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Talking about food and nutrition:  
women and popular Australian women's  
magazines

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University of Wollongong

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# **Talking about food and nutrition: women and popular Australian women's magazines.**

A thesis submitted in fulfilment of the requirement for the award of  
the degree

**Doctor of Philosophy**

From

**University of Wollongong**

By

**Danielle McVie, BSc (Nutrition), MPH.**

Graduate School of Public Health

2005

I hereby declare that I am the sole author of this thesis. This thesis does not incorporate without acknowledgement any material previously published or written by another person except where due reference is made in the text.

Danielle M McVie

## **Abstract**

Review of the literature quite clearly indicates that there is need for a comprehensive review of nutrition messages presented to women. This is important given women's considerable and continuing influence on family food decisions and their reported use of magazines as a source of information in the media. Women frequently cite women's magazines to be an important source of nutrition information, however few studies have investigated this relationship in depth. It is important to understand how women use the information in women's magazines and to what extent they have the potential to influence the food decisions women make on a day to day basis.

The principle objective of this study was to gain insight into the food and nutrition issues considered to be of importance among women and in popular women's magazines. This project aimed to identify similarities and differences in the food and nutrition issues raised by women and those presented in women's magazines in order to provide insight into the role women's magazines have in the provision of food and nutrition information to women. This study was conducted in three parts.

The first study involved focus group discussions with three cohorts of women, that is, teenage girls aged 13-16 years, and women aged 25-34 years and 45-54 years. Nine focus groups were conducted. This study provided insight into women's use and perceptions of women's magazines and aided in the development of the content analysis instrument. Results indicated that participants in this study did not actively seek nutrition information from magazines. Rather, magazines primarily operated as an incidental source of information, and nutrition information acted as a feature that helped to sell one magazine over another. Learning about current nutrition issues was generally not the participants' motivation for buying women's magazines. Participants also indicated that they did not place a high degree of trust in, and were skeptical of, the information presented in women's magazines.

The second study involved two semi-structured interviews with approximately half the women from each cohort who participated in the focus group discussions. Each woman participated in two semi-structured interviews. The first interview was conducted approximately five months after the focus groups and the second interview four months after the first interview. The interviews provided insight into the food and nutrition concerns of women. The results indicated that participants were not anxious about food and nutrition issues and did not think about food and nutrition in a risk framework. Weight concerns and the desire to lose weight were the most frequently discussed food and nutrition issue among all groups of women. Non-weight concerns were more likely to be raised by women who had current health concerns for themselves or someone in their family.

The third study consisted of a 12 month content analysis of eight popular women's magazines. This study was conducted concurrently with the semi-structured interviews. Magazines were analysed for the food and nutrition content of advertisements, editorial items and cover headlines. This study provided insight into the food and nutrition messages presented in women's magazines. The results of this study indicated that magazine advertising content is largely dominated by advertisements for non-core products (i.e. foods that were not listed as a part of the core food groups according to the Australian Guide to Healthy Eating (Commonwealth of Australia 1998). Advertisements were also more likely to use consumer related statements as primary promotion messages. The majority of nutrition related statements were related to general nutrition. Results of the content analysis of editorial content highlighted that the predominant food and nutrition messages related to dieting and weight loss, followed by food or product specific articles. The dominance of dieting and weight loss messages was also reflected in magazine headlines. The content analysis demonstrated clear inconsistencies in the food and nutrition messages they presented to women and were surprising in the limited presentation of food and nutrition issues that could be considered of direct interest to women such as osteoporosis, nutrition and aging or vegetarianism.

This thesis demonstrated a close alignment between the food and nutrition concerns of women and the issues presented to them via the content of women's magazines. Both the women who participated in focus groups and semi-structured interviews and the content of women's magazines content analysed have a very narrow focus regarding food and nutrition issues. Weight concern related to self identity (but not health) was the main concern raised by both the women and the magazines. This close alignment supports the findings of previous surveys where women have self reported that they consider magazines an important source of food and nutrition information. However it is not possible in this study to determine the direction of this alignment, that is, whether the magazines responded to or acted to lead women's food and nutrition concerns. In addition, it was evident from the content analysis that magazines were driven by the commercial imperative to sell products, including food and nutrition products, to women. Interestingly, the women who participated in the focus group discussions identified that women's magazines aimed to sell them products. Despite this, the women who participated in the semi-structured interviews indicated that magazines did raise their awareness of some food and nutrition issues.

This study has highlighted the potential for health professionals to utilise women's magazines to raise a broader range of food and nutrition issues, and to provide the necessary 'expert credence' sought by the women. However, this involvement of health professionals should be within the 'recreational' and entertainment context of the role of magazines in women's lives. The women in this study clearly identified that they primarily buy magazines for the entertainment they provide. It is therefore important that health professionals learn to position broader food and nutrition issues within an entertainment framework.



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## **List of Abbreviations**

The following abbreviations are used with in this thesis.

ADA:	American Dietetic Association
ANZFA:	Australia New Zealand Food Authority
AWW:	Australian Women's Weekly
BSE:	Bovine Spongiform Encephalopathy
CHO:	Carbohydrate
Cle:	Cleo
Cos:	Cosmopolitan
CSIRO:	Commonwealth Scientific and Industrial Research Organisation
Dol:	Dolly
GF:	Girlfriend
GM:	Genetically Modified
NHMRC	National Health and Medical Research Council
NI:	New Idea
TL!:	That's Life
UK:	United Kingdom
USA:	United States of America
WD:	Woman's Day

# **1 Introduction and the Context of the Studies**

A vast amount of research from a variety of disciplines has been conducted to determine the factors that influence the food choices made by individuals. In addition, numerous attempts have been made to develop models which will predict an individual's food choices, however the result of these research efforts has demonstrated the complexity of food choices. The question still remains — why do people eat what they eat? Some areas of food choice have been studied in greater depth than others. One that is currently not well researched is the structural influences and the interaction of these influences on an individual's food choice behaviour. A structural factor which has been identified as an important influence on food choice but has not been explored in depth using empirical research methods is that of the mass media and its role in the provision of nutrition information.

This thesis focuses on one mass media source, women's magazines, and examines the role they have in the provision of nutrition information to women. Much of the published food choice literature that exists takes a behavioural approach. It is believed that a broader approach is necessary to gain further insight in this area and that the application of sociological theory will allow for this. The conceptual framework applied in this study is based on the work of sociologists Anthony Giddens, Ulrich Beck and Deborah Lupton. Concepts developed by these postmodernist sociologists relating to late or post modernity and risk, reflexivity and self identity, expert knowledge, trust and doubt, and the role of mass media will be explored.

## ***1.1 Overview of the Study***

The study was conducted in a longitudinal manner, involving focus groups and interviews with teenage girls aged 13-16 years, and women aged 25-34 and 45-54 years. Concurrently with the interviews a content analysis of eight women's magazines was undertaken over a 12-month period. The

study was conducted in this manner to identify any trends in the food and nutrition issues raised by women and in the women's magazines and to determine any similarities and differences between issues raised by the women and the magazines.

The study for this thesis was conducted in three parts. These were:

1. Focus group discussions were conducted with three cohorts of women to gain insight into women's use and perceptions of women's magazines. This formed the basis of understanding women's thoughts and perceptions of nutrition information in women's magazines and aided in the development of the content analysis instrument.
2. Semi-structured interviews were conducted with approximately half the women from each cohort who participated in the focus group discussions. Each woman participated in two semi-structured interviews. The first interview was conducted approximately five months after the focus groups and the second interview four months after the first interview. The purpose of these interviews was to gain an understanding of the food and nutrition issues important to women and how this changed over time.
3. Content analysis of eight popular Australian women's magazines was conducted concurrently with the semi structured interviews over a 12-month period. The purpose of this was to gain insight into the food and nutrition issues presented in the magazines over the same period as the interviews in order to identify what connection, if any, there was between the magazines and the women's knowledge of food and nutrition issues.

## **1.2 Study Objectives**

The principle objective of this study was to gain insight into the food and nutrition issues considered to be of importance among women and in popular women's magazines. It was anticipated that identifying similarities



and differences in the food and nutrition issues raised by women and those presented in women's magazines would provide insight into the role women's magazines have in the provision of food and nutrition information to women.

In order to achieve these objectives several questions were posed.

1. How important do women perceive women's magazines to be in the provision of food and nutrition information?
2. What food and nutrition issues do women identify as important in their day to day lives?
3. What food and nutrition issues are presented in women's magazines?
4. What food and nutrition issues are presented in women's magazines and also identified by women as important?
5. What food and nutrition issues are identified as important by women but are not presented in women magazines?
6. What food and nutrition issues are presented in women's magazines but not identified to be important to women?

### ***1.3 Value of this Research***

Women's magazines are frequently cited by women to be an important source of nutrition information (Crawford and Baghurst 1991; Radimer and Harvey 1995; de Almeida, Graca et al. 1997; American Dietetic Association 2002; Worsley and Lea 2003), but studies have not investigated this in depth. While magazines are cited as a source of nutrition information they are not the most trusted source (de Almeida, Graca et al. 1997). It is important to understand how women use the information in women's magazines and the potential they have to influence the food decisions women make on a day to day basis.

While there has been some research conducted as content analyses of women's magazines to explore the presentation of food and nutrition information, most of this has analysed advertising (Barr 1989; Hickman,

Gates et al. 1993; Pratt and Pratt 1995; Begley and Cardwell 1996; Hill and Radimer 1996; Lohmann and Kant 1998; Lohmann and Kant 2000) and to a lesser extent editorial content (Guillen and Barr 1994; Korinis, Korslund et al. 1998). An extensive review of the literature identified no studies which conducted interviews with women concurrently with a comprehensive content analysis of the editorial, advertising and cover headlines of magazines. No studies were identified that describe possible links between the food and nutrition issues identified as important by women and the presentation of food and nutrition issues within women's magazines. The results of this study will add to the understanding of the role the media in the provision of nutrition information to women.

## **1.4 Thesis Structure**

This thesis is divided into eight chapters. The following section will provide a brief overview of each chapter.

*Chapter two* commences with a broad examination of the media's role in the provision of health information and the known influences this medium has on consumers. Despite consumers having access to comprehensive dietary recommendations to guide their dietary decisions, the rates of dietary related disease continue to rise. It is thus important to consider the influences on food choice decisions made by consumers. The chapter explores the reported influence the media has on dietary patterns and examines what is currently known about the nutrition messages in mass media. The chapter concludes with a review of the literature on magazines and their influence on food choice, providing a background for the focus of this thesis.

*Chapter three* introduces the conceptual and methodological framework employed in this thesis. It commences with an overview of theoretical frameworks that have previously been used to explore food choice influences and identifies the main theories used to study mass media. Sociological literature, with a particular focus on the work of Anthony

Giddens and Ulrich Beck, is explored in greater depth. Concepts developed by these postmodernist sociologists relating to late or post modernity and risk, reflexivity and self identity, expert knowledge, trust and doubt and the role of mass media are explored. Finally, the chapter examines the role of women's magazines in the provision of food and nutrition information. As neither Giddens nor Beck have written about women's magazines in any depth, the work of McCracken, Croteau and Hoyos is explored. Throughout this chapter discussion focuses on how the selected theories shaped the research design and data analysis. It also outlines the three data collection methods employed in this research and positions them in the context of the overall aim of the thesis, to provide insight into food and nutrition discourse in women's magazines and among women.

*Chapter four* presents the focus group discussion component of this thesis. The focus groups were conducted in order to gain insight into women's perceptions and use of food and nutrition information presented in women's magazines. The methods used in these discussions are detailed. In addition, the results of this study are reported, together with discussion of these results in relation to the theoretical framework and published literature. This chapter concludes that magazines are highly accessible and therefore a convenient way to provide women (and men) with nutrition information. However it appears that magazines may not be meeting women's needs in terms of their capacity to provide nutrition information based on women's lack of trust and high level of skepticism in the information presented in women's magazines.

*Chapter five* presents the semi-structured interviews conducted with approximately half the women who participated in the focus group discussions. The purpose of these interviews was to gain a more detailed understanding of food and nutrition issues important to women. This chapter outlines the methods, the results, and then discusses these results in the light of the theoretical framework. It concludes that the semi-structured interviews do not suggest that women were anxious about food

and nutrition issues or prioritise these when making day to day food decisions.

*Chapter six* introduces the content analysis study which was performed on eight popular women's magazines, targeted at three different age groups, ranging from teenage girls to mature women. Food and nutrition related information in the form of editorial items, advertisements and cover headlines were all subject to content analysis. This chapter introduces the content analysis method, outlines the development of the content analysis instrument and presents the results of this study.

*Chapter seven* then discusses the results of the content analysis. This chapter concludes that there is a clear trend to present women with discourse surrounding dieting and weight loss, including celebrity diets and food products. The majority of food products promoted to women were from the non core food groups as defined by "The Australian guide to healthy eating" (Commonwealth of Australia 1998). It was also apparent that as the age of the magazine target group increased, so did the number of advertisements. There was a lack of expert knowledge presented from health professionals. It was also observed over the 12-month analysis period that women's magazines presented their readers with numerous inconsistencies.

*Chapter eight* draws together the findings from the three studies considering the similarities and differences in the discourse among women and in women's magazines. This chapter also outlines limitations, recommendations based on this study's outcomes and implications for practice.

## **2 Literature Review and Background**

### **2.1 *Introduction***

This thesis examines food and nutrition information presented in women's magazines and explores the extent to which women's discussions of food and nutrition reflect the information in these magazines. It was anticipated that identifying similarities and differences in the food and nutrition issues raised by women and those presented in women's magazines would provide insight into the role women's magazines have in the provision of food and nutrition information to women.

Mass media is defined as "the means of communication that reach large numbers of people" (Egger, Donovan et al. 1997 p. xiii). For the purpose of this thesis all use of the word 'media' refers to mass media.

The media is an important and powerful communication tool. It is widely reported to be a useful source of information for consumers and is known to impact on their health-related decisions. Given the breadth of health information transmitted by the media, it was decided to select one aspect and nutrition was identified as a pertinent public health issue to explore. The potential for nutrition information to impact on large segments of the Australian population is significant. Magazines offer an appropriate medium in which to explore this issue due to their wide readership and their ability to provide detailed information. Examination of the role of magazines in the provision of nutrition information illuminates the role between magazines as a health communication tool and consumers as interpreters of this information.

This chapter commences with an examination of the media's role in the provision of health information and the known influences this media has on consumers. Nutrition is then examined as an important public health issue, worthy of exploration in a study of this nature. This is demonstrated by indicating the degree to which Australians are not adhering to current

dietary guidelines. Despite consumers having access to comprehensive dietary recommendations to guide their dietary decisions the rates of dietary related disease continue to rise. To understand this phenomenon it is important to consider the complexity of food choice decisions made by consumers. This chapter then explores the reported influence the media has on dietary patterns and examines the literature on nutrition messages in the media. It concludes with a review of the literature on magazines and their influence on individuals' food choices.

## **2.2 Health Information and the Media**

The media serves a variety of functions. While its primary role is to entertain, it can also be used effectively to inform, motivate and advocate consumers about important public health issues (Naidoo and Wills 1995; Egger, Donovan et al. 1997). McCombs and Shaw (1972) provided evidence that the media has an agenda setting function. Their study investigated what voters in Chapel Hill, North Carolina, USA, said were key issues in an election campaign and the issues reported in the media. Results of this study found a strong relationship between the issues raised by the participants and those which were emphasised in the media. This was the first empirical study to explore the media's agenda setting ability, and the authors concluded that:

*"The mass media force attention to certain issues"* (McCombs and Shaw 1972 p. 177).

The now well-established agenda setting function of the media (McCombs and Shaw 1972; McCombs and Shaw 1993; Frost, Frank et al. 1997; Soroka 2002; Gross and Aday 2003; Soroka 2003; Wanta, Golan et al. 2004) whereby issues raised in the media are perceived to be of importance among the lay public audience highlights the potential for the media to raise health issues among consumers. It is therefore essential to understand the nature of these messages and the impact which this powerful communication channel has on consumers and their health-

related decisions.

It is widely known that the media is a source of health information for consumers (Slovic 1986; McCallum, Hammond et al. 1991; Roper Starch Worldwide 1997). The National Breast Cancer Centre survey of 3,000 healthy women found that the media were the most common source of advice about breast cancer (Barratt, Cockburn et al. 1997). A United States (US) study has reported that magazines were the second most common (doctors were the most common) source of information about disease prevention (Meissner, Potosky et al. 1992). There is widespread interest from researchers and health professionals questioning (in the form of media analyses) the quality of this information. Media analyses have included coverage of important public health issues such as cancer (Houn, Bober et al. 1995), medications (Moynihan, Bero et al. 2000), chlorination of water and cancer risk (Driedger and Eyles 2003) and human papillomavirus (Anhang, Stryker et al. 2004). However, research suggests that the media often misrepresent health information by reporting results of scientific papers inaccurately, using sensationalism and disproportionately reporting on risks and adverse effects (Frost, Frank et al. 1997; Covello and Peters 2002). Inaccurate reporting of health issues has resulted in many professional associations developing guidelines for communicating information to the public (Fineberg and Rowe 1998; US Department of Health and Human Services 2002). For instance, Frost et al. (1997) identified that there was a disparity between the amount of coverage devoted to the reporting of death and the actual causes of death. For example, tobacco and heart disease was under-represented and causes associated with illicit drug use, motor vehicles and toxic agents were over-represented.

Moynihan et al. (2000) reported that news media stories about medications provided inadequate or incomplete information about the benefits, risks and costs of the drugs. In addition, many failed to identify the financial ties between study groups or experts and pharmaceutical manufacturers.

Jones (2004) investigated the accuracy of breast cancer detection messages in top-selling Australian women's magazines and three weekend newspapers. Results of this study indicated that messages in the media were providing very little information on appropriate screening procedures and were misrepresenting the age of breast cancer sufferers.

Given the reportedly important role of the media in providing health information to consumers and the potential for misinformation to be communicated through this medium, it is necessary to explore the impact that this communication has on consumers' health-related behaviours.

### **2.2.1 Impact of Health Information in the Media**

Use of the media has been adopted as a strategy to influence behaviour in health promotion campaigns with varying levels of success. For example, media has been used in campaigns focused on anti-tobacco (Borland and Blamford 2003), physical activity (Bauman, Bellew et al. 2001; Reger, Cooper et al. 2002), skin cancer (Delaney and Adams 1997), illicit drugs (Stephenson 2003), driver fatigue (Tay and Watson 2002), sexually transmitted infection screening (Oh, Grimley et al. 2002) and alcohol consumption (Surkan, Dejong et al. 2003). In-depth exploration of public health media campaigns is outside the scope of this thesis, because the focus is on the reporting of nutrition information by journalists and advertisers rather than materials produced by health authorities. However the media's frequent use as a health promotion tool suggests a belief by experts in its efficacy as a behaviour change tool without clear evidence of this effect. The influence of the media on consumers' health-related behaviours has been reported to result in both positive and negative health outcomes. The reporting of health issues in the media and the known impact on consumers will be explored here.

Passalacqua and Colleagues (2004) demonstrated that the media influenced the opinions and feelings of cancer patients after reporting that the Di Bella Therapy (an unproven cancer treatment) was ineffective.



Participants completed a survey during the peak of the promotion of this treatment and after publicising that the treatment was ineffective. Results demonstrated that patients' opinions and feelings of hope and confusion were influenced by the media coverage, however, physician–patient communication and decision-making were not affected.

Another example of the impact of the mass media was when researchers associated with the Women's Health Initiative (WHI) stopped participants taking the combination estrogen and progestin drug offered as hormone replacement therapy (HRT). Researchers have reported that the poor communication of this issue via the media resulted in significant changes in the way women took their HRT medication (Dentzer 2003). For instance, Dentzer (2003) indicated that inadequacies in media coverage contributed to many women suddenly ceasing their HRT drugs. This finding was also supported by Haskell (2004) who reported that women abruptly stopped HRT after publication of the WHI research. Similarly, McIntosh and Blalock (2005) reported significant influence on women's use of HRT following media reporting of the results of the WHI study.

It should also be noted that the media can play a positive role in public health. For instance, Wilson and Associates (2004) analysed six major Canadian newspapers in conjunction with a policy analysis activity and identified that newspapers accelerated the policy decision surrounding Creutzfeldt-Jakob disease (CJD) and blood supply decisions which had important implications for public health.

The above research reports demonstrate that the media does clearly influence both consumers and policy decisions which has public health implications. However, published research in this area is limited given the difficulties in causally relating the changes in consumer behaviour or influencing issues considered to be important to by consumers with the reporting on health information in the media. Hence, this indicates an area worthy of further research.

## **2.3 Australia's Current Dietary Practices – An Important Public Health Issue**

In addition to the personal health burdens the economic cost associated with diet-related disease such as stroke, heart disease and cancer has been estimated to be approximately \$6 billion per year (Baghurst and Binns 2002). Therefore the dietary practices of the Australian population are a salient issue for health professionals. The following section explores the nutritional status of Australian consumers and the literature on how consumers perceive their diet, demonstrating why food and nutrition is a key public health issue.

### **2.3.1 The diet of Australian consumers**

Nutrition-related issues are frequently reported in the media, and this will be explored later in this chapter. However it is clear that improving the nutritional status of Australians is a key public health issue:

*“Proper and adequate nutrition is closely related to optimal growth, good education outcomes and health throughout life, and contributes to the economic and social well being of society” (SIGNAL 2001 p. 3).*

It is well established that poor dietary choices are associated with dietary related disorders such as coronary heart disease, stroke, hypertension, arteriosclerosis, some cancers, type 2 diabetes mellitus, osteoporosis, dental caries, gall bladder disease and nutritional anemia, accounting for a significant public health problem in Australia (Australian Institute of Health and Welfare 2000).

It is uncommon for nutritional deficiency to be a problem in Australia. There are, however, groups which are more vulnerable to deficiencies, such as the elderly, those on low incomes and those who suffer from some chronic diseases (SIGNAL 2001).

In Australia it is more common for an individual to experience diet–disease relationships which have resulted from the over-consumption of particular groups of foods. Results of nutrition surveys indicate that many Australian consumers fail to meet dietary recommendations set by local health authorities. The third edition of the Australian dietary guidelines recommended the consumption of a variety of foods (National Health and Medical Research Council 2003). Results of a National Nutrition Survey indicate that more than 90% of Australians reported consuming food from the cereal and grains and milk product groups (Australian Bureau of Statistics 1995a). Of primary concern for health professionals is the over-consumption of fat and the under-consumption of fruit and vegetables (SIGNAL 2001).

### **2.3.2 Foods and Nutrients Over-Consumed by Australians**

Research has shown that the diet of Australians is higher in total fat than the recommendations set by the National Health and Medical Research Council (NHMRC). Total fat accounted for 33% of total energy consumption compared to the recommended 30%. Saturated fat consumption accounted for 13% of total energy intake, while recommendations suggested that saturated fat should not account for more than 10% of total energy intake (Australian Bureau of Statistics 1995b). Milligan et al. (1998b) studied the dietary behaviours of 504 18-year-old men and women in comparison to the national dietary guidelines. Results of the two-day diet records found that for 80% of the subjects' total fat intake exceeded the recommendation by more than 30%. In 90% of subjects, saturated fat provided more than 10% of energy. This high fat intake was attributed to the high consumption of convenience foods and meat in the Australian population.

Sodium consumption has been reported to exceed the recommended range of less than 100mmol/day for both women and men (Milligan, Burk et al. 1998b). A Hobart study of 87 men and 107 women aged 17-80 years reported that the target for sodium consumption was met by only 6% of men and 36% of women, with the rest of the population exceeding the

recommendation (Beard, Woodward et al. 1997).

The third edition of the Australian dietary guidelines recommend that Australians consume moderate amounts of sugar and foods containing sugar (National Health and Medical Research Council 2003). No recommended quantities are given for the general population. The relationship between sugar consumption and disease is controversial, with some arguing that there is insufficient evidence to suggest that a dietary guideline is necessary, while others report a casual link between high sugar consumption and diabetes, coronary heart disease, obesity and dental caries. Results of the 1995 National Nutrition Survey indicated that total sugar consumption was estimated to make up 19.4% and 20.9% of males' and females' total energy intake respectively over the age of 19 years (Australian Bureau of Statistics 1995c).

### **2.3.3 Food and Nutrients Under-Consumed by Australians**

The Australian 1995 National Nutrition Survey reported over half of the males aged 12-44 years and one-third of the children 4-11 years had not eaten fruit or fruit products during a 24-hour period. Twenty percent of children aged under 12 years had not eaten vegetables or vegetable products during the same period (Australian Bureau of Statistics 1995b). Two and a half percent of men and 4.1% of women had eaten the recommended servings of fruit and vegetables (Milligan, Burk et al. 1998a). Recent research indicates that inadequate consumption of fruit and vegetables is responsible for 3% of the disease burden and 11% of the total cancer burden in Australia (Mather, Vos et al. 1999).

In addition, Australian consumers have been found not to consume adequate amounts of fibre. While there is no quantitative recommendation for fibre consumption, more than 40% of women and 23% of men reported not consuming 15g/day and 93% of women and 77% of men reported consuming less than 30g/day (Milligan, Burk et al. 1998b).

Most Australians exceed the RDI for vitamins. Ninety percent of Australians in most age and sex groups exceed the RDI for protein, thiamin, niacin equivalents and vitamin C, and more than 75% of Australians exceed the RDI for phosphorus, riboflavin and potassium. Groups for which deficiency was a concern were females aged 12-15 years and 65 years and over for calcium. Zinc was another nutrient of concern with less than 25% of females aged 12-18 years and 24-44 years and less than 10% of women aged 65 years and over exceeding the RDI (Australian Bureau of Statistics 1995c).

#### **2.3.4 What Consumers Think About Their Diet**

Research has demonstrated that consumers are not aware of the true quality of their diet, which could be a contributing factor to their lack of adherence to dietary recommendations. Consumers' awareness of their dietary patterns and the prevalence of dietary disease may help them make necessary dietary changes (Putnam, Kantor et al. 2000). Variyam and colleagues (2001) analysed data from the 1989-90 US Continuing Survey of Food Intake by Individuals and the Diet and Knowledge Survey and found that 40% of the population of household meal planner/preparers perceived their diet to be better than it actually was.

When comparing the diets of Australians to the recommendations or guidelines produced by health authorities it is clear that there is a need for significant change in the dietary decisions made by consumers, particularly in light of the evidence that suggests that consumers overestimate the quality of their diets. Before health professionals can begin to rectify these disparities in Australian consumers' diets it is necessary to understand why consumers choose diets that result in negative health outcomes.

### ***2.4 The Complexity of Food Choice***

The previous section indicated that Australians are not adhering to the national nutritional guidelines. A large amount of research continues to

update these guidelines to provide recommendations aimed to optimise the health status of the Australian population. Quite obviously factors outside the recommendations of health professionals influence the food choices of consumers.

An enormous body of published literature focused on food choice exists within the academic arena. Food choice influences have been explored from a variety of disciplines and perspectives, including sociology (Murcott 1998; Shepherd 1999; Coveney 2000; Evans, Booth et al. 2000; Devine, Connors et al. 2003; Germov and Williams 2004), anthropology (Fischler 1988; Mintz and Du Bois 2002), psychology (Lundberg, Rasch et al. 1991/1992; Favaro and Santonastaso 1995; Stein and Nemeroff 1995; McFarlane and Pliner 1997; Lindeman and Stark 1999; Lahti-Koski, Pietinen et al. 2002; Nicklaus, Boggio et al. 2005), nutrition science (Glanz, Basil et al. 1998; Drewnowski and Hann 1999; Wahlqvist 2004), ecology (Story, Neumark-Sztainer et al. 2002; Caraher and Coveney 2004) and economics (Lutz, Smallwood et al. 1995; Mathios 1996; Blaylock, Smallwood et al. 1999; Nayga 1999; Drewnowski and Darmon 2005). Collaboration between disciplines has resulted in food choice being examined using multidisciplinary approaches (Marshall 1995; Meiselman and MacFie 1996; Worsley 1996). While a variety of perspectives have been used to explore food choice, adding to the large volume of knowledge of food choice influences, the question still remains — why do people eat what they eat?

Examination of the key influences on food choice highlights its complex nature, which occurs both at an individual level and at an environmental level. After reviewing published literature on determinants of food choice, seven key influences can be identified. Researchers have identified the following factors: personal or individual, physiological, psychological, social, structural, cultural and food attributes. However, the most influential factors and the interactions between key influences are not well understood and vary between studies. Detailed description of each of the factors and many sub-factors are outside the scope of this thesis (based

on its media focus) and have been described in detail elsewhere (Khan 1981; Crockett and Sims 1995; Kraak and Pelletier 1998b; Nestle, Wing et al. 1998; Asp 1999; Gracey 2000; Story, Neumark-Sztainer et al. 2002). Therefore these factors will only be briefly reviewed here.

#### **2.4.1 Determinants of Food Choice**

Personal and individual factors are those believed to be associated directly with the individual. Such factors include lifestyle (Lennernas, Hambræus et al. 1995), lifecourse events and experiences (Devine, Connors et al. 1998; Devine, Wolfe et al. 1999), personal identity (Fischler 1988; Bisogni, Connors et al. 2002), values, morals and ideals (Stein and Nemeroff 1995; Georgiou, Betts et al. 1996; Santos and Booth 1996; Glanz, Basil et al. 1998; Pollard, Steptoe et al. 1998; Neumark-Sztainer, Story et al. 1999), access to personal resources (Lutz, Smallwood et al. 1995; Blaylock, Smallwood et al. 1999), knowledge of food and nutrition (Blaylock, Smallwood et al. 1999; Variyam, Blaylock et al. 1999) and an individual's socioeconomic status (Kirby, Baranowski et al. 1995; Patterson, Harlan et al. 1995; Mathios 1996; Turrell 1996; Nayga 1997; Young and Fors 2001; Turrell, Hewitt et al. 2002).

Physiological influences are those that are linked to biological factors. These include: allergies, hunger (Neumark-Sztainer, Story et al. 1999) gender (Alexander and Tepper 1995; Roos, Prattala et al. 2001) and health status and physiological changes such as aging and pregnancy (Finley, Dewey et al. 1985).

Psychological factors are linked to biological factors and include personal food preferences, food likes and dislikes (Arvola, Lahteenmaki et al. 1999), food cravings (Neumark-Sztainer, Story et al. 1999), direct product experience, psychological health (Favaro and Santonastaso 1995), emotions/mood (Neumark-Sztainer, Story et al. 1999) and personality (Lindeman and Stark 1999; Lindeman and Stark 2000; Lindeman and Sirelius 2001).

Social factors, which are the interactions we have with others, influence our food choices. These influences include social relationships (Craig and Truswell 1990; Santos and Booth 1996; Schafer, Schafer et al. 1999; Bisogni, Connors et al. 2002), food context (Coll, Meyers et al. 1979), food trends, public perceptions (Coll, Meyers et al. 1979), society's beliefs and values, family resemblance and family food preferences (Rozin 1991; Feunekes, de Graaf et al. 1998; Skinner, Carruth et al. 1998; Neumark-Sztainer, Story et al. 1999; Cullen, Baranowski et al. 2001), peer influences (Cullen, Baranowski et al. 2001) and social roles (Roos, Prattala et al. 2001).

Structural factors are the external influences such as family and/or household environment, food availability and accessibility (Meyers, Stunkard et al. 1980; Hearn, Baranowski et al. 1998; Neumark-Sztainer, Story et al. 1999), food and nutrition policy, retail environment, media and advertising (Woodward, Cumming et al. 1997; Hitchings and Moynihan 1998; Neumark-Sztainer, Story et al. 1999) and place of residence (for example urban versus rural) (Kirby, Baranowski et al. 1995; Skerratt 1999).

Cultural factors are those which are transmitted from one generation to another and include food rules (Hupkens, Knibbe et al. 1998; Green, Draper et al. 2003), meal concepts, situational ethnicity (Stayman and Deshpande 1989), attitudes to food, cultural/ethnic identity, identities, ideals and roles (Devine, Sobal et al. 1999), religious restrictions and traditions.

Attributes of food are also considered to be an important influence on food choice. This includes sensory factors such as taste and food appearance (Stewart and Tinsley 1995; Santos and Booth 1996; Glanz, Basil et al. 1998) quality and freshness, cost (Glanz, Basil et al. 1998; Neumark-Sztainer, Story et al. 1999), convenience (Glanz, Basil et al. 1998; Neumark-Sztainer, Story et al. 1999), country of origin, food appeal (Neumark-Sztainer, Story et al. 1999), health benefits (Neumark-Sztainer,



Story et al. 1999), natural content and food safety (Green, Draper et al. 2003).

### **2.4.2 Conceptual Models of Food Choice**

Researchers have attempted to develop a more comprehensive understanding of the food choice process and have developed conceptual models to describe the food choice process commonly experienced by individuals (Furst, Connors et al. 1996; Devine, Connors et al. 1998; Booth, Mayer et al. 2001; Wetter, Goldberg et al. 2001). While these models acknowledge the complex interaction of the key factors at an individual and environmental level they are not useful in terms of predicting an individual's food choices due to the complexity of the process.

Furst et al. (1996) used a constructionist approach to investigate the food choice process. These researchers designed a funnel-shape model to indicate the factors that influence food choice based on 29 in-depth interviews with adults making grocery store decisions. The food choice model grouped factors into three components, these were; life course events, influences (such as ideals, personal factors, resources, social framework and food context) and personal systems. These components interact to result in a choice. The funnel-shape model indicates that the single food choice is a result of the “mixing and separating” of influences that occur at an individual and environmental level.

Wetter and associates (2001) developed a framework for understanding the factors that influence the eating and physical activity behaviours of individuals. Its development was based on the collaboration of scientists working in human behaviour from a variety of backgrounds including anthropology, sociology, consumer and policy research and physical activity. The framework was designed in the form of a kaleidoscope:

*“The tubular base of the kaleidoscope represents the life-course trajectory and the colored pieces of glass inside represent the*

*determinants. These determinants are therefore ever present, but their influence on behavior changes with time” (Wetter, Goldberg et al. 2001 p. S13).*

The core of the framework (the psychobiologic core) included influences such as physiology, hierarchy of needs, genetics, pleasure and self identities. This core was then enveloped by cultural determinants such as life experience, values, beliefs, ethnic identities and habits. Surrounding this are the social determinants such as socioeconomic status, educational attainment, interpersonal relationships, life stage and social roles. Lifestyle factors then encase these factors, which are considered to be knowledge, safety, time, cost, source of information, physical or social situation or context, accessibility, convenience, seasonality and social trends. This outer layer is considered most proximal to the individual’s behaviour and also the most changeable. The framework also identified that behavioural skills, such as making a commitment to change and self-rewards for change, form the outer layer and that these are the processes required to facilitate change.

Booth and colleagues (2001) developed the Wetter and associates (2001) model further to include the environmental, societal and policy determinants on food choice and physical activity. Using knowledge mapping techniques, a group of experts from diverse backgrounds formed a working group to explore these influences. Three environmental and policy influences were identified. These were:

*“Specific behavior setting where people live their lives; primary or proximal leverage points that control behavior settings and secondary or distal leverage points that have indirect, but still an important influence on behaviour settings.” (Booth, Mayer et al. 2001 p. S22)*

Devine et al. (1998) used a life course perspective to develop a model of food choice trajectory. The researchers conducted 86 in-depth interviews

that focused on life course food choice and the influence of fruit and vegetable consumption. The authors developed a general food choice trajectory model with the key influences being food upbringing, roles, health, ethnic traditions, resources, location, and the food system.

These models have not been applied widely in predicting Individual's food choices. Knowledge of the determinants and models of food choice have not answered the question that health professionals continue to ask about food choice – why do people eat what they eat? While it seems that some areas of food choice determinants appear to be well understood, there is no certainty in predicting an individual's food decisions, highlighting the complexity of a single food choice. An area of food choice that is currently not well researched is the structural influences and the interaction of these structural influences on an individual's food choice behaviour. A structural factor, which has been identified as an important influence on food choice but has not been explored in depth, using empirical research methods, is that of the media and its role in the provision of nutrition information.

## ***2.5 Women and Food Choice***

The following section highlights the dominant role women have in food decisions, however, there is evidence that men are becoming more involved in these decisions. Crotty (1995) identifies that the current structure of nutrition education focuses on women as the 'gate keepers' of the family's diet and as primarily responsible for the control and decisions associated with food. Coveney and Baum (1996) explored the social organisation of food choice and reported that regardless of social class women were the main food providers, taking on the role of the shopper and the cook. Harnack and colleagues (1998) identified that in a household with male and female heads of the household, the male heads of the household were involved in family meal tasks to a lesser extent than female household heads. Similarly, Murcott (1997) reported that more often than not women were responsible for food decisions and preparation.

Kemmer and associates (1998) found that in over half (17 of 22) of couples in their study, the woman was primarily responsible for the preparation of the evening meals. This was in contrast to earlier studies in which women were overwhelming responsible for this task. The results of this study suggest changes in gender roles may be underway.

This thesis focuses on nutrition information presented to women in magazines, given that food choices are still predominantly the responsibility of women.

## ***2.6 The Influence of Nutrition Knowledge on Dietary Patterns***

It has been reported (Wardle, Paramenter et al. 2000; Pirouznia 2001; Worsley 2002) that an individual's nutrition knowledge can impact on their dietary decisions. It is proposed that the greater the levels of nutrition knowledge the more likely an individual is to comply with dietary guidelines. The following section will highlight this relationship.

Harnack et al. (1997) studied whether cancer prevention related nutrition knowledge and beliefs corresponded to cancer prevention related dietary behaviour, such as fruit and vegetable, fibre and fat intake. They studied the results from the 1992 National Health Intercept Survey Cancer Epidemiology Supplement and Food Frequency Questionnaire of 10,286 US adults aged 18 years and over and found that cancer prevention knowledge and beliefs corresponded with cancer prevention related dietary behaviour in the general population. They also found that the strength of this relationship varied with education level and perceived barriers to eating a healthy diet.

Wardle and associates (2000) assessed the association between nutrition knowledge and intake of fruit, vegetables and fatty foods of a community sample of adults recruited through three General Practitioner services in England. Results of this study of 1,040 individuals aged 18 to 65 years indicated that those with greater knowledge of nutrition ate more fruit and

vegetables and less fat. The association was stronger for fruit and vegetables than it was for fat. This relationship between knowledge and eating remained even after controlling for demographic variables. More specifically, the results of this study indicated that respondents in the highest quintile for knowledge were 25 times more likely to meet current recommendations for fruit, vegetables and fat than those in the lowest quintile.

Timperio and colleagues (2003) used qualitative and quantitative data collection techniques to examine the perceptions of fattening foods in adults, with 62 adults participating in focus groups and 1500 adults participating in a postal survey. Results of this study indicated that the public's understanding of fattening foods was inconsistent with the current dietary recommendations. In particular, focus groups revealed that adults considered a wide range of variables (including fat, sugar, salt and calorie content, type of fat, label information, balance with physical activity, moderation, metabolism, fresh versus processed and extra or unnecessary additions to meals and snacks) when considering if a food is fattening. Survey results suggested that adults understood the role of dietary fat in weight control, however the link between sugar, fat and energy was not well understood, with 30% of respondents believing that as long as they watched their fat intake they could eat as much as they want. In addition, only 28% of respondents considered it important to check the energy content of foods, however, 71% considered foods high in sugar to be fattening. The results of this study indicated that the general population has limited nutrition knowledge and could benefit from further nutrition information regarding components of foods (such as the link between sugar, fat and energy) if they are to achieve dietary recommendations.

## ***2.7 The Influence of the Media on Dietary Patterns***

The complex nature of food choice and the evidence provided above, which indicate that consumers are in many cases not meeting national dietary guidelines, highlights the need to explore the media as a source of nutrition information given its influential role in the health arena (Lupton

1994; Egger, Donovan et al. 1997). Controversy surrounding the results of scientific studies which are regularly reported in the media have resulted in consumers becoming confused about proper nutrition practices (Harvard School of Public Health 2005). It has also been reported that consumers perceive the reporting of conflicting research results as an indication that scientists are continually changing their minds, not that they are participating in academic debate (Crotty 1995). This creates a perspective that scientific findings are unreliable, rather than they are based on rigorous processes. Therefore it is essential to explore the portrayal of nutrition information in the media and the way in which consumers respond to this information.

The media has been reported to have the potential to influence attitudes, beliefs and behaviours related to health (Lupton 1992). Consumers' awareness of dietary patterns and the prevalence of dietary disease may help them make necessary dietary changes (Putnam, Kantor et al. 2000). Some studies have reported the positive or negative health effects that the media can have on an individual's dietary choices and behaviours. For example, changes in the consumption of foods in the US have been reported to be influenced by the media (Goldberg 1992; Goldberg and Hellwig 1997). These changes include the decreased consumption of full fat milk and the increased consumption of reduced fat milk (Goldberg 1992; Goldberg and Hellwig 1997). An increase in broccoli consumption between 1970 to 1990 has also been attributed to positive media reporting of its cancer-fighting properties (Goldberg 1992; Goldberg and Hellwig 1997). Conversely the media's use of sensationalism and the tendency to report findings from single studies have resulted in consumers adopting negative health behaviours. For example, a *New York Times* front page headline stating that pasta makes you fat resulted in a 2% sales decrease in 1995 (Goldberg and Hellwig 1997).

There is evidence to suggest that consumers are skeptical of the information they receive about diet and health. Data from the Washington

State Cancer Risk Survey of 1751 adults conducted between October 1997 and September 1998 reported that 71% of respondents felt that the government should not tell people what to eat, 70% thought that Americans are obsessed with fat, 40% reported being tired of hearing what foods they should eat and felt dietary recommendations should be taken with a grain of salt (Patterson, Satia et al. 2001).

Nutrition information provided in advertising has been demonstrated to indirectly impact on the demand for food products. In 1994, food companies spent more than US\$30 billion on advertising. Food companies which produced high-fat and high sugar foods that are highly processed and packaged spent most of this money. Such advertising can be effective in increasing product purchases (Nestle, Wing et al. 1998). Television advertising has been reported to have a major influence on children's purchasing decisions (Kraak and Pelletier 1998b). When television viewing is a part of children's meal routines these children's dietary patterns include fewer fruit and vegetables and more pizzas, snack foods and soft drinks than those children from families where television and eating are separate activities (Coon, Goldberg et al. 2001). Similarly, Halford and associates (2004) reported on three groups of children, lean, overweight and obese, who all ate significantly more food after viewing food ads. Woodward and colleagues (1997) explored whether the extent of television watching was linked to the food choices of teenagers. Results of this study indicated that teenagers who watched television more extensively ate more and tended to eat more unhealthy foods.

The interaction among sources of information, consumers' awareness of calcium and related health attributes and the consumption of dairy products was explored using data from the Dairy Board's Calcium Ad Tracking (CAT) survey. Results of this analysis supported the researchers' hypothesis:

*“that advertising based nutritional messages, such as calcium, can affect demand for food products (indirectly) through changes in*

*consumers' attitudes and knowledge about nutritional attributes of products"* (Jensen and Kesavan 1993 p.374).

Lupton and Chapman (1995) investigated the media coverage of diet and cholesterol, which they described as the cholesterol controversy. The researchers analysed Australian national and regional newspapers over an eight-month period (January to August 1993). In addition to the media analysis, focus group discussions were conducted to examine public awareness of and responses to the cholesterol controversy reported in the media. The authors conducted 12 semi-structured focus group discussions with Sydney residents. Results of this study indicated that participants were cynical of the media coverage and health promotional advice on diet and cholesterol. They were, concerned about their diet but expressed confusion at advice on this issue. In general, the researchers noted that participants relied on commonsense and experience.

The media has been demonstrated to influence the dietary patterns of consumers in both positive and negative ways. Given the influence of this communication medium, it is necessary to be aware of the messages, which are presented to consumers.

## **2.8 Nutrition Messages in the Media**

*"Twenty five years ago, the chances were slim that a food and health related study in a scientific journal would make the evening news or greet readers in their morning newspapers. Now, hardly a week goes by when a breaking dietary study doesn't make headlines"* (Fineberg and Rowe 1998 p. 194).

The above quote demonstrates the prevalence with which food and health-related information is reported in the media, and self-reported survey data indicate media to be the primary source of nutrition information for consumers (Goldberg 1992; Lester 1994; Gabriel and Lang 1995; Goldberg and Hellwig 1997; Australia New Zealand Food Authority 2001)



and therefore a key influence on consumers' food beliefs and food choices. Research has indicated that information portrayed in the media does not always reflect scientific perspectives. In particular, nutrition messages have been found to contradict or misrepresent current scientific advice of health professionals (Barr 1989; Story and Faulkner 1990; Kotz and Story 1994; Radimer 1995; Hill and Radimer 1996; Rauhe and Massad 1999). Professional associations such as the American Dietetic Association have clearly indicated concern, stating:

*“food and nutrition misinformation can have harmful effects on the health and economic status of consumers”* (Ayroob, Duyff et al. 2002 p. 260).

A US content analysis study of 53 print and electronic news outlets over a three-month period of May through to July 1995 of food and nutrition stories reported dietary fat was mentioned twice as much as other topics and was mentioned in 47% of all reports. The second most reported topic was preventing illness through a healthy diet, however this was usually reported in relation to a single food rather than a balanced diet. Results of this study also indicated that the media failed to provide contextual and scientific relevant information. Researchers found that only 31% of statements made about the harms and benefits of dietary choices mentioned the amount consumed, 17% mentioned any population as being more or less susceptible, 7% referred to the frequency of consumption and only 1% dealt with any cumulative effects (Borra, Earl et al. 1998)

Wallace and Ballard (2003) examined the accuracy and comprehensiveness of osteoporosis information presented in the eight popular American women's magazines (selected based on circulation figures) and two mass circulating newspapers (based on geographic location and circulation figures) between 1998 to 2001. The authors examined the use of information sources, incidence and prevalence statistics, identification of risk factors and prevention methods, both the nutrition and non-nutrition content of the articles were assessed. Results of

this study indicated that very little information was published in the media in comparison to the scientific literature. Of the information provided, much of the information presented was ambiguous, incomplete and not entirely balanced.

In a recent Australian study, Lupton (2004) explored the coverage of food risks in three metropolitan newspapers. A discourse analysis was conducted over a 13-month period (1 January 2002 to 28 February 2003) in three metropolitan newspapers. The results of the analysis revealed that the most commonly reported issue was the relationship between food intake and obesity, in particular childhood obesity followed by risk associated with the primary production of food and risks from processed, restaurant or takeaway food (Lupton 2004).

### **2.8.1 Television Program Content and Nutrition Messages**

Analysis of food and nutrition messages communicated in the media indicate that these messages are not consistent with dietary recommendations. Story and Faulkner (1990) analysed were messages relating to food and eating presented on prime time television (8–11pm) in both programme content and advertising. Results indicated that on average during this programming time, food references occurred 4.8 times per 30 minutes. Sixty percent of these references were for low nutrient beverages such as coffee, alcohol and soft drink.

### **2.8.2 Television Advertising and Nutrition Messages**

Kotz and Story (1994) examined children's television programming on all major networks, on three Saturday mornings between the hours of 7–10.30 am (one Saturday in each of the following months, October 1991, January 1992 and February 1992). Results of this study indicated that 43.6% of all food advertisements were for foods classified in the fats, oils and sweet food group. The most frequently advertised product was identified as high sugar cereals.

Byrd-Bredbenner and Grasso (1999) analysed the health messages in advertisements broadcast during commercials aired at prime time in 1992 and 1998. Not surprisingly, in both years advertisements for food and beverages were the largest category. In 1992, three-quarters of the nutrition information in these advertisements was judged to be misleading or inaccurate, compared to just over half in 1998. In comparison to the USDA food pyramid, protein-rich and grain products were well represented (as a result of the number of burgers advertised by fast food companies), while fruit, vegetables (with the exception of french fries), and dairy products were rarely advertised. In a later study, Byrd-Bredbenner and Grasso (2000) analysed the nutrition-related information presented in commercials aired during top rated prime time television viewed heavily by 2 to 11 year olds. Results indicated that approximately half of the nutrition information in food and beverage commercials was inaccurate or misleading.

Hammond and associates (1999) examined the extent to which 9 to 17-year-old New Zealanders were exposed to advertising of different food groups. Advertisements were examined on the three main New Zealand commercial stations over three hours of broadcasting (4–6 pm and 7–8 pm) over a one-week period in May 1995. Results of this study indicated that sweet snacks, drinks, fast food/takeaways and breakfast cereals were the most advertised products. Fruit, vegetables, and meat, fish and eggs were advertised least frequently.

Zuppa and associates (2003) conducted a content analysis of advertisements aired during children's programs (that is, those classified as 'C' or 'G') in April 2001. Results indicated that advertisements for non-core foods, for example, fast foods, chocolate and confectionery made up 79% of food advertisements.

Clearly consumers are presented with a vast amount of information from the media regarding food and nutrition. The focus of much of this information is contrary to the positive nutrition messages advocated in

nutrition guidelines. This is of considerable concern given that the media is a popular source of information among consumers.

## ***2.9 Consumers' Perceptions of the Importance of Food and Nutrition***

The well-established agenda setting role of the media (McCombs and Shaw 1972; McCombs and Shaw 1993; McCombs 1997) makes it necessary to explore the food and nutrition issues which consumers report as important. It is essential to understand the issues of concern among consumers given that the media often misrepresent scientific studies and are known to promote food messages which conflict with current dietary recommendations.

Dutch researchers conducted focus groups with 30 adult consumers to identify the issues most commonly associated with food. In decreasing order the following issues were identified as important: safe food, preparing meals, healthy food, tasty food, eating less fat, unhealthy food, price of products, vegetables, balanced food and shopping. In addition, participants identified food conversation topics in decreasing order these were: tasty food; healthy food; recipes; consequences of BSE (Bovine Spongiform Encephalopathy) and foot and mouth disease; regular eating; diet; price of food; balanced food; the question 'what will we eat tonight?' and nutrition and children. Food topics that the participants identified they had the most interest in were: food safety, fruit and vegetables, genetic modification, vitamins, composition of food products, preparing and saving food, food supplements, eating less fat, European E numbers<sup>1</sup> and functional foods (van Dillen, Hiddink et al. 2003).

Worlsey and Scott (2000) examined consumers' ratings of food and health concerns in Australia and New Zealand. Results of this study indicated that concerns were similar in both countries. The main concerns identified were

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<sup>1</sup> The European Union requires most additives used in food additives to be labeled by its name or its assigned E number.

food safety, food system issues, health, the environment and animal and human welfare issues. Interestingly, women expressed more concern than men about most issues, while young people and highly educated people expressed the least concern.

In a recent Australian study, Lupton (2005) interviewed 40 people living in Sydney and 30 living in Bathurst and examined their perceptions of food risks. Results of the interview data suggest that participants were concerned about risks associated with being overweight and the consumption of fat. Participants also indicated concern for issues such as additives and chemicals in food, however the number concerned with this was far less than those raising the issue of overweight and the foods that contribute to weight gain.

The area of consumer food and nutrition concerns appears to be relatively under researched, indicating a need to explore this area in greater depth.

## ***2.10 The Nutrition Messages in Magazines***

Given the reported impact the media can have on issues perceived by the public to be important, it is essential to be aware of the nutrition messages present in all forms of the media, however it is outside the scope of this thesis to explore the numerous media sources. Magazines are frequently reported to be a key source of nutrition information. In the following section, the literature will be reviewed to determine use of these magazines, along with the messages presented in advertisements and editorial content.

### **2.10.1 Magazines as a Source of Nutrition Information**

Magazines, in particular, have been identified by consumers as a popular and useful source of nutrition information. Crawford and Baghurst (1991) reported that 27% of respondents to their self-administered postal survey indicated that magazines and newspapers were the most popular source of nutrition information. Similarly, de Almeida et al (1997) found that 27%

of respondents aged 15 years and older in the European Union who participated in an interviewer assisted questionnaire reported magazines and newspapers as the second most popular source of nutrition information. A telephone survey of 803 Queensland residents aged 21 to over 80 years reported that 63% of respondents indicated that magazine articles were a source of useful nutrition information. Thirty three percent of respondents indicated that magazines were 'more useful' sources of nutrition information when asked to nominate the two sources they found 'more useful' (Radimer and Harvey 1995). The American Dietetic Association (ADA) reported that 58% of consumers obtained diet and nutrition information from magazines (American Dietetic Association 2002). In a qualitative analysis of Dutch consumers, magazines were identified as the third most popular source of nutrition information; these magazines included supermarket magazines, women's magazines, magazines for parents, magazines for consumers and culinary magazines (van Dillen, Hiddink et al. 2003).

Research indicates that women are significantly more likely to use magazines as a source of nutrition information. Radimer and Harvey (1995) reported women were significantly more likely than men to report magazines as a useful source of nutrition information (74% and 52% respectively). Similarly, a USA study reported 64% of women compared with 50% of men identified magazines as a source of nutrition information (US Department of Health and Human Services 2000). An Australian study using a self-administered postal questionnaire reported that 18% of women and only 2% of men used women's magazines as a source of nutrition information (Worsley and Lea 2003). The number of men who reported using women's magazines as a source of nutrition information in the study conducted by Worsley and Lea (2003) differed vastly from results of the other studies reported. The reason for this may be related to the other studies being focused on magazines in general while Worsley and Lea asked specifically about use of women's magazines.

Demographic characteristics have been reported to influence an individual's use of magazines and the level of trust placed in this source of nutrition information. A European survey reported that as age increased and education decreased magazines and newspapers were decreasingly sought. However, when asked about which sources of nutrition information they trust most, magazines and newspapers were ranked fifth, with health professionals ranked as the most trusted source (de Almeida, Graca et al. 1997). The ADA reported that individuals with some college education were more likely to use magazines and newspapers as a source of nutrition information (American Dietetic Association 2002). A survey of South Australian women and men found that use of women's magazine articles for nutrition information decreased with increasing levels of education among survey respondents (Worsley and Lea 2003). Again, there is contradiction in the finding reported by Worsley and Lea and the other studies reported here. This too could be a result of Worsley and Lea asking directly about women's magazines, while the other studies asked about magazines in general.

Given the reported importance of magazines in the provision of nutrition information it is vital to be aware of what information is communicated to the readers of these publications. Indeed it is also of central importance that there is an understanding of the influence this information has on the general population's food decisions.

### **2.10.2 Nutrition information in Magazine Advertisements**

Content analysis has been used extensively to determine the nutrition messages in a variety of magazines, particularly those messages in the form of advertisements. Researchers have categorised the types of foods advertised and findings of these studies indicate a large proportion of food advertisements are for nutrient-poor products. For example, Barr's (1989) analysis of Canadian women's magazines found that advertisements did not promote nutrition positive food choices.

Pratt and Pratt (1995) compared food advertisements and the accompanying health promotional messages in three magazines, two of which had a large African American readership, these being *Ebony and Essence* and one that had a primarily “white” readership, *Ladies Home Journal (LHJ)*. *Ebony and Essence*’s largest number of advertisements were for alcoholic beverages. In comparison, this was the least advertised category in *LHJ*. The most frequently advertised food groups in *LHJ* were desserts and foods high in fat and sugar, followed closely by breads and cereals.

Hill and Radimer (1996) analysed the content of magazine advertisements targeted at young women and found most were for non-core and low nutrient dense foods, such as alcohol, cocoa and supplements. In contrast, results indicated that the most commonly advertised products in women’s magazines were sauces and mixes, grain products and milk.

Lohmann and Kant (1998) found that 50% of all advertisements in two popular culinary magazines were for beverages with 80% of these advertisements being for alcoholic beverages. The most advertised product in the two popular health magazines were for fats, oils and sweets (30%). In a later study Lohmann and Kant (2000) examined three types of magazines; food, women’s and health. Women’s and food magazines’ most advertised product categories were classified as miscellaneous, which included soups, sauces, condiments and combination dishes. The most advertised product category in health magazines were breads. The second most advertised product category in women’s and health magazines were fats, oils and sweets.

Those foods which are considered to be more healthy have been reported to be the least frequently advertised products. Many studies have reported fruit, vegetables, milk and dairy products being the least advertised product, as stated in Pratt and Pratt’s (1995) study of *Ebony and Essence*. Similarly, Lohmann and Kant’s (1998) study of culinary and health magazines identified that fruit, vegetables and bread were the least



advertised products. When food, women and health magazines were examined together, fruit and vegetables were the least advertised product category (Lohmann and Kant 2000). Consideration must be given to the fact that these products are unbranded and therefore the potential, particularly from a financial consideration, is limited in terms of advertising capacity.

Researchers have compared the foods advertised with current dietary guidelines or in response to recent changes to food policy, particularly those policies related to nutrition claims. Barr (1989) used content analysis to examine a Canadian women's magazine, *Chatelaine*, over the period 1928 to 1986 to explore the types of foods advertised and statements used to promote these products and assess trends over this time. Results indicated that the types of food advertised and nutrition message used to promote these products changed, however they were not more positive in terms of nutrition. Barr (1989) noted that there was a decrease in the number of food ingredients and an increase in non-nutritious beverages, desserts and foods high in sugar and fat. General health and nutrition messages used to promote products decreased while messages emphasising avoiding dietary components increased.

Hickman and colleagues (1993) examined women's magazines in 1975 and compared them with those appearing in 1982 and 1990. Results indicate a progressive increase in the number of nutrition claims, particularly for those claims that focused on the absence of dietary components such as fat and cholesterol. The authors noted that advertisements for grains, fruit, vegetables and juices, meats, and fats were more likely to contain a nutrition claim than other categories of food and beverage products.

Hill and Radimer (1996) compared the content of the advertisements in magazines aimed towards young and mature women in relation to products advertised, promotional statements made and consistency with current dietary recommendations. For both types of magazines avoidance

of dietary components were most evident. For young women this was predominantly promotion of natural or pure products and for mature women low fat claims. In both magazines, messages were most commonly consistent with the dietary guideline to decrease fat intake. Younger women were more likely to be exposed to messages, which were not consistent with dietary guidelines.

In summary, it has been widely reported in the literature that across a variety of magazines, food advertisements promote the consumption of non core or nutrient poor foods, such as those foods high in fat and sugar. Advertisements for core foods or those considered healthy have been reported to have been advertised least frequently. Magazine readers are clearly more frequently receiving messages to consume products which are not consistent with dietary guidelines. Interestingly, while 'unhealthy' products high in fat and sugar appear to be most frequently advertised, there also appears to be an increase in the use of nutrition (or 'health') claims, which focus on the absence of dietary components of foods, such as fat and cholesterol. While the literature reports consistency in the findings of studies of food advertisements in women's magazines, few reports have been published in the last decade, a period when significant changes have occurred in the food supply and food marketing. Examination of the relationship between women's food concerns and women's magazines will require up-to-date data on the presentation of food messages via advertisements in this medium.

### **2.10.3 Nutrition Messages in Magazine Editorial Content**

Few content analyses have focused on the editorial content of magazines. Nutrition, dieting and fitness messages in the teenage women's magazine *Seventeen* were examined by Guillen and Barr (1996). Magazine issues published in even years from 1970 to 1990 were coded using an instrument developed by the researchers. Major articles (over one page in length), minor articles (brief highlights or columns) and advertisements

were coded, however major articles were subjected to a more in-depth analysis and a different coding instrument was developed for advertisements. Recipes were counted. Results indicated major nutrition related articles emphasised weight loss plans or provided information on nutrients such as fibre, fat and vitamins. Minor articles were more likely to provide cooking tips, food information, nutrition information, or present career opportunities in food and nutrition. Almost a quarter of advertisements relating to nutrition were for diet camps, followed by products for weight reduction. Sweets, candy or snacks were the most advertised food products.

Kornis et al. (1998) compared magazine coverage of calcium and weight loss information across two age groups, these being teen focused and women's magazines. The study examined two four-year periods (1986–1989 and 1991–1994). These study periods were selected based on the release of the 1989 revision of Recommended Dietary Allowances (RDA). Four issues of four magazines per age group were examined over the eight-year period. Results of this study indicated 83% of all articles examined were focused on weight loss. Teenage-focused magazines were responsible for 62% of weight loss articles compared with 38% of women's magazines. Of the articles focused on calcium, 90% were in women's magazines compared to 10% in teen-focused magazines. Results also indicated that the release of the 1989 calcium RDAs did not affect the coverage of calcium in either magazine. Information on weight loss was presented most frequently as advertisements in women's magazines and teen-focused magazines. Similarly, information on calcium was presented in the form of advertisements more frequently than editorial in women's and teen-focused magazines.

In contrast, the American Council on Science and Health (2001) has reported magazines to be an excellent or good source of nutrition information. Similarly, an Australian content analysis of more than 400 articles published in a two-year period in 14 Australian women's magazines found that in 93.9% of cases the nutrition information was

accurate. It was found, however, that 64.3% of diet plans were unrealistic and 57.3% were unsustainable (Begley and Cardwell 1996).

#### **2.10.4 Summary**

Clearly the advertising of food in magazines is not consistent with nutrition messages promoted by health authorities. However, the type of magazine and the demographic characteristics of the target audience influence the products advertised and their consistency with dietary guidelines. The quality of editorial nutrition messages appears to be relatively under researched.

#### **2.11 Conclusion**

The dietary practices of many Australians are in conflict with the current dietary guidelines. This represents an important public health issue, worthy of further exploration. This chapter explored the role of the media in the provision of information to consumers and the influence this communication channel has on consumers' health-related behaviours. Review of the literature quite clearly indicated that there is need for a comprehensive review of nutrition messages presented to women. This is highlighted by women's considerable and continuing influence on family food decisions and their reported use of magazines as a source of information in the media. It is, therefore, salient to conduct the research project exploring nutrition messages in women's magazines and to gain an understanding of food and nutrition issues women perceive to be important. This will help to establish an in-depth understanding of the role the media has in the provision of nutrition information to women.

The following chapter will introduce the theoretical and methodological framework. It will provide an overview of theoretical frameworks that have previously been used to explore food choice influences, identifying the main theories used to study media. Sociological literature, with a particular focus on the work of Anthony Giddens and Ulrich Beck, is explored in greater depth. Concepts developed by postmodernist sociologists relating

to late or post modernity and risk, reflexivity and self identity, expert knowledge, trust and doubt and the role of media are explored. This chapter also outlines the three data collection methods employed in this research and positions them in the context of the overall aim of the thesis, to provide insight into food and nutrition discourse in women's magazines and among women.

## **3 Conceptual and Methodological Framework**

### **3.1 *Introduction***

The previous chapter identified that there is need for a comprehensive review of nutrition messages presented to women via women's magazines. This is pertinent given women's considerable and continuing influence on family food decisions and their reported use of magazines as a source of information in the media. It was concluded that it is salient to conduct the research project exploring nutrition messages in women's magazines and to gain an understanding of the food and nutrition issues women perceive to be important. This will help to establish an understanding of the role the media has in the provision of nutrition information to women.

This chapter outlines the theoretical and methodological underpinnings on which the study was based. This outline provides a framework for how the results of this study will be analysed. The published academic literature contains numerous studies that attempt to explain the factors that influence food choice, however, it is anticipated that a broad approach is necessary to gain most insight in this area. A social theory approach will be applied, to give a greater understanding of the influence of the media's presentation of food and nutrition and the likely impact this has on food choice.

The chapter commences with an overview of the theoretical frameworks that have previously been used to explore food choice influences, followed by an overview of the main theories used to study media. This thesis draws on the sociological literature, with a particular focus on the work of Anthony Giddens and Ulrich Beck. Concepts developed by the postmodernist sociologists relating to late or post modernity and risk, reflexivity and self identity, expert knowledge, trust and doubt and the role of media, are explored. This chapter discusses the role of the media in the provision of food and nutrition information and examines the sociological perspectives of McCracken (1993) and Croteau and Hoynes (2003), in addition to Giddens and Beck, to understand the role of women's

magazines. Throughout this chapter discussion focuses on how relevant theories have shaped the project and how these theories informed data analysis.

