Factors Influencing Women’s Choice of Weight-Loss Diet

by

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Abstract

Dieting for weight loss describes any modification to food consumption that is intended to reduce body weight, adiposity, and/or body size (McFarlane, Polivy, & McCabe, 1999). Research and theory into weight-loss dieting has been dominated by two essentially antagonistic perspectives (Neumark-Sztainer, 2005; Putterman & Linden, 2004): a medical/disease-prevention perspective that promotes weight-loss dieting for the treatment of overweight and obesity in the developed world (e.g., NICE, 2006; Ruser, 2005); and a psychosocial body-image perspective that blames weight-loss culture and the pursuit of thinness for widespread body dissatisfaction, psychological distress, and disordered eating in the developed world (e.g., Stice, 2002; Stice & Shaw, 2002). It is the contention of the present thesis that these perspectives have led to a focus on the motivational aspects of weight-loss itself at the expense of an understanding of the relevance of weight-loss methods. Indeed, weight-loss dieting has been operationalised in simple terms, such as the presence or absence of dieting (e.g., Jenks & Higgs, 2010); the use of specific/single dietary changes (e.g., the consumption of artificial sweeteners; Malinauskas, Raedeke, Aebly, Smith, & Dallas, 2006) or conversely, the use of very broad dieting strategies (e.g., ‘effortful caloric restriction’ including calorie counting, portion control and/or the restriction of food groups; Putterman & Linden, 2004); or the presence of psychological components of dieting, typically dietary restraint, that do not reliably correlate with actual caloric intake (Stice, Fisher, & Lowe, 2004; Stice, Sysko, Roberto, & Allison, 2010). This ignores the reality of weight-loss dieting as a complex set of behaviours with numerous underlying motivations and expected outcomes. In the present thesis, these limitations in the conceptualisation and operationalisation of weight-loss dieting are considered from the
The operationalisation of dieting behaviour for research purposes is a potentially important issue in the context of the theory of reasoned action because explaining an individual’s behaviour requires an understanding of their beliefs about the expected outcome of a particular action coupled with the importance they place on that outcome. In dieting, this assumes that the individual possesses expectations relating some aspect or feature of a diet to some specific outcome. The present thesis aimed to address this gap in the literature by conducting an empirical investigation of women’s selection of diet method, including the mental health correlates of these choices.

Prior to conducting research with female dieters, preliminary work was required to address the absence of assessment tools that measure factors relevant to diet choice. Applying qualitative content analysis to data from the commercial market of diet products and interviews with health professionals and laypeople, Study 1 extracted a typology of eight diet methods (Meal Plan, Calorie Counting, Low GI, High Protein/Low Carb, Meal Replacement, Pre-Prepared Meal, Supplement and Special Food); and in accordance with the theory of reasoned action, a typology of ten potential outcomes from dieting (Thinness, Health, Permanent Weight Loss, Quick Weight Loss, Lifelong Changes, Low Effort, Easily Integrated, How Diet Works, Cost and Natural) and three sociocultural influences on diet choice (Health Professionals, Media, and Family/Friends).

The relevance of the diet method typology was confirmed in Study 2, which surveyed 151 women who were currently dieting (age in years: $M = 30.85; SD = 11.65$) and investigated how diet motives differentiate the approach dieters take towards weight loss; whether these motives influence the maintenance of various diet methods, and; if
maintenance of these methods are differentially related to eating disorder symptomatology. A concern with appearance was the predominant weight-loss motive over a concern with health and there was evidence of a thinness-focused motivational profile: dieters who were preoccupied with becoming thinner desired quick weight loss, and devalued permanent weight loss, making lifelong dietary changes and education in how their diet method works. The thinness-focused motivational profile was associated with a vulnerability to sociocultural pressure to be thin and poor body image. Canonical analysis linked five diet methods – Calorie Counting, Special Food, High Protein/Low Carb, Supplement and Meal Plan – with the thinness-focused motivational profile and these methods (apart from Meal Plan) were also associated with the eating disorder symptomatology, restraint and eating concern.

Study 3 examined future diet choice in 182 women (age in years: $M = 31.18$, $SD = 9.78$) who were not dieting but had experience with weight-loss diets. The majority of these non-dieting women showed some dissatisfaction with their weight; and appearance was their predominant concern instead of health. A thinness-focused motivational profile – that includes the desire for quick weight loss, and devaluation of permanent weight loss and of education in how a diet works – was supported in Study 3. Canonical analysis did not differentiate future preference for diet methods and simply showed that the higher-order goals of dieting (Thinness, Health and Permanent Weight Loss) were the overriding concern to non-dieting women when considering diet choice within the next 12 months. Despite widespread scepticism regarding information the media disseminates, in the context of intention to start dieting, the media was revealed as the most influential sociocultural source of diet information. Furthermore, the thinness-focused motivational profile was more reliant on the media for diet advice. Non-dieters
in general were found to be most interested in information concerning the unwanted rather than wanted consequences of particular diet methods. However, information about the unwanted consequences of a diet method was found to be less important for prospective dieters who intended to start the diet. This suggested the existence of a self-serving bias, one that is consistent with the motivated reasoning literature.

Collectively, the results of these studies are taken to demonstrate the value of investigating the psychological bases of selecting and maintaining not just dieting behaviour, but particular diet methods. Implications of the present results for policy and clinical practice are considered, including the importance of assessing the motives of clients seeking weight-loss treatment and more stringent regulation of weight-loss products. The precise link between dieting and eating disorders remains unclear (Stice, 2002), and the investigation of specific diet methods has the potential to deconstruct how diet behaviours and diet cognitions predispose an individual to eating pathology. The results also demonstrate the potential role that diet motives have in determining whether dieting is a healthy versus unhealthy endeavour, physically and mentally. Limitations of the present thesis are acknowledged and indicate several directions for future research, including the use of more ecologically valid forms of data collection in order to better capture the decision-making process.
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Introductory Chapter

1.1 Rationale for the Current Research Focus

Dieting for weight loss is an attempt to modify food consumption for the purpose of reducing body weight and size (McFarlane, Polivy, & McCabe, 1999). By this definition, dieting behaviours include numerous and diverse strategies – from general caloric restriction through to the restriction or substitution of specific foods – making it difficult to operationalise and measure this construct adequately (Puttermann & Linden, 2004). Moreover, the psychological components of dieting – from cognitions and emotions around general dietary restraint and appetite management through to attitudes about specific foods – while measureable, do not reliably correlate with actual calorie intake or weight loss (Stice, Fisher, & Lowe, 2004; Stice, Sysko, Roberto, & Allison, 2010; Williamson et al., 2007).

Despite these challenges, there is substantial investment in understanding the motivations, methods, and consequences of dieting from laypeople and health professionals. This reflects the importance placed on body weight in relation to appearance, and mental and physical wellbeing, particularly in modern Western societies. Western culture promotes an unrealistically thin body ideal, particularly for women (Myers & Biocca, 1992). Slender and youthful individuals are over-represented in the media and tend to be portrayed as happier, healthier, more successful, and self-disciplined (Brownell, 1991). Whereas, individuals of average size and proportions are under-represented, and those who are overweight or obese are often negatively stereotyped as unhappy, lacking in self-control, and less moral or trustworthy (Brownell, 1991). These influences have been implicated in rising rates of disordered eating,
including anorexia nervosa, bulimia nervosa, and binge eating throughout the West and much of the developed world, particularly in girls and women (Miller & Pumariega, 2001).

Paradoxically, the typical Western lifestyle is not conducive to being thin; in fact, it may be better described as ‘obesogenic’ (Katz, 2003; Poston & Foreyt, 1999), due to the availability of affordable, energy-dense but nutrient-poor food that is often served in large portions (Young & Nestle, 2002), coupled with a trend towards more sedentary lifestyles at work and leisure (Amigo & Fernández, 2007; World Health Organisation [WHO], 2003). Despite a general awareness in the community of the need to consume healthy foods and engage in regular physical activity (Hesketh, Waters, Green, Salmon, & Williams, 2005), these lifestyle factors have been implicated in the rising rates of obesity and a number of other serious health issues including diabetes, cardiovascular disease, stroke and some forms of cancer (WHO, 2003).

Research into dieting reflects this paradox, and can be classified into two very broad approaches that conceptualise weight-loss dieting in essentially opposite ways (Neumark-Sztainer, 2005; Putterman & Linden, 2004): (a) medical/health research into the physical ill-effects of overweight and obesity, which focuses on dieting as an integral component of weight control in cases of overweight, cardiovascular disease, and/or metabolic illness (e.g., National Institute for Health and Clinical Excellence [NICE], 2006), and (b) psychosocial research into unrealistic thinness ideals and their impact on negative body image, which focuses on weight-loss dieting as a risk factor for eating disorders and/or a symptom of an unhealthy drive for thinness (e.g., Stice & Shaw,
Although it is obvious that these different perspectives on weight-loss dieting reflect the different target groups involved – the overweight in the former case; the eating disordered (and often a healthy weight or underweight; American Psychiatric Association [APA], 2000) in the latter case – the problem at the public health level is that these different perspectives and their associated public health messages are required to co-exist in the public health space. This raises the risk that ‘mixed messages’ about weight loss will be received by the very diverse consumers of health-relevant information. And this perhaps explains why, despite the prevalence of weight-loss dieting, little is known about the complex motivations of dieters and the implications of this for the methods they choose. It is important to understand the consumers of diet products: their choice of method which varies in risk and practicality; how they use information to reach their decision; healthy or unhealthy ways of conceptualising weight loss and dieting, and; their motivation for maintaining particular diets. Dieting has complex and important relationships with physical and mental health including positive associations between weight loss and the prevention or treatment of overweight and obesity along with a host of other associated illness (NICE, 2006); as well as negative associations between body dissatisfaction, psychological distress (Amigo & Fernández, 2007; McFarlane et al., 1999), weight cycling (Friedman et al., 1998) and disordered eating (Stice, 2002). Therefore, the aim of the present research was to survey motivations and beliefs about weight-loss dieting by women who are or have been consumers of diet products, and to examine the associations that may exist between

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1 It is prudent to note that research and intervention needed to address issues of bodyweight (i.e. obesity and/or eating disorders) is largely required at the sociocultural and not psychological level (e.g., de Silva-Sanigorski et al., 2010).
these cognitions and their selection of particular diet products as well as poor dieting and psychosocial sequelae.

Complicating this investigation is the plethora of commercially available diet products that vary in terms of their empirical support, endorsement by health professionals, suitability for particular individuals, level of commitment required (psychological, financial and temporal), side effects, and health benefits/risks. The weight-loss industry is highly profitable, earning billions of dollars each year worldwide (Berzins, 1999), with approximately $790 million per annum of earnings in Australia alone (Stark, 2012). Diet products are readily available from a variety of everyday shopping outlets including the internet, and the media is focussed on dieting strategies, particularly magazines which frequently report diet plans or ‘tips’ (Andersen & DiDomenico, 1992; Malkin, Wornian, & Chrisler, 1999; van den Berg, Neumark-Sztainer, Hannan, & Haines, 2007). Dieting is a substantial industry and mainstream activity with important implications for physical and psychological wellbeing and yet it is minimally regulated: consumers are only assured that the products are non-toxic (Rose, 2010). Success rates for long term weight-loss dieting are low (Mann et al., 2007), yet a large majority of women have tried diets, many making multiple attempts at weight loss (French, Jeffery, & Murray, 1999; Jeffery et al., 1984).

The approach to dealing with these complexities in the present research was to systematically categorise diet methods using the characteristics of these diets, survey the diet motivations and cognitions of current and non-current female dieters, and relate these motives and cognitions to the diet methods chosen. In Study 1, diet methods were surveyed by examining diet marketing claims and interviewing relevant professionals and laypeople, with the aim of creating a typology of diet methods and potential diet
outcomes that could be operationalised. In Study 2, the cognitions of current dieters that coincide with a thinness-motive versus a health-motive for weight loss were investigated, along with these dieters’ endorsement of methods, using the typologies created in Study 1. Vulnerability to psychosocial pressure to be thin and eating disorder symptomatology were also measured to ascertain the relevance of diet motives and diet choice to mental health. The recruitment of current dieters was intended to focus on the decision-making around the maintenance of particular diet methods. Current dieters potentially have available to them psychological, social, and biological feedback on their diet and are in a position to evaluate the suitability of their diet choice. Study 3 conducted a parallel study with non-current dieters. Here, the focus was on these women’s intention to undertake particular diets in the future; in relation to hypothetical goals, and how they acquire new information – both the sociocultural source and content of evidence sought – to inform their dieting decisions.

Before outlining these studies in more detail, a literature review will be provided in relation to medical and psychosocial aspects of weight-loss dieting, in which it is highlighted that both the uptake of diets and the maintenance of dietary change are important avenues of research. The literature review will then argue for an empirical investigation of dieting behaviour and diet choice using a decision-making framework: the theory of reasoned action. It is an appropriate focus given that the utility of the present research lies in its potential to characterise the cognitive profiles of thinness-focussed versus health-focussed dieters. Importantly, the theory of reasoned action conceptualises the decision-making process by quantifying how much the individual is compelled by each diet-related motive and behavioural outcome. This acknowledges that various aspects of an action will be differentially important across individuals. However,
one limitation of the theory of reasoned action in the dieting context is that it assumes the individual has a good understanding of all relevant information, but dieting is a convoluted health behaviour with the regular emergence of new and often controversial products. In addition to existing knowledge, it is likely that prospective dieters will seek out further information in their decision-making process. As such, this research also investigates how prospective dieters’ acquire diet information with a particular interest in whether an objective or biased approach is taken.

1.2 Research to Date on the Motives and Consequences of Dieting

Thus far, much knowledge about weight loss and dieting has been gained from research about general dieting motives and consequences. Weight-loss dieting remains an important field of study particularly for the areas of medicine and psychology, although they generally investigate very different aspects of the weight-loss dieting experience (Neumark-Sztainer, 2005; Putterman & Linden, 2004). Medical research focuses on the ability to produce and encourage the maintenance of healthy weight loss in overweight and obese individuals and the effects of weight cycling with repeated failed attempts at long-term weight loss with dieting; whereas the focal point of psychosocial research into dieting has been on body image, in the Western world and cross-culturally, and the association between weight-loss dieting and disordered eating. The following two sections briefly review the current themes emerging from the medical and psychological fields of research.

1.2.1 Medical research into overweight and obesity: the importance of healthy weight-loss dieting. Given the substantial health risks associated with overweight and obesity, weight-loss dieting is an integral part of current treatment
recommended by medical professionals, in addition to exercise or physical activity interventions, medications and bariatric surgery (Bacon & Aphramor, 2011; NICE, 2006). A prominent technique studied in clinical trials for obesity is Very Low Calorie Diets (or VLCDs) in which the dieter will cease eating normal foods and replace their meals with specially formulated drinks, ‘bars’ (similar in size and texture to a muesli bar), soups or porridge that are high in protein and nutritionally complete (NHS Choices, 2010; Tsai & Wadden, 2006). They have received such a name because they typically restrict the dieter to a total of 400 to 600 kilocalories per day (Tsai & Wadden, 2006). Such extreme energy restriction increases the risk of gallstones, hair loss, blood electrolyte imbalance, muscle cramps, constipation, fatigue, headaches and dizziness (Tsai & Wadden, 2006). The VLCD phase of a trial usually lasts for 12 weeks before the gradual reintroduction of conventional foods (Tsai & Wadden, 2006) where it is expected that the obese person makes improvements to their dietary and exercise habits for longer term weight management (Loveman et al., 2011).

As well as VLCDs, the other dietary intervention commonly researched is low calorie diets that use conventional foods and typically prescribe between 1000 and 1800 kilocalories per day (Tsai & Wadden, 2006). The results of a meta-analysis of randomised controlled trials that compared VLCDs with the low calorie food-based method showed that while VLCDs provided significantly greater short-term weight loss (the loss of 16.1% of initial weight with VLCDs as compared to 9.7% with the low calorie diets, over a mean of 12.7 weeks); over the long-term (mean 1.9 years) the weight loss achieved by the two types of dietary interventions was not different (Tsai & Wadden, 2006). On average, VLCDs achieved a 6.3% reduction in initial weight and the low calorie diets achieved 5.0% reduction in treatment completers (Tsai & Wadden,
Attrition for both dietary interventions was relatively high at a mean of 22% for the VLCDs and 23% for the low calorie diets (Tsai & Wadden, 2006), and so these weight-loss figures reported are of the best case scenario.

Medical research into the effects of weight-loss dieting for the overweight and obese continues to broaden its scope, with reviews showing promising short-term weight loss and associated health effects from diets that prescribe low GI foods (Thomas, Elliott, & Baur, 2007) and less than promising weight-loss results from green tea preparations (Jurgens et al., 2012). Regardless of the type of weight-loss diet, what remains a major concern for medical research is weight-loss diet adherence during the clinical trial and the maintenance of changed dietary patterns following the study. Dropout rates in dieting trials can be as high as 59% (Rolland, Hession, Murray, Wise, & Broom, 2009). For treatment completers, systematic reviews show that weight-loss dieting is largely unsuccessful at achieving long-term weight loss (Mann et al., 2007; Turk et al., 2009). The typical weight-loss trajectory with medical intervention is that weight is lost quickly within the first 6 months, after which time it is gradually regained (approximately 30-35% over the next year) and this usually continues until the dieter nears their original weight once more (Turk et al., 2009). Diet adherence and maintenance is such a concern because weight fluctuation has been associated with harmful effects to the body (Amigo & Fernández, 2007; Andres, Muller, & Sorkin, 1993; Dulloo, 2005; Luo et al., 2007; Pamuk, Williamson, Serdula, Madans, & Byers, 1993; Rzehak et al., 2007; Søgaard, Meyer, Tonstad, Haheim, & Holme, 2008). Obviously, the medical community does not want to contribute to this harm with medical dietary intervention as merely another part of a dieter’s pattern of yo-yo dieting with associated weight cycling. Recent research suggests that overweight or obese
people who repeatedly weight cycle would have been better off, from a physical health perspective, staying at their higher weight (Stark, 2012).

