Available at: <http://hdl.handle.net/10034/96653>

Fit for public consumption: an exploratory study of the reporting of nutrition research in UK tabloids and public attitudes towards it.

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Dissertation submitted to the University of Liverpool for the Degree of Master of Science in Health Promotion in part fulfilment of the Modular Programme in Health Promotion.

November 2005

Word Count 17,208

ABSTRACT

Newspapers constitute a popular form of mass media within the UK; presenting a valuable opportunity for disseminating key nutrition and health messages. This qualitative, exploratory study examined tabloid articles reporting on nutrition research, and public attitudes towards them. All popular tabloids were included and articles were sampled over a full calendar month. A tool was designed to test for accuracy with respect to the original research, balance, and presence of appropriate contextualised information. Thirty-nine features were systematically assessed using the tool. Two focus groups were conducted to explore public attitudes towards specific tabloid articles. Questions were centred on the cognitive, affective and behavioural elements of attitude formation. The groups were audio recorded, transcribed, and emerging themes were established. Findings indicated that tabloid articles were essentially inaccurate, biased, and not effectively contextualised. Attitudes expressed within the focus groups were largely negative and suggested that tabloid articles could confuse members of the public. Articles were more likely to be disregarded than acted upon, however there was some value attached to newspapers providing nutrition information, inferring that opportunities to effectively use this media are not completely lost.

DECLARATION

The work is original and has not been submitted previously in support of any qualification or course.

Signed

Date

ACKNOWLEDGEMENTS

I wish to thank my employer, the North East Wales NHS Trust, in particular my manager Penny Cowley and dear colleagues for supporting me throughout, and making it possible for me to undertake the research. I am greatly indebted to all those who responded to my focus groups invites, and who were able to participate in the sessions, your interest and willingness to support my work is deeply appreciated. Many thanks to the Food Standards Agency, Wales for generously providing the vouchers as incentives. My sincere heartfelt thanks go to Dr Elaine Hogard for her undying support, enthusiasm, and wisdom, a truly wonderful supervisor! My love and appreciation go unquestionably to my husband Ash, and to my family for keeping me sane and seeing me through. Thanks to Kiya for singing me songs and cheering me up when the going got tough. Lastly, I wish to dedicate this piece of work to the memory of my mother, Jean Partridge who always wanted the best for me, and who knew I had the ability to go further- thanks Mum!

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ABBREVIATIONS

BDA	British Dietetic Association
FSA	Food Standards Agency
IFIC	International Food Information Council Foundation
IFT	Institute of Food Technologists
MORI	Market and Opinion Research International
NeLH	National Electronic Library for Health
PHN	Public Health Nutritionist
PCC	Press Complaints Commission
RD	Registered Dietitian
TAT	Tabloid Analysis Tool
WHO	World Health Organisation

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1.0 INTRODUCTION

Newspapers, specifically tabloids are a popular form of mass media within the UK (Alden, 2005). Their extensive readership, and the potential for highlighting important health related issues makes them a valid media to explore. A key principle of health promotion is to enable people to take control of, and have responsibility for their own health, and for health promoters to employ a range of approaches to facilitate this (Tones and Green, 2004). Engaging with the media offers one such approach. The media is concerned with reporting matters of public interest, and since the public are becoming increasingly interested in nutrition and health (Ayoob, Duyff, and Quagliani, 2002), opportunities to convey key messages in this field are expanding. Media coverage of nutrition may exist in many forms, not least articles detailing the latest diet popularised by a well-known celebrity. For the purpose of this study, focus is placed entirely upon the reporting of research studies related to food and nutrition.

There is a distinct lack of empirical research that examines the quality of nutrition research reported in the media. Studies that have explored media coverage of health-related issues differ in their conclusions. Some report that the media provides an accurate reflection of information offered by the research community (Begg and Gregor, 1999; Bubela and Caulfield, 2004), whereas others suggest the media is inaccurate, and portrays adverse health messages (Philo, Secker, Henderson, McLaughlin and Burnside, 1994; Henderson, Kitzinger and Green, 2000). This study will examine tabloid coverage of nutrition research; exploring whether reported content is accurate, balanced and contextualised. An accurate report contains information that concurs precisely with the original published research study. A balanced report is unbiased and does not present a misleading view of the research. A contextualised report relates the research to other information that will be meaningful to members of the general public.

This study will also explore people's attitudes towards tabloid articles featuring nutrition research. Newspapers have a role in informing the public, yet there is an absence of knowledge related to the public's perception of what is written, how they feel about it, and whether they might take action after reading a particular article. Attitudes are believed to consist of three domains, cognitive, affective and conative (Malim and Birch, 1998), each of these components will be explored to determine possible attitudes towards the reporting.

The public's desire for information on nutrition, coupled with the popularity of the tabloid press, and the lack of related research in the field, makes this exploratory study both timely and necessary.

2.0 LITERATURE REVIEW

2.1 Health Promotion and the Media

The media is believed to reflect and shape public opinions (Begg and Gregor, 1999); helping to create or reinforce ideas about what is culturally acceptable (Henderson et al, 2000). It is thereby not surprising that health promotion practitioners regard the media as an “all-pervading and all powerful medium” (Whitehead, 2000, p.807). Reaching large numbers of people at any given time, with a key message is an important goal for most health promoters given the universal struggle for sufficient time, money and resources. The value of engaging with the media to promote good health can in part be quantified given that over eighty percent of the population cite the media as an important source of health information (Office of Health Economics, cited by Naidoo and Wills, 2000).

Health Promotion is classically regarded as a process that enables people to increase control over, and to improve their health; a philosophy underpinned by the World Health Organisation’s (WHO) Ottawa Charter (1986). In order to be enabled, one must be adequately informed, and it is here that health promotion has a significant contribution to make, in terms of furthering both the capacity and capabilities of the public health agenda (Ewles and Simnett, 2003). There is little dispute that a key priority within public health is health promotion, “and for this objective it is mandatory to understand better where people obtain their information from and who they trust” (Holgardo, Martinez-Gonzalez, De Irala-Estevez, Gibney, Kearney, Martinez, 2000, p.187-188). Public health has begun to recognise the value of newspapers as a “tool in public health advocacy” (Sidell, 2000, p. 182). Indeed media advocacy became an important health promotion strategy (Grilli, Ramsay, and Minozzi, 2005) following the Ottawa Charter (WHO, 1986), which specified a need for developing proactive media partnerships. The advocacy approach is a practical means for raising awareness of

important public health issues, which may involve introducing new facts or providing new perspectives on old ones (Naidoo and Wills, 2000). A recent example is 'Health Challenge Wales'; launched by the Welsh Health Minister in 2004. This makes specific reference to the role of the media in helping to communicate the 'better health' message (Welsh Assembly Government, 2004). It promotes working with the media proactively to engage the public in action to improve their own health.

The success of a media advocacy approach depends somewhat upon the skills of public health and health promotion specialists, a notion debated by Ferriman (2003) who argued that public health doctors in particular are not proficient at using the media. This view may stem from the differing origins of public health and health promotion. Historically public health has its roots in medicine, with professionals working from a 'top down' perspective, focusing upon disease prevention. Whereas health promotion seeks to protect and promote health, using a 'bottom up' approach, practicing in sectors where people live, work and play (Naidoo and Wills, 2005). This creates an argument that health promoters are more able to relate to and effectively communicate with members of the public. Regardless of this debate it is unfair to assume that the ability to communicate well with people, directly translates into an ability to convey clear and concise health information through a challenging medium such as the media. Shuchman and Wilkes (1997) suggest the problem in the communication process is more generic, and related to the fundamental differences between the media and the scientific or research communities.

2.1.1 Researchers, Scientists and Journalists

Within the scientific and research community there is widespread accusation that journalists are too sensationalist, and they pay too much attention to anecdotal findings (Larsson, Oxman, Carling and Herrin, 2003). The counter argument from journalists is that the research

community creates barriers to disseminating information in a timely fashion (Wilkes and Kravitz, 1992), and that scientists “can neither speak nor write well, and worse still, are quite incapable of making their ideas accessible to the general public.” (Wolpert, cited by White, Evans, Mihill and Tysoe, 1993, p. vii). Condit (2004) believes that the conflict between researchers and journalists is a symptom of the differences that exist between their individual working practices. Both are trained within their respective professions to conform and comply with specific codes or practices, which at times clash with one another.

Journalists are notoriously under pressure to compete for newspaper space (Harcup, 2004), therefore it is not uncommon for features to be shortened or re-worded to make them fit for purpose. This can prove frustrating for researchers and scientists since they have little control over the final report (Condit, 2004, p.1415). Despite the challenges of working within the media, journalists should remain mindful that it has the potential to “influence both parents and health workers far more than government or science are able to”, and therefore they have a duty “to cover stories responsibly, presenting them in a way that will serve the public” (Science Media Centre, 2002, p.9). One might suppose that ethical issues have little to do with journalism, particularly if one believes that selling papers for profit constitutes the primary focus of journalism. Contrary to this, Keeble believes “there is a strong ethical commitment amongst many journalists towards fairness in reporting and accuracy” (2001, p.130). Furthermore, White et al (1993, p. 19) suggests one might expect too much from newspapers reporting on science or health, and that they “are not scientific journals and they are not platforms for scientists to address their peers. The rules are different. Not sloppier, not less rigorous- just different”.

A survey of over one and a half thousand scientists undertaken by Market and Opinion Research International (MORI) and the Wellcome Trust (2001), highlighted that whilst most agreed it was their duty to communicate their work to the non-specialist public, time and a lack of media training were limiting factors. Furthermore, the Science Media Centre (2002,

p.9) suggests “if scientists want to communicate effectively with the public, they must first communicate effectively with the media”. Aside from reporting their own research findings, it is also expected that scientists provide context for the reporter, detailing what their findings mean in the bigger picture of dietary recommendations and practices (Goldberg, 1997), a skill that may be fundamentally lacking. Like journalists, researchers and scientists experience working pressures, and regardless of the public value of their research, they may choose to disseminate their work for economic gain, succumbing to what Caulfield (2004, p.338) refers to as a “media arms race”.

The different working practices of these professions illustrate inherent problems in conveying health related information through media sources. Many people first learn about new advances in the field of science or health via news reports (Stamm, Williams, Hitchcock Noel and Rubin, 2003), and so joint action is needed from all parties to serve the public justly. Each must take “responsibility for reporting accurate, balanced, and complete information” (Ayoob et al, 2002, p. 262).

2.1.2 Dietitians

Key professionals with a responsibility for nutritional health promotion are Registered Dietitians (RD), and Public Health Nutritionists (PHN). Dietitians are “uniquely qualified to translate scientific information about food into practical dietary advice, as well as providing impartial advice about nutrition” (British Dietetic Association (BDA), n.d.). Given their knowledge, training, and advanced communication skills, Dietitians are capable of interpreting emerging nutrition research for the media (Ayoob et al, 2002). Borra, Earl, and Howard Hogan (1998, p.193) agree, “Dietitians can provide context not only to the scientific relevance of research but also how findings fit into dietary recommendations”. As discussed within 2.1.1, generic researchers might be expected to provide such context but do not possess

the skills to do so, making Dietitians an invaluable commodity. Furthermore, according to Holgado et al (2000), health professionals, such as Dietitians were second in line from the media for being the public's most popular source of information on healthy eating.

As public access to nutrition information from the media increases, Dietitians are likely to be fielding questions from clients, patients and the general public on new studies appearing in the daily press. It would therefore seem logical that Dietitians are proactively engaged in working with the media, acting as an impartial and expert resource for them. In the absence of supportive literature it is tentatively suggested that dietetic associations with the media at present focus mainly upon participating in general nutrition features, promoting or supporting specific health campaigns. This does not necessarily extend to providing regular input into news articles that report on nutrition research; this issue shall be investigated by this study with respect to assisting journalistic balance and provision of practical context.

2.2 UK Tabloids

Newspapers are a popular form of mass media that have the capacity to reach large volumes of people and convey a wealth of information. The UK's independent Audit Bureau of Circulation recently reported that 87 million newspapers are sold each day (Alden, 2005). Tabloids commonly referred to, as the 'popular press' constitute the majority of these sales. The 'red-top' tabloids including the Sun, the Daily Mirror and the Star constitute half of the total sales for daily newspapers. The so-called 'mid-market' tabloids, the Daily Mail and the Daily Express constitute a quarter of all sales; which leaves the 'quality press' broadsheets with the remainder. *Within these figures however, the Sun receives the greatest number of sales, followed by the Daily Mail (Alden, 2005).* Sale figures offer a useful indication of newspaper popularity, but one should consider the numbers of people that actually read them. For instance Bignell (2002, p.99-100) highlights that "The Sun is read by a quarter of all adult

males and a fifth of all adult females”, but not all of these will have individually bought the newspaper. Conversely, one could argue that people may purchase a newspaper but not necessarily read it, or read it in detail. Regardless of this debate tabloids are unquestionably a popular form of media within the UK.

The UK has one of the “largest and most diverse newspaper markets in the world” (Duffy and Rowden, 2005, p. 1). To co-exist with one another, and retain high sales figures newspapers appear to target specific sections of the population, to attract a certain group of readers. For example the Daily Mail is “read by more women than men” (Bell and Alden, 2003, p. 20), and “ a quarter of Daily Mail and Daily Mirror readers, and a third of Daily Express...readers are aged over 65” (Duffy and Rowden, 2005, p. 19). Furthermore, it is suggested that the ‘mid-market’ tabloids attract readership from more affluent women compared with the ‘red-top’ tabloids (Cridland, 2005). However, according to Duffy and Rowden (2005) ‘mid-market’ readers actually come from a relatively even spread of social classes, although it is noted that ‘red-top’ readers have greater proportions of readers from the lower social classes. Harris and Spark (1997, p. 4) believe that “with general newspapers, and certainly most provincial dailies...it is worth assuming that a large section of the readers, male and female, will not have had higher education”. One might assume this comment is directed at the tabloids or ‘popular press’ as opposed to the broadsheets, or ‘quality press’, however the distinction between the two has recently become blurred, since newspapers such as the Times and the Independent have introduced tabloid sized editions (Alden, 2005). Traditionally tabloids have been associated with large headlines, half naked women and football, but as Preston (2004) remarks, this does not have to equate to a poorer quality of news, and perhaps it is time to question the ingrown British tradition of tabloid and trash.

2.2.1 A Source of Nutrition Information

In the US, Americans have consistently ranked the news media as one of their top sources of nutrition information (Borra et al, 1998; Ayoob et al, 2003). Furthermore a Cochrane systematic review concluded that “population surveys show that mass media are the leading source of information about important health issues, such as weight control” (Chapman, cited by Grilli et al, 2005). One might question the relevance of this data when applied to the UK. However, a recent consumer survey undertaken by the UK Food Standards Agency (FSA) (2005) asked where members of the general public sourced information on food standards or food safety. Over 3000 people were interviewed, and the media, which included the press, was the source with the second highest spontaneous, unprompted mention. Furthermore, Holgado et al (2000) asked citizens from several European countries (including the UK) where they sourced information on healthy eating, and newspapers were quoted as the second most frequently used medium.

There is consensus of opinion within the wider literature that “lay people get a substantial amount of information about health and related topics from the media” (Condit, 2004, p. 1415), and that newspapers are a source of public communication regarding new medical advances (Entwistle, 1995). Over recent years the number of reported scientific studies relating to nutrition appears to be increasing such that “hardly a week goes by when a breaking dietary study doesn’t make the headlines” (Harvard School of Public Health and The International Food Information Council Foundation (IFIC), 1998, p.194). The rising coverage of nutrition in the press is arguably a case of supply and demand, with the media supplying articles to meet the public’s growing interest in nutrition. Regardless of what is responsible for the increased reporting, it is impossible to ignore the potential value of newspapers as a public source of nutrition information.

2.2.2 Accurate Reporting

It is important to highlight that there are generic concerns related to accuracy within the press. In 2003, the Press Complaints Commission (PCC) received over three and a half thousand complaints from the public; forty percent of these were related to inaccurate reporting. The PCC is an independent UK body with a code of conduct, drawn up by editors, stipulating that newspapers be cautious not to publish inaccurate information (PCC, 2005). Dougal (2003, p.33) is sceptical about how seriously the PCC code of conduct is taken by the journalistic community, and states, “even in instances of acknowledged factual inaccuracy there remains an unwillingness to publish letters of correction”. Given these general concerns, one might be overly optimistic in expecting the media to accurately report within a specific field such as nutrition research.

According to Condit (2004, p.1415) medical researchers believe that “media coverage is characterised by inaccuracy”, yet Caulfield (2004, p. 337) suggests “media reporting of science is surprisingly accurate and portrays a message created by the scientific community”. Accuracy in media reporting of science, health, or medicine is contestable, and is perhaps tainted by different perceptions of what qualifies as accurate or inaccurate. A review of media reporting on meningitis in Wales concluded that aside from sensationalist headlines, news reports were reasonably accurate (Begg and Gregor, 1999). The precise method for drawing these conclusions is not featured within this review, which would suggest that Begg and Gregor’s assessment was not systematic, and was perhaps overly subjective. Bubela and Caulfield (2004) examined reporting of genetic research, their data suggested, “the majority of newspaper articles accurately convey the results of and reflect the claims made in the scientific journal articles” (p.1399). However a recognised limitation of this study was that it only examined broadsheets. As previously discussed, these do not share the same popularity or mass appeal as the tabloids. Furthermore, Bubela and Caulfield’s study appeared to focus

upon reported accuracy of the studies results, and did not extend to examine reported accuracy of other study characteristics such as the sample size.

Few studies have examined the accuracy of media reporting on nutrition issues. Henderson et al (2000) examined the influence of the media in portraying bottle and breast-feeding and concluded that reported material was potentially detrimental to the ideal health message, and failed to promote breast-feeding as the normal and accepted practice for feeding infants. Consequently the public is often left having to “separate accurate nutritional messages from the wrong ones because sometimes media messages are not in line with health promotion values” (Holgardo et al, 2000, P. 189). Henderson et al’s (2000) study of the media was time- limited to a single month; but they upheld that their findings warranted greater involvement of health professionals to assist the media in delivering accurate and appropriate messages to the public.

A US study by Hackman and Moe (1989) offers the closest association to the study undertaken here. They evaluated newspaper reports of nutrition-related research over six months, and conducted an assessment using an eleven-point scale. The findings included some reference to accuracy, and concluded that study results were cited correctly in seventy eight percent of news stories. However reporting accuracy of other features such as the study sample appeared to vary more significantly. Hackman and Moe failed to acknowledge the limitations of their study, namely the scale that they devised to assess the news articles. The scale focused on the presence and/ or accuracy of study characteristics. One could argue that components other than these are equally important if the research is to be accurately interpreted by the public. For instance, is the headline consistent with the nature of, or the results of the reported research study?

Accountability for delivering accurate reports is considered a key feature of objective journalism (Boyer, 1981 cited by Harcup, 2004). However, one might dispute that journalistic responsibility should extend beyond simply providing an accurate account of the facts. For

instance, an article might be factually sound, but may lack valuable context leaving the reader confused about how to interpret and use the information. Stryker (2002, p. 520) highlights this point and states “inaccuracies resulting from the decontextualised and sensationalised manner in which stories are reported are conceptually distinct from, and occur with greater frequency than, actual errors contained within the story”. This study acknowledges the significance of Stryker’s point, and will discuss the issues of balance and context separately.

2.2.3 Balanced Reporting

Guidelines issued by the IFIC and the Institute of Food Technologists (IFT) (2005) highlight the need for balanced reporting on emerging science of dietary components for health. This guidance characterises a ‘balanced’ report as one that avoids presenting a misleading picture of the research; for example a report should disclose all key details about a study, and should inform the public where new findings fit into the research continuum.

Woloshin and Schwartz (2002, p. 2856) argue “medical journals work hard to ensure that articles represent study findings and to acknowledge important limitations, work that might be undone by the time the research findings reach the news media”. Brunt, Murray, Kesterson, Perkins and Tierney (2003) provide an illustrative example of how poor reporting can have undesirable consequences. Their research explored the effects of media publicity following a controversial study showing risk associated with a drug used to treat hypertension. Results showed a measurable reduction in prescription claims for the drug following media coverage of the study. Brunt et al (2003) urged both the media, and the medical community to be concerned about the quality of health reporting. In particular, caution is needed to avoid describing scientific observations as fact, when they might be inconclusive or only inferential (Goldberg, 1997).