### ***3.2 Theoretical Framework Used in Previous Food Choice & Media Studies***

### ***3.3 Food Choice Studies***

A vast amount of the research published in the academic literature has explored food choice from a behavioural perspective. Much of this research has focused on behavioural change theories such as the Social Cognitive Theory (Reynolds, Hinton et al. 1999; Story, Neumark-Sztainer et al. 2002), value expectancy theory (Glanz, Basil et al. 1998), stages of change (Campbell, DeVellis et al. 1994; Steptoe, Wijetunge et al. 1996), theory of planned behaviour (Dennison and Shepherd 1995; Sjoberg, Kim et al. 2004), Social Learning Theory (Gribble, Falciglia et al. 2003) and the health belief model (Kloeblen and Batish 1999). Class-based theories have also been used in food choice studies to explore the difference between food habits and food rules (Hupkens, Knibbe et al. 1998). While these approaches have helped increase our knowledge of food choice behaviour (as discussed in the previous chapter), it still remains unclear why people eat what they eat.

The behavioural based approaches that are commonly used in public health and health education are focused on the individual. A broader approach is required if we are to gain greater insight into the influences on food choice. The social environment impacts on many aspects of an individual's life, including the decisions they make. Taking a new direction such as one that is based on sociological theory and looking more broadly at what structural and social influences impact on people's food decisions will provide a different perspective on this public health issue. It can provide health professionals some insight into how societal level factors impact on the food decisions of people rather than just those factors

associated with the individual. Given that media are a socially based phenomena and the reported role this medium has in informing people about food and nutrition (as previously discussed in chapter two) it makes sense to explore the role of media from a social theory perspective. Exploring these issues from a new perspective may result in the expansion of knowledge and understanding of public health issues and aid in the promotion of health to the population.

### **3.3.1 Media Studies**

Historically, communication and marketing theories have dominated media studies, focusing on how people respond to information transmitted via the media. These studies have also been known as media representation studies (Seale 2003). Early studies examined the impact of the media on the general public's perception of risk using the communication model known as the hypodermic needle. The hypodermic needle theory posits that the media can target large groups of people directly and uniformly and "inject" them with messages and have the desired impact on the audience's behaviour (Lupton 1994). This model of studying media effects has been adopted in some public health studies and in many health education campaigns. For example, using this model it may be suggested that exposure of violence through the media will result in individuals behaving in a violent manner. However, the results of studies using the hypodermic needle model are limited because this model fails to take account of external and internal factors that may impact on how individuals understand the message and whether they pay attention to it (Lupton 1994; Egger, Donovan et al. 1997).

Social marketing strategies have also been adopted in studies of the promotion of healthy behaviours to the general population via the media. Social marketing is based on the application of marketing principles to assist and maintain social change. These marketing principles include the widely known 4Ps (product, place, price and promotion) or the marketing mix, which dominates marketing literature (Kotler, Brown et al. 2003).



Public health professionals and government organisations in Australia have tried to adopt this framework using the media in areas such as prevention of skin cancer (Smith, Ferguson et al. 2002), anti-tobacco campaigns (Government Department of Health and Ageing 2004), use of illicit drugs (Australian Government Department of Health and Ageing 2005) and alcohol (Australian Government Department of Health and Ageing 2003). Criticism of social marketing in public health is based on concern that it requires a large investment of time, money and human resources that may not be available to some public health agencies. Other criticisms include ethical concerns relating to victim blaming and to the commercialisation of health information (Ling, Franklin et al. 1992). A social marketing approach will not be taken in this study, as the focus is not on analysis of campaigns produced to change Individual behaviour, rather media that have been produced to entertain and inform.

Alternatively, behaviour change models such as the consumer information processing model have been used. This model describes information as channelling through steps, also taking account of internal factors such as personality and socio-demographic characteristics that may influence the way the information is processed. The information processing model has been applied to areas of public health such as the effectiveness of alcohol warning labels (deTurck, Goldhaber et al. 1995), health warning on cigarettes (Fischer, Krugman et al. 1993), patients' decisions to accept treatment (Kaplan, Hammel et al. 1985), effects of medication labels (Sansgiry, Cady et al. 2001) and children's perceptions of television commercials (Christenson 1982). This model has been criticised for being overly restrictive by assuming that the human mind is always focused and/or systematic to follow a hierarchy every time the individual makes a choice (Machado 2002)

It is only recently that a sociological approach to study the impact of health messages transmitted via media has gained popularity, with researchers such as Seale and Lupton adopting such an approach. Within the sociological framework the complex nature of the relationship between the

media and the messages produced by this medium and the audience is acknowledged. It is important to take a more sociological approach to the way the general public absorb this information given that they understand and utilise, this information based on their own personal experiences, values, ideologies and reality (Lupton and Chapman 1995; Seale 2003).

### **3.4 A Sociological Approach to Food Choice and Media**

This thesis focuses on the media's, in particular women's magazines', role in the dissemination of food and nutrition information. A sociological approach has been taken in the development of the research design and in analysis of the study results. The works of Anthony Giddens, Ulrich Beck and Deborah Lupton in the area of modernity and risk, reflexivity and expert knowledge inform this study.

Giddens and Beck's work in the area of risk reflexivity and self identity is highly relevant to the role of the media in the provision of food and nutrition information. Although Giddens and Beck developed their ideas about risk, reflexivity and modernity independently, many parallels can be drawn in their work (Beck 1992), and they will be considered together. Lupton (1999b) has reviewed and applied the work of Giddens and Beck in many areas of media and public health, such as the reporting of diet and cholesterol (Lupton and Chapman 1995), medical practice ((Lupton 1995; Lupton 1998; Lupton and McLean 1998) and in a recent study that examined the reporting of perceptions of food risks (Lupton 2004). Therefore the writings of Lupton will aid in the application of these frameworks to the current study.

#### **3.4.1 Modernity and Risk**

Giddens (1991) and Beck (1992) identify that we are in a period of late or post modernity (Giddens uses the term 'late' while Beck uses the term 'post') which is characterised as being a *risk society*. This feature is fundamental to how *lay actors* and *technical specialists* organise the social world. A central premise is that the lay public and experts are likely to think

in terms of risks when making decisions/choices. This concept is important to the current study as it highlights that the population are likely to seek information on risk and how to minimise it in their day to day lives. How experts and media present this information to the lay population is likely to impact on how the general population process, and whether they accept or reject, this information. Therefore the concept of *risk society* is central to this thesis.

Giddens (1994) believes that the period of late modernity is not inherently more uncertain, rather it is the result of greater human knowledge that makes issues appear less certain. It is not that late modernity is more risky than previous times, it is that this uncertainty is more apparent because the public and experts are more likely to think in these terms. As a result, experts are generating more information and presenting it in terms of risk. This increased information generation results in a decreasing number of right answers, which increases uncertainty. A result of this uncertainty is that risk and trust have become central features of modern times. In response, the lay public are increasingly seeking information and making their own decisions based on their assessment of information presented by experts. This becomes a risk to themselves and their families because experts increasingly present information in uncertain terms. Therefore when faced with choices, individuals must rely on trust they have in this source (Giddens 1991 pp.23):

*“trust often merges with pragmatic acceptance, it is a sort of ‘effort-bargain’ that the individual makes with the institutions of modernity”.*

Similarly, Ulrich Beck describes postmodernity as a *risk society*, however he suggests that postmodernity is more risky rather than just a result of modern perceptions. Beck proposes that modern risks are a result of industrialisation and over-production, compared with the past when risk was associated with the undersupply of hygienic technology. The risks of today have more global significance and can often go undetected (until identified and constructed by experts) in comparison to those of the past

which were more personal and visible to the lay population (Beck 1992).

Beck defines risk as:

*“...a systematic way of dealing with hazards and insecurities induced and introduced by modernization itself. Risks, as opposed to older dangers, are consequences, which related to the threatening force of modernization and to its globalisation of doubt. They are politically reflexive.”* (Beck, 1992 p.21 emphasis in original)

Beck's view of risk in modernity differs to that of Giddens who asserts that in fact society is not more risky, rather it is that this era is perceived to be more risky (Lupton 1999b). However, they both agree that risk is central in modern society and therefore an important consideration.

Giddens' and Beck's concept of late (or post) modernity being a risk society is central to this thesis. It demonstrates the concerns of the lay public and experts and its role in shaping the way events of day to day life are perceived by the population. Therefore an important role of this thesis is to further the understanding of how the lay public and experts assess, communicate and process these perceptions of risks.

For the lay public, living in a risk society has consequences for an individual's self-identity. Modernity is described as being reflexive, which results in individuals being self critical as a result of risk. In addition, the risk society encourages individuals to seek information about risk. This impacts on the relationship between the lay population and experts. These issues will be explored in the following two sections.

### **3.4.2 Reflexivity and Self Identity**

Giddens and Beck suggest that we now live in a period which is highly reflexive and both claim that this reflexiveness is a result of modernity being a *risk society*. The risk concerns of experts and the lay public leads them to question their current beliefs and behaviours. Beck uses the term

*reflexive modernization*, which he suggests is a result of industrial society moving to a risk society. For Beck:

“the concept of ‘reflexive modernization’ can be differentiated against a fundamental misunderstanding. This concept does not imply (as the adjective ‘reflexive’ might suggest) *reflection*, but (first) *self confrontation*.” (Beck, 1994 p. 5 emphasis in original)

Similarly, Giddens suggests that:

“Modernity's reflexivity refers to the susceptibility of most aspects of social activity, and material relations with nature, to chronic revision in the light of new Information or knowledge”. (Giddens, 1991 p.20).

Both Giddens and Beck acknowledge that people's lives in late (or post) modernity are seen as less predetermined. As a result, individuals are expected to make their own fate. In addition, they agree that reflexivity is a response to uncertainty and insecurity. The lack of certainty in modernity has resulted in the need for individuals to create their own certainty through the decisions they make for themselves and those around them (Beck, 1994). For instance, Giddens acknowledges that the reflexive nature of modernity shapes an individual's self identity. An individual's self identity is created and changed over time, based on assessment of risk (Giddens 1991). Giddens says:

“...[self identity] is not something that is just given, as a result of continuities of the individual's action system, but something that has to be routinely created and sustained in the reflexive activities of the individual” (Giddens 1991 pp.52).

Giddens believes that in this period of modernity an individual's self identity is a reflexive project, which the individual continuously works and reflects on. Giddens (1991 p. 54) says:

“The existential question of self-identity is bound up with the fragile nature of the biography which the individual ‘supplies’ about herself. A person’s identity is not to be found in behavior, nor — important through this is — in the reactions of others, but in the capacity to *keep a particular narrative going*. The individual’s biography, if she is to maintain regular interaction with others in the day to day world, cannot be wholly fictive. It must continually integrate events which occur in the external world, and sort them into the ‘story’ about the self.”

This quote highlights that each individual’s *biography* is shaped through the reflexivity of modernity based on information and knowledge they receive from external stimuli. Giddens also acknowledges that the external world plays a role in shaping an individual’s self identity:

“ it must continually integrate events which occur in the external world, and sort them into the ongoing ‘story’ about the self”  
(Giddens, 1991 p. 54).

Similarly, Beck suggests that modernity has resulted from the need for individuals to produce their own life stories, a term he calls *individualization*, which he believes is central to the notion of reflexive modernisation. This concept is similar to Giddens' concept of reflexivity and self identity. Beck suggests that:

“Individualization means, first the disembedding and, second, the re-embedding of industrial society ways of life by new ones, in which individuals must produce, stage and cobble together the biographies themselves” (Beck, 1994 p. 13)

An interesting consequence of the reflexive nature of modernity as described by Giddens and Beck is that it assumes the individual as responsible for the consequences of their decisions (as opposed to society or other structural influences). Therefore based on these theories of

reflexiveness, blame can be attributed to the individual. As a result, the process of reflexivity and self identity (or individualisation) is more risky than in industrial times.

This concept highlights the importance of information and knowledge in today's society, particularly when individuals are making decisions. It also acknowledges that this reflexivity has a role in shaping an individual's self identity or individualisation. In addition, based on Giddens and Beck's work, it can be suggested that an external stimuli, such as the media, has the potential to influence an individual's *biological narrative* and an individual's self identity, given that the media is reported to be an important source of information for consumers (Goldberg 1992; Lester 1994; Gabriel and Lang 1995; Goldberg and Hellwig 1997; Australia New Zealand Food Authority 2001) (as discussed in Chapter Two).

Giddens and Beck's concept of reflexivity has the potential to inform the result of this research project. This notion suggests that people are constantly in search of new information and greater knowledge in order to shape their self identity and biological narrative. Therefore exploring the influence of external stimuli such as media, which is reported by the public to be an important source of information, may increase the understanding health professionals have of this medium's influence on the decisions made by the general public. Understanding how the general population process and use this information in their everyday lives and to shape their self identity may result in better choices and improvement in the public's health. The concept of individuals being responsible for their own fate will also be of significance for this thesis when investigating how information about risk is presented in media. It is also important to be aware that any limitations in the range or scope of information provided may result in a narrow concept of self or limit an individual's capacity to shape their self identity. Application of these concepts may provide insight into how people use food and nutrition information presented in women's magazines to make decisions and the role of these decisions in shaping an individual's self identity.

### **3.4.3 Expert Knowledge, Risk, Trust and Doubt**

Given that modernity is considered a risk society it is important to consider how such risks are constructed and subsequently communicated. Experts play an important role in this. They can be considered to develop knowledge through generation and interpretation of data and to provide knowledge about risks to the general public. The lay public do not have access to primary information themselves and thus rely on others. This dependency is inherently problematic. Lupton (1993 p. 431) indicates that:

“they [the lay public] must rely upon intermediaries such as scientists, government officials, environmental campaigners, and the news media to inform them. These intermediaries have their own agenda and therefore can tend to exaggerate and distort the “facts” to further their own cause, making it difficult for the layperson to conceptualize risk in the face of conflicting perspectives”.

It should be noted that the nature of the relationship between expert knowledge and the lay public may be changing. Historically, expert knowledge was accepted without challenge, however with the advent of the Internet, which has resulted in increased access to a variety of information sources, the lay public are better able to access information and therefore assess risk by themselves. As a result, Giddens and Beck suggest that the lay public are more willing to challenge the claims of experts in relation to risk (Lupton 1999b). Questioning of expert knowledge is a feature of the concepts of modernity and risk (Giddens 1991).

Giddens and Beck both address the nature of expert knowledge, however differences exist in their perceptions of the relationship between expert knowledge and the lay public. The following section explores their respective views of these systems.

Giddens believes that because of the reflexive nature of modernity, expert knowledge is subjected to revision and being proven wrong in the future.



Therefore knowledge currently accepted as a truth could be re-evaluated and possibly proven wrong. Such revision of scientific knowledge introduces the concept of doubt and this has become an essential characteristic of expert knowledge. It is this doubt that leads experts to re-examine current knowledge in order to increase the level of certainty in expert knowledge (Giddens 1994 p. 86):

“Experts are bound often to disagree, not only because they may have been trained in various schools of thought but because disagreement and critique is the motor of their enterprise”.

Giddens identifies that risk, trust and doubt are all features of expert knowledge. They also have a role in the relationship experts have with the lay public. As identified above, expert knowledge is reflexive and is subject to being proven wrong (or experts change their position on certain issues) as a result of revisions in this knowledge. While this is an important feature of expert knowledge it also results in doubt and decreased trust in experts from the lay public. This is particularly true when scientific debates are filtered by the media and presented in the public (Giddens 1991). As a result, the public accept that all knowledge is provisional and likely to be proven wrong in the future. However the lay public have to make decisions whether to accept or reject knowledge conveyed via experts by anticipating the outcome of these decisions, which in itself poses a risk regarding which experts to trust:

“For since there are no super-experts to turn to, risk calculation has to include the risk of which experts are consulted, or whose authority is to be taken as binding ... The very scepticism that is the driving force of expert knowledge might lead in some contexts, or among some groups, to a disenchantment with all experts; this is one of the lines of tensions between expertise and tradition (also habit and compulsion).” (Giddens 1994 p. 87)

Beck's view adds to Giddens' perspective by suggesting that as the risk society expands, so does the hostility between those afflicted by risk and those who produce or profit from risk. A result of living in a risk society is that knowledge has gained social and economic significance, with media and experts having extraordinary power to structure and disseminate knowledge:

“The risk society is in this sense also the *science, media and information* society. Thus new antagonisms open up between those who *produce* risk definitions and those who *consume* them” (Beck 1992 p. 46 original emphasis).

This creates tension between experts and the lay public, encouraging distrust of information presented by these sources:

“They induce systematic and often irreversible harm, generally remain invisible, are based on casual interpretations, and thus initially only exist in terms of the (scientific or anti-scientific) knowledge about them. They can thus be changed, magnified, dramatised, or minimized with knowledge, and to that extent are particularly open to social definition and construction. Hence the media and the scientific and legal professions in charge of defining risks become social and political positions.” (Beck 1992 pp.22-23)

It is also important to acknowledge the role experts have in the construction of risk. Although both the lay public and experts are likely to think in terms of expert knowledge, it is more common that experts have access to the resources to assess this risk. As a result, it is the experts who determine which areas of scientific knowledge are advanced and in need of further exploration. Therefore experts determine what questions should be asked and what processes should be implemented in order to answer these questions. The public are rarely involved in the decisions about which areas of knowledge need to be explored further. For example, experts have researched and tested the short-term effects of consuming

genetically modified (GM) foods and many insist that they are safe (Australia New Zealand Food Authority 2000). On the other hand consumer advocates continue to have low acceptance of GM foods and express the desire to have research into the long-term impact of these foods (Australian Consumer Association 2003). This example highlights that the lay public may ask different questions to those posed by experts and the explanations provided by experts may not always allay lay public concerns.

Positioned between the experts and the lay public are media, which act as mediators. This role as mediator is somewhat complex. On one hand media relay expert knowledge to the lay public and are an avenue for public to express their concerns. However, media choose which perspectives they align with and how to present these issues. For instance, experts may relay their recent findings to media (usually in the form of press releases) and it is then up to the journalists and editors to decide what information is newsworthy and what is reported to the lay public (Ayroob, Duyff et al. 2002). Thus an important role for media is to reinterpret and relay concepts of risk. This can either support or undermine the public's trust in expert knowledge. The framing and positioning of information in the media is a complex process which essentially has an impact on the decisions made by the general public. Thus it is important in public health to understand the role of media, how the public interpret and construct risk, trust and doubt and hence what are the implications for public health professionals:

“The producers of mass mediated messages about health have particular agendas, and this is likely to influence what is shown. As ordinary people we must decide to trust or distrust medical advice or other expertise” (Seale 2003 pp. 514)

### **3.4.4 The Role of the Media**

In the public health arena media are commonly described as having four roles in health promotion. These are to: (1) inform or educate, (2) persuade or motivate, (3) achieve socio-political environmental changes through media advocacy, and (4) provide for public announcement (Egger, Donovan et al. 1997). All of these roles are performed by media but a broader question is how do they act to influence perceptions of risk and hence the public's capacity to manage in the current environment based on risk, trust and doubt? Media have been described as having an important role in communicating health risk information to the public (Lupton 1993). This is particularly important when these risks are not evident to the public or when technical knowledge is necessary to assess and interpret these risks (Lupton and Chapman 1995).

Traditionally media are associated with entertainment, with little acknowledgement of how this communication medium was involved in the social world (Giddens 1997). Sociologists agree that media have a fundamental role in modern societies, however debate occurs around the nature of this role. Some sociologists such as Theodor Adorno argue that the media shape our social world, while others such as John Fiske take the position that the social world shapes the media (Gauntlett 2002). The position taken in this thesis is that of Giddens (1997) who has indicated that media have a role in influencing the public's experience of the social world and shaping public opinion, as a result of the provision of knowledge about the social world, a critical feature of modern reflexivity. Giddens (1991) also believes:

“In conditions of modernity, in sum, the media do not mirror realities but in some part form them” (Giddens, 1991 p. 27)

This suggests that media are not only a medium through which the public can understand society or become aware of important issues in society, they also have a role in shaping society and setting the agenda for various

issues within that society. Lupton (1994) indicates this is particularly true when individuals have very little first-hand experience or when the event is unexpected and dramatic.

Giddens (1991) explains it is a condition of modernity whereby the public are exposed to information, events or knowledge that may not be a part of their normal life, for instance distant events become familiar to the public. This means much of what the public know about global affairs comes from the media. In some instances people often know more about what is happening on the other side of the world than what is happening locally or in their community. For example, it has been reported that the public know more about the terrorist attacks occurring on the other side of the world than they do about environmental hazards in their own community (Gray and Ropeik 2002). Clearly media have an important role in shaping the public awareness of local and global events.

An individual's biological narrative is influenced by the information presented in popular media as this media allows people to experience events, which are rare, and out of the ordinary in their daily lives and gain information on alternatives about which they previously may have been unaware. Media's provision of information to the general population, about issues that previously had not been exposed, enables people to examine themselves reflexively (Thompson 1995). As discussed earlier in this chapter, the lay public accepts risks and makes choices by anticipating the outcomes of these risks. Media adds to our awareness of risk, thereby influencing the choices made by the lay public.

While it is clear that media are an important source of information and have a role in transmitting expert knowledge to the lay public, it is acknowledged that it is not as the sole provider of information. Media are considered in conjunction with other external influences such as family, friends and other professionals when an individual is processing and interpreting information. It is important to acknowledge here, that significant others who interact with lay people in their day to day lives also

act as sources of expert advice. Thompson (1995 p. 216) states:

“individuals also commonly rely on significant others with whom they interact in their day to day lives, and whose opinions they have come to respect as a source of expert advice about which symbolic materials are worth assimilating and which are not, and how such materials are to be interpreted.”

It is concerning to note that there is a lack of representation of public views and concerns in the media, therefore the information presented in the media could be considered to be unbalanced (Rhetorica 2004). Experts are better able to raise the media's awareness of issues and their concerns, therefore the information presented is skewed and predominantly represents experts' views.

This study primarily focuses on the influence of the media in an effort to gain broader knowledge about one aspect of the social world and their influence on food choice, concepts of risk associated with food and nutrition, and in turn, food choice behaviours.

### **3.4.5 Media and Food and Nutrition Information**

The work of Giddens and Beck helps to position media's role in reporting of food and nutrition issues and their potential to impact on the choices made by the lay public. This examination of the reporting of food and nutrition in media will be used as a case study in understanding the theoretical positions of Beck and Giddens in particular concepts, such as, reflexivity, self-identity, risk, trust and doubt.

In general, media reporting of issues surrounding food and nutrition takes a nutrition science approach, adopting the hegemonic discourse (Crotty 1995). It is claimed that media are commonly reporting food and nutrition in terms of how to decrease health risks or increase health benefits, how to lose weight or by providing information about food scares. Rarely do media

present information about the social aspects of eating such as traditions or social benefits, nor do they present non-mainstream alternatives, for example vegetarianism or organic foods. Therefore the lay public are likely to think more in terms of the nutrition science approach, which breaks foods into nutrients and regularly classifies them as “good” or “bad” foods.

It can be argued that the food and nutrition information presented in the media exemplifies the risk, uncertainty and decreased trust, characteristic of modernity. News media present health-promoting messages based around decreasing health risks and report on the benefits of eating foods because of the nutrients they contain or the health-giving properties they possess. News media also present information on food risk such as food scares, contamination and hazards. On the other hand, media frequently present new scientific findings related to food, nutrition and diet. Often these findings conflict with current scientific thought, which acts to confuse the lay public (even though, as mentioned above, this is an important feature of expert knowledge). As Giddens suggests:

“How can a layperson keep up with, or reconcile the diverse theories about, for example, the influence of diet upon long-term health” (Giddens, 1994 pp. 88)

Commercial media present messages with similar contradictions. Foods are promoted for their nutritional and functional properties, which reflect current health concerns and also reinforce the messages of decreasing health risks:

“In the market place, food manufacturers or food producers promote their products selectively using those Good Nutrition messages that serve their commercial interests” (Crotty, 1995 p. 36)

Alternatively, other foods commonly considered detrimental to health are promoted with no reference to health and promotions are in terms of taste, pleasure or quality. This tension in the promotion of food may mean that

consumers are torn between choosing foods considered “good” for them, and foods they enjoy but are considered “bad” for them. This may be a result of the hegemonic discourse presented in the media, which encourages consumers to think in terms of the health benefits and risks of food rather than of other properties possessed by food.

As discussed earlier in this chapter, scientific debate is often filtered through the media to consumers, resulting in decreased trust of the lay public in expert knowledge. As consumers become aware of the tensions relating to food and nutrition in the news and commercial media it is likely that their trust in the media and in experts as an information source will decrease. It is not unusual for the lay public to insist that experts cannot make up their minds (Harvard School of Public Health 2005).

As an example, Lupton has published several articles and book chapters, which highlight the phenomenon she calls the *cholesterol controversy*. This controversy is a result of the media reporting on the link between cholesterol consumption and heart disease and the trend later in the news media to question this link. She has found that people were highly cynical of information presented in the media and by health professionals. When presented with conflicting information about the relationship between diet and cholesterol people were found to rely on their own experience (Lupton, 1996). Clearly, the lay public have a complex relationship with the provision of expert knowledge in the media and the overall perspective erodes trust in the field. It is important to explore this relationship to provide insight into the complex nature of food and nutrition information being transmitted via the media.

#### **3.4.6 Women’s Magazines**

As indicated earlier in this chapter, magazines have an important role in reinterpreting expert knowledge and relaying these concepts of risk to the general public. The health risk information that journalists and editorial staff decide to include in their publications, and how they frame the messages



that they present, is likely to impact on the lay public perception of risk and on the public's trust of experts.

A number of different sociological perspectives have been utilised to examine the role and impact of women's magazines, including critical feminist and postmodern consumerist perspectives. The main criticisms of women's magazines have come from a critical feminist perspective.

McRobbie (1999) explains that analysis of women's magazines have caused disagreements among feminists, with some believing that they are unacceptable and sexist, while others believe that women's magazines have a role in the promotion of feminism. Alternatively, Hermes (1995) explored women's magazines from a postmodern feminist perspective. Hermes believed that taking a feminist perspective does not respect readers of women's magazine, rather it indicates a level of concern for them. Hermes suggests that magazines offered women little meaning, rather they were convenient articles of pleasure in their daily routine. The feminist debate over women's magazines has helped to inform the sociological exploration of this form of the media. However, the current debate has highlighted a lack of a clear positioning of feminist perspectives, thus making it difficult to apply any one of them in this thesis.

The conceptual positions of Giddens and Beck already outlined in this chapter appear to provide a more developed framework for this thesis. Although their concepts have not been applied, their concepts are highly relevant. As discussed in the previous section, the media presents information in terms of risk. This risk information can be used reflexively by women to shape their self identity and as a result issues of trust and doubt become essential in the interpretation of this information. Women's magazines, in conjunction with an analysis of women's discourse of food and nutrition, present an interesting case study of the media's provision of food and nutrition information.

The theoretical positions of Giddens and Beck offer a framework for understanding the results. This thesis will be strengthened through

incorporation of the work of Croteau and Hoynes (2003) and McCracken (1993) who provide greater insight into the role women's magazines have in presenting information on food and nutrition. Croteau and Hoynes (2003) argue that women's magazines may assist individuals to express themselves, through editorial advice or the variety of products advertised. Thereby women's magazines have the potential to influence an individual's expression of self identity and may impact on the decisions they make:

“In the end, women's magazines use both direct and covert advertising to sell magazines and promote the ideology that celebrates the consumption of gender specific products as a means to identity formation and personal satisfaction — the dream of the “good life.” (Croteau and Hoynes, 2003 p.189)

Croteau and Hoynes add to the position of Giddens and Beck in relation to self identity and reflexivity. Women's magazines may have a role in aiding women in their expression of self identity through the presentation of information in the form of editorial advice and advertisements, which women use reflexively.

A less positive perception of the role of women's magazines is that of McCracken (1993) who describes them, from the cover to the advertisements to the editorial content, as encouraging consumerism among women. She suggests that women's magazines, from late childhood and on, encourage women to view themselves in need of improvement to feel fulfilled in life, and to experience this through consumption of the products that grace the magazine's pages either in the form of advertising (covert or overt), editorial or advertorials. She reports that cosmetics and food are the two largest advertising categories in women's magazines. She suggests that editorial material is constructed to support the advertised products. Even the placement of recipe sections and food advice are positioned to sell advertised products. The ideas of McCracken also extend the work of Giddens and Beck in the area of reflexivity and self identity, whereby magazines make women self critical

and they use this information reflexively to shape their self identity. Therefore it is possible that advertisements along with editorial materials concerned with food and nutrition could have a significant impact on magazine readers.

### ***3.5 Thesis Theoretical Framework***

This section outlines how the theories selected form the theoretical framework for the study. Review of the literature (Chapter Two) has identified the complex nature of food choice. Food choice has predominantly been studied from a behavioural perspective. While this has allowed for insight into the aspects of food choice, it is believed that a social exploration of food choice will allow for a broader understanding of this process. Given that magazines are commonly reported to be an important source of nutrition information, the food and nutrition messages transmitted via the media have the potential to influence food decisions made by individuals. Therefore the principle objective of this study was to gain insight into the food and nutrition issues considered to be of importance among women and in popular women's magazines. A theoretical framework was required that encompassed all of these factors

A range of sociology theories are reported in the literature, including feminist theory, functionalist, Marxist, pluralist and postmodern theories. Many of these could assist in understanding factors relating to the role of women's magazines in the provision of food and nutrition information. A postmodern perspective focusing primarily on the work of Anthony Giddens and Ulrich Beck accompanied by the work of Deborah Lupton was considered the most relevant to this thesis. It is outside the scope of this thesis to focus on all potentially relevant theoretical perspectives covered by these theorists. Alternatively, exploration of only one theory would not provide the sufficiently complete and broad understanding necessary for this thesis. Therefore a selection of the work of Giddens and Beck most relevant to the area of media was selected.

The literature identifies that the media are one way of filtering expert knowledge to the general public, particularly information about health risks. However the general public have identified issues of trust and doubt in the information presented in the media and in particular women's magazines. Therefore the work of Giddens and Beck in the area of modernity and risk, reflexivity and self identity, expert knowledge and risk, trust and doubt were considered relevant to this study and worthy of further exploration.

This study also aims to understand how women use the food and nutrition information presented to them in women's magazines. Other researchers such as Deborah Lupton have identified the concept of reflexivity as being important when considering how individuals respond to information presented in the media (Lupton and Chapman 1995). Given that an individual's self identity is recognised as being culturally constructed, information promoted by the media has the potential to impact on an individual (Seale 2003). Therefore it was considered that the theoretical perspectives of reflexivity and self identity were particularly pertinent in the exploration of the role of women's magazines in the media.

Neither Giddens or Beck have written specifically about women's magazines from a social theory perspective. As a result, the work of McCracken (1993) and Croteau and Hoynes (2003) was also included in the theoretical framework for this thesis to provide insight into the role of women's magazines and aid in the development of the study and analysis of study results.

This unique combination of theories will allow for an extension of knowledge regarding the role of women's magazines in the provision of food and nutrition information.

### **3.6 Conclusion**

This section positioned this thesis within the sociological literature. It established that post modernism theories such as those of Anthony

Giddens and Ulrich Beck, relating to risk, reflexivity, self identity, trust and doubt have the potential to provide a useful framework for addressing the question. In addition, the work of Croteau and Hoynes and McCracken may be useful to expand the concept of self identity and its potential relevance to understanding the role of the media. One of the overarching themes of this chapter is the complex nature of the relationship between the experts and their construction of risk information and the lay public's use and consumption of this knowledge. It was argued that the concepts of risk, reflexivity, self identity, trust and doubt all contribute to this relationship. An examination of the nutrition information presented in women's magazines in conjunction with an exploration of women's discourse relating to food and nutrition will be important to develop a greater understanding of this complex relationship and its implication for public health practice. The theoretical framework will comprise consideration of the following key concepts:

- Modernity and risk
- Reflexivity and self identity
- Expert knowledge, risk, trust and doubt
- The role of the media and women's magazines in the provision of food and nutrition information.

### ***3.7 Methodology Framework***

The purpose of this section is to outline the methodological framework used in this thesis. This section also provides a description of how the author anticipates the methodologies will provide insight into food and nutrition discourse in women's magazines and among women, and will provide a timeframe for data collection. It also highlights how other researchers, and in particular Deborah Lupton, have used similar methodologies to gain insight into public health issues. This will demonstrate why such an approach was relevant and appropriate.

### **3.7.1 Methodological Frameworks used to explore public health issues, the media and lay and/or expert discourse**

Mixed methodologies have been used by public health researchers to explore media discourse in conjunction with lay and/or expert discourse. Exploration of media and lay or expert discourse together contribute to an understanding not only of the messages transmitted via the media but also how the lay public respond to health messages, which they receive. The importance of studying the messages that are presented to the lay public via the media at the same time as lay or expert discourse was identified by Seale (2003 p.514):

“As sociologists interested in the experience of illness, and in health care and health policy, we ought to be interested in which stories get told and which get suppressed, and in how members of the media audience (which includes health policy makers and health care providers themselves of course) respond to the mediated health messages.”

A sociological approach, using focus groups, semi-structured interviews and content analysis of women's magazines was believed to be appropriate for this thesis. While other methodological processes have been used to explore the media and the public's reaction to information transmitted via the media, such as media reception analysis, the broader and sociological approach was required here to gain public health insight into this issue.

Lupton and Chapman (1995) examined press clippings relating to the relationship between heart disease, diet and cholesterol from all Australian national and regional newspapers published between January and August 1993. In conjunction with this, the researchers conducted a series of 12 semi-structured focus groups with residents of Sydney between January and May 1994. The focus groups explored the lay public responses to this issue. The aim of this study was to examine the media coverage of and lay

responses to the controversies surrounding the control of cholesterol. The findings of this study confirmed that conflicting information was being published surrounding heart disease, diet and cholesterol. This study also demonstrated the importance of reflexivity when individuals are faced with conflicting information. The results suggested that individuals often rely on personal experience and lay knowledge when interpreting information received from the media.

Using a similar methodological approach Lupton explored the social position of the medical profession over a two-year period (Lupton 1998; Lupton and McLean 1998). In this study, all new items concerning the medical profession and medical practice published in Australian metropolitan newspapers and news magazines over a 15-month period (between January 1994 to March 1995) were subject to critical discourse analysis (Lupton and McLean 1998). In addition, in-depth semi-structured interviews were conducted with 60 lay people and 20 medical doctors living in Sydney during the same period. Participants were asked to respond to the recent reporting of doctors in the news media (Lupton 1998). The aim of this research was to determine the central discourses regarding Australia's medical profession evident in newspapers, the lay public and among doctors (Lupton 1998; Lupton and McLean 1998). The findings of this research indicate that while the media did represent the medical profession negatively in some cases, for instance medical negligence and sexual assault, there were also many positive representations of the medical profession (Lupton and McLean 1998). The interview data indicated that doctors, were more likely to recall the negative representations of the medical profession in the media than were the lay participants. This study highlighted the impact that personal experiences and professional and personal interests have in how the audience responds to media coverage of specific issues.

Dixon-Woods and associates (2003) also conducted a media analysis in conjunction with semi-structured interviews to explore the discourses around children with cancer. An analysis was undertaken of worldwide

newspaper articles dealing with childhood cancer published in the first week of October 1999 and available through the online database NEXIS. Semi-structured interviews were conducted with 20 mothers of children aged between 4 and 17 years to explore the mothers' and their child's experience and beliefs about childhood cancer. The findings of this study highlighted disparities between the newspaper and parents' accounts. Newspaper articles were more likely to represent children being positive, heroic and accepting of their cancer, while parents' accounts were less positive, with reports of children being distraught and hard to manage. Parents also discussed the difficulties they faced personally when their child was suffering from cancer.

In a recent study Lupton (2004) explored food risks in three metropolitan newspapers and among the lay population. A discourse analysis was conducted over a 14-month period (1 January 2002 to 28 February 2003) in conjunction with semi-structured interviews with 70 participants about their beliefs regarding food risks. Interviews were conducted in late 2002 and early 2003 (Lupton 2005). The results of her analysis revealed that the most commonly reported issue was the relationship between food intake and obesity, in particular childhood obesity, followed by risk associated with the primary production of food and risks from processed, restaurant or takeaway food (Lupton 2004). Results of the interview data suggest that participants were concerned about risks associated with being overweight and the consumption of fat. In addition, participants also indicated concern for issues such as additives and chemicals in food, however the number concerned about this was far less than those raising the issue of overweight and the foods that contribute to weight gain (Lupton 2005).

The studies presented above have used mixed methodologies to gain insight into important public health issues. All of the studies have conducted a content analysis and/or discourse analysis with interview data. These studies have been able to identify similarities and differences in how the media and the media audience represent public health issues. These studies have also demonstrated that the media audience draw on



their own personal experience and knowledge when interpreting information presented in the media. In many cases the general public challenge the information presented to them via the media. Therefore, when studying how the media represents public health issues it is also vital to gain insight into how the general public interpret and use the information presented in the media.

### **3.7.2 Thesis Methodology**

This thesis employed a variety of qualitative and quantitative methods to examine how women use and respond to food and nutrition issues which receive a high level of coverage in the media. Focus groups, semi-structured interviews and content analysis of women's magazines were considered the best research methods to gain insight into these issues. A brief overview of the series of studies will provide a methodological context. Each methodology will be outlined in detail at the beginning of the respective study chapters. In addition, issues of quality and the manner in which ethical considerations were addressed in each study will be discussed.

The purpose of this project was to explore the food and nutrition issues considered to be important among women and determine if the media, in particular women's magazines, had a role in shaping these beliefs. The purpose of each study and the timeframe (also outlined in table 3.1) in which the data were collected are outlined below.

1. Focus groups were conducted with the aim of gaining an understanding of women's thoughts and perceptions of women's magazines and the role they play in providing women with food and nutrition information. The aim of these focus groups was to gain insight into the food and nutrition issues important to women. Focus groups were conducted between August 2002 and November 2002.

2. Semi-structured interviews were conducted with approximately half the women who participated in focus groups. The purpose of these interviews was to gain more detailed insight into the food and nutrition issues important to women. Each participant completed two interviews. The first round of interviews was conducted between May 2003 and June 2003. The second round of interviews commenced in October 2003 and was completed in December 2003.

3. Content analysis of selected women's magazines was conducted over a 12-month period from 1 January 2003 until 31 December 2003. The purpose of this content analysis was to gain insight into the food and nutrition issues presented in women's magazines. This is particularly important given that women's magazines are reported to be one of the most commonly used sources of nutrition information. The media analysis was conducted concurrently with the semi-structured interviews in order to gain an understanding of the role the media have in constructing women's nutrition discourse.

**Table 3.1 Timeframe of data collection**

<b>Methodology</b>	<b>2002</b>				<b>2003</b>			
<b>Focus Groups</b>								
Data collection			XX	XX				
<b>Semi-Structured Interview 1</b>								
Data collection						XX		
<b>Semi-Structured Interview 2</b>								
Data collection								XXX
<b>Content Analysis</b>								
Data collection					XXX	XXX	XXX	XXX

The data collected using the three methodologies above are positioned and discussed within the theoretical framework outlined previously in this chapter. It is acknowledged that a direct correlation between the issues raised in the eight Australian women's magazines and those raised by the women cannot be made because a multitude of factors are known to influence an individual's interpretation and response to information they receive from the media (Egger, Donovan et al. 1997). It is believed,

however, that this body of work will provide a basis for understanding how women respond to food and nutrition issues, which receive a high degree of coverage in the media. The next section of the chapter will provide support for the application of these methodologies by highlighting studies that have adopted similar methodologies to explore important public health issues.

### **3.8 Summary**

This section presented the methodological framework for this thesis and provided an understanding of how the three data collection methods provide insight into food and nutrition issues important to women and presented via the media. It provided evidence of other public health issues being explored in a similar manner. These studies demonstrated the importance of using a mixed methodology in order to gain insight into the issues presented in the media and how the audience respond to information presented via the media. This is especially important given that the general public often rely on their own personal experience and knowledge when interpreting information in the media.

The following chapter will present the first study of this thesis. This consisted of a number of focus group discussions with women aged 13-16, 25-34 and 45-54 years old. The focus group discussions explored the way women use nutrition information provided by women's magazines and their thoughts, opinions and beliefs regarding this information. The results of this study will then be analysed based on the theoretical framework outlined in this chapter. The remaining two studies will be described and discussed in subsequent chapters.

## **4 Focus Group Discussions**

### ***4.1 Introduction***

There has been no detailed qualitative analysis reported of women's views of, and how they use, the nutrition information presented to them in women's magazines. Given the reported importance of magazines as a provider of nutrition information and the evidence indicating the varying quality of nutrition information presented in the media, it is essential to gain an understanding of the influence of this medium. It is necessary to understand the degree to which women access and use nutrition information in magazines, whether the information is considered trustworthy or relevant to their needs, and how they respond to conflicting information (Giddens 1994; Giddens and Pierson 1998; Lupton 1999b). Central to the analysis of the results of this study will be the theoretical framework outlined in the previous chapter. The theoretical concepts of Giddens and Beck such as modernity and risk, reflexivity and self identity, expert knowledge, trust and doubt will help in understanding the study results. This will contribute to professionals' capacity to use this medium effectively for nutrition education purposes.

### ***4.2 Methodology***

The focus group method was chosen to allow women to discuss in detail the way they use nutrition information provided by women's magazines. This methodology allows participants to express their thoughts, opinions and beliefs (Krueger and Casey 2000). Focus groups are useful to elicit this information when conducted in a non-threatening and permissive environment. This methodology also provides a more natural means by which to collect information, as compared to survey data, as it allows for interaction between participants and allows the researcher to explore a range of opinions (Morgan 1988; Krueger and Casey 2000).

As with other research methodologies, limitations exist. Issues that researchers and the moderator need to be aware of are the limited ability to generalise findings due to the limited number of participants; and the possibility that results may be biased by the opinions of more vocal members of the group, which could possibly result in participants providing responses that they believe are socially desirable. The moderator may also bias results as a consequence of the cues and responses they provide during the group discussions (Morgan 1988; Stewart and Shamdasani 1990; Morgan and Krueger 1993; Krueger and Casey 2000).

Good moderation has the potential to overcome many of the limitations associated with focus groups. It is important for the researcher to plan focus groups carefully and to be aware of limitations which can be controlled for prior to undertaking data collection. The moderator has to allow participants to talk to each other, ask questions and express doubts and opinions, while not attempting to control the interaction other than generally keeping participants focused on the topic. By its nature focus group research is open ended and cannot be entirely predetermined (Morgan 1988).

As indicated in Chapter Two of this thesis, research to date regarding nutrition information in women's magazines has been collected via surveys. It is believed that employing a focus group methodology will expand our understanding of this area. The focus group methodology has been used to explore the lay public responses to diet and cholesterol controversies (Lupton and Chapman 1995), UK consumers' perceptions of food safety (Green, Draper et al. 2003) and adolescents' understanding of healthy and unhealthy eating and their beliefs about the importance of healthy eating (Croll, Neumark-Sztainer et al. 2001). It is believed that this is an appropriate method for investigation for the purpose of this project.

Women were chosen as the key focus of this research because of their well-established role in food decisions and preparation (Crotty 1995; Furst 1997) and their greater demonstrated interest in food and health than men

(Bender and Derby 1992; Worsley and Scott 2000; Worsley and Lea 2003). The study population comprised women in three age ranges, teenage girls 13–16 years and women aged 25–34 and 45–54 years. A wider selection of age ranges was not selected because of time and financial constraints imposed on the research. These three age groups were chosen for the notable differences in their life stage.

Girls/young women in the age range 13–16 years: have been observed to modify their diets, adopting either vegetarian or lower energy intakes. Why they do this is not well understood and even less is known about when, why and how they revert to more mainstream practices of choosing meat and consuming more energy. This period of change in food choices provides an excellent opportunity to examine the influences on food choices and how healthy choices may be encouraged and maintained. Studies of influences on food choice of this group have been independently identified: taste (Lennernas, Fjellstrom et al. 1997); food choice rules in the family environment (Hupkens, Knibbe et al. 1998); moral judgments associated with food (Stein and Nemeroff 1995); who they eat with and where they are consuming food; their parents' smoking habits (Crawley and While 1996); avoidance of novel foods (McFarlane and Pliner 1997); and early food preferences (Kelder, Perry et al. 1994).

Young women, 25–34 years: mothers of young children have been identified as concerned about their family's diet and healthy foods to provide to their new infants and children. Factors identified as important influences of food choice of this group of women include quality/freshness, price and 'trying to stay healthy' (Lennernas, Fjellstrom et al. 1997); family preferences (Hupkens, Knibbe et al. 1998); different life events of different ethnic groups (Devine, Wolfe et al. 1999); willingness to try novel foods and access to nutrition information (McFarlane and Pliner 1997).

Older women, 45–54 years: adults in this age group are experiencing the early (or not so early) effects of chronic disease or lifestyle problems, such as overweight and obesity, shortness of breath, non insulin-dependent

diabetes (type II), high blood pressure, etc. These adults are often interested in changing their eating practices to minimise or reverse these changes in their health status. Many of the same influences on food choice for young women would be expected to be important for this older group. However, significant differences also can be identified: 'trying to stay healthy' (Lennernas, Fjellstrom et al. 1997); different life events of older women and provision of nutrition information about new foods (McFarlane and Pliner 1997).

A convenience sample of women in two of the age groups, 25-34 and 45-54 years, were recruited using a variety of methods. Posters advertising the research project and announcing the opportunity to participate in focus groups were displayed in public areas in a region of New South Wales and in its local area health service (Appendix One). The researcher promoted the project on the local television news and radio station. Recruitment advertisements also were placed in two local newspapers. Focus groups for these two age groups were conducted in a variety of community locations and at various times during the day and evening, to maximise participation. The third group, teenage girls aged 13-16 years, was recruited via a local girls high school using a convenience sample. The focus groups were conducted on the school premises during school hours.

Three focus groups per age range were conducted, making a total of nine groups. The researcher was trained in the use and conduct of focus groups and conducted the focus group sessions. Prior to the focus group, women were told that the discussion was about health information in women's magazines and they were given a recent copy of a leading Australian women's magazine. The women were told that it may be helpful to look at the magazine before the group discussion. No further instructions were given. All focus group sessions were audiotaped using recommended guidelines (Morgan 1988; Krueger and Casey 2000). At the start of each session the researcher outlined how the session would be conducted. The researcher had developed the questions/prompts following a review of the literature. The questions explored women's thoughts,

opinions and beliefs regarding nutrition information in women's magazines (Appendix Two). Each focus group lasted approximately 60 minutes. The audiotapes were transcribed verbatim and transcripts were checked against the tapes for accuracy.

### ***4.3 Qualitative Research and Rigour***

Unlike quantitative research there are no clearly defined tests for assessing the reliability and validity of qualitative research. Regardless of this, it is necessary to accurately represent the data (Patton 1990). Debate also exists regarding the use of the appropriate terminology: some adopt the primarily quantitative terminology of reliability and validity, while others believe that these terms are not appropriate when referring to qualitative studies, therefore choose to use terms such as credibility, transferability, trustworthiness and dependability (Mathers and Huang 1998; Golafshani 2003). There are several ways to determine the quality of data. These include looking for opposing or alternative explanations or ways of organising data. A researcher's inability to find evidence of finding alternative ways of representing the data increases the confidence in the original explanations. Identifying and reporting on negative cases is another means by which the quality of work can be assessed (Patton 1999). Patton (1999) also identifies the use of triangulation which requires combining different kinds of methods (methods triangulation), consistency between different data sources (triangulation of data sources), using multiple analysts to review findings (analyst triangulation), and using multiple perspectives to interpret (theory perspective triangulation.)

To ensure the quality and rigour of this research project, participants' own words have been used through incorporation of participant quotes. In addition negative cases have been reported. Data reached saturation after three focus groups for each age group and therefore a total of nine focus groups were considered sufficient.



### **4.3.1 Ethical Considerations**

Throughout this research process ethical considerations of informed consent, confidentiality and anonymity were employed. Informed consent requires that the participants know that they are participating in research, are aware of the nature of the research project and are made aware of their right to withdraw at anytime (Seale, Gobo et al. 2004).

Confidentiality is the process of removing any information from research records and reports that may identify subjects (Berg 2001b). The confidentiality of participants who participated in this study was ensured in a number of ways. Firstly, all participant details were stored in password protected computer files. All forms completed by the participants were stored in a locked filing cabinet. Participants' names were not recorded on audiotapes, instead participant codes were allocated, and were also recorded on the participant transcriptions.

Anonymity is another key ethical consideration. Anonymity means "that the subjects remain nameless" (Berg 2001b pp. 57). In qualitative research it is not possible for the subject to remain anonymous because the participant will be involved in research activities such as interviews. However, it is important to ensure that in the reporting of study findings that participants' are not named and not identified, therefore it is essential to use pseudonyms.

Focus groups do pose a level of difficulty when trying to ensure confidentiality and anonymity. Focus groups are not fully confidential or anonymous, because the material is shared with others in the group (Morgan 1988). The researcher was aware of this and as a result, prior to conducting each focus group all participants were asked not to repeat any of the discussions after the conclusion of the focus group and participants were introduced by their the first names only. Establishing confidentiality and anonymity in the focus groups of teenage girls was difficult. As these focus groups were conducted in year groups and therefore the majority of

participants were known to each other. Prior to commencement of the focus groups the researcher reiterated the importance of hearing a variety of opinions and that there were no right or wrong answers. The importance of not repeating focus group discussions was also strongly highlighted to these groups.

Ethics approval for conduct of the study was obtained from the University of Wollongong Human Ethics Committee. Written consent was obtained from all participants (see Appendix Three - Ten for letters, information sheets and consent forms). All participants were reminded throughout the research process of their right to withdraw at any time. Teenage girls were required to have written parental consent. Prior to the focus groups all parents of teenage girls aged 13 to 16 years at the local girls high school were sent an information sheet and consent form. Parents were asked to return the signed consent form to the principal investigator if they consented to their daughter's participation. Teenage girls were also asked to sign and return the consent form to the principal investigator. Only teenage girls for whom consent forms had been received from both their parents and themselves were allowed to participate.

#### **4.3.2 Data Analysis**

A pilot group was conducted with each age group to test the responses to the developed questions. Minor changes were made to the wording of the questions. The main study was undertaken between August and November 2002.

The transcripts were managed using NVivo (QSR 2001). They were first coded for general content, which was used as a framework for analysis. Each question was coded for the themes and issues. The researcher then performed a more specific content coding to reflect major themes associated with women's use and perceptions of nutrition information in popular women's magazines.

## 4.4 Results

This section of the thesis reports the results of the focus group discussion. The major themes and issues from the focus group are highlighted. Results of this study indicated that participants did not actively seek nutrition information from magazines, rather magazines acted as an incidental source of information. Learning about nutrition was generally not the participants' motive for buying a women's magazine. Participants also indicated that they did not place a high degree of trust in and were skeptical of information presented in women's magazines. These themes and issues are discussed in consideration of the theoretical framework outlined earlier in this thesis.

### 4.4.1 The Participants

In total 21 of the 22 women aged 25-34 years, 22 of the 24 women aged 45-54 years, and 27 of the 28 teenagers aged 13-16 years who confirmed their attendance participated in the group discussions. The actual attendance in each group varied from 6 to 10 participants. In total, 70 women and teenage girls participated in the focus groups. The marital and employment status of participants aged 25 – 34 years and 45 – 54 years are listed in Table 4.1. All teenage girls were recruited through a local girls' high school. Demographic data were not collected from teenage participants, this was an oversight which occurred during data collection.

**Table 4.1 Participant Characteristics**

	<b>Women 25-34 years</b>	<b>Women 45-54 years</b>
<b>Marital Status</b>		
- Single	3	3
- Co-habiting with partner	10	-
- Married	8	19
<b>Participants with Children</b>	4	19
<b>Employment Status</b>		
- Full time	14	11
- Part time	2	6
- Not in paid employment	-	4
- Student	5	-

#### 4.4.2 Participants and Magazine Reading

Of the teenage girls who participated in the focus group discussions, 21 of the 27 reported that they read women's magazines such as *Dolly*, *Girlfriend*, *Cleo* and *Cosmopolitan* on a regular basis. Only two teenage girls identified reading other types of magazines (i.e. other than women's) on a regular basis. Both of these participants reported reading sporting magazines.

In total 12 of 21 women aged 25–34 years identified themselves as regular readers of women's magazines such as *Australian Women's Weekly*, *Woman's Day*, *New Idea*, *Cleo* and *Cosmopolitan*. Other styles of magazines identified in the 25–34 year age group were food and cooking, health and fitness, scientific, fashion, well-being and lifestyle magazines.

Of the women aged 45-54 years, 7 of 22 women identified themselves as regular readers of women's magazines such as *Australian Women's Weekly*, *Woman's Day*, *New Idea*, *Cleo* and *Cosmopolitan*. This age group was the only one in which regular readers were fewer than women who read women's magazines rarely (Table 4.2). Women in the 45–54 year age group also identified reading scientific, food and cooking, well-being, slimming and investment magazines.

**Table 4.2 Participant Magazine Reading Habits**

	<b>13 – 16 years n = 27</b>	<b>25 – 34 years n = 21</b>	<b>45 – 54 years n = 22</b>
<b>Women's Magazines</b>			
Rarely	2	9	13
Occasionally	4	-	2
Regularly	21	12	7
<b>Other Types of Magazines Regularly Read<sup>1</sup></b>			
Health & Fitness	-	3	-
Food & cooking	-	5	2
Well-being	-	1	1
Slimming	-	-	1
Scientific	-	2	3
Sporting	2	-	-
Money & Investment	-	-	1
Lifestyle	-	1	-
Fashion	-	2	-

<sup>1</sup> Some participants identified more than one other type of magazine that they read on a regular basis.

#### **4.4.3 Reasons for buying women's magazines**

When asked the reason for buying women's magazines participants frequently identified the importance of fashion and beauty information, the magazine's ability to provide light entertainment and an appealing cover as factors that encouraged them to purchase a magazine:

*"It's just like a leisure activity really if you are sitting outside or having a break at work for a leisure point of view just happen to be easy reading, or easy light entertainment."* [25 – 34 years]

Recipe and meal suggestions were regularly identified by women aged 25-34 and 45-54 years as motivators for purchasing a women's magazine:

*"I find if there are nice recipes or nice food on the front then I might be inclined to have a second look."* [45 –54 years]

A small amount of discussion focused on the appeal of competitions, horoscopes, and crosswords in purchasing magazines. Interestingly, women aged 45 –54 years were the only group that unprompted raised the issue of health and nutrition as a motivator for purchasing a women's magazine.

When asked directly about buying a women's magazine for health and nutrition information, most of the participants indicated that magazines were an incidental source of nutrition information:

*"If I see something on the cover and it's about healthy stuff then I'll read it, but I don't really buy for that stuff."* [13 – 16 years old]

However, women indicated that if a magazine advertised the presence of nutrition information on its cover then they would most likely purchase the magazine:

*"if there is something on the front, and I'll think "oh that looks interesting" if it's on health or certain foods you should eat or just anything like that I will ... pick that up in preference to something else [that doesn't advertise a nutrition related feature]"* [45-54 year old]

Focus group participants frequently mentioned that magazines were not an important source of nutrition information and that they were more likely to access other information sources to increase their nutrition knowledge, such as books and health professionals:

*"I don't buy a magazine with the - thinking I'm going to come out learning something about nutrition ..."* [25-34 year old]

Most women indicated that magazines would not be the sole source of information on a nutrition topic. However, it was revealed that magazines were a good starting point before gaining further information about a nutrition issue:

*“It would get my attention, and I’d think “oh its worth looking into further” but I think I’d be more like you would - but I wouldn’t just take it for gospel. It’s a good start, it’s a good start because it’s making us think well there might be a better way.” [45 –54 year old]*

#### **4.4.4 Absence of Nutrition Information in Teenage Girls’ Magazines**

Teenage girls discussed the absence of nutrition information in magazines targeted at their age group. Participants discussed that when nutrition information was featured in magazines targeted at teenage girls it focused on how to implement healthy eating behaviours, however this was a large but irregular feature in the magazine:

*“if they are putting in healthy things, its never a little thing it’s always big and across double pages and things ... So it’s either made really, really big or not put in at all.” [13- 16 year old]*

Teenage girls frequently mentioned that they would like magazines targeted at their age group to provide them with more nutrition information. They indicated the need for more detailed and practical information, explanations regarding nutrition, tips and recipes for maintaining healthy eating habits:

*“they just say “don’t eat it” but they don’t actually explain to you why you don’t eat it in the right content and what it’s actually made of and things like that ...” [13-16 year old]*

#### 4.4.5 Nutrition Messages in Magazines

Dieting and weight issues were identified by women in the 25-34 and 45-54 year age groups as the main nutrition messages presented in women's magazines.

Women indicated that magazines frequently present information on how to be slim, how to lose weight, regularly provide information on the most fashionable food and diet information, particularly information related to celebrities and that weight loss can be achieved quickly. Participants emphasised that the nutrition information focused on weight loss rather than other nutrition related issues:

*“when it's to do with nutrition, it's like starting with the assumption that everybody that's reading it probably wants to lose weight and so they talk about food, then they talk about how to lose weight and still eat, not about like ... how to have a healthier body or how to increase life expectancy” [25-34 year old]*

*“even with Women's Weekly flicking through there, there's still a lot of emphasis on ways to be slim and — you know— not, not necessarily just talking about healthy eating ...” [45-54 year old]*

Women aged 25–34 years suggested that many nutrition messages focused on only one nutrient, in particular on fat consumption, rather than discussing general nutrition and the importance of balance:

*“It's about weight loss, that's still about don't have the chocolate because it's fat, not because so I'll have the apple because wow you will get this vitamin or it's about the calories you save” [25-34 years old]*

Many women aged 45–54 years expressed concern that magazines made them feel bad about their lifestyle through their emphasis on the importance of being perfect. Participants indicated that magazines



regularly drew attention to areas of their life which may be problematic and created negative feelings about their health, rather than sending positive messages about health:

*"a lot of the articles suggest like — you know— you could be much better, you are not good enough, you are not slim enough, you're not healthy enough, you're not slim enough, you don't have enough energy whatever the quality of — you know — whatever the problem is the articles, it draws you in to read it, and you think, Oh well ok."* [45–54 years old]

Teenage girls discussed that generally magazines targeted at their age group contained very little nutrition information. However, more frequently than the other groups of women, teenage girls mentioned that when nutrition information was provided, the focus was how to implement healthy eating patterns, discussion of dieting myths and facts, how to eat healthily and the importance of drinking water:

*"They have a load of [information] how you eat properly rather than just not eating much at all."* [teenage girl 13-16 years]

*"A lot of them tell you not to binge, they are mostly focused on not bingeing and not starving yourself — they say drink a lot of water too."* [teenage girl 13-16 years]

#### **4.4.6 Nutrition Information in Magazines is Contradictory**

Women considered that the nutrition information presented in women's magazines was very basic, lacked depth and they felt they were never provided with all the information on the topic and it was focused on weight rather than general health and well-being. Many women indicated that they felt nutrition messages presented in magazines were contradictory.

*“you know drop a dress size in a weekend or you know ways to lose weight and all this kind of stuff but then on the following back of an article saying “girl power and don’t worry what you look like and as long as you’re healthy it doesn’t matter if you’re fat” — you know without them really saying it but that’s the message so if there’s a real conflict between healthiness and weight. I think that’s all the time, that’s consistently happening” [25–34 years old]*

*“Totally contradictory, even if within one magazine within Marie Claire or Cleo or Cosmo or any of those you get — um — “let’s all be happy with ourselves, let’s accept each other as beautiful, let’s eat what we want, let’s have fun”, and it’s not about your weight, it’s what’s inside which counts and then like — their models are all size eight” [25-34 years old]*

#### **4.4.7 Trust in Nutrition Information in Magazines**

Women frequently mentioned that they did not trust the nutrition information presented to them in women’s magazines and found the information provided was of a contradictory nature. The general comment from most women was that women’s magazines consistently provided unreliable information, that was opinion based rather than based on scientific finding, and was usually sensationalised:

*Yeah I wouldn’t trust a magazine that anything informative to be honest. [45-54 years old]*

Distrust was raised in the context that many magazines use the editorial content to support their advertisers’ products. Participants were particularly skeptical of sponsored articles and articles that try to sell products. Some participants expressed the view that magazine editors were not concerned with the effect the information they publish has on their readers or getting the correct message across, rather they place greater importance on making money through advertising:

*“... obviously you are not going to criticize the sponsors because you will lose your dollars and you would go out of existence you lose your job so.” [45-54 years old]*

The issue of trust was raised again when participants emphasised the importance of considering their personal knowledge and previous experiences when reading nutrition information in women's magazines. Women indicated that they did not accept the information presented to them in women's magazines as truthful without reflecting on their own life experiences:

*“like they say “oh if you do this, then this is going to happen” and you think — well it depends whether like what you have been told before and in your own real life and stuff.” [13-16 year old girl]*

Magazines were used to reinforce knowledge women already had about nutrition. Participants acknowledged they used nutrition information in magazines to confirm their knowledge:

*“I’m looking for confirmation of what I know. I’m looking for, for things of the knowledge that I have or the knowledge that I want to gain is how can I adapt that to my everyday life.” [45-54 years old]*

The magazine genre influenced the degree of trust participants placed in magazines. Some magazines were noted to be more trustworthy than others. Women identified that they would pay more attention to information in a health-focused magazine than a general women's magazine:

*“nutritional information if its coming from a magazine like this [Cleo], I would tend to sort of disregard it, if its coming from like a magazine that's focusing on healthy food then*

*you, you'd probably pay a bit more attention to what they are."* [25–34 years old]

*"It's kind of sad though when you think because there could be an article of substance in what you guys say in New Idea and there could possibly be, but most people would probably blow it up because of that particular magazine, they wouldn't pay as much attention to it or give it as much credence as if it was in something else."* [45–54 years old]

Nutrition messages presented by an advertiser were considered to be deceptive. Participants believed that the advertiser's focus is to sell their product and not a genuine desire to improve consumers' health. As a result women believed that advertisements did not contain all the nutrition information needed for them to make a decision:

*"they are only trying to get you to buy the product or whatever, they are not actually concerned about you and your health sort of thing"* [13–16 years old]

*"it's got vitamin A, B and C and its necessary for growing bodies, but they don't, they don't tell you how much of that vitamin is actually in there, it could be just a tiny trace of it".* [45-54 years old]

In addition, the women were particularly skeptical of advertisements that presented as articles or were for weight loss products. It was believed that advertisers were trying to trick them into thinking that their advertisement was an editorial piece rather than an advertisement:

*"But also in some of the magazines they look like editorial or articles or stories and then they are not, but often think you know how many people kind of think about that before they read it — you know who's trained for that sort of article and you know that's manipulation going on there".* [45-54 years old]

#### 4.4.8 Trustworthy Information

During the focus groups women frequently discussed that they are more likely to trust nutrition information in a women's magazine if it was written by a health professional or authority or if the journalist provided references for the information:

*“we don't know what their qualifications are, and I think that's important, and I always think that when you are looking at any sort of information you tend to take more notice if there are qualifications added.” [45-54 years old]*

In contrast, women believed that information provided by a health professional was considered to be sensible and trustworthy. As a result they were more likely to pay attention to information that acknowledged authorship by a health professional:

*“if it's written by someone — you know — a doctor somebody or a nutritionist or a dietitian or something like that — um — but if it's just — you know — the woman who also happens to do the movie review on page four — like you know — yeah you'd sort of draw the line somewhere.” [25–34 years old]*

Women discussed that articles based on case histories or real life stories of ordinary people were more trustworthy than other articles and would therefore would be more likely to read these stories:

*“I tend to read the real life kind of stories — you know the bigger ladies that have lost a lot of weight and how they have got there, I tend to read them most so because it seems like — you know it's a real person that's happened — you know and can happen to you.” [25–34 years old]*

#### 4.4.9 Popular women's magazines and their influence on eating patterns

Most women reported that they had not made major changes to the way they eat based on information they read in a women's magazine. However they indicated that magazines raised their awareness of new products available on the market.