At this point in time, medical science is struggling to find the best weight-loss dieting solution for the overweight and obese. Of the various dietary interventions that have been examined over the longer term, all end up with similar results for the dieter. Despite this lack of evidence for the efficacy of one technique over the other, misconceptions about dieting and weight loss already exist in the medical profession and this filters through to the general community. In particular, there is a widely held belief that slow and steady weight loss is the ideal slimming scenario and yet this is not backed by rigorous scientific evidence (Purcell, 2010; Purcell et al., 2010). The ‘slow and steady’ message is regarded as best-practice in the treatment of obesity (NICE, 2006) and perpetuated by health professionals working within the obesity field, with 99.2% of dietitians sampled in Australia recommending to their clients a rate of weight loss of less than one kilogram per week (Purcell, 2010; Purcell et al., 2010). This is despite reviews of the research showing that diet programs that produce rapid weight loss, like the VLCDs, have similar long-term results as compared to various gradual weight-loss diets (Anderson, Konz, Frederich, & Wood, 2001; National Health and Medical Research Council [NHMRC], 2000). In fact, preliminary results of the first randomised controlled trial, comparing rapid versus gradual weight loss, support rapid weight loss as the superior rate of weight loss in terms of diet adherence and achieving weight-loss targets (Purcell, 2010; Purcell et al., 2010). The long-term effects of the rate of weight loss are still being examined (Purcell, 2010; Purcell et al., 2010). Misconceptions about weight-loss dieting are understandable, given the amount of information already amassed; however, they are also concerning, particularly when perpetuated by health professionals
themselves. Clearly, it is important to continue advancing our knowledge of weight-loss dieting in terms of its physical health effects particularly in the long-term.

Most recently in medical research, there has been acknowledgement that the existing conceptualisation of weight-loss diets could be harmful to the psychological health of the dieter. As already stated, long-term weight loss with diets is unachievable for most and the overwhelming attitude of health professionals and dieters alike is that this issue stems from a lack of willpower on the part of the dieter (Adams, 2011). Out of the concern over diets achieving poor long-term reduction in weight, it has been noted that even the changes in eating habits associated with weight-loss diets, without substantial changes in body weight, can provide many physical health benefits such as reductions in blood pressure and blood lipids, and improved insulin levels (Bacon & Aphramor, 2011). Therefore, there has been a recent shift away from a focus purely on BMI or girth measurements as outcome measures, commonly referred to as the ‘Health at Every Size’ approach (see http://www.haescommunity.org/). Advocates for this approach want the medical community (and laypeople) to begin focusing on an individual’s metabolic health instead of body weight (Bacon, 2010; Bacon, Stern, Van Loan, & Keim, 2005). While this approach makes good sense from a physical health perspective, it may be hard to sway the opinion of those overweight and obese dieters who feel sociocultural pressure to become slimmer (Freedman, King, & Kennedy, 2001). Moreover, although the Health at Every Size approach claims to be a ‘non-dieting’ way towards better physical health, it still requires the overweight or obese person to make improvements to their dietary intake in order to obtain the physical health benefits and does not nullify the issue of successfully encouraging long-term dietary change. Initial research has shown improvements in women’s physiological
markers, health behaviours and body image when following a ‘non-dieting’ intervention in randomised controlled trials (Bacon & Aphramor, 2011). Like much weight-loss dieting research, the probable long-term outcomes need to be ascertained. Whatever the terminology or specific aims of the medical intervention, whether it be weight-loss dieting or a non-dieting approach, the adherence and lifelong continuation of dietary change (or ‘diet maintenance’) remains the crux of physical health improvement for the overweight and obese.

1.2.2 Psychosocial research into body image and disordered eating: weight-loss dieting as a risk factor. In stark contrast to the medical research view of weight-loss dieting as a potentially lifesaving intervention, dieting is investigated as a problematic behaviour from a psychosocial health perspective. Weight-loss dieting has consistently been associated with poor psychosocial health. It is generally accepted that weight-loss dieting behaviour, in conjunction with negative affect, mediates the relationship between body dissatisfaction and pathological eating behaviour (Stice & Shaw, 2002). However, the relationship between dieting and eating pathology is not entirely straightforward (Stice, 2002). This section will provide a brief synopsis of the vast dieting literature in psychology.

The impetus for weight-loss dieting stems from the paradox of current Western lifestyle: the Western world is getting fatter and yet it is a slim physique that is idealised (Battle & Brownell, 1996). In this cultural climate it is unsurprising that numerous individuals are dissatisfied and preoccupied with their body shape and size (Conner, Johnson, & Grogan, 2004). Body image – “a person’s perceptions, thoughts and feelings about his or her body” (Grogan, 1999, p. 1) – is particularly poor in women (Conner et al., 2004; Davison & McCabe 2005; Feingold & Mazzella, 1998; Sondhaus, Kurtz, &
Strube, 2001). Dissatisfaction with body shape and size begins as early as childhood (Ambrosi-Randic, 2000; Davison, Markey, & Birch, 2003; Dittmar, Halliwell, & Ive, 2006; Dohnt & Tiggemann, 2004, 2005, 2006; Lowes & Tiggemann, 2003), with one study finding half of the 3 to 6 year old girls sampled considered themselves to be fat (Hayes & Tantleff-Dunn, 2010). Poor body image is not exclusive to individuals who are overweight or obese either: many children, adolescents and adults within the normal and underweight ranges are dissatisfied with their weight and shape (Bun, Schwiebbe, Schütz, Bijlsma- Schlösser, & Hirasing, 2012; Wills, Backett-Milburn, Gregory, & Lawton, 2006). So pervasive is Western women’s dissatisfaction with their bodies that it has been referred to as “normative discontent” (Rodin, Silberstein, & Striegel-Moore, 1985; Cash & Henry, 1995).

Pressure to meet the thin ideal, and in turn, poor body image, weight-loss dieting and eating disorders, is disproportionately felt by females. It is theorised that this is due to Western culture’s focus on what a woman’s body physically looks like rather than what it can do (Fredrickson & Roberts, 1997). “Women are...most clearly trapped in the...world of images, for apart from being accorded the major responsibility in organising the purchase and consumption of commodities their bodies are used symbolically in advertisements” (Featherstone, 1982, p. 24). A Feminist perspective, objectification theory, asserts that because the female body is sexually objectified, girls and women are socialised to strongly focus on how others perceive their bodies at the expense of tuning into their own internal experience (Fredrickson & Roberts, 1997). The internalisation of this – the observer’s perspective as the most important view of a woman’s physical self – leads to an increase in habitual monitoring of one’s body and poor body image, among other things (Fredrickson & Roberts, 1997).
Of course, females do not feel pressured by the sociocultural message that ‘thin is best’ to the same extent. The tripartite influence model of body dissatisfaction provides a framework for understanding how girls and women are differentially impacted by sociocultural pressure to be thin (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). It proposes that there are three predominant sociocultural sources of influence – the media, peers and parents – that cause body dissatisfaction and subsequent eating pathology, through imagery (e.g., advertising that uses atypical female figures), explicit messages (e.g., weight-related comments or teasing), and implicit messages (e.g., the modelling of body concern). Two factors mediate sociocultural influence: the internalisation of societal standards of appearance and making social appearance comparisons (Thompson et al., 1999). This model has received support from prospective studies (Keery, van den Berg, & Thompson, 2004).

The link between body dissatisfaction and weight-loss dieting is well established (Stice & Shaw, 2002; Børresen & Rosenvinge, 2003). Many individuals, particularly women, engage in dieting behaviours – including potentially unhealthy behaviours – aimed at changing their body shape and size (Myers & Biocca, 1992). These dieting behaviours are in part motivated by over-simplified media messages, including some public health messages, that either explicitly or implicitly promote the ideas that body weight and shape are readily malleable and that weight loss is pre-requisite for physical attractiveness and health (Brownell, 1991).

Psychosocial research has investigated general dieting behaviours (typically self-report measures of dieting) and consistently found them to be associated with poor psychological outcomes. The restrictions that diets impose on an individual’s eating habits and lifestyle are associated with many negative consequences, including stress,
social anxiety, maladjustment, a preoccupation with food and eating, cognitive distortions, and difficulty concentrating (see McFarlane et al., 1999 for a review). It has been suggested that part of the problem with diets is that they prescribe rules about food and eating, which removes the individual from tuning into their bodies and induces a feeling of deprivation in the dieter (Adams, 2011). Additionally, food rules predispose dieters to become preoccupied with food and eating, particularly with the ‘bad’ forbidden foods; and when these rules are broken, individuals often over-eat in response, feel guilty and engage in self-blame (Adams, 2011).

Extreme attempts at weight loss include fasting and compensatory purging behaviours. These behaviours are often associated with unhealthy, even dangerous, levels of weight loss, physical and mental ill health, and/or psychological distress that can warrant diagnosis of an eating disorder. Eating disorders are characterised by extreme disturbances in eating behaviour and perception of body weight and shape, and include: (1) anorexia nervosa whereby the individual maintains a very low body weight despite severe physical, social and/or occupational dysfunction; (2) bulimia nervosa in which the individual engages in repeated cycles of excessive or ‘binge’ eating followed by unhealthy compensatory behaviours such as vomiting, fasting, excessive exercise or the consumption of laxatives, diuretics or other medications, and; (3) ‘eating disorder not otherwise specified’ which is a category in the Diagnostic and Statistical Manual of Mental Disorders that recognises the complexities of eating pathology and includes binge-eating disorder, which is characterised by recurrent binge-eating episodes in the absence of compensatory purging behaviour (APA, 2000).

Prospective studies have identified dieting as a significant risk factor in the development and maintenance of eating disorders (Bohon, Stice, & Burton, 2009; Leon,
Fulkerson, Perry, Keel, & Klump, 1999; Patton, Johnson-Sabine, Wood, Mann, & Wakeling, 1990; Patton, Selzer, Coffey, Carlin, & Wolfe, 1999; Santonastaso, Friederici, & Favaro, 1999; Stice & Agras, 1998), particularly symptoms of bulimia nervosa (APA, 2000; Field et al., 1999; Killen et al., 1994, 1996; Stice, 2001; Stice & Agras, 1998). Dieting encourages a situation whereby the dieter is craving high-energy foods and a binge eating episode becomes more probable (Amigo & Fernández, 2007). Several mechanisms have been suggested to explain this. From the treatment of eating disorders with Selective Serotonin Reuptake Inhibitor medication, it has been suggested that dieting may cause the depletion of tryptophan (a precursor to serotonin) and the body responds with physiological cravings for high-carbohydrate foods to restore tryptophan levels (Kaye, Gendall, & Strober, 1998). Dieting also involves a shift from using physiological cues for eating to cognitive control of eating. If these cognitive processes are disrupted, the dieter is vulnerable to disinhibited eating without cognitive or physiological restraint (Stice, 2002). Thirdly, the deprivation and social constraints associated with dieting may contribute to negative affect, which increases the likelihood that the dieter will binge on food as an attempt to alter her mood (Stice, 2002). Emotions play a substantial role in prompting eating behaviour (Conner et al., 2004). Finally, dieting may lead to binge eating because once a dieter violates their strict dietary rules they throw away the whole notion of dieting and engage in disinhibited eating (Stice, 2001), as per the abstinence-violation effect seen in addictive behaviours (Marlatt & Gordon, 1985).

However, the link between dieting and eating pathology is still not clear. In experimental design research in which the dieter follows a prescribed diet at home, and their weight is monitored over time with decreases in weight confirming caloric
deprivation, dieting has been associated with a decrease in eating pathology (e.g., Epstein, Paluch, Saelens, Ernst, & Wilfley, 2001; Goodrick, Poston, Kimball, Reeves, & Foreyt, 1998; Presnell & Stice, 2003; Telch & Agras, 1993; Wadden, Foster, & Letizia, 1994). In sum, prospective studies show that dieting status is predictive of eating pathology over time, whereas experimental manipulation of caloric deprivation with dieters over the longer term suggests the opposite: that dieting decreases eating pathology (Stice, 2002). One of the major differences between these studies is how dieting is measured: the prospective studies used self-report measures of general dieting behaviour (in which the dieters, on average, gained weight over time), whereas the experimental designs used the concrete measure of decreasing weight to confirm caloric deprivation. This implies that it is not caloric deprivation per se that increases risk of eating pathology, but some form of behavioural and/or cognitive pattern that occurs when people diet, as captured in the self-report dieting of the prospective studies. Further research is required to explicate the relationship between dieting and eating pathology. It would be a large step towards the prevention of chronically debilitating eating disorders, if research could pinpoint which types or ways of dieting are particularly risky for developing pathologic eating behaviours and cognitions. This remains a major focus for psychosocial research on weight-loss dieting.

1.3 The Current Program of Research on the Selection of Diet Methods

While we have advanced our understanding of dieting, it is still a convoluted area of research, particularly for those many dieters who do not fit neatly into the category of overweight or eating disordered. Medical research is still grappling with encouraging healthy weight-loss dieting for the overweight and obese that is maintained in the long-
term, while psychosocial research does not have a good understanding of what makes some dieting risky for the development of disordered eating.

In comparison to the links between poor body image and dieting, we know comparatively little about diet methods and what motivates users of these methods. Weight-loss dieting is an idiosyncratic behaviour in terms of its underlying motivations, behaviours and consequences. Yet in empirical research, dieting has been conceptualised in terms of cognitive effort (e.g., ‘restraint’ or a mindset of restricting food choices and amounts; Williamson et al., 2007) or as a unified weight-loss behaviour of energy restriction (e.g., Jenks & Higgs, 2010). However, specific reasons for dieting, diet goals and diet behaviours are likely to differ markedly between dieters. Surprisingly, little is known about the relevance of various reasons for dieting, to not just dieting effort, but preference for diet methods and psychosocial outcomes. Diet choice is not simply an understudied curiosity: it is likely that not all diets are equivalent in terms of their implications for physical and mental health. Diet methods vary greatly in their energy restriction and prescription of nutrient consumption (Shikany et al., 2007). Diet methods may also vary in their relevance for psychological dysfunction, with the potential for diet methods to reflect underlying psychological concerns and also contribute to these psychological concerns in a vicious cycle (e.g., inflexible food rules complement inflexible thinking and vice versa). However, we know little, if anything, about the implications of diet choice for health, dieting outcomes and psychological dysfunction. This research is innovative because it addresses these limitations in the current knowledge base. There is a vast array of behaviours that can constitute the act of ‘dieting’ and this research will examine distinct types of diet methods.
1.3.1 Variation in diet methods. There are a wide variety of possible methods to restrict daily energy intake, for instance, limiting the amount of food ingested or changing the food types that are consumed. Therefore, diets vary on a number of aspects, including: (a) the extent of energy restriction; (b) the frequency and size of meals; (c) the type of energy consumed, from naturally occurring food stuffs to supplements; and (d) the proportion of chemical-nutritional components (e.g., carbohydrates, proteins and fats). A recent examination of weight-loss eating plans found that diets were extremely diverse in their prescription of macronutrient and micronutrient content (Shikany et al., 2007). For instance, prescribed daily energy intake (taken from randomly selected sample menus) ranged from 753 to 2221 calories per day; saturated fat intake varied from 2.3% to 23.7%; and the daily calcium content ranged from 441mg to 1676mg (Shikany et al., 2007).

These variations are relevant to the physical risk associated with a diet method or product. Methods that ignore the recommendations of experts in the area of health (e.g., medical scientists, physicians, nutritionists and dietitians) are likely to be physically risky (Freedman et al., 2001). For example, it is generally accepted that approximately 30% of daily energy intake should be sourced from fats (Amigo & Fernández, 2007). Diet programs that promote a substantial increase to this proportion of daily fat intake are ignoring the scientific literature that shows high-fat diets are nutritionally inadequate (Freedman et al., 2001) and associated with high blood cholesterol levels and heart disease (NHMRC, 2005). On the other hand, diet programs that suggest an all encompassing avoidance of fats are disregarding the nutritional benefits that some lipids provide, such as the essential polyunsaturated fats which are the major source of vitamins D and E from food (Freedman et al., 2001; NHMRC, 2005).
Experts have also raised their concern over whether qualitatively different styles of dieting are more damaging to mental health (Stice et al., 2010). In addition to certain diet methods potentially being compatible with dysfunctional personality traits (e.g., inflexible thinking or perfectionism), different methods of dieting may increase a dieter’s risk for the onset of pathological eating behaviours (Stice et al., 2010). For instance, the restriction of certain food groups and stringent prescription of eating during specific time periods are likely to be more conducive to bulimic symptoms than the replacement of processed high-sugar and high-fat foods with fruit and vegetable options (Stice et al., 2010; Westenhoefer, 1991).

In relation to the practicability and effectiveness of a diet for long-term weight management, methods which can be readily integrated into an individual’s routine, methods that involve broad changes to lifestyle, and methods that focus on health and well-being rather than appearance, are more likely to lead to healthy, practical and achievable physical and mental health outcomes. One method contrary to the aforementioned ideals is meal replacement. These diets are typically short-term, non-educative and narrowly focussed strategies for weight loss that are difficult for the dieter to integrate into their social life. Even when replacing only one meal per day (as is generally suggested in the ‘weight maintenance phase’ if dieters reach their goal weight), it is a relatively hard practice to maintain in the long-term considering the lack of variety they offer in terms of taste and texture, and the restrictions they place on social gatherings and travel. Research has found that more radical changes to dietary patterns are harder to sustain (Dansinger, Gleason, Griffith, Selker, & Schaefer, 2005; Herriot, Thomas, Hart, Warren, & Truby, 2008). Diets that are difficult to integrate into one’s lifestyle, and thus hard to maintain, pose a problem to both physical and
psychological health. Individuals tend to internalise the dieting ‘failure’, blaming themselves instead of the diet method, which is evidently harmful to self-esteem, positive affect (Polivy & Herman, 1999) and self-image (McFarlane et al., 1999). Further, these individuals often resolve to start on another diet which is equally unfeasible, and so yoyo dieting emerges (Amigo & Fernández, 2007; Friedman, Schwartz, & Brownell, 1998). In addition to the immediate risk of binge eating that yoyo dieting presents (Venditti, Wing, Jakicic, Butler, & Marcus, 1996), a pattern of physical weight fluctuation is associated with long-term mortality regardless of an individual’s weight status (Amigo & Fernández, 2007; Andres et al., 1993; Dulloo, 2005; Luo et al., 2007; Pamuk et al., 1993; Rzehak et al., 2007; Søgaard et al., 2008).