Lack of balance in reporting might not simply be a failing of the journalist. Stryker (2002, p.526) comments “the news media are not solely responsible for the disparity in attention paid to the particular medical research; some medical journals also contribute to this by issuing press releases for articles that possess the characteristics journalists are looking for.” Woloshin and Schwartz (2002) also believe medical journals are implicated. They interviewed prominent journals, analysed press releases and concluded that “press releases do not routinely highlight study limitations... data are often presented using formats that may exaggerate the perceived importance of findings” (p. 2856). However, it is important to note that journalists are encouraged to read the complete journal article, and according to Entwistle (1995) many would not rely solely upon reading the press release.

Reporting of single scientific studies is presently a popular activity amongst journalists (Wellman, 1999). Covering a preliminary study within a national newspaper could draw unnecessary attention to, or overstating findings such that the general public is given either false hope or undue concern. Goldberg (1992) argues that the results of single studies rarely provide sufficient evidence to serve as a basis for recommending any dietary modification and that the nature of these findings as opposed to their significance determines whether it reaches the news. McBean (2001, p. 27) echoes this sentiment stating that “short, catchy headlines and snappy sound bites, with words such as ‘breakthroughs’ or ‘cures’ that dramatise and oversimplify preliminary results of single studies, can lead to consumer confusion and misinformation”. In contrast, Wellman, Scarbrough, Ziegler and Lyle (1999, p.803) suggest, “the public does not want to wait years until research findings conclusively define relations between specific diseases and diet”. This may be so, but if preliminary studies are publicly reported, they should be accompanied by an explanation detailing their potential infantile nature. Just as newspapers are not scientific journals, the general public are not scientists nor researchers, and therefore do not necessarily appreciate how single studies contribute to a growing body of evidence; a point raised by Williams (cited by the IFIC,

2001,p. 2) who states “it is important to understand that science is evolutionary and not revolutionary”.

Academic journals provide a rich source of news for Journalists (Hackman and Moe, 1999). A number of medical journals including the Lancet and British Medical Journal issue their own embargoed press releases in advance of publications to inform journalists of the most newsworthy stories (White et al, 1993). This activity in itself can restrict the diversity of research that reaches the public arena. Inevitably there could be other equally important research that is frequently missed simply because it does not feature in one of these journals, or it is not overtly presented to journalists. Shuchman and Wilkes (1997) ask that journalists widen their sources and follow a particular area of research, rather than shifting from one weekly leading article to another simply because it exists in a journal that they are familiar with. The pressure to locate a news story within a short space of time might be an occupational hazard for a reporter, however The Harvard School of Public Health and IFIC (1998) urges journalists to objectively consider whether the research warrants coverage, and if not to reject it.

Providing third party expert views is an equally important constituent of balanced reporting. Without this it is likely that the research will present limited perspective on a topic, which may not be reflective of the wider consensus. Featuring research that has been peer reviewed in a published journal is a guiding principle for journalists (Harvard School of Public Health and IFIC, 1998). It is argued that if journalists comply with this, they may not feel the need to seek external views (Entwistle, 1995). This measure alone is unlikely to present a balanced view of the research, particularly if it conflicts with current thinking or understanding. The Social Issues Research Centre, The Royal Society and The Royal Institution of Great Britain (2001, p.4) encourage journalists to ask, “what do other professionals in the field think of the research?”. Wellman et al (1999, p.805) suggests that “nutrition scientists can mentor the media by not just responding to questions but instead

helping journalists better realise the implications of what they choose to report and how they do it". Once again this highlights the value in establishing working links between nutrition experts and journalists.

2.2.4 Contextualised Reporting

Nutrition messages are rarely simple and require skill to translate their true meaning so that they become consumable for the general public (Mac Evilly, 2001). This skill is readily owned by RDs as discussed in 2.1.2. Shuchman and Wilkes (1997, p.976) believe the press poorly serves the public since information is delivered rapidly and "little time is taken to provide a context for the story". Ayoob et al (2002, p.262) support this view and state that important details are frequently absent from media articles, including "how much more or less of a food to eat, how often to eat a food and to whom the advice applies". Research conducted by Borra et al (1998) examined 979 media stories covering food and nutrition, of which sixty percent came from print sources. They concluded, "Most nutrition news failed to provide contextual information. Only thirty-one percent of statements about the harms and benefits of dietary choices made any mention of the amount consumed" (p.192). According to McBean (2001, p.27) a "lack of sufficient context in media stories is perhaps the single most important factor contributing to public confusion about what to eat for health."

A multidisciplinary advisory group convened by the Harvard School of Public Health and IFIC (1998) raised concerns surrounding the media's poor delivery of contextual information. They asked all those involved in nutrition communications to consider whether the information to be imparted would enhance public understanding of diet and health? They asked that all study findings be translated into everyday consumer advice, for instance if a study discussed a specific nutrient such as vitamin C, foods should be listed in which it is commonly found. Despite guidance issued from this group, there continues to be ongoing

concerns regarding appropriate contextualisation. The IFIC conduct studies entitled 'Food for Thought'; these provide regular snapshots of American media coverage, trends and patterns of reporting with regards to diet and nutrition. They recently found "stories that provided advice on what to eat, or not to eat, for better health... rarely specified how much to eat, how often, or to whom the advice applied" (IFIC, 2004, p. ii). A counter argument from journalists might be that they are restricted by column space, or imposed word limits, however the IFIC (2004, p. ii) uphold that "context can be easily included even in brief reports".

There is a distinct need for contextual dietary information when reporting on nutrition research, should this be lacking it is seriously doubtful whether members of the public can make an informed choice about whether findings are important, relevant to them, or worthy of implementing.

2.2.5 Assessing Media Reporting

Within the UK, the National Electronic Library for Health (NeLH) commissioned the Centre for Reviews and Dissemination (CRD) to develop the Internet based resource 'Hitting the Headlines' (NHS, 2003). This assesses the reliability of news stories, and the research on which they are based, and is aimed at assisting patients and health professionals who have encountered news stories on medically related research. The resource claims to offer guidance on how a news story can be assessed, but on close inspection its focus is on critical appraisal of the published research paper. Appraising the research is fundamental, particularly for health professionals answering queries from confused members of the general public, however there is an equal need to consider the quality of reporting with a view to correcting errors or discrepancies before they reach the public arena.

Media Doctor (Newcastle Institute of Public Health, 2004), an Australian based website works towards improving the accuracy of media reports detailing new medical

treatments. It adopts a five star rating system for news articles, based on whether a specific criterion is presented satisfactorily or not. The rating system is not considered sufficiently specific or robust enough for the needs of this study, but it is encouraging to see efforts towards improving the quality of health-related research reporting in the media. However, the launch of *Media Doctor* was criticised by Sweet (2004), who believes it is an attempt to turn the media into a medical journal, and that it does not recognise the realities of the media. As discussed in 2.1.1, methods used to assess media articles should be mindful of the working pressures of journalists and researchers alike, without this, the chances of generating realistic improvements are slim.

The expert panel convened by the Harvard School of Public Health and the IFIC (1998) produced guidelines for journalists, scientists, and other communicators to improve communications on emerging nutrition science. However it is uncertain how widely these have been accepted or applied. The guidelines themselves do not propose a method for assessing news articles, but instead they “outline the necessary data, disclosures, and contextual qualifiers to help the public evaluate a study’s relevance and importance” (Harvard School of Public Health and IFIC, 1998, p.194). The IFIC and the IFT (2005) have recently updated the 1998 guidance, which they hope will now “act as a bridge between the communicators”, encouraging them to work more closely with one another in the pursuit of improving the quality of information delivered to the public. Furthermore, the WHO European Health Communication Network (2003) produced a set of ten guidelines for health correspondents. This guidance mirrors that recommended by the IFIC and IFT (2005), such as the need to protect against raising false hope, and remaining cautious not to make claims of ‘miracle cures’ or to induce unwarranted ‘health scares’.

2.3 Public Attitudes towards the Media

It is widely maintained within the field of psychology that attitudes are generally constructed via three components, these being cognitive, affective and conative (Albery, 2004). The cognitive element refers to the thoughts or perceptions people have about an object; the affective relates to feelings or emotions, and the conative considers potential or predictable actions. According to Adams and Bromley (1998, p.28), attitudes are ways of responding towards people or objects, “they involve what people know or believe and what they feel, as well as what they say and do”. There is limited data available that has examined the public’s attitudes towards media reporting of health issues, nutrition or otherwise. What is evident from the literature is the perception, that the media have a “positive part to play in encouraging attitudes which are conducive to good health” (Philo et al, 1994, p.272). The media’s potential for achieving this, and how successful they might be are matters for further debate.

2.3.1 Cognitive

Anderson (as cited by Malim and Birch, 1998) believes that the nature of our attitudes depends upon the way in which information is received and combined, and the degree of emphasis placed upon certain items. Newspapers have the capacity to ‘shape’ the news by reporting some events and excluding others (Bignell, 2002), or by focusing greater attention on one particular issue. As such they are frequently considered to act as opinion formers (Reah, 2002), with the ability to influence, or perhaps even persuade members of the public to adopt, or change a particular opinion or belief (Adams and Bromley, 1998). Newspapers have the infinite ability to choose what information they will offer their readers, and how they will present it. Journalists will argue that they act as agents of the public giving their readers what

they want, but still they may be selective or “spin the science to suit their special interests” (Miller, Krautheim and Quagliani, 2002, p. 186), this in itself could serve to taint public perceptions.

Members of the general public frequently quote the media as a popular source of nutrition information (Borra et al, 1998; Miller et al, 2002; Ayoob et al, 2002), suggesting that the information provided is helpful. However, much of the literature, which discusses public understanding of health-related messages in the media frequently use the word ‘confusing’ (Reah, 2002, McBean, 2001, Patterson, Satia, Kristal, Neouuser and Drewnowski, 2001). A consumer survey conducted by the American Dietetic Association (cited by Ayoob et al, 2002) found that one in five were confused by media reports giving dietary advice. Goldberg (2000, p.646) believes we now have a situation whereby “the population believes that eating well is a very complicated and labour-intensive process” and that “we need to convince them that healthful eating is really quite simple”. If the public are confused by media messages relating to nutrition, but continue to quote the media as a valid source of information this clearly presents a missed opportunity.

Coupled with confusion, there is the perception that media reporting of nutrition information has led to misguided public understanding. The IFIC and IFT guidance (2005, p.1) proposes that communicators, including journalists need to work harder towards “empowering consumers to view beneficial dietary components as one part of a healthful diet and lifestyle rather than as ‘magic bullets’. In reality, one can assume that newspapers will continue to employ some degree of sensationalist tactics, making it “important that readers of newspapers become critical readers, who are aware of and can identify, gaps and swings in the information they are given” (Reah 2002, p.11). Whether the public is dutifully critical of the information presented, or whether they are able to decipher a sound understanding of the research, in the context of daily life remains to be seen. In the absence of current literature,

this study seeks to provide insight into how nutrition research conveyed within newspapers might be understood by members of the public.

2.3.2 Affective

According to Philo et al (1994, p.278) the media are “important sources of information and can generate strong emotional responses in their viewers and readers”. Newspapers by nature, select stories or topics that “present facts in a manner that is designed to arouse the reader’s interest and curiosity” (Reah, 2002, p.10). Whilst newspapers may be successful in employing tactics to captivate the public’s attention, what the public feels about the information conveyed remains to be seen. A study conducted by Ward (2005) approached members of the Canadian general public to explore their attitudes towards the news media. Seventy one percent of respondents reported that sensationalism in the media has affected their trust in the news. Indeed, McBean (2001, p.26) comments, “many people are ... anxious about their diets and report being unable to distinguish reliable from unreliable information”. If trust in the media is low one might expect people will not take the information they present too seriously, possibly discounting it altogether (Patterson et al, 2001). This is a concern, and could devalue attempts to convey well-written, meaningful information that may offer sound nutritional advice to the public.

Public scepticism surrounding media reports of nutrition research may not be entirely attributable to the media. Instead the uncertainty or confusion may be a consequence of the public being unfamiliar with the scientific process (McBean, 2001), or indeed with the manner in which researchers or scientists work. Frewer, Mile and Marsh (2002, p. 708-709), note that “trust in science, scientific institutions, and regulatory bodies has been declining since the 1950s”. Furthermore a survey of scientists conducted by MORI and the Wellcome Trust (2001, p. 68) revealed that many felt “members of the public view them in a negative

and inaccurate light”, and that “media coverage of recent high-profile stories such as BSE, GM foods...has confused the public and made them more wary about science” (p. 69). Furthermore research conducted by Frewer, Scholderer and Bredahl (2003) deducted that “the extent to which people trusted the information sources appeared to be driven by people’s attitudes to genetically modified foods” (p. 1117). For instance, if someone favours the use of genetically modified foods its more likely they will trust a source that promotes its benefits. This suggests that an individual’s prior attitude to a topic may carry significant influence with regards to trust, aside from, and perhaps independently of anything a scientist, researcher, or journalist might communicate on the topic.

Duffy and Rowden (2005, p.28) suggest, “it is important to note the distinction between trust and influence”. Journalists might not necessarily be trusted, but the public may still be influenced by what they choose to write about. For example, a poll of readers of the Mail and the Sun newspapers identified that they were not necessarily trusted on news issues, but they might contribute as a starting point for gathering information to form opinions (Duffy and Rowden, 2005). It is therefore important not to discount the role of the news media in contributing towards attitude formation, but instead one should recognise the notorious difficulty in attempting to measure and directly observe attitudes (Malim and Birch, 1998).

2.3.3 Conative

The conative domain, as previously described relates to an individual’s behaviour intentions (Malim and Birch, 1998). It is concerned with predicting potential actions via the expression of verbal behaviour statements. Research conducted by psychologists has shown low attitude-behaviour correlation (Wicker, 1969; Sutton, 1998, cited by Albery, 2004), highlighting that the conative element may really only predict, and not confirm, certain actions or behaviours. Russell (1999, p. 118) argues “attitudes are often a poor predictor of behaviour, because they

sometimes sample what people feel they ought to do”. For example a member of the general public might pick up and read a report in a ‘red-top’ tabloid on a nutrition research study. If they perceive this newspaper to be sensational and lacking in credibility they might feel they ought to disregard the information, regardless of whether it is useful. The study of attitudes is indeed complex, and as Duffy and Rowden (2005) highlight it is a difficult process to unpick.

Regardless of whether a person’s attitude may or may not predict their behavioural intentions, it is interesting to consider how the media may in some way be responsible for some changes in the public’s behaviour. Goldberg (1997, p.545) believes that changes in public consumption patterns can be attributed to messages conveyed in the media. She reports “advice from doctors and dietitians to individual patients accounts for some of this change, but media channels are likely responsible for the consistent trend”. To illustrate this Goldberg examined past trends in milk consumption and related media coverage. Her observations suggest that when media messages convinced the public to cut back on whole milk and opt for reduced fat varieties, consumption levels of whole milk decreased. Whilst these deductions are interesting, Goldberg’s paper appears to lack comprehensive methodology to support the associations made between consumption patterns and related media coverage. One might rightly question how it is possible to identify whether the media is either responsible, even partly, for such changes. Frewer et al’s study (2002) identified a relationship between heavy media reporting on risks associated with genetically modified foods and an increase in public concern on the issue, but still they acknowledged the difficulty in isolating the media as being directly accountable for this.

Goldberg (2000, p.644) states, “behavioural guidance through mass media can never substitute completely for meaningful interpersonal communications”. This is a valid point, particularly given concerns regarding accuracy, balance, and context of media reporting, with which this study concerns itself. However, exposure to media articles that report on nutrition research, and the possible intentions or actions that these may evoke are of interest. All three

domains, including the conative, are important when considering the expression of an attitude. This is summarised by Albery (2004, p.379) who states, “an individual expresses an attitude when he or she has thought about the object, interpreted how they feel about it and understood the different ways of responding to it”.

2.4 Summary

“The high degree of public interest in nutrition information presents both opportunity and jeopardy”(Patterson et al, 2001, p. 40). Newspapers, particularly tabloids are a popular form of mass media within the UK, presenting opportunities to convey a wealth of key messages relating to nutrition, diet and health. Unfortunately there is an equal opportunity for nutrition information to be conveyed either inadequately or inaccurately such that the message becomes distorted and possibly lost.

It is clear that the different working practices and pressures of researchers, scientists and journalists often erect barriers to effective collaborative working. Whilst all parties are intrinsically implicated, it is the public who are ultimately disadvantaged when information is given either prematurely, inaccurately, with little context or poor balance. Dietitians are recognised experts in the field of diet, nutrition and health and are thereby perceived as an invaluable and impartial resource to the media, with the ability to offer practical contextual information when reports of new nutrition research emerge.

In recent years there have been valiant movements towards improving media reporting of nutrition and health information, namely through the production of international communication guidelines (Harvard School of Public Health and IFIC, 1999; IFIC and IFT, 2005). However, awareness of this guidance, and its potential impact within the UK is not clear.

Appraising media reports of nutrition research is an important step towards understanding if and how communications can be improved. The next step is to consider public attitudes towards what is reported. Health promoters, public health or health professionals ultimately hope that information conveyed via newspapers will contribute towards favourable lifestyle changes, thereby leading to a healthier nation. However, there is a lack of information to confirm that these messages are being understood and taken seriously enough to consider taking action. Without this fundamental knowledge it is impossible to determine the value of transmitting nutrition related information via newspapers. It is therefore with this background that the following study is undertaken.

3.0 DESIGN AND METHODS

This chapter provides a detailed description of the research methodology. The study focuses upon addressing two key research questions, setting out aims and objectives to achieve this. To ensure there is comprehensive understanding of the approach taken, the study design, population, data collection and data analysis are discussed. Details regarding pilot studies are also featured, followed by recognised limitations of the overall study approach and design.

3.1 Research Questions

1. Do UK tabloids report nutrition research studies in a manner which is: -
 - a. Accurate with respect to the original research
 - b. Balanced, unbiased and not presenting a misleading view of the research
 - c. Appropriately contextualised and relating the research to other information that will be meaningful to the general public

2. What attitudes (cognitive, affective, and conative) might be expressed by members of the general public towards tabloid articles featuring nutrition research?

3.2 Aims and Objectives

The study aims are:

- (a) To explore whether UK tabloids present information on nutrition research in an accurate, balanced, and contextual manner.
- (b) To examine the attitudes of members of the general public towards reports of nutrition research within UK tabloids.

To achieve these aims, the study objectives are:

- To collect articles from UK tabloids that provide a traceable source to the original nutrition research study quoted.
- To devise and test a standardised tool that will determine through a series of questions, whether tabloid reporting of nutrition research is accurate, balanced and appropriately contextualised.
- To plan, organise and facilitate focus groups with members of the general public to explore attitudes towards a small selection of tabloid articles featuring nutrition research.

3.3 Approach and Design

This qualitative, exploratory study utilised a multi-method research approach, comprising of a systematic analysis of tabloid newspaper clippings, followed by focus groups with members of the general public. Qualitative research is essentially interpretive and inductive, since no assumptions are made about what the important issues are, and there is not a requirement to confirm or disprove anything (Naidoo and Wills, 2005). Qualitative studies are renowned for generating rich descriptive data, however they are commonly criticised for being ‘fundamentally interpretive’, creating difficulties in escaping personal interpretation when analysing (Creswell, 2003). Still, it is acknowledged that qualitative methods like focus groups are under used in social research (Gibbs, 1997), and that “bias can be minimised by acknowledging the researcher’s perspective and being open about all aspects of the process” (Naidoo and Wills, 2005, p. 34).

A comprehensive literature review failed to identify an existing tool that incorporated all the components to meet the needs of the first research question. Therefore the Tabloid

Analysis Tool (TAT) (Appendix F) was developed and tested prior to this study. Use of a standard instrument was preferred to facilitate a systemic, unbiased approach for assessing the news articles. Fundamentally similar to a systematic review, the tool focused upon critical exploration, separating the unsound from the salient (Mulrow, 1995). Literature closely related to this study (Hackman and Moe, 1989; the Harvard School of Public Health and IFIC, 1999; the IFIC and IFT, 2005), provided guidance when formulating the TAT questions.

Focus groups are a qualitative research method renowned for their capacity to “draw upon respondents’ attitudes, feelings, beliefs, experiences and reactions in a way that would not be feasible using other methods” (Gibbs, 1997, p.2). They were therefore selected as a means of addressing the second research question. Fundamentally, they offer “a way of listening to people and learning from them” (Morgan, 1998b, p.9), thereby providing an effective method for exploring what attitudes members of the public may have towards tabloid reporting of nutrition research.

3.4 Population and Sample

The study population discussed here is referred to in two contexts, firstly the sample of newspapers selected, and secondly the focus group participants.