*"I find it interesting just to flick through and see what, what products they are coming up with, what they are advertising."* [45–54 years old]

*"I like them because they introduce me to new products and I think "wow this is on the market" and if I'm in a supermarket I might grab it — so I will, I will use it for product knowledge, but — um — to get — um — an understanding or some, some sort of understanding on — um — nutrition that's not why I consult a magazine."* [25–34 years old]

Women indicated that the information provided in the form of tips and hints had a greater influence on their eating patterns than longer editorial pieces. For example, participants mentioned exposure to information regarding the benefits of an individual food had lead them to introduce that food into their diet.

*"red capsicum, I read somewhere that's a great thing for you, so now I love eating red capsicum and I try to encourage my children to eat red capsicum"* [45-54 years old]

*"If I read that a particular fruit or vegie is good for a particular thing, I'll think — yeah I'll go and buy that, but I wouldn't change my whole lifestyle around it or anything."* [25–34 years old]

While some women mentioned trying a diet promoted in a women's

magazine, such as the high protein low carbohydrate diet, all women indicated that they were unable to maintain the behaviour because the information was unrealistic, particularly for women who have a busy lifestyle.

*“maybe I should change that but it’s a lot of effort sometimes, but you know — to some of the things that they say in magazines that you should be doing — um — you know — for starters it’s a lot of money to go out and buy all these organic things and you know whatever and health foods and stuff, ... you know you are coming home from work and the two year old is screaming and it’s just easier to put a tin of spaghetti in the thing [saucepan]” [25-34 year old]*

Women indicated that if they had changed their eating patterns as a result of information gained from a magazine the impact was short term and often ceased when the media attention regarding that issue decreased.

*“There was that big flap lately about French fries being cooked in oil and being carcinogenic and it sort of mushroomed from there but it hasn’t gone any place, but I think everybody that I know stopped eating French fries for a few weeks because there was a big media thing and it was in, it was in newspapers and magazines but then it suddenly died out and when it first died out then everybody just went back to eating the French fries” [45–54 years old]*

*“every time I see an article about battery hens, I go back and buy the five dollar eggs [free range], and then I go back to two dollars, and then I will read the article again and see a little picture of these poor little chickens with no feathers and terrible cages, and I will go back to the five dollar eggs, so yeah that’s a classic example for me, just guilt working off guilt for me.” [25–34 years old]*

Recipe sections of the magazines were consistently mentioned to be a source of meal ideas and an influence on the eating patterns for women. Concern was raised however that the recipes often called for obscure ingredients and were therefore impractical, however women indicated that they often modified recipes to suit their needs.

*“Some of the ones I modified it like if they use something that I don’t eat, I don’t put that in and I’ll think of putting something else in. Because a lot of the time they do put things that — like a herb I’ve never heard of or so many things I’ve never heard of — and I think what, what’s that but its only a pinch of and I go well I’ll leave that out, so I do modify it” [25–34 years old]*

*“I mean I look through there and the food recipes and I look through it and I thought “Oh yes that looks good” but that looks like its got too much butter in it, too fat or I, I suppose it still gives you an idea of — you know the basic way but you don’t have to follow all of the recipes.” [45–54 years old]*

## **4.5 Discussion**

Focus groups provided an opportunity to gain an understanding of women’s thoughts, opinions and beliefs regarding magazines as a source of nutrition information. Participants in this study stated that they did not actively seek nutrition information from magazines. Rather, magazines primarily operated as an incidental source of information and nutrition information acted as a feature that helped to sell one magazine over another. Learning about current nutrition issues was generally not the participants’ motivation for buying women’s magazines.

The findings provide greater insight into women’s relationship with magazines than previous survey data have indicated. Magazines have been identified as one of the top sources of nutrition information for women (Crawford and Baghurst 1991; Radimer and Harvey 1995; Australia New



Zealand Food Authority 2001; The American Dietetic Association 2002). It has also been identified that women do not always place a high level of trust in the nutrition information provided by magazines (de Almeida, Graca et al. 1997). But to date, such findings have not been explored in more detail.

The data from the focus groups add to previous knowledge about women's relationship with magazines in several ways. It is apparent the magazines do assist women to think about food and nutrition issues, but they are limited in their use. The women identified that there were many reasons for not trusting the information in magazines. They were frustrated that the magazines focused on diet and weight loss, they did not take a holistic approach to food and nutrition issues and the articles engendered negative feelings about themselves. It was acknowledged that the role of magazines was primarily to sell (food) products and this made them very skeptical about the information provided by magazines. This was compounded by the difficulty in distinguishing between editorials and advertorials and the lack of background information about the qualifications of authors and sources of information. These issues are discussed in more detail in this section, within the framework articulated in Chapter 3, using the sub-headings risk, reflexivity and self-identity, expert knowledge, risk, trust and doubt and the role of magazines/media.

#### **4.5.1 Risk**

It has been claimed that people are likely to think about risk and how to minimise it, when making decisions about their daily lives (Giddens 1991; Beck 1992). It is thus important to reflect on the extent to which these women reported how they used the information provided to them via magazines, whether in a risk framework or otherwise.

The participants in this study indicated that the magazines often provided a starting point for thinking about food and nutrition issues. They reported that they were most likely to incorporate simple advice (for example, eat

more capsicum) into their lifestyles, rather than more complex dietary changes (for example following the principles of low carbohydrate diets). In contrast, they expressed frustration that the women's magazines continually focused on fat or single nutrients and indicated a desire for nutrition advice to take a more holistic approach which was practical/feasible in relation to the women's own lives. In respect to information specifically addressing risk-related topics, the women indicated that they were likely to adjust their behaviours in response to this information, but only for a short period of time.

The role of the media has been reported as raising the lay public's awareness of risk (Lupton and Chapman 1995; Kitzinger and Reilly 1997), but this was not clearly identified in this study. The participants in this study indicated that nutrition information in women's magazines was of limited use. They did not report using information from magazines in assessing personal health-related risks. They did not indicate thinking about health-related risks very much at all, except if they or their immediate family were currently experiencing health problems. In several ways this is consistent with Patterson's (2001) survey data from the Washington State Cancer Risk Survey. She reported that respondents felt the government should not tell people what to eat, considered that Americans are obsessed with fat and were tired of hearing what foods they should eat and felt that dietary recommendations should be taken with a "grain of salt". The women in this study weren't actively considering personal health risks in the same way that professionals might expect.

This study found that women were seeking more in-depth information that could be easily integrated or adopted within their lives. These findings are consistent with Crotty's (1995) suggestion that the media adopt a hegemonic approach when reporting issues relating to food and nutrition, taking a nutrition science approach in contrast to the more holistic but practical approach the participants indicated they desired.

In summary, women did not report using magazines in decision-making about risks in their daily lives. In fact, they did not appear to be thinking within a risk framework to any great extent.

#### **4.5.2 Reflexivity and Self Identity**

Giddens and Beck posit that as a result of living in a risk society, individuals have become reflexive. This reflexivity which is based on an individual's assessment of risk helps shape a person's self identity (Giddens 1991). Given that the media and, in particular, women's magazines are reported to be an important source of nutrition information (Crawford and Baghurst 1991; Radimer and Harvey 1995; de Almeida, Graca et al. 1997; American Dietetic Association 2002), the information in women's magazines has the potential to shape an individual's self identity. Therefore it is important to gain an understanding of the role food and nutrition information in women's magazines has in shaping an individual's self identity.

While most participants indicated that nutrition information they read in magazines had not resulted in major changes in the way they eat, they did identify that magazines raised their awareness of issues and provided a starting point for further examination of issues they believed to be salient. For instance, some women indicated magazines encouraged them to try new products. Testing how these products suited their own lifestyle could be considered as an example of information being used reflexively by women to shape their self identity. It appears that the women did use the information reflexively, however in a broader sense this information was of limited use in shaping identity. It is possible that the women's lack of trust in and high level of skepticism of the food and nutrition information presented in women's magazines resulted in the limited capacity for women to use this information reflexively, thereby limiting its ability to shape their self identity.

According to a National Health Council report, 75% of 2,256 Americans those surveyed reported that they pay a moderate amount or great deal of attention to medical and health news reported by the media. In addition, of those surveyed, 58% said they had changed their behaviour or taken action based on a media report of medical or health news (Johnson 1998). The participants in this study did indicate that they paid attention to the food and nutrition information presented in women's magazines, but they did not indicate the same level of behaviour change for health-related behaviours. This difference may be a result of the type of media genre discussed. Johnson (1998) explored news media, in particular newspapers, while the current study's focus was on women's magazines alone. It is also possible that the difference in results could be attributed to the media audience being more receptive to medical information than they are to nutrition information.

Clearly, media has the potential to impact on the food and nutrition issues women perceive to be important and are a likely tool women could use reflexively when making decisions relating to food and nutrition. Some women in the current study indicated that they had tried new products or made minor modifications to their diet based on information obtained from a women's magazine. For instance, including more red capsicum in their diet or purchasing free-range eggs. More significant changes to dietary choices were not evident. Magazines appear to be limited in their capacity to influence an individual's self identity because of issues of trust and skepticism.

In summary, it appears that magazines have the ability to get women thinking about food and nutrition issues, however their capacity to result in major changes in women's food and nutrition behaviour is limited based of feelings of trust and disbelief.

### **4.5.3 Expert Knowledge, Risk, Trust and Doubt**

Media has been identified as playing a key role in filtering expert information for the public (Giddens 1991; Beck 1992). Giddens and Beck's concept of expert knowledge is characterised by doubt, awareness of risk and decreased trust in experts (Beck 1992; Giddens 1994; Giddens and Pierson 1998; Lupton 1999b). It is therefore important to consider the role women's magazines have in the provision of expert knowledge to women and the meaning of risk, trust and doubt in women's relationship with the information presented in these magazines.

As identified above the participants in this study stated that they did not place a large degree of trust in the food and nutrition information presented in women's magazines. This lack of trust was associated with several factors identified by the participants. These were a result of magazines presenting contradictory information, which is usually opinion based rather than supported by scientific findings. Women expressed frustration that the editorial content of magazines was used to support advertisers' products and recognised that the magazines' overall goal was selling products. The participants in this study also indicated that they were more likely to trust nutrition information in women's magazines if it was written by a health professional or authority or if the journalist referenced the information.

Giddens's (1991) suggested that when scientific debates are filtered through the media the lay public begin to doubt and place less trust in expert knowledge. Giddens has noted that when contradictions were a feature of expert knowledge, people were more likely to rely on other forms of knowledge such as those that relate to personal experience. This was supported by the findings in this study. Participants in this study expressed confusion at the contradictions evident in the reporting of nutrition information in women's magazines. They indicated that they often reflected on their own knowledge and experience when reading food and nutrition information in women's magazines. Similarly, Lupton and Chapman's (1995) study indicated that participants were cynical of the media coverage

and health promotional advice on diet and cholesterol. They were, however, concerned about their diet but expressed confusion at advice on this issue. In general it was noted that participants relied on commonsense and experience when assessing food and nutrition information in women's magazines.

In summary, the women in this study did not place a high degree of trust in the information presented to them in women's magazines. The women in this study also expressed the desire to have food and nutrition information written by health professionals or information, which was referenced and based on scientific knowledge.

#### **4.5.4 Role of Women's Magazines in the Provision of Food and Nutrition Information**

It has been stated by some sociologists that media have a role in influencing the public's experience of the social world and shaping public opinion, as a result of the provision of knowledge about the social world (Giddens 1991; Beck 1992). Giddens (1991) and Beck's (1992) notion of modernity and issues of trust are central to how individuals manage risk in their day to day lives.

The women in this study indicated that buying a women's magazine was not motivated by the desire to learn about food and nutrition issues, rather magazines had an entertainment role in the women's lives. As indicated previously, the women in this study did not place a high degree of trust in the editorial and advertising content of women's magazines. They also indicated feeling deceived by the information in advertisements and therefore were skeptical of accepting food and nutrition advice via advertisements. Given that a large proportion of advertisements in magazines contain message which conflict with dietary recommendations (Barr 1989; Hickman, Gates et al. 1993; Pratt and Pratt 1995; Hill and Radimer 1996; Lohmann and Kant 1998; Lohmann and Kant 2000) it is encouraging that women suggest that they are skeptical of advertisements.

However it is important to recognise that the study participants identified that magazine advertisements provide meal ideas to women and therefore they could be more influential in the dietary decisions than the women realise.

Corresponding with the findings from this study a survey in the European Union has indicated that while magazines and newspapers are frequently used as a source of nutrition information, they are not among the most trusted sources of nutrition information, ranking fifth after health professionals, government agencies, food packages, television and radio (de Almeida, Graca et al. 1997). Magazines are clearly a useful source of nutrition information based on their accessibility, however they are limited in their usefulness based on issues of trust and their lack of depth when reporting on important nutrition issues. While a large proportion of the population consistently indicate that they read nutrition information in women's magazines, results of these focus groups suggest it should not be assumed that readers place a high level of trust in this information. The role of magazines, therefore, may be in raising awareness of food and nutrition issues, rather than resulting in significant changes in attitudes and behaviours.

The results of this study indicated that women's magazines have a limited role in the provision of food and nutrition information to women, largely due to women's feelings of distrust and skepticism. However it has been suggested that women's magazines have a role in aiding women in expressing their self identity (McCracken 1993; Croteau and Hoynes 2003). McCracken (1993) posits that women's magazines encourage women to view themselves in need of improvement and to feel fulfilled. These improvements are promoted as being achieved through consumerism. The women in this study indicated that the messages in magazines encouraged negative feelings about their health and highlighted areas of their life as being problematic. The push for consumerism was apparent to women, which decreased the level of trust women have in the food and nutrition information presented in women's

magazines. The findings of this study reinforce the position of McCracken (1993), however the women in this study did not indicate that women's magazines had a strong positive influence on their self identity. Gauntlett (2002) found that women responded to the role of media in shaping identity in a variety of ways, such as those who felt that the information was inspirational, others felt pleased that they did not identify with the type of lifestyle outlined in women's magazines and some said that magazines had little impact on their self identity.

In summary, the results of this study suggest that magazines have a role in raising awareness of food and nutrition issues among women, however they are limited in their ability to result in significant behaviour changes.

#### **4.6 *Limitations***

The participants in this study were self selected, this convenience sample is thus vulnerable to volunteer bias and therefore findings cannot be generalised beyond this population. In addition, the majority of participants resided in one geographical area of New South Wales: this may also limit generalisation outside of this area.

Focus groups have commonly been reported to be subject to social desirability bias. Therefore some participants may have not expressed their true attitudes and beliefs in order to comply with the group consensus (Morgan 1988; Krueger and Casey 2000). The researcher was aware of the possibility of such a bias occurring and indicated to participants prior to conducting each group that there were no right or wrong answers and there was a desire to hear a range of attitudes and beliefs. She also encouraged participants to express supportive or contrary views during discussions. It should also be noted that the data reached saturation, therefore, three focus groups per age group were considered sufficient.



## **4.7 Summary**

Magazines are highly accessible and therefore a convenient way to provide women (and men) with nutrition information. However it appears that magazines may not be meeting women's needs in terms of their capacity to provide nutrition information. It is important that women's trust is improved through providing well-referenced information. Women are looking for information substantiated by professional credentials and/or references. A more sophisticated approach to information provision should be considered. Health professionals could work with consumers as colleagues/partners in the quest to increase health literacy, rather than merely considering them as receptacles of simplified professional expertise and guidance. It is also important that health professionals are aware of the information presented to women in magazines and to consider more seriously the possible adverse impact on the public of the reporting of contradictory professional views.

The next chapter reports on the results of semi-structured interviews with approximately half the women who participated in the focus group discussions. Women were interviewed to gain an in-depth understanding of the food and nutrition issues they believe to be important. The following chapter will outline the semi-structured interview methodology and the procedures used to elicit information regarding food and nutrition information important to women. The result of this study will be discussed in relation to the conceptual framework outlined in Chapter Three.

## **5 Semi-Structured Interviews**

### ***5.1 Introduction***

Assessing the food and nutrition information presented to women in magazines provides insight into the common types of messages women are exposed to from the media. This does not, however, provide an accurate indication of how this information is perceived, interpreted and consumed by women. As indicated in the preceding chapters, the media, and in particular women's magazines, are an important source of nutrition information. While this is true, it should not be assumed that women believe everything they read, as indicated in the results of the focus groups. Issues of risk, trust, doubt and the role of expert knowledge are all significant in how women consume, and respond to, information presented to them in the media.

This chapter introduces and presents the results of the second study for this thesis. The second study consists of one on one semi-structured interviews with a sample of women who participated in the focus group discussions and extends the research findings outlined in Chapter Five. This phase of the research project was conducted concurrently with the content analysis study outlined in the subsequent chapter (Chapter Seven). The purpose of this study was to gain insight into the food and nutrition issues identified as important by the women and to explore women's use of information received from the media in their day-to-day lives.

### ***5.2 Methodology***

The interview methodology is the most commonly used method of data collection using qualitative techniques in health research (Green and Thorogood 2004). There are a number of interview techniques used to elicit information from participants, these include structured, semi-structured and unstructured interviews (Minichello, Aroni et al. 1995).

Structured interviews rely on the use of a survey or questionnaire as the data collection tool. The primary role of this method is to standardise the interview process so that all participants are asked exactly the same questions in a standardised manner. The researcher, therefore, can attribute differences that are noted between interviews as real rather than a result of the interview process (May 1997). This form of interviewing assumes that the researcher has a clear idea of the likely nature and range of answers to expect from participants. The role of the research is to acquire responses to the questions, which were predetermined prior to the interview. In contrast to this research method, unstructured interviews take the form of a typical conversation, which relies on the interaction between the interviewer and the participant. The conversation, however, is focused on the interviewer's research interest. Semi-structured interviews allows the researcher to specify core questions prior to the interviews, however this methodology also allows for the researcher to probe further into the answers provided by the interviewee (Minichello, Aroni et al. 1995).

Semi-structured and unstructured interviews are two methods for undertaking in-depth interviews. Minichiello and associates (1995 p. 61) describe in-depth interviewing as:

*“conversation with a specific purpose – a conversation between researcher and informant focusing on the informant’s perception of self, life and experience, and expressed in his or her own words. It is the means by which the researcher can gain access to, and subsequently understand, the private interpretations of social reality that individuals hold”*

Semi-structured interviews were chosen to allow for in-depth exploration of the food and nutrition issues important to women and to explore their use of information received from the media in their day-to-day lives.

### **5.2.1 Recruitment**

In the initial recruitment for this research project (as outlined in Chapter Four) participants were invited to complete two semi-structured interviews in addition to their participation in the focus group. Second interviews commenced four months after the commencement of the first round of interviews. It was anticipated that conducting a second interview later in the year would allow the researcher to explore issues raised in the first interview in greater depth and would allow for identification and exploration of any changes that may have occurred in the participants' dietary habits or for changes in the prevalence of issues that may have become topical over the course of the research project.

#### Interview One

Participants in this second phase of the project were recruited from those women who participated in the focus groups. When women agreed to participate in the focus group discussions they were also invited to be available to be contacted for the second phase of this research project. It was hoped that approximately half the women who participated in the first phase of the project would remain in the second phase of the project.

Those women who agreed to be contacted for the second phase of the research project were sent a letter of invitation (Appendix 11) and a consent form (Appendix 12) in April 2003. Participants were reminded that they were free to withdraw from the study at any time and that participation was voluntary. They were offered a gift voucher for a local department store as a thank-you for their participation. Once participants returned their consent forms, the researcher contacted them and organised a convenient time to conduct the interviews. For convenience, the interviews were conducted in either the researcher's home, the participant's own home or in a room at the University of Wollongong.

Teenage girls were recruited into the second phase of the research project following a similar procedure as outlined above. When recruited into the first phase, they and their parents were asked if they agreed to be contacted for the second phase of the research project. Those who agreed were sent a letter of invitation (Appendix 13) and a consent form (Appendix 14) in April 2003. Participants were offered a double movie pass at a local cinema as a thank-you for their participation. Once the researcher had received consent forms from the parent and the teenage girl (Appendix 15), the researcher contacted the school vice- principal who organised interview times.

### Interview Two

Women who completed Interview One were sent a letter indicating that the researcher would be telephoning them in a week's time to participate in the second semi-structured Interview (Appendix 16). Participants were reminded that they were free to withdraw from the study at any time and that participation was voluntary. Interview times were scheduled with those who agreed to participate further in the study. Participants were offered a gift voucher for a local department store as a thank-you for their participation. Interviews were conducted in October and November 2003.

Parents of teenage girls and the teenage girls who completed the first interview were sent a letter notifying them of the second interview. Parents and the teenage girls were required to contact the researcher if they did not wish to participate further in the research project (Appendix 17 and 18). They were reminded that they were free to withdraw from the study at any time and that participation was voluntary. Participants were offered a double movie pass at a local cinema as a thank you for their participation. Interviews were scheduled for the researcher by the vice-school principal and were conducted in November 2003.

## 5.2.2 The Semi-Structured Interview Procedure

### Interview One

Prior to the commencement of the interview, participants were asked to complete a pre-interview survey (Appendix 19). This enquired about the participant's magazine reading habits and included some dietary questions. All questions were closed answer. The purpose of the pre-interview survey was to gain insight into the participant's magazine reading habits and focus the participant's attention on their dietary habits. On completion of the pre-interview survey, the researcher commenced the semi-structured interview, which was tape recorded. The audiotapes were transcribed verbatim and transcripts were checked against the tapes for accuracy. The interviews explored food and nutrition issues the woman considered important, any changes she had made to her diet recently and any changes she was contemplating. The questions, below, provided a framework to explore issues important to the participant but then the interviewer's questions proceeded from the participant's concerns. All questions were designed to elicit the issues that were important to women with regard to food and nutrition (see Appendix 20 for full interview schedule).

**Table 5.1 Areas investigated in semi structured interview one**

Areas of Investigation	
<ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>	<ul style="list-style-type: none"><li>Issues regarding food that are important to you at the moment.</li><li>Issues regarding nutrition that are important to you at the moment.</li><li>Any changes you have made to your diet in the last 4 months.</li><li>Thinking about making any changes to diet.</li><li>Where participant gets nutrition information from.</li><li>Description of a healthy diet.</li></ul>

### Interview Two

Prior to commencement the participants completed a pre-interview survey (Appendix 21), which was the same as that completed in Interview One. On completion of the pre-interview survey, the researcher commenced the semi-structured interview, which was tape recorded. The audiotapes were

transcribed verbatim and transcripts were checked against the tapes for accuracy. While the basic interview schedule was similar for all women, there were variations between women and age groups, based on the issues and concerns of individuals outlined in interview one. The interview explored food and nutrition issues the women considered important, any concerns they raised in the previous interview and progress with changes they had made or were planning on making. The researcher also explored issues most commonly mentioned in the previous interviews in each age group in further depth with individuals. These areas of investigation are outlined below (see Appendix 22 for full interview schedule). The final component of the interview involved providing the participant with an article and advertisement published in a magazine relevant to their age group (Appendix 23 and 24). The participant was asked to read the editorial and advertising items. The researcher then asked questions about aspects of these items.

**Table 5.2 Additional areas of investigation specific to each age group**

<b>Areas of Investigation Specific to Each Age Group</b>
<b><u>Women aged 45 –54 years</u></b> <ul style="list-style-type: none"><li>▪ Concern for children's and partner's diet</li><li>▪ Weight loss/gain</li><li>▪ Organic and processed foods</li><li>▪ Fat content of diet</li><li>▪ Increasing age and managing increase in disease</li><li>▪ Money and time limit food choices</li><li>▪ Decreased CHO and increased protein</li><li>▪ Decrease in sugar</li></ul>
<b><u>Women aged 25 –34 years</u></b> <ul style="list-style-type: none"><li>▪ Time and money limit food choices</li><li>▪ Concerned about eating large quantities of processed food</li><li>▪ Food safety</li><li>▪ Having a healthy body with increasing age and pregnancy</li><li>▪ GM foods</li><li>▪ Weight issues</li><li>▪ Decrease in CHO and increase in protein</li><li>▪ Increase in water consumption</li><li>▪ Nutrition/food habits and their children</li></ul>
<b><u>Teenage girls</u></b> <ul style="list-style-type: none"><li>▪ Weight</li><li>▪ Time constraints</li><li>▪ Taste of particular foods, particularly meat and vegetables</li><li>▪ Food and guilt (fatty foods and junk foods)</li><li>▪ Being healthier</li><li>▪ Fruit and vegetables</li></ul>

### **5.2.3 Qualitative Research and Rigour**

The same issues that were outlined in the previous chapter (4.3) were considered for this aspect of the research project and therefore the literature regarding qualitative research and rigour will not be repeated here.

To ensure the quality of the research, participants' own words, that is, quotes have been used. This helps demonstrate the credibility of the data and the conclusions drawn. Negative cases have also been reported. Data



saturation was reached and therefore it was assumed that all issues were elicited.

#### **5.2.4 Ethics**

The ethical considerations outlined in the previous chapter (4.3.1) are also considered appropriate to this research project, therefore the literature regarding important ethical considerations will not be repeated in detail here.

A second ethics application was submitted for this research project. Ethics approval for conduct of the study was obtained from the University of Wollongong Human Ethics Committee. Written consent was obtained from all participants. Teenage girls were required to have written parental consent. Prior to the focus groups all parents of teenage girls aged 13 to 16 years at the local girls' high school were sent an information sheet and consent form. Parents were asked to return the signed consent form to the principal investigator if they consented to their daughter's participation. Teenage girls were also asked to sign and return the consent form to the principal investigator. Only teenage girls for whom consent forms had been received both from their parents and themselves were allowed to participate.

All participants were reminded prior to the commencement of semi-structured interviews, that they were free to withdraw from the study at any time. It was also made clear that participant anonymity and confidentiality would be maintained when the audiotape was transcribed.

#### **5.2.5 Analysis**

Data analysis aims:

*“to find meaning in the information collected. Data analysis is the process of systematically arranging and presenting information in order to search for ideas” (Minichello et al., 1995 p. 247)*

Data were categorised using an analytic deduction (following natural categories from topic areas), and an induction (categories emerging from the data) method to identify common themes from the transcripts based on participant's discussion of food and nutrition issues. Transcripts of interviews were managed using NVivo (QSR 2001). Transcripts were coded for themes and issues relating to food and nutrition. Reoccurring themes for each age group were used to inform the second semi-structured interview.

Each interview lasted on average 45 minutes to 1 hour in length. Aliases were used for all participants to ensure confidentiality.

### **5.3 *The Participants***

Of the 70 women invited to participate in the second stage of this research project, 43 participated in the first interview and 36 participated in the final interview. The results are reported only for the 36 women who completed all interviews, this group comprised 12 women aged 45–54 years, 13 women aged 25–34 years and 11 girls aged 13–16 years (see Appendix 25 for a brief profile of each participant).

### **5.4 *Magazine Reading Habits Results***

Prior to each interview, participants were surveyed about their magazine reading habits over the previous four months. Results of the magazine reading aspect of this survey can be found in Appendix 26. Women were asked to report the frequency with which they read the magazines that were being content analysed as outlined in Chapter Seven (*Dolly, Girlfriend, Cleo, Cosmopolitan, New Idea, Woman's Day, That's Life!* and *Australian Women's Weekly*) and, in addition, to indicate other magazines they had read over that period.

Results of these surveys indicated that the women aged 45–54 and 25–34 years were not consistent readers of magazines. All women had read

some type of magazine in the four months prior to each interview. In the four months prior to each interview period the majority of women aged 45–54 years had read a woman's magazine. Prior to interview period one, one woman had not read one of the specified magazines, while prior to interview two, two women had not read a women's magazine. These women did, however, indicate that they had read other magazines during this period. Few women reported reading every edition of one of the specified magazines. Only one woman in the group aged 25–34 years group reported not reading one of the specified magazines prior to interviews one and two: this participant did, however, indicate that she read other magazines during these periods. Of the women who indicated reading one of the specified magazines, no woman read every edition of one of these magazines.

Teenage girls were more consistent in their magazine reading habits. All teenage girls reported reading at least one of the specified magazines. Teenage girls were also more likely to report that they read every edition of a woman's magazine.

## ***5.5 Semi-Structured Interview Results***

The following section reports the results of the semi-structured interviews one and two for all aged groups. The major themes and issues from these interviews are highlighted. These themes and issues are discussed in consideration of the theoretical framework outlined earlier in this thesis.

### **5.5.1 Food and nutrition is not a primary focus for women**

It became apparent during the interview process for interviews one and two that food and nutrition issues were not of central importance to most of the women who participated in this research project, particularly for those who did not have a nutrition-related illness. Many women indicated that they did not think or talk about food and nutrition issues on a regular basis. Food was considered on a day-to-day basis, however this was in a very rudimentary manner, such as what to prepare for dinner, or what to

purchase at the supermarket. Nutrition was in most cases not a primary focus. The interview process revealed that women clearly do not perceive food and nutrition related issues as a high risk in their everyday lives:

*“I, I honestly don’t think about it I just sort of put it in and not worry about it.”* [Clare, 25–34 years, interview one]

*“It’s just a non issue. We’re not sort of hung up on it”.* [Carol, 25 - 34 years, interview one]

Many women considered other issues of greater importance than that of food and nutrition. Issues such as finances, family responsibilities, work commitments and study took priority. For instance, Carol (45–54 years) who suffers with coeliac disease talked about how she could not afford to buy gluten free products because they were too expensive and she could not justify spending the extra money when she had to feed her children and her finances were limited.

It was interesting to note that when teenage girls were asked about food and nutrition issues, many of them entered directly into discourse about the foods they like and dislike eating. In one case a girl wasn’t sure of the meaning of the term ‘nutrition’. Teenage girls also indicated that they had very little involvement in household food decisions, for many their role was in the form of adding snacks to the shopping list or making food choices for themselves when away from home. Some teenage girls also indicated that their parents had removed the responsibility of food decisions so that they could focus on their school work.

It was also surprising, given both interviews very directly asked about food and nutrition, that women raised many other non-food and nutrition issues. Throughout the research process the researcher became aware of many personal issues each woman was facing in her life. It came as a surprise that women would reveal very intimate details of their life to the researcher given that this person, in most cases, was unknown to the researcher prior

to the individual's participation in the research project. For instance, women discussed private issues such as marital problems, mental illness, illness among family and friends, financial problems and their own medical history. This tendency for women to discuss food and nutrition in context of other issues in their life demonstrates that food and nutrition is a part of a broader picture and is not something that women consider in isolation, rather it interacts with other aspects of their life. The following quote illustrates how women's food and nutrition discourse is often tied up with other issues:

*"I'm now realising that I'm going back to some of the old habits, like just picking and before I would say no to a cake, but now I'd just go up and have a piece and I'm worried very, very much about that. I'm also on antidepressants, which I think, one is making my mouth dry especially when I get up in the morning. Ahem and the antidepressants are for — you know marital relationship rubbish — ahem and it was I was, I was only going to be on it for six months. I've asked to come off it, and I'm now just. And now I'm just sort of like weaning myself off it over a period of two weeks. My father died and it's caused a lot of havoc, so I really haven't been taking care of myself."* [Barbara, 45–54 years, interview one]

### **5.5.2 Weight concerns**

Interestingly, when women did discuss food and nutrition, no other issue was discussed by the majority of participants across all age groups to the same extent as weight concerns. The desire to lose weight, in particular, dominated discussions across all age groups. Women clearly perceived weight issues to be the greatest risk facing them concerning food and nutrition. Other food and nutrition issues that were raised by women, which initially did not appear to be related to weight issues, after probing often were in some way related to weight maintenance or weight loss.

In the majority of interviews participants indicated that they would like to lose weight. The extent of weight loss varied in all age groups. Participants wanting to lose a few kilograms were in the majority: these participants expressed that they would feel happier with themselves if they lost some weight:

*“I do love to lose some weight, but, I’m obviously eating too much so I can’t really complain too much but it also frightens me a little bit that I’m starting to accept the fact that as long as I’m fit and healthy it won’t matter too much, but I don’t want to be this big, I don’t want to be a size 16, I want to be a size 14 ...,”* [Wendy, 45-54 years old, interview two]

*“if I lost 5 kilos I’d be so much more happier with how I looked type of thing whereas before I thought I looked pretty like good cause I was like a lot thinner.”* [Chrissie, 25–34 years, interview 2]

For some women in the 45–54 years age group weight concerns were central in their day-to-day lives and were the focus of food and nutrition discussions during the interview process. These women acknowledged the risks associated with their current weight and the impact this could have on their health and well-being. For instance, Barbara (45–54 years) had attempted many weight loss programs, including prescription drugs to aid weight loss. She was aware of the risk associated with being overweight and identified herself as a “victim” of food. For Barbara, food and her weight concerns were a constant source of stress in her day-to-day life:

*“ahem food is a big issue with me, I’m a victim to my food, I like a variety of food — ahem — I’m also overweight as you can see and Mediterranean background, multiple — ahem — family ahem — health histories like stroke, cardiac problems — ahem even anaemia — you know that, and my size which is four foot eleven, fourteen and a half, plus my weight, it is a really big health issue — you know five years ago or five and a half years ago I tried to do*

*something about it when I turned forty. I've been up and down — ahem since then and I've but I've progressed. I lost twenty Ks initially and over the Christmas period I put on eight, which I'm very distressed about it"* [Barbara, 45–54 years, interview one]

Interestingly, women in the 25–34 and 13–16 years age groups did not identify the same level of health concern associated with weight. Weight issues in these two groups appeared to be tied up with their self identity. For the most part the concern related to fitting into clothes and achieving what they would consider an optimal weight for looking good:

*"it's just something that like I notice myself — ahem — and you know especially when you go and try on clothes and things like that, and you have to pick out your own size and it's like "Oh God" and when you go shopping with friends and they pull out their size eights and you're pulling out your size twelve, and your thinking "Oh God here we go" — you know and they're like "Oh that looks nice" and they would look absolutely stunning in theirs, and you look, you know you've got the bits hanging out everywhere, and Owwww — it's just like "Oh God", but — ahem yeah its nothing that's — like I've never been teased or anything about it, "its nothing that anyone has ever said to me, it's mainly my realisation that I, I need to lose a bit of weight"* [Monica, teenage girl, interview one]

*"I don't really worry about it too much like I pretty much accept that my shape's not going to change dramatically and I probably would feel a bit better about myself if I lost a few kilos but I'm not going to ... it's not a huge worry for me, every now and then I feel like, I'd really like to ... if you go and buy new clothes or something, but apart from that I'm not too bad."* [Carly, 25–34 years, interview two]

When teenage girls discussed weight concerns, for the majority of participants these concerns related to body image issues and peer acceptance, and girls were focused to lose weight for a particular event,

such as their high school formal. The following is a quote from a teenage girl who expressed throughout both interviews the desire to lose weight and why she felt that weight loss was necessary:

*“Ahem, well there’s — I don’t envy the girls that are skinny in my group, but I don’t know I think it’s the media again because when you see a girl in a magazine she’s normally with a guy and she’s really, really skinny — cos I don’t have a boyfriend yet, I don’t think I want one ever, so I don’t have time but if I did want one I’d have to lose — ahem a lot of weight, have big breasts — ahem — to fit their category”* [Madison, teenage girl, interview one]

Only two of the teenage participants identified the reason for not wanting to be overweight to be related to the health risks associated with obesity:

*“I don’t want to be unhealthy and then like put on weight be overweight run the risk of heart disease and whatever it is, I want to be, I feel better when I eat healthy food, cause I know it’s better for me”* [Nicole, teenage girl, interview two]

In very few cases did women indicate that they were happy with their current weight. In most of the cases in which weight loss was not an issue this was because the women did not believe that they needed to lose weight and it therefore did not represent an important food and nutrition risk for them. In other cases, particularly those women aged 45–54 years , indicated that they enjoyed food and were not prepared to diet, as the gain was considered to minimal:

*“all of my kids are skinny, and my husband and I are carrying probably a little bit more than we should, but then it’s not, it’s not an issue, it’s not anything I’m worried about I sort of feel like you eat what you enjoy and I’m not going on a diet.”* [Carol, 45–54 years, interview one]



One participant differed from all other participants in her concern about losing weight. Tina (25 – 34 years) indicated that she often battles with weight loss and has to monitor her weight constantly to ensure that she doesn't lose too much weight:

*“I don't want to lose any more weight, I'm happy being how I am and I just — you know I want to be healthy, I don't really want to — I don't like the look of a really skinny person and I'm very paranoid about that. I eat them because like I've got the genes that will lose weight”* [Tina, 25–34 years, interview one]

Three women from the 25–34 year age group became pregnant during the course of the study. For one woman it was her first pregnancy and the second pregnancy for the other women. All the pregnant women discussed post-pregnancy weight loss and their concern about losing the weight that they had gained in their pregnancies:

*“you're going to get big, not fat when you're pregnant, and I think I'm coping with that a lot better than I did last time. I think because I know that I can lose it again — you know anything I put on I can lose and yeah it's sort of I'm not as self conscious or you know conscious about the weight that I am putting on — so yeah.”* [Chloe, 25-34 years old, interview one]

#### **5.5.2.1 Achieving weight loss goals**

During the first interview participants identified numerous strategies that they could implement to lose weight, aged 25–34 years including incorporating exercise in their day-to-day lives, joining weight loss programs, support groups, personally implemented food restriction plans and taking weight loss prescription drugs. Of the women who identified that they would like to lose weight in interview one, three teenage girls, one woman aged 25–34 years and two women aged 45–54 years reported that they had lost weight at the time of the second interview. A variety of weight

loss strategies were identified by this group of women, including exercise, decreasing consumption of carbohydrates, following the kick start eating plan (two-week soup diet), and decreasing consumption of junk food. For two of the participants weight loss seemed almost accidental; one woman traveled internationally and did not like the food available and as a result lost weight. For the other woman weight loss was a result of poor appetite brought on by a family crisis.

#### **5.5.2.2 I avoid eating fatty foods**

The issue of fat consumption was raised across all three age groups, but more frequently in the 45–54 and 25–34 year age groups, and in the majority of cases this related to weight. The following quotes illustrate how women consider the consumption of fat in relation to weight:

*“in the last month we’ve been talking about fat, for the first time ever in my life, because my partner he’s getting a bit fat and I was also thinking I was putting on a little bit of weight, so that’s actually the first time ever that we’ve spoken about fat and it’s the first time ever that I’ve actually looked at the fat content and carbohydrate and stuff like that in food, so that’s a new thing.”* [Jane, 25–34 years, interview two]

*“I try really hard to think ok what can I send with kids that is not going to be a fattening thing because although you know my kids are quite slight in build it’s not going to take much to suddenly you know bung on some weight at the wrong time and the wrong part of their life and all of a sudden I think I regret then giving them all those fattening kind of things but yeah you know”* [Nola, 45–54 years, interview two]

It became apparent during the interviews that consuming fatty food was often associated with the feeling of guilt:

*“if you do eat — ahem — a fatty food that you will guilty after, and that puts a really big affect on me. So whenever I do go out to takeaways — ahem — takeaway restaurants, especially McDonalds I feel really guilty after, and I feel really bad in myself if I have eaten all that fat”* [Madison, teenage girl, interview one]

Interestingly, some women when discussing fat consumption and fat free or fat reduced products explained that they felt deceived by the manufacturers and marketers of these products because often they would also be high in sugar.

#### **5.5.2.3 I need to decrease my carbohydrates**

Many women spoke of carbohydrates in a negative context and indicated a desire to reduce their consumption of carbohydrates, particularly simple carbohydrates. The desire to reduce the consumption of carbohydrate foods in most cases was associated with weight loss:

*“I’m more conscious of, of not eating — like having— you know less carbohydrates in your diet than I think— you know Australians — you know, and that’s probably may be why — you know, despite all these low fat things — you know, a lot of these things are high in carbohydrates and sugar and stuff, so you know they wonder — you know people wonder why they can’t lose weight.”* [Chloe, 25–34 years, interview one]

*“I’ve been trying to sort of have — you know three days where I don’t eat any breads and pastas and potatoes and every — just mains like carbohydrates and things like that. Yeah, so my three carbohydrate free days I just thought — ahem well carbohydrates I*

*found do sort of contribute to — ahem weight gain, ahem so I thought well if I minimise the amount that I have it's got to have some affect on my weight life, loss, loss and gain. So ahem — Yeah, but it's just basically related to weight again.”* [Monica, teenage girl, interview one]

The following quote demonstrates how one woman was feeling guilty about her recent increased consumption of carbohydrates:

*“I’ve actually increased my carbohydrate by having my 1 slice of toast as well as my two weet-bix, it’s very naughty, I’m aware of it and I just thought ok, I more think that perhaps I should increase more the vegie,”* [Nancy, 45–54 years, interview two]

#### **5.5.2.4 I need to eat more fruit and vegetables**

Many participants indicated that they make a conscious effort to include fruit and vegetables in their diet. For some women, it was because they knew that they were important for their health, for instance:

*“to stay healthy, and to — I was told that for your mental health you concentrate and to — ahem — when you get older you don’t want to be like obese and then you die of — ahem, like heart conditions and just like exercising and stuff”* [Gabrielle, teenage girl, interview one]

For other women, while they knew that fruit and vegetables offered numerous health benefits, they also included benefits associated with weight loss as they could be used as a substitute for less healthy snacks:

*“Your fruit and vegies are your staple and I think the more fruit you eat the less sort of naughty you’re going eat as well ‘cause it does fill you up and I not going to feel like having ... reaching even for ... I get nuts as well, nuts and dried fruit, I find again that I’ll reach for the nuts before any fruit and so I’ve been trying not to have too*

*many peanuts and things like that 'cause I think they can get quite fatty, even though they're a healthy alternative they're still a higher fat content'* [Holly, 25–34 years, interview two]

#### **5.5.2.5 I avoid consuming lots of sugar**

Sugar was another nutrient, which was spoken about, in a negative context by many women. Women often mentioned that they avoided eating products, which were high in sugar or avoided adding sugar to tea and coffee and often examined food product labels for the sugar content. Many women also indicated that they would like to decrease their sugar consumption. High sugar consumption for many women was associated with weight gain and it was perceived to be more healthy to limit sugar consumption:

*"I always check the fat content but then someone else has said to me that when the fat is low, the sugar can be really high, so now I look at both and if they are really low then I'll get that."* [Madison, teenage girl, interview one]

*"sugar consumption is always an issue with me and I think that's been for years I mean I now don't drink, don't use as much sugar in say a coffee, I can drink a cappuccino without sugar whereas I was always a two sugar person, and tea I used to be a two sugar person, I'm back to if I have sugar I have one"* [Penny, 45–54 years, interview two]

#### **5.5.2.6 I need to drink more water**

Many women indicated that they were making a conscious effort to increase their consumption of water. Some women indicated that they currently did not consume the recommended of 2 litres of water a day and were feeling bad about not achieving this goal:

*"you think I'm going to have eight glasses of water today, and then*

*you think “Oh I can’t remember when I last did it” but if you’ve got a tray with eight glasses on it, but if you still have eight at the end of the day but you know you’ve been really bad. “ [Penny, 45–54 years interview one]*

Other women indicated that they were in fact drinking more water, which was a result of a conscious effort they were making to increase their water consumption. Women often employed strategies such as keeping a water bottle with them at all times to encourage their water consumption. In one woman’s case her workplace had implemented a weekly water drinking competition, to support each other in the desire to increase their water consumption:

*“Actually the girls upstairs at my work have got a water competition going, and it’s like ... they’re the ones that have got the weight thing happening, but they’ve got a thing on the board, like we’ve got a time in and out board or we’re at lunch or whatever, and it’s got everyone’s names and then you have to write next to it how much water you’ve had that day and at the end of the week, like from Monday to Friday, at the end of the week they add it up and just say you’ve had, like, most people have about three<sup>3</sup> [bottles] a day, so that’s like 1500mls or something like that or 1800mls, and they add it up and whoever gets it at the end, I don’t know, I haven’t worked out what you get but you get something if you consume more water than anyone else that week.” [Carly, 25–34 years, interview two]*

The desire to increase water consumption was associated with internal health benefits such as flushing out toxins, keeping kidneys clear, making you feel good and preventing dehydration. Water consumption was also considered important for external factors such as enhancing the appearance of skin and hair. A couple of participants also indicated that increased water consumption aided in weight loss.

#### 5.5.2.7 I think I need to eat more meat

Many women expressed concern regarding their iron levels even though in most cases they had not had a blood test to determine their iron status. This concern was often raised when the women indicated that they did not consume very much red meat and therefore needed to make a conscious effort to include meat in their diet. Other women felt that they needed to increase their meat consumption as a result of often being tired and associated this tiredness with low iron levels.

*“Sometimes I think I — like I may lack of iron and things because I don’t eat — ahem much meat and things. I had my iron, my blood tested and it was fine ... but — ahem and ‘cos I’m tired — like I get tired and that, but no they said it was fine.”* [Chrissie, 25–34 years, interview one]

Even women who had previously not eaten meat discussed the need to incorporate meat into their diet in order to increase their iron stores. For instance, Wendy (45–54 years) who considered herself a vegetarian for 20 years reported in interview one that she had reintroduced meat into her family’s diet once a week as a result of lack of energy and a history of iron problems. She either had to disguise the meat with other food ingredients or if she was cooking steak it had to be cooked outside, so she wasn’t left with the smell of meat in the house. Similarly, Carly (25–34 years) who had consumed a primarily meat free diet expressed concern that if she was to become pregnant she would have to consume meat:

*“we were kind of talking about starting a family sometime and then you talk to the people say “Oh you should be, you shouldn’t be excluding red meat” and stuff during your pregnancy and so I was starting to think about it a little bit but I’m not really sure about the whole, I’ll have to read more about that.”* [Carly, 25–34 years, interview one].

#### 5.5.2.8 I've lost control of my diet

Women discussed losing control over their diet over the course of the study as a result of other changes in their life. When stressful events occurred in some women's lives such as family crisis or marriage breakdown women discussed breaking their normal dietary practices. For instance, Cora who suffers from coeliac disease was less vigilant in adhering to her gluten free diet and expressed concern at the upcoming visit to the medical specialist. Similarly, Barbara who was experiencing marital problems and a death in the family was unable to remain focused on her weight loss efforts and described losing control of her dietary habits. In another instance, Gaye in interview one discussed her efforts to adopt vegetarianism as a result of following a Buddhist lifestyle. However during interview two, Gaye said that a recent family crisis had resulted in her loss of control of this situation:

*"I'd be looking for food, like I had some chops here I was going to cook and take home to my husband, I sat here one lunch and ate four chump chops, cooked two and then I cooked two more, that was just ... I don't usually do that. I think I do it to keep busy I think, just keep my mind off everything, so I just ate and maybe I've done that without being aware of it, you know maybe."*

Loss of control of dietary habits was also associated with significant changes in the lifestyle of some women. For example Anna, who had reported attempting to quit smoking during interview one discussed how this had resulted in her adopting a healthier diet. However in interview two she had started smoking again and returned to her previous dietary habits. Similarly, Jane (25 –34 years) described how she had recently incorporated fish and cheese into her diet after being vegan for 12 years. Jane then described how she now found herself eating more junk food and snacks and associated this behaviour with her recent lifestyle change.



Teenage girls also discussed taking control of their dietary habits. Many teenage girls indicated that they wanted to take control of their food habits now to ensure that they could focus on more important issues in their life, such as exams.

### **5.5.3 Food and nutrition issues important to women aged 45–54 and 25–34 years**

#### **5.5.3.1 Concern for children**

Most women in the 45–54 years age group indicated a degree of concern for the food habits of their children: this was also true for those participants that had adult children. Of the women aged 25–34 years all those women who had children or were pregnant expressed concern for the health of their children:

*“I think more about [my daughter] now to make sure she gets her fruit and vegetables, more so than me and [my husband] — I mean we can, we could live without it but I don’t want her to. My concern is her and as long she’s alright everything’s ok sort of thing.”* [Claire, 25–34 years, interview one]

*“Well I guess when you have got young children, you are sort of conscious of what they are consuming because — you know there’s, there’s so much — you know advertising in media, and even peer pressure on eating — you know — takeaway food — you know ... because they’re eating junk food, but I am always trying to counter balance that — like we do let them have takeaway — ahem — you know one night a week but then — ahem — you know sort of try to have very healthy food, and I guess I consider the fat content of food.”* [Helen, 45–54 years, interview one]

Concern for children's diet continued throughout interview two. For many women they saw this as their role and responsibility as a woman:

*"I certainly was concerned about my kids, particularly with making an option to go vegetarian, when they were still ... five and seven I think they were, so they were fairly young, so for me it was always a big thing to make sure they were getting protein and I did make sure they had a lot of calcium."* [Kathy, 45–54 years, interview two]

Interestingly some of the women who did not have children of their own also indicated concern regarding the increased rate of obesity in children, which was a result of observation of society or contact with relatives' or friends' children.

#### **5.5.3.2 I was vegetarian but I eat fish**

Of the women who identified themselves as vegetarian, only three excluded all meat from their diet. The other two women who previously consumed a vegetarian diet had recently incorporated fish into their diet. For instance, Jane had followed a vegan diet for 12 years, however she had recently started consuming fish on a weekly basis. The addition of fish into her diet was based on advice from her microbiologist who felt that she was deficient in oils:

*"I was a vegan for 12 years and just changed over in the last year to be a vegetarian — ahem — and the reason I changed over was because I wasn't getting — ahem — enough oils — ahem in my diet and—ahem — I was getting a little bit anxious, ahem my microbiologist and he said I should have fish with certain oils in it so I went across to have fish."* [Jane, 25–34 years, interview one]

### 5.5.3.3 I'd like to eat organic foods but I can't afford it

Many participants indicated that they would like to consume a diet based on organic produce. In most cases the desire to consume organic produce was to reduce the consumption of pesticides. Only one participant mentioned the potential nutritional and taste benefits of consuming organic produce. Despite the desire to consume organic produce, most participants indicated that they could not sustain a diet based solely on organic produce because they were limited by the high costs and limited availability of these foods.

*"But we try and get organic stuff from, there's an organic shop around from us in Crown Street now, we get some of the stuff, it's a bit more expensive, but I do think about it and I try to think oh it'd be really good if you could have all organic foods but I just think it's not as accessible for us and it's a bit too expensive, but I do think about it, I do think, I would like to try to avoid having stuff that's had too much, like genetically modified or anything like that, yeah."* [Carly, 25–34 years, interview two].

Some women expressed scepticism about whether foods marketed as being organic were actually free of chemicals and pesticides:

*"you can get organic ones where they say they don't use chemicals or pesticides on it but at the end of the day I don't know, I don't know if I believe in that."* [Karen, 25–34 years, interview two]

One woman identified what she believed to be a contradiction in the marketing of organic foods:

*"I'd like to get organic stuff but I can't because it's a bit expensive and it's hard to get your hands on, so I usually get the organic stuff that you get from Woolworth's or Coles that's pre-packaged. Ahem, but pre-packaged which is bad but it's good cause it's organic and*

*you, I mean I hope it's organic like my boyfriend's a bit of a cynic he goes "Oh you don't really know if it's organic or not they could be just be putting labels on it". So I've got my faith in the supermarket chain that they are doing the right thing you know — so."* [Mandy, 25–34 years, interview one]

#### **5.5.3.4 If I had more time I would have a better diet**

Many women indicated that time constraints meant that their dietary choices were restricted and therefore were not eating as healthily as they wished or were unable to introduce the changes they anticipated in the first round of interviews:

*"Well I just know that it's — you know it's the healthy and it is good nutrition to have a balanced diet and, and I guess just the way our life is, sometimes it's hard — easier to just — you know boil some pasta and ... you know — rather than to make it an effort maybe like a lentil burger or something ... so I just would like a bit more balance 'cos I think you know that's a healthy"* [Helen, 45–54 years, interview one]

### **5.5.4 Food and nutrition issues important to teenage girls**

#### **5.5.4.1 I think I should try and eat breakfast**

Many teenage girls indicated that they needed to start making time in the morning to consume breakfast. Time constraints were mentioned as the reason for many teenage girls failing to consume breakfast, however they acknowledged that it was an important meal to consume, because it prevents them getting hungry later in the day. Some girl's identified that their parents insisted that they consume breakfast before leaving the house in the morning.

#### **5.5.4.2 I need to decrease my consumption of junk food**

Many teenage girls indicated that they needed to reduce their consumption of “junk foods”. Consumption of junk food was associated with weight gain and feelings of guilt after a participant had consumed it.

#### **5.5.5 Perception of healthy diet**

The last question for the first interview asked women to describe what they considered to be a healthy diet. Women’s description of a healthy diet resembled the dietary messages of nutrition professionals. Most women began by saying that a healthy diet was a balanced diet. They then more specifically mentioned that a healthy diet consists of lots of fruit and vegetables, grains, bread and pasta, some meat and limited fat. Proportions or quantities were not provided in the women’s descriptions.

#### **5.5.6 Sources of nutrition information**

Interestingly, and in contradiction to the results of Chapter Five, magazines were the most commonly identified source of nutrition information identified by all age groups in the first interview. However, many women when discussing magazines raised the issue of trust. Many also indicated that they placed a higher level of trust in one genre of magazines over another. Women were more likely to trust nutrition information presented in health focused and cooking magazines over that provided in general women’s magazines. Magazines for many women offered a starting point for women to start thinking about issues relating to food and nutrition:

*“Depends what kind of magazine it is, like if it’s the trashy kind of ones — like you know Woman’s Day and you know or Woman’s Weekly and that kind of stuff, I don’t really don’t take it very seriously but — ahem, the Super Foods really good but it’s — that’s more for the recipes and thing s... I kind of like that — ahem, and Cosmo and Cleo’s and stuff — I don’t know, I don’t really — It, it makes me think about it but then I will go and ask someone else.”*

[Carly, 2 –34 years, interview one]

Magazines were rarely the sole source of nutrition information. Women aged 25–34 and 45–54 years indicated that they gained information from a variety of sources including, professionals (in particular their general practitioner), friends, television and books. Teenage girls, in addition to magazines, indicated that their mother and school were the most common sources of nutrition information. All participants indicated that nutrition information was gathered over their lifetime from a variety of sources.

### **5.5.7 Women's reactions to nutrition information in a women's magazine**

After completion of the focus groups and first round of interviews it became apparent that there was a contradiction regarding women's use of women's magazines as a source of nutrition information between the data obtained using these two methodologies. As discussed in Chapter Five, women in a group setting indicated that they did not trust and were skeptical of nutrition information presented in women's magazines. In contrast, during the first interview many women indicated that magazines were a source of nutrition information. Therefore to explore this issue further at the completion of the second round of interviews women were given a short magazine article and an advertisement that made claims in relation to nutrition. The articles and advertisements were considered typical of the types of articles and advertisements found in women's magazines. The purpose of this activity was to gain insight into how women react and respond to the information presented in the media items.

Women aged 25–34 and 45–54 years were given the same article and advertisement (Appendix 23), and teenage girls were given a different advertisement and ad (Appendix 24).

#### **5.5.7.1 Description of media items for adult women**

The short article titled "Eat chocolate every day!" was published in the "Living Well" section of September 22 edition of *Woman's Day*. This article was chosen because it was representative of the types of articles

commonly published in women's magazines. It reported the results of study findings that suggest cocoa bean extracts in milk and dark chocolate are rich in antioxidants and stearic acids. The article quotes Dr Neil Mann, from the Department of Food Science at Melbourne's RMIT University, who discusses the research findings and health benefits. In addition the article quotes dietitian Glenn Cardwell who advocates moderation.

The advertisement promoted a product produced by Meadow Lea called Logicol™. This advertisement was chosen because it was representative of the types of advertisements which use nutrition claims to advertise a product commonly seen in women's magazines. The advertisement subtitle stated "Margarine spreads containing plant sterols such as Meadow Lea Logicol™ have been shown to reduce cholesterol absorption." The advertisement goes on to explain the role of plant sterols as a part of healthy diet and recommendations for gaining optimal benefits. The advertisement also references information from the *Medical Journal of Australia*.

#### **5.5.7.2 Description of media items for teenage girls.**

The article titled "Diet myths busted" published in the October 2003 edition of *Girlfriend* magazine outlined common dietary advice and discussed whether this advice was fact or fiction. This article was chosen because it was representative of the types of articles commonly published in magazines targeted at teenage girls. The article included quotes from the Executive Officer at Nutrition Australia, Lucinda Dobson, and the Executive Officer of the Eating Disorders Foundation of Victoria, Karen Elford. The article also provided the website addresses for the organisations for teenage girls wanting further information regarding food and their bodies.

The advertisement was a double-page promotion for Nestle Milo published in the October 2003 edition of *Dolly* magazine. This advertisement was chosen because it was representative of the types of advertisements which use nutrition claims to advertise a product commonly seen in women's

magazines. The Milo advertisement provided some food and nutrition tips in conjunction with a competition to win a gym membership and advice from health and fitness experts.

#### **5.5.7.3 Reactions of women 45–54 and 25–34 years to the magazine article**

Most women responded to the magazine article with a degree of skepticism and indicated that they would not change their current food habits based on the information presented. For some women the article added to their confusion about foods, which are considered to be healthy versus those, which are not. The quotes below illustrates this confusion and frustration with changing nutrition guidelines:

*“I just think to myself get it right you know, these researchers are into it they’re looking at different things and that are good for you that aren’t good for you, you just don’t know where you stand, you know you think ok well I’m not going to eat it this week cause it’s not good for you but then come next week, oh it’s ok you can eat it now, I personally get sick and tired of hearing it’s good for you then it’s not or it’s good for you and then the opposite so it makes it a bit... you sort of don’t know where to stand.”* [Karen, 25–34 years, interview two]

Some women interpreted the information to prove the concept of “everything in moderation” and confirmed their current beliefs of what constitutes a healthy diet.

*“I think I have read something like that before, I think I’ve heard those thoughts and I think that just proves that a little bit of what you enjoy and having things in moderation is fine, I think it’s a healthy way of looking at your diet.”* [Carol, 45–54 years, interview two]

It appears for some women the article would be used to justify their behaviour and reduce the level of guilt they feel when indulging in



chocolate. Many women also acknowledged that the journalist had tried to balance the information presented through incorporating a spokesperson from where the research was produced and balancing this with the comments of a dietitian. Despite the fact that research findings were released from a scientific institute and the opinion of a dietitian was included, most women remained skeptical of the information.

#### **5.5.7.4 Teenage girls' reactions to the magazine article**

In contrast to the adult women, teenage girls responded positively to the magazine article. However, this is possibly due to the different content and focus of the articles, rather than differences between the groups. The article shown to teenage girls contained balanced information in comparison to the article shown to the women aged 25-34 and 45-54 years.

Teenage girls suggested that the article provided useful information on healthy eating and justification why. Most teenage girls indicated that they would follow the information presented in the article:

*"Yeah I just think it's good that you know it's in a good magazine where it's you know teenagers could be going through a stage where they're not happy with themselves and this articles just telling them you know just be happy with yourself, but just, yeah like work through these things and you know you'll probably be healthy after that."* [Laura]

*"I think it's pretty positive, it's just telling you like what to eat, how it can help you and stuff like that which instead of saying just eat red meat or whatever it's telling you why and what it can help, what can happen if you don't eat it, so it's alright, it's pretty good."* [Madison]

#### **5.5.7.5 Reactions of women 45–54 and 25–34 years to the magazine advertisement**

Women also responded to the nutrition information presented in the Meadow Lea Logicol™ advertisement with skepticism. All women said that they had been aware of the product previously and believed that the advertisement was just a “commercial gimmick”, unnecessary to reduce cholesterol and an attempt by Meadow Lea to sell a product they think consumers want.

*“there shouldn’t be a need for it should there, it hasn’t shown to reduce cholesterol, well cut back on the high cholesterol foods, cut back on animal products, and you don’t need, you don’t need margarine anyway, go without altogether and cut back, again a healthy balanced diet and you don’t need this, although it does say at the bottom it should be included as part of a healthy, active lifestyle, includes a diet low in saturated fat and high in fruit and vegetables, so if people were doing that they wouldn’t need this, just a commercial gimmick.” [Wendy, 45 -54 years]*

Women responded negatively to a recommendation of consuming 1 to 1 ½ tablespoons of Logicol™ a day and felt that the product was too expensive and therefore they were not likely to purchase it. Many of the women in the 25–34 year age group quickly discounted the advertisement after reading it, indicating that they did not have a cholesterol problem and therefore would not think about purchasing the product.

#### **5.5.7.6 Teenage girls’ reactions to the magazine advertisement**

Again, in contrast to the adult women, the teenage girls reacted positively to the Nestle Milo Advertisement, believing that it provided positive advice on how to be healthy in addition to promoting Milo as a healthy product:

*“Well I’m glad that it’s saying that it’s good for you because I’m like a Milo addict. I try to have it in the morning if I’m not running late and every afternoon so yeah, that’s a more positive type thing than*

*the Facts and Fiction, rather than sort of saying don't don't don't they are just sort of suggesting things that you should be able to do and it sort of doesn't seem to be out of your reach like with 2 pieces of fruit and 5 serves of vegetables, it makes you think yeah you can do that, things like that so yeah."* [Caitlin]

Again, it is important to realise that the more positive response from teenage girls in comparison to the adult women is possibly a result of the differences in the advertisements' content and focus, rather than differences between the groups.

Only two girls were skeptical of the advertisement and believed its sole purpose is to sell the product rather than provide information on healthy eating to teenage girls:

*"I don't even bother reading things like that when I have magazines 'cause they're sort of trying to get you to buy their product and they can just say anything and try and get you to sell it, I don't buy any of it."* [Bridget]

## **5.6 Discussion**

Semi-structured interviews provided an opportunity to examine food and nutrition issues from a consumer perspective. Based on the theoretical framework outlined in Chapter Three, it was anticipated that women would raise issues, which in most cases receive media coverage and that women perceive to be important to themselves and/or their family. It is acknowledged that an individual's interpretation and the manner in which they respond to media messages are influenced by a multitude of factors. The following section will discuss the results of the semi-structured interviews.

The data from the semi-structured interviews provide insight into the food and nutrition issues important to the women who participated in this study.

It is apparent from these results that food and nutrition was not a primary concern. Giddens and Beck's theses relating to risk society incorporate the concept that uncertainty surrounds scientific knowledge. An outcome of this is the necessity for individuals to assess and manage this risk based on the provision of expert knowledge. The women in this study were not anxious about food and nutrition issues and did not think about food and nutrition in a risk framework. Uncertainty about expert knowledge was raised by women but weight concerns and the desire to lose weight was the most frequently discussed food and nutrition issue among all groups of women. Other non-weight concerns were more likely to be raised by women who had current health concerns for themselves or someone in their family. These results are discussed in consideration of the theoretical framework, which is based around the issues risk, reflexivity and self identity, expert knowledge, risk, trust and doubt and the role of magazines/media.