1.3.2 Diet selection. Consumers of diet products and programs can freely select from this range of diets (from the healthy to the physically risky and from the realistic to the impractical) because the multibillion dollar weight-loss industry is loosely regulated (Berzins, 1999; Trottier, Polivy, & Herman, 2005). Indeed, there has been a recent call from the chief executive of the Dietitians Association of Australia for the Therapeutic Goods Administration to take on a broader role in regulating the weight-loss industry in Australia, beyond merely assessing the toxicity of products, with the assessment of the long-term efficacy of products and whether weight-loss industry staff are practicing outside their level of competency (Rose, 2010).

Diet companies employ anecdotal evidence, in which the typical marketing message is that the diet will make substantial weight loss fast and easy, creating a ‘new person’ out of the dieter, whose overall life is vastly improved (Trottier et al., 2005). However, they are portraying an individual who is unusually successful at weight loss using their method (Trottier et al., 2005). Instead, the scientific research robustly shows
that long-term weight loss with dieting is unachievable for most overweight and obese people and up to two-thirds of dieters weigh more than they did at baseline two years after the dieting period (see Mann et al., 2007 for a review). Large prospective studies, inclusive of individuals of all bodyweights and sizes, similarly show that dieting behaviour predicts weight gain instead of weight loss (Mann et al., 2007).

Historically, various diet strategies have fallen in and out of favour despite the potential risk to health that they present (Miller, 1999). For example, high-protein and low-carbohydrate diets (e.g., The Atkins Diet) were dismissed by the medical community as ineffective in the 1970’s due to their poor weight-loss success with obese patients in the long term and the many reported side effects (Miller, 1999). However, this strategy regained popularity once more in the 1990’s with diets like ‘The Zone’ (Miller, 1999) and ‘Fat or Fiction’ (Aston, 2000) despite the lack of evidence for its efficacy and health experts warning against following this high-protein, and consequently high-fat, nutrient combination (Liebman, 2002).

1.3.3 Prior research into diet selection. Currently, potentially harmful diets are widely available and aggressively promoted to a large market of consumers in the Western world. Given the physical and mental health risk these diets pose and the huge body of literature dedicated to understanding the motivations for dieting and the causal pathways of disordered eating, it would be reasonable to expect that the preference for, and selection of, hazardous diet methods has also been intensely researched. However, only one study conducted over two decades ago could be found in the psychological and health literature that attempted to discern a consistent pattern in preference for diet methods. This research categorised participants using a brief measure according to the Myers-Briggs personality types, obtaining results that are unremarkable (Sitton &
Weber, 1987). Those classified as ‘feelers’ (i.e., those who value the personal approach and intimacy with others) had a preference for a group style impartation of the diet. However, no differences were found between personality types with regards to preferences for the actual diet methods of interest here (i.e., calorie-counting, fasting, consuming diet foods or diet pills). The lack of findings in this study may be due to their relatively small sample size of 46 participants. Undoubtedly, more research investigating diet choice is needed.

Another relevant study – one that did not investigate diet methods per se but three broad types of ‘diet strategies’ instead – found an association between diet strategies and the motivations underlying dieting behaviour (Putterman & Linden, 2004). Two basic motivations for dieting have been revealed: weight loss to improve appearance and weight loss to improve or prevent health issues (Clarke, 2002; O’Brien et al., 2007; Putterman & Linden, 2004; Reas, Masheb, & Grilo, 2004). The Putterman and Linden (2004) study found that dieting driven by appearance concerns was more likely to entail drastic strategies (e.g., excluding food groups, vomiting, skipping meals, and using laxatives and diuretics) than dieting motivated by health concerns. The two diet motives did not differentiate between ‘effortful caloric restriction’ (e.g., calorie counting, smaller portions, and decreased carbohydrate or fat intake) and ‘healthful eating’ diet strategies (e.g., increased whole grains, increased fruit and vegetable intake, and decreased fat intake; Putterman & Linden, 2004). This study also found that effortful caloric restriction and the drastic dieting behaviours they measured were associated with more instances of disinhibited eating, as compared to healthful eating practices (Putterman & Linden, 2004), further supporting the argument that diet methods vary in their cognitive and behavioural consequences. The authors note that these results
highlight the need for two interrelated investigations into the helpfulness and/or harm of dieting: to distinguish among the type of dieter, whether motivated by health or thinness, and; to distinguish between types of diets. The current thesis intends to build on this research by investigating specific diet methods rather than broad diet strategies, with a more thorough examination of the cognitions that influence choice of diet method in addition to diet motives.

1.3.4 Primary aims of this thesis. The overarching aim of weight-loss dieting research is, or at least should be, to promote healthy weight loss that can be maintained long-term in individuals for whom weight loss is warranted, while discouraging weight cycling and unhealthy weight-loss behaviours and attitudes in those who are susceptible to disordered eating and body dissatisfaction. The current research intends to add to our understanding of weight-loss dieting from the perspective of healthy versus unhealthy decision-making, by examining the diet cognitions and diet methods that are motivated by health concerns and lead to sustainable behaviour change, versus those that are motivated by appearance concerns and lead to negative body image and unhealthy eating behaviours.

Without an agreed upon diet typology, and in the absence of validated measures of dieting and diet motivations, preliminary work was required. Unfortunately, the task of identifying and operationalising diet methods and motivations was complicated by the existence of an overwhelming variety of diet products on the market: too many products to account for individually. Firstly, this research aims to survey diet methods and classify them into higher-order categories according to common and differentiating features. Using this new typology of diet methods, the ultimate aim of this thesis is to explain the use of various diet methods by women, from the selection of one particular
diet method over another to the maintenance of the different diet methods. Specifically, it will be examined whether there are cognitive styles of conceptualising dieting that characterise dieter’s who select and maintain particular diet methods, and whether these cognitions are related to a focus on thinness as compared to a focus on health.

As seen in the medical/disease-prevention and psychosocial literature, both the initiation and the maintenance of healthy and unhealthy diets are important avenues of enquiry. As a starting point, this research will examine diet choice and maintenance in women who are already dieting. With a sample of current dieters, concrete behaviour can be measured plus any psychosocial correlates to this behaviour. This is important because there is often a gap between intentions and actions (Marks, 1996; Sutton, 1998). In current dieters, actual dieting behaviour and diet-relevant cognitions can be captured in real time.

However, it should also be acknowledged that intentions to act are important in the context of diet choices because unhealthy dieting is typically characterised not by long-term commitment to a particular diet method, but by unrealistic and short-lived attempts at radical methods. That is, this research also needs to focus on what it is that individuals find alluring about particular diets; indeed, what promises and expectations make them intend to embark on a specific diet in the future. By measuring retrospective decisions and concrete behaviour like that in current dieters, fleeting attempts at faddish diets may not be captured. Further, since diets are difficult to maintain, a retrospective account of diet choice may only elicit a tainted view of the diet method that is causing them inconvenience or discomfort, rather than extracting what appealed to them about that method in the first instance. As such, this research will also examine prospective
dieters’ intention to use various diet methods, in addition to current dieters’ maintenance of these methods.

1.4 Health Behaviour and the Theory of Reasoned Action

The only study to examine choice of diet method by Sitton & Weber (1987), as previously described in Section 1.3.3, was conducted with the intent to match personality type with the most appropriate diet program style, in order to enhance weight-loss success rates with individually-tailored plans. Therefore, their focus on personality traits is logical: personality is considered a broad and temporally stable pattern of thinking, feeling and behaving (Pervin & John, 2001), and would be well suited for the purpose of personalising diet programs. In contrast, the specific focus of this thesis is to characterise the cognitive profiles of thinness-focussed versus health-focussed dieters, with the ultimate goal of intervening and changing an individual’s propensity for risky behaviours. Personality, as a determinant of diet choice, is not a suitable focal point in this regard. Instead, a focus on a more proximal determinant of diet selection, namely the decision-making process, is appropriate because it is more amenable to change.

The decision-making behind diet selection is an area yet to be examined. So while we can point to the sociocultural pressures that predispose individuals to hazardous dieting behaviours, no one has investigated these behavioural decisions from a cognitive processing perspective. We would expect that this cognitive process would differ for those individuals with a preference for risky and impractical diets, as opposed to those who prefer the safer and more realistic methods. If we know more about the
cognitions that underlie and influence the selection of risky diet behaviours, then we are in a better position to successfully intervene.

To better understand how dieters select their diet method this research will be conducted in the context of an established psychological framework: the theory of reasoned action. The theory of reasoned action identifies those cognitions important in shaping selection between various available options of a behaviour. This section will review the theory of reasoned action within the context of health behaviour research and detail how this theory will be used for the purposes of this research.

1.4.1 Health behaviour research. In contemporary Western societies it is the diseases of lifestyle and behaviour that are the major threats to lives and longevity, as opposed to infectious diseases in the past (Bogart & Delahanty, 2004). This shift in the agent of illness presents a new era in health care and promotion (Bogart & Delahanty, 2004). Instead of preventing ill-health with advances in pharmacology (e.g., vaccinations and antibiotics), reducing morbidity and mortality now entails changing an individual’s unhealthy behaviour over the long-term. Much research has been conducted on promoting behaviour change, mostly in the context of high-risk health behaviours such as cigarette smoking (e.g., Bledsoe, 2006; Erol & Erdogan, 2008; Marin, Marin, Perez-Stable, Otero-Sabogal, & Sabogal, 1990), unsafe sexual intercourse (e.g., Albarracin, Johnson, Fishbein, & Mueller-leile, 2001), consuming alcohol (e.g., Hassan & Shiu, 2007) and other intoxicants (e.g., O’Toole, Pollini, Ford, & Bigelow, 2008).

There is now an important recognition in the health promotion field that knowledge of the behaviour’s potential harm is not enough to challenge an unhealthy behavioural pattern and promote a beneficial alternative. The initial approach was to
improve the general public’s knowledge about the risks that are inherent in the hazardous behaviour (Shepherd, 2007). This was done on the intuitive notion that this increased knowledge would alter an individual’s attitudes towards the behaviour and ultimately decrease the occurrence of that unhealthy behaviour (Shepherd, 2007). However, research quickly highlighted that knowledge about the consequences of the behaviour only plays a small part in an individual’s decision-making process and so, interventions of this kind would be limited in their success (Shepherd, 2007). The conceptualisation of what determines health behaviour needed to be broadened to reflect the complexities involved in these decisions.

There is ample research to suggest that an understanding of healthy and unhealthy behaviours requires an understanding of the sociocultural and psychological factors that contribute to the adoption and maintenance of these behaviours, and the factors that serve as enablers and obstacles of healthy behaviour change (Bogart & Delahanty, 2004). The health promotions field draws upon social psychological theories in order to achieve this understanding because these theories provide a testable framework to guide research, often exposing the most appropriate angle for intervention (Bogart & Delahanty, 2004). All these theories have in common the recognition that these health behaviours occur because of a complex interaction between various perceptions and expectations that the individual holds, both of which are informed by their relevant knowledge (Bogart & Delahanty, 2004). This thesis will focus on the theory of reasoned action because it not only recognises these aspects, but it also emphasises the importance of three factors that are pertinent to the study of diet choice, discussed in turn, in the subsequent section: (a) an individual’s beliefs relevant to
performing the behaviour; (b) the individual’s values that are used to determine the importance of each belief, and; (c) the influence of sociocultural groups.

1.4.2 The theory of reasoned action. The theory of reasoned action places particular importance on the specific reasons for performing the target behaviour. It asks specifically what outcomes the individual believes will occur if they engage in the behaviour. This is a different focus to other social psychological theories commonly used for examining health behaviour, such as the transtheoretical model and health belief model, in which the central considerations are the individual’s perception of the benefits and the barriers of behaviour change (Bogart & Delahanty, 2004). The majority of health promotion research has been in the context of high-risk health behaviours with a simple dichotomous choice, for example the decision to smoke, or not to smoke, tobacco cigarettes (e.g., Erol & Erdogan, 2008). Health behaviours other than weight-loss dieting are typically more straightforward. The less someone smokes cigarettes, the better their health. Further, the more attempts they make at quitting, the better their chances of behaviour maintenance (Tobacco Use and Dependence Guideline Panel, 2008). Instead, weight-loss dieting can be beneficial, harmful, or some combination of the two, in terms of an individual’s physical and mental health. As such, it is the selection of various possible behaviours (diet methods) that all have the identical intended outcome (weight loss) which helps in defining healthy and unhealthy dieting. An examination of the reasons for performing the behaviour is imperative to the research of a health behaviour in which many different behaviour options are available to achieve the same goal, such as dieting. If a researcher was to ask a dieter about the benefits of dieting, the likely theme of the response would be an increase in attractiveness and better physical health. No insight would be gained whatsoever as to why the dieter selected that particular diet
method as opposed to any other method. If a researcher was to ask a dieter about the barriers to dieting, they may gain some indirect evidence for choosing a diet method if particular diets were able to circumvent the barrier. For instance, an individual may report one of their barriers to dieting as having little time to prepare food. This barrier could be used to suggest why they have selected a diet method that includes pre-prepared meals. However, this would not give a comprehensive picture of what enticed the dieter to use the particular diet method. So although individuals who diet may be predominantly focussed on the perceived endpoint of their behaviour (i.e., achieving weight loss), according to the theory of reasoned action, it is the specific diet behaviours that are important to examine in order to understand these decisions.

Secondly, the theory of reasoned action recognises that the outcomes from the behaviour are not equally salient and uses a person’s values in order to gauge the importance of each outcome. This is essential in the context of weight-loss dieting because dieters are not always rational in their motivations and thinking, and what is important to each dieter needs to be explicitly measured rather than assumed. For example, a person’s health is such an omnipotent factor for functioning in occupational and social aspects of life that from a purely rational perspective health should be the ultimate motivation and goal in dieting. However, research has shown that this is often not the case: for some dieters weight-loss dieting is primarily motivated by ‘physical attractiveness’ (O’Brien et al., 2007; Putterman & Linden, 2004; Reas et al., 2004). The extreme cases of this are seen in eating disorders where health is negatively impacted by the dieter’s pursuit of perceived beauty (APA, 2000). Moreover, selecting a diet method is a consumer behaviour and different aspects of a diet, such as cost, ingredients, required commitment and potential weight-loss trajectory, will be differentially
important to different people. Consequently, it is important to ascertain precisely how important the various facets of weight loss and diet methods are to each individual.

Lastly, the theory of reasoned action includes a measure of social influence. Given the large part sociocultural factors play in the desire for weight loss (Conner et al., 2004) it is reasonable to expect that sociocultural groups will be a substantial force in weight-loss behaviours. By using this framework, the relative import of various sociocultural influences on diet choice can be determined. When considering the practical applications of this research, it is important to know how influential or insignificant different sociocultural groups are in diet choice for informing intervention strategies. For example, if those individuals who make poor diet choices are more influenced by non-professional advice (as opposed to information disseminated by health professionals) then this suggests that non-professionals are the most appropriate health promotion medium for communicating the desired health message.

The focus on predicting actual behaviours and behavioural choices is particularly important here; the theory of reasoned action is not limited in its focus to motivations per se, but includes the beliefs and values that determine behavioural choices. Within the dieting context, being dissatisfied with one’s physical appearance does not in itself determine which weight-loss strategy one will select; many individuals are dissatisfied with their appearance, and yet not everybody attempts the same diet strategy. Rather, the selection is likely to be based on one’s salient beliefs about the particular diet method, like its perceived efficacy at causing weight loss and associated side effects. The theory of reasoned action allows the testing of this intuitive assumption. Overall, the three abovementioned features of the theory of reasoned action provide a compelling
argument for the use of this particular framework in diet choice research and a brief description of the theory is provided next.

As its name suggests, the theory of reasoned action is based on the assumption that individuals make systematic use of the information available to them in order to make a rational decision about behaving (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Three classes of behavioural antecedents are proposed by the framework: cognitions, affective evaluations, and intentions (Ajzen & Fishbein, 1980). The direct determinant of behaviour is the strength of a person’s intention to actually execute the behaviour (simply named intention). Intention, in turn, is determined by two factors: (1) a person’s judgement of the behaviour as good or bad (attitude); and (2) the level of perceived social pressure to carry out the behaviour by important others (subjective norm). The most distal level of determinants, are the individuals’ cognitions or beliefs about the behaviour (Ajzen & Fishbein, 1980). A person’s attitude is a function of their beliefs regarding the likely outcomes of performing the behaviour (behavioural beliefs), weighted by the importance of those outcomes to the individual (outcome evaluation). Outcome evaluations can be likened to an individual’s values concerning the outcome: values are general beliefs about the desirability or ‘goodness’ versus ‘badness’ of behaviours, outcomes and goals (Vaughan & Hogg, 2002). Subjective norm is a function of the individual’s belief that certain others want them performing the behaviour (normative beliefs), weighted by their motivation to conform to these wishes (motivation to comply). Figure 1.1 represents how these behavioural determinants in the theory of reasoned action combine, with arrows indicating the direction of influence.
Providing further support for its applicability in diet choice research, the theory of reasoned action is the dominant framework for studying the comparable area of food choice (Bogart & Delahanty, 2004; Conner & Armitage, 2006). An exemplar of food choice research is subsequently described in order to demonstrate how the theory of reasoned action is being utilised in a current and similar research setting.

**1.4.3 Food choice and the theory of reasoned action.** In the study of food choice, researchers have been particularly interested in the consumption of foods that present a risk factor for prevalent diseases in our society, such as high-fat or low-fibre foods (Bogart & Delahanty, 2004). High-fat diets are associated with a number of lifestyle diseases including obesity, cardiovascular disease and diabetes (WHO, 2003),
and diets low in fibre are linked to many forms of cancer (Jacobs, Marquart, Slavin, & Kushi, 1998).

On superficial inspection, the two research areas of food choice and diet choice may seem very similar. However, they differ in important ways that justifies the proposed research. The food choice research is examining the specific behaviour of ‘eating’ and the selection of different food types (e.g., “Will I eat an apple or will I eat a muffin?”) In comparison, the proposed research on diet choice is focussed on the behaviour of ‘dieting’ and the selection of various diet methods (e.g., “In an attempt to lose weight, will I reduce the portion size of my meals or will I eat fewer foods that are high in carbohydrates?”) Further, dieting is a voluntary behaviour engaged in by a subsample of the population, who make dieting decisions when specifically motivated to lose weight. In contrast, eating is an essential activity for life, and so research on food choice is examining the decisions that every individual makes, every single day.