Popular UK tabloid newspapers as opposed to broadsheets were selected for study in view of their wide readership and mass appeal (Bell and Alden, 2003; Bubela and Caulfield, 2004). For an entire month all popular tabloid papers were purchased to form the basis of the study sample. The month of January was purposefully selected to try and obtain a large sample, capitalising upon the increased interest in nutrition that often accompanies the New Year. The tabloids purchased, Monday to Saturday were the Sun, Daily Mail, Daily Mirror, Daily Express, and the Daily Star. On Sundays they were, the News of the World, Mail on Sunday, Sunday Mirror, People, Sunday Express, and the Daily Star Sunday. Two articles

from the total study sample were purposefully chosen as a basis for discussion within the focus groups. One larger and one smaller article were considered sufficient material to discuss within the hour-long session (Krueger, 1998a). In an attempt to generate a productive discussion, the principle researcher selected articles with topics that were considered most widely applicable to the potential participants. Furthermore, to remain fair, the two pieces selected consisted of one of the 'worst' and one of the 'better' reported articles, as assessed using the standardised tool. To maintain consistency between focus groups the same articles were used. Newspaper names and dates were removed from the articles to avoid potential for familiarity or bias towards certain tabloids.

Focus group participants were recruited via a purposeful and convenient sample. Given limited time and resources this was considered time efficient whilst still ensuring the needs of the research questions were not compromised (Morgan, 1998b; Robinson, 1999). The overriding inclusion factor was simply that subjects should be members of the general public willing to participate, non-specialists in nutrition, and in a position to purchase and/ or read information from the tabloids. Following approval from the University Principal (Appendix A), and obtaining receipt of ethical approval from the School of Health and Social Care's Ethics sub committee (see Appendix B), non-teaching staff working within the University College of Chester were invited to participate. The principle researcher was able to obtain staff names, e-mail addresses and job titles via the University internal e-mail system. Teaching staff were excluded from the study as they were regarded as a group less likely to read the tabloids, based upon literature reported earlier (Bell and Alden, 2003; Duffy and Rowden 2005; Cridland, 2005). Furthermore, to eliminate the potential for either real, or self-confessed experts in food and nutrition, staff based within catering services were also excluded. The Federation of Women's Institutes (WI) were considered as a potentially convenient invitational group, based upon knowledge of tabloid readership characteristics (Duffy and Rowden, 2005). If responses from within the University were insufficient, contact

was to be made with the local WI branch to discuss the possibility of distributing invitations to their members.

Invitation letters (see Appendix C) were sent via e-mail or post (for those without use of e-mail), to a total of two hundred and twelve staff based within administration and cleaning services. It is recommended that between six to ten participants form a focus group (MacIntosh, 1993 as cited by Gibbs, 1997; Litosseliti, 2003). Given the researcher's inexperience in moderating sessions of this nature, a smaller group of between six to eight participants was considered more manageable (Krueger, 1998b). Responses to invitations were acknowledged within forty-eight hours, and confirmation of date, time and venue were posted to participants one to two weeks prior to the groups (see Appendix D). Furthermore, in an attempt to minimise non-attendance, a reminder phone call was made to each participant the day prior to the focus group (Krueger and Casey, 2000)

The potential participants for the focus groups were largely heterogeneous; likely to comprise of differing age, sex, status, and to some extent occupation. Calder as cited by McLafferty (2004) suggests that exploratory research is best conducted using such groups since they produce richer information. However a degree of homogeneity is suggested to aid group dynamics, enabling participants to feel that they have something in common with one another (Morgan, 1998b). It was therefore advantageous that participants were employees of the University, or potentially members of the Women's Institute. The study did employ a slight bias towards recruiting females by nature of the staff groups targeted, however this was viewed as advantageous, since women have been reported to form a considerable proportion of the readership for one of the most popular tabloids (Bell and Alden, 2003).

3.5 Data Collection

Newspapers were collected daily, and examined systematically, page-by-page. All articles, regardless of size, that featured nutrition research studies were clipped. Only those providing a traceable source to the original research (journal name, authors name and/ or organisation) formed the final study sample (NHS, 2003). The study excluded examination of free magazines or other additional material, as they were not considered intrinsic to paper. The original published studies corresponding to the newspaper articles were obtained via Internet searches using either the 'Google' search engine, specialist databases such as 'Medline', or via the journals own website (where a journal name was provided). Where the researcher was unable to locate the original research, the related news article was excluded from the study, since there was no opportunity for just assessment of its content. All eligible articles along with their corresponding research papers were sorted into chronological order in preparation for analysis.

Attitudinal data from members of the public were obtained via the focus groups. There are mixed opinions regarding how many focus groups one should run (Gibbs, 1997), with an argument that one should continue running groups until a 'saturation point' when no new ideas are forthcoming (Krueger and Casey, 2000). In view of limited time and resources, and the multi-method nature of the study, the aim was to conduct a minimum of two groups. The researcher moderated the groups, and devised a questioning guide (see Appendix E) to facilitate communication, and to elicit participant's attitudes towards the articles presented. Key questions were open-ended questions, and were intended as prompts, but not to lead the participants in any way (Sim and Wright, 2000). To permit fair quantification of the data the same questions were used in each focus group (Webb and Kevern, 2001). Sessions were audio-recorded using digital equipment, and a software package was used to download the audio data onto a computer for transcribing purposes. An assistant moderator made

contemporaneous notes at each focus group. These assisted the moderator in providing an oral summary of the session, and provided a means of observing non-verbal communication (Krueger, 1998b). Participants were informed in the initiation letter and prior to the session, that the groups would be audio recorded. Assurance was given that data would be managed confidentially, and that names would be deleted from the final transcripts. Focus groups are not fully confidential or anonymous (Gibbs, 1997), since material is shared with others in the group, however, participants were asked to respect one another's comments and keep them private. In recognition of the time and effort involved in participation a five-pound voucher was offered as an incentive to encourage attendance at the groups (Krueger and Casey, 2000). Furthermore, participants were informed that a summary of findings would be sent to them once the study was complete. This is an important gesture for valuing their contribution to the research (Robinson, 1999).

3.6 Data Analysis

The TAT provided the framework for assessing accuracy of newspaper articles with respect to the original research papers, and for examining criteria related to the overall balance and contextual information contained within the articles. A general data recording sheet for the TAT was constructed to capture information relating to the size of the news article, the page number it featured on, and whether the research reported was of an empirical nature (see Appendix F). Column inches were also measured and calculated (Spokane Falls Community College, n.d.) to provide a further means of assessing the article size. Articles were assessed individually. However, a number of articles contained more than one feature on nutrition research, these articles were assessed repeatedly, once for each traceable study mentioned. Prior to using the TAT, the news article and the corresponding research paper were read fully so that questions were managed fairly. Once all articles had been assessed, the data was

sequentially recorded in an Excel spreadsheet to aid interpretation. Findings were analysed question-by-question, but some questions were grouped so that data directly answered the research questions.

A transcript-based analysis was used for the focus groups. Whilst more time consuming, this is accepted as the most rigorous of methods (Litosseliti, 2003). Analysis was considered when planning the focus group questions, for example an 'ending question' was incorporated as this "allows participants to state their final position on critical areas of concern" (Krueger, 1998a, p 26). Furthermore an oral summary agreed by participants was to be given at the end of each group, as this is believed to have a critical role in the analysis process (Krueger and Casey, 2000). Robinson (1999) highlights an important step in the analysis process is to familiarise oneself with the data by reading transcripts thoroughly. Following this, the study selected the 'long-table approach' for analysis, which "allows the analyst to identify themes and categorize results" (Krueger and Casey, 2000, p.132). This involved printing transcripts onto colour-coded paper, keeping a hard copy for reference and then cutting up further copy into individual, but identifiable quotes. The quotes, plus any notes relating to non-verbal communication were then organised under the headings of the key questions. Sorting the data in this way was helpful since participants do not always provide answers to specific questions in the expected order (Litosseliti, 2003). A descriptive summary could then be prepared to characterise the emerging themes. Computer based software provided an alternative option for analysing the data however, this is more advantageous when managing large sets of data, plus time is needed to learn and operate the system. Manually sorting the data is a visual process, and is considered a more beneficial learning experience for those new to focus groups (Krueger and Casey, 2000).

3.7 Pilot Studies

Pilot work can assist in supporting the viability of research (Bond, 1996). Testing the feasibility of this study was intended to identify potential shortfalls; such as time and resources allocated, or whether the data generated was sufficiently targeted and meaningful. Feasibility in terms of the researchers capability, and their access to a setting, and participants for the focus group (Morse, 2003) was discussed earlier. Pilot work was conducted on the TAT, and the focus group questions.

The TAT was piloted using ten newspaper articles. Articles were conveniently located through either personal reading, or via alerts from colleagues; and all met the defined study criteria. Testing the TAT highlighted minor issues with certain questions. These required modification to clarify their position, and to provide better assurance of their interpretive value. Providing a tool, which was both reliable and valid, was imperative to this study, since “reliability is concerned with consistency and replicability” (Tones and Green, 2004, p.320). To achieve this, the TAT was tested by two of the researcher’s Dietetic colleagues. This was to demonstrate that the TAT, when used repeatedly by others, would still yield consistent results (Naidoo and Wills, 2005). Each colleague used the tool separately, and on two pilot pieces. Both arrived at almost identical answers and conclusions, which were comparable with those deducted by the principle researcher. After completing this task, the principle researcher and colleagues had a short discussion on the article and what the tool had highlighted. This dialogue assured the researcher that the tool was suitably valid, and that it would assess what was required to answer research question one. Following recommendations from colleagues, some questions were slightly re-worded to aid general comprehension.

Questions for use within the focus groups were required to generate responses to address research question two. They were therefore tested prior to the study to measure their

validity. As focus groups are timely and expensive Krueger (1998a, p. 58) recommends testing questions with potential participants “who are not familiar with the study but represent a lay perspective”. Questions were therefore piloted using a small group of administrative colleagues and friends. Attention was paid to testing the key questions since these are known to “drive the study” (Krueger, 1998a, p. 25). The questions worked well and elicited the targeted responses desired, however following de-briefing with colleagues, minor modifications were made to tighten up on phrasing. It is recognised that the validity of focus groups extends beyond constructing key questions. The process begins with ensuring that focus groups fit the research purpose, and that the research plan is implemented adequately. Even then Fern (2001, p. 95) comments that “validity is a judgement call”, and is largely reliant upon the researchers capabilities.

3.9 Limitations

Every effort was made to select the most appropriate methodology for this study, however no method is without some degree of limitation. Problems or anomalies encountered during the study are highlighted here. Firstly, the time period selected for collating the data from the tabloids unfortunately coincided with the incidence of a global disaster. This was likely to have a negative impact upon the reporting of other ‘news’ items, such as emerging nutrition research.

The TAT failed to distinguish between different types of reporting, for instance were the articles ‘hard news’ items or simple feature stories. According to Henderson and Kitzinger (as cited by Condit 2004, p.1415-1416) “hard news reports are more accurate than feature stories”; this may have been significant with regards to assessment of accuracy in this study. To avoid placing unrealistic demands on newspapers, some allowances were made if information was marginally generalised to aid public understanding. The researcher was

mindful that newspapers are not scientific journals, however the allowances made perhaps introduced greater subjectivity into the analysis process. Use of the TAT became problematic when laboratory-based studies were examined; in particular the researcher queried whether reporting sample size was particularly relevant. In these instances such questions were answered as 'not applicable'.

This study assumed that journalists would have accessed and read the full-published paper when reporting on a piece of research. Whilst this activity is encouraged (Entwistle, 1995), articles may have been based upon a simple press release. Press releases can fail to highlight study limitations, and might exaggerate the importance of findings (Woloshin and Schwartz, 2002). Given additional time and resources the researcher could have explored what journalists use as a basis for their reports.

The researcher acted as a moderator for the focus groups. However, inexperience in this task may have partially hindered the data collection process. It was a perceived strength of the study that the researcher had background knowledge on the topic of discussion, however Krueger and Casey (2000, p. 100) comment, "moderators with a personal commitment to the topic need to be careful to keep their personal views to themselves". Every effort was made to remain impartial during the discussions, but given the novice nature of the moderator, aspects of non-verbal communication may have encouraged or discouraged certain participant responses.

Participants of the focus groups had protected time to read the tabloid articles. In reality, newspapers may not be read so comprehensively; therefore attitudes might be expressed differently than they were within the focus group setting. The tabloid articles used as the basis for discussions were concerned with foods that were reported as either ineffective or harmful to health in some way. It's possible that responses to key questions may have been different if one, or both of the articles had focused on encouraging a particular food or way of eating. Furthermore, a question phrased to elicit participant's feelings towards the articles

used the word 'thought' as opposed to 'feeling'. This did not appear to prevent participants from expressing their feelings, but it would have been more accurate to ask the question directly.

During the focus groups evidence emerged that one or two participants read the broadsheets, questioning whether the best people for the study were selected. The number of willing participants recruited was lower than anticipated, providing only sufficient numbers for two groups. Sessions took place during the summer season, which resulted in a number of regretful declines. Furthermore University domestics, who were approached via the shift supervisor, were informed that they could not participate because of the busy conference season. To meet required numbers, the Chester Branch of the Women's Institute were contacted. The secretary was willing to distribute twenty-five invitations, which resulted in six acceptances. Since recruited numbers were low, there was limited scope for control over the composition and number of groups.

The chapter has provided a detailed description of the design and methods used to undertake the study. It has provided justification and rationale for all actions taken, and where possible has linked them to recognised practice within the field of qualitative research. Pilot activities were undertaken to provide reassurance of the studies feasibility, reliability, and validity. Limitations related to the research methodology have been recognised.

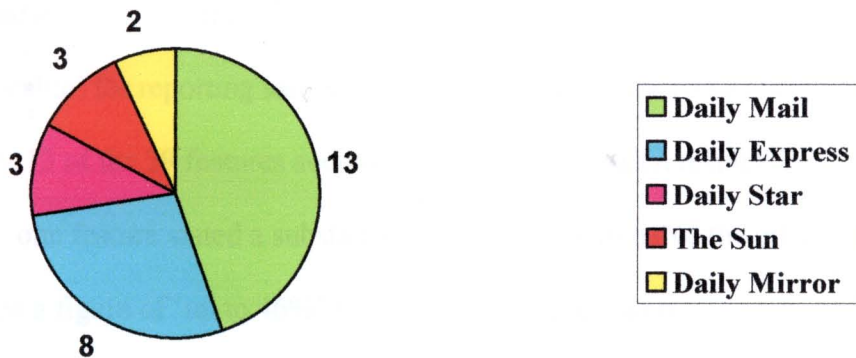
4.0 RESULTS

This chapter presents data collected from the systematic analysis of tabloid articles, and the focus groups. Key findings are arranged in accordance with the research questions.

4.1 General Findings from the Tabloid Analysis Tool (TAT)

32 tabloid articles formed the original study sample. Three were excluded, as corresponding research papers were either unavailable or awaiting publication. Of the 29 articles used in the study, the number located by tabloid is illustrated in Figure 4.1.

Figure 4.1
Number of Articles Located by Tabloid



70% of the articles (n=20) were classified as small (less than half a page long), but total 'column inches' per article varied from one to 70. No articles were featured on the front page; the earliest point of reporting was page nine. All were based upon published empirical research studies, although not all were 'current' studies, three dated back to the 1990's. No tabloid sourced information from the same journal more than twice.

Several articles featured more than one piece of nutrition research, therefore the TAT was used a total of 39 times, once for each reference made to a locatable study. The figures presented from this point forward are therefore expressed as a proportion of the 39 ‘features’ assessed using the tool (see Appendix F).

4.1.1 Accuracy of Reporting with Respect to the Original Research

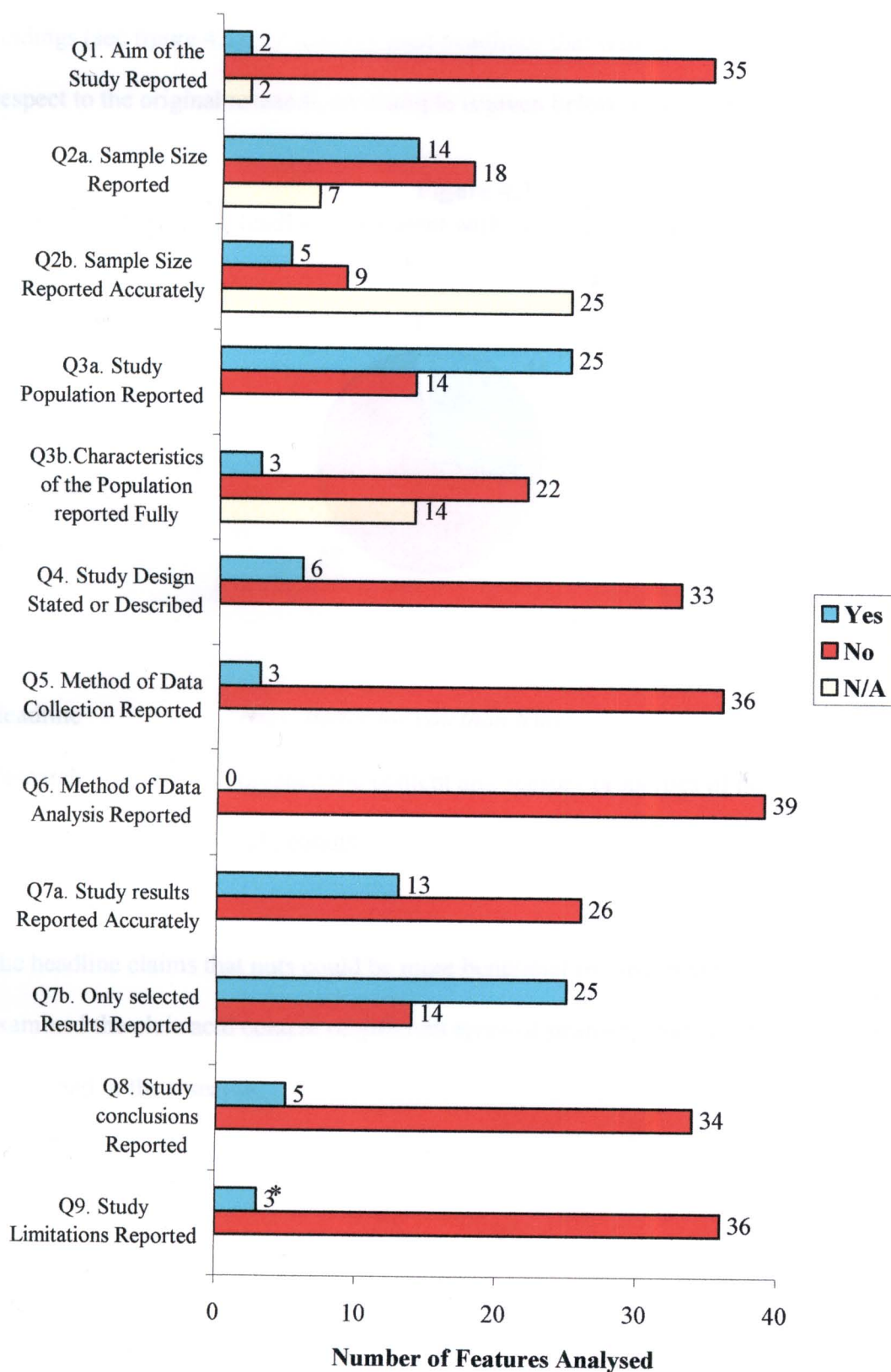
The TAT assessed whether specific study characteristics, and other elements of the features, such as headlines were reported accurately with respect to the original research.

4.1.1.1 Inaccurate Reporting of Study Characteristics

Inaccuracies occurred with respect to reporting of sample size and study results (see figure 4.2). 14 features reported the study sample size, but only five did so accurately. Seven features were ‘not applicable’ for reporting sample size, as the studies concerned examined non-human models. Just 13 of the 39 features accurately conveyed research results. To illustrate an inaccuracy; one feature stated a substance in olive oil could halve the effect of a breast cancer gene, when a figure of ‘up to 46%’ was quoted in the research.

The TAT did not test other characteristics for accuracy, such as the study aim, method of data collection and analysis. The pilot indicated these were either reported or omitted, and were not likely areas of inaccuracies. Absence of key study characteristics is dealt with in 4.1.2.1.