### **5.6.1 Risk**

The theoretical framework relating to risk indicates that the women would have risk positioned as central to their lives and would be actively seeking information from a range of sources with a view to minimising risk (Giddens 1991; Beck 1992). Therefore it was expected that women would be applying a risk framework when considering food and nutrition issues. These data from the semi-structured interviews do not support this position. Throughout the interview process it was difficult to engage women in discussions regarding food and nutrition and the related risks to health. The women did not position food within a health risk framework. The primary focus was on weight but from a self-image perspective. The women did not indicate that they actively sought information relating to food and nutrition and health risk. Women were more likely to raise concerns if they had a personal health issue or someone in their family was experiencing health difficulties.

It became apparent during the semi-structured interviews that food and nutrition was not a primary concern for women and did not have the degree of significance which health professionals and the media propose. There was very little evidence from this study that women were anxious about food and nutrition issues. For the women in this study food and nutrition played a very elementary and ordinary role, with women thinking about what to cook for dinner or what foods to purchase from the supermarket. Other issues in the women's life took on a greater degree of significance. As a result it appeared that the women did not perceive food and nutrition risks as a priority.

Giddens's (1991) 'protective cocoon' thesis may help to explain this finding. It suggests that the 'protective cocoon' allows the individual to dismiss risks that are not likely to encroach on their life, which allows women to concentrate on other issues that they perceive to be of greater risk or are more able to be controlled by them. This behaviour is based on trust in individuals or abstract systems. For instance, women may perceive and prioritise that it is more important to control their finances in order to be able to pay household bills and purchase food that fits within their budget, rather than worry about the long-term impact of consuming non-organic products. Therefore they control this risk by not purchasing organic products which may result in the mismanagement of their budget.

The reasons why food and nutrition issues did not dominate women's food decision framework may be the result of several aspects of today's society. In Australia over the last decade there has been an absence of major food scares. For example, when consumer trust in food safety and regulation declined in Europe with the advent of BSE or mad cow disease, Australia escaped the impact of this crisis. Australia's plentiful and secure food system may have resulted in women placing a high degree of trust in Australia's current food environment, thereby reducing consumers' perception of risk.

Teenage girls represented the most difficult group of women to enter into discourse about food and nutrition. In most cases the teenage girls identified that their parents were the primary decision makers about the foods that they consumed. Teenage girls typically mentioned that they were primarily responsible for placing additional items on the shopping list, such as snacks, or making the occasional food decision when they were away from home. For the majority of teenage girls, food decisions and awareness of food and nutrition related issues were perceived to be out of their control. Clearly teenage girls trusted the decisions their parents were making for them. In addition to this many of the teenage girls who participated in this study indicated that their parents actively removed decisions and activities relating to food away from them to allow them to focus on schoolwork. Similarly, Green and associates (2003) reported that teenagers perceived food consumption to be out of their control and that in a lot of cases teenagers had little to say or experience in making food decisions.

As indicated above, the theoretical framework suggests that women would be thinking in terms of risk. It was anticipated that if women were thinking in terms of risk they would be using risk terminology. The findings of this study indicated, however, that women did not use the term 'risk' when discussing food and nutrition issues important to them. This is in contrast to expert discourse that frequently includes the terminology of risk and the regular reporting of food and nutrition in terms of risk. For instance, the British Medical Association (BMA) has published a book titled *The BMA guide to living with risk*. It aims to help lay members of the public assess and manage risk in their day-to-day lives, such as those associated with diet, alcohol and smoking (British Medical Association 1990).

The published academic literature positions food and nutrition risks in a number of ways. For instance, there is a large amount of literature highlighting risk associated with physical health, contamination of food supply, food safety; and technology (for some recent examples, see Christophe 2000; Casse and Hervieu 2002; Magkos, Arvaniti et al. 2003;

Shaw and Thomson 2003; Fischer, de Jong et al. 2005; French, Maule et al. 2005; Fung, Hu et al. 2005; Kulikov 2005; Leosdottir, Nilsson et al. 2005; Mannisto, Dixon et al. 2005; Vlachopoulos, Panagiotakos et al. 2005). The women in this study did not consider food and nutrition issues to the same degree or consider such a range of issues. Rather, the focus on food related risk was narrow compared to the concerns of experts. The results of this study indicated that throughout the interview process weight concerns remained the most dominant topic of discussion among all age groups. Clearly weight was perceived among women to be greatest concern related to food and nutrition. The majority of women in this study however did not position this concern in terms of health risk. The concern was most often associated with risk to self identity. The issue of weight and self identity will be explored in the following section of this discussion. The women aged 45–54 years were more likely to link weight concerns with health-related issues and some appeared to have given up worrying about body image issues. Teenage girls were more likely to link their weight to an event, for example their school formal. The women in the 25-34 year age group who became pregnant during the course of this study indicated a degree of concern regarding post-birth weight and this was considered to be a negative aspect of their pregnancies.

Often other food and nutrition issues raised by women were related to weight concerns, for example participants' desire to decrease fat, carbohydrate and sugar consumption. It is known that dieting and weight issues are commonly reported in the media (Korinis, Koruslund et al. 1998; Moyer, Vishnu et al. 2001). Based on this, it is not surprising that this issue was the most commonly discussed food and nutrition issue raised by the women. It is also interesting to note that weight concerns were most commonly related to body image rather than health risks. Similarly, in a recent study by Lupton (2005) it was found that one of the most commonly raised issues relating to risk was associated with being overweight and the consumption of fat.

For the most part when non-weight related food and nutrition concerns were raised, they were discussed in terms of what is considered to be healthy, rather than in more specific nutrition-related terms. For example, increasing fruit and vegetable consumption to increase the consumption of fibre, vitamins and minerals. This may mean that women are hearing healthy eating messages but failing to pay attention to the specifics of these messages.

One nutrition concern that was raised in more specific terms was that of iron and meat consumption. Many women perceived that they might be deficient in iron as a result of being tired. Women connected what they believed to be an inadequate consumption of red meat with this tiredness. Only one woman during the interview process reported that she had a history of iron deficiency. Women's rhetoric of meat and iron resembles the media campaign produced by Meat and Livestock Australia 1993 which produced television and magazine advertisements targeted at women suggesting that 7 out of 10 women were deficient in iron. This campaign suggested that meat was the best answer to alleviating iron deficiency compared to non-heme sources such as spinach. While comprehensive results of the impact of this advertising campaign are difficult to locate, it has been found that this campaign led to a 20% increase in women's perception that beef is the best source of iron (Cattle Council n.d) and has had an estimated \$240 million impact on beef sales since 1993 (Beitelspacher n.d). Therefore it is possible that this campaign along with subsequent campaigns may have influenced women's knowledge about iron and meat consumption.

Water consumption was another food and nutrition issue that was raised regularly by women. This finding comes as of little surprise given that the advice to consume approximately 2 litres or 8 glasses of water a day is commonly incorporated into dietary advice and has received considerable media attention (for examples see, Anonymous 2004; McKimmie 2004; Freegard 2005) and the reported increased profit by companies producing bottled water (Bawden 2004; Mitchell 2004). It is confusing, however, that



women have responded to this public health nutrition promotion message, while failing to pick up on other food and nutrition messages which have been the focus of campaigns over the last few decades, such as food safety, diabetes, folate and calcium.

Women aged 45-54 years and 25–34 years expressed concern about the food habits of children. Women with children were conscious of making sure that their children were consuming a healthy balanced diet. In some cases it appeared that women often considered their children's nutrition and the long-term impact of this to a greater extent than their own. Interestingly, even women who did not have their own children indicated that they were worried about the high rate of childhood obesity in Australia.

Few women were specific about the nutrition-related health consequences of the foods they consumed, instead they were thinking of effects that were visible in the short term. This was particularly true for the younger groups of women. More women in the 45–54 years age group were able to think of the long-term impact of their food decisions.

It became apparent throughout the research process that control of food habits or dietary behaviour was a pertinent issue for many women. Some women expressed losing control of their desired dietary behaviours as a result of a crisis or dramatic event occurring in their lives. Women equated success with exerting control over personal food habits or controlling the food habits of their children. Lupton (1996) in discussing the results of focus groups and interviews described how participants often linked their emotional state with the types of food they consumed. For instance, feelings of sadness, depression and exhaustion were linked to poor health and eating unhealthy foods. Lupton (1996 p. 153) further discusses the relationship of self-control and eating. She concluded that:

*“In consumer culture there is, therefore, a continual dialectic between the pleasures of consumption and the ethic of asceticism*

*as a means of constructing the self: each would have no meaning without the other”*

### **5.6.2 Reflexivity and Self Identity**

It has been suggested that the reflexive nature of modernity shapes an individual's self identity. An individual's self identity is created and changed over time based on the individual's assessment of risk (Giddens 1991). It was, therefore, expected that the women would use the information presented in the media reflexively and this would have an impact on the individual's self identity. The results of this study indicated that weight issues dominated women's food and nutrition discourse. When the women in this study discussed a desire to lose weight, in the majority of cases this concern was related to the women's self identity or body image. The women said that this was to achieve what they believed looked good or to fit into a particular size or style of clothing. Women who felt that they needed to lose weight because of the associated health risks were in the minority and were more likely to be in the 45–54 year age group. This is an interesting finding, as it suggests that women do not perceive themselves at risk of the negative health consequences related to being overweight, rather the risk for the majority of women is related to poor body image. Giddens (1991) suggests that dieting is a means of reflexively influencing an individual's self identity.

Society has positioned an individual's body size as significant to an individual's success. For instance the American Obesity Association (2002) has reported on the discrimination faced by obese individuals when seeking employment, wages and benefits. Reports such as this highlight the significance of an individual's weight status and provide insight into why the women in this study were focused on weight loss related to body image rather than health risks.

### 5.6.3 Expert Knowledge, Risk, Trust and Doubt

Media has been identified as playing a key role in filtering expert information for the public (Giddens 1991; Beck 1992). Giddens and Beck's concept of expert knowledge is characterised by doubt, awareness of risk and decreased trust in experts (Beck 1992; Giddens 1994; Giddens and Pierson 1998; Lupton 1999b). It is therefore important to consider women's relationship with expert knowledge related to food and nutrition and the meaning of risk, trust and doubt in women's relationship with the information presented by experts.

The results of the semi-structured interviews provided an interesting finding in terms of the women's relationship with expert knowledge, in particular that which is provided through the media. While the women indicated that they relied on a variety of sources throughout their life course for information regarding food and nutrition, the media and in particular magazines were the most commonly identified source of information. This finding is in contradiction to the results outlined in Chapter Four where women indicated that magazines were not a primary source of food and nutrition information. This contradiction in findings will be addressed in the overall thesis discussion (Chapter Eight). The published literature supports the finding that the experience of gaining nutrition information throughout the life course is somewhat fragmented (Seale 2003).

The women in this study raised the issue of trust in the information presented in women's magazines. Women indicated that the style or genre of magazine influenced the degree of trust the individual would place in the information presented. This finding is supported by the literature. The work of de Almeida and associates (1997) found that magazines were not the most trusted source of nutrition information, in particular women's magazines. Participants in Lupton's (2005) study identified that some publications such as *National Geographic* magazine, some consumer magazines, investigative news programs and documentaries on television

were trusted to provide detailed information on food risks.

It is interesting to note that when asked what constituted a healthy diet, women responded with a very hegemonic nutrition discourse, which is commonly a part of health and nutrition professionals' healthy diet advice, such as the food pyramid and the Australian dietary guidelines. Women's ability to recall this dietary information indicates that they are in fact receiving some food and nutrition messages from the media.

The results of the semi-structured interviews demonstrated that risk, trust and doubt were important elements of expert knowledge. Interestingly, when asked to respond to an editorial and advertising item in a women's magazines, the women aged 45–54 and 25–34 years responded to each item with skepticism. This was in contrast to the responses of teenage girls who in the majority of cases accepted each item without question and responded positively. However, it should also be noted that the differences between the teenage girls and women aged 25–34 and 45–54 years may be a result in the differences between the articles and advertisements shown to these groups.

The results of this study raise an important finding with regard to the difference between lay and expert views. For instance, if women's weight discussion is placed in a risk framework, this risk is positioned as psychological risk that is related to self-image and acceptance. Experts' views when placed in a risk framework encompass a variety of disciplines such as physiological risk (for example obesity and chronic disease), ethical risks (for example genetically modified organisms), technological risks (for example irradiation). Rarely would professionals frame food related risks in terms of psychological risks associated with body image and peer acceptance.

#### **5.6.4 Role of Media and Women's Magazines in the Provision of Food and Nutrition Information**

The conceptual framework predicted that media are a source of information about risk and how to minimise risk. Media are positioned as a mediator between experts and the lay public and have a role in filtering information. Therefore it was expected that the women would raise issues that had been prevalent in the media. This study found, however, that the women were not thinking very deeply about food and nutrition issues, rather other issues affecting their lives, such as managing finances, took on greater importance. Even with prompting, these women did not place food and nutrition issues highly on their list of concerns. It was thus difficult to make any conclusions about the role of women's magazines in the provision of food and nutrition information to these women.

#### **5.7 Limitations**

A limitation of this study includes the non-random sample from a specific geographic region. Participants were self selected and therefore may differ from the general population. This type of sample thus limits the extrapolation of the data beyond this study population.

A second limitation may be associated with the self selection of participants into the second phase of the research project. As outlined previously, only half of the women who participated in the focus groups, participated in the semi-structured interviews. The type of people that remained in the study from the focus group discussions may result in some bias in the data. Significant demographic differences between those participants who left the study and those who remained in the study were not apparent. However those participants who remained in the study may have been more interested in the study topic area and therefore resulted in some bias.

A third limitation associated with this research is that the participants were involved in two semi structured interviews over an eight month period. As a

result they may have been made more responsive to food and nutrition information in the media and also more focused on their own personal food and nutrition issues or concerns. Therefore the results of these studies could be biased in that women were made more responsive to food and nutrition issues because of their involvement in this study.

Finally, women frequently expressed feelings of guilt or referred to their behaviour as naughty when discussing food and nutrition issues. While this finding is interesting, as a content analysis was performed on the interview data rather than a discourse analysis, further discussion of this is outside the scope of this study. Reanalysis of these data in the future should incorporate a discourse analysis.

## **5.8 Summary**

Results of the semi-structured interviews do not suggest that women were anxious about food and nutrition issues or that prioritised these when making day-to-day food decisions. It also became apparent that the women's discourse differed from that of experts who talk in terms of food and nutrition risks. Participants in this study did not focus to any great extent on risk associated with food and nutrition; rather their focus was on weight from a body image perspective. These results suggest that women are operating in the context of what Giddens (1991) defines as the "protective cocoon" whereby the women were filtering out risks which they felt were less likely to intrude on their life or were surrounded in uncertainty. This study also highlighted the complex relationship women have with expert knowledge filtered through the media. Adult women responded to the media, in particular women's magazines, with skepticism and doubt. They also acknowledged the importance of trust in expert sources.

The following chapter reports results of the content analysis conducted on top-selling women's magazines relevant to the age groups of the women

who were the focus on this and the preceding chapter. Eight magazines were analysed for food and nutrition information over a 12-month period (from the beginning of January 2003 until the end of December 2003).

## **6 Magazine Content Analysis**

### **6.1 *Introduction***

Chapter Two highlighted the fact that there has been no published comprehensive content analysis to date that examines all food and nutrition information presented in women's magazines, including editorial, advertising and cover contents. In the majority of cases researchers have examined one health or nutrition related topic in either the editorial or the advertising content. The aim of this study was to gain a comprehensive understanding of the food and nutrition information presented in women's magazines in order to assist health professionals in understanding the messages presented to women and how these messages are interpreted by women.

This chapter presents the results of a content analysis of eight Australian women's magazines over a 12-month period, from January 2003 until December 2003. It begins by introducing the content analysis methodology and outlines the development of the content analysis coding scheme. The coding scheme developed for this thesis was based on a review of the literature, results of focus group discussions outlined in Chapter Four and consideration of the theoretical framework described in Chapter Three. In addition, the sampling process for the women's magazines that are analysed will be outlined. Results are reported for advertisements, editorial content and magazine cover headlines, highlighting the issues and looking at how these issues are addressed in women's magazines.

### **6.2 *Methodology – Content Analysis***

Content analysis was used in this thesis to assess food and nutrition information presented in women's magazines. This methodology has been employed extensively to analyse a variety of messages in the media, including television programs and advertising, newspapers and magazines. Content analysis has also been used to analyse interview data. A commonly cited definition of content analysis is:



“...any technique for making inferences by objectively and systematically identifying specified characteristics of messages” (Holsti 1969 p.14).

Another well-accepted definition of content analysis is that of Krippendorff (1980 p.21):

“Content analysis is a research technique for making replicable and valid inferences from data to their context.”

These definitions suggest that any text can be subject to content analysis, a premise that appears to be uncontested in the published academic literature. Therefore content analysis can be considered a tool that can be applied to provide knowledge, insight and provide a representation of messages transmitted to the public (Krippendorff 1980). Holsti (1969) highlights the importance of the researcher objectively and systematically applying this tool. However some researchers, such as Lupton, (1999a) caution that the process of coding data from text into categories is based on making subjective decisions.

Content analysis of data not from participants, but obtained from texts such as newspapers, magazines, television programs and advertisements allows researchers to draw conclusions from the text. Researchers can gain insight into those who have produced the text, those for whom the text was intended and the text itself (Weber 1990). This style of research is not obtrusive as the text is produced for reasons other than the research, this also reduces participant bias (Lupton 1999a).

The process of content analysis consists of the researcher developing a coding scheme that includes a consistent set of rules for coding the text under investigation. This process enables the analyst to maintain objectivity, be systematic and also allows for comparison of the information coded. As well as allowing the researcher to develop a set of rules and procedures, it allows

organisation of data for easy identification, retrieval and indexing (Holsti 1969).

Berg (2001a) identified the main components of text that are counted in content analysis as words, themes, characters, paragraphs, items, concepts and semantics, however the researcher may also choose to use a combination of these components. Once the researcher has developed an appropriate coding scheme, the data gathered can be subject to quantitative or qualitative analysis. Traditionally, content analysis has been associated with quantitative analysis and some researchers have disagreed that it can be applied to qualitative research (Lupton 1999a). This debate is centred around whether only *manifest* content from texts can be subject to content analysis because this allows the researcher to maintain their objectivity. The *latent* content of text can be subject to content analysis, however this may compromise the objectivity of the researcher and requires the researcher to interpret the meaning of the text (Holsti 1969). I take the position that it is acceptable to use both quantitative and qualitative analysis in content analysis.

In the area of public health, content analysis has been applied to the exploration of television advertisements and programs, magazines, newspapers and pamphlets covering a range of important public health issues, for example food and nutrition (Lupton and Chapman 1995; Byrd-Bredbenner and Grasso 2000; Zuppa, H. et al. 2003), breast feeding (Henderson, Kitzinger et al. 2000; Potter, Sheeshka et al. 2000), breast cancer (Jones 2004), alcohol advertising (Jones and Donovan 2001) human papillomavirus (Anhang, Stryker et al. 2004), Human Immunodeficiency Virus (Brown, Chapman et al. 1996) prescription medicines (Brunt, Murray et al. 2003), heroin trials (Lawrence, Bammer et al. 2000), medical reporting (Lupton 1995) and osteoporosis (Wallace and Ballard 2003). The approaches taken to analyse these public health issues have included quantitative and qualitative analysis.

This thesis applies content analysis to the study of women's magazines to explore the provision of food and nutrition information to women. Aspects of the magazines explored include the advertisements, editorial items and cover headlines that refer to food and nutrition. The content analysis undertaken in this thesis was quantitative. Quantitative content analysis was chosen for this study because of the time restriction associated with undertaking a doctoral study.

### **6.2.1 Choosing and Collecting the Magazines**

Women's magazines were 57.2% of the magazine market share in 2003 (Magazine Publishers of Australia 2004), therefore they represent a significant proportion of all magazines purchased and read in Australia. Eight women's magazines were selected over a 12-month period. The selection of magazines was based on readership figures obtained from the Magazine Publishers of Australia (Magazine Publishers of Australia 2002b). These readership and circulation figures (see Table 6.1) were used to identify the top-selling magazines for each age group of women recruited into this study (i.e. women aged 13-16 years, 25-34 years and 45-54 years).

**Table 6.1. Magazine Readership and Circulation in the Top 100 (Magazine Publishers of Australia 2002b; Magazine Publishers of Australia 2002a)**

<sup>1</sup> Titles highlighted in grey were examined in this thesis and will be described in this chapter.  
N/A – did not rate the top 100 for circulation in January to June, 2002

In addition, an intercept survey was conducted at local shopping centres with women aged 25-34 years (n=103) and 45-54 years (n=98). A cross-sectional survey of teenage girls aged 13-16 years (n=105) was also conducted with girls recruited from the local girls' high school (as identified in Chapter Four). The aim of this additional research was to confirm that the magazine reading habits of women in the region from which the study population was derived corresponded with national readership and circulation figures (see Appendices 27-38 for letter to shopping centre management, participant information sheets, consent forms, standard survey introduction and survey).

Results of these surveys demonstrated similar readership habits to the national readership and circulation figures. The top five magazines read in each age group are outlined in Table 6.2. Additional results from the survey can be found in Appendix 39. Further discussion of these results are outside the scope of this thesis.

**Table 6.2 Magazine Readership of Women Aged 13-16, 25-34 and 45-54 years Based on Intercept Survey of Women residing in the Study Region**

<b>Magazine Ranking</b>	<b>13-16 years</b>	<b>25-34 years</b>	<b>45-54 years</b>
1.	Dolly	<b>New Idea</b>	Australian Women's Weekly
2.	Girlfriend	i. <b>Woman's Day</b> ii. <b>That's Life!</b>	<b>New Idea</b>
3.	<b>Cosmopolitan<sup>a</sup></b>		<b>Woman's Day</b>
4.	<b>Cleo</b>	<b>Cosmopolitan</b>	<b>That's Life!</b>
5.	B Magazine	i. <b>Cleo</b> ii. <b>Who Weekly</b>	<b>Cosmopolitan</b>

<sup>a</sup> Titles in bold indicate that the magazine was ranked within the top five in more than one age group

Based on time restrictions associated with completing a doctoral study and management issues associated with the data, it was decided to select the top three magazines per age group (as identified in Table 6.2) for content analysis. Therefore the eight magazines analysed for this research project are: *Australian Women's Weekly (AWW)*, *New Idea*, *Woman's Day*, *That's Life!*, *Cleo*, *Cosmopolitan*, *Dolly* and *Girlfriend*.

For the purpose of this research, the magazines considered to be most relevant to teenage girls are *Dolly* and *Girlfriend*. *Cleo* and *Cosmopolitan* were considered to be targeted to young women, while *New Idea*, *That's Life!*, *Woman's Day* and *Australian Women's Weekly* were considered to be targeted mostly to mature women. It should be noted that there is an overlap in the magazines read by women across the three age groups, as is indicated in Table 6.2. In this table, magazines in bold appeared in more than one group. Therefore the analysis of these eight magazines provides an accurate representation of the magazines read by women in these age groups, giving a clear indication of the food and nutrition issues they are exposed to in popular women's magazines.

### **6.2.2 Description of the Magazines**

Table 6.3 outlines the main features of each of the eight magazines analysed in this study. It should be noted that magazines such as *Australian Women's Weekly*, *Woman's Day*, *New Idea* and *That's Life!* target a very broad segment of the population, while magazines such as *Cosmopolitan*, *Cleo*, *Dolly* and *Girlfriend* have much more specific target audiences. It should also be noted that health and/or food are declared by the publisher to be features of all the magazines identified below.

**Table 6.3. Description of the Eight Women's Magazines' Characteristics**

Table 6.4 provides a sample of quotes that were obtained from the publisher's website for each of the magazines. Interestingly all quotes refer to the magazine having an intimate relationship or friendship with readers and highlight the role in guiding women in their day to day life. Clearly, women's magazine editors perceive themselves as having a role in assisting them with their daily decision-making. This may also include the food decisions they make on a day to day basis.

**Table 6.4. Publishers' Promotional Information for the Eight Women's Magazines**

### **6.2.3 The development of the content analysis instruments**

As discussed in section 6.2, it is important for researchers using content analysis to develop a coding scheme to ensure that the analysis is objective and systematic. For the purpose of this project, three coding schemes were developed to examine food and nutrition messages (one each for advertising, editorial and cover content of the magazines). They were based on a review of the literature, which identified coding schemes used in other published



studies, results of the focus group discussions and consideration of the conceptual framework. In all three coding schemes the specifics of each item was recorded, for example name of publication in which the item was published, page number, size, headline etc. This was considered to be important in the process of data management and in terms of data analysis.

**6.2.4 The development of the content analysis instrument for magazine advertisements**

The coding scheme for the magazines' advertisements was primarily based on a review of coding schemes used in other published studies. Of particular relevance was that of Barr (1989), which has been applied, validated and extended in other published work such as that of Pratt and Pratt (1995). In addition the focus group results (Chapter Four) and the conceptual framework outlined in Chapter Three were also considered in the development of the coding scheme.

Barr (1989) developed her framework to examine the types of foods and beverages advertised in Canadian women's magazines, in particular to determine how these were advertised and whether there had been any changes over time. The coding scheme devised by Barr assigned each product to one of eight food groups; these categories are outlined in Table 6.5. In addition each food group was coded into individual items. For example, milk and dairy products were broken down further into milk, yoghurt, and cottage cheese.

**Table 6.5. Barr's (1989) Product Groups**

Barr (1989) also coded the form in which the food was sold into one of the following categories: fresh, canned, bottled, frozen, dry, reconstitution required (e.g. cake mix), and ready to eat (e.g. breakfast cereal). Modification to foods (such as low salt, reduced fat, calorie reduced, artificially sweetened, decaffeinated) were coded as present or absent.

Messages used to promote the products were also recorded. Messages could be broadly categorised as either related or unrelated to nutrition. According to Barr (1989), nutrition related messages fall into three categories, that is, statements about (1) general health and nutrition, (2) containing specific nutrients and (3) minimising or eliminating certain substances. Consumer related messages (related directly to the consumer and were unrelated to the nutritional properties of the food.) were also coded. It was also recorded whether the messages were clearly stated or implied.

Other researchers have also applied Barr's (1989) framework, and its successful application has tested and demonstrated the reliability of this framework. For instance, Hickman and colleagues (1993) used content analysis to determine whether the use of nutrition claims in food and beverage advertising in four US women's magazines increased after the release of major reports with dietary recommendations for general health. Pratt and Pratt (1995) compared food advertisements and the accompanying health promotional messages in three magazines, two of which had a large African American readership and one that had a primarily "white" readership. Hill and Radimer (1996) compared the content of the advertisements in magazines aimed towards young and mature women, and Lohmann and Kant (1998; 2000) examined the changes in advertising frequency of foods in four popular food magazines in 1991 and 1994. In 2000, they (Lohmann and Kant) examined three types of magazines, food, women's, and health magazines, to determine whether food advertising differed with magazines' target audience and primary focus. Barr's framework has been widely applied and the researchers who have used it have done so with only minor modification. For example, Pratt and Pratt (1995) categorised fruit and vegetables as separate groups rather than using a single group as specified by Barr.

The review of the literature shows the significance of Barr's (1989) framework. The coding scheme developed by her and extended by the other researchers provides a clear framework (with minor modifications) on which to base the analysis for this thesis. In addition the results of focus group discussions outlined in Chapter Four were considered. For this reasons other information was also coded. Focus group participants indicated they would place a greater level of trust in information, which was referenced or written, or provided by someone they believed was an expert. For this reason the use of a spokesperson and referencing was included in the coding scheme. Consideration of the conceptual framework also suggested the importance of risk, trust and doubt when the lay public are exposed to expert knowledge.

A brief description of the content analysis coding scheme applied to this research project is outlined in Figure 6.1. Full details of the coding scheme including the coding book and coding form, is in Appendix 40. It was decided not to include advertisements that promoted cookbooks, and weight loss programs that were not promoting their own food products or supplements. This decision was based on time and resource limitations associated with completing the study.

**Figure 6.1 Broad Categories Used for the Content Analysis Coding Scheme for Advertisements**

<b>Coding System For Advertisements</b>	
1.	Features of the advertisement, including advertised product, publication details, position, size, type of advertisement, headline and associated graphic features
2.	Product features, including the product's food category, form and whether the product is nutrient modified
3.	Use of spokespeople and references
4.	Key messages (primary and secondary) including the manner in which messages are framed and themes.
5.	Food and nutrition message features, such as consistency with Australian Dietary Guidelines, use of health claims

### **6.2.5 The development of the content analysis instrument for magazine editorial content**

The coding scheme for the editorial content of the eight Australian women's magazines was devised through a similar process described above for the advertisements. A review of the literature was conducted in addition to considering the focus group results (Chapter Four) and the conceptual framework outlined in Chapter Three.

Review of the literature identified several studies, which were useful in the development of the editorial coding scheme, however there were far fewer studies reported than for advertising. Unlike academic literature regarding magazine advertising content, it was difficult to identify a clear framework that has been extensively applied. A framework developed by Guillen and Barr (1994) was referred to in several other studies. The application of this framework varied across studies in terms of the topic focus.

Guillen and Barr (1994) analysed nutrition, dieting and fitness content of magazines for adolescent women. Major articles (over one page in length), minor articles (brief highlights or columns) and advertisements were coded. Major articles were subjected to a more in-depth analysis and a different coding instrument was developed for advertisements. Recipes were counted. For items other than advertisements, the format of the item (article, question and answer column, highlight or quiz) and its primary subject (e.g. weight loss, fitness plan, nutrition information and cooking tips) were coded. Codes were developed for nutrition and fitness recommendations. These were discussions of general (nutrition and fitness) guidelines, and for the specifics of the nutrition or fitness plan itself. The categories were developed from a health expert's recommendations about the desirable and undesirable features of nutrition and fitness plans.

Korinis and colleagues (1998) used content analysis to determine the frequency of calcium and weight loss advertisements, articles and columns in magazines targeted to teenage girls and women. Data collection involved

identifying and examining articles and advertisements focusing on calcium and/or weight loss. The size and characteristics of the articles or advertisements containing the desired focus or key words were measured and recorded.

Allen (1995) conducted a content analysis to evaluate the coverage of a new food label in the print media, specifically major newspapers, health newsletters and consumer magazines that were published from December 1992 to August 1993. The coding instrument developed addressed the following criteria: the type of publication, the identified benefits and limitations associated with the food label, definitions for the terms per cent daily values and daily values, information on energy from fat, identification of the required information on the label, information regarding health claims, credentials of persons quoted in the articles, and any other sources of information about the new food label that were identified.

Potter (2000) content analysed infant feeding messages in a Canadian women's magazine. The coding instrument was developed following the methods outlined by Guillen and Barr (1994). The first code was the source of the message. There were three categories for sources: advertisements for infant feeding products, articles focused on infant feeding and other relevant items (e.g. articles where infant feeding was mentioned but was not the main topic). Next general categories were identified to describe the types of messages and then more specific categories to describe the themes. In addition, the article was coded according to whether it had been written by a health professional or someone else. The categories on the coding form were not mutually exclusive; most messages contained several themes.

For the research reported here a coding scheme similar to Guillen and Barr (1994) was developed with some modifications based on focus groups and the conceptual framework. A brief description of the content analysis coding scheme applied to this research project is outlined below (Figure 6.2). Full details of the coding scheme, which includes the coding book and coding form, can be found in Appendix 41. It was decided not to include editorial

items that were in the form of restaurant reviews, recipes or cooking tips (e.g. instructions on how to separate an egg) and cookbook reviews, based on time and resource limitations associated with the study.

**Figure 6.2 Broad categories used for the content analysis coding scheme for editorial items**

<b>Coding System For Editorial Content</b>	
1.	Features of the editorial, including article title, subheading, publication details, author and author's qualifications, type of editorial, magazine section in which the editorial appears, size of editorial and key graphic features
2.	Food and nutrition features, including type of message, primary subject, main themes, manner in which the topic is framed
3.	Information sources, including the use of quotes, references and provision of details for further information

#### **6.2.6 The development of the content analysis instrument for magazine covers**

Only one published study could be found which performed content analysis on magazine covers. However it was important in this study to include a content analysis of magazine covers, as they were considered to act as an advertisement for the magazine, as reported by focus group participants in Chapter Four and by McCracken (1993) in Chapter Three. In addition, focus group participants also indicated that they were more likely to purchase a magazine if it had nutrition on the cover.

Begley and Cardwell (1996) analysed the appearance of nutrition headlines on the covers of Australian women's magazines. This was part of a study that examined the reliability and readability of nutrition information in women's magazines. The presence of a nutrition headline was counted, no further information was recorded.

The coding scheme developed for the magazine covers included only basic information. A brief description of the content analysis coding scheme applied to this research project is outlined below (Figure 6.3). Full details of the coding

scheme, which includes the coding book and coding form, can be found in Appendix 42. A decision was made not to code cover headlines that referred to recipes or cooking tips to maintain consistency with the coding scheme developed for magazine editorial items.

**Figure 6.3 Broad Categories Used for the Content Analysis Coding Scheme for Cover Headlines**

<b>Coding System For Magazine Covers</b>	
1.	Features of the cover headline, including headline, subheading, publication details, number of words used, use of colour and graphic features
2.	Food and nutrition features, including the topic of the headline and the manner in which the headline was framed

### **6.3 Validation and Reliability of the Coding Schemes**

“Validity is defined as the extent to which an instrument is measuring what it is intended to measure” (Holsti 1969 pp. 142), In part, validity is determined by adequate sampling and reliability. It is also necessary to assess other factors such as, face, construct, hypothesis, predictive and semantic validity (Weber 1990). The reliability of content analysis results is influenced by many factors. These include the coder’s skills and experience, precision of the code rules and categories and the degree of ambiguity in the data (Holsti 1969; Krippendorff 1980; Weber 1990).

To validate the three coding schemes developed for the content analysis, all three coding schemes were initially tested on a one-month sample of magazines from the previous year. The aim of this initial validation was to aid in the development of coding rules and to determine any inconsistencies or errors in the coding book and form. This process also provided an indication of whether the codes developed were adequate and comprehensive enough for the purpose of this research project and whether they represented accurately the food and nutrition messages presented in the women’s magazines. On the completion of this exercise minor changes were made to the coding books and forms.

In addition, during the actual data collection phase, a research assistant was trained to code two months each of magazine data to identify errors in the coding books and forms and minimise researcher bias. The second coder coded the advertisements, editorial and cover headlines of a two-month sample of magazines (August to September 2003). Inter-coder reliability was calculated based on the Holsti (1969) formula. The formula is outlined below:

$$\frac{2M}{N1 + N2}$$

In this formula M is the number of coding decisions, which the two coders were in agreement. N1 and N2 are the number of coding decisions made by the coder one (N1) and coder two (N2) (Holsti 1969).

Inter-coder reliability for advertisements, editorial items and cover headlines was calculated to be 0.93, 0.91 and 0.94 respectively. These results indicate a high index of consistency, therefore the results of this study can be considered to have a high level of reliability.

## **6.4 Coding Procedure**

Of the magazines selected for analysis, five were monthly publications (*Australian Women's Weekly*, *Cosmopolitan*, *Cleo*, *Dolly*, *Girlfriend*) and three were weekly publications (*Woman's Day*, *New Idea*, *That's Life!*). To compensate for the differences in publication frequency, only the second and fourth issue of each month for the weekly publications were subject to content analysis. All monthly publications were content analysed.

The procedure to code the magazines involved assessing each page of the magazines and tagging pages, which contained food and nutrition information (based on the coding rules outlined in the coding books). Once each magazine had been examined, the researcher then double-checked that all



relevant information was tagged and then completed the relevant coding form for each advertisement, editorial item or cover headline.

Details for each completed coding form were then entered and stored into Microsoft Access for analysis.

## **6.5 Data Analysis**

Data analysis was conducted using Microsoft Excel, Office 2000 version. Results are reported in terms of frequencies and percentages.

## **6.6 Content Analysis Results**

Coding of the eight magazines over the 12-month analysis period produced a large amount of rich data. It is impossible to report all the data gathered using the coding procedure outlined. Therefore, only data relevant to the previous two chapters will be described and discussed here. This results section will begin with the reporting of the advertisements, followed by editorial items and finally those from the cover headlines.

### **6.6.1 Analysis of the Magazines' Advertising Content**

The following section outlines the results of the analysis of the food and nutrition advertisements that appeared in the eight women's magazine during the 12-month analysis period. It reports the number of food and nutrition advertisements, the type of products promoted, primary promotional statements and the presence of quoted information used in these advertisements.

#### **6.6.1.1 Number of food and nutrition advertisements**

In total, 1161 advertisements were coded from all magazines during the analysis period. Table 6.6 shows the total number of advertisements and the percentage of all advertisements each magazine contributed to the final analysis. Overall the magazines targeted at more mature women contained a greater number of food and nutrition advertisements, while magazines targeted at teenage girls contained the least.

The *Australian Women's Weekly* contained the greatest number of food and nutrition related advertisements while *Girlfriend* contained the least.

Interestingly *That's Life!* magazine had considerably fewer food and nutrition advertisements over the 12-month period compared to the other mature women's magazines.

**Table 6.6 Number and Percentage of Food and Nutrition Related Advertisements by Magazine (n = 1161).**

	<b>Cle<sup>1</sup></b>	<b>Cos<sup>2</sup></b>	<b>Dol<sup>3</sup></b>	<b>GF<sup>4</sup></b>	<b>NI<sup>5</sup></b>	<b>TL!<sup>6</sup></b>	<b>WD<sup>7</sup></b>	<b>AWW<sup>8</sup></b>	<b>Total</b>
N	69	98	8	5	199	33	288	461	1161
(%)	(5.9)	(8.4)	(0.7)	(0.4)	(17.1)	(2.9)	(24.8)	(39.7)	

<sup>1</sup> Cle = Cleo

<sup>2</sup> Cos = Cosmopolitan

<sup>3</sup> Dol = Dolly

<sup>4</sup> GF = Girlfriend

<sup>5</sup> NI = New Idea

<sup>6</sup> TL! = That's Life!

<sup>7</sup> WD = Woman's Day

<sup>8</sup> AWW = Australian Woman's Weekly

#### **6.6.1.2 Number of advertisements by product categories for each magazine**

Advertisements were categorised by food product category. Advertisements were assigned to one of two main groups, core and non-core foods. These were categorised according to "The Australian guide to healthy eating", which outlines core food products considered to promote good nutrition. Foods that were not listed as a part of the core food groups were considered to be eaten in small amounts or as extra foods because they were not a part of the five main food groups (Commonwealth of Australia 1998). For the purpose of this research, these will be known as non-core foods.

Table 6.7 shows the number and percentage of core and non-core food product advertisements in each of the eight women's magazines. Non-core foods were advertised more frequently in all eight magazines in comparison to core foods. The magazines targeted at teenage girls (*Dolly* and *Girlfriend*) contained no advertisements for core products. The *AWW* contained the greatest number of advertisements for core products (n = 86).

**Table 6.7 Core Versus Non-Core Advertisements**

Product Categories		Cle	Cos	DoI	GF	NI	TL!	WD	AWW	TOTAL
Total Core Foods	n	12	10	0	0	40	2	60	86	210
	%	17.4	10.2	-	-	20.1	6.1	20.8	18.7	18.1
Total Non-core Foods	n	57	88	8	5	159	31	228	375	951
	%	82.6	89.8	100	100	79.9	93.9	79.2	81.3	81.9
Total Advertisements	n	69	98	8	5	199	33	288	461	1161
	%	5.9	8.4	0.7	0.4	17.1	2.8	24.8	39.7	

Table 6.8 highlights the number of core foods advertised in the five core groups by magazine and the total for all core products across the eight magazines. Milk and milk products were the most frequently advertised food items (n = 63 or 30%) in the core food group category, followed closely by cereal based products (n = 61 or 29.1%). Fruit was the least advertised of the core food group (n = 19 or 9.1%).

Frequency of core foods advertised varied with the magazine. Milk and milk products were the most frequently advertised products for *Cleo* (n = 4), *Woman's Day* (n = 21) and *AWW* (n = 29). The most frequently advertised core products in *Cosmopolitan* were meat, fish, poultry, eggs, pulses (n = 3) and for *New Idea*, cereal products were most frequently advertised (n = 24).

**Table 6.8. Number of Advertisements Promoting Core Food Items by Magazine and Total for All Magazines.**

Core Food Groups		Cle n = 69	Cos n = 98	Dol n = 8	GF n = 5	NI n = 199	TL! n = 33	WD n = 288	AWW n = 461	TOTAL n = 1161
Milk & Milk Products	n %	4 5.8	2 2.0	0 -	0 -	7 3.5	0 -	21 7.3	29 6.3	63 5.4
Cereal Products	n %	4 5.8	2 2.0	0 -	0 -	24 12.1	0 -	13 4.5	18 3.9	61 5.3
Meat, Fish, Poultry, Eggs, Pulses	n %	3 4.4	3 3.1	0 -	0 -	6 3.0	1 3.0	14 4.9	18 3.9	45 3.9
Vegetables	n %	0 -	2 2.0	0 -	0 -	0 -	1 3.0	4 1.4	15 3.3	22 1.9
Fruit	n %	1 1.5	1 1.0	0 -	0 -	3 1.5	0 -	8 2.8	6 1.3	19 1.6
Total Core Foods	n %	12 17.4	10 10.2	0 -	0 -	40 20.1	2 6.1	60 20.8	86 18.7	210 18.1

Non-core food items were categorised into one of 14 groups. Table 6.9 details the non-core food items that were advertised in each magazine over the 12-month period. Ingredients and condiments were the most advertised products (n = 163 or 14.0%), followed by high fat/sugar/salt snacks (n = 113 or 9.7%) and then non-alcoholic nutritious beverages (n = 108 or 11.4%).

Magazines aimed at teenage girls contained advertisements for only non core food (however it should be noted that the overall advertising rate for food items was low in these magazines). This group of magazines also had the lowest number of advertisements for non core food products (*Dolly* n = 8, *Girlfriend* n = 5). There were very few similarities between the foods advertised in magazines for teenage girls. Both magazines contained advertisements for non-alcoholic non-nutritious beverages and confectionery; no other similarities were observed.

Beverages were the most commonly advertised products in the magazines aimed at young women. The type of beverage most advertised varied between magazines. In *Cleo* the most frequently advertised product was non-alcoholic nutritious beverages (n = 16 or 23%) while for *Cosmopolitan* non-alcoholic non-nutritious beverage (n = 22 or 22.5%) advertisements appeared more frequently.

Similar to the results for the core products, *That's Life!* magazine differed from all other mature women's magazines because it contained considerably fewer advertisements for non-core food products (n = 31) (see table 6.9). The most frequently advertised products in *That's Life!* were fast food/takeaway foods advertisements (n = 8), however this group of foods ranked number 10 in the overall products advertised in all eight magazines.

Very few other similarities existed between the magazines. However the top two products advertised for each magazine was ranked in the top four advertised non-core products for the overall analysis, which were ingredients and condiments, non-alcoholic nutritious beverages, high fat, sugar and salt snacks and miscellaneous.

**Table 6.9. Number of Non-Core Food Advertisements by Magazine and Percentage of Non-Core Food Advertisements by all Advertisements**

Non-core food category		Cle n = 69	Cos n = 98	DoI n = 8	GF n = 5	NI n = 199	TL! n = 31	WD n = 288	AWW n = 461	TOTAL n = 1161
Ingredients & condiments <sup>a</sup>	n %	2 2.9	8 8.2	0 -	0 -	13 6.5	1 3.2	56 19.4	83 16.1	163 14.0
High fat/sugar/salt snacks	n %	3 4.3	7 7.1	0 -	0 -	12 6.0	3 9.7	38 13.2	50 17.4	113 9.7
Non-alcoholic Nutritious Beverages <sup>b</sup>	n %	16 23.2	17 17.3	0 -	0 -	19 9.5	2 6.5	20 6.9	34 6.9	108 9.3
Miscellaneous <sup>c</sup>	n %	1 1.4	1 1.0	1 12.5	0 -	33 16.6	3 9.7	16 5.6	47 16.3	102 8.8
Non-alcoholic Non --- nutritious Beverages	n %	15 21.7	22 22.4	5 62.5	1 20.0	10 5.0	5 16.1	13 4.5	21 7.3	92 7.9
Chocolate & confectionery	n %	6 8.7	13 13.3	2 25.0	1 20.0	6 3.0	0 -	23 8.0	15 5.2	66 5.7
Vitamin & mineral supplements <sup>d</sup>	n %	0 -	0 -	0 -	1 20.0	8 4.0	2 6.5	10 3.5	45 15.6	66 5.7
Weight Loss Products <sup>e</sup>	n %	6 8.7	1 1.0	0 -	0 -	18 9.0	2 6.5	16 5.6	17 5.9	60 5.2
Food Company/Industry Promotions	n %	0 -	0 -	0 -	0 -	18 9.0	4 12.9	12 4.2	23 8.0	57 4.9
Fast food/takeaway/café	n %	1 1.4	7 7.1	0 -	2 40.0	14 7.0	8 25.8	4 1.4	9 3.1	45 3.9
Alcoholic Beverages	n %	7 10.1	11 11.2	0 -	0 -	2 1.0	0 -	9 3.1	1 0.3	30 2.6
Sandwich Spreads <sup>f</sup>	n %	0 -	1 1.0	0 -	0 -	4 2.0	0 -	5 1.7	16 5.6	26 2.2
Infant Foods <sup>g</sup>	n %	0 -	0 -	0 -	0 -	1 0.5	1 3.2	5 1.7	5 1.7	12 1.0
Nutrient modified snacks (e.g. low fat or low sugar versions)	n %	0 -	0 -	0 -	0 -	1 0.5	0 -	1 0.4	9 3.1	11 0.9
Total	n %	57 82.6	88 89.8	8 100.0	5 100.0	159 79.9	31 100.0	228 79.2	375 81.3	951 81.9

<sup>a</sup> Includes sauces, recipe mixes/bases, gravy mix, stocks, dressings, herbs, spices, flavourings, sugar, salt and marinades.

<sup>b</sup> Includes soy milk, water, nutrient enhanced water, fruit juice, liquid meal supplement, breakfast replacement drinks, Yakult (fermented milk drink that contains high levels of sugar) and tea. Beverages were not listed in the core foods in the 'Australian Guide to Healthy Eating' (Commonwealth of Australia 1998), with the exception of milk.

<sup>c</sup> Includes artificial sweeteners, pre-made icing, pre-prepared /frozen /multi-component meals, chewing gum, multiple product promotions, pastry and soup.

<sup>d</sup> Includes vitamin, mineral and herbal supplements and tonics.

<sup>e</sup> Includes weight loss formulas and generic weight loss pharmaceutical promotions.

<sup>f</sup> Includes products such as jam, chocolate hazelnut spread and peanut butter.

<sup>g</sup> Includes infant formula and packaged baby food.

### 6.6.1.3 Primary promotional statements in advertisements by magazine

The primary message for each advertisement was coded into one of two categories, these were consumer and nutrition related. Consumer related messages were those that related directly to the consumer and were unrelated to the nutritional properties of the food. These included a recommendation from the magazines to purchase the product, the taste of the product, quality, prizes and competitions, convenience, fun and pleasure, novel, pleasing the family, sponsorship and cool or fashionable. Of the 1,161 advertisements coded, 857 (73.8%) primary messages were consumer related (see table 6.10).

Nutrition related messages were those that relate to the nutritional properties and functions of the product. These included general health and nutrition, nutrient specific, minimising and elimination of substances, and other nutrient claims such as weight loss. The remaining 304 (26.2%) primary messages were related to nutrition. Tables 6.10 and 6.11 present the number of advertisements by the eight magazines in these promotional categories.

Across all magazines, consumer related promotional statements outnumbered nutrition related promotions. Consumer related promotions ranged from 69% to 83 % of total promotional statements for the 1161 food and nutrition advertisements across the eight magazines. The most frequently occurring consumer related promotional statements were in the form of a magazine recommendation (n = 169 or 14.6%). These recommendations occurred in a variety of formats, such as new product features, to a section that outlined products recommended by the magazine. For example, the following promotion appeared in a section titled “What’s New?” in *Woman’s Day*, November 10, 2003 edition (p. 64):

“Give yourself a big sticky treat with a yummy new **Kit Kat Caramel**. It has layers of crispy wafer and praline, topped with a layer of flowing, gooey caramel, and all covered in smooth milk chocolate. From confectionery outlets and supermarkets.”

Promotional statements related to the taste (n = 140) of the product were the second-most common type of consumer related promotion. These two promotional statements ranked either one or two for *Cleo*, *Cosmopolitan* and *New Idea*. All remaining magazines had one of their top two rating consumer related statements in the overall top ranking promotional statements. For example, the following advertisement appeared in *New Idea*, October 25, 2003 edition (p. 33):

“The natural yoghurt that won’t leave a sour taste in your mouth. Unlike other natural yoghurts, Vaalia is decidedly mild and very creamy.”

**Table 6.10. Primary Consumer Related Promotional Statements in Each of the Eight Australian Women's Magazines**

Primary Consumer Message		Cle N = 69	Cos n = 98	DoI n = 8	GF n = 5	NI n = 199	TL! n = 33	WD n = 288	AWW n = 461	TOTAL n = 1161
Recommended by magazine	n %	11 15.9	19 19.4	5 62.5	3 60.0	26 13.1	2 6.1	53 18.4	50 10.9	169 14.6
Taste	n %	17 24.6	22 22.5	-	-	25 12.6	5 15.2	20 6.9	51 11.1	140 12.1
High quality, authentic, time tested	n %	3 4.4	6 6.1	-	-	23 11.6	-	22 7.6	63 13.7	117 10.1
Prizes/competition	n %	8 11.6	3 3.1	-	-	21 10.6	11 33.3	31 10.8	34 7.4	108 9.3
Convenience	n %	3 4.4	4 4.1	-	-	12 6.0	-	15 5.2	39 8.5	73 6.3
Fun/pleasure	n %	-	3 3.1	-	-	9 4.5	-	17 5.9	38 8.2	67 5.8
Gives energy/performance	n %	3 4.4	4 4.1	3 37.5	1 20.0	2 1.0	2 6.1	12 4.2	18 3.9	45 3.9
Novel/new	n %	-	11 11.2	-	-	7 3.5	2 6.1	11 3.8	10 2.2	41 3.5
Will please the family, kids, guests	n %	2 2.9	-	-	-	7 3.5	3 9.1	9 3.1	19 4.1	40 3.5
Sponsorship/charity	n %	2 2.9	2 2.0	-	-	1 0.5	-	15 5.2	6 1.3	26 2.2
Cool/fashionable	n %	6 8.7	8 8.2	-	-	1 0.5	-	5 1.7	1 0.2	21 1.8
Other	n %	-	-	-	-	4 2.0	-	2 0.7	4 0.9	10 0.9
Consumer Total	n %	55 79.7	82 83.7	8 100.0	4 80.0	138 69.4	25 75.6	212 75.6	333 72.2	857 73.8



The most frequently occurring food and nutrition related primary promotion statement across all magazines were those relating to the product being good for general health and nutrition (n = 100 or 6.8% of all advertisements). An advertisement appearing in the September 2003 edition of the *Australian Women's Weekly* (p. 94) provides an example of this:

"Sustagen is good to your body when you're not."

Promotions relating to minimising or eliminating certain substances (n = 88 or 7.6% of all advertisements), were the second-most frequently occurring advertisements. For instance, the following advertisement appeared in the May 26, 2003 edition of *Woman's Day* (p. 50),

"50% less fat than margarine. Devondale Light – It's the lightest way to enjoy the natural taste of butter."

Advertisements appearing in *Dolly* contained no nutrition related promotions, while *Girlfriend* magazine contained only one nutrition related promotion, which focused on the prevention of illness. Again, differing from other magazines aimed at mature women, *That's Life!* contained fewer nutrition related promotional statements (n = 8) in comparison to the other magazines aimed at mature women (*New Idea* n= 61, *Woman's Day* n = 76, *AWW* n = 128). The nutrition message that occurred most in *Cleo* and *Cosmopolitan* was a promotion related to minimising or eliminating certain substances (n = 8 of 69 and n= 11 of 98, respectively).

Weight loss products were coded into separate categories. Results are presented in Table 7.11. Messages relating to success in achieving weight loss occurred most frequently (n = 21 or 1.8%) followed by lose weight messages (n = 15 or 1.3%). For example the following advertisement appeared in the November 26, 2003 edition of *That's Life!* (p. 63):

“FatBlaster challengers achieve record transformations! It’s not over yet! But we are already seeing some of the most amazing body transformations ever with this years \$200,000 FatBlaster Challenge!”

**Table 6.11 Primary Nutrition Related Promotional Statements in Each of the Eight Australian Women's Magazines**

Primary Nutrition Related Promotional Statement		Cle n = 69	Cos n = 98	DoI n = 8	GF n = 5	NI n = 199	TL! n = 33	WD n = 288	AWW n = 461	TOTAL n = 1161
<b>General health and nutrition</b>	n %	-	4 4.1	-	1 20.0	29 14.6	5 15.2	19 6.6	42 9.1	100 8.6
Good for general health	n %	-	4 4.1	-	-	25 12.6	4 12.1	16 5.6	39 8.5	88 7.6
Prevents/control illness/disease	n %	-	-	-	1 20.0	4 2.0	1 3.0	3 1.0	3 0.7	12 1.0
<b>Nutrient specific</b>	n %	-	-	-	-	2 1.0	1 3.0	12 4.2	27 5.9	42 3.6
Contains minerals	n %	-	-	-	-	-	-	4 1.4	26 5.6	30 3.2
Contains specific type of fat	n %	-	-	-	-	2 1.	-	8 2.8	1 0.2	11 1.0
Contains vitamins	n %	-	-	-	-	-	1 3.0	-	-	1 0.1
<b>Minimises or eliminates certain substances</b>	n %	8 11.6	11 11.2	0	0	7 3.5	0	24 8.3	39 8.5	88 7.6
Low in fat (non-specific)	n %	5 7.3	7 7.14	-	-	4 2.0	-	14 4.9	21 4.6	51 4.4
Pure, natural, no additives	n %	-	-	-	-	2 1.0	-	5 1.7	8 1.7	15 1.3
Low in calories	n %	-	-	-	-	-	-	4 1.4	4 0.9	8 0.69
Sugar free	n %	3 4.3	3 3.1	-	-	1 0.5	-	-	1 0.2	8 0.7
Light/lite	n %	-	1 1.0	-	-	-	-	-	4 0.9	5 0.4
Lactose free	n %	-	-	-	-	-	-	1 0.4	1 0.2	2 0.2
<b>Other nutrition claims</b>	n %	-	-	-	-	5 2.5	0	5 1.7	3 0.7	13 1.1
Weight loss/keep in shape/body image	n %	-	-	-	-	5 2.5	-	1 0.4	1 0.2	7 0.6
Reduces cholesterol	n %	-	-	-	-	-	-	4 1.4	2 0.4	6 0.5
<b>Weight loss products only</b>	n %	6	1	0	-	18	2	16	17	60
Success	n %	2 2.9	-	-	-	6 3.0	1 3.0	6 2.1	6 1.3	21 1.8
Lose weight	n %	-	-	-	-	10 5.0	-	4 1.4	1 0.2	15 1.3
Win	n %	-	1 1.0	-	-	2 1.0	-	-	6 1.3	9 0.8
Easy	n %	3 4.4	-	-	-	-	1 3.0	-	1 0.2	5 0.4
Happiness	n %	-	-	-	-	-	-	3 1.0	1 0.2	4 0.3
Health improvement	n %	-	-	-	-	-	-	1 0.4	2 0.4	3 0.3
Look good/get into shape	n %	1 1.5	-	-	-	-	-	1 0.4	-	2 0.2
Recommended	n %	-	-	-	-	-	-	1 0.4	-	1 0.1
<b>Nutrition Total</b>	n %	14 20.3	16 16.3	0 -	1 20.0	61 30.7	8 24.2	75 26.0	128 27.8	304 26.2

#### 6.6.1.4 Use of quoted information in advertisements

Of the 304 advertisements, which used food and nutrition, related primary messages, 106 (34.9%) used quoted information to support promotional claims. Overall, research findings (n = 59 or 55.7%) and lay people (n = 31 or 29.2%) were the most common types of information quoted in these advertisements.

**Table 6.12 Quoted Information in Advertisements with Nutrition Related Primary messages**

Source		Cle	Cos	DoI	GF	NI	TL	WD	AWW	Total
Research findings	n %	-	-	-	-	5 31.3	1 33.3	23 60.5	30 69.8	59 55.7
Lay persons' opinion	n %	1 20.0	1 100.0	-	-	9 56.3	2 66.7	10 26.3	8 18.6	31 29.2
Expert opinion	n %	-	-	-	-	2 12.5	-	4 10.5	3 7.0	9 8.5
Celebrity	n %	4 80.0	-	-	-	-	-	1 2.6	1 2.3	6 5.7
Company information	n %	-	-	-	-	-	-	-	1 2.3	1 0.9
Total		5	1	0	0	16	3	38	43	106

Of the 59 advertisements that quoted research findings, 15 cited a journal article, 9 cited the 1995 National Nutrition Surveys results, 13 cited Australian Bureau of Statistics data, 7 cited reports from other organisations such as ANZFA (Australia New Zealand Food Authority) and CSIRO (Commonwealth Scientific and Industrial Research Organisation) and 15 made a generic statement such as “Australian University studies have found ...”.

#### 6.6.1.5 Summary for magazine advertising analysis

Results of the 12-month analysis of food and nutrition related advertisements across the eight women's magazines indicated that the number of food and nutrition related advertisements increased with the target age of the

magazines' readers. The one exception to this was *That's Life!* which contributed only a small fraction of the total advertisements to the final analysis. *That's Life!* differed from other magazines in that it consists of editorial items, which are based on reader contributions (as indicated in Table 6.4), therefore it may attract a different advertising profile to the other magazines analysed here.

Magazines targeted to teenage girls contained very few advertisements. The advertisements, which were present, however, promoted the consumption of non-core items and in particular unhealthy items such as non-alcoholic non-nutritious beverages and confectionery. Interestingly, magazines targeted at young women consisted mainly of advertisements for beverages (non-alcoholic nutritious, non-alcoholic non-nutritious and alcoholic). This group also contained the greatest percentage of advertisements for alcohol.

It was also revealed that consumer related statements, such as a recommendation from the magazines and about taste were more frequently used as primary promotional messages in food and nutrition advertisements. When advertisements did use nutrition related statements as their primary promotional strategy these statements most frequently related to general health and nutrition and minimising or eliminating certain substances.

Interestingly when considering endorsements associated with magazine advertisements, recommendations from magazines (n = 169, from Table 6.10) occurred at a greater rate than advertisements quoting research findings (n = 59, from Table 6.12) and expert opinions (n = 9, from Table 6.12).

### **6.6.2 Analysis of Editorial Content**

The following section outlines the results of the editorial analysis for the eight magazines analysed during the 12-month data collection phase. This section outlines the presence of a regular food and nutrition related column, food and nutrition topics addressed in the magazines' editorial content, the type of articles used to publish food and nutrition related information, the manner in

which this information was framed, use of information sources, declaration of author qualifications and the provision of contact details for readers to gain further information.

#### **6.6.2.1 Presence of a regular section addressing food and nutrition related issues in the eight women's magazines**

Very few magazines had regular sections, which dealt directly with food and nutrition related issues. *Dolly*, *Girlfriend*, *That's Life!*, *New Idea* and *AWW* all had regular health sections, which sometimes dealt with food and nutrition issues, however there was not a regular column devoted to this issue. Half (every second issue of the sample) of the *Woman's Day* magazines analysed over the analysis period, contained a column written by a diet coach (the qualifications of the diet coach were not specified), which addressed issues relating to food and nutrition. It should be noted that the first and fourth issue of each month featured this column and the sample for this research project selected the second and fourth issue of every month, therefore these findings are representative.

During the course of the analysis it was noted that both magazines targeted at young women, *Cleo* and *Cosmopolitan*, introduced a section that specifically focused on food and diet. Beginning in June 2003, *Cosmopolitan* introduced a section titled "Food and body workbook". Previously it had a one-page section titled "food fest" which addressed a range of food related issues. Similarly, in October 2003, *Cleo* introduced a section titled "body//diet" [sic]. Previously the magazine had a section titled "body", re-titled "body and bliss", which dealt with general health issues, sometimes including food and nutrition related issues. The addition of a section more related to food and nutrition in these magazines is an interesting finding, clearly both *Cleo* and *Cosmopolitan* considered this to be a pertinent issue to young women. The other magazines did not follow this trend.

### 6.6.2.2 Type of food and nutrition related articles published in the eight women's magazines

Table 6.13 shows the type of articles in which food and nutrition related information was published in the eight women's magazines. Articles were classified into one of seven groups. Columns or tips that were a part of a regular magazine section were the most frequent (n = 265 or 67.3%) style of article used to publish food and nutrition information across all magazines. Feature articles (which were over one page in length) were the second most common style of article (n = 102 or 25.9%) in which food and nutrition was presented.

*That's Life!* magazine differed from all other magazines in that all food and nutrition related articles were published in the form of a column or tip as a part of a regular section (n = 46 or 100%). For *Cosmopolitan* (n = 31 or 66.0%), *Girlfriend* (n = 10 or 62.5%), *Woman's Day* (n = 69 or 76.67%) and the *Australian Women's Weekly* (n = 54 or 87.1%), the majority of articles were in the form of a column or tip which was a part of a regular section. In *Cleo* (n = 18 or 51.4%), *Dolly* (n = 11 or 39.3%) and *New Idea* (n = 32 or 45.7%) the majority of articles were in the form of a feature article.

**Table 6.13. Type of Food and Nutrition Related Editorial in Women's Magazines**

Type of Article		Cleo n = 35	Cosmo n = 47	Dolly n = 28	GF n = 17	NI n = 70	TL! n = 46	WD n = 90	AWW n = 62	Total n = 395
Column/tip part of regular section	n %	17 48.6	31 66.0	10 35.7	10 62.5	28 40.0	46 100.0	69 76.7	54 87.1	265 67.3
Feature article (over one page in length)	n %	18 51.4	14 29.8	11 39.3	5 29.4	32 45.7	-	15 16.7	8 12.9	103 25.9
Question & Answer	n %	-	1 2.1	-	-	4 5.7	-	6 6.7	-	11 2.8
Dear Doctor	n %	-	-	5 17.9	-	6 8.6	-	-	-	11 2.8
Information that is part of feature article	n %		1 2.1	1 3.6	1 6.3	-	-	-	-	3 0.8
Survey results	n %	-	-	1 3.6		-	-	-	-	1 0.3
Self — quiz	n %	-	-	-	1 6.3	-	-	-	-	1 0.3

### 6.6.2.3 Food and nutrition editorial content

Table 6.14 outlines the main topics covered in the editorial content in the eight women's magazines over the analysis period. In total 395 articles relating to food and nutrition were coded. *Girlfriend* magazine contained the least number of food and nutrition related editorial items (n=17). Magazines targeted at teenage girls (*Dolly* n = 28, *Girlfriend* n = 17) and young women (*Cleo* n = 35, *Cosmopolitan* n = 47) contained fewer articles relating to food and nutrition than to magazines aimed at mature women (*New Idea* n = 70, *Woman's Day* n = 92, *AWW* n = 62), with the exception of *That's Life!* (n = 46) which contained a similar number of articles to young women's magazines. *Woman's Day* contained the greatest number of articles relating to food and nutrition.