Nonetheless, there is enough overlap between these two research areas so that the food choice literature can be illustrative. Obviously, both research areas involve behavioural decisions made around food; therefore, any framework that is deemed useful to guide the food choice literature should also be valuable in diet choice research. In addition, there may be some motivational overlap in these behaviours. For example, the selection of low-fat foods (food choice) and the restriction of fat intake (diet choice) may both be the outcome of a conscious attempt to lose weight. Most importantly, however, these health behaviours (selecting foods and selecting diet methods) both entail decisions with numerous available options to select from. More commonly, other health behaviours do not involve this level of complexity; instead presenting simple dichotomous decisions about whether or not to engage in the behaviour. For instance,
the cigarette smoking research simply considers an individual’s decision to partake in, or abstain from, smoking tobacco. However, in the food choice research, even within a specific food category (e.g., meat) there are a multitude of options for individuals to select from (e.g., beef, lamb, chicken or pork and so forth, and then whether they are consumed in their whole food state or processed et cetera). Similarly, there is an array of response options when selecting a diet method: an individual can follow a strict meal plan, cut out certain ‘forbidden foods’, or consume meal replacement ‘shakes’, to name just a few of the potential behaviours. The study of food choice entails a similarly complex decision-making process, and so provides a fine guide for the investigation of diet choice.

Shepherd and Towler conducted a series of studies examining choice amongst foods that significantly influence fat consumption. For instance, one of their studies was conducted to better understand choices with regards to eating meat, meat products (e.g., burgers or sausages), dairy products and fried foods (Shepherd & Towler, 1992). These particular food categories are significant because they contribute to the majority of fat consumed by the average person in the UK. This large study of 538 participants used a questionnaire format to collect the data. As measures of food choice, participants reported on their current eating behaviour and their intentions to eat each of the food categories in the near future.

The researchers were primarily interested in clarifying the participants’ attitudes towards, and beliefs about, the four food groups to see if these were predictive of food choice behaviour (Shepherd & Towler, 1992). That is, they focussed their investigation on the attitudinal pathway of the theory of reasoned action: it has been consistently found that subjective norms have minimal sway on food choice (Bogart & Delahanty,
2004). Three attitude items for each food category consisted of asking whether eating the food type was ‘good’, ‘beneficial’, or ‘pleasant’ (e.g., “My eating meat is beneficial”). Participants indicated how much they agreed with each of the statements on a seven-point scale (the extreme ends of the scale were labelled ‘strongly agree’ and ‘strongly disagree’). Behavioural belief questions were asked about six salient beliefs specific to that food group (identified as such in prior interviews). Three salient beliefs were common to all the food categories and related to whether the participants perceived that the product is healthy to eat, whether it tastes good, and whether they believed it is high in fat. An example belief item about the healthiness of eating meat was, “My eating meat is healthy.” Each of these belief statements had a corresponding item where participants indicated how much they personally valued that outcome; i.e., their ‘outcome evaluation’ from the theory of reasoned action. Following on from the previous example, the personal relevance of the perceived healthiness of eating meat was measured with the item, “Food which is healthy is desirable.” This is an important inclusion to the questionnaire, and the theory of reasoned action. To demonstrate this point, consider the decision to eat an apple. Most would agree that eating an apple is a healthy behaviour. However, not everyone will actually be concerned about eating healthy foods themselves; at one extreme there will be individuals who do not care at all about eating healthy foods and at the other extreme there will be those who are obsessive about consuming healthy foods. When deciding whether or not to eat the apple, the perceived healthiness of the food would strongly impact on the latter group’s decision and have marginal impact on the former group’s decision. The former group, who are unconcerned about consuming healthy foods, may instead choose to eat an apple because they are relatively inexpensive, because they are sweet in taste or because they
have an apple tree in their garden. It is clear that the relevance of each behavioural belief for each individual needs to be ascertained in this type of research.

The results showed that the participants’ beliefs, outcome evaluations and attitudes towards eating the foods were important predictors of intentions to consume the foods and of actual consumption behaviour. Whether the participants thought the food tasted ‘good’ was the most important factor in determining the consumption of meat, meat products and fried foods. In the case of consuming dairy products, whether eating the product was perceived as healthy was most relevant. This research identifies the outcomes from consuming these food groups that are important in determining eating intentions and behaviour, and highlights the salient cognitions to target for behaviour change.

As an aside, it is worth noting here why the theory of reasoned action is drawn upon instead of its successor – the theory of planned behaviour – which includes an additional measure of the individual’s perceived control over engaging in the behaviour (Ajzen, 1991). Previous research using the theory of planned behaviour to investigate consuming a low-fat diet found this behaviour to be under volitional control (Armitage & Conner, 1999) and it is argued that selection of a diet method is similarly a behaviour in which the dieter is relatively unimpeded by issues of control.

1.4.4 The application of the theory of reasoned action in the present research. As demonstrated in the example from the food choice literature, the theory of reasoned action provides important insights into the cognitions that shape behaviours and behaviour change. Most importantly, this framework goes beyond the motivations for the behaviour and focuses on the cognitions and values about engaging in the
behaviour, which is particularly important for discriminating a dieter’s preference amongst various diet options that all promise the same endpoint of weight loss. As seen in the food choice literature, the most informative aspect of this theory relates to the most distal predictors: the individual’s beliefs and values. It is the ‘cognitions level’ of the theory which revealed that the perceived health benefits were most important to dairy food consumption as opposed to desirable flavour that predicted the consumption of the other foods.

As another example to reiterate this point, a similar food choice study showed that it was primarily the outcomes of health, eating enjoyment, the perceived safety of eating the meat and price that impacted the consumption of poultry and the outcomes of health, eating enjoyment, the perceived safety of eating the meat and animal welfare that was paramount to the consumption of pork (McCarthy, O’Reilly, Cotter, & de Boer, 2004). Three factors were common to the consumption of both meats while price and concern for animal welfare differentiated between the two choices. Environmental considerations were a low priority for the Irish consumers of pork and poultry (McCarthy et al., 2004). It was these perceived outcomes – price and animal welfare – that differentiated between people’s selection of foods to eat. The more proximal components of the theory to the enactment of the behaviour are more generic in nature, describing the individual’s global positive or negative feeling towards the behaviour (i.e., their attitude) and the overall perceived pressure to perform the behaviour (i.e., the social norms). As such, the current research will solely focus on the ‘cognitions level’ of the theory of reasoned action – the outcome-related beliefs and values, and sociocultural beliefs – as highlighted in Figure 1.2.
Figure 1.2. The theory of reasoned action with the most specific level of analysis highlighted. These underlying beliefs differentiate people’s choice between variants of the same behaviour. Adapted from “Understanding attitudes and predicting social behavior,” by I. Ajzen & M. Fishbein, 1980, Englewood Cliffs, New Jersey: Prentice-Hall.

However, a limitation of the theory of reasoned action is that it assumes the individual has all relevant information at their disposal in order to make their decision. It takes for granted that the individual holds firm beliefs about the outcomes of the behaviour and has no confusion or desire to seek out more details about the behaviour. This assumption made by the model is likely to make sense in the context of many health behaviours. In reference to the cigarette smoking example again, it is widely understood and accepted that smoking tobacco cigarettes increases a person’s risk of contracting some forms of cancer (Weinstein, 1998), regardless of which brand a smoker selects. However, in the more complex health behaviour of weight-loss dieting this may
not necessarily be the case: there are numerous products emerging on the market to
understand and review; information about diets other than marketing hype may not exist
or can be difficult to access or understand, and; as medical and psychosocial research
advances, the content of the information is constantly changing. As highlighted earlier,
even the messages from scientific communities is somewhat contradictory (Neumark-
Sztainer, 2005; Putterman & Linden, 2004). The medical field endorses very restrictive
calorie and food practices in the way of Very Low Calorie Diets which utilise meal
replacement formulas (see Section 1.2.1 of this Introductory Chapter). Whereas, the
psychosocial camp warn of the risks of very restrictive eating behaviour that forces
cognitive control over eating rather than tuning into one’s physiological responses (see
Section 1.2.2 of this Introductory Chapter).

Just as weight-loss dieting is a complex phenomenon for researchers to study; so
it is for diet consumers trying to understand the information to make dieting decisions.
Therefore, in order to conduct a more holistic analysis of dieting decisions, it is essential
to examine how prospective dieters research and gather information about diets to
inform their decisions, in addition to examining how they use their existing knowledge
via the theory of reasoned action. That is, when investigating the initiation of a diet
method this research will examine how existing knowledge is used and how new
knowledge is acquired.

1.5 How Prospective Dieters Research Diets and Motivated Reasoning

If a prospective dieter is interested in a diet product, the most appropriate
consumer behaviour would involve a systematic investigation of all relevant information
in order to weigh up whether this product is optimal for them, by providing strongly
desired outcomes in the absence of strongly detested effects (as per the theory of reasoned action). Thorough research on the part of the consumer is especially important for the selection of a diet method, where choices have consequences for physical and mental health if the method is inappropriate, with potential weight cycling, impaired concentration, preoccupation with food, shame and guilt et cetera. An important aspect of diet initiation is that a prospective dieter takes a realistic look at a diet method beyond the readily available marketing claims that the company produces about the diet’s potential effectiveness at weight loss. There is no perfect diet: every method has its difficult aspects and the more risky diets have potential side effects. As an example, the potential unwanted consequences of going on a diet which uses shakes, bars and soups to replace regular meals (comparable to the VLCDs used in obesity weight-loss trials reviewed in Section 1.2.1) include: fatigue and dizziness; boredom with the lack of variety the replacement meals offer; difficulty sustaining or returning to the diet through social gatherings such as weddings or work conferences; strong urges to eat ‘normal’ food when preparing and sitting through family meals; a preoccupation with food and eating, and; secret binges on foods with subsequent feelings of guilt and shame (e.g., Herriot et al., 2007). For optimal mental and physical health, prospective dieters need to consider the potential consequences of being on a particular diet, both the good and the bad, and place these pieces of information within the context of their own situation.

Consumer evaluation research has shown that consumers with a high investment in a product typically engage in a more systematic and objective search and evaluation of product information (Borgida & Howard-Pitney, 1983; Burnkrant & Sawyer, 1983). Indeed, when individuals are motivated to be accurate in their deliberation, they exert
more cognitive effort during their search for, and processing of, issue-related material and apply more complex rules while reasoning (Kunda, 1990). However, research has also uncovered bias in decision-making when individuals are strongly motivated to reach a particular outcome or conclusion – referred to as ‘motivated reasoning’ – which manifests itself in the biased search for, and evaluation of, evidence; bias in which personal beliefs are brought to mind; and/or in the selective use of inferential rules (Kunda, 1990). Motivated reasoning has four major drivers: (a) the desire to perceive oneself as free from risk, (b) the pursuit of important life goals, (c) to maintain attitudinal or cognitive consistency, and (d) safeguarding one’s self-image (de Mello, 2004).

Given the millions of dollars spent annually on weight-loss products (Stark, 2012) despite the fact that marketing claims in the weight-loss industry are largely unsubstantiated (Cleland, Gross, Koss, Daynard, & Muoio, 2002), it is reasonable to suspect that consumers of diet products do engage in a biased decision-making process to justify the use of these products (de Mello, 2004). In the dieting context, the first of the aforementioned drivers of motivated reasoning is relevant in that prospective dieters will want to consider themselves free from the risk of harm when using a diet product. However, most pertinent to weight loss is the second driver: the pursuit of important life goals. A dieter wants to lose weight and a diet product is a means to reach this goal. To find fault in a diet product may reduce the dieter’s confidence that what they desire is indeed possible; and more than this, a new diet product with its claim of being ‘revolutionary’ or ‘the secret’ to weight-loss success can provide the consumer with hope that this next time their dieting efforts will be more successful. Hope is a pleasant and powerful emotion evoked in situations when goal-congruent outcomes are perceived
as possible even though they are uncertain, and it is a marketable entity (MacInnis & de Mello, 2005). Consumers can avoid the uncomfortable scenario of yearning for an improbable goal – which may involve anxiety, sadness or anger – by engaging in motivated reasoning whereby information is selectively attended to and processed so that they can have confidence in the diet’s effectiveness and maintain hope that they can achieve their weight-loss goals (de Mello, MacInnis, & Stewart, 2007).

Indeed, motivated reasoning has been shown to influence how consumers research a product related to attaining a goal, when consumer’s confidence in achieving this goal is threatened. In a series of studies, de Mello and colleagues (2007) demonstrated that when university students’ confidence in achieving good grades (i.e., their ultimate goal of studying) was threatened, they engaged in motivated reasoning processes when evaluating the effectiveness of a ‘memory booster’ product (i.e., a goal enabler). Specifically, the biased reasoning was revealed as: purposefully searching for information from a source that provides product-favourable material and identifying this information as more credible; being less discerning of unreliable information; discounting unfavourable product information, and; having a more positive attitude toward product effectiveness in the face of unfavourable information (de Mello et al., 2007).

In the context of selecting between weight-loss diets, the potential risk to physical and mental health is largely found, not by examining how effective the method is at achieving the primary goal of weight loss, but rather in the secondary characteristics of the diet method such as how nutritionally complete the method is, whether it causes fatigue, and/or induces a preoccupation with eating. Details of a diet’s ‘potential effectiveness’ are easily found in the marketing claims; whereas details about the
difficult aspects of the diet are much harder to find, but important nonetheless. Therefore, the current research will also examine how comprehensive a prospective dieter’s investigation of a diet method is: specifically, whether they attend to information beyond the details of the product’s effectiveness.

### 1.6 Summary and Rationale of the Research Project

In summary, there is much literature on weight loss for the overweight and obese, body image, disordered eating and the decisions to start a diet and maintain diets. However, little is known about the relevance of specific diet methods. Prior research has implied that rather than dietary change per se, it is the motives and cognitions driving the dieting behaviour that have important implications for the selection of diet strategy, and mental and physical health outcomes (Putterman & Linden, 2004). The number, diversity and complexity of weight-loss strategies and products available to dieters complicate our understanding of why dieters select one diet over another and perhaps this explains the focus in the literature on weight loss as a general behavioural motivator and dieting as a generic behaviour. As argued in section 1.4.2, this is a potentially important omission in the context of the theory of reasoned action. According to this theory, explaining an individual’s behavioural choices requires an understanding of their beliefs about the expected outcome of a particular action coupled with the importance they place on that outcome. In the context of dieting, this assumes that the individual possesses expectations relating some aspect or feature of a diet to some specific outcome.

Therefore, part of the central aim of the present thesis was to classify diets in terms of their requisite behaviours and identify outcome-relevant beliefs about these
behaviours. To do this, given the complex and multidimensional nature of diets, an initial analysis was conducted of diet products and diet strategies in order to extract minimally-overlapping, higher-order diet behaviours, referred to as ‘diet methods’, as well as producing the relevant theory of reasoned action constructs: various possible outcomes of these methods that the theory of reasoned action ‘behavioural beliefs’ and ‘outcome evaluations’ variables could be based upon, and potential sociocultural sources of information. The subsequent studies could then evaluate the importance to individuals of these diet beliefs and sociocultural groups within the context of a thinness-focussed versus health-focussed pursuit of weight loss, and the extent to which they explain diet choice and diet maintenance.

Using the preliminary work from Study 1, the application of the diet method typology was examined in Study 2 with women who are currently dieting for weight loss. They have made their dieting decisions and so it was apt to use this population to observe whether the diet method typology adequately summarises their behaviour. Current dieters are particularly important because of the gap between intention and actual behaviour (Marks, 1996; Sutton, 1998). For these individuals who are currently using a particular diet method, they have been ‘sold’ on the idea to diet, believed that the method could provide them with the dieting outcomes that they value and are accumulating their personal experience of that method, including any potential consequences or side-effects. Their decision around dieting is more about maintenance of their current method than about intention to diet or choice of new method. The maintenance of a diet has important implications for healthy versus unhealthy dieting, such as excessive weight loss, weight cycling, and bingeing and purging. Therefore, Study 2 associated these current dieters’ values, or ‘outcome evaluations’ in theory of
reasoned action parlance, with thinness and health motives for weight loss, maintenance of the various diet methods, vulnerability to sociocultural pressure to be thin, and with eating disorder symptomatology that these women may have been experiencing in their dieting journey.

In Study 3, the examination of diet choice was extended to include decision making and intention to diet in non-dieting women. This required an investigation into how prospective dieters use their existing knowledge to make dieting decisions, and so parallel analyses were conducted linking outcome-related beliefs about dieting with a preference for the various diet methods. However, it also required an investigation into how evidence about a diet’s effectiveness and a diet’s suitability is sought by prospective dieters. Diet choice is a process that does not simply begin with a weighing of evidence: that would assume that the evidence is already available and easily understandable. In the context of dieting, this is generally not the case. It is argued that what is also important is the way evidence is gathered: from whom the information is sought and the content of evidence that is salient to the prospective dieter.
Study 1: The Production of Central Variables for this Research: a Diet Method Typology, Diet Outcomes and Sociocultural Sources of Information for Diet Choice

2.1 Introduction

Investigating diet choice within a theory of reasoned action framework required the identification and operationalisation of three characteristics of dieting: (1) diet methods for use in assessing prospective dieters’ intention to adopt particular diets or current dieters’ reasons for maintaining their chosen diet; (2) dieters’ beliefs concerning the relevant outcomes of dieting and their evaluations of these outcomes; and (3) sociocultural influences to diet choice.

The present study represents an attempt to extract these diet characteristics in the form of a typology of diet methods, diet outcomes and sources of sociocultural influence. These were extracted concurrently on the basis of similar information sourced from marketing claims, interviews with laypeople and health professionals, and ranged from general approaches to dieting to specific diet strategies through to commercial diet products or programs. In addition, the third construct – sociocultural influences – was informed by the tripartite influence model of body dissatisfaction (Thompson et al., 1999). The approach was to perform conventional qualitative content analysis using these sources of information (Hsieh & Shannon, 2005). The following sections detail the rationale for this approach and the results obtained.