Figure 4.2
Study Characteristics Reported

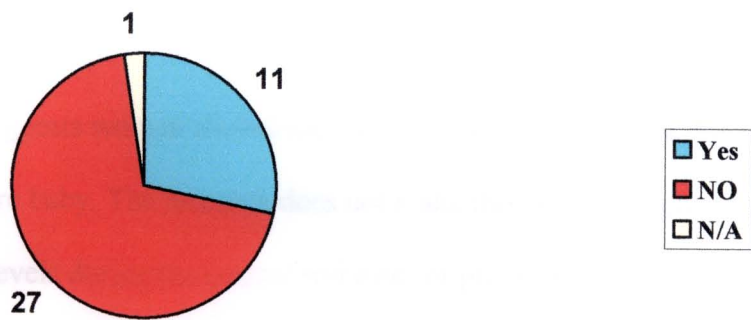


* All limitations not reported (see 4.1.2.1)

4.1.1.2 Inconsistencies in the Headlines

Question 10 in the TAT assessed whether article headlines were consistent with the research findings (see figure 4.3). 27 features used headlines that were not consistent or accurate with respect to the original research, an example is given below to illustrate.

Figure 4.3
Headline Consistent with Research Findings?



Headline	<i>"Nuts: Better for you than fruit?"</i>
Research	Polyphenolic content and sensory properties of normal and high oleic acid peanuts.

The headline claims that nuts could be more beneficial for you than fruit. The research examined the oleic acid content of different types of peanuts; fruit was not included or mentioned in the research.

4.1.1.3 Inaccurate Attributions to the Research

Question 11 in the TAT assessed whether features had attributed information to the research study that could not be found. 19 features did, highlighting a further area of reporting inaccuracy. An example is provided to illustrate:

Tabloid headline *“Take folic acid or risk a premature baby, mums told”*

Research Paper Second Trimester folate status and preterm birth

The feature states the study suggests women should take over 0.5mg of folic acid a day to cut their risk of having a premature baby. The research does not make this recommendation; it merely states that low folate levels during the second trimester of pregnancy are associated with the increased risk. Furthermore, the feature states women were monitored throughout their pregnancy, which is untrue, the research states they were recruited at between 24-29 weeks.

4.1.2 Balance in Reporting

To determine whether reporting was balanced, the TAT assessed for the presence, and comprehensiveness of reported study characteristics. Furthermore it examined whether expert quotes external to the research were obtained, and whether features made statements that were unsubstantiated and potentially misleading.

4.1.2.1 Under reporting

Several key study characteristics were under-reported, namely the study aim, method of data collection, data analysis, and study limitations. Greater than 90%, (at least 35 out of 39) of the features did not report these characteristics (see figure 4.2). Three features reported study limitations, but not all limitations were listed. For example, a feature on ‘red meat and cancer risk’ (see Appendix E) stated the study was generally limited because smoking; obesity and inactivity were more strongly related to colon cancer. However, it failed to state that a questionnaire used in the study did not identify the number of meat servings eaten per day, and that insufficient detail had been collated on family history of the study population.

4.1.2.2 Selective Reporting

Question 7a in the TAT identified that 25 features were selective in their reporting of study results. For example, a feature entitled ‘cancer aid in ketchup’ only discussed findings related to lycopene levels in ketchup, when the study examined total antioxidant content, which included substances other than lycopene.

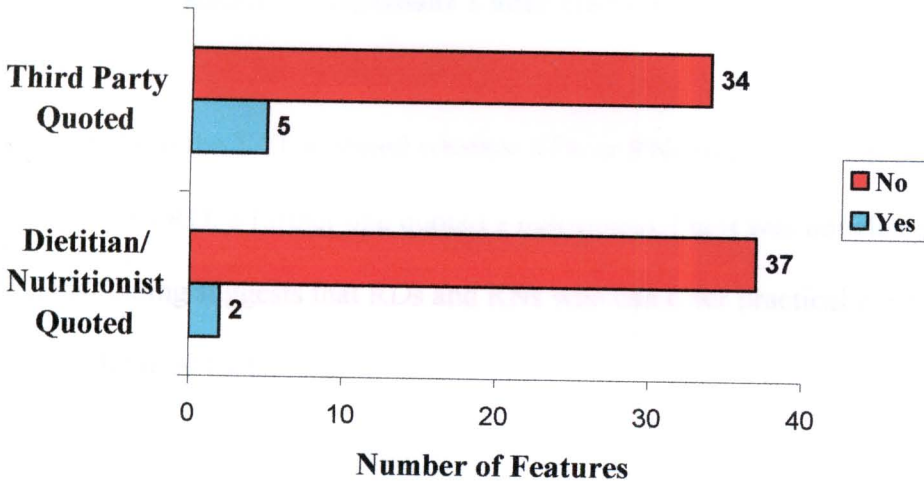
25 out of the 39 features reported the study population, but only three gave population characteristics fully (see figure 4.2, question 3b). For example, an article entitled ‘beer for the brain’ stated that the study was undertaken on ‘older women’ but it did not specify the age range.

4.1.2.3 Lack of External Opinions

Question 12 in the TAT assessed whether features included a quote from a source external to the research study. Figure 4.4 illustrates that few features achieved this, implying that tabloid

readers are more commonly exposed to single, and potentially biased perspectives on the research.

Figure 4.4
External Sources Reported?



4.1.2.4 Unsubstantiated Statements

Question 14 in the TAT assessed whether features made statements that were attributed to ‘experts’, ‘researchers’ or ‘studies’, but were not substantiated with a valid source. Six out of 39 features made such statements. For example, a feature on honeybush tea stated ‘research’ had shown it to have antiviral properties, and that it could also help lower cholesterol. These statements were not qualified with research details, a name or organisation; therefore this information could be misleading.

4.1.3 Contextualisation in Reporting

Question 15 to 17b in the TAT assessed for the presence of appropriate contextualised information. These questioned whether readers were offered a route to further information

after reading the article, and whether the nutrients or foods featured in the studies were discussed in practical dietary terms. Findings from question 13 are also reported here, since they are relevant to the provision of contextualisation.

4.1.3.1 Dietitians Under Quoted

Question 13 in the TAT assessed whether RDs or RNs were quoted in the features. One feature quoted a RD; a further one quoted a nutritionist, but it was not clear whether this was a RN. This finding suggests that RDs and RNs who can offer practical dietary context, are currently under used by tabloids.

4.1.3.2 Sources of Further Information Not Provided.

Question 15 in the TAT assessed whether features provided a credible source of further information for interested readers, for example a help line, name and/or details of a support organisation. Five features achieved this, and in all cases they merely gave the name of an organisation, such as Cancer Research UK; no contact details were reported.

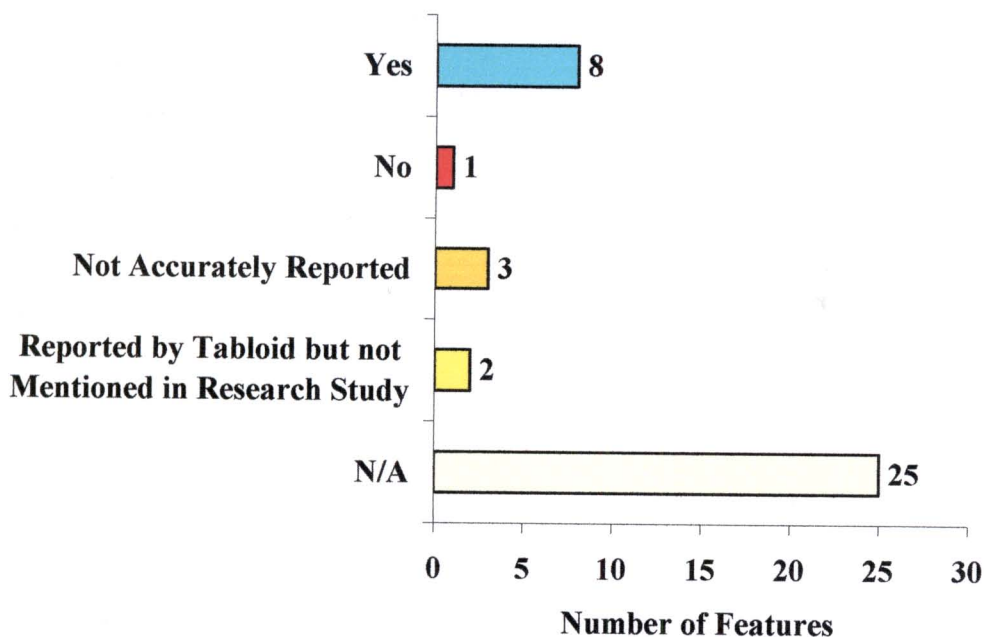
4.1.3.3 Practical Food and Nutrient Information Limited

All 12 features reporting on a study that focused upon a specific nutrient (question 16), managed to identify a food(s) where that nutrient could be found, for example folic acid can be found in leafy green vegetables. However, six of the 12 features named only one particular food; in all cases this was the food that was used or tested in the study reported.

Question 17a in the TAT assessed whether features stated the quantity of food, or nutrient linked with the health outcome in the reported study. In total 13 features reported

food or nutrient quantities; but three of these were inaccurately reported, and two reported quantities that were not mentioned in the research paper (see figure 4.5). 25 features were labelled as ‘not applicable’ for this question. 22 of these achieved this label because the research paper itself had either not included, or was unclear about the food/ nutrient quantity linked to the health outcome. A number of these studies were laboratory based, preliminary studies, and were therefore concerned with exploring the possibility of observing an effect, rather than deriving quantities. The remaining three ‘not applicable’ features dealt with research of a different nature, for example comparison of nutrient values between foods.

Figure 4.5
Quantity of Food/ Nutrient Linked to Health Outcome Reported?



Where quantities were reported, Question 17b considered whether these were amounts that the average adult would reasonably be expected/ advised to consume. Three features reported quantities that members of the public would not routinely be advised/ expected to consume under current healthy eating guidance. For example one feature suggested drinking

five cups of chamomile tea a day to boost the immune system. Even for those that enjoy drinking the tea it's unlikely that they would consume this amount daily. Furthermore the figure is inaccurate as subjects within the study were only given 200mls of the tea per day, equivalent to approximately one cup.

4.2 Focus Group Analysis

Two groups were conducted, each with eight participants (15 female, one male). Full transcriptions can be found in appendices G and H. Data is presented thematically and under headings derived from the key questions, with participant quotes given to illustrate major themes. Reference is made throughout this section to the tabloid articles used as a basis for discussion (Appendix E).

4.2.1 Participants' Understanding

Theme Uncertainty

Participants in both groups struggled to outline their comprehension of the articles, particularly when presented with article one. This was evident from the manner in which participants re-read sentences and reiterated them to one another. Many were initially unable to decipher what the article was telling them. After some debate within each of the groups, it was agreed that the main message from the article was to follow a balanced diet.

"I can't find really what the aim of it is"

(Participant G, Group Two, Article One)

"It's giving you all sorts"

(Participant G, Group One, Article One)

"It boils down to the concept that you need a balanced diet doesn't it"

(Participant D, Group One, Article One)

Theme Differing understanding

Participants were more confident in reporting their understanding of the second article, but in both groups participants had different perspectives of what they believed the article was telling them. Some believed that the foods named caused constipation, whilst others believed they were related to making an existing problem worse.

“Look elsewhere for the cause of constipation”

(Participant F, Group Two, Article Two)

“It proposes that eating high fibre foods makes constipation you know worse”

(Participant A, Group Two, Article Two)

Theme Questioning

As discussions progressed, participants from both groups began to question elements of the articles, suggesting that they required more specific information to help them understand and interpret them.

“It hasn't actually said what worse is”

(Participant C, Group One, Article Two)

“But something it doesn't say which surely given the article would be quite important is how often it is safe to eat red meat, or what is recommended by nutritionists”

(Participant B, Group Two, Article One)

Theme Misleading but not Necessarily Inaccurate

No participants directly questioned the accuracy of the articles, or the data they presented. Instead there was a popular belief that information might be misleading rather than incorrect.

“I don’t think anything in it is actually incorrect or a lie I just think it’s just the way they choose to favour the percentages”

(Participant B, Group One, Article One)

Participants were initially hesitant in expressing their understanding, but became more confident once discussions progressed, and once they were more familiar with the article. Participants did not necessarily understand the articles in the same way, and differences were observed. They questioned the articles; identifying areas where more information was needed to aid their understanding. However, they did not consider that the information presented was particularly inaccurate.

4.2.2 Participants’ Feelings

Theme Potentially Helpful

In a transition question participants were asked what they thought about newspapers reporting information on nutrition. A positive theme emerged, with many feeling that it could be helpful, provided the information was correct.

“I think its good provided its correct information”

(Participant D, Group One)

“I think sometimes its really worthwhile because you know we really should know what’s in what we are eating.”

(Participant A, Group Two)

Theme Confusing and Overdramatic

Once participants were given specific tabloid articles, a plethora of negative comments surfaced. The words ‘confusing’ and ‘overdramatic’ rapidly emerged from the first article, as did thoughts pertaining to the article employing shock tactics

“Confusing, overdramatic and too much information”

(Participant E, Group One, Article One)

“I think it’s designed to scare you”

(Participant H, Group Two, Article One)

Theme A Joke

The second article in particular generated some laughter, namely after reading the headline. Consequently both groups regarded this article in a somewhat joking manner, with several remarking that they would not take it seriously.

“I think it’s a bit of a joke as well by the headline”

(Participant C, Group Two, Article Two)

“Chuck it down the pan basically”

(Participant A, Group One, Article Two)

Theme Concerning

After the initial hysteria, several participants expressed their concern about the potential effects of taking both articles seriously, with some reporting feeling ‘overloaded’ in receiving information of this kind.

“Its just ridiculous and its very frightening because people are getting these thrown at them all the time, and it must be very hard to decide what the best food is to eat”

(Participant A, Group One, Article Two)

“You’re looking at it and thinking, oh god what can I eat then, what’s left that you are going to eat that’s not going to harm your body”

(Participant E, Group Two, Article One)

Participants’ feelings towards the articles were largely negative, with many being either confused or amused by the information presented. Many felt there was value in newspapers reporting nutrition information, yet there were genuine concerns about the type of information presented in the given articles.

4.2.3 Participants’ Potential Actions

Participants were asked whether they would consider following the advice/ information contained within the tabloid articles presented.

Theme Information lacking

This theme was particularly evident with regards to the second article, leaving a number of participants uninterested in following the advice.

“I would just hope that no one bases their diet on this 5 sentence article, cause I don’t think its very good”

(Participant B, Group One, Article Two)

Theme Relevancy

Several participants believed the information was not relevant to them, either because they were already following the advice, or because they believed they were not the kinds of people the article was getting at. This resulted in a disregard for acting upon the information.

“It may be that this was in Saga magazine, so you know it could be really relevant to that audience”

(Participant G, Group Two, Article One)

“Well I read it and thought well I already live like they are suggesting”

(Participant F, Group Two, Article One)

Theme Wouldn't follow the advice

Further to any relevancy issues, many participants expressed that they wouldn't follow the advice in the articles. Some stated that the information had simply not made an impact on them.

"It hasn't made me think I won't eat red meat tomorrow"

(Participant D, Group One, Article One)

In contrast to this particular theme, and to show the full range of responses obtained, one participant was keen to follow the advice.

"Yeah well I would, I'm in that age group, 50-74, and I think that age group didn't have as much information as what yourself get now"

(Participant E, Group Two, Article One)

Theme Depends on the source

Participants were not given information on the source of the articles, but this was questioned during the sessions. It was inferred that information from certain newspapers was more readily valued than that from others.

"I actually read an article, I think it was in the Sun about beer and how beer is good for you, and it gave like a check box of all different things, I just thought that was pretty silly. It just seemed unbelievable, some of the things even though perhaps they could have been true"

(Participant D, Group Two)

“I think it comes from the sort of paper you wouldn’t read”

(Participant C, Group 1, Article 1)

“I bought an article today, it’s in the telegraph about milk and the problems with ovarian cancer apparently, and that’s the first paragraph, and then when you read it carefully, milk is good for you... but the headline, first paragraph was that its now causing ovarian cancer, and that’s the Daily Telegraph!”

(Participant E, Group One)

Theme The information might make you think

Despite the common disregard for the advice offered, several participants believed the articles were still of some value.

“I don’t feel the article is totally bad, we’re cynical because we perhaps feel it doesn’t apply to us and therefore we wouldn’t follow it in great depth”

(Participant G, Group One, Article Two)

“But I suppose good or bad however you perceive it at least both articles are making you think about food and about what’s going in really, but I don’t think it necessarily does anything, apart from that”

(Participant G, Group Two)

Intentions to act on the information presented in the articles were negligible. This related to a lack of conviction regarding the material, its source, or the lack of individual applicability.

Despite a common disregard for the information, articles were still valued, but merely from a general interest perspective.

5.0 DISCUSSION

This study set out to explore whether tabloid reports of nutrition research were accurate with respect to the original research; that they were balanced and did not present a misleading view of the research, and that they were appropriately contextualised. Furthermore the study explored attitudes members of the public might express towards tabloid articles featuring nutrition research. This chapter provides a detailed discussion and appraisal of the key study findings. The significance and implications of individual results will be examined, with reference made as applicable, to the current body of literature discussed in chapter two. The discussion will also consider the valuable lessons learnt from completing the research; providing detail on how aspects might be undertaken differently in the event of replicating or furthering the study. The chapter will close with a concise conclusion, followed by a series of key recommendations.

5.1 Accuracy of Reporting

Journalists are frequent communicators of science; as such it is argued that they have an ethical responsibility to convey information accurately, and in the best interests of the public (Keeble, 2001). The results of this study showed that this was a responsibility not upheld, since there were numerous degrees of inaccuracy in relation to reporting of key study characteristics. Condit (2004) suggests that media coverage of medical science is characterised by inaccuracy; this research would support that statement. Journalists failed in twenty-six out of thirty-nine cases to convey study results accurately, a finding that provides direct contrast to the research conducted by Bubela and Caulfield (2004). They identified that newspaper articles accurately conveyed the results of genetic research, however their study was conducted on the broadsheets so it is perhaps unjust to make a direct comparison of this

studies findings with theirs. Hackman and Moe's (1989) research concluded that seventy eight percent of news stories relating to nutrition research accurately reported study results. The difference between their findings and those presented here may be accounted for on several levels. Firstly, their research was conducted within America. It is uncertain whether the US press have similar categories of newspapers to the UK, and therefore whether the authors were examining the quality or popular press, or both. Furthermore, newspapers were pooled over six months as opposed to a single month, thereby offering a greater sample. The number of inaccuracies found in relation to reporting of study findings was both surprising and disappointing. Given that the results of a study are essentially the crux of a journalist's story, and a feature that the public will certainly focus on, the findings reported here pose cause for concern.

Reporting of sample size provided another area of inaccuracy. Features that provided these figures were more often inaccurate than accurate. The perception of what is accurate and what is not is perhaps contestable, since there are degrees of accuracy. For instance, if an article states the sample size was almost five hundred, when the actual figure was four hundred and ninety five this might, by interpretation be considered as either accurate or inaccurate. In the case of this example, the principle researcher considered this to be accurate, and only labelled a feature as inaccurate if the figure was overtly wrong. One might question the public value of giving information on sample size, but if journalists are choosing to report it, why not do so accurately? Certain tabloids, particularly the mid market varieties are targeting their readership at potentially affluent women (Cridland, 2005), who may have undertaken higher education, and so one should not assume that readers will not comprehend the importance of a studies sample size, particularly if this is accompanied by information on the research design. Sadly though, this element was vastly underreported within this study, as was data collection and data analysis. So, to obtain a true understanding of the study interested readers would really need to source the original research for themselves.

Tabloids are renowned for their elaborate and often sensationalist headlines. Whilst this may be so, headlines should remain consistent with research findings (Harvard School of Public Health and IFIC, 1998), so as not to give an inaccurate account. Stryker (2002) believes that inaccuracies resulting from sensationalised stories occur with greater frequency than actual errors contained within the story. When Begg and Gregor (1999) made their accuracy assessment of news stories in relation to meningitis, they appeared to omit headlines from their accuracy assessment. This study considers the headline to be part of the featured text; as such it should be equally accurate. The majority of headlines examined within the study sample were not consistent with the research findings. Headlines are what most commonly attract the eye of the reader, and given the distinct possibility that the remainder of the article might not be read, there is great potential for giving the reader an inaccurate view of the research. In fairness to journalists, they are occupationally tasked with presenting news so that it will attract the reader's attention, and ultimately sell papers. Still, one would hope there is a means of captivating attention without misleading the public, or misrepresenting valid research. Newspapers are a profit driven business, but if they are truly working in the interests of the public it is fundamentally wrong to ask the public to try and separate accurate statements from inaccurate ones (Holgardo et al, 2000).