**Table 6.14. Main Topic of Food and Nutrition Related Editorial (articles) in Women's Magazines**

		<b>Cle n = 35</b>	<b>Cos n = 47</b>	<b>DoI n = 28</b>	<b>GF n = 17</b>	<b>NI n = 70</b>	<b>TL! n = 46</b>	<b>WD n = 92</b>	<b>AWW n = 62</b>	<b>Total n = 396</b>
Celebrity diet	n	10	19	11	6	26	2	34	22	130
Dieting/weight loss and body image	%	28.6	40.4	39.3	35.3	37.1	4.3	37.0	35.5	32.8
Food/product specific info	n	2	1	-	1	15	26	18	12	75
	%	5.7	2.1	-	5.9	21.4	56.5	19.6	19.4	18.9
Nutrition & healthy eating	n	7	3	3	3	4	5	12	5	42
	%	20.0	6.4	10.7	17.6	5.7	10.9	13.0	8.1	10.6
Eating disorder, including binge eating	n	1	6	9	2	4	1	2	-	25
	%	2.9	12.8	32.1	11.8		2.2	2.2		6.3
Food as therapy	n	2	-	-	-	1	-	3	14	20
	%	5.7				1.4		3.3	22.6	5.1
Alcohol	n	2	-	-	1	5	6	1	2	17
	%	5.7			5.9	7.1	13.0	1.1	3.2	4.3
Food and nutrition disease	n	3	1	-	-	3	4	3	2	16
	%	8.6	2.1			4.3	8.7	3.3	3.2	4.0
Nutrition & the lifecycle	n	1	1	-	-	4	2	5	-	13
	%	2.7	2.1			5.7	4.4	5.4		3.3
Food & careers	n	2	-	-	-	4	-	4	2	12
	%	5.7				5.7		4.3	3.2	3.0
Nutrient specific info	n	-	4	1	1	1	-	3	1	11
	%		8.5	3.6	5.9	1.4		3.3	1.6	2.8
Wellbeing	n	-	4	2	1	-	-	-	1	8
	%		8.5	7.1	5.9				1.6	2.0
Improving physical characteristics	n	2	2	1	1	1	-	-	-	7
	%	5.7	4.3	3.6	5.9	1.4				1.8
Food & personality	n	2	1		1	-	-	-	-	4
	%	5.7	2.1		5.9					1.0
Food & sex	n	1	2	-	-	-	-	1	-	4
	%	2.9	4.3					1.1		1.0
Vegetarian	n	-	-	1	-	1	-	1	-	3
	%			3.6		1.4		1.1		0.8
Food labelling	n		1	-	-	-	-	1	-	2
	%		2.1					1.1		0.5
Organic food	n	-	-	-	-	-	-	1	1	2
	%							1.1	1.6	0.5
Other	n	-	2	-	-	1	-	3	-	6
	%		4.3			1.4		3.3		1.5

Information about celebrity diets, dieting, weight loss and body image was the most common type of article published (n = 130); this was followed by product specific articles. These articles featured information on a particular food product, food or food ingredient and highlighted key features of the food item, such as taste, common uses and often included nutrition information for the

product. When these articles were examined for the type of food product discussed, 39 of the 75 (52%) food or product specific articles promoted the consumption of fruit and vegetables (including herbs). The second most commonly occurring food promoted in magazine articles was chocolate. The benefits of consuming chocolate was discussed in 5 of the 75 articles (6.67%).

**Table 6.15. Diet information in the eight Australian women's magazines**

		<b>Cle</b> <b>n = 10</b>	<b>Cos</b> <b>n = 19</b>	<b>Dol</b> <b>n = 11</b>	<b>GF</b> <b>n = 6</b>	<b>NI</b> <b>n = 26</b>	<b>TL</b> <b>n = 2</b>	<b>WD</b> <b>n = 34</b>	<b>AWW</b> <b>n = 22</b>	<b>Total</b> <b>n = 130</b>
Celebrity food habits	n	2	7	3	5	5	-	18	12	52
	%	20.0	36.8	27.3	83.3	19.2		52.9	54.5	40.3
Tips for dieting/weight loss	n	2	5	4	1	1	1	2	3	19
	%	20.0	26.3	36.4	16.7	3.8	50.0	5.9	13.6	14.7
Celebrity diet and weight loss/gain	n	-	-	-	-	6	-	8	2	16
	%					23.1		23.5	9.1	12.4
Negatives aspects of dieting	n	5	5	1	-	1	1	1	-	14
	%	50.0	26.3	9.1		3.8	50.0	2.9		10.9
Diet plan	n	-	-	-	-	6	-	1	4	11
	%					23.1		2.9	18.2	8.5
Dieting/weight loss success stories	n	1	1	2	-	3	-	3	-	10
	%	10.0	5.3	18.2		11.5		8.8		7.8
Over weight & obesity	n	-	1	1	-	2	-	1	-	5
	%		5.3	9.1		7.7		2.9		3.9
Other	n	-	-	-	-	1	-	-	1	2
	%					3.8			4.5	1.6

As identified in table 6.15, the most common diet information was that relating to celebrity food habits. Three of the eight magazines (*Cosmopolitan*, *Woman's Day* and *Australian Women's Weekly*) frequently profiled the food habits of a celebrity in the form of a brief food diary. *Cosmopolitan* and the *Australian Women's Weekly* then provided a brief evaluation of this diet profile. The title of these articles in two of the three magazines (*Woman's Day* and *AWW*) were related to revealing secret information; *Woman's Day* titled their version "Celebrity secrets" while a similar section in the *Australian Women's Weekly* was titled "Stars spill the beans". Other articles relating to the diets of celebrities were also associated with secrets or dietary tricks used by celebrities to stay slim,. Examples of article titles, subheadings and cover headlines can be seen in Figure 6.4.

**Figure 6.4 Examples of diet ‘tricks and secrets’**

**Table 6.16 Percentage of a Page Used by Diet and Weight Loss and Food or Product Specific Articles**

Size of Article		Cle	Cos	Dol	GF	NI	TL	WD	AWW	Total
<b>Diet &amp; weight loss articles</b>										
less than 25% of page	n %	1 10.0	8 42.1	8 70.0	5 83.3	2 7.7	2 100.0	7 20.6	9 32.1	42 32.3
25 – 49% of a page	n %	-	1 5.3	-	1 16.7	3 11.5	-	10 29.4	5 17.9	20 15.4
50 –74% of a page	n %	1 10.0	-	-	-	-	-	3 8.8	2 7.1	6 4.6
75 – 99% of a page	n %		-	-	-	-	-	-	1 3.6	1 0.8
100% of a page	n %	1 10.0	4 21.1	1 10.0	-	2 7.7	-	3 8.8	-	11 8.5
More than one page	n %	7 70.0	6 18.5	2 20.0	-	19 73.1	-	11 32.4	5 17.9	50 38.5
Total		10	19	11	6	26	2	34	22	130
<b>Food or product specific articles</b>										
less than 25% of a page	n %	2 100.0	1 100.0	-	1 100.0	8 33.3	21 80.8	11 61.1	8 66.7	52 69.3
25 – 49% of a page	n %	-	-	-	-	7 46.7	5 19.2	3 16.7	1 8.3	16 21.3
50 –74% of a page	n %	-	-	-	-	-	-	3 16.7	-	3 4.0
75 – 99% of a page	n %	-	-	-	-	-	-	-	1 8.3	1 1.3
100% of a page	n %	-	-	-	-	-	-	1 5.6	2 16.7	3 4.0
More than one page	n %	-	-	-	-	-	-	-	-	0 -
Total		2	1	0	1	15	26	18	12	75

The leading editorial topics (diet and weight loss information and food and product specific articles) were compared based on their size, measured as a percentage of the magazine page used by the article. The majority, 38.8% (or n = 50) of diet and weight loss articles used more than one page, 31.8% were under 25% of page and 11 articles (8.5%) used 100% of the page. In comparison, food and product specific articles appeared second most frequently. The majority of these articles (n = 52 or 69.3%) took up less than 25% of a page in the magazine, 3 articles took up 100% of the page and no articles were spread across more than one page. Therefore diet and weight loss not only appeared more frequently but also covered a larger area in comparison to food and product specific articles.

Issues such as food labelling, organic foods, genetic modification and vegetarianism did not occur frequently in the magazines analysed, while issues such as food as an indication of personality and the use of food during sex occurred more frequently. It is noteworthy that food in the majority of articles was described as being problematic. For instance food or an individual's relationship with food could be associated with causing a problem (such as weight gain and obesity, anorexia nervosa, poor skin and health problems) or having a role in fixing a variety of issues (such as depression or an unsatisfying sex life). The enjoyment or pleasure associated with eating food or the social role of food was not discussed in the magazines analysed.

#### **6.6.2.4 Information sources used in the food and nutrition related articles**

Table 6.17 outlines the information sources referred to by the article author in the food and nutrition related editorial items in the eight women's magazines. Magazine editorial items were initially classified as either not referring to or referring to external information sources. The number and type of information sources were recorded and the average number of information sources used in each article containing information sources was calculated. *Cleo*, *Dolly* and *Cosmopolitan* (17. 1%, 25.0% and 25.5% respectively) had the lowest

percentage of articles that *did not* contain information sources. *Girlfriend* (68.8%) and *AWW* (61.3%) had the highest percentage of articles that *did not* contain information sources. *New Idea*, *That's Life!* and *Woman's Day* had just under half of their articles not mentioning information sources.

**Table 6.17. Information Sources Mentioned in Magazine Food and Nutrition Editorial Content**

	<b>Cleo n = 35</b>	<b>Cosmo n = 47</b>	<b>Dolly n = 28</b>	<b>GF n = 17</b>	<b>NI n = 70</b>	<b>TL! n = 46</b>	<b>WD n = 92</b>	<b>AWW n = 62</b>	<b>Total n = 396</b>
Number of articles with no information sources	6	12	7	12	31	21	39	38	166
Percentage of articles containing no information sources	17.1	25.5	25.0	68.8	44.3	45.7	42.4	61.3	41.7
Number of articles with information sources	29	35	21	5	39	25	53	24	231
Percentage of article with information sources	82.9	74.5	75.0	31.2	55.7	54.3	57.6	38.7	58.3
Total number of information sources mentioned	51	52	30	6	61	30	65	39	334
Number of articles containing one information source	19	20	14	3	25	21	40	8	150
Number of articles mentioning more than one information sources	10	15	7	2	14	4	13	16	81

Table 6.18 outlines the type of information sources mentioned in the articles, which referred to external sources of information. The most common source was information received from a celebrity (n = 54) and a dietitian (n = 52). Celebrities were the most frequently mentioned source of information in *Woman's Day* (n = 21) while dietitians were most frequently mentioned in *AWW* (n = 14) and *Cosmopolitan* (n = 16). Information from lay people was the most commonly presented source of information in *New Idea* (n = 14), *Cleo* (n = 10) and *Dolly* (n = 7), while research findings were most commonly mentioned sources of information in *That's Life!* (n = 21).

**Table 6.13. Information Sources Mentioned in Magazine Editorials**

		<b>Cleo n = 51</b>	<b>Cosmo n = 52</b>	<b>Dolly n = 30</b>	<b>GF n = 6</b>	<b>NI n = 61</b>	<b>TL! n = 30</b>	<b>WD n = 65</b>	<b>AWW n = 39</b>	<b>Total n = 334</b>
Celebrity	n %	4 7.8	7 13.5	1 3.3	2 3.3	6 9.8	-	21 32.3	13 33.3	54 16.2
Dietitian or Nutritionist	n %	6 11.8	16 30.8	6 20.0		7 11.5	4 13.3	8 12.3	5 12.8	52 15.6
Lay person	n %	10 19.6	6 11.5	7 23.3	2 3.3	14 23.0	-	7 10.8	1 2.6	47 14.1
Doctor	n %	5 9.8	7 13.5	6 20.0	-	10 16.4	3 10.0	10 15.4	3 7.7	44 13.2
Research findings & Uni Dr/Professor	n %	6 11.8	3 5.8	2 6.7	-	-	22 73.3	8 12.3	3 7.7	44 13.2
Authority/association	n %	5 9.8	4 7.7	6 20.0	2 3.3	5 8.2	-	-	1 2.6	23 6.9
Psychologist or Counsellor	n %	4 7.8	3 5.8	-	-	6 9.8	-	-	1 2.6	14 4.2
Exercise specialist	n %	5 9.8	-	-	-	6 9.8	1 3.3	-	-	12 3.6
Book	n %	-	2 3.8	-	-	2 3.3	-	5 10.8	2 5.1	11 3.3
Other, health related specialist	n %	3 5.9	4 7.7	2 6.7	-	5 8.2	-	6 9.2	-	20 6.0
Other, non health related specialist	n %	3 5.9	-	-	-	-	-	-	-	3 0.9

### 6.6.2.5 Qualifications of authors of food and nutrition related articles

Table 6.19 outlines the qualifications declared by authors of articles in all eight magazines. In the majority of articles (n = 394) across all eight women's magazines the qualification of the author/s was not declared. There was a clear trend for magazines not to provide information about the author's qualifications. Articles written by experts were in the minority (n = 74). Articles published with no details regarding the author's qualifications ranged from 62% (AWW) to 95% (*That's Life!*) of editorial items. The most common experts to declare authorship of articles in women's magazines were doctors (n = 29), diet coaches (n = 12) and food professionals such as food editor and food critic (n = 10).

**Table 6.18. Qualifications of Journalists Specified in Magazines' Food and Nutrition Editorial Content**

Journalist Qualifications		Cleo n = 35	Cosmo n = 47	Dolly n = 28	GF n = 17	NI n = 70	TL! n = 46	WD n = 90	AWW n = 62	Total n = 394
Not specified	n %	32 91.4	44 93.6	22 78.6	14 81.3	54 77.1	44 95.7	72 80.0	39 62.9	321 81.2
Doctor	n %	1 2.9	-	5 17.9	-	10 14.3	1 2.2	-	12 19.4	29 7.4
Diet coach <sup>a</sup>	n %	-	-	-	-	-	-	12 13.3	-	12 3.1
Food writer <sup>b</sup>	n %	-	-	-	-	2 2.9	-	-	8 12.9	10 2.5
Naturopath	n %	-	-	-	-	-	-	6 6.7	1 1.6	7 1.8
Reader/lay person	n %	-	2 4.3	1 3.6	3 18.8	-	-	-	-	6 1.5
Weight loss expert <sup>c</sup>	n %	-	-	-	-	4 5.7	-	-	-	4 1.0
Dietitian <sup>d</sup>	n %	1 2.9	-	-	-	-	-	-	2 3.2	3 0.8
Celebrity	n %	1 2.9	1 2.1	-	-	-	-	-	-	2 0.5
Judge	n %	-	-	-	-	-	1 2.2	-	-	1 0.3

<sup>a</sup> The qualifications of a "diet coach" were not specified

<sup>b</sup> This includes food editor, food critic

<sup>c</sup> Qualifications of the various weight loss experts were not specified

<sup>d</sup> It was not specified if the dietitians were Accredited Practising Dietitians

#### 6.6.2.6 Details for readers to gain further information

Table 6.20 outlines the proportion of food and nutrition articles published in the eight women's magazines during the data collection period that provided readers with details where they could gain further information regarding the article topic. The majority of articles (n = 321 or 81.47%) did not provide the reader with contact details to obtain further information. Across all magazines it was more likely that a magazine would not provide further information details to the reader, ranging from 53.6% (*Dolly*) to 86.6% (*That's Life!*). There was not a large variation in the type of contact details provided in magazines. They were likely to direct readers to organisations, websites or provide purchase details for books.

Contact details for the Eating Disorder Foundation were frequently provided in many of the magazines, particularly those targeted at teenage and young women. This foundation was the most frequently referred to organisation (and for this reason it is highlighted in table 6.20 as a subset of the total number of organization/association/society).

**Table 6.14. Details Regarding Further Information Provided**

<b>Further Information Details</b>	<b>Cleo n = 35<sup>a</sup></b>	<b>Cosmo n = 47</b>	<b>Dolly N = 28</b>	<b>GF n = 17</b>	<b>NI n = 70</b>	<b>TL! n = 46</b>	<b>WD n = 90</b>	<b>AWW n = 62</b>	<b>Total n = 394</b>
No further information details	26 74.29	34 72.34	15 53.57	14 81.25	60 85.71	40 86.96	77 85.56	56 60.87	321 81.47
Organisation/association/society contact details	7	12	7	2	7	1	3	1	40
<i>Eating Disorder Foundation</i>	2	7	5	2	2				18
Website address	4	2	2	1	2	5		2	18
Book details	3	2	5		3		3	2	18
<b>Total</b>	<b>40</b>	<b>50</b>	<b>29</b>	<b>16</b>	<b>72</b>	<b>46</b>	<b>83</b>	<b>61</b>	<b>397</b>

<sup>a</sup> Some articles may have provided more than one further information source

### **6.6.2.7 Summary of editorial analysis**

All magazines had a regular section devoted to health. Nutrition related information was sometimes addressed in these editorial sections. Magazines targeted at teenage girls contained the least amount of food and nutrition related information. There was a clear trend for young women's magazines to focus more on the role of food and nutrition with the incorporation of a regular section devoted to this topic. Magazines targeted at more mature women contained the greatest number of food and nutrition related articles.

Across all magazines the following clear trends appeared:

- Articles primarily had a product and diet and weight loss focus.
- Articles were mainly published in the form of a column or tip.
- Content was usually presented in an informational or tip manner, which indicated that following the advice presented would have a positive effect.



- The use of information sources to support claims made in the articles was variable across the magazines.
- When information sources were mentioned dietitians came second after celebrities and only just more than lay people.
- Few authors declared qualifications, suggesting that the majority of food and nutrition related articles were written by authors without training in nutrition.
- There was a lack of information that would allow readers to gain further information regarding the topic addressed in the article.
- An editorial responsibility to provide contact details for Eating Disorder related foundations when issues relating to eating disorders had been raised.

As revealed in the analysis of advertisements, *That's Life!* differed from all other magazines because all food and nutrition related articles were in the form of a column or tip, which in the majority of cases reported on the results of a single study.

### **6.6.3 Analysis of Magazines' Cover Messages**

The following section reports the results of the magazine headline analysis.

#### **6.6.3.1 Food and nutrition related cover headlines**

Table 6.21 outlines the food and nutrition headlines appearing on the eight women's magazines over the analysis period. In total, 132 magazine covers were analysed. From these covers, 61 headlines relating to food and nutrition were analysed. *Cosmopolitan* had the greatest number of cover headlines relating to food and nutrition (11 of 12 covers), while *That's Life!* contained no headlines relating to food and nutrition.

The most frequently occurring headline across all magazines were those relating to celebrity diets ( $n = 25$ ), followed by those relating to dieting and weight loss ( $n = 20$ ). These two headlines occurred at a much higher frequency than all other headlines, which occurred only once or twice.

Headlines referring to celebrity diets appeared most frequently on *New Idea* and *Woman's Day* (n = 10 of 24 and n= 11 of 24 respectively), while headlines relating to dieting and weight loss occurred most frequently on the covers of *Cleo* and *Cosmo* (n = 5 of 12 and n= 6 of 12). Headlines relating to food and nutrition appeared infrequently on the covers of *Girlfriend*, *Dolly* and *AWW* (n = 2 of 12, n = 6 of 12 and n = 4 of 12).

**Table 6.15. Food and Nutrition Cover Headlines<sup>a</sup> of the Eight Australian Women's Magazines**

Category		Cle	Cos	DoI	GF	NI	TL!	WD	AWW	Total
Number of covers analysed		12	12	12	12	24	24	24	12	132
Number of food and nutrition related cover headlines		9	11	6	2	15	0	14	4	61
Percentage of covers with food and nutrition headline		75.0	91.7	50.0	16.7	62.5	0	58.3	33.3	46.2
Category		Cle n = 9	Cos n = 11	DoI N = 6	GF n = 2	NI n = 15	TL! n = 0	WD n = 14	AWW n = 4	Total n = 61
Celebrity diets	n %	1 11.1	-	-	-	10 66.7	-	11 78.6	3 75.0	25 41.0
Dieting/weight loss	n %	5 55.6	6 54.5	2 33.3	1 50.0	4 26.7	-	2 14.3	-	20 32.8
Alcohol	n %	2 22.2	-	-	-	-	-	-	-	2 3.3
Eating disorders	n %	-	-	2 33.3	-	-	-	-	-	2 3.3
Food & emotions	n %	-	1 9.1	-	1 50.0	-	-	-	-	2 3.3
Food & appearance	n %	-	-	1 16.7	-	1 6.7	-	-	-	2 3.3
Children & food	n %	-	-	-	-	-	-	-	1 25.0	1 1.6
Dietary habits & effects	n %	1 11.1	-	-	-	-	-	-	-	1 1.6
Food & personality	n %	-	1 9.1	-	-	-	-	-	-	1 1.6
Nutrition related disease	n %	-	-	-	-	-	-	1 7.1	-	1 1.6
Over-eating	n %	-	1 9.1	-	-	-	-	-	-	1 1.6
Low fat food	n %	-	1 9.1	-	-	-	-	-	-	1 1.6
Relationship with food	n %	-	1 9.1	-	-	-	-	-	-	1 1.6
Bizarre stories	n %	-	-	1 16.7	-	-	-	-	-	1 1.6

<sup>a</sup> Excludes recipe related headlines

### **6.6.3.2 Summary**

Magazines targeted at young women had a greater number of food and nutrition related cover headlines. Again, differing from the other magazines, *That's Life!* had no food and nutrition related cover headlines.

There was a clear focus on dieting, with the most common cover headline across all magazines referring to celebrity diets, followed by headlines that referred to dieting and weight loss.

### **6.6.4 Inconsistency in food and nutrition related messages in women's magazines**

It became apparent throughout the data analysis that there was an obvious inconsistency in food and nutrition related messages presented to women in some of the magazines analysed. The following section explores some of these inconsistencies. In-depth exploration of all inconsistencies is outside the scope of this thesis. However, this section draws on examples from the content analysis data to demonstrate that readers of women's magazines were exposed to conflicting messages in the editorial and advertising content of magazines.

This section will begin by exploring the conflicting messages regarding dieting in the editorial content of two magazines targeted to mature women (*New Idea* and *Woman's Day*). Two examples will then be drawn from *Cleo*, a magazine targeted at young women that produced conflicting messages in terms of alcohol and dieting messages in its editorial and advertising content. Finally, an example from *Dolly*, a magazine targeted at teenage girls will be provided. In this example, editorial messages of positive attitudes to health, diet and exercise conflict with advertising messages.

#### **6.6.4.1 Inconsistency in editorial messages in magazines targeted at mature women**

Mature women's magazines provided the most blatant examples of inconsistent food and nutrition messages being presented to women. For instance magazines such as *New Idea* and *Woman's Day*, frequently presented articles focused on the latest celebrity diet or popular weight loss diet. However, over the course of the one year period in which this study was conducted both magazines also published articles discussing the dangers associated with dieting.

**Figure 6.5 *New Idea*, June 14, 2003 "Danger Diets" article, pages 32–35**

The most extreme example of inconsistency was in the June 14, 2003, edition of *New Idea*. The cover headline states, "Are star diets killing you?", the article headline followed on by stating "Danger diets" with a sub-heading "Leading nutritionists warn of the ill effects of some celebrity diets" (see figure 6.5, full article see Appendix 43). This four-page article, presented on pages 32 to 35 of the magazine, highlighted the diet rules and a one-day diet plan in addition to discussing the associated dangers of well-known celebrity diets such as the "Atkins" diet, the "zone" diet, "sugar busters", "cabbage soup" diet and the "dairy free" diet. The article also presented a series of photographs of slim and glamorous celebrities. While internal conflicts are obviously apparent with the author presenting an article that expressed concern for celebrity diets and then detailed the guidelines for following such a dietary regime along with photographs of glamorous and slim celebrities, this magazine then presented an article titled "Eat like a star" on pages 48 to 49. This article, which

appeared in the regular section of the magazine “Healthy Life”, had the subheading “She’s cooked for Nicole Kidman and Gwyneth Paltrow, now Aine McAteer reveals her secrets” (see Figure 6.6, full article see Appendix 44). The article profiled the principles of macrobiotic diets and even provided a recipe. It also presented a series of pictures of slim and glamorous celebrities. The appearance of these two articles in the one issue is a very clear inconsistency in the messages presented in the magazine.

**Figure 6.6. *New Idea*, June 14, 2003, “Eat like a star” article, pages 48–49**

*Woman’s Day* provides a similar example. Over the 12-month analysis period the magazine provided a series of articles on diet and weight loss. One example was in the February 10, 2003, edition with a column titled “Diet Riot” (see Figure 6.7, full article see Appendix 45) which appeared in the regular section “Living Well”. This article highlighted the dangers associated with following the Atkins diet. The column was accompanied by a photograph of celebrity Catherine Zeta-Jones.

**Figure 6.7. *Woman’s Day*, February 10, 2003, “Diet Riot” page 56**

Interestingly and in conflict to “Diet Riot”, the September 22, 2003, edition of *Woman’s Day* featured a large cover headline “Catherine’s diet secret – how she lost 7kg in 14 days ... and you can too! Atkins diet made easy!” The article published on pages 10 to 13 with the same title (see Figure 6.8, full article see Appendix 46) discussed celebrity weight loss successes following the Atkins diet. While it did mention some expert opposition to this diet, this is only a small section of the article, which was preceded and followed by praise for this weight loss method. The article also outlined a seven-day eating plan following the Atkins diet and provided before and after photographs of celebrities who had lost weight. It included a photograph of Catherine Zeta-Jones, who was also featured in and was used to promote the article discussed above, “Diet Riot”.

**Figure 6.8. *Woman’s Day*, September 22, 2003, “Catherine’s amazing new diet” pages 10–13.**

#### **6.6.4.2 Inconsistency in editorial and advertising messages in magazines targeted at young women**

Inconsistency in the messages presented in the form of editorial items and those included in products advertisements in women’s magazines also became apparent in some magazines over the 12-month analysis period. This was particularly true for *Cleo*. For instance, *Cleo* published two articles in 2003 that discussed the negative impact of alcohol consumption. The first article, published in October 2003, was titled “Is drinking the new dinner — it’s Friday night and you’ve forgotten to eat ... again. Oops! Here’s why that packet of chips at the bar does not equal nutrition ” addressed the issue of

women replacing the consumption of nutritious food with alcohol. The double page article (see Figure 6.9 and full article in Appendix 47) quoted a nutritionist and a university researcher with a PhD.

**Figure 6.9. *Cleo*, October 2003, "Is drinking the new dinner" pages 208-209**

The second article, published in November 2003, highlighted the dangers of alcohol consumption. Over three pages, the article titled "Alcohol: could it be the real date-rape drug" (see figure 6.10 and full article in Appendix 48) addressed how binge drinking increased the chances of women participating in risky sexual behaviour. Again this article relied on information from experts such as alcohol awareness organisations and information from women who had been raped while drunk. The article provided contact details for various alcohol and drug information service throughout Australia.

**Figure 6.10 *Cleo*, November 2003, "Alcohol: it could be the real date-rape drug" pages 111-112, 114**

It may be that some editorial responsibility was taken when publishing the October and November 2003 issues of *Cleo* because there were no

advertisements for alcohol in those issues, or it may be that advertisers chose not to run their alcohol advertisements in issues which contained the anti-alcohol articles. However, there were nine advertisements promoting alcoholic beverages throughout the analysis period. Two of these nine advertisements appeared in December 2003 (the month following the alcohol editorial items), the remaining advertisements appeared in January, February, March and July 2003 (see Figure 6.11 for example of alcohol advertisements, see advertisement Appendix 49).

**Figure 6.11. Examples of alcoholic beverage advertisements appearing in *Cleo* 2003**

Inconsistencies were also noted in the editorial items that addressed negative aspects associated with dieting and the presentation of advertisements for weight loss products. During the 12-month analysis period, *Cleo* published five articles that presented dieting in a negative way. For example, the July 2003 edition had an article “Fact: diets can seriously ruin your health and looks. Restricting what you eat comes with a price!” (see Figure 6.12, full article see Appendix 50). This four-page article contained graphic details and photographs of the impact restricting food intake can have on an individual’s body (and appeared as a sealed section). It contained information from a variety of health professionals, health associations and lay people who had experienced the negative impact of long-term food restriction. This article was then followed with two articles “There is a healthy way to lose weight” and “Break the diet cycle” which offered women healthy alternative ways to achieve or maintain a healthy weight.



**Figure 6.12. *Cleo*, July 2003, "Fact: Diets can seriously ruin your health & looks. Restricting what you eat comes at a price! Pages 108 –111**

*Cleo* also published six advertisements for weight loss products such as “Fat Blaster” and “Optidrene”. These products promoted fast, easy and dramatic weight loss, which was in conflict to the messages promoted in the magazine’s editorial content. (Examples of these advertisements can be seen in Figure 6.13, see advertisement Appendix 51). These advertisements also appeared frequently in magazines such as *New Idea*, *Woman’s Day* and the *Australian Women’s Weekly*.

**Figure 6.13. Examples of Weight Loss Product advertisements**

#### **6.6.4.3 Inconsistencies in editorial and advertising content of magazines targeted at teenage girls**

Food and nutrition messages in magazines targeted at teenage girls were minimal and this was true for both editorial and advertising content. Despite this, conflicting messages were still evident. For example, *Dolly* magazine’s food and nutrition focus was towards encouraging healthy eating habits in teenage girls, through promotion of healthy food choice, prevention of binge eating and eating disorders and encouragement of achieving and maintaining

a healthy weight. An example of this is a feature published in the May 2003 edition of *Dolly*, titled “The Dolly 4 week mind and body blitz” which encouraged a positive approach to health, eating and exercising (see Figure 6.14, see full article Appendix 52) The articles’ sub-heading states:

“This mind and body challenge isn’t meant to be serious. It’s about laughing, dancing, eating right and ending up with a positive vibe — and body to match. Welcome to the four-week plan to a better than ever you.” (p. 107)

**Figure 6.14. *Dolly*, May 2003 "The Dolly 4 week mind and body blitz" pages 107–115**

This healthy attitude was not extended to the advertising content of *Dolly*. While the overall frequency of food and nutrition related advertisements was low, none of the advertisements were for core food products and the majority were for non-alcoholic, non-nutritious beverages, followed closely by chocolate and confectionery. An example of a beverage advertisement for Nestle Milo, commonly seen in *Dolly* is shown in Figure 6.15 (full article see Appendix 53). Similar advertisements for Milo also appeared frequently in *New Idea*, *Woman’s Day* and the *Australian Women’s Weekly*.

**Figure 6.15. An example of a beverage advertisement from *Dolly* 2003 (Nestle Milo)**

#### **6.6.4.4 Summary of inconsistent messages in women's magazines**

Inconsistencies in the food and nutrition related messages conveyed to readers of women's magazines were apparent in all three groups. The magazines targeted to mature women offered the most extreme examples of conflicting messages. Inconsistencies in the messages conveyed through editorial and advertising content were also apparent in magazines targeted to young women and teenagers.

### **6.7 Summary**

This chapter has reported the results of the 12-month content analysis of eight popular Australian women's magazines. The results of this study indicated that magazine advertising content is largely dominated by advertisements for non-core products. Advertisements are also more likely to use consumer related statements as primary promotion messages. The majority of nutrition related statements were related to general nutrition. Results of the content analysis of editorial content highlighted that the predominant food and nutrition messages related to dieting and weight loss, followed by food or product specific articles. The dominance of dieting and weight loss messages was also supported by magazine headlines. The content analysis also demonstrated clear inconsistencies in the food and nutrition messages these magazines present to women.

The following chapter will discuss the results of the content analysis. These results will be discussed in consideration of the conceptual framework of risk,

reflexivity and self identity, expert knowledge, risk, trust and doubt and the role of media and women's magazines in the provision of expert knowledge as outlined in Chapter Three. The chapter will conclude by outlining the limitations associated with this content analysis study.

## **7 Content Analysis Discussion Chapter**

### **7.1 *Introduction***

The previous chapter outlined the results of the 12-month content analysis of eight popular Australian women's magazines. This chapter will discuss the results of this content analysis. The conceptual framework of risk, reflexivity and self identity, expert knowledge, risk, trust and doubt and the role of media and women's magazines in the provision of expert knowledge as outlined in Chapter Three will be used to discuss the results of the content analysis. The chapter will conclude by outlining the limitations associated with this content analysis study.

The content analysis of women's magazines provided an opportunity to examine food and nutrition issues presented by the media to women. As discussed in Chapter Three, lay people may require experts to interpret risks and raise awareness of these risks (Giddens 1991; Beck 1992). The media, and for instance women's magazines, are one channel through which the lay public can be informed of risks (Lupton 1993). Results from the content analysis identified the issues most commonly presented and outline the manner in which these issues are presented to women in the magazines. This study is important given the potential role magazines have in shaping women's beliefs and behaviours surrounding issues relating to food and nutrition.

The data from the content analysis indicated that food and nutrition advertisements were most commonly for non-core food items and the primary messages were most often consumer related rather than nutrition related. When nutrition messages were used they more often related to general health and nutrition rather than more specific issues. It was also evident that as the age of the target readers increased, so did the number of food and nutrition related advertisements. Editorial items most frequently focused on celebrity diets and dieting and weight loss, followed by editorial items that promoted food products. Cover headlines, like editorial items, were focused on celebrity

diets and weight loss information. Discussion of cover headlines will focus on risk because only a very small amount of data was collected from the cover headlines, making it difficult to apply to the other aspects of the theoretical framework.

Applying the theoretical framework outlined in Chapter Three was more difficult than anticipated and it was found to be of limited relevance to these data. Application of some aspects of the theoretical framework such as reflexivity and self identity, the role risk, trust and doubt in expert knowledge were somewhat problematic because it is difficult to make assumptions about how women would interpret the information presented in the magazines. The content analysis did, however, highlight the commercial imperative driving magazines.

## **7.2 *Food and Nutrition Issues in Women's Magazines and Risk***

It has been claimed that people are likely to think about risk and how to minimise it when making decisions about their daily lives (Giddens 1991; Beck 1992). Given that women's magazines are reported to be a source of nutrition information it is important to reflect on the food and nutrition information presented to women via these magazines. The following sections will explore the food and nutrition risks presented in the advertising, editorials and cover headlines in the magazines.

### **7.2.1 Advertisements**

The results of this study indicated a disparity in the number of food and nutrition advertisements between magazines aimed at teenage girls, young women and mature women. Magazines aimed at mature women, with the exception of *That's Life!*, contained considerably more advertisements for food and nutrition related items in comparison to those for the young and teenage women. This finding is in agreement with the work of Hill and Radimer (1996) who reported a lower rate of advertising in young women's magazines, particularly for core foods. This pattern may be influenced by

consumerism and advertising drive to sell products. As the age of the target population increases, so does their disposable income. For instance, teenage girls have very little of their own income and in most cases would rely on “pocket money” from their parents, while young women often have large financial commitments such as mortgages, young children and personal loans, and therefore have a limited amount of disposable income. More mature women are likely to have fewer financial burdens and are more likely to have the most disposable income (Commonwealth of Australia 2004), and are therefore more likely to be the target of advertisers’ attention.

The results of the content analysis highlighted the commercial imperatives driving advertisers in women’s magazines (McCracken 1993; Croteau and Hoynes 2003). It was clear that the role of advertisements was to sell products rather than raising awareness of food and nutrition related risks to women. This is particularly true when the product did not have health promotion properties or specific nutritional properties that could help sell the product to the consumer. Therefore the notion that the role of the media is to raise awareness of risks is not as relevant when considering the advertising of food in women’s magazines, particularly those foods that are not considered to be nutritious.

The analysis of advertising content suggested that women’s magazines most commonly present women with advertisements that promote the consumption of non-core food items. While not all non-core foods are considered unhealthy, for example non-alcoholic nutritious beverages, such as fruit juice, these are foods which are not listed in the *Australian Guide to Healthy Eating* (Commonwealth of Australia 1998) and therefore not considered essential for achieving a healthy and balanced diet. This finding is consistent with that of Hill and Radimer (1996) who found that core foods made up 47% of mature women’s magazines and 12% of young women’s magazines advertisements. Barr (1989) examined Canadian women’s magazines between 1928 and 1986 and concluded that advertisements in women’s magazines promoted the consumption of low-nutrient dense foods. Similarly, in a study examining the differences between food advertisements in magazines targeted at African

American and non- African American women, it was found that advertisements for alcoholic beverages occurred most frequently compared to non- African American magazines, in which desserts and foods high in fat or sugar dominated (Pratt and Pratt 1995).

In this study, consumer related messages were the most frequently identified primary message used in advertisements to promote products, particularly those in the form of a recommendation from the magazine or referring to the taste of the product. Similarly, Hill and Radimer (1996), Barr (1989), Hickman and associates (1993) and Pratt and Pratt (1995) found that consumer related claims were used more often than nutrition related claims. In these studies, taste was the most frequently identified consumer related message, however it should be noted that none of these studies included a magazine recommendation in their coding scheme. In addition, they coded for all messages in magazines, while the current study only reports on the primary promotional message. As discussed previously, what these findings do indicate is the relationship to the commercial imperatives of advertisers to sell products, rather than raise awareness to consumers of food and nutrition issues or risks.

The current study demonstrated that when nutrition-based promotional messages were used, in food and nutrition advertisements they were often general health messages. This suggests that individuals exposed to women's magazines receive little discussion of risks in specific terms. As indicated in Chapter Three, the media is one of the intermediaries through which individuals are exposed to information about risks (Lupton and Chapman 1995). Nutrition messages in advertisements may be one vehicle through which women become aware of issues that are of concern. Based on this, women may consider general health issues as being of greater importance than more specific claims such as low fat. Barr (1989) also reported that claims relating to general health were most common, however there was a trend of a consistent decrease in the appearance of these messages during the analysis period of 1928 to 1986, and also a consistent increase in elimination messages such as low fat. This may reflect more specific nutrition



knowledge becoming known during that period but this would not explain why more general nutrition messages were found in this study to be more commonly used in food advertisements.

Hill and Radimer (1996) reported that claims relating to minimising or eliminating certain substances occurred most often in young and mature women's magazines. These were in the form of such claims as the product being natural/pure, which occurred most frequently in young women's magazines, while for mature women's magazines low-fat claims occurred most frequently. Hickman and colleagues' (1993), analysis of four women's magazines noted a trend of increase in nutrition related claims for the three years, 1975, 1982 and 1990, especially for claims relating to the absence or elimination of particular dietary substances. The later studies report a greater presentation of minimising or eliminating messages, which is in contradiction to the current study. Reasons for these differences are uncertain, however possibilities may include changes in the food regulatory environment, which has seen a tightening of food labelling laws and use of nutrition claims. Another possibility is the expansion of nutrition knowledge among the lay population. For example, the general public are recognising that there is a difference in the quality of fat contained in food products and the percentage of total fat (Chan, Patch et al. 2005). There is increased awareness that some low-fat products are high in sugar and calories. It should also be noted that the current study coded only for the primary message in advertisements, while the other studies coded for all nutrition messages.

### **7.2.2 Editorial Content**

While most magazines had a regular section dedicated to the discussion of health issues, few devoted a regular segment to discourse relating directly to food and nutrition. Interestingly, both *Cleo* and *Cosmopolitan*, magazines targeted at young women, introduced food and diet related sections into their magazines during the 12-month analysis period. This suggests that editors perceive an increasing relevance of food and diet information among young women. It has been reported in the literature that young women have

increased awareness of food and nutrition as they enter cohabitation, marriage and motherhood (Green, Draper et al. 2003), therefore editors of young women's magazines may be recognising this need. It is known that young women are often concerned about weight issues (Wardle and Johnson 2002), and the editors recognise the importance of devoting a section of their magazines to these issues.

The lack of food and nutrition information in teenage girls' magazines may be related to the social context in which they make food decisions. For instance, published literature suggests that teenage girls' food choice is mainly governed by their parents (Green, Draper et al. 2003). Editors of magazines targeted at teenage girls may recognise the limited level of control the girls have over household food decisions and therefore do not consider it a significant issue for the magazines. Interestingly, it has been claimed that food marketers target young children and adolescents in their advertising because of the billions of dollars of their own money spent annually, the influence they have on family food purchases, and their potential as future adult shoppers (Kraak and Pelletier 1998a; Story and French 2004). There appears to be some inconsistency in the way magazine editors and food marketers treat adolescents as food purchasers and decision makers by magazine editors and food marketers.

When considering the most common messages in the magazines' editorial content, risks relating to weight gain were given the greatest level of importance, followed by product promotion in which the magazine's editorial recommended purchase and consumption of products based on the products perceived value, for example being 'good' or because of its taste. The product promotion role of editorial has been previously identified in the literature (McCracken 1993). This finding has significant implications for the information provision role of women's magazines, which will be explored later in this chapter.

Few studies have utilised content analysis of food and nutrition information in the editorial items in women's magazines. Most evaluations have focused on advertising content (for examples see, Barr 1989; Hickman, Gates et al. 1993; Pratt and Pratt 1995; Hill and Radimer 1996), therefore comparison of the findings of previous findings with the current study is limited. Those studies that have explored nutrition related editorials in women's magazines report varying results relating to the coverage of nutrition topics. Guillen and Barr's (1994) analysis of the teenage girl magazine *Seventeen* over a 20-year period (1970-1990) found that major nutrition related editorial items focused on weight loss plans and nutrition information such as vitamins, fibre and fat, while minor editorial items focused on cooking tips, food information and nutrition information. This is consistent with the results reported here, in that the editorial content is predominately weight focused. In contrast, Begley and Cardwell (1996) reported that general nutrition was the most common nutrition topic in women's magazines, followed by weight loss and body shape and then diet and disease relationship.

In a recent article, Lupton (2004) examined the reporting of food risk in three Sydney metropolitan newspapers between 1 January 2002 and 28 February 2003. Half of the editorial items in her study focused on the relationship between food intake and obesity. This topic was followed by risk associated with primary production, for example use of pesticides and fertilisers, and those associated with processed, restaurant or takeaway foods. While the results of this study have some similarity to the current study in that there is a focus on dieting and weight, clear differences do exist. The current study identified very few articles that focused on broader food risks associated with the production and consumption of food. The reason for the discrepancies may include the type of media. Newspapers are better able to respond to one-off events (Egger, Donovan et al. 1997). In addition, Lupton (2004) coded only those articles that mentioned risk, danger and hazard in relation to food consumption. The coding rules used in the current study allowed for coding of all food and nutrition related information.

The high prevalence of celebrity diets, dieting and weight loss information in women's magazines could act to focus women's attention on the importance or necessity to diet and lose weight. This could lead to an increase in women's perceptions of weight related issues facing them in today's society. While there is currently an increasing prevalence of obesity in Australia (Cameron, Welborn et al. 2003), the majority of dieting and weight loss messages were focused on weight loss from an appearance or body image perspective rather, than a health improvement perspective. This finding is supported by Guillen and Barr (1994) who found that all dieting articles identified increased attractiveness as a reason for dieting, while only 50% of the articles identified improvements in health and wellbeing as a reason. Similarly, Moyer and associates' (2001) analysis of health information in women's magazines in the US reported that articles addressing dieting emphasised weight loss rather than health improvements.

The results of the current study also highlighted a lack of discourse in women's magazines about broader food and nutrition issues such as food labelling, organic foods, genetic modification or vegetarianism. Surprisingly, these issues were covered less frequently than issues such as food choice as an indicator of personality and the role of food during sex. Clearly editors of these magazines do not rate these issues highly or as newsworthy as celebrity dieting and dieting and weight loss. Moyer and associates (2001) identified that the health topics covered in women's magazines do not reflect those issues covered in leading medical journals or women's primary health concerns identified by women. In addition, the topics covered in women's magazines did not correspond with the greatest health risks. In Australia it has been identified (Crotty 1995) that media generally take a hegemonic approach to food and nutrition issues and therefore alternative eating styles are unlikely to be covered.

Another reason for the lack of discussion of broader food and nutrition issues may be a lack of controversy associated with the current Australian food supply. During the period in which this content analysis was conducted, there was an absence of food scares or controversies surrounding food regulations.

As a result, there was very little media representation of these issues. As suggested by Giddens (1991) and Beck (1992), experts and media present information to the lay population about risks and this impacts on the general population's perception of risk. Therefore, the general population may not perceive the Australian food supply and regulations as risky or likely to impact on them because of the lack of discussion in the media.

#### **7.2.2.1 Cover Headlines**

Food and nutrition related headlines rarely featured in varying frequency (0 – 92%) on the covers of the magazines, and were most often (74%) related to dieting related information. This finding corresponds with Begley and Cardwell (1996) who also examined the presence of nutrition related headlines on women's magazine covers. It is apparent that women's magazine covers are reinforcing the importance of the dieting and weight loss focused information presented within the editorial content. McCracken (1993) noted that the magazine's cover is the most important advertisement and helps to distinguish one magazine from another. In addition, McCracken (1993) suggested that the cover helps to position the rest of the magazine and aids in the reading process. Clearly, editors of magazines believe promotion of issues such as dieting and weight loss will be of interest to the readers of women's magazines and result in improved sales of their magazines. This is supported by Shoemaker and Reese (1996) who suggest that journalists are more likely to report on issues they believe to be of interest to their readers. This finding could also be extended to cover headlines.

#### **7.2.2.2 Summary**

Addressing food and nutrition related risks was not apparent in food and nutrition advertisements, instead the focus in advertisements was on consumer related messages which suggests that the commercial imperative is to sell products rather than educate consumers regarding risks. This is not surprising given that the majority of food and nutrition related advertisements were for non-core products. Overall, celebrity diets, dieting and weight loss information were the most frequently identified food and nutrition related

articles. For those women who regularly read women's magazines the constant focus on these issues may result in them believing that the need to diet is the main issue facing them. Cover headlines also had a similar focus on celebrity diets and weight loss.

### ***7.3 Reflexivity and self identity***

As indicated in Chapter Three, Giddens and Beck's concept of reflexivity suggests that people are constantly in search of new information and greater knowledge in order to shape their self identity and biological narrative (Giddens 1991; Beck 1994). Given the reported importance of the media in providing women with information about nutrition (Crawford and Baghurst 1991; de Almeida, Graca et al. 1997; American Dietetic Association 2002) the information contained in women's magazines has the potential to impact on women's self identity. It cannot, however, be assumed that all women who read women's magazines read them in the same manner, or even use the information contained in the editorial and advertising content reflexively. Therefore, this section will explore messages that raised the issue of self identity.

#### **7.3.1 Advertisements**

The advertising content of the magazines analysed for this study promoted consumerism. The most common consumer related messages were in the form of a magazine recommendation. This was closely followed by consumer related messages which related to the taste of the products and then those which related to the product being high quality, authentic and time tested. The consumer focus implied that women need to acquire food products. Other researchers such as McCracken (1993), Croteau and Hoynes (2003) and Hermes (1995) also support this finding. McCracken (1993) posits that women's magazines encourage women to view themselves in need of improvement and to feel fulfilled. These improvements are promoted as being achieved through consumerism. McCracken (1993 p. 67) has concluded that:

“Both covert and overt advertising attempt to create fancied needs and exaggerated self-consciousness in the primarily females audience of these publications. “

The most common nutrition related messages most frequently focused on the product being good for general health, and on certain nutrient components of the product having been minimised or eliminated. While most advertisements did not directly tackle the issue of identity of the consumer, these messages may reflect ideals that many women strive to achieve in their lives. The issue of self identity was more apparent in advertisements for weight loss products, with the majority of primary messages focused on success or just the need to lose weight. Only three of the weight loss advertisements' primary message related to health improvements.

Again, similar studies in the published literature have not focused on the potential impact magazines' food and nutrition advertisements have on self identity. These studies have, however, identified the predominance of consumer related messages, such as taste, quality and convenience (Hickman, Gates et al. 1993; Pratt and Pratt 1995; Hill and Radimer 1996; Lohmann and Kant 2000). These findings raise questions relating to the consumerism focus of magazines and the concepts of reflexivity and self identity. Clearly, advertisements in women's magazines use consumer related messages such as taste, quality and convenience because these messages are effective in selling products to women through reflecting the women's needs and hence concepts of self. For example, they have busy lifestyles and select convenient foods to reflect this lifestyle. However, it is unclear whether the advertisers deliberately expose women to messages that encouraged feelings of inadequacy and linked purchase of a product with improved coping or control, for example, women are not coping with all the busyness in their lives, but this product can help them. Other researchers such as McCracken (1993) and Madden and Chamberlain (2004) are of the belief that women's magazines aim to undermine women's confidence, in order to sell them products.

## **7.4 Editorial Content**

The results of the content analysis of the magazines' editorial content indicate a focus on weight loss and dieting, including celebrity diets. This focus was in most cases related to body image issues rather than decreasing health risks related to obesity or over-consumption of particular foods. If women were to use this information to shape their self-identity they would believe that it is likely to be tied to their weight and ability to diet. However, it is difficult to make this assumption on behalf of the women who may read these magazines. Gauntlett (2002) explored how information in women's magazines impacts on an individual's self identity. He found that women's magazines helped women think about their identity in a variety of ways. For example, some women aspired to be like the images and followed the information given in women's magazines, while others did not identify with the information and instead felt pleased that they did not have that approach to life. Others said that women's magazines had little impact on their sense of self (Gauntlett 2002).

The second most common topics found in women's magazines related to product promotions. Again, if women were to use this information reflexively it would suggest that consumerism is closely tied to an individual's self-identity, indicating a need to purchase a variety of products to shape their self identity. This suggestion is supported by McCracken (1993) who indicates that the editorial content of women's magazines is used to support the advertising content, thereby promoting consumerism among readers. McCracken (1993) also proposes that the editorial content of women's magazines encourages feelings of inadequacy among women, thereby endorsing the advertising content of the magazines. A recent study of women's magazines in New Zealand found that:

“The discourses combine to undermine women's confidence in their ability to make the right choices about food.” (Madden and Chamberlain 2004 p. 594)



An extension of this is that women, to regain their self-identity of being in control, buy the advertised products.

#### **7.4.1 Summary**

It appears that women's magazines often relate an individual's self identity to issues of weight and consumerism. However, as indicated in the introduction to this chapter, it is difficult to determine how women may use the information in women's magazines in a reflexive manner.

### **7.5 *Expert Knowledge, Risk, Trust and Doubt***

Media have been identified as playing a key role in filtering expert information for the public (Giddens 1997). Giddens and Beck's concept of expert knowledge is characterised by awareness of risk, doubt and decreased trust in experts (Beck 1992; Giddens 1994; Giddens and Pierson 1998; Lupton 1999b). It is therefore important to consider the role women's magazines have in the provision of expert knowledge. Assumptions cannot be made based on magazine content as to how the lay public will interpret and use the magazines and the role of risk, trust and doubt. Therefore in this section it is only possible to identify the use of expert knowledge in the magazines analysed in this study.

#### **7.5.1 Advertisements**

In the current study, less than one-third of the advertisements that included nutrition related primary messages quoted information sources. The most frequently used information sources were research findings and lay opinions, however these represented a very small proportion of the overall advertisements. Analysis of the magazines also demonstrated that the editors appeared to be positioning themselves as experts in product promotions. This emerged in the form of editorial staff opinion, which occurred more frequently than opinions of health professionals and scientific findings. Again, this lack of expert knowledge may indicate the commercial imperative driving magazine

advertisers which is supported by McCracken (1993) and Croteau (2003). Given the high number of non-core food products advertised in the magazines, there is little opportunity for promotion of products with special nutrition features or requiring expert endorsement. No studies in the published literature have examined advertisements' use of expert knowledge, therefore the results of the current study cannot be compared with other similar studies.

### **7.5.2 Editorial Content**

The results of the content analysis indicated that the majority of food and nutrition related articles were not based on expert knowledge. Most food and nutrition articles were written by journalists with no additional training or expertise in food and nutrition. Begley and Cardwell (1996) also found nutrition related articles were written by journalists (32.8%) or were anonymous (32.0%). In the latter case the authors assumed that those articles which were anonymous were written by journalist. Dietitians were reported to contribute 20.3% of the nutrition related information in women's magazines overall.

In this study journalists in some cases quoted experts in their provision of food and nutrition information. These experts deviated from what is traditionally considered a food and nutrition expert. The most common types of experts used to provide information were celebrities, which is most likely related to the high frequency of celebrity diet stories presented in women's magazines. Other experts identified in the women's magazines were nutritionists and dietitians (a more traditionally recognised expert, however they were represented in a very small portion of articles) and lay people. Interestingly, Green's (2003) results from focus groups assessing how UK consumers choose safe food reported that consumers were more likely to trust sensory data, anecdotal evidence and personal experience more than expert sources. This might explain the findings from this study. Similarly, Lupton (2005) reported that when assessing food risks, individuals were more likely to rely on their own judgement.

Where more academic sources of information were identified in the food and nutrition related articles this was most often in a generic and non-specific manner, such as “a recent study has found” or a “US study found”. This finding is supported by Moyer and associates’ (2001). This lack of information in terms of study details makes it difficult for the readers of the magazines to draw conclusions regarding the quality of the information. In this regard, this study is in conflict with one conducted by Wallace and Ballard (2003) who evaluated osteoporosis in US women’s magazines and newspapers. They found that the majority of articles (85.4%) included information from expert sources. Not only did the magazines in this study not present information on osteoporosis, those articles in the magazines did include did not routinely cite information from expert sources.

### **7.5.3 Summary**

This analysis does not demonstrate that women’s magazines have a significant role in filtering expert knowledge to women, or that the information they provide to women is based on expert knowledge. Magazine editorial items were rarely written by a food and nutrition expert and in many cases non-traditional “experts” were quoted. In addition, few advertisements in women’s magazines supported their products with claims from experts. This finding suggested the limited application of the expert knowledge component of the theoretical framework outlined in Chapter Three.

## ***7.6 Magazine’s Role in the Provision of Food and Nutrition Information***

It has been stated by sociologists that media have a role in influencing the public’s experience of the social world and in shaping public opinion, as a result of their provision of knowledge about the social world (Giddens 1997). It has also been suggested that the media expose individuals to distant events that transform space and time (Giddens 1991).

Examination of the main food and nutrition topics in women’s magazines does not suggest that women’s magazines have a key role in educating women

about important food and nutrition issues. The food and nutrition focus taken in the women's magazines analysed in this study would not be considered satisfactory or desirable by many health professionals. The issues focused on weight with the main consideration being tied to self identity and body image rather than minimising health concerns. In addition, the editorial content also appeared to have a role in promoting consumerism among the magazine readers, by raising awareness of food and nutrition related products available for purchase. It is also interesting to note the women specific food and nutrition issues that were not discussed in women's magazines, for example osteoporosis, nutrition during pregnancy and iron deficiencies. Women's magazines have a unique opportunity to provide women with food and nutrition information specific to their own needs, however editors of women's magazines appear to be overlooking this opportunity.

The results of this study do to some degree support the role of women's magazines in the provision of the mediated experience. In many cases this is through information regarding the latest celebrity diets and profiling celebrity eating habits. To many health professionals this may be alarming, given the reported dangers associated with typical celebrity diets such as the Atkins diet and low carbohydrate high protein diets (Bilsborough and Crowe 2003; American Cancer Society 2005).

Also, the results of this study in many ways support the work of McCracken (1993) who described the role of women's magazines, from the cover to the advertisements to the editorial content, as encouraging consumerism among women. The results of the content analysis confirm the role of food and nutrition advertisements to sell products to consumers, rather than to educate consumers about important food and nutrition issues. Advertisements were most likely to raise consumers' awareness of non-core foods using consumer related messages. When nutrition related messages were used these were most often to promote general health and nutrition messages.

Lack of consistency in magazines limits their role in educating women regarding important food and nutrition issues. The content analysis revealed

inconsistencies in the food and nutrition messages presented in the women's magazines. The inconsistencies in editorial material and between editorial material and advertisements were apparent across magazines in all age groups. Women are therefore confronted with mixed messages in women's magazines. This has the potential to result in confusion of the lay public and a decrease of trust in the media as a source of information. A recent study of popular New Zealand women's magazines also identified clear inconsistencies in the nutrition messages presented (Madden and Chamberlain 2004). Lupton and Chapman (1995) explored the media presentation of the "cholesterol controversy" and conducted focus groups to determine how the lay public responded to the media's presentation of the controversy. Results indicated that participants expressed scepticism about the media's coverage of health and medical controversies and therefore did not believe everything they read. This is not surprising given the lack of expert information and the lack of consistency.

The entertainment role of magazines can not be ignored. The findings of this study support Naidoo and Wills (2000) who state that the producers of the media do not create television programs or print texts such as newspapers and magazines purely to provide the public with accurate health information. Producers of magazines are possibly aware of the inconsistencies and inaccuracies within their magazines, however their focus is to entertain their readers, not to provide scientific evidence.

### **7.6.1 Summary**

The results of the content analysis do not indicate that magazines have an important role in providing women with information regarding food and nutrition, as would be perceived as satisfactory from a health professional's perspective. Magazines are also limited in their ability to inform women, given the inconsistencies in the information they present, leading to a decreased level of trust in the magazine content.

## **7.7 Limitations**

It is important to recognise when interpreting the results of this study that people reading magazines do not systematically look at and analyse food and nutrition information in the way that this study has. When individuals read magazines, there are external and internal factors competing for their attention, both within the magazine and within the environment in which they read the magazines. Researchers have indicated that often women's experience of reading magazines is very fragmented (Hermes 1995). Therefore it cannot be assumed that all magazine readers are aware of the recurring messages and the manner in which they are presented to the same degree that the results of this research have demonstrated. As suggested by Seale (2003), women experience the media, and in this case women's magazines, differently from researchers conducting a media analysis. Women would rarely choose to focus on one health issue and study how the media presents this issue. The lay audience are more likely to experience a much more fragmented representation of an array of issues and in many cases will be required to fill in the gaps:

“As we go about our lives we may at one point in the day hear a report about a health scare on a radio programme, then read about a health policy in the newspaper, then spend the evening channel hopping on television, seeing a soap opera where characters eat a variety of health enhancing or damaging foods, a documentary where a medical breakthrough is described, finishing with reading a magazine where readers' letters about health issues are answered.” (Seale 2003 p. 518)

Another limitation of this study is that only eight magazines were analysed over the 12-month period. This is not representative of all food and nutrition messages that women would be exposed to during this time. Women could receive food and nutrition information from other types of media such as newspapers, television, radio and the Internet. In addition, women may be exposed to other types of magazines such as health, food and cooking and weight loss magazines. The results of this study are also limited by the fact

that only every second issue of the weekly magazines were analysed. Therefore there is a possibility that the selection bias of only some of the magazines may have resulted in the reporting of the data. While there were legitimate reasons for limiting the number of publications analysed and the number of weekly magazines that could be included in the sample, the results of this study cannot be generalised to magazines other than those which were included in this analysis (Kondracki, Wellman et al. 2002).

It should also be noted that only the primary messages in food and nutrition advertisements were analysed. This may have resulted in an under- or over-representation of some messages. Therefore caution should be taken when interpreting the results of this study.

Recipes were not analysed in this study. Some women during the focus group discussions (Chapter Four) indicated that recipes provide meal suggestions and therefore are important in guiding food choice. There is a possibility that excluding these from the analysis could have resulted in selection bias.

A limitation associated with quantitative content analysis is that the results indicated what has been presented in the magazines. This does not allow for an understanding of how this information could be interpreted by the readers of these magazines.

## **7.8 Conclusions**

The results of the 12-month content analysis of the women's magazines' editorial items, advertisements and covers, indicated a clear trend to present women with a discourse surrounding dieting and weight loss, including celebrity diets and food products. The majority of food products promoted to women were from the non-core food groups. It was also apparent that as the age of the magazine target group increased, so did the number of advertisements. There was a lack of expert knowledge presented from health professionals. It was also apparent that over the 12-month analysis period, women's magazines presented readers with numerous inconsistencies.

The results of this study indicate that magazines are driven largely by commercial imperative to sell magazines and the products advertised, both in a covert and overt manner. While women's magazines do provide some food and nutrition information, they are limited in their capacity to educate women, based on the narrow range of issues covered, lack of expert information included and the presence of inconsistencies which have the potential to confuse readers.

The following and final chapter of this thesis will draw together the findings from the three studies undertaken for the research project and discuss them in relation to the conceptual framework outlined in Chapter Three. Conclusions, limitations, implications for practice and recommendations will also be discussed.



## **8 Thesis Discussion, Limitations, Recommendations and Implications for Practice.**

### **8.1 Introduction**

This thesis aimed to describe the role of women's magazines in the provision of food and nutrition information to women. It was important to understand this relationship for several reasons. Firstly, women have identified in previous studies that they consider magazines to be an important source of food and nutrition information (Crawford and Baghurst 1991; de Almeida, Graca et al. 1997; American Dietetic Association 2002) but this possible relationship has not been explored in any detail. Secondly, magazines have the potential to be an important vehicle for food and nutrition information but there has not been detailed examination of all the ways in which magazines may provide information. It was important to undertake such an examination so health professionals are both aware of the messages that women are receiving via this media and can effectively use this media for their own positive food and nutrition information or, at minimum, act to counter the potential negative messages disseminated via this media.

The study involved examination of (1) women's perceptions of food and nutrition information in women's magazines, (2) the key issues regarding food and nutrition that women identified as important, and (3) the food and nutrition issues presented in the editorial and advertising content and cover headlines of eight popular women's magazines over a 12-month period. The results of each of these studies have been presented in previous chapters. This final chapter draws together the key findings of the three studies and discusses these within the conceptual framework outlined in Chapter Three. Following this discussion the study limitations, recommendations and implications for practice will be outlined.

The conceptual framework comprises the key components of (1) modernity and risk, (2) reflexivity and self-identity, (3) expert knowledge, risk, trust and

doubt, and (4) the role of media and women's magazines in the provision of food and nutrition information.

Firstly, in relation to modernity and risk, the findings of the studies do not support the concept of risk as described by Giddens (1991) and Beck (1992). Women did not report actively seeking information that could be considered risk-related, nor did they position food and nutrition issues within a risk framework. The magazines use of risk frameworks also was not apparent. Primarily they positioned food and nutrition information within a commercial, marketing framework or within 'social (lack of) success' context, a finding which is supported by the work of McCracken (1993) and Croteau and Hoynes (2003)

Secondly, identity issues revolved around body image and social competence both for the women themselves and as portrayed in the magazines. Evidence of reflexivity by women was apparent in the ways women approached the food and nutrition information presented in the magazines. Women often acknowledged that they were most likely to consider their own personal experience and knowledge when reading a magazine, and hence not accept the information at face value.

In relation to the concepts of expert knowledge, risk, trust and doubt, the findings of the studies indicated that women did not place a high level of trust in the information presented by women's magazines, often describing the content within a doubtful view. The magazines themselves were found not to utilise expert opinion or reference experts in any significant manner. The women appeared cognisant of this short-coming, expressing a desire that the magazines include references in their articles to increase their credibility. On the whole, women considered the magazines' primary role was to sell products. The examination of the content of the magazines was consistent with this view of magazines, as commercial interests dominated.

In relation to the role of magazines in the provision of food and nutrition information, women appeared to contradict themselves both within the focus

group discussions and between the focus groups and semi-structured interviews. This conflict in women's discussion and uncertainty of their use of food and nutrition information in women's magazines suggests that women are themselves unsure of this relationship.

It was apparent that women's magazines did raise women's awareness of food and nutrition issues, however the range of issues actually identified as being covered by the magazines was found to be quite narrow, with a particular focus on weight and dieting issues. It was thus not surprising that the women were not thinking more broadly about food and nutrition issues, nor was it surprising that it was difficult for the women to generate their discussion about food and nutrition issues.