2.2 Rationale for the Measurement of Diet Methods

To date, research has tended to overlook the features of particular diet methods in favour of measuring generic psychological and/or behavioural factors relevant to dieting,
such as intention to diet, diet frequency, duration, or intensity of effort around dieting. In its simplest form, this has involved a dichotomous response to the question of whether one is or is not dieting (e.g., Jenks & Higgs, 2010). As a basic form of gauging problematic dieting, studies have assigned an arbitrary point at which diet frequency becomes ‘chronic dieting’ (e.g., Neumark-Sztainer et al., 2002). Where specific methods have been cited, this has typically been in the context of a discrete comparison of a small selection of methods. For example, research has measured the frequency of artificial sweetener use (Malinauskas, Raedeke, Aeby, Smith, & Dallas, 2006) or the incidence of taking diet pills (Yahia, El-Ghazale, Achkar, & Rizk, 2011). Often, the methods investigated are low incident behaviours, such as the consumption of laxatives for the purposes of weight-loss (e.g., Yahia et al., 2011).

Additionally, weight-loss dieting is often equated to cognitive and/or behavioural ‘restraint’ related to food. This is broadly accurate: in order for weight-loss diets to be effective they require a reduction in the energy a dieter consumes. However, this is still an over-simplification of the large set of behaviours that constitute weight-loss dieting. For example, current dieting behaviour was assessed with two items in a study on dieting and weight-related attitudes in pregnant women (Takimoto, Mitsuishi, & Kato, 2011). This first item was, "Are you currently restricting your food intake?" with those who assent to this question “requested to identify whether they were doing so by self-judgment or by following a dietician's advice” (Takimoto et al., 2011, p. 213).

Perhaps the most widely recognised scale in this research area, since its inception in 1975, is the Restraint Scale that was developed to identify chronic dieters (Herman & Mack, 1975). This measure has two subscales labelled ‘Concern for Dieting’ and ‘Weight Fluctuations’. As the subscale names suggest, their items assess diet-related
cognitions (e.g., “Do you give too much time and thought to food?”) and outcomes of
dieting (e.g., “What is the maximum amount of weight you have ever lost in one
month?”), rather than a specific focus on the various dieting behaviours themselves
(Heatherton, Herman, Polivy, King, & McGree, 1988). After extensive use of the scale
with various populations and in various research paradigms, the authors have since
conceded that the Restraint Scale identifies a subset of dieters (albeit probably a large
subset) whose restrictions in energy intake are marked by periods of disinhibited eating
which result in excessive energy intake (Heatherton et al., 1988). The dieters who
actually succeed in maintaining a reduced energy intake (i.e., those strict dieters who are
in fact the most restrained in their eating) do not attain the highest scores on the
Restraint Scale and are not identified as ‘chronic dieters’ (Heatherton et al., 1988).

As argued in the Introductory Chapter, weight-loss dieting is often a complex set
of rules and behaviours that vary markedly in their prescription of nutrients, practicality
to sustain in everyday life, and suitability to the individual. It is vital that research
investigates physically and psychologically healthy and unhealthy methods of dieting
given its popularity, particularly amongst females. Putterman and Linden noted the
absence of a standardised measure to assess diet methods in 2004. A thorough
examination of psychological, health and medical journals, using the databases
PsycTESTS, PsycINFO, PsycARTICLES and MEDLINE Complete, failed to uncover
any instrument that purports to categorise and measure diet methodology. Hence, the
first step was to survey the diversity of methods, followed by classification on the basis
of conventional content analysis into overarching styles of diet execution. The following
section details this process and the resultant typology of diet methods.
2.3 Systematic Review of Diet Methods

In the initial stage of this process, a comprehensive list of diet products was created. The name of the product, a brief description of how dieters follow the method and claims of what the diet can achieve versus the negative aspects to the diet were collated from a variety of sources:

- retail outlets in Melbourne (Australia) including large and small supermarkets, chemist stores, and the health section of bookstores;
- television advertisements on all commercial networks (Melbourne, Australia);
- the World Wide Web, using the search terms ‘diet’, ‘weight loss diet’ and ‘diet plan’ were entered into the search engines Google and Bing and the first 50 sponsored and unsponsored links were investigated for their relevance;
- seven laypeople aged in their twenties and thirties were interviewed about their history of diet product use (see Appendix A for the interview schedule); and
- three health professionals working in the obesity field were consulted (see Appendix A for the interview schedule).

All audio data was recorded and transcribed verbatim. The use of the World Wide Web ensured that the list of diet methods was globally relevant. After the period of data collection, in which television advertisements were surveyed across a three-week time period (July, 2008), a list of 84 diet products (and corresponding descriptions of their method) and 139 marketing claims had been created. Laypeople and relevant health professionals, not involved in the creation of the list, were consulted to highlight any glaring omissions of popular diet products: none were found.
2.4 The Classification of Diet Methods

In order to create the diet method classification, the descriptions of how to follow the diet products (promotional material or personal anecdotes from laypeople and health professionals) were examined for common themes. Initially, the diet products were separated into two categories: those products which provided instruction only, as distinct from those diets that provide physical diet products such as meals or powders. Then, themes in food substitution and diet execution were examined within these groups. The categorisation of diet products into eight methods was collaboratively created. The value of a collaborative process to produce this classification lies within the interpretive discussions between researchers, unlike quantitative research processes in which value is placed upon the degree of concordance between independent judgments (Barbour, 2001).

Table 2.1 presents the eight diet methods, including a brief description of their dieting behaviour and/or rules, and examples of commercial products which fit within the category. While all weight-loss diets need to ultimately reduce energy intake, these categorisations were judged to represent distinctly different methods that the dieter uses in their attempts to achieve this end. To illustrate this distinction, consider the following two diet methods: calorie counting diets and low glycaemic index (GI) diets. A calorie counting diet requires a dieter to monitor and restrict the number of calories they consume, regardless of the foods and drinks actually selected. Whereas a low GI diet encourages dieters to consume particular foods that release sugar into the bloodstream at a relatively slow and steady rate, which (in addition to controlling blood insulin levels) keeps individual’s feeling satiated for longer and encourages a reduced amount of food intake overall (State Government of Victoria, 2010b). So while both methods may
achieve a reduced energy intake, they approach this overarching goal in diverse ways that has a dieter thinking and behaving in a distinctly different manner.

As a check of the diet method typology, all 84 diet products were then grouped according to this categorisation. While this process highlighted that the diet method groups are not mutually exclusive, all diet products could still easily be classified according to the diet method group that provided the most specific description of the product. For example, some diet products prescribe the consumption of high-protein foods or drinks, yet also provide a suggested meal plan for the dieter to follow. These were categorised as a High Protein/Low Carb diet method, instead of the more generic Meal Plan diet method, because it was the high-protein aspect of the diet that was strongly advocated and marketed to the consumer as the fundamental component to weight loss and/or the differentiating feature of the product.
Table 2.1
List of Diet Methods, Description of their Methodology and Common Examples in the Commercial Weight-Loss Industry

<table>
<thead>
<tr>
<th>Diet method</th>
<th>Description</th>
<th>Example of commercial products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meal Plan</td>
<td>Provides the dieter with a daily meal plan to follow. These diets do not provide pre-prepared food, but they give a clear plan of what the dieter should eat at each meal</td>
<td>CSIRO total wellbeing diet; GutBusters</td>
</tr>
<tr>
<td>Calorie Counting</td>
<td>Requires the dieter to count calories and restrict the number of calories they consume each day</td>
<td>Weight Watchers; Calorie King Australia</td>
</tr>
<tr>
<td>Low GI</td>
<td>Requires the dieter to eat foods that have a low GI rating (the rate at which the food raises blood sugar level).</td>
<td>Ultimate EnerGI Health Club; The Low GI Diet: Lose Weight With Smart Carbs</td>
</tr>
<tr>
<td>High Protein/Low Carb</td>
<td>Encourages the dieter to consume high-protein foods (e.g., meat, nuts and eggs) at the expense of high-carbohydrates foods (e.g., grains and pastas)</td>
<td>The Atkins Diet; Zone Diet;</td>
</tr>
<tr>
<td>Meal Replacement</td>
<td>Provides the dieter with specifically formulated weight-loss products (e.g., “shakes”, soups, mousse or “bars”) that replace most or all of their normal daily meals</td>
<td>Celebrity Slim; OptiSlim; Tony Ferguson Weightloss Program</td>
</tr>
<tr>
<td>Pre-Prepared Meal</td>
<td>Provides the dieter with pre-prepared meals</td>
<td>Lite n’ Easy; Jenny Craig</td>
</tr>
<tr>
<td>Supplement</td>
<td>Chemical supplements are added to the dieter’s normal diet and involve the consumption of pills, powders or liquids that claim to burn fat, enhance metabolism speed, suppress appetite, or cleanse/detoxify the body</td>
<td>Blackmores Weight-Loss Accelerate; Xantrax tablets</td>
</tr>
<tr>
<td>Special Food</td>
<td>Requires the dieter to eat “special” foods or drinks throughout the day; these foods or drinks either replace normal meals or are to be consumed with every meal.</td>
<td>Cabbage Soup Diet; Wu-Yi Tea; The Lemon Detox Diet</td>
</tr>
</tbody>
</table>
2.5 The Classification of Diet Outcomes

The classification of diet outcomes was derived from the claims made by the marketing for diet products and personal claims of the appealing or unappealing aspects of a diet method. The utilisation of marketing materials was based on the assumption that market research has guided diet products’ advertisements so that they target the salient aspects of diet choice for the consumer. Firstly, the 139 diet claims were divided into two categories: those claims that referred specifically to the weight loss associated with the diet, and those claims about how the diet product impacted the dieter’s life. Next, themes were inductively derived from the dataset. In the same procedure as that employed for the classification of diet methods, collaborative discussions ensued between researchers. As an example of how the themes were extracted: the online Weight Watchers Australia marketing claim was “Keep Weight Off For The Long Haul”. This and other similar marketing strategies that claimed their diet product would produce long-lasting weight loss led to the inclusion of a diet outcome about ‘permanent weight loss.’ Another example is the marketing claim “Learn more with Bodytrim” which accompanied the Bodytrim Diet Plan (Australia) internet link. This implies an educational element to this diet product and attests to the relevance of knowing how a diet works and improving nutritional knowledge as an important outcome of participating in a diet.

Ten categories of diet outcomes were extracted and these are presented in Table 2.2, as well as the abbreviated label name assigned to them, and an example marketing claim. Obviously, the two predominant motives that drive weight loss were included: thinness/appearance concerns and health concerns. The appearance motive required careful wording because, by definition, all weight-loss dieters aim to become slimmer.
So for the purposes of the current research this outcome refers to the extent of a dieter’s obsession or ‘preoccupation’ with thinness, the aesthetic aspect of weight loss. This is an important inclusion because it is essential to differentiate between the extent to which becoming thinner is important to each dieter, from the dieters half-heartedly invested in losing weight to those dieters who are extreme in their pursuit of weight loss. The ‘Thinness’ construct addresses the intensity of their desire to become thinner. As a test of the current classification, all 139 diet claims were then grouped according to this categorisation.
### Table 2.2

*Diet Outcomes, Designated Variable Label and Example Marketing Claims*

<table>
<thead>
<tr>
<th>Diet outcome</th>
<th>Label</th>
<th>Example marketing claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinness (preoccupied with thinness)</td>
<td>Thinness</td>
<td>How to burn stomach fat</td>
</tr>
<tr>
<td>Health (concerned with health)</td>
<td>Health</td>
<td>The Weight-Loss Diet Meal Plans model healthy eating patterns that can be followed</td>
</tr>
<tr>
<td>Achieving permanent weight loss</td>
<td>Permanent Weight Loss</td>
<td>Keep Weight Off For The Long Haul</td>
</tr>
<tr>
<td>Achieving quick weight loss</td>
<td>Quick Weight Loss</td>
<td>Fast track your weight loss and fitness with The Biggest Loser Express Kit</td>
</tr>
<tr>
<td>Making lifelong changes</td>
<td>Lifelong Changes</td>
<td>You can...practice a lifelong diet to maintain a healthy weight</td>
</tr>
<tr>
<td>Requiring little effort</td>
<td>Low Effort</td>
<td>Discover how to lose weight...easily with our simple weight-loss diet</td>
</tr>
<tr>
<td>Not interfering with things I enjoy</td>
<td>Easily Integrated</td>
<td>The Flexible Way to Lose Weight &amp; Still Live Your Life</td>
</tr>
<tr>
<td>Knowing how the diet works</td>
<td>How Diet Works</td>
<td>Learn more with Bodytrim</td>
</tr>
<tr>
<td>Cost of diet product</td>
<td>Cost</td>
<td>Tony Ferguson Offers An Affordable Weightloss Solution That Works</td>
</tr>
<tr>
<td>Avoiding unnatural diet product</td>
<td>Natural</td>
<td>Natural Diet Products to help you lose weight safely</td>
</tr>
</tbody>
</table>
2.6 Sociocultural Sources of Information about Diet Methods and Associated Diet Outcomes

The theory of reasoned action includes a pathway of social influence when predicting an individual’s intention to engage in an action. For women considering a weight-loss diet, their beliefs about diet methods and ultimately their diet choice will be influenced by sociocultural factors, whether it is product marketing, health professional advice or anecdotal evidence from peers and celebrities et cetera. Consistent with these examples, sociocultural influence on diet choice was divided into three relevant groups: (1) health professionals, such as physicians, dietitians and nutritionists; (2) the media including magazines and celebrity endorsements, and; (3) laypeople in the prospective dieter’s life which are referred to within the present thesis as Family/Friends. These were deemed appropriate groups of sociocultural influence on diet choice because they are the very same groups that informed this research for the classification of diet methods and diet outcomes. The best sources of information on diets are the same for diet consumer and researcher alike.

Further evidence for the inclusion of these sociocultural influences came from the tripartite influence model of body dissatisfaction (refer also to Section 1.2.2 in the Introductory Chapter). This theoretical model was developed to describe the sociocultural forces on body image and disordered eating (Thompson et al., 1999) and has received cross-cultural support (Rodgers, Chabrola, & Paxton, 2011; van den Berg, Thompson, Obremski-Brandon, & Coover, 2002; Yamamiya, Shroff, & Thompson, 2006). Three social groups are included in the model: the family, peer group and the media (Thompson et al., 1999). If these social groups are consistently found to emphasise the value of appearance, then they should also be relevant to dieting and
weight-loss advice. For the current research purposes, family and peer groups were combined to form one group of acquaintances in a non-professional capacity.

Beyond the tripartite influence model of body dissatisfaction, health professionals are an obvious inclusion here. Dietitians, nutritionists and relevant medical practitioners should be the most informed in nutrition, the evidence-base for dieting techniques and the science behind weight loss. This thesis will examine whether prospective dieters are interested in and impacted by the diet-related information provided by health professionals because the optimal scenario for physical health is that these women highly value the dieting information offered by health professionals.

It is important to note that this conception of social influence deviates from a strict adherence to the theory of reasoned action. Within the theory of reasoned action, social influence is about the individual’s perception of whether significant others want them to perform the behaviour or not. However, instead of investigating the perceived pressure that individual’s feel to diet (which has been studied many times before in the body image literature; e.g., Thompson et al., 1999); this research assesses how prospective dieters view relevant sociocultural groups as viable information sources for their dieting decisions. In other words, here ‘social influence’ will be how informative sociocultural groups are perceived to be on the topic of dieting, as an alternative to how much pressure social groups exert to engage in a diet. This is another novel approach to the research of dieting in this program of research.
2.7 Conclusion

This study detailed the classification of diet methods, the potential outcomes of using these methods, and sociocultural sources of information relevant to diet choice. Out of the breadth of dieting products available, eight diet methods were extracted: Meal Plan, Calorie Counting, Low GI, High Protein/Low Carb, Meal Replacement, Pre-Prepared Meal, Supplement and Special Food. Ten corresponding diet outcomes were created out of diet marketing and anecdotal claims. These were: Thinness, Health, Permanent Weight Loss, Quick Weight Loss, Lifelong Changes, Low Effort, Easily Integrated, How Diet Works, Cost and Natural. Lastly, three sources of sociocultural influence were identified: Health Professionals, Media, and Family/Friends.

This preliminary work was essential prior to addressing the main research questions of this thesis, as diet methods, beliefs about diet outcomes and sociocultural influences on diet choice have not been measured before. In the subsequent studies, these typologies were used to investigate diet choice: diet maintenance in current dieters and future intentions to diet in non-current dieters, respectively.
Study 2: Health and Thinness Motives for Weight Loss, Diet Outcome Evaluations and the Maintenance of Eight Diet Methods by Current Dieters

3.1 Introduction

In the present study, the diet method and diet outcome typologies derived in Study 1 were used to evaluate diet decision making in a sample of 151 women who were currently dieting. The primary aim was to elucidate diet methods, diet values, and conjunctions of methods and values that are motivated by health concerns and lead to sustainable behaviour change, versus those that are motivated by appearance concerns – particularly, a preoccupation with thinness – and that are associated with negative body image and unhealthy body-change behaviours including disordered eating. More generally, the application of the diet methods and diet values also served as a test of the ability to operationalise, and the usefulness of, the typologies developed in Study 1.

The rationale for the initial focus on current dieters (non-dieters are considered in Study 3) was that, compared to non-dieters, diet-related beliefs and cognitions in current dieters are temporally proximal and inform their regular (at least daily) decisions around maintaining a particular diet method(s). Furthermore, these beliefs/cognitions manifest as overt behaviours rather than hypothetical intentions. The immediacy and concreteness of these beliefs/cognitions is particularly important given the evidence that exists in the health psychology literature that intention to behave is a poor predictor of actual behaviour change (Marks, 1996; Sutton, 1998). Diet-related beliefs/cognitions in current dieters are also far more likely to be dynamic in that they are shaped by ongoing feedback received by the dieter concerning their weight-loss progress and the outcomes of any costs-versus-benefits analyses they undertake. This is particularly important
considering the value of assessing the relevance of these beliefs/cognitions in relation to real-world outcomes (e.g., Bothe & Richardson, 2011; Trotter, 2002). Finally, for the reasons described above, the practical advantage of current dieters is that the salience, clarity, and availability of their diet-related beliefs and cognitions will be greater than in women who have never dieted and/or who are not currently dieting.