A question within the TAT asked whether features had made any inaccurate attributions to the research. Several did make statements about the research, which were found to be inaccurate. An example was provided in 4.1.1.3. This finding highlighted that additional inaccuracies can arise, further to those specifically related to study characteristics. One may argue that newspapers are not scientific journals, and therefore one should not expect the same amount of precision. Still, it is unacceptable to serve the public with half-truths, and as White et al (1993) remarked, the rules may be conventionally different, but they should not be any less rigorous.

In summary the results of this study indicate that tabloid articles reporting on nutrition research are largely inaccurate, not just in terms of printing sensationalist headlines, but also in the reporting of basic facts. The journalistic community and other relevant communicators responsible for supplying the media with data, must apply greater care in their reporting to eliminate these fundamental inaccuracies

5.2 Balance in Reporting

Aside from communicating with accuracy, journalists are also urged to communicate with balance. Under reporting information such as key study characteristics could impact on the readers overall appreciation of the research. To illustrate, the TAT detected that the study aim was vastly under reported. Omitting this information will undoubtedly have ramifications for the person who is attempting to interpret what the study means. Furthermore, it permits the journalist to present findings in such a way that they could fail to represent what the study originally set out to achieve. Alarming only two studies conveyed the study aim, with a further two studies being excused as the research itself failed to clarify this information. Interestingly when asked to give their understanding of a particular article, one participant within the focus groups, remarked that they struggled to see what the aim of it was. Whilst one cannot generalise this response, it does indicate that the absence of an aim impeded this person's comprehension of the study.

Acknowledging the limitations of any study is a requirement within research. In obvious terms, no study is perfect and so reporting likely flaws is important, particularly if one is to understand the true value of what was found. For the benefit of the public, this could involve simply stating that more research is needed before any findings can be confirmed. Only three features examined within this study made any attempt to disclose limitations of the research they were reporting. It is important for the public to understand that "scientific

research is evolutionary and not revolutionary” (IFIC and IFT, 2005, p.4), without this knowledge they may readily regard articles reporting on nutrition research as conflicting. For example, on one occasion milk consumption might be cited as being good for bone health, but on another it could be reported as having a link to the incidence of ovarian cancer.

Participants within the focus groups expressed feelings of despair in relation to this very point, and made comments along the lines of “what’s left that you are going to eat that’s not going to harm your body” (Participant E, Group 2). In all cases journalists should attempt to describe a studies limitations in lay terms so as not to mislead the reader or create confusion.

Guidance from the IFIC and IFT (2005) asks that journalists avoid the use of select findings so as not present an unbalanced view of the research. The TAT found that the majority of articles were selective in reporting results, omitting findings that were undoubtedly intrinsic to the study. Clearly this leaves the tabloid reader with an incomplete view of the study and what was found. Furthermore, of the twenty-five studies that discussed the study population, twenty-two did not fully describe the characteristics of that population. This makes it exceptionally difficult for the reader to determine whether the study reported applies to them. Equally, it creates a situation whereby the journalist may, either knowingly or unknowingly, generalise the results of a study when they might only apply to specific age group, or sex, for example. Guidance issued by the Harvard School of Public Health and IFIC (1998) asks all those involved in public communication of research to clarify to whom the findings apply. Arguably newspapers are concerned with reaching the general public, and not specific sectors, but perhaps this indicates an element of caution is needed when determining whether it is appropriate to report a study. If column space were at a premium as it almost always is, and there were doubt regarding whether the applicable audience is wide enough to justify the studies inclusion, it would be sensible to avoid printing the feature altogether. This point mirrors the recommendation made by the WHO (2003) in its guidance issued to professional health correspondents.

Reporting of preliminary research is a popular media activity (Wellman, 1999). This was apparent within the findings of this study. For instance a number of articles used research performed in the laboratory, involving animal models. There is concern that these kinds of studies provide insufficient evidence on which to base dietary recommendations (Goldberg, 1992). However, there is also the argument that the public should not have to wait years to receive conclusive evidence (Wellman, 1999). Whatever ones views on this issue are, it is imperative that where these studies are made public, they are accompanied by an explanation that clearly informs the public of their preliminary nature. Journalists need to balance their reporting in this manner so as not to create false hope or to raise undue concern. This becomes more essential if a journalist reports on a study that is particularly controversial, or "if findings conflict with established dietary recommendations" (IFIC and IFT, 2005, p. 4).

To give a balanced account of the research they intend to report, a journalist should have access to, and have read the full research paper. This study did not explore the journalistic source, but this should be a key consideration for future studies of this nature. A number of journals regularly issue press releases (White et al, 1993), and concern has been expressed regarding their content and format (Woloshin and Schwartz, 2002). Ultimately journalists should be encouraged to read the full research paper, and to be responsible for what they choose to print and how they print it. However, an investigation into the content of press releases issued by journals would be a valid area of study. What is clear from this research is that academic journals provide a rich source of information for journalists. In just one month, thirty-nine studies of a nutritional nature were identified, and this was during a period when there was breaking news of a global disaster. Avoiding selectivity in terms of which journals are sourced for information is important (Schuchman and Wilkes, 1997). Within the confines of this study there appeared to be no bias towards reporting from specific journals. A diverse range of journals was used, and no one tabloid selected a study from the

same journal more than twice, which would suggest some degree of balance in this area at least.

Seeking expert opinions, external to the research reported is recommended to journalists (The Royal Society et al, 2001). This avoids presenting a one-dimensional view of the research, and offers an opportunity for the public to see what other experts' thoughts on the matter are. Findings from this study indicate that this was an activity rarely undertaken, as only five features sort views outside of those expressed by the study authors. External input can serve to either support, or question a study and the significance of its findings. The absence of opinion from other key professionals, or impartial organisations leaves the journalist open to accusations of presenting a biased and potentially imbalanced account of the study.

The TAT asked questions to determine whether articles were accurate, balanced and appropriately contextualised. This approach was therefore limited to checking for the presence, absence, or accuracy of a particular fact or element, as opposed to studying specific language used. Goldberg (1997), and the IFIC and IFT (2005) both highlight the importance of avoiding description of scientific findings as fact when they are not conclusive. The language or tone used by journalists can, if used inappropriately mislead the reader, for example 'may' does not translate into 'will', or 'some' people does not mean 'all' people. Consideration of the specific language used to describe the actual study is an area worthy of more in depth investigation.

In summary, the findings of this study indicate significant areas of imbalance in tabloid reporting of nutrition research. These relate to omissions or selectivity in reporting, lack of explanation with regards to the infantile nature of preliminary studies, and a failing to seek external professional judgment of the study. All of these elements are equally important in ensuring the reader obtains an honest and unbiased view of the research.

5.3 Contextualisation in Reporting

Providing an accurate and balanced account of nutrition research is crucial, but equally so, is presenting the information in a meaningful and practical manner. Guidance from the IFIC and IFT (2005, p. 5) specifies the need to “translate the latest research into what is on the consumer’s dinner plate”. This vital element was not readily apparent from the tabloid articles examined.

When a news article reports a study dealing with the effects of a specific nutrient; foods where it is commonly found should be identified (The Harvard School of Public Health and IFIC, 1998). Relevant features within this study did highlight at least one food where the nutrient concerned may be found. However, half of these only mentioned the food that was used within the study. For example, a feature was written about a study that proposed caffeine consumption had an inverse relationship with the risk of Parkinson’s disease. Coffee was the only source of caffeine mentioned in the feature, when there are several other dietary sources available. Clearly the information provided might not be helpful to members of the public who are interested in benefiting from the advice, but who are not coffee drinkers.

Within the literature there are concerns relating to a lack of contextual information in media reporting (Shuchman and Wilkes, 1997), particularly in relation to providing details of how much or less of a food to eat, and how often to eat it (Borra et al, 1998; Ayoob et al, 2002). A key problem encountered within this study was that much of the research reported was not in a position to give details on quantities, or the frequency at which certain foods should be consumed. Much of the research was preliminary and was still attempting to establish whether a relationship could be found between a food and a particular health outcome. The value of reporting such studies was debated earlier however, where such studies do reach the public’s eye every attempt should be made to place the findings in the context of existing dietary guidance. A number of features did attempt to report quantities or

amounts of the foods in question, however a small number of these were found to be inaccurate with respect to the original research. A further two, reported quantities of a food or nutrient that were not apparent from reading the research paper, and were not qualified with any valid rationale. These findings do question the potential use of reporting research that is unable to offer some level of practical application. Conversely, it is perhaps not wrong to allow the public access to new research as it emerges, provided they are alerted to its position on the research continuum.

Dietitians are highly trained professionals with the skill to translate scientific information about food into practical dietary advice (BDA, n.d.). As such they are well placed to support the media community by adding valuable context to features on nutrition research (Borra et al, 1998). Disappointingly, only one feature within this study included a quote from a Dietitian. A further feature quoted a nutritionist but it was unclear whether this was a RN. This finding supports an assumption made within the literature review, which suggested Dietitians were underused with respect to advising the media on emerging nutrition research. Given the concerns over lacking context within tabloid reports of nutrition research, Dietitians could be used more effectively by the media, particularly to provide an unbiased view of the research, and to discuss how findings fit into dietary recommendations. Dietitians and journalists do have a common interest here. Dietitians want to ensure that the public are not misled or confused by nutrition information, and journalists ultimately uphold that they work in the interests of the public (Keeble, 2001). This study proposes that both parties consider the benefits to the public if they can work collaboratively in this area.

A further recommendation issued within the guidance from the Harvard School of Public Health and The IFIC (1998) is that a credible source of further information be provided within the news report. This would allow a member of the public to obtain more information or assistance on the topic if they wished. Once again findings from this study fell short of this recommendation, with only five features offering some form of contact. Supposing that the

information contained within an article was deficient in providing practical context, this element would at least enable the reader to seek clarification as to whether the study could be helpful to them.

In summary, this study illustrates that there is a lack of appropriate and practical dietary information to support the nutrition research that is quoted by tabloids. If journalists are truly committed to working in the best interests of the public, this is an area particularly worthy of their attention.

5.4 Attitudes Expressed by Focus Group Participants

The literature review conducted prior to this study identified there was limited data available that had considered public attitudes towards media reporting of health-related research. In addressing research question two this study has partly tackled this by exploring attitudes towards tabloid articles featuring nutrition research, within a focus group setting. As with previous chapters, the discussion is structured within the three components of the attitudinal model. Since these components are inextricably linked it is recognised that there is a fundamental difficulty in describing them as independent entities.

5.4.1 Participants' Understanding

Attitudes are somewhat dependant upon the manner in which information is received and combined (Anderson, cited by Malim and Birch, 1998), this proved particularly relevant within this study. Participants reported finding one particular article unclear, and were therefore uncertain of what to comprehend. As a result they expressed several negative thoughts and feelings.

Existing literature suggests that the public are confused by media portrayal of health messages (McBean, 2001; Patterson et al, 2001). This became widely apparent when several participants expressed their confusion overtly within the focus groups. Furthermore, confusion was detected once they verbalised their understanding of the articles, highlighting instances where one persons understanding differed significantly from another. Born out of the confusion, and difficulty in comprehending the information, participants questioned the articles, highlighting areas where they perceived more information was needed. This correlates strongly with findings from the TAT, which indicated deficiencies in the provision of appropriate contextualised information.

Similar to perceptions located in the literature (Miller, Krautheim and Quagliani, 2002, p. 186), participants did believe that journalists placed their own spin on a story, and that the information they presented might be misleading. Interestingly though, participants did not perceive that the information could be inaccurate. Findings from the TAT illustrated otherwise, inferring that members of the public whilst being sceptical about how the data is presented, are more willing to accept that factual information is correct.

Reah (2002) argues that newsreaders should be critical, and able to identify anomalies in what they read. This study showed that members of the public can be critical, and that they do not necessarily accept all that is presented before them. Participants in the focus groups were not misguided by the sensationalist tactics, and despite their initial perplexity, they reached the rather sensible understanding that the articles were trying to advocate a healthy balanced diet. It was noted in 3.9 that the participants taking part in the focus groups might not have been wholly representative of those that commonly read the popular tabloids; therefore such critical thinking might not be widely applicable.

With regards to the focus groups, the aim was to explore participant's attitudes towards specific articles. Another area of enquiry worthy of pursuit, would be to consider what pieces of information participants perceive to be important when reading an article on

nutrition research in a newspaper. This might provide more detailed insight into how reporting could be improved to aid public understanding.

5.4.2 Participants' Feelings

The public have acknowledged the media as a popular source of nutrition information (Borra et al, 1998; Miller et al, 2002; Ayoob et al, 2003). This was also apparent from responses given to a transition question within the focus groups. Participants felt that nutrition information reported in newspapers could be helpful, provided it was correct. This inferred that members of the public do value the nutrition information that newspapers provide. Sadly, this 'value' became considerably less apparent once participants expressed their feelings on the example articles presented.

Within the focus groups it was particularly evident that the second article was not taken too seriously. People commented on the headline in particular as being a joke. Given feelings towards the article, it was unlikely that the study itself was taken seriously, which would be especially disappointing if it were sound research. One participant implied this, and commented on an article seen in the Sun newspaper. They felt the information was presented in a 'silly' way, and found it to be unbelievable, but acknowledged that it may have been true. If tabloids are presenting valid research in a rather joking manner this might be serving the public more harm than good. It may well offer some light relief, but it does not justify a reason to report it.

Goldberg (2000) indicated that the confusion linked with media reporting of nutrition science may leave the public believing that eating a well balanced diet is too complicated or even impossible. This theme emerged from the focus group discussions, as several participants were concerned about conflicting messages appearing in newspapers. Ultimately feeling that it would be near impossible to eat something that was not 'bad' for you. This

belief may be representative of the public's inability to view research as evolutionary. As discussed in 5.2, it is unfair, and detrimental to 'feed' the public with preliminary studies, and not explain their immature nature, or discuss their relevance in the context of a normal daily diet.

Being overdramatic and employing shock tactics, were further feelings that emerged from focus group participants. It is acknowledged that tabloid headlines are often sensationalistic (Begg and Gregor, 1999), and that sensationalism in the media can affect public trust (Ward, 2005). This finding was therefore not surprising. Employing these tactics most likely helps journalists sell newspapers, but it seems to do little in making people really take notice. For instance participants may have felt the articles were 'scaremongerish', but they were not scared enough to take the advice on board.

Attitudes or opinions towards the tabloid topics, prior to the focus group discussion must also be considered. Frewer et al (2003) argued that if someone were in favour of genetically modified food for example, they would be more likely to trust a source promoting its benefits. This was partly evident from one participant's response to the first article. She was a vegetarian and reported feeling glad about this after reading what was written. It is possible that pre-existing attitudes towards a particular topic may have tainted participants' views towards the research, or how it was reported. This is perhaps a limitation of the chosen approach to the focus groups. To avoid this limitation, participants could have been asked similar key questions, but without specific examples of tabloid articles. However, one might argue why there is a need to control for this, as people are likely to have pre-formed views on a range of topics, and as this study found, people will relate to topics they either know, or are interested about to help illustrate their points.

5.4.3 Participants' Potential for Action

Whilst research might contest that there is a strong correlation between a person's attitude and potential behaviour (Wicker, 1969; Sutton, 1998 as cited by Albery, 2004), findings from the focus group research appeared to demonstrate a relationship between the cognitive, affective, and conative domains. For example, participants who reported finding the articles to be a joke, or confusing tended to report that they would not consider following the advice. This finding correlates with Patterson et al's (2001) results, which reported a link between public confusion over media messages, and a disregard for the information they contained.

Most of the focus group participants were clear that they would not act upon the advice offered in the articles. In several instances the reasons culminated in a belief that the information contained within the article was not relevant to them. Some believed they were already doing what the article suggested, and others felt that their life experience helped them to know better. Arguably the topic of the article itself may have helped participants reach this decision, and perhaps if the topic had been different, alternative intentions may have been observed. One participant commented that they would take on board the advice. They believed, as an older participant in the group that information on nutrition had not been forthcoming in the past, so the fact that it was now made public was valued. This comment demonstrated a success of the focus groups since a range of responses were received, and participants obviously felt free to express their individual thoughts and intentions (Krueger and Casey, 2000).

Similar to findings from the TAT, reference was made in the focus groups to a lack of practical dietary guidance within the articles, such as how often it is safe to eat red meat. Absence of this information could provide a barrier for those who are genuinely concerned about what they have read, and who would consider acting upon it. Whilst participants commented on the lack of practical guidance, it is important to highlight that this was not

specifically highlighted as a barrier that would have prevented them from taking action. The concern over lack of contextualisation within tabloid reports, and the value of input from a professional such as a Dietitian has already been discussed. However, as Goldberg (2000, p. 644) stated, “behavioural guidance through the mass media can never substitute completely for meaningful interpersonal communications”. Still, ‘signposting’ interested members of the public who read these articles would at the very least be helpful.

A valid point made in the literature review was that people have a tendency to express certain opinions, or to adopt a particular attitude because that they feel they ought to (Russell, 1999). For example participants in the focus groups were deliberately not told they were reading a tabloid article, to avoid any possible stigmatisation. Interestingly, several participants queried the source, and a number appeared to assume from the manner in which articles were written, that they might be from a tabloid. One participant recounted reading a feature in a broadsheet, which much to their dismay they discovered to be misleading, therefore assuming that it was more characteristic of a tabloid feature. Participants may have made assumptions about the source of the articles, and in doing so it is possible that this may have contributed to their decision to disregard the information presented. If one assumes that such a stigma is attached to the tabloids, and that even those that read them do not take their information too seriously, one would question their true value in conveying health-related information. Duffy and Rowden’s (2005) research identified that whilst members of the public might not completely trust the newspapers, they would use the information as a starting point, and a basis upon which to gather further information. This point relates to a comment made within one of the focus groups, “good or bad however you perceive it at least both articles are making you think about food” (Participant G, Group 2). Therefore, it would seem there is value in newspapers reporting information on nutrition research, and that it is of interest. However, one cannot assume that this results in a belief about what is written, or a willingness to act upon it.

In summary the media may be perceived as having a key role in encouraging attitudes that are conducive to good health (Philo et al, 1994), but it was apparent from this study that attitudes towards what was reported, and how it was reported were far from favourable. The subject of the articles, plus any pre conceived thoughts on the topics may have been responsible for influencing some opinions, however a number of the findings did correlate with aspects of the literature. For instance, the public can be readily confused by health-related information conveyed by the media. Attitudes expressed within the focus groups inferred that there are limitations in using tabloids to convey nutrition research. In brief, they may be valued as a source of information, they may catch the reader's attention and be thought provoking, but they will not necessarily be relied or depended upon.

5.5 Conclusion

The tabloids constitute a particularly popular form of mass media within the UK; thereby they offer a significant opportunity to reach the wider public with key nutrition and health messages (Whitehead, 2000). This study posed a number of key questions, which it successfully addressed via a structured set of aims and objectives. The findings have illustrated that the quality of tabloid reporting in relation to nutrition research is at present far from adequate. In many instances articles were inaccurate with respect to the original research. They were frequently unbalanced, potentially misleading, and were thereby rarely providing a fair account of the research. Features were not appropriately contextualised, and commonly lacked practical dietary information. Accuracy, balance and appropriate contextualisation are all important ingredients that journalists should consider when reporting emerging nutrition research to the public.

The focus groups highlighted that tabloid articles on nutrition research can perplex, confuse, and even amuse members of the public. There seemed to be much negativity towards

the current trend of reporting, and a genuine concern regarding what truly is best to eat. Unsurprisingly, and for varying reasons, most participants felt they would most likely disregard the information offered. Tabloids may not be branded as ‘quality press’, but since they choose to report health related research, this demands a degree of journalistic accountability. Despite the criticisms observed, it would appear that participants believed there is value in newspapers reporting nutrition information. This offers hope to all those working within the field of nutritional health promotion, that valid opportunities to use this popular form of media are not lost. A number of key recommendations follow this conclusion; each one is an important stepping-stone towards increasing understanding of, and improving the present quality of news reporting on nutrition research. Without question, the public deserves better information on nutrition research from the tabloid press than they are currently receiving.

5.6 Recommendations

The key recommendations following completion of this study are:

- To disseminate findings amongst the media community, Registered Dietitians and Registered Nutritionists, highlighting the key areas of concern with regards to tabloid reporting of nutrition research.
- To increase awareness of the guidance documents issued by the Harvard School of Public Health/ IFIC (1999), and the IFIC/ IFT (2005), and to encourage Journalists to use them.
- To strengthen the involvement of Registered Dietitians, and other appropriately trained nutrition graduates in media reporting of nutrition related science.