Clearly potential exists for health professionals to utilise women's magazines to raise a broader range of food and nutrition issues, and to provide the necessary 'expert credence' sought by the women. However, this involvement of health professionals should be within the 'recreational' and entertainment context of the role of magazines in women's lives. The women in this study clearly identified that they primarily buy magazines for the entertainment they provide. It is therefore important that health professionals learn to position broader food and nutrition issues within an entertainment framework.

## **8.2 Discussion**

This section discusses the findings of the three studies in terms of the conceptual framework outlined in Chapter Three. A direct causal relationship cannot be attributed to similarities and differences observed in food and nutrition discourses of women and that of the magazines because of the nature of this type of research. However, as noted in the conceptual framework, the media have a role of identifying and raising the lay population's awareness of important issues (Giddens 1991). It is well reported that magazines are identified as having a role in informing women of food and nutrition issues (Crawford and Baghurst 1991; de Almeida, Graca et al. 1997; American Dietetic Association 2002). The magazines analysed here provided

some insight into the types of messages the media are presenting to women. It is of course impossible to directly attribute food and nutrition issues raised by women in the focus groups and semi-structured interviews to the issues raised in the media and in particular the women's magazines. A multitude of factors influence the lay public's understanding of food and nutrition issues, including their own personal experiences (Lupton 1994). It is interesting, however, to consider similarities and differences presented in the discourse of the women and of the magazines.

This research has found that both the women who participated in focus groups and semi-structured interviews and the women's magazines content analysed have a very narrow focus regarding food and nutrition issues. Weight concern related to self identity was the main concern raised by both the women and the magazines. Interestingly, teenage girls indicated they had very little control or took very little responsibility for their food decisions. Consistent with this, the magazines aimed at teenage girls contained very little food and nutrition information both in the form of the advertisements and the editorial content. Interestingly, teenage girls indicated a desire for greater information relating to food and nutrition.

### **8.2.1 Risk**

Key literature asserts that people are likely to think about risk and how to minimise it when making decisions about their daily lives (Giddens 1991; Beck 1992). The media have also been reported as one way that information relating to risk can be provided to the public (Lupton 1993). Based on this knowledge and the evidence that women's magazines are an important source of nutrition information for women (Crawford and Baghurst 1991; de Almeida, Graca et al. 1997; American Dietetic Association 2002), it was anticipated that content analysis of women's magazines in conjunction with interviews with women would identify important food and nutrition risks. It was also anticipated that the issues raised in the magazines and those raised by women would be similar.

The results of these studies did not support the proposition that people think in terms of risk and how to minimise it in their daily lives. The results of the semi-structured interviews demonstrated that the participants were not preoccupied with food and nutrition issues. Participants were more likely to think in terms of the day-to-day needs or rudimentary issues, such as what to eat for dinner. The analysis of women's magazines provides insight into the types of food and nutrition risk information women gain through the media. Interestingly, results of the 12-month content analysis indicated a lack of discussion about food and nutrition issues. Information that could be considered relating to reduction of risk was only sought when a woman already had experience of a disease or illness. Of particular note was the consistent theme of a narrow focus of women's ideas around food and nutrition, which was mirrored in the magazines. The primary focus was on weight, but within a self-image perspective rather than on physical health. The women's discussions and magazines' contents both focused on dieting and weight loss and very little else.

Both Giddens (1991) and Beck (1992) suggest that risk can often go undetected unless pointed out by experts or professionals. If other media such as television and newspapers also take such a narrow focus this might explain why women are not thinking about broader issues associated with food and nutrition, for example, health risks, disease prevention, food safety, genetically modified food, organic food, environmental consequences, and social issues associated with food and nutrition.

When food and nutrition risks were discussed among women and in women's magazines, the focus was somewhat narrow. The media are well known for reporting on controversial or unusual food and nutrition related issues. For example, food safety issues such as BSE (Bovine Spongiform Encephalopathy or Mad Cow Disease) was widely discussed in the media during the outbreak in Europe in 1994-1996 (Kitzinger and Reilly 1997). While the disease was not a serious threat to Australians, this issue was still widely discussed in the Australian media (for examples, see Anonymous 1997; Brown 1998; Cooke 2000a; Cooke 2000b; Wroe 2002). In contrast, public

health specialists find it hard to gain media interest in health issues that impose a serious and very real risk to the population (Kitzinger and Reilly 1997; Gray and Ropeik 2002), for example, smoking, alcohol consumption and obesity. The media therefore do not provide the general public with an accurate representation of serious risks to health. It is not that surprising that the food and nutrition focus in the women's magazines did not reflect those issues which public health professionals would consider high risk. This is consistent with findings on media coverage of health risks in general compared to the leading causes of death (Frost, Frank et al. 1997).

Lupton (2004) revealed that the most commonly reported food risk issue in newspapers was the relationship between food intake and obesity, in particular childhood obesity, followed by risk associated with the primary production of food and risks from processed, restaurant or takeaway foods. There are very distinct differences in the types of issues reported in Lupton's study and this study. Lupton's newspaper study revealed a broader range of issues being addressed. These differences could be attributed to the different type of media. Newspapers are better able to report on single events and are able to publish a larger volume of information because of their daily publication frequency, while women's magazines are published either on a monthly or weekly basis and are therefore less able to respond to all news events (Egger, Donovan et al. 1997). Another difference that could have caused a disparity between the results of Lupton's study and the current study is the role of the different types of media. Newspapers are primarily produced for an informational role, while magazines take on a much more light entertainment focus (Egger, Donovan et al. 1997).

Lupton (2005) concluded that participants in her semi-structured interviews were aware of food risk but also relied on previous experience and cultural beliefs when making day-to-day decisions. Participants in Lupton's study appeared to be more concerned about food risk than those who participated in this study. Both groups raised issues of the risk associated with being overweight and the consumption of fat. The participants in Lupton's study also raised other issues such as additives and chemicals in food, however the

number concerned about this was in a minority. It is not known why Lupton's participants were much more risk aware. It is possible that the timeframe of data collection may have caused this difference. During the period of data collection for this study the food environment was relatively stable. The main controversy surrounding the Australian food and nutrition environment was contamination of vitamin supplements by the Pan Pharmaceutical Company. This received a high level of media coverage via television news programs and in newspapers (for examples see Karvelas and Sexton 2003; Malkin 2003; Needham and Marriner 2003; Noble 2003). This was not presented in the women's magazines. The debacle was, however, raised by several women in the first semi-structured interview, which corresponded with this news event. Clearly, for this issue to be raised by the news media and some participants in this study it was an issue of concern in Australia. What is interesting is that it was not presented in the magazines. This raises questions regarding magazines' ability to respond to controversial or crisis situations.

The lack of risk discussion among the women who participated in this study and in the content analysis might be explained by Giddens's (1991) notion of the 'protective cocoon'. It is suggested that the 'protective cocoon' allows the individual to dismiss external risks that are not likely to encroach on their life, which allows women to concentrate on other issues that they are more able to control, for example managing the family budget. This behaviour is based on trust in individuals or abstract systems. It is possible that the women who were involved in this study placed a high degree of trust in the food regulatory environment. The Australian food system has not been exposed to government and regulatory controversies such as has been the case in Europe and the United Kingdom with regards to BSE, foot and mouth disease and salmonella in eggs (Lupton 2005). Therefore it is possible that the women in this study focused on issues that were visible to them and those that they have a degree of control over.

### **8.2.2 Reflexivity and Self Identity**

Giddens (1991) and Beck's (1994) concept of reflexivity suggests that people are constantly in search of new information and greater knowledge in order to shape their self identity and biological narrative. Given the reported importance of the media in providing women with information about nutrition (Goldberg 1992; Lester 1994; Gabriel and Lang 1995; Goldberg and Hellwig 1997; Australia New Zealand Food Authority 2001) information contained in women's magazines has the potential to impact on women's self identity. It was expected that the women would use the information presented in the media reflexively and this would have an impact on their individual self identity.

Discussion of dieting and weight loss was dominant among the women and was the most prominent issue in the women's magazines analysed in this study. Women in the most part positioned their weight concerns in terms of self identity and body image. This is consistent with the focus of the women's magazines, which is based on issues of looking good, rather than being healthy. However, the findings from this study highlight contradictions in women's discussions in relation to body image and health. During the focus group discussions the adult women expressed frustration at the magazines' constant focus on weight and dieting rather than on being healthy. However, in the semi-structured interviews women's rhetoric of food and nutrition issues focused predominantly on weight loss from a self image perspective rather than being related to health. Hence, women are guilty of a similar discourse for which they criticised magazines. It is possible, therefore, that women's magazine have a more significant impact on women than they are aware. This also raises the perennial question – does the media create or reflect issues in society?

When women in this study discussed their strategies for losing weight, they often talked about the desire to decrease carbohydrates. This approach to dieting is a key principle of the widely published Atkins diet and other low carbohydrate high protein derivatives of this diet (Bilsborough and Crowe



2003). Low carbohydrate high protein diets were also the most frequently discussed diets in the women's magazines. These particular diets gained popularity among American actresses and received a high level of media coverage both in America and Australia. Interestingly, the majority of the women who participated in this study were not successful in achieving their weight loss goals. This is consistent with other findings, which indicate that within five years most dieters have regained the weight they have lost and often exceed their initial weight (Crawford, Jeffery et al. 2000).

The participants in these studies appeared to act reflexively when reading women's magazines. They said that when they read information in women's magazines they often drew on personal experience and their own knowledge when considering the information. It was apparent that the majority of women did not accept the information in the magazines at face value. This finding is supported by the work of Lupton and Chapman (1995), who reported that when the general public are confronted with conflicting information about diet and cholesterol, they rely on their own personal experience and knowledge and is consistent with the concept of reflexivity and self identity.

### **8.2.3 Expert Knowledge, Risk, Trust and Doubt**

Media have been identified as playing a key role in filtering expert information for the public (Giddens 1991; Beck 1992). Giddens and Beck's concept of expert knowledge is characterised by doubt, awareness of risk and decreased trust in experts (Beck 1992; Giddens 1994; Giddens and Pierson 1998; Lupton 1999b). It is therefore important to consider women's relationship with expert knowledge that is filtered through women's magazines. The results of these studies indicate the complex nature of women's relationship with food and nutrition information presented in women's magazines. In addition, the content analysis indicated a limited role of expert knowledge in the provision of food and nutrition information in the magazines.

Participants in the focus group discussions indicated a level of distrust in the food and nutrition information presented in the magazines. There was inconsistency between the participants' discussion of the magazines in the focus groups and the semi-structured interviews, where they reported that they did use magazines as a source of nutrition information. However, later they indicated that they did not trust the information in the magazines. This finding raises several issues, including women's relationship with magazines and the role these magazines have in filtering expert knowledge to women, and issues associated with the data collection methods of focus groups and semi-structured interviews. These issues can be summarised in the following questions:

1. Were the women in the focus groups misrepresenting the truth because of the nature of group discussions, that is were possibly embarrassed to say that they used magazines as a source of nutrition information?
2. Were the women in the semi-structured interviews misrepresenting the truth because they believe that was the answer the researcher wanted to hear?
3. Were women free to explain their own individual and complex relationship with magazines in the semi-structured interviews because of the nature of the one-on-one interview?
4. Were women more able to explain the complex relationship they have with magazines in the focus group, which primarily focused on the role of magazines in the provision of food and nutrition information, in comparison to the one-on-one interview, where issues relating to their own dietary behaviours were the focus of discussion?

It is impossible to draw any definitive conclusions without further research in this area or to determine which methods produce the most accurate representation of how women perceive and use information from the literature. It is known, however, that the published literature suggests that women identify magazines as an important source of nutrition information

(Crawford and Baghurst 1991; Radimer and Harvey 1995; Australia New Zealand Food Authority 2001; The American Dietetic Association 2002), however it is not the most trusted source of nutrition information (de Almeida, Graca et al. 1997).

Examination of the women's magazines demonstrated that these magazines did not act systematically to raise the level of trust women had in the information presented to them. Results found that information offered in women's magazines was rarely supported by expert knowledge. Editorial was most frequently written by journalists and infrequently contained information from experts. At the worst extreme, magazine editors positioned themselves as the expert through recommending particular products to magazine readers. Participants in this study stated that they did not trust the substance of food and nutrition information in women's magazines. An interesting finding from this study is that women were more likely to trust real life stories or personal opinion. Women also indicated however that they would prefer information in magazines to be supported by scientific evidence.

Women indicated in the focus group discussions that they would place more trust in information that was referenced or provided by health professionals. Previous research has indicated that the most trusted sources of nutrition information include dietitians, the National Heart Foundation and Anti-Cancer Council, and doctors. Articles in health and cooking magazines, books, food labels, family and friends were also among trusted sources (Worsley and Lea 2003). Lupton (2005) found that government departments and health authorities such as the National Heart Foundation, dietitians, university researchers and health professionals were among the most trusted sources of food risk information. However, when the participants in this study were asked to read and respond to a magazine article that contained quotes from health professionals and an advertisement that contained referenced information from an academic journal, women were still sceptical of this information. This finding was in contradiction to the women's earlier statement that they would trust information that was referenced or provided by health professionals.

#### **8.2.4 The Role of the Media and Women's Magazines**

It has been stated by sociologists that media have a role in influencing the public's experience of the social world and shaping public opinion, as a result of the provision of knowledge about the social world (Giddens 1991; Beck 1992). In addition to the media having been commonly associated with an entertainment role, it also has a role in communicating risk information to the lay population (Lupton 1993). The results of this study indicated that women are uncertain or unsure of the role women's magazines have in the provision of food and nutrition information, and this was demonstrated through contradictions in the women's discussions.

The semi-structured interviews also indicated that younger women, and in particular teenage girls, were more frequent readers of women's magazines. It was evident that teenage girls wanted more information about food and nutrition. One implication of these findings is that health professionals are missing an important opportunity to provide teenage girls, the most regular readers of women's magazines, with information about food and nutrition.

The focus group discussions revealed that women were most likely to purchase a women's magazine for its entertainment value, rather than to learn about food and nutrition issues. During the focus groups, women indicated that magazines were not an important source of nutrition information, rather magazines acted as an incidental source of information. In contrast, focus group participants also suggested that they would purchase a magazine if it contained food and nutrition information on the front cover. The semi-structured interviews revealed that the women did consider magazines to be a source of nutrition information, however they indicated a level of distrust in the information presented in women's magazines. These results suggest that women are uncertain of the role women's magazines have in the provision of food and nutrition information. It is also possible that women were unwilling to admit in a group situation the level of influence women's magazines have on them.

Content analysis of the women's magazines revealed that they are limited in the range of food and nutrition they present to women. The issues covered by magazines are very narrow, with a strong emphasis on weight loss and dieting information. In addition, it was evident from the content analysis that magazines were driven by the commercial imperative to sell products, including food and nutrition products, to women. Interestingly, the women who participated in the focus group discussions identified that women's magazines aim to sell them products. Despite this, the women who participated in the semi-structured interviews indicated that magazines did raise their awareness of food and nutrition issues. Other researchers (Kitzinger and Reilly 1997; Gray and Ropeik 2002) have demonstrated that the media do not reflect experts' concerns about the most serious and threatening health risks and this study supports these claims.

Health professionals need to recognise that the agenda of the media is not to educate the lay public about health risks, but primarily to provide entertainment and to sell advertising space. Of course if the media presented health information that was acceptable to scientists, it would not be as popular among the lay public (Naidoo and Wills 2000).

### **8.3 Limitations**

The specific limitations of each study were discussed in the relevant chapters and sections. Therefore this section will consider only those limitations that relate to the study as a whole.

A causal relationship cannot be made between the interview data and the media analysis. This was not an experimental based study. Rather, the study examined how women respond to and interpret the food and nutrition information they receive in their natural everyday environment. Women's magazines were selected for analysis because they have previously been identified as an important source of nutrition information. It was not assumed that women's magazines would be representative of the full media discourse on food and nutrition issues or of the depth with which such issues are

presented. When interpreting the results of the study as a whole, direct correlations cannot be made between the issues raised in magazines and those raised by women. It is interesting, however, to identify areas of similarity and differences between the interview data and the magazine content analysis.

It is also important to consider that the media discourse analysed in this study and the interview discourse data had different origins. The media data were created for the primary purpose of publishing a magazine for purchase and reading by the lay population. In contrast, the interview data were produced as dialogue between the researcher and the participants, guided by specific research questions. The participants were involved in this research process over a 17- month period, participating in a focus group and two interviews each with the researcher. As a result they may have been made more responsive to food and nutrition information in the media and also have been more focused on their own personal food and nutrition issues or concerns. Therefore the results of these studies could be biased in that women were made more responsive to food and nutrition issues because of their involvement in this study.

#### **8.4 Recommendations**

Based on the results of the studies undertaken for this thesis, several recommendations have been drawn. These include those relating to future research and health promotion practice.

Recommendations for future research in this area include:

- A more comprehensive media analysis including other forms of media through which women receive food and nutrition messages. For instance, news media (television news programs and newspapers) and other types of magazines such as health and medicine magazines and cooking magazines. This is particularly important given that the women who participated in this study indicated that they did not place a high degree of trust in information from women's magazines.

- Examination of the types of meal ideas and recipes that are presented in women's magazines. The women who participated in this study indicated that they often get meal ideas from women's magazines but this was not specifically explored in this study. It would be of interest to determine what types of foods are being recommended to women via meal ideas.
- Discourse analysis of the main food and nutrition messages presented in women's magazines and among women. Discourse analysis would allow researchers to gain insight into the manner in which information is presented, hence providing greater insight into how this information might be perceived by women.
- Interview journalists and/or editors of women's magazines to gain insight into how they select the stories and construct stories that are included in women's magazines regarding food and nutrition. This is particularly important given that not much is reported in the professional literature about production of food and nutrition information in the media and how journalists and/or editors determine what food and nutrition information to include.

Recommendations for health promotion practice include:

- Health professionals becoming aware of the food and nutrition messages presented in the media. By being aware of the types of food and nutrition messages, health professionals will be better able to counter negative or detrimental messages.
- Health professionals writing for the media or positioning themselves as accessible to the media to promote healthy and positive food and nutrition messages. It would be important in this case that health professionals be given some media training in order to write press releases or articles that are appropriate for the style of publication and audience, and include information on their professional training and experience.

- Provision of greater (and appropriate) food and nutrition information to teenage girls so that they are equipped to make healthy food choices and gain control over their food decisions. The teenage girls who participated in this study indicated that there is a lack of food and nutrition information in magazines targeted at their age group and expressed the desire for this type of information.
- Taking the focus off individual weight and dieting and encouraging people to think about their health and broader issues relating to food and nutrition.

### ***8.5 Implications for health promotion practice***

The results of this study indicated that both women and women's magazines have a very narrow focus on food and nutrition issues. Both the women and the magazines were predominantly preoccupied with weight loss and dieting. While obesity is a considerable problem in Australia, the focus among women and in the women's magazines was from a body image perspective, rather than a health improvement perspective. This finding has some important implications for health promotion practice. If health professionals want the lay public to be aware of broader food and nutrition issues and to consider these issues in their food choices, these issues need to be presented in the media in a manner that is acceptable to the population. The results of this study indicated that the women's magazines were limited in their ability to provide food and nutrition information because of the lack of trust and level of skepticism women have in the information contained within these magazines. The content analysis also revealed a lack of expert input into magazine articles. For this situation to be rectified health professionals need to have greater involvement in the provision of food and nutrition information via women's magazines.



## 9 Reference List

- Alexander, J. and B. Tepper (1995). "Use of reduced-calorie/reduced-fat foods by young adults: influence of gender and restraint." Appetite **25**(3): 217-230.
- Allen, A. (1995). "The Nutrition Facts Label in the print media: A content analysis." Journal of the American Dietetic Association **95**(3): 348-351.
- American Cancer Society (2005). Weighing In on Low-Carb Diets. [http://www.cancer.org/docroot/SPC/content/SPC\\_1\\_A\\_Low\\_Carb\\_Diet\\_to\\_Prevent\\_Cancer.asp.26](http://www.cancer.org/docroot/SPC/content/SPC_1_A_Low_Carb_Diet_to_Prevent_Cancer.asp.26) August 2005
- American Council on Science and Health (2001). Nutrition accuracy in popular magazines (January 1997-December 1999). New York, American Council on Science and Health.
- American Dietetic Association (2002). Nutrition and You: Trends 2002.
- American Obesity Association (2002). Discrimination. <http://www.obesity.org/discrimination/employment.shtml.22> August 2005
- Anhang, R., J. Stryker, et al. (2004). "News media coverage of human papillomavirus." Cancer **100**: 308-14.
- Anonymous (1997). Meat watchdog to monitor food safety issues needed. Herald and Weekly Times: 2.
- Anonymous (2004). Fact or fiction - the thirst for knowledge. The West Australian. Perth: 9.
- Arvola, A., L. Lahteenmaki, et al. (1999). "Predicting the intent to purchase unfamiliar and familiar cheeses: the effects of attitudes, expected liking and food neophobia." Appetite **32**: 113-126.
- Asp, E. H. (1999). "Factors affecting food decisions made by individual consumers." Food Policy **24**(2-3): 287-294.
- Australia New Zealand Food Authority (2000). GM foods and the consumer: ANZFA's safety assessment process for genetically modified foods. Canberra, Australia New Zealand Food Authority.
- Australia New Zealand Food Authority (2001). Food labelling issues - consumer qualitative research. Canberra, Australia New Zealand Food Authority.
- Australian Bureau of Statistics (1995a). National health survey: summary of results. Canberra, Australian Government Publishing Service: Cat 4364.0.
- Australian Bureau of Statistics (1995b). National nutrition survey selected highlights Australia. Canberra, Department of Health and Family Services: Cat 4802.0.
- Australian Bureau of Statistics (1995c). National nutrition survey: nutrient intakes and physical measurements. Canberra, Australian Government Publishing Service: Cat. 4805.0.
- Australian Consolidated Press (2004a). Australian Women's Weekly, ACP Pty Ltd. <http://www.acp.com.au/magazinetitles/MWomen/aww/default.asp.4> November 2004
- Australian Consolidated Press (2004b). Cleo, ACP. <http://www.cleo.acp.com.au/profile.html.4> November 2004

- Australian Consolidated Press (2004c). Cosmopolitan, ACP4 November 2004
- Australian Consolidated Press (2004d). Dolly, ACP.<http://www.acp.com.au/magazinetitles/WLifestyle/dolly/default.asp> 4 November 2004
- Australian Consolidated Press (2004e). Woman's Day, ACP.<http://www.acp.com.au/magazinetitles/MWoman?WD/default.asp> 4 November 2004
- Australian Consumer Association (2003). Special report - genetically modified foods, Australian Consumer Association. **07/03**.<http://www.choice.com.au/viewArticle.aspx?id=100255&catId=100288&tid=100008&p=1.1> July 2005
- Australian Government Department of Health and Ageing, P. H. D. (2003). National Alcohol Campaign - Campaign outline. **5 June, 2003**.[http://www.nationalalcoholcampaign.health.gov.au/campaign/campaign\\_outline.htm.9](http://www.nationalalcoholcampaign.health.gov.au/campaign/campaign_outline.htm.9) June 2005
- Australian Government Department of Health and Ageing, P. H. D. (2005). National Drugs Campaign. **17 April 2005**.<http://www.drugs.health.gov.au/campaign/about.htm.9> June 2005
- Australian Institute of Health and Welfare (2000). Australia's health 2000: the seventh biennial health report of the Australian Institute of Health and Welfare. Canberra, Australian Institute of Health and Welfare.
- Ayroob, K., R. Duyff, et al. (2002). "Position of the American Dietetic Association: food and nutrition misinformation." Journal of the American Dietetic Association **102**(2): 260-266.
- Baghurst, K. and C. Binns (2002). Dietary guidelines for Australian adults: preface. Canberra, National Health and Medical Research Council: vii-ix.
- Barr, S. (1989). "Nutrition in food advertising: content analysis of a Canadian women's magazines, 1928-1986." Journal of Nutrition Education **21**(2): 64-74.
- Barratt, A. L., J. Cockburn, et al. (1997). Report on the 1996 Breast Health Survey. Woolloomooloo NSW, NHMRC National Breast Cancer Centre.
- Bauman, A., B. Bellew, et al. (2001). "Impact of Australian mass media campaign targeting physical activity in 1998." American journal of Preventive Medicine **21**(1): 41-47.
- Bawden, T. (2004). Water pours into Coke's profits. The Advertiser: 39.
- Beard, T. C., D. R. Woodward, et al. (1997). "The Hobart salt study 1995: few meet national sodium intake target." Medical Journal of Australia **166**: 404-407.
- Beck, U. (1992). Risk society: towards a new modernity. London, SAGE Publications Inc.
- Beck, U. (1994). The reinvention of politics: towards a theory of reflexive modernisation. Reflexive modernisation: politics, traditions and aesthetics in the modern social order. U. Beck, A. Giddens and S. Lash. Cambridge, Polity Press.
- Begley, A. and G. Cardwell (1996). "The reliability of nutrition information in Australian women's magazines." Australian Journal of Nutrition and Dietetics **53**(4): 160 -166.
- Beitelspacher (n.d). Go a head beef up your diet. Beef Mag.

- Bender, M. and B. Derby (1992). "Prevalence of reading nutrition and ingredient information on food labels among adult Americans: 1982 - 1988." Journal of Nutrition Education **24**(6): 292-297.
- Berg, B. (2001a). An introduction to content analysis. Qualitative research methods for the social science. Boston, Allyn and Bacon: 238-268.
- Berg, B. (2001b). Qualitative research methods for the social sciences. Needham Heights, MA, Allyn & Bacon.
- Bilsborough, S. A. and T. C. Crowe (2003). "Low-carbohydrate diets: what are the potential short-and long-term health implications?" Asia Pacific Journal of Clinical Nutrition **12**(4): 396-404.
- Bisogni, C., M. Connors, et al. (2002). "Who are we and how we eat: a qualitative study of identities in food choice." Journal of Nutrition Education & Behavior **34**(3): 128-139.
- Blaylock, J., D. Smallwood, et al. (1999). "Economics, food choices, and nutrition." Food Policy **24**(2-3): 269-286.
- Booth, S., J. Mayer, et al. (2001). "Environmental and societal factors affect food choice and physical activity: rationale, influences and leverage points." Nutrition Reviews **59**(3 (part 2)): S21-S39.
- Borland, R. and J. Blamford (2003). "Understanding how mass media campaigns impact on smokers." Tobacco Control **12**(3): 45-50.
- Borra, S., R. Earl, et al. (1998). "Paucity of nutrition and food safety 'news you can use' reveals opportunity for dietetics practitioners." Journal of the American Dietetic Association **98**(2): 190-193.
- British Medical Association (1990). The BMA guide to living with risk. London, England, Penguin Books.
- Brown, D. (1998). Mad cow disease link hidden - expert. The West Australian: 9.
- Brown, J., S. Chapman, et al. (1996). "Infinitesimal risk as public health crisis: news media coverage of a doctor-patient HIV contact tracing investigation." Social Science & Medicine **43**(12): 1685-1695.
- Brunt, M., M. Murray, et al. (2003). "Mass media release of medical research results: an analysis of antihypertensive drug prescribing in the aftermath of the calcium channel blocker scare of March 1995." Journal of General Internal Medicine **18**: 84-94.
- Byrd-Bredbenner, C. and D. Grasso (1999). "Prime-time health: an analysis of health content in television commercials broadcast during programs viewed heavily by children." International Electronic Journal of Health Education **2**(4): 159-169.
- Byrd-Bredbenner, C. and D. Grasso (2000). "What is television trying to make children swallow?: Content analysis of the nutrition information in prime-time advertisements." Journal of Nutrition Education **32**(4): 187-195.
- Cameron, A., T. Welborn, et al. (2003). "Overweight and obesity in Australia: the 1999-2000 Australian diabetes, obesity and lifestyle study (AusDiab)." Medical Journal of Australia **178**: 427-432.
- Campbell, M. K., B. M. DeVellis, et al. (1994). "Improving dietary behavior: the effectiveness of tailored messages in primary care settings. 84, 783-787." American Journal of Public Health **84**: 783-787.
- Caraher, M. and J. Coveney (2004). "Public health nutrition and food policy." Public Health Nutrition **7**(5): 591-598.

- Casse, F. and F. O. Hervieu (2002). "GMOs in food: risk assessment, scientific management and regulatory aspect." Bulletin De L Academie Nationale De Medecine **186**(8): 1377-1389.
- Cattle Council (n.d). History of beef in Australia.
- Chan, C., C. Patch, et al. (2005). "Australian consumers are sceptical about but influenced by claims about fat on food labels." European Journal of Clinical Nutrition **59**: 148-151.
- Christenson, P. G. (1982). "Children's perceptions of TV commercials and products: The effects of PSA's." Communication Research **9**(4): 491-524.
- Christophe, B. (2000). "The 1999 Belgian food crisis. Development and management." Biomedical Research-Tokyo **21**(6): 345-352.
- Coll, M., A. Meyers, et al. (1979). "Obesity and food choices in public places." Archives in General Psychiatry **36**: 795-797.
- Commonwealth of Australia (1998). The Australian Guide to Healthy Eating: background information for nutrition educators. Canberra, Government Publishing Service.
- Commonwealth of Australia (2004). Women in Australia. Canberra, Department of Family and Community Services.
- Cooke, J. (2000a). Is Australia safe? Sydney Morning Herald. Sydney: 36.
- Cooke, J. (2000b). Mad Cow Disease explosion in Britain would hit Australia, too. Sydney Morning Herald. Sydney: 23.
- Coon, K. A., J. Goldberg, et al. (2001). "Relationships Between Use of Television During Meals and Children's Food Consumption Patterns." Pediatrics **107**(1): e7-11.
- Covello, V. and R. Peters (2002). "Women's perceptions of the risks of age-related diseases, including breast cancer: reports from a 3-year research study." Health Communication **14**(3): 377-395.
- Coveney, J. (2000). Food, morals and meaning: the pleasure and anxiety of eating. London, Routledge.
- Coveney, J. and F. Baum (1996). Socioeconomic status, gender and family food choice. Multidisciplinary approaches to food choice. A. Worsley. Adelaide, Food Choice Conference, Adelaide Australia.
- Craig, P. and A. Truswell (1990). "Dynamics of food habits of newly married couples: weight and exercise patterns." Australian Journal of Nutrition and Dietetics **47**(2): 42-46.
- Crawford, D. and K. Baghurst (1991). "Nutrition information in Australia- the public's view." Australian Journal of Nutrition and Dietetics **48**: 40-44.
- Crawford, D., R. W. Jeffery, et al. (2000). "Can anyone successfully control their weight? Findings of a three year community-based study of men and women." International Journal of Obesity and Related Metabolic Disorders **24**: 1107-1110.
- Crawley, H. and D. While (1996). "Parental smoking and the nutrient intake and food choice of British teenagers aged 16-17 years." Journal of Epidemiology and Community Health **50**(3): 306-312.
- Crockett, S. and L. Sims (1995). "Environmental influences on children's eating." Journal of Nutrition Education **27**(5): 235-249.
- Croll, J., D. Neumark-Sztainer, et al. (2001). "Healthy eating: What does it mean to adolescents." Journal of Nutrition Education **33**: 193-198.

- Croteau, D. and W. Hoynes (2003). Media society: industries, images and audiences. Thousand Oaks, California, Sage Publications.
- Crotty, P. (1995). Good nutrition? fact and fashion in dietary advice. St Leonards, Australia, Allen & Unwin Pty Ltd.
- Cullen, K., T. Baranowski, et al. (2001). "Child-reported family and peer influences on fruit, juice and vegetable consumption: reliability and validity of measures." Health Education Research **16**(2): 187-200.
- de Almeida, M. D., P. Graca, et al. (1997). "Sources used and trusted by nationally-representative adults in the European Union for information on healthy eating." European Journal of Clinical Nutrition **51**(Suppl 2): S16 - S22.
- Delaney, F. and L. Adams (1997). "Preventing skin cancer through mass media: process evaluation of a collaboration of health promotion agencies." Journal of Health Education **56**(3): 274-86.
- Dennison, C. M. and R. Shepherd (1995). "Adolescent food choice: an application of the Theory of Planned Behaviour." Journal of Human Nutrition and Dietetics **8**: 9-23.
- Dentzer, S. (2003). "Science, public health and public awareness: lessons from the Women's Health Initiative." Annals of Internal Medicine **138**(4): 352-353.
- deTurck, M. A., G. M. Goldhaber, et al. (1995). "Effectiveness of alcohol beverage warning labels: Effects of consumer information processing objectives and color of signal word." Journal of Products and Toxics Liability **17**(3): 187-195.
- Devine, C., M. Connors, et al. (1998). "Life-course influences on fruit and vegetable trajectories: qualitative analysis of food choices." Journal of Nutrition Education **30**(6): 361-370.
- Devine, C., M. Connors, et al. (2003). "Sandwiching it in: spillover of work onto food choices and family roles in low- and moderate-income urban households." Social Science & Medicine **56**: 617-630.
- Devine, C., J. Sobal, et al. (1999). "Food choices in three ethnic groups: interactions of ideals, identities and roles." Journal of Nutrition Education **31**(2): 86-93.
- Devine, C., W. Wolfe, et al. (1999). "Life-course events and experiences: association with fruit and vegetable consumption in 3 ethnic groups." Journal of the American Dietetic Association **99**(3): 309-314.
- Dixon-Woods, M., C. Seale, et al. (2003). "Representing childhood cancer: accounts from newspapers and parents." Sociology of Health and Illness **25**(2): 143-164.
- Drewnowski, A. and N. Darmon (2005). "Food choices and diet costs: an economic analysis." Journal of Nutrition **135**(4): 900-904.
- Drewnowski, A. and C. Hann (1999). "Food preferences and reported frequencies of food consumption as predictors of current diet in young women." Am J Clin Nutr **70**(1): 28-36.
- Driedger, S. and J. Eyles (2003). "Different frames, different fears: communicating about chlorinated drinking water and cancer in the Canadian media." Social Science & Medicine **56**: 1279-1293.
- Egger, G., R. Donovan, et al. (1997). Health and the media: principles and practices for health promotion. Sydney, McGraw-Hill Book Company Australia Pty Ltd.

- Evans, A., H. Booth, et al. (2000). "Sociodemographic determinants of energy, fat and dietary fibre intake in Australian adults." Public Health Nutrition **3**(1): 67-75.
- Favaro, A. and P. Santonastaso (1995). "Effects of parents' psychological characteristics and eating behaviour on childhood obesity and dietary compliance." Journal of Psychosomatic Research **39**(2): 145-151.
- Feunekes, G. I., C. de Graaf, et al. (1998). "Food choice and fat intake of adolescents and adults: associations of intakes within social networks." Preventive Medicine **27**(5 Pt 1): 645-56.
- Fineberg, H. and S. Rowe (1998). "Improving public understanding: guidelines for communicating emerging science on nutrition, food safety and health." Journal of the National Cancer Institute **90**(3): 194-199.
- Finley, D. A., K. G. Dewey, et al. (1985). "Food choices of vegetarians and nonvegetarians during pregnancy and lactation." Journal of the American Dietetic Association **85**(6): 678-85.
- Fischer, A. R. H., A. E. I. de Jong, et al. (2005). "Improving food safety in the domestic environment: The need for a transdisciplinary approach." Risk Analysis **25**(3): 503-517.
- Fischer, P. M., D. M. Krugman, et al. (1993). "An evaluation of health warnings in cigarette advertisements using standard marketing research methods: What does it mean to warn?" Tobacco Control **2**: 279-285.
- Fischler, C. (1988). "Food, Self and Identity." Social Science Information/Information Sur Les Sciences Sociales **27**(2): 275-292.
- Freegard, J. (2005). Tap into water. Herald-Sun. Sydney: 24.
- French, S., A. J. Maule, et al. (2005). "Soft modelling in risk communication and management: examples in handling food risk." Journal of the Operational Research Society **56**(8): 879-888.
- Frost, K., E. Frank, et al. (1997). "Relative risk in the news media: a quantification of misrepresentation." American journal of Public Health **87**(5): 842-845.
- Fung, T. T., F. B. Hu, et al. (2005). "Dietary patterns and the risk of postmenopausal breast cancer." International Journal of Cancer **116**(1): 116-121.
- Furst, E. L. o. (1997). "Cooking and femininity." Women's Studies International Forum **20**(3): 441-449.
- Furst, T., M. Connors, et al. (1996). "Food choice: a conceptual model of the process." Appetite **26**(3): 247-266.
- Gabriel, Y. and T. Lang (1995). The unmanageable consumer: contemporary consumption and its fragmentations. London, SAGE Publications Ltd.
- Gauntlett, D. (2002). Media, gender and identity - an introduction. New York, Routledge.
- Georgiou, C., N. Betts, et al. (1996). "Young adult exercisers differ in food attitudes, perceived dietary changes and food choices." International Journal of Sport Nutrition **6**: 402-413.
- Germov, J. and L. Williams (2004). A sociology of food and nutrition: the social appetite (second edition). Melbourne, Oxford University Press.
- Giddens, A. (1991). Modernity and self identity: self and society in the late modern age. Cambridge, Polity Press.

- Giddens, A. (1994). Living in a post-traditional society. Reflexive modernisation: politics tradition and aesthetics in the modern social order. U. Beck, A. Giddens and S. Lash. Cambridge, Polity Press.
- Giddens, A. (1997). Sociology -3rd edition. Cambridge, UK, Polity Press.
- Giddens, A. and C. Pierson (1998). Conversations with Anthony Giddens: making sense of modernity. Cambridge, Polity Press.
- Glanz, K., M. Basil, et al. (1998). "Why American eat what they do: taste, nutrition cost, convenience and weight control concerns as influences on food consumption." Journal of the American Dietetic Association **98**(10): 1118-1126.
- Golafshani, N. (2003). "Understanding reliability and validity in qualitative research." The Qualitative Report **8**(4): 597-607.
- Goldberg, J. (1992). "Nutrition and health communication: the message and the media over half a century." Nutrition Reviews **50**: 71-77.
- Goldberg, J. P. and J. P. Hellwig (1997). "Nutrition research in the media: the challenge facing scientists." Journal of the American College of Nutrition **16**(6): 544-50.
- Government Department of Health and Ageing (2004). Quit Now - The National Tobacco Campaign. **10 August 2004**. <http://www.quitnow.info.au/smokescreen/smokescreen.html.9> June 2005
- Gracey, M. (2000). "Historical, cultural, political, and social influences on dietary patterns and nutrition in Australian Aboriginal children." American Journal of Clinical Nutrition **72**(5 Suppl): 1361S-1367S.
- Gray, G. M. and D. P. Ropeik (2002). "Dealing with the dangers of fear: The role of risk communication." **21**(6): 106-117.
- Green, J., A. Draper, et al. (2003). "Short cuts to safety: risks and 'rules of thumb' in accounts of food choice." Health, Risk and Society **5**(1): 33-52.
- Green, J. and N. Thorogood (2004). Qualitative methods for health research. London, Sage Publications.
- Gribble, L., G. Falciglia, et al. (2003). "A curriculum based on social learning theory emphasizing fruit exposure and positive parent child-feeding strategies: A pilot study." Journal of the American Dietetic Association **103**(1): 100-103.
- Gross, K. and S. Aday (2003). "The scary world in your living room and neighborhood: Using local broadcast news, neighborhood crime rates, and personal experience to test agenda setting and cultivation." Journal of Communication **53**(3): 411-426.
- Guillen, E. and S. Barr (1994). "Nutrition, dieting and fitness messages in a magazine for adolescent women, 1970-1990." Journal of Adolescent Health **15**(6): 464-472.
- Halford, J., J. Gillespie, et al. (2004). "Effect of television advertisements for foods on food consumption in children." Appetite **42**: 221-225.
- Hammond, K., A. Wyllie, et al. (1999). "The extent and nature of televised food advertising to New Zealand children and adolescents." Australian & New Zealand Journal of Public Health **23**(1): 49-55.
- Harnack, L., G. Block, et al. (1997). "Association of cancer prevention-related nutrition knowledge, beliefs, and attitudes to cancer prevention dietary behavior." Journal of the American Dietetic Association **97**(9): 957-965.



- Harnack, L., M. Story, et al. (1998). "Guess who's cooking? The role of men in meal planning, shopping, and preparation in US families." Journal of the American Dietetic Association **98**(9): 995-1000.
- Harvard School of Public Health (2005). Interpreting news on diet, Harvard School of Public Health. <http://www.hsph.harvard.edu/nutritionsource/media.html>.23 August 2005
- Haskell, S. (2004). "After the women's health initiative: postmenopausal women's experiences with discontinuing estrogen replacement therapy." Journal of Women's Health **13**(4): 438-442.
- Hearn, M., T. Baranowski, et al. (1998). "Environmental influences on dietary behaviour among children: availability and accessibility of fruits and vegetables enable consumption." Journal of Health Education **29**(1): 26-32.
- Henderson, L., J. Kitzinger, et al. (2000). "Representing infant feeding: content analysis of British media portrayals of bottle feeding and breast feeding." British Medical Journal **321**(7270): 1196-1198.
- Hermes, J. (1995). Reading women's magazines. Cambridge, UK., Polity Press.
- Hickman, B., G. Gates, et al. (1993). "Nutrition claims in advertising: a study of four women's magazines." Journal of Nutrition Education **25**(5): 227-235.
- Hill, J. and K. Radimer (1996). "Health and nutrition messages in food advertisements: a comparative analysis of young and mature Australian women's magazines." Journal of Nutrition Education **28**(6): 313-320.
- Hitchings, E. and P. Moynihan (1998). "The relationship between television food advertisements recalled and actual food consumed by children." Journal of Human Nutrition and Dietetics **11**: 511-517.
- Holsti, O. R. (1969). Content analysis for the social sciences and humanities, Addison-Wesley.
- Houn, F., M. Bober, et al. (1995). "The association between alcohol and breast cancer: popular press coverage of research." American journal of Public Health **85**(8): 1082 - 1086.
- Hupkens, C. L., R. A. Knibbe, et al. (1998). "Class differences in the food rules mothers impose on their children: a cross-national study." Social Science & Medicine **47**(9): 1331-1339.
- Jensen, H. and T. Kesavan (1993). "Sources of information, consumer attitudes on nutrition, and consumption of dairy products." The Journal of Consumer Affairs **27**(2): 357-376.
- Johnson, T. (1998). "Shattuck lecture - medicine and the media." The New England Journal of Medicine **339**(2): 87-92.
- Jones, S. (2004). "Coverage of breast cancer in the Australian print media - does advertising and editorial coverage reflect correct social marketing messages?" Journal of Health Communication **9**: 309-325.
- Jones, S. and R. Donovan (2001). "Messages in alcohol advertising targeted to youth." Australian & New Zealand Journal of Public Health **25**(2): 126-131.



- Kaplan, R. M., B. Hammel, et al. (1985). "Patient information processing and the decision to accept treatment." Journal of Soc Behav Pers **1**(1): 113-120.
- Karvelas, P. and J. Sexton (2003). Pan 'sold products capable of killing'. The Australian: 5.
- Kelder, S., C. Perry, et al. (1994). "Longitudinal tracking of adolescent smoking, physical activity and food choice behaviour." American journal of Public Health **84**(7): 1121-1126.
- Kemmer, D., A. Anderson, et al. (1998). "Living together and eating together: changes in food choice and eating habits during transition from single to married/cohabiting." Sociological Review **46**(1): 48-72.
- Khan, M. A. (1981). "Evaluation of food selection patterns and preferences." CRC. Critical Reviews in Food Science and Nutrition **15**: 129-153.
- Kirby, S., T. Baranowski, et al. (1995). "Children's fruit and vegetable intake: socioeconomic, adult-child, regional and urban-rural influences." Journal of Nutrition Education **27**(5): 261-271.
- Kitzinger, J. and J. Reilly (1997). "The rise and fall of risk reporting: media coverage of human genetics research, 'false memory syndrome' and 'mad cow disease'." European Journal of Communication **12**(3): 319-350.
- Kloeblen, A. S. and S. S. Batish (1999). "Understanding the intention to permanently follow a high folate diet among a sample of low-income pregnant women according to the Health Belief Model." Health Educ. Res. **14**(3): 327-338.
- Kondracki, N., N. Wellman, et al. (2002). "Content Analysis: review of methods and their applications in nutrition education." Journal of Nutrition Education & Behavior **34**: 224-230.
- Korinis, M., M. Korslund, et al. (1998). "Comparison of calcium and weight loss information in teen-focused versus women's magazines over two 4-year periods (1986-1989 and 1991-1994)." Journal of Nutrition Education **30**: 149-154.
- Kotler, P., L. Brown, et al. (2003). Marketing, 6th edition. Sydney, Prentice Hall Australia.
- Kotz, K. and M. Story (1994). "Food advertising during children's Saturday morning television programming: are they consistent with dietary recommendations?" Journal of the American Dietetic Association **94**(11): 1296-1300.
- Kraak, V. and D. Pelletier (1998a). "How marketers reach young consumers: implications for nutrition education and health promotion campaigns." Family Economics and Nutrition Review **11**(4): 31-41.
- Kraak, V. and D. Pelletier (1998b). "The influence of commercialism on the food behavior of children and teenage youth." Family Economics and Nutrition Review **11**(3): 15.
- Krippendorff, K. (1980). Content analysis: an introduction to it's methodology. Newbury Park, California, SAGE Publications, Inc.
- Krueger, R. A. and M. A. Casey (2000). Focus groups: a practical guide for applied research. Thousand Oaks, California, SAGE Publications, Inc.
- Kulikov, A. M. (2005). "Genetically modified organisms and risks of their introduction." Russian Journal of Plant Physiology **52**(1): 99-111.

- Lahti-Koski, M., P. Pietinen, et al. (2002). "Associations of body mass index and obesity with physical activity, food choices, alcohol intake, and smoking in the 1982-1997 FINRISK Studies." American Journal of Clinical Nutrition **75**: 809-817.
- Lawrence, G., G. Bammer, et al. (2000). "'Sending the wrong signal': Analysis of print media reportage of the ACT heroin prescription trial proposed, August 1997." Australian & New Zealand Journal of Public Health **24**(3): 254-264.
- Lennernas, M., C. Fjellstrom, et al. (1997). "Influences on food choice perceived to be important by nationally-representative samples of adults in the European Union." European Journal of Clinical Nutrition **51**(Supplement 2): S8-S15.
- Lennernas, M., L. Hambræus, et al. (1995). "Shift related dietary intake in day and shift workers." Appetite **25**(3): 253-265.
- Leosdottir, M., P. M. Nilsson, et al. (2005). "Dietary fat intake and early mortality patterns - data from The Malmo Diet and Cancer Study." Journal of Internal Medicine **258**(2): 153-165.
- Lester, I. (1994). Australia's food and nutrition: Australian Institute of Health and Welfare. Canberra, Australian Government Publishing Service.
- Lindeman, M. and M. Sirelius (2001). "Food choice ideologies: the modern manifestations of normative and humanist views of the world." Appetite **37**: 175-184.
- Lindeman, M. and K. Stark (1999). "Pleasure, pursuit of health or negotiation of identity? Personality correlates of food choice motives among young and middle-aged women." Appetite **33**(1): 141-61.
- Lindeman, M. and K. Stark (2000). "Loss of pleasure, ideological food choice reasons and eating pathology." Appetite **35**(3): 263-8.
- Ling, J., B. Franklin, et al. (1992). "Social marketing: its place in public health." Annual Reviews of Public Health **13**: 341-362.
- Lohmann, J. and A. Kant (1998). "Effect of the food guide pyramid on food advertising." Journal of Nutrition Education **30**(1): 23-28.
- Lohmann, J. and A. Kant (2000). "Comparison of food groups and health claims appearing in food advertisements in three popular magazine categories." Journal of the American Dietetic Association **100**(11): 1396-1399.
- Lundberg, U., B. Rasch, et al. (1991/1992). "Psychological reactivity and type A behavior in pre-school children: a longitudinal study." Behavioral Medicine: 149-157.
- Lupton (1996). Food, the body and the self. London, SAGE Publications.
- Lupton, D. (1992). "Discourse analysis: a new methodology for understanding the ideologies of health and illness." Australian Journal of Public Health **16**(2): 145-150.
- Lupton, D. (1993). "Risk as moral danger: the social and political functions of risk discourse in public health." International Journal of Health Services **23**(3): 425-435.
- Lupton, D. (1994). Analysing news coverage. The fight for public health - principles and practice of media advocacy. S. Chapman and D. Lupton. London, BMJ Publishing Group.

- Lupton, D. (1995). "Medical and health stories on the Sydney Morning Herald's front page." Australian Journal of Public Health **19**(5): 501-508.
- Lupton, D. (1998). "Doctors in the news media: lay and medical audiences' responses." Journal of Sociology **34**(1): 35-48.
- Lupton, D. (1999a). Content Analysis. Handbook for research methods in health sciences. V. Minichello, G. Sullivan, K. Greenwood and R. Axford. Sydney, Australia, Addison Wesley Longman Australia Pty Limited: 449-461.
- Lupton, D. (1999b). Risk. London, Routledge.
- Lupton, D. (2004). "A grim health future': food risks in the Sydney press." Health, Risk & Society **6**(2): 187-200.
- Lupton, D. (2005). "Lay discourses and beliefs related to food risks: an Australian perspective." Sociology of Health and Illness **27**(4): 448-467.
- Lupton, D. and S. Chapman (1995). "A healthy lifestyle might be the death of you': discourses on diet, cholesterol control and heart disease in the press and among the lay public." Sociology of Health and Illness **17**(4): 477-494.
- Lupton, D. and J. McLean (1998). "Representing doctors: discourses and images in the Australian press." Social Science & Medicine **46**(8): 947-958.
- Lutz, S., D. Smallwood, et al. (1995). "Limited financial resources constrain food choices." FoodReview **18**(1): 13-17.
- Machado, M. (2002). Information processing and other hierarchy of effects theories, University of Texas at Austin. [http://www.ciadvertising.org/SA/fall\\_02/adv382j/machadoma/paper1/paper1main.html.25](http://www.ciadvertising.org/SA/fall_02/adv382j/machadoma/paper1/paper1main.html.25) August 2005
- Madden, H. and K. Chamberlain (2004). "Nutritional health messages in women's magazines: a conflicted space for women readers." Journal of Health Psychology **9**(4): 583-597.
- Magazine Publishers of Australia (2002a). Top 100 magazine circulation (Australia only) January to June 2002, MPA. **08/02**. <http://www.magazines.org.au.4> November 2002 2002
- Magazine Publishers of Australia (2002b). Top 100 Readership Profile - January 2002 to December 2002. Roy Morgan readership survey, MPA. **08/02**. [www.magazines.org.au.4](http://www.magazines.org.au.4) November 2004 2004
- Magazine Publishers of Australia (2004). Market composition by category - 2003, Magazine Publishers of Australia. <http://www.magazines.org.au/files/pdf/Market%20Composition%20By%20Category.pdf.3> July 2005
- Magkos, F., F. Arvaniti, et al. (2003). "Putting the safety of organic food into perspective." Nutrition Research Reviews **16**(2): 211-222.
- Malkin, B. (2003). Confusion reigns behind the counter. The Sydney Morning Herald. Sydney: 5.
- Mannisto, S., L. B. Dixon, et al. (2005). "Dietary patterns and breast cancer risk: results from three cohort studies in the DIETSCAN project." Cancer Causes & Control **16**(6): 725-733.
- Marshall, D., Ed. (1995). Food choice and the consumer. London, Blackie Academic & Professional.

- Mather, C., T. Vos, et al. (1999). The burden of disease and injury in Australia. Canberra, Australian Institute of Health and Welfare.
- Mathers, N. and Y. Huang (1998). Evaluating methods for collecting data in published research. Research into practice: essential skills for reading and applying research in nursing and health care. P. Crookes and S. Davies. London, Bailliere Tindall.
- Mathios, A. (1996). "Socioeconomic factors, nutrition and food choices: an analysis of the salad dressing market." Journal of Public Policy and Marketing **15**(1): 45-54.
- May, T. (1997). Social research - issues, methods and process 2nd edition. Buckingham, Open University Press.
- McCallum, D., S. Hammond, et al. (1991). "Communicating about environmental risks: how the public uses and perceives information sources." Health Education Quarterly **18**: 349-361.
- McCombs, M. (1997). "Building consensus: the news media's agenda-setting roles." Political Communication **14**: 433-443.
- McCombs, M. and D. Shaw (1972). "The agenda-setting function of mass media." Public Opinion Quarterly **36**: 176-187.
- McCombs, M. and D. Shaw (1993). "The evaluation of agenda-setting research: Twenty-five years in the marketplace of ideas." Journal of Communication **43**(2): 58-67.
- McCracken, E. (1993). Decoding women's magazines: from Mademoiselle to Ms. Basingstoke, Hants, Macmillan.
- McFarlane, T. and P. Pliner (1997). "Increasing willingness to taste novel foods: effects of nutrition and taste information." Appetite **28**(3): 227-238.
- McIntosh, J. and S. Blalock (2005). "Effects of media coverage of Women's Health Initiative study on attitudes and behavior of women receiving hormone replacement therapy." American Journal of Health-System Pharmacy **62**(1): 69-74.
- McKimmie, M. (2004). 100 ways to live to 100. The West Australian: 4.
- McRobbie, A. (1999). In the culture society: art, fashion and popular music. London, Routledge.
- Meiselman, H. L. and H. J. H. MacFie, Eds. (1996). Food choice, acceptance and consumption. London, Chapman & Hall.
- Meissner, H., A. Potosky, et al. (1992). "How sources of health information relate to knowledge and use of cancer screening exams." Journal of Community Health **17**(3): 153-165.
- Meyers, A., A. Stunkard, et al. (1980). "Food accessibility and food choice." Archives in General Psychiatry **37**: 1133-1135.
- Milligan, R., V. Burk, et al. (1998a). "Influences of gender and socio-economic status on dietary patterns and nutrient intakes in 18-year-old Australians." Australian and New Zealand Journal of Public Health **22**(4): 485-493.
- Milligan, R., V. Burk, et al. (1998b). "Influences of gender and socio-economic status on dietary patterns and nutrient intakes in 18-year-old Australians." Australian and New Zealand Journal of Public Health **22**(4): 485-493.
- Minichello, V., R. Aroni, et al. (1995). In-depth interviewing: principles, techniques, analysis. Second edition. Melbourne, Australia, Longman.

- Mintz, S. W. and C. M. Du Bois (2002). "The anthropology of food and eating." Annual Review of Anthropology **31**: 99-119.
- Mitchell, S. (2004). Water is it for Coke's profit fizz. Financial Review: 1.
- Morgan, D. (1988). Focus groups as qualitative research. Newbury Park, California, Sage Publications, Inc.
- Morgan, D. and R. A. Krueger (1993). When to use focus groups and why. Successful focus groups: advancing the state of the art. D. Morgan. Newbury Park, California, SAGE Publications, Inc.
- Moyer, C., L. Vishnu, et al. (2001). "Providing health information to women - the role of magazines." International Journal of Technology Assessment in Health Care **17**(1): 137-145.
- Moynihan, R., L. Bero, et al. (2000). "Coverage by news media of the benefits and risks of medications." The New England Journal of Medicine **342**(22): 1645 - 1650.
- Murcott, A. (1997). "'The nations diet': an overview of early results." British Food Journal **99**(3): 89-96.
- Murcott, A., Ed. (1998). The nations diet: the social science of food choice. New York, Addison Wesley Longman Limited.
- Naidoo, J. and J. Wills (1995). Health promotion, foundations for practice. London, Bailliere Tindall.
- Naidoo, J. and J. Wills (2000). Health promotion: foundations for practice. London, Bailliere Tindall.
- National Health and Medical Research Council (2003). Dietary guidelines for Australian Adults - a guide to healthy eating. Canberra.
- Nayga, R. (1997). "Impact of sociodemographic factors on perceived importance of nutrition in food shopping." The Journal of Consumer Affairs **31**(1): 1-9.
- Nayga, R. (1999). "Retail health marketing evaluating consumers' choice for healthier foods." Health Marketing Quarterly **16**(4): 53-65.
- Needham, K. and C. Marriner (2003). Tainted pill blamed for death. The Sydney Morning Herald. Sydney: 2.
- Nestle, M., R. Wing, et al. (1998). "Behavioral and social influences on food choice." Nutrition Reviews **56**(5 (part two)): S50-S74.
- Neumark-Sztainer, D., M. Story, et al. (1999). "Factors influencing food choices of adolescents: findings from focus group discussions with adolescents." Journal of the American Dietetic Association **99**(8): 929-935.
- Nicklaus, S., V. Boggio, et al. (2005). "A prospective study of food variety seeking in childhood, adolescence and early adult life." Appetite **44**(3): 289-297.
- Noble, T. (2003). List of Pan-ban products grows. The Age: 2.
- Oh, M., D. Grimley, et al. (2002). "Mass media as a population-level intervention tool for chlamydia trachomatis screening: a report of a pilot study." Journal of Adolescent Health **31**(1): 40-7.
- Pacific Publications (2004a). Girlfriend, Pacific Publications. <http://www.pacpubs.com.au/display.cfm?objectid=72651D2E-5561-4493-AF62DB1ED9525146.4> November 2004 2004
- Pacific Publications (2004b). New Idea, Pacific Publications. <http://www.pacpubs.com.au.4> November 2004

- Pacific Publications (2004c). That's Life!, Pacific Publications.<http://www.pacificpublications.com.au.4> November 2004 2004
- Passalacqua, R., C. Caminiti, et al. (2004). "Effects of media information on cancer patients' opinions, feelings, decision making process and physician-patient communication." Cancer **100**: 1077-84.
- Patterson, B., L. Harlan, et al. (1995). "Food choices of whites, blacks and Hispanics: data from the 1987 National Health Survey Interview." Nutrition and Cancer **23**(2): 105-119.
- Patterson, R., J. Satia, et al. (2001). "Is there a consumer backlash against the diet and health message?" Journal of the American Dietetic Association **101**: 37-41.
- Patton, M. (1990). Qualitative evaluation and research methods. Newbury Park, SAGE Publications.
- Patton, M. (1999). "Enhancing the quality and credibility of qualitative analysis." Health Services Research **34**(5): 1189.
- Pirouznia, M. (2001). "The association between nutrition knowledge and eating behavior in male and female adolescents in the US." International Journal of Food Sciences & Nutrition **52**(2): 127-32.
- Pollard, T., A. Steptoe, et al. (1998). "Motives underlying healthy eating: using the food choice questionnaire to explain variation in dietary intake." Journal of Biosocial Science **30**(2): 165-179.
- Potter, B., J. Sheeshka, et al. (2000). "Content analysis of infant feeding messages in a Canadian women's magazine, 1945 to 1995." Journal of Nutrition Education(324): 196-203.
- Pratt, C. and C. Pratt (1995). "Comparative content analysis of food and nutrition advertisements in Ebony, Essence and Ladies' Home Journal." Journal of Nutrition Education **27**(1): 11-17.
- Putnam, J., L. Kantor, et al. (2000). "Per Capita food supply trends: progress toward dietary guidekines." FoodReview **23**(3): 2-14.
- QSR (2001). NVivo [software]. Doncaster, Australia, QSR International.
- Radimer, K. (1995). "Assessment of magazine weight reduction diets for consistency with dietary guidelines and targets." Australian Journal of Nutrition and Dietetics **52**: 16 - 23.
- Radimer, K. and P. Harvey (1995). "Where do Queenslanders get nutrition information." Australian Journal of Nutrition and Dietetics **52**(2): 94-99.
- Rauhe, B. and S. Massad (1999). "Magazines teens are reading: what health-related messages are they getting." Journal of Health Education **30**(3): 152-156, 172.
- Reger, B., L. Cooper, et al. (2002). "Wheeling walk: a community campaign using paid media to encourage walking among sedentary older adults." Preventive Medicine **35**(3): 285-292.
- Reynolds, K., A. Hinton, et al. (1999). "Social cognitive model of fruit and vegetable consumption in elementary school children." Journal of Nutrition Education **31**(1): 23-30.
- Rhetorica (2004). Media: political bias.<http://rhetorica.net/bias.html.22> August 2005
- Roos, G., R. Prattala, et al. (2001). "Men, masculinity and food: interviews with Finnish carpenters and engineers." Appetite **37**: 47-56.

- Roper Starch Worldwide (1997). Americans talk about science and medical news. New York, The National Health Council Report.
- Rozin, P. (1991). "Family resemblance in food and other domains: the family paradox and the role of parental congruence." Appetite **16**: 93-102.
- Sansgiry, S. S., P. S. Cady, et al. (2001). "Consumer involvement: effects on information processing from over-the-counter medication labels." Health Marketing Quarterly **19**(1): 61-78.
- Santos, M. L. and D. A. Booth (1996). "Influences on meat avoidance among British students." Appetite **27**(3): 197-205.
- Schafer, R. B., E. Schafer, et al. (1999). "Marital food interaction and dietary behavior." Social Science & Medicine **48**(6): 787-96.
- Seale, C. (2003). "Health and media: an overview." Sociology of Health and Illness **25**(6): 513-531.
- Seale, C., G. Gobo, et al., Eds. (2004). Qualitative research practice. London, SAGE Publications.
- Shaw, I. and B. Thomson (2003). "Acrylamide food risk." Lancet **361**(9355): 434-434.
- Shepherd, R. (1999). "Social determinants of food choice." Proceedings of the Nutrition Society **58**(4): 807-12.
- Shoemaker, P. J. and S. D. Reese (1996). Mediating the message: theories of influences in mass media content. New York, Longman.
- SIGNAL (2001). Eat Well Australia; An agenda for action for public health nutrition, National Public Health Partnership.
- Sjoberg, S., K. Kim, et al. (2004). "Applying the theory of planned behavior to fruit and vegetable consumption by older adults." Journal of Nutrition for the Elderly **23**(4): 35-46.
- Skerratt, S. (1999). "Food availability and choice in rural Scotland: the impact of "place"." British Food Journal **101**(7): 537-544.
- Skinner, J., B. Carruth, et al. (1998). "Toddlers' food preferences: Concordance with family members' preferences." Journal of Nutrition Education **30**(1): 17-22.
- Slovic, P. (1986). "Informing and educating the public about risk." Risk Analysis **6**(403-415).
- Smith, B. J., C. Ferguson, et al. (2002). "Impacts from repeated mass media campaigns to promote sun protection in Australia." Health Promot. Int. **17**(1): 51-60.
- Soroka, S. N. (2002). "Issue attributes and agenda-setting by media, the public, and policymakers in Canada." International Journal of Public Opinion Research **14**(3): 264-285.
- Soroka, S. N. (2003). "Media, public opinion, and foreign policy." Harvard International Journal of Press-Politics **8**(1): 27-48.
- Stayman, D. and R. Deshpande (1989). "Situational ethnicity." Journal of Consumer Research **16**: 361-371.
- Stein, R. and C. Nemeroff (1995). "Moral overtones of food: judgments of others based on what they eat." Journal of Personality and Social Psychology **21**(5): 480-490.
- Stephenson, M. (2003). "Mass media strategies targeting high sensation seekers: what works and why." American Journal of Health Behaviour **27**(Supplement 3): S233-8.