The approach of Study 2 was to initially examine the relative importance of health and thinness and other diet outcomes for current dieters, followed by an examination of which diet outcome evaluations are related to health versus thinness motives. Further, the psychosocial correlates of the outcome evaluations were established. After which, the study turned its attention to the diet methods and tested whether the typology measures distinct and separable forms of dieting, followed by an investigation of which diet methods are motivated by health versus thinness and/or associated with eating disorder symptomatology.

3.1.1 Current dieters’ motives for weight loss and outcome evaluations.

Initially, Study 2 examined the outcomes from dieting that are personally important to current dieters. The basic premise of the theory of reasoned action is that people will engage in an action if they believe it will produce personally valued outcomes (Fishbein & Ajzen, 1975). The present study sampled current dieters: they have considered the behaviour, engaged in the behaviour and they are maintaining the behaviour. Within the theory of reasoned action, it can be assumed that these dieters believed from the outset that their diet would produce personally valued outcomes. Therefore, this study simply measured these women’s diet values or outcome evaluations in theory of reasoned action parlance: what is personally important to them in the context of weight loss and dieting. As explained in Section 1.4.2 of the Introductory Chapter, outcome evaluations are
equivalent to a person’s values concerning the focal behaviour. As such, these terms will be used interchangeably. The level of endorsement by current dieters of the diet outcomes was explored, with a particular focus on the relative importance of health concerns versus thinness concerns for these dieters.

Alongside self-report motives for weight loss, implicit motives can be revealed from dieter characteristics in the examination of a dieter’s current weight, their weight-loss goals and extent of dissatisfaction with appearance. Ideally, weight-loss dieters will be overweight or obese but with minimal concern over their physical appearance and aiming for an ideal weight within a healthy weight range. This describes the dieter motivated to lose weight solely for health reasons. Study 2 assessed the extent to which current dieters fit this mould of the health-focussed dieter.

3.1.2 Health-focussed versus thinness-focussed motivational profiles. Aside from the extremes seen in eating disorders, research has not ascertained whether there are helpful or problematic ways of conceptualising weight loss and dieting in the general dieting population. This is hardly surprising considering that health professionals approach dieting in distinctly different ways: from a physical health perspective that is primarily concerned about overweight and obesity to a mental health perspective that is mostly concerned about poor body image. Yet in clinical practice, assumptions have been made about unhealthy and healthy dieting beliefs without adequate scientific backing: the prime example being the general perception by physicians and dietitians that rapid weight loss is a problematic desire that should be actively discouraged (NICE, 2006; Purcell, 2010; Purcell et al., 2010). While medical research investigates the validity of this assumption for the overweight and obese from a physical health perspective (Purcell, 2010; Purcell et al., 2010), the current study aims to establish
whether quick weight loss and other value systems around dieting are healthy or indeed problematic from a psychological point of view. What all health professionals can agree upon is that dietary change is best motivated by health concerns rather than a strong drive for thinness (NICE, 2006; O’Brien et al., 2007; Putterman & Linden, 2004; Reas et al., 2004). Therefore, Study 2 examined which outcome evaluations are associated with the diet motives of health versus thinness in order to establish health-focussed versus thinness-focussed motivational profiles.

As argued in Section 1.3.1 of the Introductory Chapter, a healthy approach to dieting entails a long-term weight management focus, which uses relatively simple changes to existing routines that can be maintained indefinitely; whereas, short-term attempts at dietary change, that have strict rules around eating and use unnatural or unusual ingredients are likely to be difficult to sustain, placing the dieter at risk of weight cycling and negative psychological effects associated with dieting ‘failure’. It was expected that dieters motivated by health would desire the former style of dieting and dieters motivated by thinness would desire short-term and radical changes, like the latter description. However, due to the dearth of prior literature on diet motives and methods, this remained an open empirical question of whether health versus thinness motives for weight-loss differentiates how dieters conceptualise diets.

3.1.3 Diet outcome evaluations, sociocultural pressure and body dissatisfaction. It is well-established that women influenced by the sociocultural thin ideal with poor body image, have a strong drive for thinness (Ahern & Hetherington, 2006; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004; Vartanian, Herman, & Polivy, 2005); and those with a more positive body image show more concern over their health (O’Brien et al., 2007; Reas et al., 2004). But without prior
research on diet methods, it is unclear whether sociocultural pressure and body image concerns account, at least in part, for cognitions about ways to diet. Using the results from the preceding section that has revealed which outcome evaluations are related with thinness and health motives for dieting, Study 2 aimed to examine whether there is an underlying problematic pattern of dieting in which poor psychosocial health is associated with a drive for thinness and thinness-focussed cognitions; and equally important, whether there is a pattern of good psychosocial health and health-focussed cognitions. Thinness-focussed outcome evaluations were expected to be directly related to body dissatisfaction and vulnerability to sociocultural pressure to be thin; and health-focussed outcome evaluations were expected to be inversely related to these factors.

Validated and reliable questionnaires were used as markers of vulnerability to sociocultural pressure and body image concerns. Specifically, these captured:

- extreme dissatisfaction with one’s weight and body shape (the Weight Concern and Shape Concern subscales of the EDE-Q);
- susceptibility to sociocultural pressure to be thin (the Internalisation-General subscale of the Sociocultural Attitudes Towards Appearance Questionnaire-3 [SATAQ-3]); and
- the tendency to make bodily comparisons with others (the Physical Appearance Comparison Scale [PACS]).

It should be noted that in addition to the conceptual link between a thinness motive for dieting and markers of poor psychosocial health, there is also a statistical reason for this relationship. The item measuring the Thinness outcome evaluation has purposefully been taken from an eating disorder screening tool: the Eating Attitudes Test
(EAT-26). While it is only a singular question taken in isolation from a multiple item instrument, the EAT-26 is an internally consistent test (Garner, Olmsted, Bohr, & Garfinkel, 1982) and this item should be positively correlated with other factors related to body image concerns as measured within the test.

3.1.4 Diet method typology. Study 1 developed a typology of eight diet methods for use in the current thesis. A subsidiary but necessary aim of this study was to evaluate the extent to which the typology captures distinct and separable forms of dieting behaviour. It was expected that these methods would be the product of manifestly different patterns of dieting behaviour and intercorrelations between the methods were inspected to reveal the extent to which current dieters use combinations of the diet methods. If these methods are mutually exclusive ways of dieting, then they should not be correlated with each other.

3.1.5 Diet methods and eating disorder symptomatology. Diet methods vary considerably in many ways including nutrient prescription, behaviours required of the dieter and how practicable they are for long-term use (see Section 1.3.1). However, it is unknown how diet methods vary in terms of how risky or safe they are for promoting or co-existing with disordered eating. As highlighted in the Introductory Chapter (Section 1.2.2), the precise link between dieting behaviour and eating pathology is unclear (Stice, 2002). Prospective research studies have found that dieting increases a dieter’s risk of disordered eating in the future, using broad self-report measures of the presence or absence of dieting behaviour (Bohon et al., 2009; Leon et al., 1999; Patton et al., 1990; Patton et al., 1999; Santonastaso, et al., 1999; Stice & Agras, 1998). Health professionals have proposed viable reasons why diets might lead to eating pathology,
particularly binge eating, but our understanding of this relationship is still limited (Stice, 2002).

This research, with its novel approach to categorising dieting behaviour into diet methods, aimed to further our understanding of the link between dieting and eating pathology by identifying which diet methods pose the most risk of problematic eating behaviours and cognitions. Subscales from the valid and reliable Eating Disorder Examination-Questionnaire (EDE-Q) were used as markers of eating pathology: (a) a preoccupation with eating behaviour (the Eating Concern subscale), and; (b) an excessive effort to continually restrict food intake (the Restraint subscale). Without prior research to guide predictions, specific hypotheses could not be made about which diet methods would show an association with eating disorder symptomatology.

3.1.6 Diet outcome evaluations and diet method maintenance. Study 2 culminated in the examination of the relevance of dieter’s outcome evaluations to the selection and maintenance of the various diet methods. Of particular interest was whether the relationships between the outcome evaluations and the diet methods reflect underlying differences in health-focussed versus thinness-focussed dieting cognitions. It was expected (assuming that there has been a clear delineation between health-focussed and thinness-focussed diet values identified by earlier analyses) that health-focussed and thinness-focussed motivational profiles would be associated with the maintenance of different diet methods and further inform us on which diet methods pose as risky or more safe options for weight loss.

While this was predominantly an unexplored empirical question, a small number of simple hypotheses about how singular outcome evaluations relate to diet methods
could be made about the diets that have methodology that explicitly coincide with the diet outcome evaluations. Firstly, two diet methods require the consumption of food stuffs that are highly processed, removed from their whole food state and have been manufactured specifically for the purposes of weight loss: Meal Replacement diets (which provide shake and soup powders and the like) and Supplement diets (which provide powders or pills to consume in addition to whole foods). Consequently, it was expected that those dieters who highly value eating natural, whole foods would be less likely to use and maintain Meal Replacement and Supplement diets. Secondly, Special Food diet methods typically state upfront in their promotional material that the practice of consuming the special diet food is a short-term endeavour. For instance, The Lemon Detox Diet’s most popular version of the program, ‘The Full Body Cleanse’, is prescribed for a period of 10 days. Even their most lengthy program, the ‘Relaxed Version’, is recommended for 13 to 25 days only (Pure Natural Health, 2011). Therefore, it is expected that dieters who engage in the Special Food diet method do not place a high importance on making lifelong changes to their dietary patterns. For the remaining diet methods – Calorie Counting, Meal Plan, Low GI, High Protein/Low Carb and Pre-prepared Meal – the salience of the dieting values for their use and maintenance is not immediately apparent from their methodology, and so hypotheses about the relationships between outcome evaluations and these diet methods could not be made.

3.1.7 Research aims and hypotheses. The primary objective of Study 2 was to identify health-focused versus thinness-focused motivational profiles of dieters and the diet methods that are preferred by dieters with these motives. A sample of 151 women over 18-years-old (aged between 18 and 67) who self-described as currently being “on a weight-loss diet” completed an online questionnaire that assessed their diet outcome
evaluations and diet maintenance over the previous 12 months according to the diet methods extracted in Study 1. Preliminary examinations of the typologies produced in Study 1 were made. Once the outcome evaluations and diet method typology were scrutinised individually, the association between diet outcome evaluations and diet methods were explored. Due to the dearth of prior literature, the hypotheses for Study 2 were exploratory and descriptive.

3.1.7.1 Aim 1 and related hypotheses. The relative importance to current dieters of health and appearance was investigated to better understand dieting motives. Further, the other diet outcomes were examined to reveal the relevance of these outcomes to real-world behaviour.

Hypothesis 3.1.1: If health concerns are the predominant motivation for weight loss, dieters will be above the normal BMI range (hence the rationale for ongoing dieting), and their ideal BMI will be within the normal range (indicative of a healthy weight goal). Alternatively, if appearance concerns are the predominant motivation for weight loss, dieters will show a high level of dissatisfaction with their body shape and weight, exceeding community norms.

Hypothesis 3.1.2: Endorsement of diet outcome evaluations will reflect their relative importance to current dieters.

3.1.7.2 Aim 2 and related hypothesis. Health professionals agree that dietary change should be motivated by a concern with health rather than a preoccupation with thinness (NICE, 2006; O’Brien et al., 2007; Putterman & Linden, 2004; Reas et al., 2004). Therefore, the co-occurrence of diet outcome evaluations was assessed in relation
to health and thinness motives. While it was expected that the co-occurrence of particular outcome evaluations would reveal underlying patterns of dieting cognitions motivated by thinness or motivated by health, without any prior research this remained a broad empirical question without specific hypotheses.

*Hypothesis 3.2:* Outcome evaluations will be differentially associated with health and thinness motivations for dieting.

### 3.1.7.3 Aim 3 and related hypotheses.

The proposition was tested that sociocultural pressure to be thin and negative body image account, at least in part, for diet outcomes focussed on thinness rather than health. The co-occurrence of these psychosocial factors and diet outcome evaluations was assessed. Outcome evaluations were expected to be differentially associated with sociocultural pressure to be thin and body dissatisfaction as stated in the subsequent hypotheses.

*Hypothesis 3.3.1:* Body dissatisfaction and vulnerability to sociocultural pressure to be thin will directly relate to outcome evaluations associated (in Hypothesis 3.2) with a preoccupation with thinness.

*Hypothesis 3.3.2:* Body dissatisfaction and vulnerability to sociocultural pressure to be thin will be inversely related to outcome evaluations associated (in Hypothesis 3.2) with a concern with health.

### 3.1.7.4 Aim 4 and related hypothesis.

To assist in the interpretation of results obtained using the diet methods typology of Study 1, an initial analysis of the interrelationships between methods was conducted. This would reveal the extent to
which the typology of Study 1 captures distinct and separable forms of dieting. Note that it was not appropriate to use factor analysis for this task because similar diet methods are not expected to co-occur, in fact, they may be mutually exclusive of one another.

*Hypothesis 3.4:* Intercorrelations will reveal the extent to which current dieters use combinations of diet methods.

### 3.1.7.5 Aim 5 and related hypothesis. The proposition was tested that diet methods vary in the degree with which they are conducive to eating disorder symptomatology.

*Hypothesis 3.5:* Endorsement of diet methods will be differentially associated with eating disorder symptomatology.

### 3.1.7.6 Aim 6 and related hypotheses. Applying the theory of reasoned action, diet motives and values should differentiate the selection and maintenance of the various diet methods. Initially, two basic predictions were made about how the outcome evaluations would be associated with the diet methods, based on the overt characteristics of the diet methods.

*Hypothesis 3.6.1:* Dieters who value consuming natural foods will be less likely to maintain Meal Replacement and Supplement diet methods which use powders, tonics and/or foods specifically formulated for weight loss.

*Hypothesis 3.6.2:* Dieters who value making lifelong changes will be less likely to use Special Food diet methods which are explicitly short-term endeavours focussed on the consumption of a ‘special’ weight loss or detoxifying agent.
Of particular interest was whether the relationships between the outcome evaluations and diet methods reflect underlying differences in dieting cognitions based upon their association with a thinness versus health motivation for weight loss. In the absence of relevant literature, this hypothesis remained a broad prediction based on the initial empirical question of the study.

_Hypothesis 3.6.3:_ The set of outcome evaluations related to a concern with health (in Hypothesis 3.2) will be associated with different diet methods as compared to the set of outcome evaluations related to a preoccupation with thinness (in Hypothesis 3.2).

### 3.2 Method

**3.2.1 Participants.** All adult participants were weight-loss dieting at the time of completing the survey. It was articulated to participants that it did not matter how long they had been dieting, the type of diet method they were using, or whether they were achieving their weight-loss goals. A sample of 154 participants aged between 18 and 67 years took part in the study. Three participants were removed from the sample for the following reasons: one of the participants did not complete a significant portion of the questionnaire and two participants did not disclose their gender (the survey was open to both males and females). A sample of 151 women remained with a mean age of 30.85 years ($SD = 11.65$). The majority of the sample resided in Australia (93.4%) with the remaining participants from other developed countries that use English as their predominant language.
3.2.2 **Materials.** The questionnaire battery used the following measures.

3.2.2.1 **Demographic, weight and diet history information.** Participants were asked to indicate their age and gender. Participants also provided information on their current weight and ideal weight. They were able to enter their information in imperial or metric units of measurement to maximise the accuracy of this self-report data. They also provided detail of their height in order to calculate BMI values. BMI is calculated by dividing an individual’s weight in kilograms by their height in metres squared (State Government of Victoria, 2010a). BMI values provide an indicator of total body fat taking into account an individual’s height (State Government of Victoria, 2010a). WHO (2006) BMI classifications were applied to provide an indication of the physical health status of participants’ current and ideal weight.² WHO (2006) has deemed people with a BMI of: below 18.5kg/m² as “underweight”; between 18.5kg/m² and 24.9kg/m² as within the “normal range”; between 25.0kg/m² and 29.9kg/m² as “overweight”, and; 30.0kg/m² and above as “obese”.

For diet history, participants indicated their age at first weight-loss diet. They were also provided unlimited space to record information about their history of diet attempts.

3.2.2.2 **Diet methods.** Participants were asked about their recent use of eight common diet methods (see Appendix B). The eight categories were (as shown in Table 2.1): Calorie Counting; Pre-Prepared Meal; Meal Plan; Meal Replacement; High Protein/Low Carb; Supplement; Special Food; and Low GI. To further guide

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² It should be noted that BMI can be a poor predictor of obesity-related health risks (Janssen, Katzmarzyk, & Ross, 2004) and that self-reported weight and height data can be inaccurate, typically producing underestimates of true BMI (Gorber, Tremblay, Moher, & Gorber, 2007).
participants in the categorisations, immediately prior to the relevant item for each diet category, the style of dieting was briefly described and common examples from the commercial weight-loss industry were provided.

Using an 11-point Likert scale, one question was asked about each method of dieting. It addressed the participants’ recent use of these diets (e.g., “Over the previous 12 months, how often were you on calorie counting diets?” with scale anchors labelled “never” and “always”). A measure of how diverse the participants’ dieting had been was created by summing the number of diet methods they had reported using at least some of the time over the previous 12 months, with possible scores ranging from zero to eight.

3.2.2.3 Diet outcome evaluations. Ten outcome evaluations concerning weight loss were measured (see Appendix C): (1) preoccupied with thinness (Thinness); (2) concerned with health (Health); (3) achieving permanent weight loss (Permanent Weight Loss); (4) achieving quick weight loss (Quick Weight Loss); (5) not interfering with things I enjoy (Easily Integrated); (6) making lifelong changes (Lifelong Changes); (7) requiring little effort (Low Effort); (8) knowing how the diet works (How Diet Works); (9) avoiding unnatural diet products (Natural); and (10) cost of diet product (Cost).