- To explore whether journalists with a responsibility for reporting scientific research have access to training that incorporates understanding and interpreting research.
- To conduct a similar study examining the broadsheets (quality press), to determine whether the findings described here are characteristic of more than just tabloid news reporting.

Appendix A

University Principal's Approval Letter

Our Ref: A1126

23 June 2005

Ms A Basu BSc



UNIVERSITY OF
CHESTER

Principal
Professor T J Wheeler

Direct Line 01244 392729

Fax 01244 392808

t.wheeler@chester.ac.uk

Dear Ms Basu

Thank you for your letter of 8 June 2005.

I confirm that I have happy for you to approach non-teaching staff of the College and would suggest that you contact staff in our Human Resource Management Services who would be pleased to assist you in this respect.

I wish you every success in your research project.

Yours sincerely

Prof T J Wheeler DL
Principal

University College Chester, Parkgate Road, Chester CH1 4BJ
Tel 01244 375444 • Fax 01244 392820 • www.chester.ac.uk

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Appendix B

Ethics Approval Letter

the School of Health & Social Care
Jo Southern

University College Chester

JS/RE/LH

10 June 2005

Andrea Basu



CHESTER

- Dean -

School of Health & Social Care

D E L Marrison

BEd (Hons), MA, FCML, RGN, ONC,
DN (Lond), RNT.

Education Centres at:

University College Chester
Parkgate Road, Chester CH1 4BJ
Tel 01244 383688
Fax 01244 381090
Registered Charity 525938

Leighton Hospital
Nr Crewe, Cheshire CW1 4QJ
Tel 01270 612331
Fax 01270 250976

Bache Hall
Countess Way
Chester CH2 1BR
Tel 01244 221229
Fax 01244 382144

Arrowe Park Hospital
Arrowe Park Road,
Upton, Wirral CH49 5PE
Tel 0151 604 7139
Fax 0151 604 7174

Warrington Campus
Crab Lane
Fearnhead, Warrington
Cheshire WA2 0DB
Tel 01925 534226

Dear Andrea

I am pleased to inform you that the Research Ethics Sub Committee of the School of Health and Social Care has approved your project "Food, fact of fiction? Nutrition research reported in popular UK tabloids – a systematic analysis of reporting accuracy, content and interpretation by members of the general public".

Approval is subject to the following conditions.

1. That you provide a brief report for the sub-committee on the completion of your project.
2. That you inform the sub-committee of any substantive changes to the project.

May I take this opportunity to extend the best wishes of the Sub Committee and its Chairman for the successful completion of your project.

Yours sincerely

Jo Southern
Secretary to the Sub Committee

cc File

Appendix C

Focus Group Invitation Letters

28th July 2005

Dear Sir or Madam

I am a student within the college looking into how popular newspapers report information on research related to food and nutrition. A number of people say that they pick up information on nutrition from the newspapers, and I am particularly keen to hear views from members of the general public on one or two articles recently taken from the press. To enable this I am inviting staff groups from within the college to participate in a focus group. This will involve participating in a short discussion with 6-8 other people, lasting approximately 1 hour.

Light refreshments will be provided at the session, plus a £5.00 voucher will be given to those participating in appreciation for the time they have taken to attend. I shall be guiding the session, which will be audio taped to help me keep a careful record of points made by the group. Every step will be taken to ensure that the information provided by you remains fully confidential.

The session will take place in a designated room on the Chester campus, and will be held on either Monday 8th, Tuesday 9th, or Wednesday 10th August 2005, and shall commence at 5.30pm. If you are available and willing to participate please complete the slip below and send it back to me. I shall then be in touch over the coming week to provide you with more details.

I thank you for taking the time to read my letter; I do hope that you are able to participate in this exciting piece of research.

Yours Sincerely

Andrea Basu

Student undertaking MSc Health Promotion
University College Chester
School of Health and Social Care

I would like to participate in the focus group session and am happy to be contacted by Andrea Basu to receive further information on attending.

Name

Preferred Day to Attend Monday 8th () Tuesday 9th () Wednesday 10th ()
(Please tick)

Occupation

Contact Address

Contact Telephone Daytime Evening

22nd July 2005

Dear Madam

I am a mature student from University College Chester who is looking into how popular newspapers report information on research related to food and nutrition. A number of people say that they pick up information on nutrition from the newspapers, and I am particularly keen to hear views from members of the general public on one or two articles recently taken from the press. To enable this I would very much like to invite you to participate in a short discussion on the topic. The discussion will involve a small group of 6-8 people, and shall last approximately one hour.

Light refreshments will be provided, plus a £5.00 voucher will be given to those participating in appreciation for their time. I shall be guiding the session, which will be audio taped to help me keep a careful record of points made by the group. Every step will be taken to ensure that the information provided by you remains fully confidential.

The session will take place in a dedicated room at the University College Chester (Parkgate Road), and will be held on either *Monday 8th, Tuesday 9th, or Wednesday 10th August 2005*, and shall commence at 5.30pm. If you are available and willing to participate please complete the slip below, and return it to me soon as you are able in the stamped addressed envelope provided. I shall then be in touch over the coming 7-10 days to provide you with more details.

I thank you for taking the time to read my letter; and I do hope that you are able to participate in this exciting piece of research. Should you have any further questions please do not hesitate to contact me.

Yours Sincerely

Andrea Basu

Student undertaking MSc Health Promotion
University College Chester
School of Health and Social Care

I would like to participate in the focus group session and am happy to be contacted by Andrea Basu to receive further information on attending.

Name _____

Occupation _____

Preferred Day to Attend Monday 8th () Tuesday 9th () Wednesday 10th ()
(Please tick)

Contact Address _____

Contact Telephone Daytime _____ Evening _____

Appendix D

Follow Up Letter to Focus Group Participants

2nd August 2005

Dear

Many thanks for agreeing to take part in my research, which is exploring features on food and nutrition reported by popular newspapers. Your participation in the focus group is greatly valued.

The following information provides confirmation of the details for your attendance.

Date	_____
Time	5.30pm
Venue	University College Chester, Parkgate Road, Chester, CH1 4BJ
Location	Molloy Hall Building, Room 1.04

A map locating the University is enclosed with this letter. I would suggest entering the college from the Parkgate road entrance. There is ample parking, particularly as this is non-term time for Chester students. Should you require disabled parking, a number of spaces are available and are clearly marked.

The Molloy Hall Building is marked on the enclosed map. Upon entering the building take the stairs immediately to your right. Continue straight down a short corridor (passing 2 red doors on your right), go through a fire door and room 1.04 is then the first red door in the right hand side.

A colleague and myself will be there to welcome you when you arrive, and some light refreshments will be provided before we start. It is anticipated that the session will last no longer than 1 hour. Should you have any questions about attending, or if you are no longer able to participate please contact me as soon as possible.

Once again my genuine thanks for your support and I look forward to meeting you on the day.

Yours Sincerely

Andrea Basu
Student undertaking MSc Health Promotion
University College Chester
School of Health and Social Care

Appendix E

Focus Group Moderator's Guide

Focus Group – Moderator’s Guide

Introduction

Welcome, my name is Andrea Basu, I am a student here at UCC and I shall be facilitating the discussion today.

I would like to thank you all for taking the time to come along, and for your kind agreement to participate in this discussion.

I am taping our discussion today so that I may keep a careful record of all the important points raised. Please be assured that no names or personal details will be used or disclosed at any point.

It seems that popular newspapers in the UK are more and more often reporting information on diet, nutrition and health, especially from scientific (research) studies. Today I am very interested in hearing your thoughts on two articles I’ve taken from some of these newspapers.

I will hand out the 2 articles separately so that we can have a short discussion on each. You will have time to read each of the articles and then as a group to discuss a few questions on them.

So that my research remains fair I will be unable to answer specific questions about the article until the end, but will be happy to do so then.

Once we have finished looking at the 2 articles I shall briefly summarise all your comments to check we haven’t missed out any important information, and then I will draw the discussion to a close.

▪ Opening question

Ok, so just to get us started... could we go around the room and tell each other our name (first names is fine) and (Just for fun) what our favourite food is! I’ll start.....

▪ Introductory question

When you hear the words
‘Nutrition research’ what comes to mind?

▪ Transition question

What do you think about newspapers reporting information on nutrition?

Red meat in cancer link

Key Questions (Article 1)

1. Imagine you were telling a friend or relative about the article, how would you describe its contents?
2. What do you think of the article?
3. Would you consider following (acting upon) the advice/ information in this article?
4. Now, just jot down on the small piece of card provided, one phrase or sentence that best describes your thoughts about the article (using paper and pen provided).

Probing Questions
Would you explain further?
Please describe what you mean?
Is there anything else?

Article 2

**FIBRE THEORY'S
DOWN THE PAN**

Key Questions (Article 2)

1. Imagine you were telling a friend or relative about the article, how would you describe its contents?
2. What do you think of the article?
3. Would you consider following (acting upon) the advice/ information in this article?
4. Now, just jot down on the small piece of card provided, one phrase or sentence that best describes your thoughts about the article (using paper and pen provided).

Probing Questions
Would you explain further?
Please describe what you mean?
Is there anything else?

Moderators Oral Summary

Close session

May I express my sincere thanks to you individually and collectively for participating in the discussion today.

The information you have provided will be extremely valuable to this study. Once my research is complete I shall send you all a short summary of the results so that you will be able to fully appreciate how important your contribution has been.

Please remember to collect your thank you voucher from before leaving as you've more than earned it!

Do have a safe journey home, thank you.

Appendix F

Tabloid Analysis Tool (TAT)

The Tabloid Analysis Tool (TAT)

RESEARCH NUMBER (CODE)

ARTICLE HEADLINE

Newspaper & Date

TITLE OF CORRESPONDING RESEARCH PAPER

Journal & Date of
Publication

RESEARCH PAPER

Empirical Study

Editorial/ Commentary

RESEARCH SOURCE GIVEN (TICK ALL THAT APPLY)

Journal

Author

Organisation

ARTICLE SIZE

Small
(less than half a page)

Medium
(Half a page)

Large
(Over half a page- whole page and/ or front page coverage)

COLUMN INCHES _____

NEWSPAPER PAGE NUMBER _____

TOTAL No. OF STUDIES MENTIONED IN THE NEWS ARTICLE _____

(1) Aim of the study reported?

Yes No

(2a) Sample size reported?

Yes No

(2b) Reported accurately?

Yes No

(3a) Study population reported?

Yes No

(3b) Characteristics of the population reported fully?

Yes No

(4) Study design stated or described?

Yes No

(5) Method of data collection reported?

Yes No

(6) Method of data analysis reported?

Yes No

(7a) Study results reported accurately?

Yes No

(7b) Only selected results reported?

Yes No

(8) Study conclusions reported?

Yes No

(9) Limitations of the study reported?

Yes No

(10) Headline consistent with research findings?

Yes No

(11) Any information attributed to the published research study that cannot be found?

Yes No

(12) Quote(s) from scientists/ third party health sources not related to the research?

Yes No

(13) Dietitian or Registered Nutritionist quoted in the article?

Yes No

(17b) Would the average adult/relevant population group be reasonably expected/ advised to consume this amount?

Yes No N/A

(14) Any statements attributed to 'experts', 'researchers' or 'studies' that are unsubstantiated?

Yes No

(15) Is a credible source (other than the journal article) i.e. helpline, support organisation, website or GP/ Health Professional, suggested for readers wanting further information

Yes No

(16) For studies focusing on a specific nutrient, are foods/ food stuffs identified where it may be found?

Yes No N/A

(17a) Is the quantity of food/ nutrient linked to the health outcome reported?

Yes No N/A

Appendix G

Focus Group Transcription Group 1

Transcription - Focus Group 1

Ok if we can make a start now, I'll introduce myself, my names Andrea Basu and I'm a Masters student here in the college. Thank you all very, very much for coming along today. I really appreciate your participation cause its really very important for me to help me with my research. The area I am looking at is certainly very topical, more and more we are finding that newspapers are reporting quite a lot of information about nutrition, food and health, and also newspapers seem quite a popular way for people to catch on to things, so I'm quite interested today to actually get your opinions, your views on 2 articles that I have taken from popular newspapers and I'm going to be distributing those in a short while. I will give you one and then you will have the chance to read through it, then I've just got three questions for you to have a little discussion around, and then we will move onto the next one, then I shall draw the session to end. You are welcome to help yourself to refreshments afterwards too.

Ok, so that my research remains fair I won't be able to answer any specific questions about the article until right near the end, I have to stay quite impartial if that's ok, so If I seem a bit evasive that's the reason why, but I'll be happy to answer questions at the end.

Right, so in that case, just to get us started what id like us to do, and I know that some of us already know each other but perhaps just go around the room quickly, saying your first name if that's ok, and if you want to say a little something about yourself, and then just for fun tell us what your favourite food is- since its topical!

So I'll start, I'm Andrea and I'm a Masters student at the college doing the health promotion course, or should I say university now. One of my favourite foods is definitely ice cream, its definitely my weakness I have to say, so I do have to be careful with how often I have it, so that's me. Shall we continue with *****.

I'm Participant A, from ***** , public affairs link for that WI, and I think my favourite food must be fish and chips, which is naughty but very nice.

I'm Participant B, I work in registry here at the University, I don't know if I can pick a favourite food as I like everything, probably chocolate, I'll go with chocolate.

I'm Participant C, retired teacher and WI member, raspberries.

I'm Participant D, I work here at the University in the school of education. My favourite food, I'm not sure, between chocolate and ice cream, probably chocolate ice cream.

I'm Participant E and I'm a retired teacher, a member of ***** WI. I think my favourite food is avocado.

I'm Participant F, I've been retired some long time and without a doubt my favourite food is roast beef, preferably the topside, sorry I know it sounds greedy.

I'm Participant G, chair of home and gardens, so this is quite a topical subject for me. I don't think there my favourite foods but my downfall is chocolate and double cream.

I'm Participant H and I work alongside Person G on home and garden and on the ***** show committee. I've a great weakness for puddings I must admit, but Ive been a farmers wife for nearly 50 years and we grow our own beef and lamb so we do eat quite a lot of that, British beef.

When you hear the words nutrition research what comes into your mind?

Participant E Hospitals

Participant B Food

Participant E And diets

Participant F I think of laboratories

Participant E Nutrition research, either for younger people or older people, research in laboratories as to what its good for.

Participant H To work out the value of food, the value of what you are actually eating.

Participant B I think of you are what you eat, that TV show. (Could you explain a little more about that and why that is), yes, I really enjoy that programme because each week this doctor, nutritionist, takes a person who's really unhealthy and teaches them how to eat really well, I think of a lot of things when I watch that show as well but its just like interesting, interesting that it's a popular programme at the moment.

Participant C I think recently I think of the Health of the Nation and I think of the government, I'll use the word interference.

(One or two yes's voiced in the audience)

Participant F I think of information, for those that don't understand you know what's sensible or not sensible to eat, obviously good for the health of the family generally.

Participant D I think of the balance of carbohydrate, proteins, fats that sort of thing, when you're talking about what nutrition is.

Anything else when you think of the words nutrition research?

Participant F Yes, research err,

Participant D Developments in how it's changing, what people's thoughts on it are.

Participant E Changing habits and behaviours

Participant A What is nutritional and finding out what is cause I don't think a lot of our food is nutritional. So I'd gladly have research to make it nutritional, if we could. I'm envious of this beautiful food across the way here (refers to farmers wife sitting opposite and her own home produce), at least you know what's in yours full stop, that's the part that bother me the most.

Participant F And with changing times are you looking to the past a great deal or at present or future developments in your researching, are you covering what you think you wish to portray, how far are you delving into the past with recommendations, or are you looking at present things like E numbers and you know things that are not supposed to be where they are. Yes its a huge field isn't it.

Participant G Yes, nutrition, you could say where has that food come from, has it come from farmland near Sellafeld or has it come from a very good

Participant H Or has it come from countries that don't stick to the laws.

Participant C Organic food isn't as good as we think it is because of the soil, it might not contain all the nutrients that one needs for ourselves.

Yes, that's wonderful thank you, just moving on a little bit more now. If I was to ask you the question what do you think about newspapers reporting information on nutrition, what would you say?

Participant C I'd welcome it

Participant F Yes I read most days about food in some form or other in the newspaper

Participant D I think its good provided its correct information...

(Voices say yes in agreement and nods come from around the table)

Participant D Yes, and not just jumping on the bandwagon, just because one minute your eating something you think you should be, next minute its bad for you and next minute its good for you again, you know wine and alcohol and such like and then its sort of like who do you believe and you end up with such a mixed story that you don't think you are and what's the point anyway.

Participant A But I get confused because over butter and milk, I was saying that butter and milk are good for you, but particularly with mums now, most mums don't think they are

Participant C You need moderation

Yes

Yes

Participant A Not a lot of children I'm afraid are not getting the amount of milk they should.

Participant H I think there an awful lot that they don't tell us (people nodded in agreement), because as I say we are milk producers and err and if you chat to the tanker drivers they will tell you things that the newspapers will not tell you, like plane loads of milk coming into Manchester everyday from Poland and our dairies regulation filters will not take that milk because its so dirty. Now you see we're not told this are we, and that's what worries me, what we are not told.

Participant F I think articles in newspapers, many of them have jumped on the fashion bandwagon, as nutrition has been a sort of popular subject really, but I think it's a very good idea cause because it is amazing, obviously I'm old but the younger generation it is amazing that so many of them have very little idea of what proper food is. I'm just amazed they don't stick to a meal, they don't plan ahead, and yes I

think it's a very good idea. Yes providing it's correct (group agreement again, voices saying yes).

Participant E Yes providing its correct, I brought an article today which err, its in the Telegraph about milk and the problems with ovarian cancer apparently, and that's the first paragraph, and then when you read it very very carefully, milk is good for you, and their research was not very satisfactory. But the headline, first paragraph was that its now causing ovarian cancer, and that's the daily telegraph, and I disbelieve, I'm very cynical about everything I'm afraid. Yes (one to two other yes's from around the room), I think information is very good and you take it on board but you question it, but not a lot of people do because if you'd read that article you'd start saying that its bad news for the dairy industry people will stop drinking as much milk.

(Hand out first article for reading)

The first question after reading the article... if you were to imagine that you were talking to a friend or relative about this article how would you describe its contents.

Participant A Overdramatic

Participant D My immediate thought would be well if you cut it out what would you be missing out on as well though, like iron for example and all the other things that you get in red meat.

Participant A You see they're complaining about meat, but our friend here knows where her meat comes from so she's quite safe, our meat what I buy, I don't know what's in it? Its pumped to death with all different sorts of types of waters, there's allsorts put into our foods, into the meat chain, so it might not be so much the burger, if it was made of your red meat (gesticulates to the farmers wife opposite) it would be fine, but if its made from the types of red meat that I buy it, no it wouldn't be, and that's the problem.

Participant C It's a very confusing piece of work isn't it

Participant E Yes it is

Yes

Yes

- Participant F Everything's thrown at you
- Participant D Yes, different types of cancer, its almost like you jump from one type to another.
- Participant C And then it just says its thought that smoking, obesity and inactivity are still thought to be the most, the more strongly linked with colon cancer and eating red meat

(Laughter amongst the group)

- Person G I mean we had all the problems with McDonalds and the person just eating burgers all of the time, obviously its going to make something a problem. I mean who eats a burger a day?

- Participant F You'd be amazed.

- Participant D If you had plenty of ketchup would be all right though wouldn't you, isn't it the lycopene that's supposed to help isn't it.

- Participant H They are going to be eating other things as well so why are they just picking out that you know, they are probably going to be going out, to the public now, drinking 10 pints.....(gets cut off)

Mentions of foods such as fish and chips (unable to decipher as people talking over one another)

- Participant G Yes, if they are going to be drinking a lot, more alcohol, the rest of the days not going to be healthy living is it.

- Participant E I was just going to say that I read an article in the paper on Sunday about the Atkins diet and perhaps if you read the book in the Atkins diet, you know the correct book written by Atkins, its perfectly safe and can be, and err Doctors agree with it. Its people like, other people taking the Atkins diet and just taking little bits out of it. So that in itself its again, its not right, its isn't correct.

Participant F I would say some of the information is useful but maybe for the people who do indulge in eating these things, some of it would be, but nothings really proven is it.