- Step toe, A., S. Wijetunge, et al. (1996). "Stages of change for dietary fat reduction: associations with food intake, decisional balance and motives for food choice." Health Education Journal **55**(1): 108-22.
- Stewart, B. and A. Tinsley (1995). "Importance of food choice influences for working young adults." Journal of the American Dietetic Association **95**(2): 227-231.
- Stewart, D. and P. Shamdasani (1990). Focus groups: theory and practice. Newbury Park, California, SAGE Publications.
- Story, M. and P. Faulkner (1990). "The prime time diet: a content analysis of eating behavior and food messages in television program content and commercials." American journal of Public Health **80**(6): 738-740.
- Story, M. and S. French (2004). "Food advertising and marketing directed at children and adolescents in the US." International Journal of Behavioral Nutrition and Physical Activity **1**(3): 3-19.
- Story, M., D. Neumark-Sztainer, et al. (2002). "Individual and environmental influences on adolescent eating behaviours." Journal of the American Dietetic Association **S102**(3): S40-S51.
- Surkan, P., W. Dejong, et al. (2003). "A paid radio advertising campaign to promote parent-child communication about alcohol." Journal of Health Communication **8**(5): 489-95.
- Tay, R. and B. Watson (2002). "Changing drivers' intentions and behaviours using fear-based driver fatigue advertisements." Health Marketing Quarterly **19**(4): 55-68.
- The American Dietetic Association (2002). Nutrition and you; trends 2002. Chicago, The American Dietetic Association.
- Thompson, J. B. (1995). The media and modernity: a social theory of the media. Cambridge, Polity Press.
- Timperio, A., C. Burns, et al. (2003). "'Fattening' foods - perceptions and misconceptions: a qualitative and quantitative exploration." Nutrition and Dietetics **60**: 230-238.
- Turrell, G. (1996). "Structural, material and economic influences on the food-purchasing choices of socioeconomic groups." Australian and New Zealand Journal of Public Health **20**(6): 611-617.
- Turrell, G., B. Hewitt, et al. (2002). "Socioeconomic differences in food purchasing behaviour and suggested implications for diet-related health promotion." Journal of Human Nutrition and Dietetics **15**: 355-364.
- US Department of Health and Human Services (2000). Healthy people 2010: Understanding and improving health. Washington DC, US Government Printing Office.
- US Department of Health and Human Services (2002). Communicating in a crisis: risk communication guidelines for public officials. Washington, D.C., Department of Health and Human Services.
- van Dillen, S., G. Hiddink, et al. (2003). "Understanding nutrition communication between health professionals and consumers: development of a model for nutrition awareness based on qualitative consumer research." American Journal of Clinical Nutrition **77**(Suppl): 1065S-72S.



- Variyam, J., J. Blaylock, et al. (1999). "Mother's nutrition knowledge and children's dietary intakes." American Journal of Agricultural Economics **81**(2): 373-384.
- Variyam, J., Y. Shim, et al. (2001). "Consumer misperceptions of diet quality." Journal of Nutrition Education **33**(6): 314-321.
- Vlachopoulos, C., D. Panagiotakos, et al. (2005). "Chronic coffee consumption has a detrimental effect on aortic stiffness and wave reflections." American Journal of Clinical Nutrition **81**(6): 1307-1312.
- Wahlqvist, M. L. (2004). "Requirements for healthy nutrition: integrating food sustainability, food variety, and health." Journal of Food Science **69**(1): 18-20.
- Wallace, L. and J. Ballard (2003). "Osteoporosis coverage in selected women's magazines and newspapers, 1998 - 2001." American Journal of Health Behaviour **27**(1): 75-83.
- Wanta, W., G. Golan, et al. (2004). "Agenda setting and international news: Media influence on public perceptions of foreign nations." Journalism & Mass Communication Quarterly **81**(2): 364-377.
- Wardle, J. and F. Johnson (2002). "Weight and dieting: examining levels of weight concern in British adults." International Journal of Obesity **26**(8): 1144-1149.
- Wardle, J., K. Parmenter, et al. (2000). "Nutrition knowledge and food intake." Appetite **34**: 269-275.
- Weber, R. P. (1990). Basic content analysis (University paper series on quantitative applications in social science series no. 07-004). Newbury Park, California, SAGE Publications, Inc.
- Wetter, A., J. Goldberg, et al. (2001). "How and why do individuals make food and physical activity choices?" Nutrition Reviews **59**(3): S11-S20.
- Wilson, K., C. Code, et al. (2004). "The reporting of theoretical health risks by the media: Canadian newspaper reporting of potential blood transmission of Creutzfeldt-Jakob disease." BMC Public Health **4**(1): 1.
- Woodward, D. R., F. Cumming, et al. (1997). "Does television affect teenagers' food choices?" Journal of Human Nutrition and Dietetics **10**: 229-235.
- Worsley, A., Ed. (1996). Multidisciplinary approaches to food choice. Adelaide, Food Choice Conference.
- Worsley, A. (2002). "Nutrition knowledge and food consumption: can nutrition knowledge change food behaviour?" Asia Pacific Journal of Clinical Nutrition **11**(Suppl): S579-S585.
- Worsley, A. and E. Lea (2003). "Consumers' personal values and sources of nutrition information." Ecology of Food & Nutrition **42**: 129-151.
- Worsley, A. and V. Scott (2000). "Consumers' concerns about food and health in Australia and New Zealand." Asia Pacific Journal of Clinical Nutrition **9**(1): 24-32.
- Wroe, D. (2002). Mad cow disease a threat here, experts say. The Age. Melbourne: 6.
- Young, E. and S. Fors (2001). "Factors related to the eating habits of students in grades 9-12." Journal of School Health **71**(10): 483-489.
- Zuppa, J., M. H., et al. (2003). "Television food advertising: counterproductive to children's health? A content analysis using the Australian Guide to Healthy Eating." Nutrition and Dietetics **60**: 78-84.

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## **10.1 Appendix 1: Recruitment Advertisement**

Please note this is a text only version.

### **Are you a woman aged 25-34 years or 45-54 years?**

**Your help is needed:** Volunteers are needed to help a local research student at the University of Wollongong. Women aged 25-34 years and 45-54 years interested in assisting with research into health information and the mass media are needed. Female volunteers from all backgrounds are invited to become involved in this project.

**What is the topic?** Health information in leading women's magazines.

**What is required?** Participants will be involved in a single group discussion with other women in their own time.

Information gained from these group discussions will be published in the form of a thesis and in journals.

Participants will also have an opportunity to participate in further research activities such as interviews with the researcher over a period of 18 months. Participants expressing interest in further research activities will be contacted at a later date. Personal details of those not wishing to participate in further research activities will be destroyed.

**Are you interested?** If you are interested in this research and would like to assist, please call at the Graduate School of Public Health, University of Wollongong on (mobile) or email [\\_\\_\\_\\_\\_](#) to provide your name and contact details and to gain more information on this research.

Participants' personal details will be treated confidentially. While the researcher can promise confidentiality, the extent of confidentiality will depend on the commitment of group members.

**Why only women?** Research has shown women are more likely than men to indicate that magazine articles are an important source of information, for this reason only women are the focus of this study. The University of Wollongong Human Ethics Committee has reviewed this research project.

## **10.2 Appendix 2: Focus Group Procedures & Questions**

1. Introduction of self, the topic and thank the participants for their involvement.
2. Outline the research approach, so all participants have an understanding of what is required and the importance of input from all participants. Participants will be assured that is okay to have an opinion that differs from other participants and that they should express their opinions freely.

### **Focus Group Rules**

- a. Speak up
  - b. Only one person speak at a time
  - c. No wrong or right answers
  - d. Need for active participation
  - e. Remind participants of the obligation to confidentiality and not talk about what was said outside the group discussion
3. Ensure all participants are comfortable with the setting, including the audio taping of the interview and the general research approach.
4. Check all participants have signed the consent form and return copy of consent form to participants. Assure the participants that this information will remain confidential.
5. Introductory statement  
“the mass media particularly the printed mass media, such as women’s magazines provide information to the public. This research aims to critically examine the health messages presented to women in leading Australian women’s magazines”.
6. Begin focus group discussions

## **Appendix 2: Focus Group Procedures & Questions Cont.**

### **Focus Group Questions**

#### **1. Ice Breaker # 1 (5-10 minutes)**

*Going around in a circle can each person introduce herself and tell us briefly about the magazines that you read.*

#### **2. Ice Breaker # 2 (10-15 minutes)**

Tell me about the main reasons you would buy a magazine.

Prompt: Are there any other factors?

Prompt: Does anyone have anything to add?

Probe: Health and nutrition?

Confirmation: So you are saying that x, y and Z motivate you to buy a magazine, is that right?

#### **3. Tell me about the main nutrition messages in women's magazines?**

Prompt: Are there any other messages?

Prompt: Does anyone have anything to add?

Probe: Tell me about nutrition messages in editorial content (i.e. articles, columns, recipe sections etc)?

Probe: Tell me about nutrition messages in advertising?

Confirmation: So you are saying that the main nutrition messages in women's magazines are X, Y and Z.

#### **4. I'd like to hear your thoughts about nutrition information in women's magazines.**

Prompt: Any other thoughts?

Prompt: Does anyone have anything to add?

Probe: Tell me about the similarities or differences you have noticed between the nutrition information in the advertising and editorial content in magazines.

Confirmation: So what you are saying is...

#### **5. Tell me about any examples of when you and your friends have read a magazine and you have changed the way you eat.**

Prompt: Does anyone have anything to add?

## ***Appendix 2: Focus Group Procedures & Questions Cont.***

Prompt:	Tell about nutrition messages in editorial content (i.e. articles, columns, recipe sections etc)?
Probe:	Tell about nutrition messages in advertising?
Probe:	Tell me about the types of information you pay more attention to.
Probe:	Tell me about the types of information you don't pay attention to.
Probe:	Tell me about the type of information you would like to see in women's magazines.

Confirmation: So you are saying that....

### **6. Final/wrap up question**

Does anyone have any other comments that they would like to make about nutrition messages in women's magazines before we conclude?

### **10.3 Appendix 3: Participant Information Sheet**

Note: Participant information sheet was printed on a Graduate School of Public Health letter head

**Research Project:** Health information in women's magazines<sup>2</sup>

Researcher:

**Supervisor:**

**The mass media, in particular women's magazines are an important source of information. The aim of this research is to critically examine the messages presented to women in leading Australian women's magazines.**

**As a potential participant in this research project you could make a valuable contribution by being involved in a group discussion with other participants for the first phase of the research project. Discussions will be held with groups of women. Before discussions, each woman will be sent a current issue of a leading women's magazine to read. A group discussion will be held at a convenient location. The discussions will take 1 to 1 ½ hours and refreshments (tea and coffee) will be available. The focus of the discussion will be on information in leading Australian women's magazines, particularly that related to health. Participants will need to participate in group discussions in their own time, not during work hours.**

**Information gained from the group discussions will be published in the form of a thesis and in journals, however anonymity of participants will be maintained in publishing. If a participants' comments are to be quoted, or the participant referred to, her name will be changed to ensure anonymity is maintained.**

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<sup>2</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.



**A second phase of this research project will involve four additional interviews with the researcher, Danielle over a period of 18 months. Participants in the group discussions may be contacted in the future and invited to participate in the second phase of the research project. Further involvement is completely voluntary, however your involvement would be greatly appreciated. Identifying information will be**

*Appendix 3: Participant Information Sheet*

**destroyed if you do not wish to participate in the second phase of the research project.**

The information provided in the group discussions will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong.

Participants will not be placed at any risk. The identity of the participants will remain confidential and during group discussions only first names will be used. No participant will be given other participants' details. Although the researcher can promise confidentiality as to the group discussions, the extent of the confidentiality will depend on the commitment of the group members.

Participants can withdraw their consent and cease participation at any time before or during the research process. If you choose to withdraw after participation in-group discussions your comments will be edited out of the discussion transcript.

If you have any questions about this research you can contact the researcher or her supervisor named above. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on .

## **10.4 Appendix 4: Participant Consent Form**

**Research Project:** Health information in women's magazines<sup>3</sup>

**Researcher:**

**Supervisor:**

**I have been given information about “*Health information in women’s magazines*” and have discussed the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Heather Yeatman in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I consent to participate in this project I will be asked some questions about health information in the mass media. This will involve a group discussion that will take approximately 1 to 1 ½ hours. I also understand that I may be invited to participate in the second phase of this research involving interviews with the researcher, Danielle, however I am not obligated to participate in any further research. I am aware that other participants in this research, who may not be known to me, will attend the group discussions. I am aware that the information I provide will be audio-taped to ensure that comments are reported accurately. The tapes will be wiped clear after the discussions are typed up. My identity will remain confidential and will be protected through the use of an alias.**

**I have had initial discussions with the researcher and have had an opportunity to ask any questions about the research and my participation.**

**I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at**

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<sup>3</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

anytime. My refusal to participate or withdraw will not affect any relationship I have with the University of Wollongong.

If I have any enquires about the research, I can contact on or Dr Heather Yeatman on . If I have any complaints or concerns regarding the way the research has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on .

*Appendix 4: Participant Consent Form Cont.*

By signing the below I am indicating my consent to participate in the research titled *“Health information in women’s magazines”* conducted by , as it has been described to me in the information sheet and in discussions with her. I understand that the data collected from my participation will be used for a PhD thesis and journal publications, and I consent for it to be used in this manner.

**Signed**

**Date**

.....

...../...../.....

**Name (please print)**

.....

By signing below I agree to be contacted to participate in the second phase of this research project.

.....(signature)

**Contact details**

**Telephone** .....(home)

.....(work)

.....(mobile)

Email .....

## **10.5 Appendix 5: Letter to Parents**

Note: Letter to parents was printed on a Graduate School of Public Health letter head

Dear Parents

I am a PhD student at the University of Wollongong in the Graduate School of Public Health, conducting research on health information in magazines aimed at teenage girls. I am seeking teenage girls aged 13 to 15 years to volunteer to participate in a group discussion. Participants will be involved in a single group discussion with other teenage girls. Information gained from these group discussions will be published in the form of a thesis and in journals.

Participants will also have an opportunity to participate in further research activities such as interviews with the researcher over a period of 18 months. Participants expressing interest in being further involved will be contacted at a later date. Personal details of those not wishing to participate in further research activities will be destroyed.

Teenage girls will not be allowed to participate with out written parental consent. I have attached for your information further information regarding this project and a consent form that you will need to sign and return to me if you consent for your daughter to participate in this research. Once parental consent is obtained, information regarding the research project will be provided to your daughter and consent will also be obtained from her. Under no circumstances will a teenage girl be allowed to participate with out parental consent.

If you have any questions regarding this project or would like further information please do not hesitate to contact me.

Yours sincerely,

PhD Student  
Graduate School of Public Health  
University of Wollongong  
Phone  
Email

## **10.6 Appendix 6: Parents Information Sheet**

Note: Parents information sheet was printed on a Graduate School of Public Health letter head

**Research Project:** Health information in magazines targeted at teenage girls<sup>4</sup>

Researcher:

Supervisor:

**The mass media, in particular women's magazines are an important source of health information. The aim of this research is to critically examine the messages presented to teenage girls in leading Australian magazines targeted at teenage girls.**

**Your daughter, as a potential participant in this research project could make a valuable contribution by being involved in a group discussion with other teenage girls from her school for the first phase of the research project. Before discussions, each teenage girl will be sent a current issue of a leading magazine targeted at teenage girls (for example Dolly or Girlfriend) to read. A group discussion will be held at a convenient location. The discussions will take 1 to 1 ½ hours and refreshments will be available. The discussion will focus on information in leading Australian magazines targeted at teenage girls, particularly that related to health. Issues that will be raised in the group discussions with teenage girls are, health issues teenage girls notice in magazines, reasons for magazines being an important source of information and the main nutrition issues evident in magazines.**

**Information gained from the group discussions will be published in the form of a thesis and in journals, however anonymity of participants will be maintained in publishing.**

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<sup>4</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

**A second phase of this research project will involve four additional interviews with the researcher, Danielle over a period of 18 months. Participants in the group discussions will be invited to participate in the second phase of the research project. Further involvement is completely voluntary, however your daughter's involvement would be greatly appreciated. Identifying information will be destroyed if you do not wish your daughter to participate in the second phase of the research project.**

***Appendix 6: Parents Information Sheet Cont.***

The information provided in the group discussions will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcripts have been made.

Participants will not be placed at any risk. The identity of the participants will remain confidential and during group discussions only first names will be used. No participant will be given other participants' details. Although the researcher can promise confidentiality as to the group discussions, the extent of the confidentiality will depend on the commitment of the group members.

Participants can withdraw their consent or you can withdraw your consent for your daughter to participate and cease participation at any time before or during the research process. If you choose to withdraw your daughter, or your daughter chooses to withdraw after participation in-group discussions, information already given cannot be withdrawn from the study.

**If you have any questions about this research you can contact the researcher or her supervisor named above. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on**

## **10.7 Appendix 7: Parental Consent Form**

**Research Project:** Health information in magazines targeted at teenage girls<sup>5</sup>

**Researcher:**

**Supervisor:**

**I have been given information about “*Health information in magazines targeted at teenage girls*” and have discussed any questions I have regarding the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Heather Yeatman in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I consent for my daughter to participate in this project she will be asked some questions about health information in the mass media. The discussion will focus on information in leading Australian magazines targeted at teenage girls, particularly that related to health. Issues that will be raised in the group discussions will concern the health issues teenage girls notice in magazines, reasons for magazines being an important source of information and the main nutrition issues evident in magazines.**

**This will involve a group discussion that will take approximately 1 to 1 ½ hours with other teenage girls from her school. Before the group discussion my daughter will be provided with a copy of magazine for teenage girls, for example “Dolly” or “Girlfriend”. I also understand that she may be invited to participate in the second phase of this research involving interviews with the researcher, Danielle, however I am aware that I am not obligated give my consent for her to participate in any further research. I am aware that other teenage girls in this research, who may not be known to me, will attend the group discussions. I am aware that the information my daughter provides will be audio-taped to ensure that comments are reported accurately. The tapes will be wiped**

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<sup>5</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

clear after the discussions are typed up. My daughters' identity will remain confidential.

I have had initial discussions with the researcher and have had an opportunity to ask any questions about the research and my daughters' participation.

*Appendix 7: Parental Consent Form Cont.*

I understand that my decision to agree to my daughter's participation in this research is voluntary, I am free to refuse for her to participate and I am free to withdraw her from the research at anytime. If withdrawal occurs after group discussions, information already provided cannot be withdrawn. My refusal for her to participate or withdraw will not affect any relationship she or I may have with the University of Wollongong.

If I have any enquires about the research, I can conduct on or If I have any complaints or concerns regarding the way the research has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on

By signing the below I am indicating my consent for my daughter to participate in the research titled "*Health information in magazines targeted at teenage girls*" conducted by Danielle Lidgard, as it has been described to me in the information sheet and in discussions with her. I understand that the data collected from my daughters' participation will be used for a PhD thesis and journal publications, and I consent for it to be used in this manner.

-----  
-----

I give/do not give permission for my daughter \_\_\_\_\_ (name) to participate in the group discussions for the research project "*Health information in magazines targeted at teenage girls*"



\_\_\_\_\_(signature)\_\_\_\_\_

\_\_\_\_\_(name please print)\_\_\_\_\_ (date)

-----

-----

By signing below I agree to be contacted to gain permission for my daughter to participate in the second phase of the research project *“Health information in magazines targeted at teenage girls”*

\_\_\_\_\_(signature)\_\_\_\_\_

\_\_\_\_\_(name please print)\_\_\_\_\_ (date)

Contact details Telephone

.....(home).....(mobile)

Address

.....

.....

### **10.8 Appendix 8: Letter to Teenage Girls**

Note: Letters to teenage girls were printed on a Graduate School of Public Health letter head

Dear \_\_\_\_\_

You maybe aware of the research project *“Health information in magazines targeted at teenage girls”*<sup>6</sup>. I am seeking volunteers aged 13 to 15 years to be involved in this project.

I have attached to this letter, information on the project and a consent form, for you to read and sign and then return to me if you are interested in being involved in this project.

If you become involved in this project, you will be apart of a group discussion with other girls from your school. The information gained from this discussion will be published in the form of a thesis and in journal articles.

You will also have an opportunity to be contacted and invited to be involved in further research activities such as interviews with the researcher over a period of 18 months. If you express interest in further research activities I will contact you at a later date.

\_\_\_\_\_  
<sup>6</sup> This letter will be pilot tested with teenage girls aged 13 and 14 years for language.

Your personal details will be destroyed if you choose not to participate in further research activities.

If you have any questions regarding this project or would like further information please do not hesitate to contact me.

Yours Sincerely,

PhD Student  
Graduate School of Public Health  
University of Wollongong  
Phone  
Email

## **10.9 Appendix 9: Information Sheet for Teenage Girls**

**Research Project:** Health information in magazines targeted at teenage girls<sup>7</sup>

**Researcher:**

**Supervisor:**

**The mass media, in particular women's magazines are an important source of information. The aim of this research is to critically examine the messages presented to teenage girls in leading Australian magazines targeted at teenage girls.**

**As a teenage girl and a potential participant in this research project you could make a valuable contribution by being involved in a group discussion with other teenage girls from your school for the first phase of the research project. Before discussions, you will be sent a current issue of a leading magazine targeted at teenage girls (for example Dolly or Girlfriend) to read and keep. A group discussion will be held at a convenient location. The discussions will take 1 to 1 ½ hours and refreshments will be available. The discussion will focus on information in leading Australian magazines targeted at teenage girls, particularly that related to health.**

**Information gained from the group discussions will be published in the form of a thesis and in journals, however your anonymity will be maintained in publishing.**

**A second phase of this research project will involve four additional interviews with the researcher, Danielle over a period of 18 months. You may be contacted in the future and invited to participate in the second phase of the research project. Further involvement is completely voluntary, however your involvement would be greatly appreciated.**

---

<sup>7</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

**Identifying information will be destroyed if you or your parents do not wish to participate in the second phase of the research project.**

The information provided in the group discussions will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcription has been made.

As a participant you will not be placed at any risk. The identity of all participants will remain confidential and during group discussions only first names will be used. No participant will be given other participants' details. Although the researcher can promise confidentiality as to the group discussions, the extent of the confidentiality will depend on the commitment of the group members.

You can withdraw your consent or your parents can withdraw consent for you to participate in this study and cease participation at any time before or during the research process. If you choose to withdraw or your parents choose to withdraw after participation in group discussions information already given can not be withdrawn for the study.

If you have any questions about this research you can contact the researcher or her supervisor named above. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on

## **10.10 Appendix 10: Participant Consent Form-Teenage Girls**

**Research Project:** Health information in magazines targeted at teenage girls<sup>8</sup>

**Researcher:**

**Supervisor:**

**I have been given information about “*Health information in Health information in magazines targeted at teenage girls*” and have discussed any questions I have about this the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Heather Yeatman in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I give consent participate in this project I will be asked some questions about health information in the mass media. This will involve a group discussion that will take approximately 1 to 1 ½ hours with other teenage girls from my school. I also understand that I may be invited to participate in the second phase of this research involving interviews with the researcher, Danielle. I am aware that do not have to give my consent to participate in any further research. I am aware that other teenage girls in this research, who may not be known to me, will attend the group discussions. I am aware that the information I provide will be audiotaped to ensure that comments are reported accurately. The tapes will be wiped clear after the discussions are typed up. My identity will remain confidential.**

**I have had initial discussions with the researcher and have had an opportunity to ask any questions about the research and my participation.**

**I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at**

---

<sup>8</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

anytime. If withdrawal occurs after group discussions, information already provided cannot be withdrawn. My refusal to participate or withdraw will not affect any relationship I have with the University of Wollongong.

If I have any questions about the research, I can contact

If I have any  
complaints or concerns

*Appendix 10: Participant Consent Form-Teenage Girls Cont.*

regarding the way the research has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on

By signing the below I am giving my consent to participate in the research titled *“Health information magazines targeted at teenage girls”* conducted by Danielle Lidgard, as it has been described to me in the information sheet and in discussions with her. I understand that the data collected from my participation will be used for a PhD thesis and journal publications, and I consent for it to be used in this manner.

-----  
-----

I \_\_\_\_\_(name) give my consent to participate in the group discussions for the research project *“Health information in magazines targeted at teenage girls”*

\_\_\_\_\_(signature)\_\_\_\_\_

\_\_\_\_\_(date)

I \_\_\_\_\_(name) agree to be contacted to gain permission for me to participate in the second phase of the research project *“Health information in magazines targeted at teenage girls”*

**(This is dependent on parental approval, you will not be contacted if your parents have not consented to further participation).**

\_\_\_\_\_**(signature)**\_\_\_\_\_

\_\_\_\_**(date)**

## **10.11 Appendix 11: Invitation for Further Participation**

Dear \_\_\_\_\_

**Thank you for your contribution last year in the focus group for my research project titled “Health information in women’s magazines”. Your contribution to the group discussion was very valuable. I gained very interesting and relevant information as a result.**

**You expressed interest last year in participating in the second phase of this research project, which will involve three interviews over the next twelve months. Your expression of interest does not obligate you to participate in further research activities.**

**If you agree to further participation in this research project the first of the three interviews will be scheduled with you at a convenient time with in the next month. During the interview we will be discussing issues surrounding food and nutrition. The interview will be held at a convenient location and will take approximately 30 to 60 minutes. To reimburse you for the costs associated with participating in this research project I will provide a gift voucher from Grace Bros.**

**Information gained from the interviews will be published in the form of a thesis and in journals, however your anonymity will be maintained. The information provided in the interviews will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcription has been made.**

**As a participant you will not be placed at any risk. The identity of all participants will remain confidential and during group discussions only first names will be used. No participant will be given other participants’ details.**

**You can withdraw your consent to participate in this study and cease participation at any time before or during the research process. If you have any questions about this research you can contact the researcher or her supervisor. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on**



**Please don't hesitate to contact me if you have any questions about this research project.**

**Yours Sincerely**

**Danielle Lidgard**

## **10.12 Appendix 12: Participant Consent Form**

**Research Project:** Food and Nutrition Issues<sup>9</sup>  
**Researcher:** Lidgard  
**Supervisor:** Associate Professor Heather Yeatman

**I have been given information about “*food and nutrition issues*” and have discussed the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Associate Professor Heather Yeatman and Dr Sandra Jones in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I consent to participate in this project I will be asked some questions about food and nutrition issues. This will involve three interviews with the researcher, Danielle over the next twelve months. I am aware that I am not obligated to participate in any research activities and I am free to withdraw from research activities at anytime. I am aware that the information I provide will be audiotaped to ensure that comments are reported accurately. I understand that the tapes will be wiped clear after the discussions are typed up. My identity will remain confidential and will be protected through the use of an alias.**

**I have had initial discussions with the researcher and have had an opportunity to ask any questions about the research and my participation.**

**I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at anytime. My refusal to participate or withdraw will not affect any relationship I have with the University of Wollongong.**

**If I have any enquires about the research, I can contact Danielle Lidgard, Associate Professor Heather Yeatman or Dr Sandra Jones. If I have any complaints or concerns regarding the way the research has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on .**

**By signing the below I am indicating my consent to participate in the research titled “*food and nutrition issues*” conducted by Danielle Lidgard, as it has been described to me in the information sheet and in discussions with her. I understand that the data collected from my participation will be used for a PhD thesis and journal publications, and I consent for it to be used in this manner.**

**Signed**

**Date**

---

<sup>9</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

..... /.....  
Name (please print)

.....  
Contact details

Telephone home..... email

.....  
work..... mobile.....

### ***10.13 Appendix 13: Invitation for Further Participation (Parent)***

Dear \_\_\_\_\_  
\_\_\_\_\_

Thank you for allowing your daughter to contribute last year in the focus group for my research project titled “Health information in magazines targeted at teenage girls”. Her contribution to the group discussion was very valuable. I gained very interesting and relevant information as a result.

You and your daughter expressed interest last year for her to participate in the second phase of this research project, which will involve three interviews over the next twelve months. This expression of interest does not obligate her to participate in further research activities.

If you agree to her further participation in this research project the first of the three interviews will be scheduled with your daughter at a convenient time with in the next month. During the interview we will be discussing issues surrounding food and nutrition. The interview will be held at St Mary Star of the Sea College and will take approximately 30 to 60 minutes. As a token of my appreciation for those participants who agree to participate in further research activities I will provide a double voucher for the cinema.

Your daughter will not be allowed to participate in this research project without parental consent. Consent for participation will be obtained from you and from your daughter. If you are happy for your daughter to participate in further research activities please sign the consent form I have attached and return it to me. Your daughter will also need to sign her consent form and return it to me for participation.

Information gained from the interviews will be published in the form of a thesis and in journals, however her anonymity will be maintained. The information provided in the interviews will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcription has been made.

As a participant your daughter will not be placed at any risk. The identity of all participants will remain confidential. You can withdraw your consent for your daughter to participate in this study and cease participation at any time before or during the research process. If you have any questions about this research you can contact the researcher or her supervisor. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

**Please don't hesitate to contact me if you have any questions about this research project.**

**Yours Sincerely**

**Danielle Lidgard**

## **10.14 Appendix 14: Participant Consent Form (Parent)**

### **Participant Consent Form**

**Research Project:** Food and Nutrition Issues<sup>10</sup>

**Researcher:**

**Supervisor:**

**I have been given information about “*food and nutrition issues*” and have discussed the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Associate Professor Heather Yeatman and Dr Sandra Jones in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I consent for my daughter to participate in this project she will be asked some questions about food and nutrition issues. This will involve three interviews with the researcher, Danielle over the next twelve months. I am aware that she is not obligated to participate in any research activities and I am free to withdraw consent from research activities at anytime. I am aware that the information she provides will be audiotaped to ensure that comments are reported accurately. The tapes will be wiped clear after the discussions are typed up. Her identity will remain confidential and will be protected through the use of an alias.**

**I have had initial discussions with the researcher and have had an opportunity to ask any questions about the research and my daughters participation.**

**I understand that participation in this research is voluntary, I am free to refuse my daughters participation and free to withdraw from the research at anytime. My refusal for my daughter to participate or her withdraw will not affect any relationship I or she has with the University of Wollongong.**

**If I have any enquires about the research, I can conduct Danielle Lidgard, Associate Professor Heather Yeatman or Dr Sandra Jones. If I have any complaints or concerns regarding the way the research has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on**

**By signing the below I am indicating my consent for my daughter to participate in the research titled “*food and nutrition issues*” conducted by Danielle Lidgard, as it has been described to me in the information sheet and in discussions with her. I understand that the data collected will be used for a PhD thesis and journal publications, and I consent for it to be used in this manner.**

**Signed**

**Date**

...../...../.....

**Your Name (please print)**

**Daughter's Name**

---

<sup>10</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

.....

**Contact details**

<b>Telephone</b>	<b>(home)</b> .....	<b>Email</b>
	.....	<b>(work)</b> ..... ..
	<b>(mobile)</b> .....	

## **10.15 Appendix 15: Invitation for Further Participation (Teenage Girls)**

Dear \_\_\_\_\_  
\_\_\_\_\_

Thank you for your contribution last year in the focus group for my research project titled “Health information in magazines targeted at teenage girls”. Your contribution to the group discussion was very valuable. I gained very interesting and relevant information as a result.

You expressed interest last year at participating in the second phase of this research project, which will involve three interviews over the next twelve months. Your expression of interest does not obligate you to participate in further research activities.

If you agree to further participation in this research project the first of the three interviews will be scheduled with you at a convenient time within the next month. During the interview we will be discussing issues surrounding food and nutrition. The interview will be held at St Mary Star of the Sea College and will take approximately 30 to 60 minutes. To reimburse you for the time you spend being involved in this project I will provide you with a double voucher for the cinema.

You will not be able to participate in this research project without parental consent. I have attached a consent form for you to sign and return to me if you are interested in being involved in this project. Your parents will also need to return their signed consent form to me for you to be able to participate.

Information gained from the interviews will be published in the form of a thesis and in journals, however your anonymity will be maintained. The information provided in the interviews will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcription has been made.

As a participant you will not be placed at any risk. The identity of all participants will remain confidential and during group discussions only first names will be used. No participant will be given other participants' details.

You can withdraw your consent to participate in this study and cease participation at any time before or during the research process. If you have any questions about this research you can contact the researcher or her supervisor. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

**Please don't hesitate to contact me if you have any questions about this research project.**

**Yours Sincerely**

**Danielle Lidgard**



**Participant Consent Form**

**Research Project:** Food and Nutrition Issues<sup>11</sup>

Researcher:

Supervisor:

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**I have been given information about “*food and nutrition issues*” and have discussed the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Associate Professor Heather Yeatman and Dr Sandra Jones in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I consent to participate in this project I will be asked some questions about food and nutrition issues. This will involve three interviews with the researcher, Danielle over the next twelve months. I am aware that I am not obligated to participate in any research activities and I am free to withdraw from research activities at anytime. I am aware that the information I provide will be audiotaped to ensure that comments are reported accurately. The tapes will be wiped clear after the discussions are typed up. My identity will remain confidential and will be protected through the use of an alias.**

**I have had initial discussions with the researcher and have had an opportunity to ask any questions about the research and my participation.**

**I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at anytime. My refusal to participate or withdraw will not affect any relationship I have with the University of Wollongong.**

**If I have any enquires about the research, I can contact Danielle Lidgard, Associate Professor Heather Yeatman or Sandra Jones. If I have any complaints or concerns regarding the way the research has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on**

**By signing the below I am indicating my consent to participate in the research titled “*food and nutrition issues*” conducted by Danielle Lidgard, as it has been described to me in the information sheet and in discussions with her. I understand that the data collected from my participation will be used for a PhD thesis and journal publications, and I consent for it to be used in this manner.**

**Signed**

**Date**

.....

...../...../.....

**Name (please print)**

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<sup>11</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

.....

**Contact details**

**Telephone**    **(home)**.....

**Email**

.....

**(work)**..... ..

**(mobile)**.....

## **10.16Appendix 16: Invitation for interview 2**

Dear \_\_\_\_\_

Thank you for participating in the first interview for my research project “Food and Nutrition Issues”. Your contribution to this research has been very valuable. As discussed with you, there will be a second interview conducted during October. I will be contacting you next week to invite you to participate further in my research project and to schedule an interview time that is convenient for you.

A second interview is important, as I am interested in how women’s concerns about food and nutrition issues may change over time.

As in the previous interview, we will be discussing issues surrounding food and nutrition that are important or a concern for you. The interview will be held at a convenient location and will take approximately 30 to 60 minutes. To reimburse you for the costs associated with participating in this research project I will provide a gift voucher from Grace Bros.

As with the previous interview, I confirm the following information:

Information gained from the interviews will be published in the form of a thesis and in journals, however your anonymity will be maintained. The information provided in the interviews will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcription has been made.

As a participant you will not be placed at any risk. You can withdraw your consent to participate in this study and cease participation at any time before or during the research process. If you have any questions about this research you can contact the researcher or her supervisor. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457. Please don’t hesitate to contact me if you have any questions about this research project.

I look forward to speaking with you soon and I hope that we are able to make a time to conduct this important second interview.

Yours Sincerely

Graduate School of Public Health

**University of Wollongong NSW 2522**

**Phone:**

**Email:**

## **10.17Appendix 17: Letter to Parent Interview 2**

**Dear** \_\_\_\_\_

Thank you for allowing your daughter to participate in the first interview for my research project “food and nutrition issues”. Your daughters’ contribution to this research has been very valuable. As discussed with your daughter there will be a second interview conducted during October/November. As in the previous interview we will be discussing issues surrounding food and nutrition that are important or a concern for your daughter.

This second interview is very important for my study, as I am trying to identify how your daughters concerns about food and nutrition may have changed since the last time we talked together.

The interview will be held at St Mary Star of the Sea College at a time that will be arrange with . To reimburse your daughter for the time she will spend being involved in this project I will provide her with a double voucher for the cinema.

If you do not want your daughter to participate in this research project, please contact me before the 24th of October, 2003. My contact details are detailed below.

As with the previous interview, I confirm the following information:

Information gained from the interviews will be published in the form of a thesis and in journals, however your anonymity will be maintained. The information provided in the interviews will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcription has been made.

As a participant your daughter will not be placed at any risk. You can withdraw your consent for your daughter to participate in this study and cease

participation at any time before or during the research process. If you have any questions about this research you can contact the researcher or her supervisor. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of

**Appendix 17: Letter to Parent Interview 2 Cont.**

Wollongong Human Research Ethics Committee on . Please don't hesitate to contact me if you have any questions about this research project.

**Yours Sincerely**

**Graduate School of Public Health  
University of Wollongong NSW 2522**

**Phone:**

**Mobile:**

**Email:**

## **10.18 Appendix 18: Invitation for Interview 2 (Teenage Girls)**

Dear \_\_\_\_\_

Thank you for participating in the first interview for my research project “Food and Nutrition Issues”. Your contribution to this research has been very valuable. As discussed with you previously there will be a second interview conducted during October/November. As in the previous interview we will be discussing issues surrounding food and nutrition that are important or a concern for you.

This second interview is very important for my study, as I am trying to identify how your concerns about food and nutrition may have changed since the last time we talked together.

The interview will be held at St Mary Star of the Sea College at a time that will be arranged with Mr. Wattam. To reimburse you for the time you spend being involved in this project, I will provide you with a double voucher for the cinema.

If you do not want to participate further in this research project, please contact me before the 24th of October, 2003. My contact details are detailed below.

As with the previous interview, I confirm the following information:

Information gained from the interviews will be published in the form of a thesis and in journals, however your anonymity will be maintained. The information provided in the interviews will be tape-recorded and transcribed. Transcripts will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Audiotapes will be destroyed after transcription has been made.

As a participant you will not be placed at any risk. You can withdraw your consent or your parents can withdraw their consent for you to participate in this study and cease participation at any time before or

during the research process. If you have any questions about this research you can contact the researcher or her supervisor. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221

***Appendix 18: Invitation for Interview 2 (teenage girls) Cont.***

Please don't hesitate to contact me if you have any questions about this research project.

**I am looking forward to talking with you again soon.**

**Yours Sincerely**

**Graduate School of Public Health  
University of Wollongong NSW 2522**

**Phone:**

**Mobile:**

**Email:**



## **10.19 Appendix 19: Pre Interview Survey**

Please answer the following questions by ticking the most appropriate answer.

**1. How often over the last four months have read the following magazines?**

	<b>Every Issue</b>	<b>Most Issues</b>	<b>Once</b>	<b>Never</b>
<b>Dolly</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Girlfriend</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Cleo</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Cosmopolitan</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>New Idea</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Woman's Day</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>That's Life!</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>The Australian Women's Weekly</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2. Have you read any other magazine/s over the last four months?**

☐ No

☐ Yes, please list below

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**3. Which of the following best describes the type of breakfast you usually consume? You may tick more than one answer**

☐ Cereal

☐ Toast and spreads

☐ Cooked breakfast with meat

☐ Cooked breakfast without meat

☐ Fruit

☐ Don't usually eat breakfast

☐ Other Please

specify\_\_\_\_\_

**4. Which of the following applies to you? You may tick more than one answer.**

☐ Most main meals consist of meat and vegetables

☐ Some main meals consisting of meat and vegetables with some not containing meat

☐ Most main meals do not contain meat, but I'm not a vegetarian

☐ Vegetarian

☐ Many main meals include pasta

☐ Many main meals include rice

☐ Other, please

specify\_\_\_\_\_

#### *Appendix 19: Pre Interview Survey*

**5. Which of the following best describes the snacks you eat between meals? You may tick more than one answer**

☐ Generally pre-packaged foods, for example muesli bars, potato chips

☐ Fruit

☐ Cakes or sweet biscuits

☐ Savoury biscuits

☐ I usually don't snack between meals

☐ Other, please

specify\_\_\_\_\_

## **10.20Appendix 20: Semi-Structured Interview Schedule**

### **Standard Introduction**

Hello\_\_\_\_\_ thank you for agreeing to participate in today's interview. Today we are going to talk about issues regarding food and nutrition that are or have become important to you over the last four months.

Is it okay with you if I record our discussion today?

If yes begin recording

If no written notes ONLY will be taken.

1. Tell me about the issues regarding food that are important to you at the moment.

*Prompt: Tell me about the main food issues that interest you*

*Prompt: Tell me about the main food issues that worry or concern you*

*Prompt: You mention fruit and vegetables, can you tell me more about?*

2. Tell me about the issues regarding nutrition that are important to you at the moment.

*Prompt: Tell me about the main nutrition issues that interest you*

*Prompt: Tell me about the main nutrition issues that worry or concern you*

*Prompt: You mentioned weight issues, can you tell me more about*

3. Tell me about any changes you have made to your diet in the last 4 months?

*Prompt: Tell about the reasons you decided to make these changes*

*Prompt: Tell me about any problems you had trying to make the changes to your diet.*

*Prompt: During our last discussions you mention you wanted to make X to your diet? Where you able to do this?*

4. Are you thinking about making any changes to your diet?

***Prompt: Tell me about these changes***

***Prompt: Tell me about why are you thinking about making these changes***

***Prompt: Tell me about any new recipes or food products you have tried over the last four months***

***Prompt: Have you tried/had any non-meat main meals over the last four months? Tell me about this.***

- 5. Do you have any other general comments to make about issues that are important or relevant to you about food and nutrition?**

**Thank you for taking time out to participate in today's interview. I will contact you in three months to arrange our next interview.**

## **10.21 Appendix 21: Pre Interview Survey 2**

Please answer the following questions by ticking the most appropriate answer.

1. How often over the last four months have you read the following magazines?

	Every Issue	Most Issues	Some Issues	Once	Never
Dolly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Girlfriend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cosmopolitan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Idea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Woman's Day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
That's Life!	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Australian Women's Weekly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Have you read any other magazine/s over the last four months?

☐ No

☐ Yes, please list below

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---

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3. Which of the following best describes the type of breakfast you usually consume? You may tick more than one answer

☐ Cereal

☐ Toast and spreads

☐ Cooked breakfast with meat

☐ Cooked breakfast without meat

☐ Fruit

☐ Don't usually eat breakfast

☐ Other Please

specify\_\_\_\_\_

**4. Which of the following applies to you? You may tick more than one answer.**

☐ Most main meals consist of meat and vegetables

☐ Some main meals consisting of meat and vegetables with some not containing meat

☐ Most main meals do not contain meat, but I'm not a vegetarian

☐ Vegetarian

☐ Many main meals include pasta

☐ Many main meals include rice

☐ Other, please

specify\_\_\_\_\_

*Appendix 21: Pre Interview survey Cont.*

**5. Which of the following best describes the snacks you eat between meals? You may tick more than one answer**

☐ Generally pre-packaged foods, for example muesli bars, potato chips

☐ Fruit

☐ Cakes or sweet biscuits

☐ Savoury biscuits

☐ I usually don't snack between meals

☐ Other, please

specify\_\_\_\_\_

## **10.22 Appendix 22: Interview Schedule for Semi Structured Interview 2**

### **Semi Structured Interview Two**

**13-16 Year Age Group**

**November 2003**

#### **Standard Introduction**

Hello\_\_\_\_\_ thank you for agreeing to participate in today's interview. Today we are going to talk about issues regarding food and nutrition that are or have become important to you over the last four months.

Is it okay with you if I record our discussion today?

If yes begin recording

If no written notes **ONLY** will be taken.

#### **Start Interview**

1. I last spoke to you in May/June. Tell what has been happening since we last spoke?

Prompt – Have there been any changes in your life?

*Interested in finding out whether there have been any significant changes that may influence participants food choices/decisions. For example; disease/sickness, pregnancy, marriage, divorce etc.*

2. Lets talk about food. When you talk to friends/families/colleagues about food what types of things do you discuss.

Prompt – Do you discuss food or food product information with friends? Tell me about this.

Probe - Is this something you do regularly? Tell be about this.

Probe - Tell me about situations that change what you think or decisions you make about food

*Interested in finding out whether the participant puts foods into categories for example; good/bad, everyday food/special occasion foods. Does the participant exchange food/product information and what type of information they exchange with others.*

3. Lets talk about nutrition. When you talk about nutrition with your friends/family/colleagues, what types of things do you talk about?

Prompt – Do you talk about diets? Weight loss? Celebrity diets/weight loss? Nutrition/healthy eating tips?

Probe – Is this something you do regularly? Tell me about this.

#### Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.

4. You mentioned last time we spoke that you had made X changes to your diet. Tell me how these changes are going?

Probe – has this change been easy or difficult to maintain? Tell me about this.

5. You mentioned last time we spoke that you were worried about X. Tell how you are feeling about this now.

Probe – have you made any changes to deal with this? Tell me about this.

6. You mentioned last time we spoke that you were considering changing X. Tell me have you made these changes.

Probe – what made you do this?

Probe – has it been easy or difficult?

7. In my discussions with other women from your age group, I have found that many women talk about X. Tell me, are these issues important to you?

- Weight
- Time constraints
- Taste of particular foods, particularly meat and vegetables
- Food and guilt (fatty foods and junk foods)
- Being healthier
- Fruit and vegies

8. I have noticed lately a lot of information and people talking about Glycaemic Index (GI). Tell me your thoughts of this new way of eating?



Probe – have you tried the GI diet? Tell me about this.  
Probe – have you tried any other diets?

**After interview Activity.**

Give women a copy of a short article from magazine relevant to their age group and ask them to comment on aspects of the article. For example;

1. Would they follow the advice and why?
2. Is there any information they don't understand?
3. Is any information missing?
4. What are the strengths of the article?
5. What are the weaknesses of the information?

**Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.**

Give women a copy of an advertisement that uses nutrition to promote the product and ask women to comment on aspects of this advertisement?

1. Do you currently purchase this product? Why?
2. If no, would you consider purchasing this product now that you have seen this advertisement? Why?
3. What are your initial thoughts/reactions to this advertisement?

## Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.

### **Semi Structured Interview Two** **25-34 Year Age Group** **October/November 2003**

#### **Standard Introduction**

Hello\_\_\_\_\_ thank you for agreeing to participate in today's interview. Today we are going to talk about issues regarding food and nutrition that are or have become important to you over the last four months.

Is it okay with you if I record our discussion today?

If yes begin recording

If no written notes ONLY will be taken.

#### **Start Interview**

1. I last spoke to you in May/June. Tell what has been happening since we last spoke?

Prompt – Have there been any changes in your life?

*Interested in finding out whether there have been any significant changes that may influence participants food choices/decisions. For example; disease/sickness, pregnancy, marriage, divorce etc.*

2. Lets talk about food. When you talk to friends/families/colleagues about food what types of things do you discuss.

Prompt – Do you discuss food or food product information with friends? Tell me about this.

Probe - Is this something you do regularly? Tell be about this.

Probe - Tell me about situations that change what you think or decisions you make about food

*Interested in finding out whether the participant puts foods into categories for example; good/bad, everyday food/special occasion foods. Does the participant exchange food/product information and what type if information they exchange with others.*

3. Lets talk about nutrition. When you talk about nutrition with your friends/family/colleagues, what types of things do you talk about?

Prompt – Do you talk about diets? Weight loss? Celebrity diets/weight loss? Nutrition/healthy eating tips?

Probe – Is this something you do regularly? Tell me about this.

## Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.

4. You mentioned last time we spoke that you had made X changes to your diet. Tell me how these changes are going?

Probe – has this change been easy or difficult to maintain? Tell me about this.

5. You mentioned last time we spoke that you were worried about X. Tell how you are feeling about this now.

Probe – have you made any changes to deal with this? Tell me about this.

6. You mentioned last time we spoke that you were considering changing X. Tell me have you made these changes.

Probe – what made you do this?

Probe – has it been easy or difficult?

7. In my discussions with other women from you age group, I have found that many women talk about X. Tell me, are these issues important to you?

- Time and money limit food choices
- Concerned about eating large quantities of processed food
- Food safety
- Having a healthy body with increasing age and pregnancy
- GM foods
- Weight issues
- Decrease in CHO and increase in protein
- Increase in water consumption
- Nutrition/food habits and their children

8. I have noticed lately a lot of information and people talking about Glycaemic Index (GI). Tell me your thoughts of this new way of eating?

Probe – have you tried the GI diet? Tell me about this.

Probe – have you tried any other diets?

### **After interview Activity.**

Give women a copy of a short article from magazine relevant to their age group and ask them to comment on aspects of the article. For example;

1. Would they follow the advice and why?
2. Is there any information they don't understand?
3. Is any information missing?
4. What are the strengths of the article?
5. What are the weaknesses of the information?

### **Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.**

Give women a copy of an advertisement that uses nutrition to promote the product and ask women to comment on aspects of this advertisement?

1. Do you currently purchase this product? Why?
2. If no, would you consider purchasing this product now that you have seen this advertisement? Why?
3. What are your initial thoughts/reactions to this advertisement?

Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.

**Semi Structured Interview Two**  
**45- 54 Year Age Group**  
**October/November 2003**

**Standard Introduction**

Hello\_\_\_\_\_ thank you for agreeing to participate in today's interview. Today we are going to talk about issues regarding food and nutrition that are or have become important to you over the last four months.

Is it okay with you if I record our discussion today?

If yes begin recording

If no written notes ONLY will be taken.

**Start Interview**

1. I last spoke to you in May/June. Tell what has been happening since we last spoke?

Prompt – Have there been any changes in your life?

*Interested in finding out whether there have been any significant changes that may influence participants food choices/decisions. For example; disease/sickness, pregnancy, marriage, divorce etc.*

2. Lets talk about food. When you talk to friends/families/colleagues about food what types of things do you discuss.

Prompt – Do you discuss food or food product information with friends? Tell me about this.

Probe - Is this something you do regularly? Tell be about this.

Probe - Tell me about situations that change what you think or decisions you make about food

*Interested in finding out whether the participant puts foods into categories for example; good/bad, everyday food/special occasion*

*foods. Does the participant exchange food/product information and what type of information they exchange with others.*

3. Lets talk about nutrition. When you talk about nutrition with your friends/family/colleagues, what types of things do you talk about?

Prompt – Do you talk about diets? Weight loss? Celebrity diets/weight loss? Nutrition/healthy eating tips?

Probe – Is this something you do regularly? Tell me about this.

## Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.

4. You mentioned last time we spoke that you had made X changes to your diet. Tell me how these changes are going?

Probe – has this change been easy or difficult to maintain? Tell me about this.

5. You mentioned last time we spoke that you were worried about X. Tell how you are feeling about this now.

Probe – have you made any changes to deal with this? Tell me about this.

6. You mentioned last time we spoke that you were considering changing X. Tell me have you made these changes.

Probe – what made you do this?

Probe – has it been easy or difficult?

7. In my discussions with other women from your age group, I have found that many women talk about X. Tell me, are these issues important to you?

- Concern for children's and partners diet
- Weight loss/gain
- Organic and processed foods
- Fat content of diet
- Increasing age and managing increase in disease
- Money and time limit food choices
- Decrease CHO and increased protein
- Decrease in sugar

8. I have noticed lately a lot of information and people talking about Glycaemic Index (GI). Tell me your thoughts of this new way of eating?

Probe – have you tried the GI diet? Tell me about this.

Probe – have you tried any other diets?

**After interview Activity.**

Give women a copy of a short article from magazine relevant to their age group and ask them to comment on aspects of the article. For example;

1. Would they follow the advice and why?
2. Is there any information they don't understand?
3. Is any information missing?
4. What are the strengths of the article?
5. What are the weaknesses of the information?

**Appendix 22: Interview Schedule for Semi Structured Interview 2 Cont.**

Give women a copy of an advertisement that uses nutrition to promote the product and ask women to comment on aspects of this advertisement?

1. Do you currently purchase this product? Why?
2. If no, would you consider purchasing this product now that you have seen this advertisement? Why?
3. What are your initial thoughts/reactions to this advertisement?

**10.23***Appendix 23: Sample Advertisement and Editorial for Adult Women*

1. Eat chocolate every day! Woman's Day September, 22 2003.
2. Meadow Lea Logicol advertisement, Woman's Day, August 2003.





**10.24 Appendix 24: Sample Advertisement and Editorial for Teenage Girls Cont.**

1. Diet Myths Busted! Girlfriend, October 2003
2. Milo advertisement, Dolly, October, 2003



## 10.25 Appendix 25: Participant Profile

Participant Name	Details
<b>45-54 year group</b>	
Barbara	Married with teenage children. Works in community nursing. Struggles with her weight, has recently gained weight after losing 20 kilograms. Describes herself as a victim of food.
Penny	Married with adult children. Works part-time. Recently gained weight which she attribute to HRT.
Yvonne	Single, no children and lives alone. Recently retrenched. Describes herself as mostly vegan however consumes milk and yoghurt sometimes.
Betty	Married with adult children. Self employed. Diabetic. Has recently lost 15 kilograms and aims to lose another 20 kilograms.
Nancy	Divorced with adult children, lives alone. Works part-time and has very limited financial resources. Has recently lost a stone which resulted from dietary changes associated with elevated cholesterol.
Wendy	Married with children. Was vegetarian for 20 years but has recently reintroduced meat into the family diet because of iron deficiency.
Carol	Married with children. Not currently employed. Feels that should could lose some weight but isn't very worried about it.
Helen	Married with primary school aged children, describes herself as an older mother. Works part time. Would like to lose some weight.
Kathy	Married with adult children. Studying part-time and works part-time. Consumes a vegetarian diet. Has given up trying to lose weight.
Nola	Married with primary school aged children. Works full time. Is not concerned about her weight and is happy with her current dietary practices.
Cora	Separated from husband during the course of the research project, has teenage children. Has coeliac's disease.

	Indicated that limited financial resources limit her food choices.
Gaye	Married with adult children. Cares for her disabled husband and volunteers part-time caring for disabled children. Has recently started consuming a vegetarian diet as a result of interest in Buddhism.
<b>25-34 year group</b>	
Clare	Married with one child and became pregnant with second child during the course of this project. Works part-time. Has always been weight conscious.
Hayley	Married, no children. Currently working on a casual basis. Is following a low fat diet because of recent weight gain.
Tina	Single, lives with partner. Works full time and long hours. Concerned about losing too much weight, because recently has lost a lot of weight because of long working hours and not having enough time to eat.
Chrissie	Single, lives at home. Works full time. Has always been weight conscious and would like to lose a little bit of weight.
Tracy	Single, lives with partner. Self employed. Follows a vegetarian diet and is happy with current dietary practices.
Carly	Married, with no children. Works full time. Describes her diet as basically vegetarian, once a month will eat chicken or fish. Is worried about the impact of being vegetarian during pregnancy.
Mandy	Single, lives with partner. Studying full time. Follows a vegetarian diet, will eat fish about once a month.
Anna	Married with one child. Studying full time. Never has worried about her weight.
Karen	Married and became pregnant during the course of the study. Works full time. Has never worried about her weight.
Brooke	Single, lives alone. Works full time. Had her gall bladder removed the previous year and now has problems digesting fatty foods.
Holly	Single, lives with partner. Works fulltime, says that she works long hours which impacts on her food decisions.
Chloe	Married with one child and became pregnant during the

	course of the project. Studying part-time. Has always struggled with her weight.
Jane	Single, lives with partner. Works fulltime. Was vegan for 12 years, but recently started eating fish and cheese based on advice from microbiologist.
<b>13-16 year group</b>	
Laura	<p>All teenage girls were recruited from a local girls high school.</p> <p>Girls were aged between 13 to 16 years.</p> <p>No further demographic information was recorded for these participants.</p>
Beth	
Madison	
Gabrielle	
Bridget	
Samantha	
Nicole	
Kylie	
Caitlin	
Melanie	
Melissa	
Monica	

## 10.26 Appendix 26: Results of Pre Interview Surveys 1 & 2

This section provides the results for women's magazine reading habits of the pre-interview surveys for interview one and two by each age group. Women were asked to report the frequently with which they read the magazines which were being content analysed (Dolly, Girlfriend, Cleo, Cosmopolitan, New Idea, Woman's Day, That's Life! and Australian Women's Weekly).

Women aged 45 –54 years magazine reading habits are outlined below. In the four months prior to each interview period the majority of women had read a woman's magazine. Prior to interview period one, one woman had not read one of the specified magazine, while prior to interview two, two women had not read a woman's magazine. These women did however indicate that they had read other magazines during this period. Few women reported reading every edition of one of the specified magazines.

**Table: Women Aged 45- 54 years Magazine Reading Habits During Interview 1 & 2 Periods**

	Interview 1					Interview 2				
	Every	Most	Some	Once	Never	Every	Most	Some	Once	Never
<b>Dolly</b>	0	0	-	1	11	0	0	0	2	10
<b>Girlfriend</b>	0	0	-	1	11	0	0	0	0	12
<b>Cleo</b>	0	0	-	1	11	0	0	1	1	10
<b>Cosmopolitan</b>	0	0	-	3	9	0	0	1	0	11
<b>New Idea</b>	0	1	-	6	5	0	2	2	2	6
<b>Woman's Day</b>	0	3	-	5	4	0	3	2	0	7
<b>That's Life!</b>	0	0	-	3	9	0	0	2	1	9
<b>AWW</b>	2	0	-	7	3	1	1	4	2	4

N = 12

Prior to interview 1 four women aged 45 –54 years identified that they had not read any other magazines, two women identified reading one other magazine and 6 women indicated that they had read two other magazines. Prior to interview 2, four women identified that they had not read any other magazines, one women had read one other magazine, 5 women had read 2 other magazines and 2 women had read five other magazines.

## **Appendix 26: Results of pre interview surveys 1 & 2**

Women aged 25 –34 years magazine reading habits are outlined below. Only one woman in this group reported not reading one of the specified magazines prior to interview one and two, this participant did however indicate that she read other magazines during these period. Of the women indicated reading one the specified magazines, no woman read every edition of one of these magazines.

**Table: Women Aged 25- 34 years Magazine Reading Habits During Interview 1 & 2 Periods**

	Interview 1					Interview 2				
	Every	Most	Some*	Once	Never	Every	Most	Some	Once	Never
<b>Dolly</b>	0	0	-	0	13	0	0	0	0	13
<b>Girlfriend</b>	0	0	-	0	13	0	0	0	0	13
<b>Cleo</b>	0	2	-	5	6	0	0	3	2	8
<b>Cosmopolitan</b>	0	2	-	7	4	0	0	3	4	6
<b>New Idea</b>	0	0	-	7	6	0	0	4	2	7
<b>Woman's Day</b>	0	1	-	7	5	0	1	4	5	3
<b>That's Life!</b>	0	1	-	2	10	0	0	1	2	10
<b>AWW</b>	0	1	-	6	6	0	1	1	3	8

N = 13

\* The "some" option was not included in the pre-interview survey for interview one.

Prior to interview one, only one woman reported reading no other magazines, 1 had read one other magazines, 2 woman had read four magazines, three women had read three other magazines, two women had read four other magazines and 2 women reported reading 5 or more magazines. Prior to interview two, all women reported reading another magazine, 2 women reported reading one other magazine, three read 2 other magazines, 5 women had read three magazines and two women has read four magazines and one women reported reading five or more magazines.

Teenage girls magazine reading habits are outlined below. All teenage girls reported reading at least one of the specified magazines. Teenage girls were also more likely to report that they read every edition of a women's.



## ***Appendix 26: Results of pre interview surveys 1 & 2***

**Table: Women Aged 13- 16 years Magazine Reading Habits During Interview 1 & 2 Periods**

	Interview 1					Interview 2				
	Every	Most	Some	Once	Never	Every	Most	Some	Once	Never
<b>Dolly</b>	4	3	-	3	1	3	1	5	1	1
<b>Girlfriend</b>	2	3	-	4	2	3	1	3	1	3
<b>Cleo</b>	0	3	-	3	5	0	1	2	4	4
<b>Cosmopolitan</b>	2	4	-	6	3	1	1	3	4	2
<b>New Idea</b>	0	1	-	7	3	0	0	4	3	4
<b>Woman's Day</b>	1	0	-	6	4	1	0	3	3	4
<b>That's Life!</b>	0	0	-	2	9	0	0	0	2	9
<b>AWW</b>	0	1	-	5	5	0	0	3	3	5

N = 11

Prior to the first interview, 10 teenage girls reported reading no other magazines and one teenage girl reported reading one other magazine. Prior to the second interview, 8 teenage girls reported reading no other magazines, 2 teenage girls reported reading one other magazine and one teenage girl reported reading two other magazines.

## **10.27 Appendix 27: Letter to Shopping Centre Management**

Dear Sir/Madam,

I am a PhD student in the Graduate School of Public Health at the University of Wollongong, supervised by Dr. Heather Yeatman. I am conducting a research project called *"Magazine purchased by women aged 25-34 years and 45-54 years; a cross sectional study"*. The University of Wollongong's Human Research Ethics Committee has reviewed this project. The mass media, in particular women's magazines are an important source of information and very little information is publicly available regarding women's magazine purchasing habits. The aim of this research is to identify the magazines purchased by women aged 25-34 years and 45-54 years.

**As a retail centre that which attracts women from various socio-economic groups and cultural backgrounds I request permission to conduct a survey within your shopping centre. Participants in this project will be required to complete a short survey (less than 5 minutes). Women will be approached by the researcher (Danielle Lidgard) and asked if they would like to participate in a short survey. Participation is completely voluntarily. I have attached a copy of the introduction to be used by the researcher for your information.**

**Participants will not be placed at any risk. The identity of the participants will remain confidential. Participants can withdraw their consent and cease participation at any time during the research process.**

If you have any questions about this research you can contact the researcher or her supervisor named above. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457

Yours Sincerely,

PhD Student Graduate School of Public Health  
University of Wollongong  
Phone  
Email

## **10.28 Appendix 28: Participant Information Sheet**

**Research Project:** Health information in women's magazines<sup>12</sup>

**Researcher:**

**Graduate School of Public Health, University of  
Wollongong. Phone:**

**Supervisor:**

Graduate School of Public Health, University of Wollongong.

Phone:

**The mass media, in particular women's magazines are an important source of health information. The aim of this research is to examine the messages presented in leading Australian women's magazines.**

**As a participant in this research project you could make an important contribution by being involved in a short survey, which takes less than 5 minutes to complete. If you agree to participate in this research you will be asked to complete the survey. The survey will ask you questions about the magazines you read and buy.**

**Involvement in this survey is voluntary. You are free to discontinue participating in this survey at any time.**

**Information gained from the survey will be published in the form of a thesis and in journals. Your anonymity will be maintained in publishing. Information will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. You will not be placed at any risk. No identifying information will be collected from you and the identity of the all participants will remain confidential.**

If you have any questions about this research you can contact the researcher or her supervisor named above. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on

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<sup>12</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

## **10.29 Appendix 29: Consent Form**

I agree to participate in the research project "Magazine purchased by women aged 25-34 years and 45-54 years; a cross sectional study" as described to me by from the Graduate School of Public Health at the University of Wollongong, supervised by

I understand the study aims to identify the magazines purchased by women and to understand women's magazine reading habits.

I understand the survey will take approximately 5 minutes to complete.

I understand involvement in this survey is voluntary and I am free to refuse consent or to discontinue participating in this survey at any time.

**I understand the information I provide is confidential and I will not be identified in the publication of the results, which will be in the form of a university thesis and journal articles. I understand will not be placed at any risk and all my personal details will remain confidential.**

I understand if I have any questions I can contact Danielle, at the University of Wollongong on

**I understand that if I have any concerns or complaints regarding the way in which this research is or has been conducted, I can contact the Secretary of the University of Wollongong Human Ethics Committee on**

---

(Detach, the above information will be provided to the participant)

I, (name).....give my consent to participate in the research project "Magazine purchased by women aged 25-34 years and 45-54 years; a cross sectional study" conducted by

Signature.....Date.....

### **10.30Appendix 30: Standard Survey Introduction**

Hello, my name is \_\_\_\_\_. I am from the Graduate School of Public Health at the University of Wollongong.

I am conducting a short survey on women's magazines. The aims of the study are to identify the magazines purchased by women and understand women's magazine reading habits. If you agree to participate you will be asked to complete a 5-minute survey.

Involvement in this survey is voluntary. You are free to discontinue participating in this survey at any time.

The information you provide is confidential and you will not be identified in the publication of the results, which will be in the form of a university thesis and journal articles. You will not be placed in any risk and all your personal details will remain confidential.

Do you have any questions about the survey or anything I just said?