Preceding the items was a statement that emphasised that the section referred specifically to weight-loss dieting and to consider the items in the context of diet foods, products and programs. One item measured each diet outcome evaluation using a five point Likert scale ranging from ‘never’ to ‘always’. For example, the item for Quick Weight Loss was ‘I want to lose weight as quickly as possible.’
Items from the food choice literature were adapted for this research when considerable overlap in the theme was apparent. For example, the item used in Axelson, Brinberg and Durand (1983) to measure price sensitivity, “I am very price conscious,” was adapted for the purposes of this study to be, “I am very price conscious when choosing which diet or diet product to buy.” Item production for the novel diet outcome evaluations, such as achieving quick weight loss, were guided by the food choice literature (e.g., McCarthy, de Boer, O’Reilly, & Cotter, 2003) and Ajzen and Fishbein’s (1980) detailed account of how to conduct questionnaire research using the theory of reasoned action. The item used to assess valuing thinness was taken directly from the Eating Attitudes Test (EAT-26; Garner et al., 1982), a screening instrument to identify eating disorders. Of course, by definition, all weight-loss dieters desire thinness. The use of the EAT-26 item ensured that the intensity of this desire was adequately captured. Clinical eating disorder scales are designed to do this.

3.2.2.4 Nutritional knowledge. A measure of nutritional knowledge was devised from the Dietitians Association of Australia website (see Appendix D). Twenty multiple choice questions were collated from their ‘smart eating quiz’ (Dietitians Association of Australia, 2008a) and ‘nutrition quiz’ (Dietitians Association of Australia, 2008b) that ranged from 2 to 6 possible response options. An example item is “How many serves of vegetables do you need daily?” to which the participant could endorse the answers “one,” “two,” “three,” “four” or “five.” Correct responses were awarded a score of one point and incorrect responses were not penalised.

3.2.2.5 Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3). The SATAQ-3 (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004) uses 5-point Likert scales that range from 1 = “definitely disagree” to 5 = “definitely agree”
to measure four factors (see Appendix E). This research focuses on the factor that measures general internalisation of the thin ideal influenced by visual and print media, often referred to as ‘Internalisation-General’ (referred to subsequently in this research as Internalisation; $\alpha = .95$). The SATAQ-3 possesses adequate internal consistency, and has good content and convergent validity with measures of body image (Thompson et al., 2004) and disordered eating (Calogero, Davis, & Thompson, 2005).

3.2.2.6 Physical Appearance Comparison Scale (PACS). The PACS (Thompson, Heinberg, & Tantleff-Dunn, 1991) assesses the frequency of engagement and investment in physical appearance comparisons using a 5-point Likert scale ranging from 1 = “never” to 5 = “always” (herein this variable will be called Comparison; $\alpha = .84$; see Appendix F). The PACS has shown adequate internal consistency and test-retest reliability (Thompson et al., 1991).

3.2.2.7 Eating Disorder Examination-Questionnaire (EDE-Q). The EDE-Q is a self-report questionnaire (Fairburn & Beglin, 1994), adapted from the Eating Disorder Examination (Cooper & Fairburn, 1987), that assesses attitudinal, emotional, and behavioural symptoms of disordered eating over the past four weeks (see Appendix G). Two 7-point Likert scales are utilised by the measure: one ranging from 0 = “no days” to 6 = “every day” to measure the number of days out of the last 28 the individual experienced the relevant symptoms and the other ranging from 0 = “not at all” to 6 = “markedly.” Four subscales are created with the EDE-Q: dietary restraint (Restraint; $\alpha = .73$); concern with eating (Eating Concern; $\alpha = .78$); concern with body weight; and concern with body shape. The two scales regarding weight and shape were highly correlated ($r = .87$), so they were averaged together to create a single measure of body dissatisfaction (Body Dissatisfaction; $\alpha = .91$).
The EDE-Q subscales have adequate test-retest reliability, internal consistency, and concurrent and discriminant validity (Binford, Le Grange, & Jellar, 2005; Cooper, Cooper, & Fairburn, 1989; Mond, Hay, Rodgers, Owen, & Beumont, 2004).

3.2.3 Procedure. The study was approved by the Deakin University Human Ethics Advisory Group – Faculty of Health. Participants were recruited using a brief written invitation which contained the URL link to the Plain Language Statement (see Appendix H) and online questionnaire. The invitation was distributed via email, announcements on Deakin University’s online notice boards for various undergraduate units, and advertised on social networking and online classified advertisement sites. Additionally, a snowball technique was employed where participants were invited to forward the questionnaire link to family and friends. Participation was voluntary and anonymous, and no financial inducements were offered.

Participants completed the questionnaire and submitted their responses entirely online. By submitting their responses, this indicated their consent to participate in the study and this was clearly outlined in the Plain Language Statement. Due to the online recruitment procedure, response rate could not be ascertained.

3.3 Results

3.3.1 Data screening. Preliminary data screening revealed missing values distributed randomly across the items and participants. For those scales created by averaging multiple items (e.g., the SATAQ-3 and PACS) missing values were not replaced and scale totals were calculated by taking the mean value of existing data. For the remainder of the variables, missing data was replaced with median values. Fewer than 3% of cases for each variable had missing values.
Scales were calculated using the averaged responses to the internally consistent items; that is, items that possessed item-total correlations greater than .3 and which, when averaged, yielded a scale with adequate reliability. On this basis, one item was removed from the PACS scale (item 4). The Materials section of the Method lists the final Cronbach’s alpha for each scale.

The inclusion of a small number of univariate outliers did not impact the pattern of results. Consequently, the original data was retained. No multivariate outliers were identified for the regression analyses according to critical chi-square value cut-offs suggested by Tabachnick and Fidell (2007). All scales were screened for violations of normality and, as a result, variables with skewed distributions (Meal Replacement Use, High Protein/Low Carb Use and Supplements Use) were transformed for parametric analyses. Examination of these transformed variables revealed that they were now sufficiently normally distributed. Pre-Prepared Meals Use and Special Foods Use were unable to be transformed satisfactorily and were converted into dichotomous variables for parametric analyses that indicated whether a dieter reported recent use of the diet versus nil use of the diet. Prior to each analysis, independent and dependent variables were examined for violations of the relevant assumptions. Due to the number of variables for analysis (including eight diet methods and ten outcome evaluations) a more conservative significance level ($p < .01$) was used for inferential analyses.

3.3.2 The characteristics and weight-loss motives of current dieters. An initial examination of the sample’s diet-related characteristics was conducted using Current BMI, Ideal BMI, extent of Body Dissatisfaction, Age at First Diet and level of Nutritional Knowledge. Table 3.1 presents the descriptive statistics for these variables. Consistent with other dieting samples, dieting behaviour in these women predominantly
commenced during adolescence: the median Age at First Diet was 16-years-old. However, the range of Age at First Diet spanned early childhood through to middle adulthood. In terms of diet-relevant knowledge, these current dieters demonstrated a relatively good level of Nutritional Knowledge, scoring on average 16.5 out of the 20 available points.

Table 3.1

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>M</th>
<th>Median</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at First Diet (years)</td>
<td>19.00</td>
<td>16</td>
<td>7.17</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Nutritional Knowledge</td>
<td>16.50</td>
<td>17</td>
<td>1.85</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Current BMI (kg/m²)</td>
<td>26.61</td>
<td>24.98</td>
<td>6.79</td>
<td>16.39</td>
<td>51.94</td>
</tr>
<tr>
<td>Ideal BMI (kg/m²)</td>
<td>21.99</td>
<td>22.03</td>
<td>3.34</td>
<td>13.26</td>
<td>32.46</td>
</tr>
<tr>
<td>Body Dissatisfaction</td>
<td>3.52</td>
<td>3.54</td>
<td>1.38</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Before testing hypotheses concerning specific diet methods and dieting expectations, the two basic motivations for weight loss were examined in the sample: dieting for health and dieting for appearance (*Hypothesis 3.1.1*). The health motivation was investigated by comparing the dieters’ current weight and ideal weight to health ranges in the BMI scale as designated by the WHO (2006), presented in Figure 3.1. If health motivations for weight loss predominate in the sample, it was expected that the Current BMI of dieters would be above the normal BMI range (hence the rationale for ongoing dieting), and Ideal BMI would be within the normal range (indicative of a
healthy weight goal.\(^3\) The appearance motivation for weight loss was investigated by examining dieter’s Body Dissatisfaction and this is shown relative to Current BMI in Figure 3.2. Alternatively, if appearance motivations for weight loss predominate in the sample, it was expected that dieters would have a high level of dissatisfaction with their body shape and weight, exceeding community norms. Note that in the scatterplots of Figures 3.1 and 3.2 the normal BMI weight range is demarcated by two vertical lines at 18.5\(\text{kg/m}^2\) and 25.0\(\text{kg/m}^2\).

As seen in Figure 3.1, while approximately half (48.3\%) of the dieters were indeed above the normal BMI range, many were already within the normal range (46.4\%) and some were even below it (5.3\%). As expected of weight-loss dieters, they aimed to achieve a lower weight than their current weight. Those within and below the normal range tended to have an Ideal BMI that was close to their Current BMI. Presumably, they were dieting to maintain their weight or to lose ‘the last few kilograms’ that is a popular topic of diet forums and weight-loss books (e.g., Bridges, 2011). Note, however, that this is problematic for the latter group as they were below a minimally normal body weight for their height, a criterion for anorexia nervosa (APA, 2000).

\(^3\) In response to an examiner’s feedback, it should be acknowledged that this is one possible inference from the data and assumes dieters have an understanding of BMI categories.
Figure 3.1. Scatterplot of current dieters’ Current BMI and Ideal BMI (kg/m²). The diagonal line represents the equation Ideal BMI = Current BMI. The two vertical lines in Current BMI represent the normal BMI range of 18.5kg/m² to 25.0kg/m².
Although Current and Ideal BMI were positively correlated, $r = .84$, $p < .001$, the scatterplot in Figure 3.1 suggests that the relationship is best described by a logarithmic rather than linear function in which Ideal BMI does not increase in proportion to Current BMI. The logarithmic relationship indicates that for many dieters who were obese, not surprisingly, their ideal weight was not just a few kilograms away from their current weight. Within this data range, the logarithmic trend tapers off at approximately $30\text{kg/m}^2$, above the normal BMI range and at the lower cusp of the obese category instead. This suggests that obese dieters are aware of BMI categories and presumably, this also reflects more realistic expectations amongst many of these dieters.

With regards to an appearance motivation for weight loss, the extent of a dieter’s Body Dissatisfaction was unrelated to Current BMI, $r = .11$, $p = .19$. Indeed, the scatterplot in Figure 3.2 shows marked variability in this relationship with many dieters reporting high levels of Body Dissatisfaction despite being within and even below the normal BMI range. The clear majority (84.1%) of dieters reported Body Dissatisfaction that exceeds female adult community norms of $M = 2.01$ (Mond, Hay, Rodgers, & Owen, 2006). With half of the dieters already at a physically healthy weight and with the disparity between actual BMI and Body Dissatisfaction, this gave little reason to infer that dieting in the sample was motivated by concerns with body weight that were purely health related.
Figure 3.2 Scatterplot of current dieters’ Current BMI (kg/m²) and Body Dissatisfaction. The two vertical lines in Current BMI represent the normal BMI range of 18.5kg/m² to 25.0kg/m².
3.3.3 Diet outcome evaluations. As detailed in Study 1, in order to operationalise relevant constructs from the theory of reasoned action, ten diet outcomes were extracted for use in this research. The diet outcome evaluations were examined to better understand the relevance of these outcomes to current dieters (Hypothesis 3.1.2). All of the outcome evaluations were endorsed by the clear majority of the sample (i.e., current dieters selected options on the Likert scale other than ‘never’; range = 88.7% to 99.3%). The means and standard deviations for each diet outcome evaluation are presented in Table 3.2. Consistent with the results of the previous section; out of the two motivations for weight loss, a preoccupation with thinness was more prevalent than a concern with health. It is troubling to note that health was rated on average as being the least important diet outcome. After listing preoccupation with thinness and health concern in Table 3.2, the outcome evaluations are ranked from most important to least important. Making lifelong dietary changes was rated on average as the most important diet outcome, followed by achieving permanent weight loss. Alongside health, consuming natural food stuffs and the expense associated with a diet were on average the least important diet outcomes to dieters.
Table 3.2
Bivariate Correlations (Pearson’s r Values), Means and Standard Deviations for Diet Outcome Evaluations of Current Dieters

<table>
<thead>
<tr>
<th>Diet outcome evaluation</th>
<th>Variable label</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preoccupied with thinness</td>
<td>Thinness</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Concerned with health</td>
<td>Health</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Making lifelong changes</td>
<td>Lifelong Changes</td>
<td>-.23*</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Achieving permanent weight loss</td>
<td>Permanent Weight Loss</td>
<td>-.28**</td>
<td>-.15</td>
<td>.37**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Knowing how the diet works</td>
<td>How Diet Works</td>
<td>-.45**</td>
<td>.06</td>
<td>.40**</td>
<td>.39**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Requiring little effort</td>
<td>Low Effort</td>
<td>-.02</td>
<td>.02</td>
<td>-.08</td>
<td>.01</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Not interfering with things I enjoy</td>
<td>Easily Integrated</td>
<td>-.08</td>
<td>-.01</td>
<td>.03</td>
<td>.07</td>
<td>.11</td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Achieving quick weight loss</td>
<td>Quick Weight Loss</td>
<td>.45**</td>
<td>.17</td>
<td>-.36**</td>
<td>-.43**</td>
<td>-.49**</td>
<td>.03</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Avoiding unnatural diet product</td>
<td>Natural</td>
<td>-.19</td>
<td>.22*</td>
<td>.25*</td>
<td>.11</td>
<td>.40**</td>
<td>.20</td>
<td>.26*</td>
<td>-.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Cost of diet product</td>
<td>Cost</td>
<td>-.00</td>
<td>.10</td>
<td>.01</td>
<td>.01</td>
<td>.06</td>
<td>.39**</td>
<td>.28*</td>
<td>.12</td>
<td>.17</td>
<td></td>
</tr>
</tbody>
</table>

| M         | 2.61 | 2.46 | 3.09 | 2.90 | 2.79 | 2.69 | 2.64 | 2.57 | 2.57 | 2.50 |
| SD        | 1.11 | 1.05 | .93  | 1.02 | 1.21 | 1.06 | 1.05 | 1.19 | 1.32 | 1.21 |

Note. Possible score range for each scale is 0 - 4.
*p < .01; ** p < .001.
3.3.4 Health-focussed versus thinness-focussed motivational profiles in current dieters. An important aim of this study was to examine whether there are patterns of dieting cognitions that are motivated by appearance or by health. This section examines which outcome evaluations co-occur with a preoccupation with thinness versus a concern with health. The outcome evaluations were expected to be differentially associated with Health and Thinness (*Hypothesis 3.2*), but in the absence of prior literature more specific hypotheses could not be made.

Table 3.2 presents the correlations between the ten diet outcome evaluations. Consistent with expectations, Thinness and Health had different patterns of correlations with the eight remaining outcome evaluations. The first column of correlations in Table 3.2 shows that Thinness has a relationship with four other outcome evaluations: it is positively correlated with Quick Weight Loss and negatively correlated with How Diet Works, Permanent Weight Loss and Lifelong Changes. That is, those dieters who were thinness-focussed, wanted the results from dieting quickly, and devalued understanding how their diet will achieve these results and devalued making lifelong changes for permanent weight loss. The correlation matrix reveals that these outcome evaluations all vary together as a consistent set. Permanent Weight Loss, Lifelong Changes and How Diet Works are all positively correlated with each other; and all three of these aforementioned outcome evaluations are negatively correlated with Thinness and Quick Weight Loss.

With regards to health-focussed dieting, only one outcome evaluation is correlated with Health in a positive direction: Natural. Note the absence of a relationship between Thinness and Health: these dieting motives are independent of each other.
As an aside, Natural has a number of other positive correlations: with How Diet Works, Lifelong Changes and Easily Integrated. The remaining correlations amongst outcome evaluations concern diet method convenience: Low Effort, Easily Integrated and Cost are all positively correlated.

3.3.5 Diet outcome evaluations, sociocultural pressure and body dissatisfaction. Following on from the previous section, the current section explores whether sociocultural pressure and poor body image accounts, in part, for thinness-focussed diet motivations and cognitions. It was hypothesised that body dissatisfaction and markers of sociocultural pressure would be directly related to Thinness and the outcome evaluations identified as thinness-focussed in the preceding analysis. That is, these psychosocial factors would be positively correlated with Thinness and Quick Weight Loss, and negatively correlated with Permanent Weight Loss, Lifelong Changes, How Diet Works (Hypothesis 3.3.1). It was also hypothesised that body dissatisfaction and markers of sociocultural pressure would be inversely related to Health and the outcome evaluations identified as health-focussed (i.e., a negative correlation with Health and Natural; Hypothesis 3.3.2).

As shown in Table 3.3, correlations were calculated between each diet outcome evaluation and Internalisation (the ‘Internalisation-General’ subscale of the SATAQ-3), Comparison (the PACS), and Body Dissatisfaction (the Weight Concern and Shape Concern subscales from the EDE-Q combined). Table 3.3 also displays descriptive statistics for the psychosocial factors.