Participant B I don't think anything in it is actually incorrect, or a lie I just think it's just the way that they choose to favour (lots of hums in agreement at this very point), and the percentages that they use. If you look at what the actual, what its saying it that it increases their chance of about 70%, well that's within another proportion...(people talking over one another)... really you are probably looking at around 2-3% and not 70 % but it makes the numbers look more interesting so

(Several hums in agreement)

Participant F Yes of course

Participant D And its not just an isolated thing either I mean there are the other effects that could be effecting it was well as just what they are eating, I mean it could be the environment they live in, it could be us.

(Some hums in agreement)

So to just reiterate then, how would you describe the contents of the article

Participant F I would say read it, use your common sense and to take out pieces that you know will apply to you. (Several hums in agreement)

Participant E I think its confusing

Participant F Yes

Participant G Its giving you all sorts and yet its just telling you that a well balanced healthy diet

Participant D Yes its what you need

Participant B It could have been said in a sentence.

Participant C Which would not be eating a burger a day

(Several 'no's' voiced in agreement)

Participant A Well its says a burger a day dramatically increases...to a captive audience....

(Talking over one another, unable to decipher conversation).

Participant F At the same time as another study so you've took contrasting points of view haven't you, it's a little bit err frightening in a way isn't you know, people think gosh I'm quite annoyed about this, so is that what its meant to be?

I think we are spilling into the next question now so I will just ask - What do you think of the actually about the article, what do you actually think about it?

Participant D Read it but don't necessarily accept it as fact.

Participant G It hasn't made an impact on me

Participant D It hasn't made me think I wont eat red meat tomorrow.

Participant C I think it perhaps comes from the sort of paper that you wouldn't read and therefore that title, the second larger print, I think that could, perhaps shock and move the people its meant to shock and move.

Could you explain just a little bit further?

Participant C I think if you're the kind of person that doesn't give a lot of great thought to diet, this is definitely fast food stuff isn't it?

Participant A Yes

Participant C If your perhaps not keen on cooking and want to do anything in a hurry, no time to prepare food of your own and you do eat fast food regularly I think its meant to tackle, its meant to the people who perhaps are overeating, cause I mean lets face it some people don't just have one a day, they could have a double burger or whatever. I think it would work for perhaps people that don't more about what they are eating. Just to shock, and I think that the shock tactics could work

(a couple of humms in agreement).

Participant H The last paragraph probably has no relevance to the rest of the article but because it suits, it fits in

Participant D Hum

Participant E Yes

Participant D It's a big number

Participant E Yes

Participant H Then they've used it to suggest of course what the rest of the things have said, but it just says that the incidences of bowel cancer have risen.

Participant C Yes

Participant E Yes It mentions breast cancer; its mentions smoking it mentioned bowel cancer...

(Unable to decipher discussion as all talking, but centred on the fact that article flits from one thing to another).

Participant H It could be totally irrelevant some if it.

Participant C Yes, because it's pricking your conscience isn't it. It isn't a very nice photograph either is it, because you've got this enormous sized burger (much agreement and laughing of disbelief amongst the group) and then this terrible drink by it as well.

Participant F Well that's journalism for you isn't it (talking over each other but in agreement).

Participant E It's made you read it, yes

- Participant F Shock tactics
- Participant G Yes, but its not going to make me sit down and really think...
- Participant D No
- Participant A No
- Participant E Although we do eat quite a lot of red meat.
- Participant A Yes
Participant C Mind you if it gets 5 people to think about how they manage their own food out of 5000 well its worked hasn't it
- Participant B It makes me think I'm glad I'm vegetarian that's all. To me this article is not relevant because I don't eat meat. So I'd just say yeah, ok.

OK, any other comments?

And lastly, would you consider following the advice in this article, or consider acting upon the advice.

- Participant F Well one does already, to ermm, pretty well. You know as I say its common sense. It's the way you don't overdo anything, and you eat regularly and you prepare your food, you go and buy it you come home. In fact I was at a meeting on one occasion and introducing packet soups and the lady was going to give me me piles, she said have you ever had packet soups, I said good heavens no I wouldn't have packet soups, I must tell you 30 years on I would have a packet soup. But at that time it time it was quite odd to me and our generation didn't do that did we, we made our own soups (humms in agreement), and from your point of view (gesticulates to the lady across the table who previously discussed concerns over what might be added to meats) we knew what was going in them.

Would you consider acting upon the advice in this article?

- Participant D I have to say that err well I've got a few days leave Thursday and I'm going down to my sisters in the West country, and my partner said to me yesterday well are we going to stop at McDonalds on the way down, well that hasn't made me think, well I don't like McDonalds much anyway but it just seems that we are going to stop at McDonalds

on the way down, but that hasn't made me think right I'm going to have chicken nuggets instead then instead of a burger.

Participant A I wouldn't encourage my grandchildren or anyone really to be eating in McDonalds red meat

Participant E It does say really red meat doesn't it, and mentions steak.

Participant C But its suggesting burgers

Participant F I think though if you haven't had it for a week then you yearn for gravy, veg and red meat you see

Participant D I mean lack of red meat, its one of the main iron things, you get iron from isn't it.

(all talking at once, couldn't decipher words at this point)

Participant C I tend to eat more chicken and fish so I don't think it's catering for me personally so that's why it's a difficult question really, I wouldn't take ant notice.

Participant D It all boils down to the concept that you need a balanced diet doesn't it.

Participant G Oh yes

Participant F I not saying I wouldn't eat it (burgers) though, I don't but its not a thing that I would, if it was convenient then you know I would

Participant H Once in a blue moon its wouldn't do any harm

Participant F Yes that's right

Participant C It depends on what a burger is though doesn't it.

Participant E Yes

Participant C If you didn't listen to the radio and knew in the last paragraph about this rise particularly in male, males of, in their last 20 years it says

doesn't it 15%, If you didn't hear that on the radio and your newspaper was where you read that, and the last thing you read is always something you remember, you then go back and say well cricky I didn't know about this bowel cancer and I'll go back and what does it say. It doesn't say don't eat burgers ever, it says doesn't it a burger a day for 10 years, for a decade isn't it?

(2 people rely 'yes' together)

Participant H I think it's horrendous

Participant G I don't think the article is totally bad, we're cynical because we perhaps, it doesn't apply to us and therefore we wouldn't follow it in great depth, but at the same time there are some people who, who don't realist that eating a burger a day form the age of say 15-25 has done some harm to your bowels.

Participant F Do you think they would be able to understand this article though because its quite high flouted

Participant E Oh I think so

(People talking at once so unable to decipher some conversation)

Participant A But it's a bit misleading though cause it says here consumption of red meat over 10 years, those eating more than 3oz a day increase the risk of cancer by 35%. Now I managed to by a piece of beef over the weekend and my poor fella had that most of the week

Any other comments?

Participant B More people nowadays can afford to eat red meat everyday whereas 20 or 50 years ago they couldn't and so it might be that red meat really is linked to bowel cancer and that's the increase but problem is there's no proven cause that anything is like linked, and so there's links that they've found but they cant say this is definitely the causes of this. They can just say it seems to or appears to be this, but no one really knows

Participant F I would dispute with you about the cost of meat I mean when I was young all the working classes ate meat and they could afford it, its was affordable and its was good but there wasn't the same, well there was no prepared food was there.

(People talking at once, unable to decipher discussion)

Just jot down a sentence or a phrase that best describes your thoughts on the article you've just read

"This article gives lots of fact but leaves you not very interested because we all know a balanced diet is best for you"

"An article to shock—aimed at the readers 'fast food' eating habits- hence the title headline (title) and caption below the picture- and the closing paragraph."

"Not a bad article, although slightly melodramatic, the facts seem to be correct. Chances of someone eating a burger a day for a decade are very slim"

"Interesting but dramatic. People article aimed at will probably not take much notice"

"Those eating more than once ounce processed meat daily increase their chance of cancer."

"Quite shocking, rather mixed information- not proven but helpful for general diet"

"Confusing, overdramatic and too much information. Is the title of the article linked to all the information in the report??"

"Shock tactics- read, absorb but be wary- there is little evidence of true undisputed fact."

Ok, quite a short one compared to the last one, the questions are the same, but I shall ask them again in turn.

Imagine you were telling a friend or relative about this article how would you describe its contents?

Participant F Eating fruit, vegetables sand bran cereals might be no good at all for constipation.

Participant G And we all thought those should be the ones we should be eating

Yes (talking over one another unable to decipher conversation)

Participant F Things get disproved over the years don't they, and good advice turns into not so good advice doesn't it, its like Doctor Spock. But I would say from personal experience that it's probably quite right. Cabbage and roast beef will help you more (laughter amongst group).

Any other thoughts

Participant C I think what's next?

Participant A You know fats and sugars are not good for you (hum x 1) the eggs are not good for you (hum x 1), I said about the butter and all the rest of it, and then they turn around in the next breath and say yes it is good for you. You just don't know really where to go, so for younger people with families they don't know what matters really having all this being thrown at them. All the things they thought were right, and then they're doing it aren't they and then this tells them its not doing you that much good anyway so why did you do it?

Participant C Good that (sarcastic, intonating that the article is not helping)

Participant H Quite a bizarre option

(Unable to decipher conversation- talking over one another)

Any other comments

Participant B The second sentence there because its says only 20% of people benefited from eating lots of fibre such as fruit, vegetables and bran cereals but actually those are good things to eat (lots of nodding and agreement within the group), but its sounds like only 20% of people found it helpful to eat fruit vegetables and fruit with regards to constipation. Cause I'd read that and think I don't need to worry about eating fruit and veg now.

Participant F Yes yes, that's certainly a point isn't it

Participant A Although it says only modest its still there its still working for them

Participant D It says it can make you worse, but wheres the proof (hum x1), because 20% of people is not a very high percentage is it.

(Hums in agreements)

Participant C It hasn't actually said what worse is?

(Numerous no's in agreements)

Participant B And what can really make it worse

Participant C Definitely

Ok good, is there anything else on that point

Participant F Well it seems both the article's you know are catch the attention aren't they, to be shocking, so I suppose they are successful in that event, because one would say oh my goodness, and read it, and you've got to make the headlines grab you.

Participant E Yes it does actually make you read it

Participant C The headline is fun isn't it. It's further down the line if you're the person that reads the article

Participant E I think you should take it with a pinch of salt, except you shouldn't (joking about the metaphorical use of salt!)

Participant F Yes but he's probably going to make his money out of this (meaning the professor quoted in the article)

Participant G But it's very contradictory because he's saying that the fibre and the fruit they're really doing you that much good when everyone knows that just not true.

Participant A I mean he says they are making you worse?

Participant F It doesn't say what it is, what it means or, was this from a popular paper or?

(Several hums out of interest to know this)

I can answer that at the end

**Ok, I think we should move on to the next question as I think we are coming onto it.
What do you think of this article?**

Participant A Chuck it down the pan basically

Participant C It's a joke

Participant H It is

Participant B Its only 5 sentences as well, I mean I know that you can, its just there not much there and what is there doesn't really seem to be necessarily accurate, it's a bit disturbing. I would just hope that no one bases their diet on this 5 sentence article, cause I don't think its very good

Participant F What's left to eat? We'll all be starving

(Laughter)

Participant A It's just ridiculous and its very frightening because people are getting these thrown at them all the time and it must be very to decide what the best food is to eat, we know what the best food is, we've been there

Participant E I mean it says patients may no longer be bothered by ineffective advice about fibre, I mean obviously they are not going to be bothered by ineffective advice.

Participant H Its complete rubbish in some respects

(Considerable agreement within the group, nods)

Participant C It's just to catch the eye isn't it and just...

Participant A He's trying to sell his report; perhaps it's just a bit of publicity for him (referring to the professor)

Participant C Perhaps it's the first of April? (joke)

**Ok, any other comments on that point? No, ok then lastly,
Would you consider following the advice or acting upon the advice in this article?**

Participant G No

Participant C No

Participant F Oh, no

Would you explain further?

Participant G Well fruit is very good for you isn't it

Participant D And yet its 20% of what's worse and what's. ...(gets cut off)

Participant H Is it because you need to drink more liquids with, when your eating high fibre foods, they are not telling you?

Participant C Well it might be saying that its... it is in fact fruit, vegetables and bran fibre foods were causing you to be constipated

Participant E No less constipated, in fact too constipated cause it's down the pan (joking)

(Talking over one another and unable to decipher some discussion)

Participant F It's very individual
We're told something one year, the next year its disproved, ones just got to decide for themselves

Participant D And everyone's environment is different and that causes stress

Participant F Yes, and stress

- Participant E Yes your right
- Participant A Well you see you've the other article here haven't you which says to me over three quarters have not known about not eating enough fruit and vegetables can increase the disease, now this one here, the down the pan one is saying that well you don't need them. So someone's got to make their mind up haven't they, and that is the thing that worries me most of all about food today.
- Participant D You can't take it seriously
- Participant F Yes, here's this article saying, yes do have it and this other is saying well not you know.
- Participant A And people are confused, children aren't getting the right amount of carbohydrates if we just looked at small children rather than this gentleman having his burger (refers to picture in the first article), the amount of children for brains cells need carbohydrate, they need milk for their bones, an awful lot of women today are getting osteoporosis caused by various things the pill, hormone replacement etc. so you do need help from a nutrition point of view don't you
- Participant F Yes, most definitely
- Participant A So it's a great worry I think that myself.

Any other thoughts on that last point?

Ok, so lastly on your other card if you can just do the same as last time and in a phrase or sentence put down what best describes your thoughts about the article.

"Headlines catch your eye but content not very convincing and I would not follow this advice"

"Whatever next? A joke approach to a real problem for some people- confusing to say the least"

"Too short, misleading, and I wonder if it was cobbled together to fill up some space in a newspaper"

"Not very clear as to an alternative to high fibre"

"Its success as a treatment for constipation was only modest"

"Say Drs- only Prof. M Lissner's opinion not useful"

"Not to be taken seriously"

"Ineffective, nonsensical advice, take it with pinch of salt and flush it down the pan".

Thank you very much you all your thoughts and comments, although you might not think it they are all very valuable. The questions I asked you were all very open questions, just trying to pull out your thoughts.

Does anybody have any further questions about the articles?

(Moderator offered some background information on the articles e.g. where they are taken from, what the studies actually say, in response to participant questions)

Participant E Does anybody, I mean like you know that you've said these articles aren't accurate entirely, does your organisation go back and complain to the newspaper, you know how you have these comments I mean it's a way of life with the newspapers that everything we read we cant really say is true, who questions all of these things that we are being saturated with?

Absolutely and this is exactly what I am doing, I'm doing this piece of research because nobody is questioning it, I agree with you wholeheartedly

Thank you

Additional Information

Who were the group?

- A total of 8 women
- 6 WI members (did not all know each other), all mostly retired and in their 5th or 6th decade of life.
- 2 admin staff form within the college- in their 30s.

Appendix H

Focus Group Transcription Group 2

Transcription- Focus Group 2

I know you already know who I am but I'll just say my name again anyway, I'm Andrea and I'm one of the masters students doing the masters in health promotion here at the college. Thanks a million for coming along today cause I really do need your thoughts and your comments to make my research work, so I do really appreciate you coming. As I've mentioned we are taping the discussion today but it's purely just so I can keep a record of comments. Obviously everything that you do say wont be traceable back to yourselves, all the names will be removed.

Just to give you a bit of background really on my research, I cant perhaps tell you too much now but Id be more than happy to answer more specific questions at the end. But its really centred on the fact the newspapers, being a popular form of media and equally the public interest in nutrition, the two at the same time seem to be working quite closely together, and we see now more and more newspapers reporting on nutrition, health and food. So I'm just quite interested specifically today to get your comments on two articles that I've recently taken from popular newspapers. So what I'll be doing in turn I will take each of the two articles, I'll give you a chance to have a little read, and there not long, and then we'll have a little discussion around three questions and just as I say to get your thoughts really. Ok, just so that my research remains fair I will be unable to answer any specific questions about the articles until the end, but I'll be more than happy to do that then, that's absolutely fine. Then once we've finished going through everything I try and pull together all your thoughts and do a quick summary before you go. If you do want to help yourself to a drink or whatever before you go, IK don't want to be left with food, so do feel free to help yourself.

Ok, I just want to get us started first of all, so it's just a bit of fun really. I have put little name cards out but if you can perhaps just, If I start with myself, say your first name, just keep it really informal, if you want to say whereabouts your from in the college, I know some of you have already done that but the main thing is, and its just a bit of fun, say what your favourite food is, just cause its topical.

So I'll start I'm Andrea, I'm a master's student here at the college and I think one of my most favourite foods is rich dark chocolate, the 70% coco solid dark chocolate, I love it, so that's my favourite food. So starting with*****

I'm Participant A, I work in student development; my favourite kind of food is fish in more or less all different varieties.

Very healthy (some laughs)

My name is Participant B and I also work in student development and Id say any kind of cheese which isn't so healthy.

I'm Participant C and I work in the marketing department and I like all food (several laughs), one of my favourites, I've got a sweet tooth, is ice cream

I'm Participant D and I work in marketing too Id say my favourite, well favourite meal all round is a lamb dinner.

I'm Participant E I work in learning resources, Like Person C I do enjoy my food I try to do more healthy eating but I do like steak.

I'm Participant F I work in work based learning I'm trying to think what is my favourite food? I just love food. I think I more or less live on fruit or veg.

I'm Participant G and I think my favourite food, I think I'm probably with you Andrea, good quality dark chocolate. A nice little bit of chocolate.

I'm Participant H as well, I love all food in fact it would upset me if I had to choose one, I don't want to upset any of the food groups, but the strawberries, crisps and sandwiches are going down really well. (Referring to food provided at the session)

Glad to hear it!

Ok, thanks for that, the first thing I want to ask you before we start looking at the articles is when you here the words nutrition research what comes into you minds?

Participant F Things that will do us good, that's my immediate thought that will nourish without doing any harm.
But that's just nutrition

Participant E I think I thought it was looking into both side of nutrition you know harmful and beneficial.

So nutrition research- any other thoughts? Those two words

Participant H I think about healthy well being, looking into research in healthy.

Participant F I was thinking of genetic foods unfortunately which has not had a good press recently has it, but research does bring that to the front for me anyway.

What about anybody else, any other thoughts?

Participant D I agree with them, what's both good and bad for you as well, though you tend to hear most about what's bad for you

Participant A Id pretty much say that too there's a lot of scares about particular food groups and particular ways of eating going on at the moment, and I think there has been a lot of research piled into that area.

Participant B Especially things that were perhaps thought to be good but now people are looking at them they're thinking now they are not so good for you.

Participant C For me its more about kind of understanding what you are putting into your body and what's done to foods and the makeup of foods and that kind of thing so its more about understanding foods really.

Participant B And actually what your body needs to function properly

Yes

Hum

Yes

Participant F Yes there's lots of articles about the vitamins and mineral contents in things and everything, and some of them now contradicting themselves aren't they. What used to be good for you is no longer good for you, and what we thought was in some things is proving wrong. Once, once they are actually got into the??????? I presume.

**Great, ok is that all the comments there for that point? That's lovely, thanks
And then one further question before we go into the articles.
What do you think about newspapers reporting information on nutrition?**

Participant A I think sometimes its really worthwhile because you know we should really know what's in what we are eating, but sometimes as well it can play on hysteria and get really scaremongerish. For instance after they did the Jamie Oliver school programme everyone was reporting on it, especially the local papers doing their local schools. And I remember when 'Supersize Me' came out I read an article in the Times where somebody has also done it but they'd done the healthy options at McDonalds to see if they could do that so I think that there are some good sorts of information but it can be really reactory and you know just spur on unplanned hysteria and things like that, especially with things like BSE and GM, genetically modified foods and BSE, you know some of the tabloids went to town on that and we were all going to die and you know the people were.....(gets cut off)

Participant D In terms of concern I think it would depend on which kind of newspaper its being reported in and how much notice I take of it really

Ok, could you just give me a bit more on that?

Participant D Well the tabloids, they do seem to sensationalise things, and when you listen to things on the news as well, say the evening news or something and they don't correspond with what the newspaper says half the time so.

That's interesting

Participant H I think its really interesting reading about nutrition and food, but sort of echoing what you said then its how informed these reporters are, and it can be so disastrous the point they are putting across if its false, if its wrong, if they're misinformed what they are reporting to the public is not correct, I think that can be quite dangerous.

Participant B I get the impression some times that tabloids like that they will get one case and present that as this happened to one person so this is a real danger, whereas I want to hear actual facts and figures for the whole population and not just one person that is affected.

Participant H Yes

Participant G I think you can become quite political as well., especially with things like GM and BSE and things. Some of the papers maybe engineer things to a certain political wavering or our standing within the EU and the bigger picture really. It can be quite damaging as well as beneficial.