Are you interested in participating in the survey? If yes, Provided the participant with an information sheet and asked her to complete the survey.

### 10.31 Appendix 31: Survey

**Instructions:** Please indicate your response by ticking the relevant boxes.

1. Are you aged?  
☐ 25-34 years                      ☐ 45-54 years
2. Have you **bought** (purchased) a magazine in the last month?  
☐ Yes                      ☐ No (go to Q4)                      ☐ Can't remember (go to Q4)
3. Which magazine/s have you **purchased** in the last month?  

<input type="checkbox"/> Australian Women's Weekly	<input type="checkbox"/> Belle
<input type="checkbox"/> B Magazine	<input type="checkbox"/> Cleo
<input type="checkbox"/> Dolly	<input type="checkbox"/> Family Circle
<input type="checkbox"/> Good Medicine	<input type="checkbox"/> Harpers Bazaar
<input type="checkbox"/> Marie Clare	<input type="checkbox"/> New Idea
<input type="checkbox"/> New Woman	<input type="checkbox"/> Take 5
<input type="checkbox"/> Vogue Australia	<input type="checkbox"/> Vogue Entertaining & Travel
<input type="checkbox"/> Vogue Living	<input type="checkbox"/> Who Weekly
<input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Woman's Day

.....  
.....
4. Have you **read** any of the following magazines in the last month (for example, at the doctors surgery, friends house, waiting room, work etc)?  

<input type="checkbox"/> Australian Women's Weekly	<input type="checkbox"/> Belle
<input type="checkbox"/> B Magazine	<input type="checkbox"/> Cleo
<input type="checkbox"/> Dolly	<input type="checkbox"/> Family Circle
<input type="checkbox"/> Good Medicine	<input type="checkbox"/> Harpers Bazaar
<input type="checkbox"/> Marie Clare	<input type="checkbox"/> New Idea
<input type="checkbox"/> New Woman	<input type="checkbox"/> Take 5
<input type="checkbox"/> Vogue Australia	<input type="checkbox"/> Vogue Entertaining & Travel
<input type="checkbox"/> Vogue Living	<input type="checkbox"/> Who Weekly
<input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Woman's Day

.....  
.....
5. When you read a magazine, do you read it cover to cover?  

<input type="checkbox"/> Yes, all the time	<input type="checkbox"/> Yes, most of the time	<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> No, I don't read it cover to cover		
6. Which parts of the magazine do you read frequently?  

<input type="checkbox"/> Gossip	<input type="checkbox"/> Articles	<input type="checkbox"/> Health information
<input type="checkbox"/> Fashion	<input type="checkbox"/> Recipes	<input type="checkbox"/> Nutrition/diet information
<input type="checkbox"/> Advertisements	<input type="checkbox"/> Horoscopes	<input type="checkbox"/> Product promotions
<input type="checkbox"/> Other (please specify)	..... .....	
7. Magazines are a useful source of nutrition/diet information. Do you....?  

<input type="checkbox"/> Strongly agree	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Neither agree or disagree
<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Don't know
8. What is your postcode?.....
9. Are you employed?  

<input type="checkbox"/> Full-time	<input type="checkbox"/> Part-time	<input type="checkbox"/> Casual
<input type="checkbox"/> Unemployed	<input type="checkbox"/> Student	<input type="checkbox"/> Home duties
<input type="checkbox"/> Other (please specify)	.....	

## **10.32 Appendix 32: Letter for Survey (Parents)**

Dear Parent/Guardian

I am a PhD student at the University of Wollongong in the Graduate School of Public Health, conducting a research project titled "*Health information in magazines targeted at teenage girls*". I am seeking teenage girls in years 7 to 10 to participate in a short survey about the magazines they buy and read. The survey will take less than 5 minutes to complete.

Information gained from the survey will be published in the form of a thesis and in journals. The University of Wollongong Human Ethics Committee and St Mary Star of the Sea College have reviewed this project.

Teenage girls will not be allowed to participate in the survey without written parental consent. I have attached further information regarding this project and a consent form that you will need to read, sign and return in the reply-paid envelope provided by the **30 September 2002**. If parental consent is obtained, information regarding the research project will be provided to your daughter and consent will also be obtained from her. Under no circumstances will a teenage girl be allowed to participate without parental consent.

**If you have any questions regarding this project or would like further information please do not hesitate to contact me.**

Yours sincerely,

PhD Student  
Graduate School of Public Health  
University of Wollongong

Email



### **10.33 Appendix 33: Information Sheet for Survey (Parents)**

**Research Project:** Health information in magazines targeted at teenage girls<sup>13</sup>

**Researcher:**  
**Wollongong.** Graduate School of Public Health, University of  
**Phone:**

**Supervisor:**  
Graduate School of Public Health, University of Wollongong.

**The mass media, in particular women's magazines are an important source of health information. The aim of this research is to examine the messages presented to teenage girls in leading Australian magazines targeted at teenage girls. Your daughter may have already volunteered to participate in a group discussion about health information in magazines targeted at girls in her age group. I also need to collect information on the magazines your daughter reads and buys. This will help provide a more complete understanding of the health messages teenage girls are regularly receiving from magazines.**

**Your daughter, as a potential participant in this research project could make a valuable contribution by being involved in a short survey, taking less than 5 minutes to complete. If your daughter participates in this research she will be asked to complete the survey in her homeroom class at St Mary Star of the Sea College.**

**Your daughter cannot participate in this research project without parental consent. If you indicate your consent for your daughter to participate in this project her consent will also be obtained. Your daughter is under no obligation to participate in this research project because parental consent has been given. Under no circumstances will a teenage girl be allowed to participate in this survey without parental consent.**

Information gained from the survey will be published in the form of a thesis and in journals, however anonymity of participants will be maintained in publishing. Information will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. Participants will not be placed at any risk. No identifying information will be collected from your daughter and the identity of the participants will remain confidential.

Participants can withdraw their consent or you can withdraw your consent for your daughter to participate and cease participation at any time. If you choose to withdraw your daughter, or your daughter chooses to withdraw after participation, information already given cannot be withdrawn from the study.

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<sup>13</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

If you have any questions about this research you can contact the researcher or her supervisor named above. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

### **10.34 Appendix 34: Survey Consent Form (Parents)**

**Research Project:** Health information in magazines targeted at teenage girls<sup>14</sup>

**Researcher:**

Graduate School of Public Health, University of Wollongong.  
Phone:

**Supervisor:**

Graduate School of Public Health, University of Wollongong.  
Phone:

**I have been given information about “*Health information in magazines targeted at teenage girls*” and have discussed any questions I have regarding the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Dr Heather Yeatman in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I consent for my daughter to participate in this research project she will be asked to complete a short survey about the magazines she buys and reads. The survey will be completed in class at St Mary Star of the Sea College and will take less than 5 minutes to complete.**

**I understand that my decision to agree to my daughter’s participation in this research is voluntary, I am free to refuse for her to participate and I am free to withdraw her from the research at anytime. If withdrawal occurs after survey has been completed, information already provided cannot be withdrawn. My refusal for her to participate or withdraw will not affect any relationship she or I may have with the University of Wollongong.**

**If I have any enquires about the research, I can contact Danielle Lidgard on or on If I have any complaints or concerns regarding the way the research has been conducted, I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on**

**By indicating my consent below I am giving permission for my daughter to participate in the survey for the research titled “*Health information in magazines targeted at teenage girls*” conducted by Danielle Lidgard, as it has been described to me in the information sheet and in discussions with her.**

-----Please detach here-----

Survey Consent Slip

---

<sup>14</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

I (Please print your  
name).....

☐ Give  
☐ Do not give

Permission for my daughter (daughters  
name).....homeroom.....

to participate in the survey for the research project "Health information in magazines  
targeted at teenage girls".

Your

signature.....(Date).....

Please return this consent form in the reply paid envelope by the  
30 September 2002.

### ***10.35 Appendix 35: Homeroom Notice for Survey***

Danielle Lidgard a PhD student from the University of Wollongong is conducting a survey that takes less than 5 minutes to complete on the types of magazines that students in years 7-10 buy and read.

A letter and permission form has been sent home to your parents. You are only allowed to participate in this survey if your parents have returned the consent form, giving their permission for you to complete the survey. An information sheet and consent form will be given to these students in today's homeroom. If you are one of these students and would like to participate you need to sign the consent form and then complete the survey. Your homeroom teacher has copies of these surveys. When you have completed the survey please place it in the envelope provided and give it to your homeroom teacher. Your homeroom teacher will give the completed surveys to Danielle.

## **10.36 Appendix 36: Survey Information Sheet (Students)**

**Research Project:** Health information in magazines targeted at teenage girls<sup>15</sup>

**Researcher:**  
**Graduate School of Public Health, University of Wollongong.**

**Supervisor:**  
Graduate School of Public Health, University of Wollongong.

**The mass media, in particular women's magazines are an important source of health information. The aim of this research is to examine the messages presented to teenage girls in leading Australian magazines targeted at teenage girls.**

**As potential participant in this research project you could make an important contribution to this project by being involved in a short survey, which takes less than 5 minutes to complete. If you agree to participate in this research you will be asked to complete the survey in today's homeroom class at St Mary Star of the Sea College.** The survey will ask you questions about the magazines you read and buy.

**Information gained from the survey will be published in the form of a thesis and in journals. Your anonymity (identity) will be maintained in publishing. Information will be kept by the researcher for the study and will be stored securely by the supervisor at the University of Wollongong. You will not be placed at any risk. No identifying information will be collected from you and the identity of the all participants will remain confidential (a secret).**

You can withdraw your consent or your parents can withdraw their consent for you to participate and cease participation at any time before or during the research process. If you choose to withdraw after participation, information already given cannot be withdrawn from the study.

If you have any questions about this research you can contact the researcher or her supervisor named above. If you are dissatisfied with any aspect of how this research has been conducted you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on

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<sup>15</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

## **10.37 Appendix 37: Survey Consent Form (Students)**

### **Consent Form For Students**

**Research Project:** Health information in magazines targeted at teenage girls<sup>16</sup>

**Researcher:**

**Graduate School of Public Health, University of  
Wollongong Phone:**

**Supervisor:**

Graduate School of Public Health, University of Wollongong.  
Phone:

**I have been given information about “*Health information in magazines targeted at teenage girls*”. I can discuss any questions I have regarding the research project with Danielle Lidgard, who is conducting this research as a part of her PhD, supervised by Dr Heather Yeatman in the Graduate School of Public Health at the University of Wollongong.**

**I understand that if I give my permission participate in this research project I will be asked to complete a short survey about the magazines I buy and read. The survey will be completed in my homeroom class today at St Mary Star of the Sea College and will take less than 5 minutes to complete.**

**I understand that my decision to agree to participate in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at anytime. If I withdraw after survey has been completed, information already provided cannot be withdrawn. If I do not agree to participate or withdraw this will not affect any relationship I may have with the University of Wollongong.**

**If I have any enquires about the research, I can contact  
or If I have any complaints or concerns  
regarding the way the research has been conducted, I can contact the  
Complaints Officer, Human Research Ethics Committee, University of  
Wollongong on**

**By indicating my consent below I am giving my permission to participate in the survey for the research titled “*Health information in magazines targeted at teenage girls*” conducted by Danielle Lidgard, as it has been described to me in the information sheet.**

-----Please detach here-----

Survey Consent Slip

**I (Please print your name).....homeroom  
number.....**

**[ ] Give  
[ ] Do not give**

---

<sup>16</sup> The Australian Research Council and Sanitarium Health Food Company have funded this research project.

Permission to participate in the survey for the research project “Health information in magazines targeted at teenage girls”.

Your

signature.....(Date).....

**If you are giving your permission to participate in the survey please complete the survey. When you have completed the survey place it in the envelope provided and return it to your homeroom teacher.**

## 10.38 Appendix 38: Teenage Girl Survey

**Instructions:** Please indicate your response by ticking the relevant boxes.

10. How old were you on your last birthday?

- |   |                                       |   |
|---|---------------------------------------|---|
| <input type="checkbox"/> Under 13 years old | <input type="checkbox"/> 13 years old | <input type="checkbox"/> 14 years old         |
| <input type="checkbox"/> 15 years old       | <input type="checkbox"/> 16 years old | <input type="checkbox"/> 17 years old or more |

11. Have you **bought** (purchased) a magazine in the last month?

- |                              |  |  |
|------------------------------|--|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No (go to Q4) | <input type="checkbox"/> Can't remember (go to Q4) |
|------------------------------|--|--|

12. Which magazine/s have you **purchased** in the last month?

- |  |  |
|--|--|
| <input type="checkbox"/> Australian Women's Weekly | <input type="checkbox"/> Belle                       |
| <input type="checkbox"/> B Magazine                | <input type="checkbox"/> Cleo                        |
| <input type="checkbox"/> Dolly                     | <input type="checkbox"/> Family Circle               |
| <input type="checkbox"/> Good Medicine             | <input type="checkbox"/> Harpers Bazaar              |
| <input type="checkbox"/> Marie Clare               | <input type="checkbox"/> New Idea                    |
| <input type="checkbox"/> New Woman                 | <input type="checkbox"/> Take 5                      |
| <input type="checkbox"/> Vogue Australia           | <input type="checkbox"/> Vogue Entertaining & Travel |
| <input type="checkbox"/> Vogue Living              | <input type="checkbox"/> Who Weekly                  |
| <input type="checkbox"/> Other (please specify)    | <input type="checkbox"/> Woman's Day                 |
- .....
- .....
- .....

13. Have you **read** any of the following magazines in the last month (for example, at the doctors surgery, friends house, waiting room, work etc)?

- |  |  |
|--|--|
| <input type="checkbox"/> Australian Women's Weekly | <input type="checkbox"/> Belle                       |
| <input type="checkbox"/> B Magazine                | <input type="checkbox"/> Cleo                        |
| <input type="checkbox"/> Dolly                     | <input type="checkbox"/> Family Circle               |
| <input type="checkbox"/> Good Medicine             | <input type="checkbox"/> Harpers Bazaar              |
| <input type="checkbox"/> Marie Clare               | <input type="checkbox"/> New Idea                    |
| <input type="checkbox"/> New Woman                 | <input type="checkbox"/> Take 5                      |
| <input type="checkbox"/> Vogue Australia           | <input type="checkbox"/> Vogue Entertaining & Travel |
| <input type="checkbox"/> Vogue Living              | <input type="checkbox"/> Who Weekly                  |
| <input type="checkbox"/> Other (please specify)    | <input type="checkbox"/> Woman's Day                 |
- .....
- .....
- .....

14. When you read a magazine, do you read it cover to cover?

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Yes, all the time                  | <input type="checkbox"/> Yes, most of the time | <input type="checkbox"/> Yes, sometimes |
| <input type="checkbox"/> No, I don't read it cover to cover |  |   |

15. Which parts of the magazine do you read frequently?

- |   |                                     |   |
|---|-------------------------------------|---|
| <input type="checkbox"/> Gossip                 | <input type="checkbox"/> Articles   | <input type="checkbox"/> Health information         |
| <input type="checkbox"/> Fashion                | <input type="checkbox"/> Recipes    | <input type="checkbox"/> Nutrition/diet information |
| <input type="checkbox"/> Advertisements         | <input type="checkbox"/> Horoscopes | <input type="checkbox"/> Product promotions         |
| <input type="checkbox"/> Other (please specify) |                                     |   |
- .....
- .....
- .....

16. Magazines are a useful source of nutrition/diet information. Do you....?

☐ Strongly agree

☐ Strongly disagree

☐ Neither agree or disagree

☐ Agree

☐ Disagree

☐ Don't know

17. What is your post code?.....



### 10.39 Appendix 39: Additional Survey Results

Question:	Age: 25-34 Working	Age: 25-34 Non-Working	TOTAL AGE: 25-34	Age: 45-54 Working	Age: 45-54 Non- Working	TOTAL Age: 45-54	TOTAL
<b>1: Number Surveyed in age group:</b>	66	37	<b>103</b>	63	35	<b>98</b>	<b>201</b>
<b>2: Number purchased a magazine in the last month:</b>	53	30	<b>83</b>	45	27	<b>72</b>	<b>155</b>
<b>3: Magazines Purchased:</b>							
Australian Women's Weekly:	6	2	<b>8</b>	20	14	<b>34</b>	<b>42</b>
B Magazine:	2	2	<b>4</b>				<b>4</b>
Belle:							<b>0</b>
Cleo:	9	1	<b>10</b>	1		<b>1</b>	<b>11</b>
Cosmopolitan:	11	1	<b>12</b>	2	2	<b>4</b>	<b>16</b>
Dolly:	1	2	<b>3</b>	2	2	<b>4</b>	<b>7</b>
Family Circle:	3	1	<b>4</b>	5	1	<b>6</b>	<b>10</b>
Girlfriend:	1	1	<b>2</b>	1	2	<b>3</b>	<b>5</b>

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Good Medicine:	4	1	5	7		7	12
Harpers Bazaar:				1		1	1
In Style:	2		2				2
Marie Clare:	6	1	7	3		3	10
New Idea:	10	6	16	15	10	25	41
NW:	4		4	4		4	8
New Woman:	3	1	4	2	2	4	8
Take 5:	3	5	8	1	6	7	15
That's Life:	8	7	15	7	10	17	32
Vogue Australia:	2		2	1		1	3
Vogue Entertaining & Travel:				2		2	2
Vogue Living:	3	1	4	1	1	2	6
Who Weekly:	6	4	10	4		4	14

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Woman's Day:	7	8	15	17	6	23	38
Other (please specify):							
Didn't specify:	1		1				1
About Pregnancy:		1	1				1
Art & Archeology:		1	1				1
Art & Craft:	1		1				1
ASL:					1	1	1
Australian Family History:				1		1	1
Better Homes & Gardens:	3		3	1	1	2	5
Big Week:	1		1				1
Body Building:	1		1				1
Bulletin:				1		1	1
Burke's Backyard:				1		1	1

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Computers:					1	1	1
Craft:	1		1				1
Delicious:	1		1				1
Donna Hay:	1		1				1
FHM:	1		1				1
Fresh Food:				1		1	1
Good Taste:	1		1				1
Heartwise:				1		1	1
Home Beautiful:	1	1	2				2
Home Magazine:	1		1				1
House & Garden:	1	1	2				2
Inside Out:				1		1	1
League Week:	1		1				1
Mag's Online:	1		1				1

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
My Weekly:					1	1	1
Peoples Friend:					1	1	1
Picture:		1	1				1
Slimming:	1		1				1
Soap:		1	1				1
Stamps and Paper Craft:	1		1				1
Super Food Ideas:	2	4	6				6
Surfing Life:	1		1				1
Table:				1		1	1
The Wiggles:	1		1				1
Time:				1		1	1
TV Week:		1	1	1	1	2	3
Unique Cats:	1		1				1

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Wedding Mags:	1		<b>1</b>				<b>1</b>
Witch Craft:	1		<b>1</b>				<b>1</b>
Woman's Health:		1	<b>1</b>				<b>1</b>
WOW:		1	<b>1</b>				<b>1</b>
<b>4: Magazines read in the last month:</b>							
Australian's Women's Weekly:	19	11	<b>30</b>	22	11	<b>33</b>	<b>63</b>
B Magazine:	6		<b>6</b>	2		<b>2</b>	<b>8</b>
Belle:	2	1	<b>3</b>	1		<b>1</b>	<b>4</b>
Cleo:	15	6	<b>21</b>	3	1	<b>4</b>	<b>25</b>
Cosmopolitan:	17	6	<b>23</b>	9	3	<b>12</b>	<b>35</b>
Dolly:	4	2	<b>6</b>	3	1	<b>4</b>	<b>10</b>
Family Circle:	1	2	<b>3</b>	15	2	<b>17</b>	<b>20</b>
Girlfriend:	2	1	<b>3</b>	1		<b>1</b>	<b>4</b>

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Good Medicine:	7	1	8	7	1	8	16
Harpers Bazaar:	1		1	3		3	4
In Style:	2		2	1		1	3
Marie Clare:	13		13	10		10	23
New Idea:	21	10	31	19	16	35	66
NW:	6	1	7	5		5	12
New Woman:	3	1	4	4	3	7	11
Take 5:	5	6	11	4	6	10	21
That's Life:	14	9	23	8	10	18	41
Vogue Australia:	3		3	5		5	8
Vogue Entertaining & Travel:	1		1	4		4	5
Vogue Living:	8		8	4		4	12
Who Weekly:	13	5	18	12	3	15	33
Woman's Day:	13	12	25	22	9	31	56

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Other (please specify):							
Better Homes & Gardens:	2	1	3		1	1	4
Good Taste:	1		1				1
Gourmet:	1		1				1
House & Garden					1	1	1
National Geographic:	1		1	1		1	2
Parenting		1	1				1
Reader's Digest:	1		1	1		1	2
She	1		1				1
Super Food Ideas:		1	1				1
TV Soap		1	1				1
<b>5: Read Magazine cover to cover?</b>							
Yes, all the time:	12	9	21	13	13	26	47
Yes, most of the time:	18	10	28	19	11	30	58



<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Yes, sometimes:	17	7	<b>24</b>	12	4	<b>16</b>	<b>40</b>
No:	19	11	<b>30</b>	19	7	<b>26</b>	<b>56</b>
<b>6: Parts of magazine read most frequently:</b>							
Gossip:	33	25	<b>58</b>	29	19	<b>48</b>	<b>106</b>
Articles:	35	20	<b>55</b>	35	20	<b>55</b>	<b>110</b>
Health Information:	41	20	<b>61</b>	39	26	<b>65</b>	<b>126</b>
Fashion:	39	16	<b>55</b>	23	15	<b>38</b>	<b>93</b>
Recipes:	35	18	<b>53</b>	42	28	<b>70</b>	<b>123</b>
Nutrition/ diet:	32	14	<b>36</b>	37	19	<b>56</b>	<b>92</b>
Advertisements:	10	5	<b>15</b>	7	9	<b>16</b>	<b>31</b>
Horoscopes:	26	18	<b>44</b>	25	17	<b>42</b>	<b>86</b>
Product Promotions:	13	5	<b>18</b>	10	11	<b>21</b>	<b>39</b>
Other:							
Competitions:	1		<b>1</b>				<b>1</b>

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Crosswords:				2	3	<b>5</b>	<b>5</b>
Feng Shui:					1	<b>1</b>	<b>1</b>
General:	1		<b>1</b>				<b>1</b>
Psychics:				1		<b>1</b>	<b>1</b>
Readers Letters:					1	<b>1</b>	<b>1</b>
Sports:	1		<b>1</b>				<b>1</b>
<b>7: Magazines are a useful source of nutrition/ diet information:</b>							
Strongly agree:	3	4	<b>7</b>	7	2	<b>9</b>	<b>16</b>
Agree:	36	16	<b>52</b>	38	25	<b>43</b>	<b>95</b>
Strongly Disagree:	3	4	<b>7</b>	1		<b>1</b>	<b>8</b>
Disagree:	6	8	<b>14</b>	4	3	<b>7</b>	<b>21</b>
Neither agree or disagree:	14	3	<b>17</b>	11	5	<b>16</b>	<b>33</b>
Don't Know:	4	2	<b>6</b>	1		<b>1</b>	<b>7</b>
No Response:				1		<b>1</b>	<b>1</b>

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
<b>8: Post Code:</b>							
Didn't State:	3		<b>3</b>	1	1	<b>2</b>	<b>5</b>
2115:		1	<b>1</b>				<b>1</b>
2122:					1	<b>1</b>	<b>1</b>
2168:	1		<b>1</b>				<b>1</b>
2232:	1		<b>1</b>				<b>1</b>
2315:					1	<b>1</b>	<b>1</b>
2452:					1	<b>1</b>	<b>1</b>
2500:	20	9	<b>29</b>	7	3	<b>10</b>	<b>39</b>
2502:	4	4	<b>8</b>	1	4	<b>5</b>	<b>13</b>
2505:	2	1	<b>3</b>	4		<b>4</b>	<b>7</b>
2506:	1		<b>1</b>	2		<b>2</b>	<b>3</b>
2515:	1	1	<b>2</b>				<b>2</b>
2516:	1		<b>1</b>				<b>1</b>

<b>Question:</b>	<b>Age: 25-34 Working</b>	<b>Age: 25-34 Non-Working</b>	<b>TOTAL AGE: 25-34</b>	<b>Age: 45-54 Working</b>	<b>Age: 45-54 Non- Working</b>	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
2517:	3	1	4	3	1	4	8
2518:	2	1	3				3
2519:	2		2	4	2	6	8
2520:				1		1	1
2525:	2	1	3	4		4	7
2526:	1	3	4	1	4	5	9
2527:	2	1	3	4	1	5	8
2528:	8	6	14	9	7	16	30
2529:	6	4	10	8	3	11	21
2530:	4	3	7	3	2	5	12
2533:					2	2	2
2534:	1	1	2				2
2540:				1		1	1

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
2541:					1	1	1
2560:					1	1	1
2713:				1		1	1
2760:				1		1	1
2902:				1		1	1
4272:				1		1	1
4740:				1		1	1
4802:	1		1				1
<b>9: Employed:</b>							
Full-Time:	36		36	33		33	69
Unemployed:		2	2		2	2	4
Part-time:	16		16	19		19	35
Casual:	15		15	11		11	26
Student:	5	8	13	2	1	3	16

<b>Question:</b>	Age: 25-34 Working	Age: 25-34 Non-Working	<b>TOTAL AGE: 25-34</b>	Age: 45-54 Working	Age: 45-54 Non- Working	<b>TOTAL Age: 45-54</b>	<b>TOTAL</b>
Home Duties:	4	25	<b>29</b>	2	31	<b>33</b>	<b>62</b>
Other:							
Awaiting Permanent Visa:		1	<b>1</b>				<b>1</b>
Humanitarian:		1	<b>1</b>				<b>1</b>
Retired:			<b>1</b>		1	<b>1</b>	<b>1</b>

QUESTION	Age: Under 13	Age: 13 years	Age: 14 years	Age: 15 years	Age: 16 years	Age: 17 years or more	Total
Number surveyed in each age group	21	34	22	22	6	0	105
Number purchased a magazine in each age group	14	25	18	18	4	0	79
Magazines purchased in last month							0
Dolly	9	21	14	14	1	0	59
Girlfriend	7	12	10	5	1	0	35
Cosmopolitan	0	2	5	3	2	0	12
Cleo	0	1	3	6	1	0	11
B - Magazine	0	0	0	3	0	0	3
Disney	3	0	0	0	0	0	3
Australian Women's Weekly	2	0	0	0	0	0	2
K-Zone	2	0	0	0	0	0	2
Surfing Life	0	0	0	0	2	0	2
TV Hits	0	1	0	1	0	0	2
Animal Life	1	0	0	0	0	0	1
Big Hit	0	0	0	0	1	0	1
Chick	0	0	0	0	1	0	1

Harpers Bazaar	0	1	0	0	0	0	1
Marie Clare	0	0	0	1	0	0	1
New Woman	1	0	0	0	0	0	1
RSPCA Animal Magazine	1	0	0	0	0	0	1
Smash Hits	0	1	0	0	0	0	1
Take 5	1	0	0	0	0	0	1
That's Life	1	0	0	0	0	0	1
Who Weekly	0	0	0	0	1	0	1
Woman's Day	1	0	0	0	0	0	1
<b>Magazines read in the last month</b>							<b>0</b>
Dolly	14	31	17	19	4	0	85
Girlfriend	10	24	13	12	3	0	62
Australian Women's Weekly	7	12	11	6	2	0	38
Cosmopolitan	1	6	9	12	2	0	30
Cleo	1	6	5	10	4	0	26
New Idea	4	7	4	6	2	0	23
Who Weekly	4	8	4	5	2	0	23
Woman's Day	3	8	8	2	0	0	21
B - Magazine	1	1	2	7	0	0	11



NW	2	2	4	1	1	0	10
Marie Clare	0	3	2	1	0	0	6
New Woman	1	2	1	2	0	0	6
Take 5	1	3	2	0	0	0	6
That's Life	0	2	1	3	0	0	6
Good Medicine	1	3	0	0	1	0	5
Vogue Australia	0	3	1	0	1	0	5
TV Hits	1	0	0	1	1	0	3
Family Circle	0	1	2	0	0	0	3
Belle	1	1	0	1	0	0	3
TV Week	0	0	0	2	0	0	2
Smash Hits	0	1	0	1	0	0	2
Instyle	0	1	1	0	0	0	2
Vogue Entertaining & Travel	0	1	1	0	0	0	2
Vogue Living	0	1	1	0	0	0	2
Dance Train	0	0	1	0	0	0	1
Surfing Life	0	0	0	0	1	0	1
Track Magazine	0	0	1	0	0	0	1
Weight Watchers	0	0	1	0	0	0	1

Cook Magazine's	0	0	0	1	0	0	1
Better Homes & Garden's	1	0	0	0	0	0	1
Harpers Bazaar	1	0	0	0	0	0	1
Horse Deals	1	0	0	0	0	0	1
Delicious	0	1	0	0	0	0	1
The Helix	1	0	0	0	0	0	1
Animal Life	1	0	0	0	0	0	1
Rolling Stone	0	0	0	1	0	0	1
<b>Read magazines cover to cover?</b>							0
Yes, all the time	4	4	5	2	1	0	16
Yes, most of the time	4	12	9	10	1	0	36
Yes, sometimes	9	12	7	8	3	0	39
No, I don't read it cover to cover	4	6	1	2	1	0	14
<b>Parts of magazine most frequently read</b>							0
Gossip	15	31	20	16	4	0	86
Fashion	13	28	20	17	6	0	84
Articles	11	20	11	15	1	0	58
Horoscopes	8	15	12	15	4	0	54
Health information	5	8	7	7	7	2	36

Nutrition/diet information	4	9	10	11	1	0	35
Product promotions	3	11	5	5	1	0	25
Advertisements	4	9	3	6	0	0	22
Recipes	3	4	2	4	3	0	16
"How embarrassing"	2	3	1	1	0	0	7
Quizzes	2	2	1	1	0	0	6
People's Stories	0	0	0	3	1	0	4
What is most interesting	1	0	0	1	0	0	2
Beauty	0	0	1	1	0	0	2
Interviews	0	1	0	0	0	0	1
Comics	1	0	0	0	0	0	1
<b>Magazines are a useful source of nutrition/diet information. Do you?</b>							0
Strongly agree	1	1	0	4	0	0	6
Agree	8	15	10	12	1	0	46
Neither Agree or disagree	7	8	7	2	2	0	26
Disagree	3	4	2	3	3	0	15
Strongly disagree	0	2	0	0	0	0	2
Don't know	2	4	2	1	0	0	9

Postcode							0
2500	5	3	6	7	1	0	22
2518	2	1	1	1	0	0	5
2519	2	3	5	1	0	0	11
2525	2	4	1	4	1	0	12
2526	5	7	1	4	1	0	18
2527	0	0	0	0	1	0	1
2515	1	8	1	1	0	0	11
2506	0	0	0	1	0	0	1
2529	0	0	0	1	0	0	1
2517	0	1	0	1	0	0	2
2528		0	1	1	0	0	2
2530	0	1	1	0	1	0	3
2516	0	1	2	0	1	0	4
2533	0	0	1	0	0	0	1
2560	0	0	1	0	0	0	1
2505	1	0	0	0	0	0	1
Not Given	0	4	0	0	0	0	4

## **10.40 Appendix 40: Advertisements Coding Book and Form**

### **Content Analysis of the Advertising Content of Magazines.**

#### Instructions for Content Analysis Procedure

All advertisements relating to food and nutrition, including product advertisements and product promotions, excluding product placements, will be content analysed. All advertisements relating to food and nutrition will be subject to broad content analysis to identify themes and general frames.

#### How to determine which articles to content analyse

Any advertisement that refers directly to food and/or nutrition in the will be subject to broad content analysis.

Keywords: Food, food groups, specific foods, nutrients, specific nutrients, overweight, obesity, weight loss, diet, weight gain, dieting, diet, dieter, dietary, food safety, diet supplements, fruit, specific fruits, vegetables, specific vegetables, vegetarianism, vegetarian, vegan, pulses, legumes, no meat, ovo lacto, overweight, obesity, weight gain, weight loss, diet, dieting, healthy weight, dieter.

**Advertisements that include keywords such as weight loss or fat but are not used in advertisements that refer directly to nutrition or food, rather to exercise programs or weight loss programs will not be content analysed. Please note that references to diet supplements and meal replacement products will be content analysed.**

Exceptions: recipes sections, restaurant or cookbook reviews will not be content analysed for this research project.

#### Important Definitions

**Food** – What is eaten or taken into the body for nourishment, this includes beverages (alcoholic and non- alcoholic) Vitamins, dietary supplements and weight loss products (which replace food) will also be included in analysis.

**Nutrition** – Any references to the process of nourishing or of being nourished. That is any references to food or nutrients including dieting.

**Vegetarianism** –the principle of someone who on moral principle or from personal preference lives on vegetable food (refusing meat, poultry, game or fish) or maintains that vegetables and farinaceous substances constitute the only proper food for humans.

**Diet –**

(1) A particular selection of food, especially as prescribed to improve the physical condition, regulate weight or cure a disease.

(2) The usual or regular foods a person eats most frequently.

(3) To select or limit the food one eats to improve one's physical condition or lose weight.

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**Content Analysis****Advertisement Information**

1. Advertisement ID number (a, magazine initials, date of publication (ddmmyy or mmyy), page number), for example ANI02030263. If more than one advertisement appears on one page end ID number with a, b, c etc
2. Product Name
3. Name of company that produces the product (if specified in the advertisement)
4. Magazine title
  - a. Dolly
  - b. Girlfriend
  - c. Cleo
  - d. Cosmopolitan
  - e. New Idea
  - f. Woman's Day
  - g. That's Life
  - h. The Australian Women's Weekly
5. Publication date
6. Page number/s
7. Key position
  - a. Inside front cover
  - b. Any inside page
  - c. Inside back cover
  - d. Outside back cover
8. Size of advertisement (length by width in millimetres)
  - a. \_\_\_\_\_ Cm Length
  - b. \_\_\_\_\_ Cm Width
  - c. \_\_\_\_\_ Cm<sup>2</sup> Area
  - d. \_\_\_\_\_ % of page used by the advertisement

9. Type of advertisement (standard product advertisement, product promotion & competition)
- Standard product advertisement (regular product advertisement)
  - Product promotion (contains more information about the product and it's features than a standard advertisement, will sometimes have a heading, for example "Cleo product promotion" may look similar to an editorial.
  - Company promotion (an advertisement that promotes the manufacturing company rather than a specific product. For example Uncle Toby's sometime have company promotion, which provide information on the importance of breakfast.
  - Competition (advertisement that incorporates a competition as a part of the ad)
  - Other (specify)
10. Advertisement headline (specify)
11. Spokesperson pictured
- Celebrity (specify)
  - Expert (specify)
  - Unknown person
  - No spokesperson
  - Other (specify)
12. Brand logo present?
- Yes
  - No
  - Not sure
13. The body copy. Amount of text in the advertisement is
- Less than 50 words
  - 50 to 250 words
  - More than 250 words
14. Key graphic features (more than one graphic feature per advertisement may be selected)
- Food photo
    - Food package
    - Serving suggestion
    - Other (specify)\_\_\_\_\_
  - People Photo
    - People/person consuming the product
    - People in contact with the product
    - People/person with the product in the fore or background
    - People/person no food

- v. Other (specify)\_\_\_\_\_
  - c. Scenic Photo
    - i. Scenic picture with product
    - ii. Scenic picture with out product
    - iii. Other (specify)\_\_\_\_\_
  - d. Diagrams (specify)
  - e. Graphs (specify)
  - f. Endorsement (for example Heart Foundation tick of approval)  
Please specify.
  - g. Advertisement contains no significant graphic features
  - h. Other (specify)
15. Colour of the advertisement
- a. 4-colour (standard)
  - b. 2-colour
  - c. More than 4-colours
  - d. Black and White
  - e. Other (specify)\_\_\_\_\_
16. Does the advertisement provide a recipe or serving suggestions for the product?
- a. Yes
  - b. No
17. Key message used to promote the product
- a. Nutrition related
    - i. General health and wellbeing
    - ii. Nutrient specific
    - iii. Reduce or control disease
    - iv. Minimises or eliminates certain substances
    - v. Other nutrient claims
    - vi. Weight loss
    - vii. Other (specify)\_\_\_\_\_
  - b. Consumer related
    - i. Taste
    - ii. Convenience
    - iii. Will please the family
    - iv. High quality
    - v. Economical
    - vi. Novel/new



- vii. Gives energy
- viii. Cool/fashionable
- ix. Prizes/competition
- x. Other (specify)\_\_\_\_\_

c. Other promotional claims (specify)

**If primary key message is not nutrition related go to question 26**

18. Secondary message used to promote the product

a. Nutrition related

- i. General health and wellbeing
- ii. Nutrient specific
- iii. Reduce or control disease
- iv. Minimises or eliminates certain substances
- v. Other nutrient claims
- vi. Weight loss
- vii. Other (specify)\_\_\_\_\_

b. Consumer related

- i. Taste
- ii. Convenience
- iii. Will please the family
- iv. High quality
- v. Economical
- vi. Novel/new
- vii. Gives energy
- viii. Cool/fashionable
- ix. Prizes/competition
- x. Other (specify)\_\_\_\_\_

c. Other promotional claims (specify)

d. No secondary message

19. For nutrition related statements, what is the general theme of the message?

- a. Positive do message –doing this will have a positive effect.
- b. Positive don't message –not doing this food will have a positive effect.
- c. Negative do message – do this will have a negative effect.
- d. Negative don't message – not doing this will have a negative effect
- e. Neutral
- f. Other (specify)

20. Is the message

- a. Implied
- b. Clearly stated

c.

21. Is the information in the advertisement quoted

- a. Yes, scientific research findings
- b. Yes, expert opinion
- c. Yes, company information
- d. Yes, lay person opinion
- e. Yes, celebrity opinion
- f. No

22. Is numerical information (i.e. statistics) used in the advertisement?

- a. Yes (specify)
- b. No

23. Describe how is the information in the advertisement is framed. Include important quotes that highlight this point.

- a. News breaking (provides information as new)
- b. Instructive/guidelines (conveying instruction, knowledge or information)
- c. Helpful/tips (Provides useful tips or hints)
- d. Warning/scare (Giving information on dangers, possible harms or anything unfavourable)
- e. Human interest (News item or story detailing emotion and human vicissitudes, usual involves ordinary people)
- f. Educational/informational (Concerned with education of the reader)
- g. Giveaway (things are given away; free gifts or competitions)
- h. Other (specify)

Important Quote

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24. Does the advertisement contain messages consistent with dietary guidelines

- a. Eat more bread and cereals
- b. Eat foods containing iron
- c. Eat a variety of nutritious foods
- d. Decrease total fat intake
- e. Decrease sugar intake
- f. Increase fruit and vegetable intake
- g. Increase fibre intake
- h. Limit salt intake
- i. Maintain a healthy body weight

- j. Eat foods containing calcium
- k. Limit alcohol intake
- l. Encourage breast feeding
- m. No message

25. Are any claims made in the advertisement? Please specify the claim.

- a. **Claim** means any statement, representation, design or information in relation to food, which is not mandatory in this code and includes an expressed or implied claim.
- b. An enhanced function claim **means a claim about the specific beneficial effects of a food or food component, in the context of the total diet, on the physiological, psychological or biological functions of the human body beyond its role in the normal growth, development, maintenance and other like functions of the human body.**
- c. **Nutrition claim** means a representation that states, suggests or implies that a food has a nutritional property whether generic or specific and whether expressed affirmatively or negatively
  - 1. And includes a nutrition content claim and nutrition function claim; and
  - 2. Includes references to energy, salt, sodium or potassium or amino acids carbohydrate, cholesterol, fat, fatty acids, fibre, protein, starch, sugars, vitamins, minerals, or any other nutrients or a biological active substance.
- d. **Nutrition content claim** means a nutrition claim, which describes or indicates the presence or absence of a component in that food.
- e. **Nutrition function claim** means a claim about the specific beneficial effects on consuming a food or component in a food, in the context of the total diet, on the normal, growth, development, maintenance and other like functions of the human body.
- f. **Health claim** means a claim that a relationship exists between the consumption of a food or component in a food, in the context of the total diet, and a disease or health related condition and includes an enhanced function claim; and a reduction of disease risk claim, a claim that a food will assist in weight reduction; a claim that could be interpreted as advice of a medical nature; and the name of, or any reference to any disease or physiological condition.
- g. **In the context of the total diet** refers to a claim that is limited to describing the effect which the ingestion or reduced ingestion of a food or component in a food, as part of a total diet, may have on health or a particular disease or health related condition, where the claim relates to the total diet of a defined population.
- h. **Prophylactic action** means the prevention of an abnormal physiological, psychological or biological state or disease.
- i. **Reduction of disease risk claim** means a relationship exists between the consumption of a food or component in a food in the context of total diet and the reduced risk of developing a disease or health related condition.

- j. **Therapeutic action** means action relating to treating, curing, or alleviating a disease, ailment, defect or injury.
- k. **No claim**

Specify the claim

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## Food & Nutrition Characteristics

### 26. Food Category

#### a. Milk & milk product

- i. Milk
- ii. Yoghurt
- iii. Cheese
- iv. Butter
- v. Margarine

#### b. Unprocessed meat

- i. Red meat
- ii. Poultry
- iii. Fish
- iv. Other (specify)

#### c. Processed meat

- i. Sandwich meat
- ii. Sausages
- iii. Pies/sausages
- iv. Frozen meat based meals
- v. Other (specify)

#### d. Bread & cereal

- i. Sliced bread
- ii. Breakfast cereal (regular less than 20% sugar)
- iii. Breakfast (high sugar more than 20% sugar)
- iv. High fibre breakfast cereal (more than x% fibre)
- v. Low fat breakfast cereal (more than x% fat)
- vi. Rice
- vii. Pasta
- viii. Noodles
- ix. Other (specify)

e. Fruit & vegetables

- i. Unprocessed fruit
- ii. Unprocessed vegetables
- iii. Vegetable based meal
- iv. Fruit based meal
- v. Tinned fruit
- vi. Frozen fruit
- vii. Tinned vegetables
- viii. Frozen vegetables
- ix. Other (specify)

f. High salt snacks (based on \_\_\_\_% salt)

- i. Popcorn
- ii. Nuts
- iii. Pretzels
- iv. Other (specify)

g. High fat snacks (based on \_\_\_\_% fat)

- i. Chocolate
- ii. Chips & crisps
- iii. Ice cream
- iv. Cakes & pastries
- v. Other (specify)

h. High sugar snacks (based on \_\_\_\_% sugar)

- i. Lollies
- ii. Ice blocks
- iii. Other (specify)
- iv. Fast food service or restaurants (specify)

i. Condiments and other food ingredients (specify)

j. Non-alcoholic beverages

- i. High sugar beverages
- ii. Sports drinks
- iii. Fruit drinks
- iv. Cordial
- v. Water
- vi. Coffee
- vii. Other (specify)

k. Alcoholic beverages

- i. Wine
- ii. Spirit
- iii. Pre-mixed beverage
- iv. Beer
- v. Other (specify)

l. Vitamin and Dietary supplement (specify)

m. Weight loss product (food replacement product) (specify)

n. Miscellaneous (specify)

o. Don't know

27. Form in which the food is sold

- a. Whole, fresh
- b. Packed fresh/ ready to eat
- c. Packaged
- d. Canned
- e. Bottled
- f. Frozen
- g. Dry
- h. Reconstitution required
- i. Other (specify)

28. Is the product nutrient modified

- a. Fat
- b. Sugar
- c. Salt/sodium
- d. Kilojoules
- e. Fibre
- f. Not modified
- g. Other (specify)

## Advertisement Coding Form

Coder ID \_\_\_\_\_

### Advertisement Information

1. Advertisement ID \_\_\_\_\_
2. Product name \_\_\_\_\_
3. Name of company \_\_\_\_\_
4. Magazine title \_\_\_\_\_

<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>	<b>g</b>	<b>h</b>
----------	----------	----------	----------	----------	----------	----------	----------

5. Publication date \_\_\_\_\_
6. Page No. \_\_\_\_\_
7. Key position \_\_\_\_\_

<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>
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8. Ad size  
\_\_\_\_\_ Cm Length  
\_\_\_\_\_ Cm<sup>2</sup> Area  
\_\_\_\_\_ Cm Width  
\_\_\_\_\_ % of page used by  
the advert

9. Ad type

<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>
----------	----------	----------	----------	----------

10. Ad headline

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Spokesperson

<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>
----------	----------	----------	----------	----------

12. Logo present

<b>a</b>	<b>b</b>	<b>c</b>
----------	----------	----------

13. Body copy

<b>a</b>	<b>b</b>	<b>c</b>
----------	----------	----------

14. Key graphic features

<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>	<b>g</b>	<b>h</b>
i	i	i					
ii	ii	ii					
iii	iii	iii					
	iv						
	v						

15. Colour of the advertisement

<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>
----------	----------	----------	----------	----------

16. Recipe?

<b>a</b>	<b>b</b>
----------	----------

17. Key message used to promote the product

<b>a</b>	<b>b</b>	<b>c</b>
i	i	
ii	ii	
iii	iii	
iv	iv	
v	v	
vi	vi	
vii	vii	
	viii	
	ix	
	x	

If primary message is not nutrition related go to Question 26

18. Secondary message



a	b	c	d
i	i		
ii	ii		
iii	iii		
iv	iv		
v	v		
vi	vi		
vii	vii		
	viii		
	ix		
	x		

19. General theme

a	b	c	d	e	f
---	---	---	---	---	---

20. Message

a	b
---	---

21. Information quoted

a	b	c	d	e	f
---	---	---	---	---	---

22. Numerical information used?

a	b
---	---

23. Advertisement frame

a	b	c	d	e	f	g	h
---	---	---	---	---	---	---	---

Quote \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

24. Advertisement and dietary guidelines

a	b	c	d	e	f	g	h	i	j	k	l	m
---	---	---	---	---	---	---	---	---	---	---	---	---

## 25. Advertisement and claims

a	b	c	d	e	f	g	h	i	j	k
---	---	---	---	---	---	---	---	---	---	---

Claim\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Food and Nutrition Characteristics

### 26. Food category

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
i	i	i	i	i	i	i	i			i	i				
ii	ii	ii	ii	ii	ii	ii	ii			ii	ii				
iii	iii	iii	iii	iii	iii	iii	iii			iii	iii				
iv	iv	iv	iv	iv	iv	iv				iv	iv				
v		v	v	v		v				v	v				
vi			vi	vi						vi					
			vii	vii						vii					
			viii	viii											
			ix	ix											

### 27. Food form

a	b	c	d	e	f	g	h	i
---	---	---	---	---	---	---	---	---

### 28. Nutrient modified

a	b	c	d	e	f	g
---	---	---	---	---	---	---

## **10.41 Appendix 41: Editorial Coding Book and Form**

### **Content Analysis of the Editorial Content of Magazines.**

#### **Instructions for Content Analysis Procedure**

All references within the editorial content of magazines; that is major article (over one page), minor articles, letters, columns, letters, reader stories, question/answer and highlights referring to food and nutrition will be subjected to a broad content analysis. More detailed content analysis will be performed on all editorial content, which refers to fruit and vegetables (including vegetarianism) and dieting/weight loss or maintaining a healthy diet. The Australian Public Health Nutrition Goals set by SIGNAL (strategic Inter-Governmental Nutrition Alliance of the National Public Health Authority) highlight promoting fruit and vegetable consumption and promoting healthy weight as important in public health.

#### **How to determine which articles to content analyse (broad content analysis)**

**Any article that refers to food and/or nutrition in the article title, subtitle, captions or call outs will be subject to broad content analysis.**

Keywords: Food, food groups, specific foods, nutrients, specific nutrients, overweight, obesity, weight loss, diet, weight gain, dieting, diet, dieter, dietary, food safety, diet supplements, fruit, specific fruits, vegetables, specific vegetables, vegetarianism, vegetarian, vegan, pulses, legumes, no meat, ovo lacto, overweight, obesity, weight gain, weight loss, diet, dieting, healthy weight, dieter.

Articles that include keywords such as weight loss or fat but are not used in articles that refer directly to nutrition or food, rather to exercise programs or weight loss programs **will not be** content analysed. Please note that references to diet supplements and meal replacement products **will be** content analysed.

**Exception: recipe sections of magazines will not be content analysed**

#### **How to determine which articles to perform more detailed content analysis (detailed content analysis)**

Fruit, vegetables and vegetarianism - any article that refers to fruit, vegetables and vegetarianism in the article title, subtitle, captions or call outs will be subject to detailed content analysis.

Keywords: Fruit, specific fruits, vegetables, specific vegetables, vegetarianism, vegetarian, vegan, pulses, legumes, no meat, ovo lacto.

Promoting healthy weight – any article that refers to weight in the article title, subtitle, captions or call outs will be subject to detailed content analysis.

Keywords: Overweight, obesity, weight gain, weight loss, diet, dieting, healthy weight, dieter.

### Important Definitions

**Food** – What is eaten or taken into the body for nourishment, this includes beverages (this includes alcoholic and non- alcoholic beverages), dietary supplements will also be included in analysis.

**Nutrition** – Any references to the process of nourishing or of being nourished. That is any references to food or nutrients including dieting.

**Vegetarianism** –the principle of someone who on moral principle or from personal preference lives on vegetable food (refusing meat or fish) or maintains that vegetables and farinaceous substances constitute the only proper food for humans.

### **Diet –**

(1) A particular selection of food, especially as prescribed to improve the physical condition, regulate weight or cure a disease.

(2) The usual or regular foods a person eats most frequently.

(3) To select or limit the food one eats to improve one's physical condition or lose weight.

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## Broad Content Analysis

### Article Information

1. Article ID Number (e, magazine initial, date of publication (ddmmyy) and page number), for example ENI02030285. If more than one advertisement appears on one page end ID number with a, b, c etc
2. Title of article
3. Article subheading
4. Magazine title
  - a. Dolly
  - b. Girlfriend
  - c. Cleo
  - d. Cosmopolitan
  - e. New Idea
  - f. Woman's Day
  - g. That's Life!
  - h. The Australian Women's Weekly
5. Publication date (ddmmyy)  
For monthly magazines the date should be recorded as 01/mm/yy

6. Author's name

7. Author's position

- a. Not specified
- b. Journalist
- c. Health professional
  - i. Doctor
  - ii. Dietitian
  - iii. Nurse
  - iv. Other health professional
  - v. Authority
- d. Other (specify)\_\_\_\_\_

8. Page number/s

9. Type of article

- a. Major article/feature article (usually over one page and is often advertised on the front cover of the magazine)
- b. Column or tip **IS** part of a feature article not specifically related to food and nutrition
- c. Column/tip part of regular section of the magazine (minor article) **NOT** part of a feature article (for example some magazines have a regular health section that may contain food and nutrition information).
- d. Letter
- e. Question/answer
- f. Dear Doctor (expert question and answer)
- g. Highlight or tip (very short article providing only one fact or a couple of sentences)
- h. Other (specify)\_\_\_\_\_

10. What section of the magazine is published

- a. Feature articles
- b. Lifestyle
- c. Food
- d. Beauty
- e. Health
- f. Fiction
- g. Regular articles
- h. Fashion
- i. Special promotions
- j. Cooking
- k. Other\_\_\_\_\_

11. Size of article (length by width in cm)

- a. \_\_\_\_\_cm Length

- b. \_\_\_\_\_ cm Width
- c. \_\_\_\_\_ cm<sup>2</sup> Area
- d. \_\_\_\_\_ % of page used by the article

Need to list the percentage of each page used by the total article.

12. Key graphic features (you can select more than one key graphic feature)

- a. Food photo
  - i. Food package
  - ii. Serving suggestion
  - iii. Other (specify) \_\_\_\_\_
- b. People Photo
  - i. People/person consuming food
  - ii. People in contact with the food
  - iii. People/person with the food in the fore or background
  - iv. People/person no food
  - v. Other (specify) \_\_\_\_\_
- c. Scenic Photo
  - i. Scenic picture with product
  - ii. Scenic picture with out product
- d. Other (specify) \_\_\_\_\_
- e. Diagrams (specify)
- f. Graphs (specify)
- g. No significant graphic feature
- h. Other (specify)

Food & Nutrition Features

13. Type of message

- a. Article specifically focusing on food and/or nutrition (this means that the entire focus of the article is food and nutrition)
- b. Food and/or nutrition was mentioned but is not the main topic of the article
- c. Other (specify) \_\_\_\_\_

14. Primary food and nutrition subject of the article

- a. Weight loss/dieting
- b. Improving personal physical characteristic (for example changes to diet lead to better skin)
- c. Nutrient specific information
- d. Food specific information (product information)
- e. Celebrity diet

- f. Cooking tips
- g. Food and nutrition related disease
- h. General nutrition
- i. Wellbeing
- j. Eating disorder
- k. Other (please specify)

15. What is the main theme of the article? Identify all themes, if more than one theme make a clear note of the most dominant theme.

16. Describe how is the topic framed. Include important quotes that highlight this point.

- a. News breaking (provides information as new)
- b. Instructive/guidelines (conveying instruction, knowledge or information)
- c. Helpful/tips (Provides useful tips or hints)
- d. Warning/scare (Giving information on dangers, possible harms or anything unfavourable)
- e. Human interest (News item or story detailing emotion and human vicissitudes, usual involves ordinary people)
- f. Educational/informational (Concerned with education of the reader)
- g. Giveaway (things are given away; free gifts or competitions)
- h. Other (specify)

Important Quote

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17. Is the article framed in a positive, negative or neutral manner?

- a. Positive do message –doing this will have a positive effect.
- b. Positive don't message –not doing this food will have a positive effect.
- c. Negative do message – do this will have a negative effect.
- d. Negative don't message – not doing this will have a negative effect
- e. Neutral
- f. Other (specify)

18. Information sources quoted or referenced

a. Yes

i. Expert quote

a. Doctor

b. Dietitian

c. Nurse

d. Other health professional

e. Authority

ii. Research findings

iii. Celebrity

iv. Other

(specify) \_\_\_\_\_

b. No

19. Does the article provide details on how to get further information on this topic?

a. No

b. Yes (see below)

c. Don't know

If yes please describe where reader is referred to for further information

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If the article topic doesn't relate to fruit and vegetable consumption, vegetarianism or weight control stop analysis

Complete detailed analysis if article focuses on fruit and vegetable consumption, vegetarianism or weight control

Detailed Content Analysis

20. Which of the following topics does the following article relate to?

a. Fruit and vegetables

b. Vegetarianism

c. Promotion of healthy weight



## Presentation of information

21. Was the information presented in a balanced manner?

- a. Yes, both sides of the issue were presented (justify your answer below)
- b. No, (justify your answer below)
- c. Don't know

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22. Does the headline/article title represent the article content accurately?

- a. Yes (justify your answer below)
- b. No (justify your answer below)
- c. Don't know

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## Recommendations

23. Were practical recommendations made?

- a. Yes (justify your answer below)
- b. No (justify your answer below)
- c. Recommendations were not made
- d. Don't know

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24. Were recipes included?

- a. Yes (provide examples)
- b. No

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## Advertisement Coding Form

Coder ID \_\_\_\_\_

### Article Information

1. Article ID No. \_\_\_\_\_
2. Article title \_\_\_\_\_  
\_\_\_\_\_
3. Article subheading \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Magazine title \_\_\_\_\_

a	b	c	d	e	f	g	h
---	---	---	---	---	---	---	---

1. Publication date \_\_\_\_\_
2. Author \_\_\_\_\_
3. Author's position \_\_\_\_\_

a	b	c	d
		i	
		ii	
		iii	
		iv	
		v	

4. Page number/s \_\_\_\_\_
5. Type of article \_\_\_\_\_

a	b	c	d	e	f	g	h
---	---	---	---	---	---	---	---

6. Magazine section \_\_\_\_\_

a	b	c	d	e	f	g	h	i	j	k
---	---	---	---	---	---	---	---	---	---	---

7. Article size

\_\_\_\_\_ Cm Length \_\_\_\_\_ Cm Width  
\_\_\_\_\_ Cm<sup>2</sup> Area \_\_\_\_\_ % of page used by  
the article

## 8. Key graphic features

a	b	c	d	e	f	g
i	i	i				
li	ii	ii				
lii	iii	iii				
	iv					
	v					

## Food and Nutrition Features

### 9. Type of message

a	b	c
---	---	---

### 10. Primary subject

a	b	c	d	e	f	g	h	i	j	k
---	---	---	---	---	---	---	---	---	---	---

### 11. Main theme

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### 12. Article frame

a	b	c	d	E	f	g	h
---	---	---	---	---	---	---	---

Quote \_\_\_\_\_

---



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### 13. Positive, Negative or Neutral

a	b	c	d	e	f
---	---	---	---	---	---

14. Information source

a	b
ia	
ib	
ic	
id	
ie	
ii	
iii	
iv	

15. Further information

a	b	c
---	---	---

Description\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Stop content analysis if the article doesn't refer to fruit and vegetable consumption, vegetarianism or weight control.**

**Complete questions 20-24 if article relates to fruit and vegetable consumption, vegetarianism or weight control**

**Detailed Content Analysis**

16. Topic

a	b	c
---	---	---

Presentation of information

17. Balanced information

a	b	c
---	---	---

Justify\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 18. Headline and article

<b>a</b>	<b>b</b>	<b>c</b>
----------	----------	----------

Justify\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Recommendations

### 19. Practical recommendations

<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>
----------	----------	----------	----------

Justify\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### 20. Recipes

<b>a</b>	<b>b</b>
----------	----------

Specify\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## **10.42 Appendix 42: Covers Coding Book and Form**

### Content Analysis of Magazines Covers.

#### Instructions for Content Analysis Procedure

A general content analysis of all cover references relating to food and nutrition will be content analysed.

#### How to determine which headlines to content analyse

Any cover headline that refers to food and/or nutrition will be subject to analysis.

Keywords: Food, food groups, specific foods, nutrients, specific nutrients, overweight, obesity, weight loss, diet, weight gain, dieting, diet, dieter, dietary, food safety, diet supplements, fruit, specific fruits, vegetables, specific vegetables, vegetarianism, vegetarian, vegan, pulses, legumes, no meat, ovo lacto, overweight, obesity, weight gain, weight loss, diet, dieting, healthy weight, dieter.

Headlines that include keywords such as weight loss or fat but are not used in headlines that refer directly to nutrition or food, rather to exercise programs or weight loss programs will not be content analysed. Please note that references to diet supplements and meal replacement products will be content analysed.

Exceptions: recipes sections will not be content analysed in this research project.

#### Important Definitions

**Food** – What is eaten or taken into the body for nourishment, this includes beverages (this includes alcoholic and non- alcoholic beverages), dietary supplements will also be included in analysis.

**Nutrition** – Any references to the process of nourishing or of being nourished. That is any references to food or nutrients including dieting.

**Vegetarianism** –the principle of someone who on moral principle or from personal preference lives on vegetable food (refusing meat or fish) or maintains that vegetables and farinaceous substances constitute the only proper food for humans.

**Diet** –

(1) A particular selection of food, especially as prescribed to improve the physical condition, regulate weight or cure a disease.

(2) The usual or regular foods a person eats most frequently.

(3) To select or limit the food one eats to improve one's physical condition or lose weight.

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### Content Analysis

1. Headline ID number (c, magazine initials, date, for example CNI050302) If more than one advertisement appears on one page end ID number with a, b, c etc
2. Headline
3. Subheading
4. Magazine title
  - a. Dolly
  - b. Girlfriend
  - c. Cleo
  - d. Cosmopolitan
  - e. New Idea
  - f. Woman's Day
  - g. That's Life
  - h. The Australian Women's Weekly
5. Publication date (ddmmyy or mmyy)
6. Total size of headline (length by width in cm)
  - a. \_\_\_\_\_ Cm Length
  - b. \_\_\_\_\_ Cm Width
  - c. \_\_\_\_\_ Cm<sup>2</sup> Area
  - d. \_\_\_\_\_ % of page used by the headline
7. Size of photograph or image associated with the headline
  - a. \_\_\_\_\_ Cm Length
  - b. \_\_\_\_\_ Cm Width
  - c. \_\_\_\_\_ Cm<sup>2</sup> Area
  - d. \_\_\_\_\_ % of page used by the picture
8. Number of words used in the headline and subheading
9. Uses colour to stand out from other headlines on the magazine cover?
  - a. **Yes**
  - b. **No**
  - c. **Don't know**
10. How is the headline depicted?
  - a. **Splash banner**
  - b. **Boxed**
  - c. **Accompanied by image/photograph**

- d. **Headline and subheading**
- e. **Other (specify)**\_\_\_\_\_

**11. Headline with photographs or images**

- a. **Photograph of a celebrity**
- b. **Photograph of an expert or authority**
- c. **Photograph of food**
- d. **Image of article**
- e. **Other (specify)**\_\_\_\_\_

**12. Describe how the headline is framed and justify your answer (i.e. how is the information presented)?**

- a. News breaking (provides information as new)
- b. Instructive/guidelines (conveying instruction, knowledge or information)
- c. Helpful/tips (Provides useful tips or hints)
- d. Warning/scare (Giving information on dangers, possible harms or anything unfavourable)
- e. Human interest (News item or story detailing emotion and human vicissitudes, usual involves ordinary people)
- f. Educational/informational (Concerned with education of the reader)
- g. Giveaway (things are given away; free gifts or competitions)
- h. Other (specify)

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## Cover Code Book

Coder ID \_\_\_\_\_

1. Headline ID No. \_\_\_\_\_

2. Headline \_\_\_\_\_  
\_\_\_\_\_

3. Subheading \_\_\_\_\_  
\_\_\_\_\_

4. Magazine title

a	b	c	d	e	f	g	h
---	---	---	---	---	---	---	---

5. Publication date

\_\_\_\_\_

6. Size of headline

_____	Cm Length	_____	Cm Width
_____	Cm <sup>2</sup> Area	_____	% of page used by headline

7. Size of photograph or image

_____	Cm Length	_____	Cm Width
_____	Cm <sup>2</sup> Area	_____	% of page used by picture

8. Number of words \_\_\_\_\_

9. Headline stands out

a	b	c
---	---	---

10. Headline depicted

a	b	c	d	e
---	---	---	---	---

11. Headline and photographs or images

a	b	c	d	e
---	---	---	---	---

12. Headline frame

a	b	c	d	e	f	g	h
---	---	---	---	---	---	---	---

**10.43 Appendix 43: New Idea, June 14, 2003 “Danger Diets”**  
**Pages 32-35**

**10.44 Appendix 44: New Idea, June 14, 2003, “Eat like a star”  
pages 48-49**

**10.45 Appendix 45: Woman's Day, February 10, 2003, "Diet Riot" page 56**

**10.46 Appendix 46: *Woman's Day*, September 22, 2003,  
"Catherine's amazing new diet" pages 10–13.**

**10.47 Appendix 47: Cleo, October 2003, "Is drinking the new dinner" pages 208-209**

**10.48 Appendix 48: Cleo, November 2003, “Alcohol: it could be the real date-rape drug” pages 111-112, 114.**

**10.49 Appendix 49: Example Alcoholic Beverage  
Advertisements**



**10.50 Appendix 50: Cleo, July 2003, "Fact: Diets can seriously ruin your health & looks. Restricting what you eat comes at a price! Pages 108 –111**

***10.51 Appendix 51: Examples of Weight Loss Product advertisements***

**10.52 Appendix 52: Dolly, May 2003 "The Dolly 4 week mind and body blitz" pages 107–115**

**10.53 Appendix 53: An example of a beverage advertisement  
from Dolly 2003 (Nestle Milo)**