Participant A That's something that it always comes back to, it always comes back to EU and Brussels when, especially when tabloids are reporting on it and erm hear about straight cucumbers and this sort of thing, its such a big bug bear, and they are always going back to it.

Participant F Its good that things are made public, at least that is happening. You used to get the impression that we were eating things that were wrong for us but no one was bothering to tell us, they weren't even doing any research on what we were eating. Now it seems to be going quite the other way.

- Participant E I think that perhaps maybe they were doing research but it wasn't publicised.
- Participant F Made public
- Participant E Or it wasn't sensationalised and I think the tabloids do as I say pick up on one thing and sensationalise that because they want to sell their newspapers, so if somebody down the road in the local area has had MRSA, well not MRSA but you know but erm whatever regarding nutrition they are going to sensationalise that to sell their tabloid, whether its correct or not or they've just doctored it a little bit.
- Participant F Does anybody remember the scares when Edwina Curry was talking about eggs?
- Participant B Yes
- Participant G Yes
- Participant F And we are now free to eat, as many eggs as we want aren't we, according to the opposite publicity that has more recently come up.
- Participant D I actually read an article, I think it was in the Sun about beer and how beer is good for you (laughs among the group), and it gave you like a check box of all the different things, I just thought that was pretty silly.
- Participant A Or pretty good (jokingly)
- Participant D It just seemed unbelievable some of the things even though perhaps they could have been true but they just put it across in a way that was like really silly.
- Participant C It's quite dangerous though really though isn't it because its confusing peoples perceptions, I mean you don't really know the truth, and I mean especially with what's in the newspapers at the moment about binge drinking and take away foods and fast food, all the time playing with peoples perceptions of what is actually good for them. It's quite dangerous.

Participant B But sometimes I think if you listen to everything the papers and the media says you wouldn't eat anything. Even fruit and vegetables have become... with pesticides...

Yes (agreement from around the room)

Participant G And the thing about carrots being carcinogenic

Participant B Yes

Yes

Participant F Arhh, but it has to be organic (jokingly)
There was a survey in yesterdays paper, my paper anyway, about what organic foods were in fact better than ordinary foods, most of them I must admit they came up trumps with, the fact that organic was better, but not on every count, which is worrying because its very expensive isn't it organic food. Oh there was a recent survey telling you chocolate was good for you!

Laughs

Participant G That's good to hear

They are all really valuable comments so thank you for all of those. What I'm going to do know is, I'm just going to hand out an article that I've recently taken from the press, so if you just want to take one, I'll give you a few moments to read it. The second article will be shorter than this, but I'll just give you a few minutes to read over this one.

Is everybody ok, need another couple of minutes, that's fine?

Ok, there are 3 questions. Now my first question is, imagine you were telling a friend or a relative about this article, how would you describe its contents?

Participant D It just seems to be throwing statistics at you a bit, and then swapping and changing from red meat and then it goes onto the Atkins diet and then it mentions breast cancer and fruit and veg and then its back to the burgers again.

Participant H To me it seems that the reporter has been given the job to report on this, so they've gone away and gone right look on the internet, right burgers ok we've got that with red meat, ok someone a research right has said that, and its just kind of piecing it together without giving anything a full in depth research.

Participant B I don't think it tells me anything I didn't know already, seems like pretty much common sense though. You shouldn't really eat red meat everyday but also all the other factors that can contribute to cancer, its just seems like we knew all that already.

Participant F Yes it's telling us things we already knew isn't it.

Participant E But I think your looking at it and thinking oh god what can I eat then. What's left that you are going to eat that's not going to harm your body, so how many times are you going to have to say it.

Participant G I mean its basic message I guess is that a healthy balanced diet is going to help you avoid cancer potentially but its not really clear that that's what its trying to say, its more sort of don't do this than do do this kind of thing, its not particularly positive, it didn't make me think oh that's a good tip to try and avoid getting cancer kind of thing.

Participant B That point though its just kind of tucked in the middle though its not..

Participant G It's not positive at all; I can't find really what the aim of it is and what they are trying to get from the audience.

Participant F There is several research projects mixed up in this one article and its calling in the one from the American Medical Association, and yet this one seems to have been called out by the cancer research UK and whoever wrote this is dragging in things from all over the place, that aren't really relevant to the meat issue.

Hum.

So, what do you think the article is trying to tell you then?

Participant H Don't eat spaghetti Bolognese (laughs, shared amongst the room, point raised in some jest).

Participant G If you look at the headline its telling you about the link between cancer and red meat but when you actually read the article it doesn't really home in on that at all, its trying to tell you that a balanced diet is whets positive but it just doesn't, for me it just doesn't do it effectively.

Participant E I think its telling us just to become more aware because they are saying that Britons ignorance about how to avoid cancer, I think its just trying to make us aware that its not just like red meat, its, but whether you take that as truth or not I don't know.

Participant C The fact that it starts thought with like that they've found red meat, it homes in on that, you know its like they are saying red meat, though they are, red meat is linked to cancer.

(Hums from some participants)

Participant E I don't have steak everyday honestly!

(Lots of laughs)

Participant G It kind of scaremongers though doesn't it

Yes

Yes

Participant G Because they're targeting red meat and cancer link realistically what it is actually doing there that really backs that up, is ok there statistics in there but there are for alcohol and fatty foods as well, so its almost like they want to use that as a message. A message to sort of hook you in, but then its not really about that.

Participant D It says right the way that it can increase the risk of cancer by a third. It might do but not that it will
But that's what, that's what the top says red meat and cancer link, that's pretty definite. And the first paragraph says even one burger at day can increase the risk of cancer.

Participant C And who's, like its says like bowel cancer among men has risen by around 15% in the past 20 years but who says it has, where are they quoting from.

Participant G It doesn't look into things like the ermm their research has been done on people who have been aged between 50-74 but it doesn't take into

account things like medical progress or progress in actual research, and it does say somewhere doesn't it about people who don't have as active a lifestyle and how that generation of people may have a completely different link to, between cancer and red meat than our generation because of awareness and stuff it sort of drags on it a little bit but it doesn't really take that into account.

Participant A Its very specific for a range of people as well, its like the title suggests that it's a blanket you know, eat a burger a day and you will get cancer, but when you read the research its ok if your between 50 and 75 and eat a burger a day everyday for 10 years then you may get cancer.

Participant G It may be that this was in Saga magazine (a laugh from another participant), so you know it could be really relevant to that audience.

Participant B But something it doesn't say which surely given this article would be quite important is how often its safe to eat red meat or what is recommended by nutritionists, after reading that I would think well how much, how often I should eat it, I'd be quite concerned

Participant G We're starting to talk about red meat like it's a poison aren't we and its just a food

Participant B Yes

Participant C Well is it, we don't know?

Ok, thanks for all those comments, I think we are spilling into the next question so I'm just going to bring it up quickly- what do you think of the article quite simply?

Participant H I think its designed to scare you, a bit too much to be honest cause if I was reading this in a magazine I would only probably read the first paragraph and go oh my god, and I wouldn't bother to read the rest of it

(Laughs from around the room)

Participant H And its not very effective really enough for me

Participant E Yeah, well I would, I'm in that age group, 50-74, and I think that age group they didn't have as much information as what yourselves get now, you know in the press and everything like that about what we've

eaten and what we've eaten wrong, and I think now from that age group its telling on us now perhaps because all the years we have been eating that. But yes I would read the whole article, everything. I would say (gasps) oh my god, but I want to see what else I can eat, oh my god I cant eat cheese or...

(Laughs amongst the participants)

Participant G It is quite a negative article isn't it with the headline and the picture, and then but when you read it, its like oh well if you eat a balanced diet than that's the main thing, but how many people get that are in the article so.

Participant D I'm finding it hard to take it seriously anyway cause of the size of that burger (several laughs).

Participant E Oh it's American!

Participant G To be honest Id probably read it, turn the page and not think not think much more of it, like with any other tabloid

Participant B Oh yes I do that a thousand times

Participant F Its just one more article, telling us the same thing that we've been told so many times that we almost become deadened to it.

Participant E But are we taking notice of it?

Participant F Well this is the problem isn't it

Participant E Yes

Participant F I'm also in that older age group and there were no burgers when we kids were there? (Directs speech at the similarly aged women next to her)

Participant E God no, Jam butties

(Lots of laughter amongst the group)

Anybody else want to add what they think of the article if you haven't already?

Participant A Well, I suppose it tries at the very beginning to show you like two sides cause its going, but however you know at the beginning of each paragraph, so look at me Im a balanced article but its like you know the information its using just doesn't convince you of either point so

So are you saying that you don't feel convinced by it?

Participant A Well its stuff that we already knew so there's like nothing new in there, and because of that it doesn't really convince me if you know what I mean

Participant B It needs to be presently the information in a new way to make you take notice . It's not original

Participant H But we're interpreting this article now though in a focus group session where we know we are going to give feedback so we are really paying attention but if you take an average everyday flicking through the newspaper, especially me I'm the type of person who reads it and goes (gasps), you know and it does scare me and then I go away and think well no, you know its red meat, as long as you are eating a healthy diet and your not having it everyday, but you know, should I be having the spag bol on a Friday night , you know

(Many laughs)

Participant H But little things like that, these stick in my head I think so I would remember from that oh you cant eat red meat everyday, but I would remember it, not in a scared kind of way, I wouldn't necessarily not eat red meat every day but you know...(gets cut off)

Participant F The more articles I see like this in the paper and lets face it there are more and more of them, the more I'm convinced that its everything in moderation. (some hums), it's the sensible middle way, and that seems to be emphasising it actually when you do try and read it and absorb it.

I think again quite nicely you are progressing onto the next question

Participant G Sorry

No, that's fine that's good, it means I've got my questions right. The next question then would be, would you consider following or acting upon the advice in this article. Some of you have already given comment on that but are there any other comments?

Participant F Well I read it and I thought well I already live like they are suggesting, but I don't eat red meat everyday, and I do eat lots of fresh fruit and vegetables and I do have a balanced diet and I've brought my children up to eat in the same way so I'm thinking, ok people who get cancer that the cause of cancer they don't seem to be able to isolate, they are looking everywhere for causes of cancer and its almost as if they can pick on anything and have a go at it does that to me I'm afraid when I read it. Yet more articles highlighting the possibility of this is what is causing cancer.

So anybody else, would you follow this advice? Take it on board?

Participant E I would yes, I would definitely. Id think every time I ate something oh I shouldn't be eating this but it s here, its there but.... and I think they are saying about red meat and what have ya and food and all that, if your you know a one parent family and you've got a lot of children it's the cheaper side of foods, meat you see them buying everyday, just to fill the kids up and because they cant afford all the expensive. But, yes I would yes I would read that and think yes ok.

Participant B I think that its quite easy when you read things like this to be quite smug with yourself and think well that doesn't effect me, I don't eat red meat everyday, I eat a healthy diet, but then the next time you go to McDonalds, you sort of, well that goes out the window and you don't think about it and you bury your head in the sand and as soon as you've turned the page I've forgotten about that.

(Hum x1)

Participant G What concerns me the most about it and what makes me think that now only its ok I don't live like that but it also makes me dismiss it at the same time is that at the end it doesn't say that you can have incidences of bowel cancer happen to people even if they haven't eaten red meat (hums x2), it doesn't, it kind of says this is the only way, if you do this you will not get cancer and that's quite frankly not true, so I just think its biased, it make me quite angry actually.

Participant E Is there more to this article or have you just taken one page from it?

That is actually the entire article and I can give you a bit more information at the end about its content. But yes it's the entire piece. Wonderful any other comments on this article?

The last thing on this article, if you wouldn't mind, there is a little piece of card and a pen in front of you. What I'd like you to do is just jot down a phrase or a sentence that best describes your thoughts on the article, just a summary really of your own thoughts and feelings about it.

"Scare tactics- meant to shock the reader. Not very useful. Quite negative. Most people don't eat red meat everyday anyway"

"Eye catching headline. Made me continue to read whole article as I wanted to know what I could or could not eat or drink without 'cancer' side effects"

"Dramatic, unclear, states the obvious in regards to a balanced diet etc. doesn't really state anything not been warned of/ heard before. Doesn't say what is the recommended intake/ how much, how little you should eat"

"I felt the article was biased and unclear in its intended message. The different examples used seemed 'canned' and didn't link well. I would probably not be greatly influenced by the material, but don't eat red meat anyway."

"Eating red meat can increase the chances of getting cancer Why? Doesn't specify. What else causes cancer? So many possibilities- nothing positive. All seems to be maybe"

"I don't particularly feel well informed by the article. It seems that the author has selected a few facts- which we don't even know are definitely true, and has put the piece together. Despite being suspicious about the content I still found myself being slightly concerned about red meat."

"Has reported information that I already know in an unsuccessful way. Don't find it terribly convincing because of this, if anything the article is a little scaremongerish and sporadically researched"

"The article tells me what I already knew, a health balanced diet means not eating red meat everyday and that a lifestyle which includes drinking, smoking and inactivity is very likely to cause health problems."

Ok I am just to hand around the next article, It is much shorter I should probably say that its been blown up quite considerably, but just to aid you in terms of reading.

(Laughter from person E as they catch the headline)

**Ok so have you had a chance to absorb that? Yes, ok so its obviously shorter than the last one, but the same sequence of questions again. So the first one being
Imagine you were telling a friend or relative about the article how would you describe its contents?**

Participant A I'd say it proposes that you know, that eating high fibre food makes being constipated you know worse, but there's nothing in the article that actually says that it makes it worse, there's no statistics in there that prove it so again Id say it was really scaremongerish , but there's absolutely no evidence to back it up.

Participant E Yes that's true but it does tell you to read the American Journal of Gastroenterology, it may be in there (some laughs). Yes I can say again it catches my eyes but then I guess its my sense of humour cause I would read that as soon as it catches my eye, and Id be sort of saying to a friend well you've got to be careful now if your eating too much vegetables, cereals and bran could make you worse you know.

Participant C I think Id joke about it as well, Id just have some Weetabix or something yes

(Some laughs)

Participant D But not with red meat!! (jokes)

(Some laughs again)

**Ok, so what do you think the article is trying to tell you then? Any other comments?
Anything else to add or has it all been said?**

Participant F Look elsewhere for the cause of constipation.

Participant D Or high fibre foods are not necessarily good for you.

Participant B It doesn't say they're not good for you in other ways (lots of yes's) its concentrating on constipation in particular

Participant F Yes a cure for constipation

Participant G Yes

Participant D It doesn't necessarily say its bad for you either

Participant B No

Participant G No

Participant B Its just 20% of people benefited

Participant A Yes

Participant C Yes, its works for some

Participant D That's how all research is, there's so many variables come in on that to affect it anyway.

Hum

Participant C Yes, exactly

Participant H In fact its quite ironic that at the end it says that patients mat no longer be bothered by ineffective advice regarding fibre but it encourages you to go and read the journal but what's the point, its ineffective advice.

Participant E Thing is if you were an IBS sufferer you'd maybe want to go and read that journal just to see what the rest of the research is, but I think again the headline is what they are trying to draw you attention to you know.

Participant G Hum

Participant C I think it's a bit of a joke as well by the headline, down the pan and all that!

(Laughs and agreement amongst participants)

Ok so what do you think of the article then? What do you think?

Participant B Its far too short, you need much more information than that.

(Hum in agreement x 1)

Participant B I feel left a bit high and dry really.

Participant D I can't see the point of what it's trying to say to be honest with you.

Participant G No

Participant F No, It really doesn't tell you anything

Participant H Its only the opinion, they've only got one source which is this professor who, isn't it, there's no other, that's only where they've got their source of facts from or base of the argument, of what this one person says about fibre.

Participant G But I suppose good or bad you however you perceive it at least both articles are making you think about food and about what's going in really, but I don't think it necessarily does anything, apart from that.

Participant B I found it quite surprising that I hadn't heard that before.

Participant F I had, I had, I must read my paper

(lots of laughs)

Any other thoughts?

Participant C It reminds me of lots of articles that are similar in that they say how we thought something was good for something but now we've found out that it isn't. but the research is always a bit you know, it makes you think research doesn't really prove anything almost with what's going on (some laughs amongst participants). You're almost tempted to dismiss all of it and go well what can you do, you know, just ignore all of it.

Participant F Yes

That's wonderful, great thanks. Now you've given me a bit more on what you think of the article, would you consider following the advice or acting on the advice in the article?

Participant C If I learnt more about it I probably might, if it was something, like if you were an IBS sufferer or something or you know if it was something that was particularly relevant to you then you'd probably want to learn more about it then follow the advice if you felt, but I don't there's particularly any advice to, I think you'd be unwise to stop eating fibre if you thought it was good for you and then you read this and stopped eating it, there's not really enough personally for me, I'd need a bit more convincing really.

So are you saying there is a lack of information, is that right?

Participant C Basically yes

Participant G Yes

Participant A I'd say that

Participant B It doesn't give you an alternative

Participant F Its supposed to be aimed at people that are constipated, but I think most people have suffered that at some point in their lives and I think they have some idea of how they can get rid of it. And its probably not by using the remedy that he says is wrong, you'd probably do something else such as drink more which is the best thing in my opinion but it doesn't give you the best cure for it.

Participant B You certainly, I think everyone who knows about a healthy diet would not consider cutting out fruit and vegetables and bran cereals...

Participant F Well no

Participant B ...Cause you'd understand that it was beneficial for a healthy diet anyway

Participant F For good nutrition

Yes

Yeah

Participant H It makes sense, you know all the adverts on TV, especially the ones for cereal, they all, a lot of them are about high fibre cereals that are really good for you. So I suppose really reading this, I know its homing in constipation but I kind of think gosh, this is one article there must be a lot of people who have got things wrong if this is true, cause all the media coverage that there is around eating high fibre foods that they say are good for you.

So am I right in thinking that really that you basically think there is not enough there to go on, you wouldn't necessarily follow it unless you felt, you mentioned there was a specific problem that you had and then you might look it up, does that kind of summarise it?

Yes

Yes

Great, ok that's lovely so lastly then, using your little cards again if you could just jot down in a phrase or sentence what bests describes your thoughts on the article, that would be great thank you.

"Interesting article, not enough content though to really take it seriously, only draws from one source"

"Very poorly researched and doesn't prove its point at all. Not very informative, no alternatives mentioned- looks like it was written for the headline"

"The articles suggests that eating high fibre foods may not be effective in relieving constipation for most people, but does not give advice on alternative remedies or indicate that high fibre foods also have other health benefits."

"Eye catching headline. Article say 'worse' but they don't advice what would help to make it better than high fibre food".

“Pointless, comical, uninformative, too short, not enough information”

“Not enough information. If this was a relevant issue for me I would follow it up with more research myself but this article seems pointless”

“The article does not give enough detail to be convincing. I would want more information before following its advice”

“High fibre foods don't cure constipation- could even make it worse? More research contradicting life experiences”

Ok, I'm going to quickly summarise what I think you've been saying to me regards the last two articles. The first article, well I think it's probably the same for both, but you were kind of saying that the headlines do kind of jump out at you a little bit. Some of you felt you might not necessarily read the whole article after the first paragraph, others felt that if you read on you actually got a feel that maybe there were just getting at a balanced diet, but they were picking research from all over the place. Is that kind of about right do you think?

Yes's and hums

And in terms of whether you felt you would follow the advice, I think some of you felt that you might, you felt maybe it was applicable to you, whereas other felt that maybe you might look at it and think about it then but then turn over the page and the next day you might not necessarily think about it. So does that seem true?

Hum

Yes

The second article, I think what was coming through quite clearly was that you felt there wasn't enough information; the headline was a bit of a joke, but it got you looking at it, that if you did have a particular problem that you might then go away and read the article and see for yourself if you were interested enough. But some of you felt that one of the things you obviously didn't bring out was that fibre has perhaps other benefits and it wouldn't necessarily be a reason not to eat it. Yes?

Yes

Humm

And for those that have suffered with constipation in the past, you tend to probably know what is going to put you right so you don't probably take the advice that's in front of you, you take the advice that you know to be true, Yes?

Yes

Ok, any thing else to add at all on those papers? No, ok.

Just before you go Id like to say thanks a million for taking the time to come along, Its been quite enlightening to hear what you've got to say, you might not think that what you've said is important but actually its very interesting to speak to people about these articles, your thoughts are really valuable.

Thank you.

Additional Information

Who were the group?

- A total of 7 women and 1 man
- All college based non- teaching staff.
- Age range varied from what appeared to be mid-late 20s- 50s.