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4 The correlations between Internalisation, Comparison and Body Dissatisfaction are presented in Appendix I.
Table 3.3

*Bivariate Correlations (Pearson’s r Values) between Diet Outcome Evaluations and Internalisation, Comparison and Body Dissatisfaction in Current Dieters*

<table>
<thead>
<tr>
<th>Diet outcome evaluation</th>
<th>Internalisation</th>
<th>Comparison</th>
<th>Body Dissatisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinness</td>
<td>.53**</td>
<td>.47**</td>
<td>.67**</td>
</tr>
<tr>
<td>Health</td>
<td>.11</td>
<td>.02</td>
<td>.26*</td>
</tr>
<tr>
<td>Lifelong Changes</td>
<td>-.27*</td>
<td>-.24*</td>
<td>-.24*</td>
</tr>
<tr>
<td>Permanent Weight Loss</td>
<td>-.25*</td>
<td>-.28*</td>
<td>-.34**</td>
</tr>
<tr>
<td>How Diet Works</td>
<td>-.42**</td>
<td>-.27*</td>
<td>-.39**</td>
</tr>
<tr>
<td>Low Effort</td>
<td>.05</td>
<td>.08</td>
<td>.01</td>
</tr>
<tr>
<td>Easily Integrated</td>
<td>.00</td>
<td>-.00</td>
<td>-.07</td>
</tr>
<tr>
<td>Quick Weight Loss</td>
<td>.40**</td>
<td>.37**</td>
<td>.50**</td>
</tr>
<tr>
<td>Natural</td>
<td>-.20</td>
<td>.01</td>
<td>-.10</td>
</tr>
<tr>
<td>Cost</td>
<td>-.01</td>
<td>.06</td>
<td>.17</td>
</tr>
</tbody>
</table>

|M    | 3.28 | 3.62 | 3.52 |
|SD   | 1.08 | .86  | 1.38 |

*Note. *p < .01; **p < .001.*

Inspection of Table 3.3 confirms *Hypothesis 3.3.1*: a high susceptibility to sociocultural pressure to be thin and body dissatisfaction are positively correlated with Thinness and Quick Weight Loss; and they are negatively correlated with Lifelong Changes, Permanent Weight Loss and How Diet Works. This shows that dieters with more extreme body image concerns were more preoccupied with becoming thinner, wanted to achieve weight loss quickly, were dismissive of understanding diet methods and were focussed on the short-term.
In contrast, *Hypothesis 3.3.2* is not supported. The sociocultural pressure factors and body dissatisfaction are not inversely related to Health and Natural: typically there is no relationship between these variables apart from one positive correlation between Body Dissatisfaction and Health. As an aside, sociocultural pressure and body dissatisfaction are also unrelated to the outcome evaluations Low Effort, Easily Integrated and Cost.

**3.3.6 Diet method typology.** A diet method typology was extracted for this thesis in Study 1. The current section examines the diet method measure used in Study 2, which quantified the extent to which the current dieters used each diet method in the past 12 months. It was expected that intercorrelations would reveal the extent to which current dieters used combinations of diet methods (*Hypothesis 3.4*). To assess whether the diet method typology successfully characterised different approaches to weight loss, a Cronbach’s alpha coefficient was calculated with these items. The Cronbach’s alpha indicated poor overlap in the use of the diet methods, $\alpha = .27$. This is supported by the low item-total correlations and the small-sized correlations between the use of the various methods (including some in the negative direction; see Table 3.4). The only medium strength correlation is between the use of Meal Replacement and Supplement diet methods. This demonstrates that ‘dieting’ is not a single construct associated with (and defined by) multiple interrelated methods. Rather, dieting is a collection of discrepant and idiosyncratic behaviours.
Table 3.4

*Descriptive Statistics and Bivariate Correlations (Pearson’s r Values) between Diet Method Maintenance by Current Dieters*

<table>
<thead>
<tr>
<th>Item-Total Correlation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Calorie Counting</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.18</td>
</tr>
<tr>
<td>2. Meal Plan</td>
<td>.08</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.12</td>
</tr>
<tr>
<td>3. Low GI</td>
<td>.14</td>
<td>.02</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.14</td>
</tr>
<tr>
<td>4. Meal Replacement</td>
<td>.06</td>
<td>.22*</td>
<td>.09</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td>.24</td>
</tr>
<tr>
<td>5. Supplement</td>
<td>.20</td>
<td>.13</td>
<td>.10</td>
<td>.41**</td>
<td>–</td>
<td></td>
<td></td>
<td>.27</td>
</tr>
<tr>
<td>6. High Protein/Low Carb</td>
<td>.13</td>
<td>.28*</td>
<td>.29**</td>
<td>.14</td>
<td>.12</td>
<td>–</td>
<td></td>
<td>.37</td>
</tr>
<tr>
<td>7. Special Food</td>
<td>.08</td>
<td>.13</td>
<td>-.04</td>
<td>.24*</td>
<td>.19</td>
<td>.23*</td>
<td>–</td>
<td>.12</td>
</tr>
<tr>
<td>8. Pre-Prepared Meal</td>
<td>.08</td>
<td>.13</td>
<td>.05</td>
<td>.19</td>
<td>.12</td>
<td>-.02</td>
<td>.06</td>
<td>–</td>
</tr>
</tbody>
</table>

M  
SD  
%  

Note. % = Percentage of dieters who reported use of the diet method in the past 12 months.

*p < .01; **p < .001.
The means, standard deviations and percentage of dieters who used each diet method is presented in the bottom three rows of Table 3.4. As this is a new approach to measuring diet behaviour, out of interest it is noted that Calorie Counting was the most popular and Pre-Prepared Meal was the least popular diet methods. The extent to which dieters used multiple diet methods in the past 12 months ranged from zero to all eight diet methods. For the dieters who did not use any of the methods captured by the diet method typology (13.2% of the sample), qualitative answers describing dieter’s weight-loss episodes across their lifetime revealed a “health kick” style approach in which dieters used a wide variety of tactics in order to make healthier choices based on existing nutritional knowledge. The following excerpts demonstrate the diversity in how dieters attempted to lose weight without a formal diet method.

I didn't use an actual diet product I just tried to eat healthier – (I) cut back on (my) consumption of junk food and increased fruit and vegetable intake.

Supplementing some full cream products with low fat and eating a more balanced diet, and increasing (my) fruit and vegetable intake.

(I) portion controlled.

I've just been on a 'general diet' where I try to eat very, very healthily for a period of time - e.g., only fresh fruits and veggies, only brown/wholemeal grains, no animal products, etc.

My own no-chocolate diet!

Not really a diet as such, no carbs (sic), low fat and low sugar content in foods and watch what I eat.

---

5 It should be noted that dieters could have participated in two or more different diets at the same time, not only consecutively. For example, a dieter could take supplements while eating pre-prepared meals.
3.3.7 Diet methods and eating disorder symptomatology. As part of the investigation into which diet methods are riskier versus which are safer to use, the link between each method and eating disorder symptomatology was examined. It was expected that use of the eight diet methods would be differentially associated with eating disorder symptomatology, but in the absence of prior research Hypothesis 3.5 was not more specific in its predictions. As shown in Table 3.5, two multiple regressions were conducted to assess which diet methods are independently associated with the eating disorder symptomatology Restraint ($M = 2.90$, $SD = 1.42$) and Eating Concern ($M = 1.76$, $SD = 1.43$).

Firstly, inspection of the correlations shows that three methods are associated with Restraint (Calorie Counting, Supplement and High Protein/Low Carb) and that four methods are associated with Eating Concern (Calorie Counting, Supplement, High Protein/Low Carb and Special Food). Use of the diet methods explains 28% of the variance in Restraint, but only two methods make a significant independent contribution to explaining Restraint – Calorie Counting contributes 12% of variance and Supplement contributes 4% of variance. With regards to Eating Concern, use of the diet methods explains 34% of the variance in this factor. Again, Calorie Counting makes a significant independent contribution to explaining Eating Concern (11%). Inspection of the $t$ values shows that although Special Food is the only other diet method to make a significant independent contribution at the .01 alpha level set, Supplement and High Protein/Low Carb $p$ values approach significance at this conservative level ($p = .015$ and $p = .011$ respectively): Special Food, Supplement and High Protein/Low Carb diet methods all contribute 3% of variance each.
|DV| Calorie Counting| Meal Plan| Low GI| Meal Replacement| Supplement| High Protein/Low Carb| Special Food| Pre-Prepared Meal| Calorie Counting| Meal Plan| Low GI| Meal Replacement| Supplement| High Protein/Low Carb| Special Food| Pre-Prepared Meal|
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|Restraint| .15| .03| .36| 4.88**| .43**| .12| Calorie Counting| .14| .03| .34| 4.77**| .42**| .11| Meal Plan| .01| .04| .02| .24| .16| .00| Low GI| .02| .04| .05| .64| .17| .00| Meal Replacement| .34**| .30| -.01| .32| -.00| -.02| .19| .00| Supplement| .84| .34| .19| 2.46| .33**| .03| High Protein/Low Carb| .83| .33| .20| 2.56| .32**| .03| Special Food| .69| .26| .19| 2.66*| .30**| .03| Pre-Prepared Meal| .20| .28| .05| .72| .11| .00|

Note. *p < .01; **p < .001.
3.3.8 Diet outcome evaluations and diet method maintenance. The final analyses in Study 2 examined the relevance of current dieter’s outcome evaluations for the maintenance of various diet methods. Of particular interest was whether the relationships between the outcome evaluations and diet methods reflect underlying differences in health-focussed versus thinness-focussed motivational profiles.

Firstly, bivariate correlations were calculated to assess the simple associations between each diet outcome evaluation with each diet method. Secondly, a statistical technique common to consumer behaviour research, canonical analysis, was employed to explore more complex relationships that exist between the multiple diet methods and multiple outcome evaluations simultaneously (Kuylen & Verhallen, 1981). In canonical analysis, canonical variates are calculated from each set of variables (that are interpreted similarly to a factor in principal component analysis) and canonical correlations (interpreted the same as any correlation coefficient) are calculated between the underlying constructs identified by the canonical variates (Kuylen & Verhallen, 1981).

3.3.8.1 Bivariate correlations. Table 3.6 shows the correlations between each diet outcome evaluation and the extent each dieter maintained use of the eight diet methods over the past 12 months. In the absence of prior research, only two hypotheses were made based on overt characteristics of the diet methods: Natural would be negatively correlated with Meal Replacement and Supplement diet methods (Hypothesis 3.6.1), and Lifelong Changes would be negatively correlated with the Special Food diet method (Hypothesis 3.6.2).
Table 3.6

*Bivariate Correlations (Pearson’s r Values) between Diet Outcome Evaluations and Diet Method Maintenance by Current Dieters*

<table>
<thead>
<tr>
<th>Diet outcome evaluation</th>
<th>Calorie Counting</th>
<th>Meal Plan</th>
<th>Low GI</th>
<th>Meal Replacement</th>
<th>High Protein/Low Carb</th>
<th>Supplement</th>
<th>Special Food</th>
<th>Pre-Prepared Meal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinness</td>
<td>.42**</td>
<td>.10</td>
<td>.17</td>
<td>.11</td>
<td>.22*</td>
<td>.18</td>
<td>.24*</td>
<td>-.02</td>
</tr>
<tr>
<td>Health</td>
<td>.10</td>
<td>.11</td>
<td>.23*</td>
<td>.07</td>
<td>.19</td>
<td>.09</td>
<td>.09</td>
<td>.03</td>
</tr>
<tr>
<td>Lifelong Changes</td>
<td>-.20</td>
<td>-.13</td>
<td>.15</td>
<td>-.20</td>
<td>-.16</td>
<td>-.21*</td>
<td>-.31*</td>
<td>-.10</td>
</tr>
<tr>
<td>Permanent Weight Loss</td>
<td>-.18</td>
<td>-.25*</td>
<td>-.17</td>
<td>-.22*</td>
<td>-.24*</td>
<td>-.14</td>
<td>-.27*</td>
<td>-.05</td>
</tr>
<tr>
<td>How Diet Works</td>
<td>-.18</td>
<td>-.22*</td>
<td>-.09</td>
<td>-.23*</td>
<td>-.04</td>
<td>-.26*</td>
<td>-.20</td>
<td>-.19</td>
</tr>
<tr>
<td>Low Effort</td>
<td>-.10</td>
<td>-.28*</td>
<td>.07</td>
<td>.03</td>
<td>-.07</td>
<td>-.19</td>
<td>-.07</td>
<td>.07</td>
</tr>
<tr>
<td>Easily Integrated</td>
<td>-.16</td>
<td>-.29**</td>
<td>.01</td>
<td>.04</td>
<td>-.13</td>
<td>-.21*</td>
<td>-.12</td>
<td>.06</td>
</tr>
<tr>
<td>Quick Weight Loss</td>
<td>.19</td>
<td>.18</td>
<td>.02</td>
<td>.21*</td>
<td>.13</td>
<td>.22*</td>
<td>.28**</td>
<td>.08</td>
</tr>
<tr>
<td>Natural</td>
<td>.02</td>
<td>-.06</td>
<td>.15</td>
<td>-.05</td>
<td>-.03</td>
<td>-.09</td>
<td>-.11</td>
<td>-.00</td>
</tr>
<tr>
<td>Cost</td>
<td>.05</td>
<td>-.05</td>
<td>.01</td>
<td>.03</td>
<td>.03</td>
<td>-.09</td>
<td>.05</td>
<td>-.15</td>
</tr>
</tbody>
</table>

*Note. *p < .01; **p < .001.*
Inspection of Table 3.6 reveals there are no significant correlations that involve the diet outcome evaluations Cost or Natural, indicating that these outcomes were irrelevant to diet maintenance; and as such, Hypothesis 3.6.1 was rejected. Similarly, there are no significant correlations with Pre-Prepared Meal, most likely because of the low incidence of dieters employing this diet method. The correlations are detailed below in point form:

- a thinness motive for dieting was associated with the maintenance of Calorie Counting, Special Food and High Protein/Low Carb diet methods;
- a health motive for dieting was associated with the maintenance of the Low GI diet method;
- dieters who valued Quick Weight Loss were more likely to maintain Special Food, Supplement and Meal Replacement diet methods;
- as predicted, dieters who valued Lifelong Changes were less likely to maintain Special Food diets (Hypothesis 3.6.2), and Lifelong Changes was also negatively correlated with Supplement diets;
- dieters who valued Permanent Weight Loss were less likely to maintain Special Food, Meal Plan, High Protein/Low Carb and Meal Replacement diet methods;
- dieters who valued How Diet Works were less likely to maintain Supplement, Meal Replacement and Meal Plan diet methods;
- dieters who valued Low Effort were less likely to maintain Meal Plan diets, and;
• dieters who valued Easily Integrated were less likely to maintain Meal Plan and Supplement diet methods.

An important trend to note in the data is that those dieters who were highly focussed on Thinness, Health and Quick Weight Loss were more likely to select and maintain the diet methods; whereas, the dieters who valued Permanent Weight Loss, Lifelong Changes, How Diet Works, Low Effort, and Easily Integrated were less likely to select and maintain the diet methods (i.e., these outcome evaluations only had negative correlations with the diet methods).

3.3.8.2 Canonical analysis. To simultaneously analyse the nature of the relationship between dieting values and diet methods, canonical analysis was performed via SPSS MANOVA between the set of ten diet outcome evaluations and the set of participant ratings indicating their maintenance of the eight diet methods. Due to the dearth of prior research in this area, specific predictions could not be made about how the diet outcome evaluations and diet methods would group together as variates and relate to each other; although, it was expected that the set of outcome evaluations related to a concern with health would be associated with different diet methods as compared to the set of outcome evaluations related to a preoccupation with thinness (Hypothesis 3.6.3).

With all canonical correlations included $F(80, 852) = 2.29, p < .001$. With the first and second canonical correlations removed, $F$ values were not significant, $F(48, 668) = 1.19, p = .18$. Therefore, only significant relationships in the first two pairs of canonical variates were interpreted. The first canonical correlation was $r = .68$, representing 46.7% overlapping variance for the first pair of canonical variates. The
second canonical correlation was $r = .42$, representing 18.1% overlapping variance for the second pair of canonical variates. Correlations between variables and their canonical variates (i.e., the canonical loadings) and the standardised canonical weights are shown in Table 3.7.

Table 3.7

*Canonical Loadings and Standardised Canonical Weights for Canonical Analysis with Diet Outcome Evaluations and Diet Method Maintenance by Current Dieters*

<table>
<thead>
<tr>
<th>Diet outcome evaluation set</th>
<th>Variate 1</th>
<th>Variate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loadings</td>
<td>Weights</td>
</tr>
<tr>
<td>Thinness</td>
<td>.66</td>
<td>.47</td>
</tr>
<tr>
<td>Health</td>
<td>.27</td>
<td>.18</td>
</tr>
<tr>
<td>Lifelong Changes</td>
<td>-.50</td>
<td>-.39</td>
</tr>
<tr>
<td>Permanent Weight Loss</td>
<td>-.54</td>
<td>-.19</td>
</tr>
<tr>
<td>How Diet Works</td>
<td>-.42</td>
<td>.02</td>
</tr>
<tr>
<td>Low Effort</td>
<td>-.39</td>
<td>-.35</td>
</tr>
<tr>
<td>Easily Integrated</td>
<td>-.50</td>
<td>-.37</td>
</tr>
<tr>
<td>Quick Weight Loss</td>
<td>.50</td>
<td>.09</td>
</tr>
<tr>
<td>Natural</td>
<td>-.11</td>
<td>.19</td>
</tr>
<tr>
<td>Cost</td>
<td>.05</td>
<td>.23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diet method set</th>
<th>Variate 1</th>
<th>Variate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loadings</td>
<td>Weights</td>
</tr>
<tr>
<td>Calorie Counting</td>
<td>.67</td>
<td>.55</td>
</tr>
<tr>
<td>Meal Plan</td>
<td>.52</td>
<td>.37</td>
</tr>
<tr>
<td>Low GI</td>
<td>.15</td>
<td>.01</td>
</tr>
<tr>
<td>Meal Replacement</td>
<td>.26</td>
<td>-.06</td>
</tr>
<tr>
<td>High Protein/Low Carb</td>
<td>.48</td>
<td>.18</td>
</tr>
<tr>
<td>Supplement</td>
<td>.48</td>
<td>.27</td>
</tr>
<tr>
<td>Special Food</td>
<td>.56</td>
<td>.41</td>
</tr>
<tr>
<td>Pre-Prepared Meal</td>
<td>-.05</td>
<td>-.18</td>
</tr>
</tbody>
</table>
The first canonical variates pair extracted 18.9% of the variance from the diet outcome evaluations set and 19.8% of the variance from the diet methods set. The second canonical variates pair extracted 10.9% of the variance from the diet outcome evaluations set and 12.8% variance from the diet methods set. That is, together, the two canonical variates account for 29.8% of diet outcome evaluations and 32.6% of diet methods.

Using $r > .3$ as the criteria for inclusion, inspection of the canonical loadings in Table 3.7 shows the following. Among the diet outcome evaluations, a positive loading on Thinness is characteristic of both canonical variates pairs; and among the diet methods, a positive loading on Calorie Counting is characteristic of both canonical variates pairs. All other variables differ across the pairings. For the first canonical variate within the diet outcome evaluations set, there is high positive loadings on Thinness and Quick Weight Loss, and; high negative loadings on Permanent Weight Loss, Lifelong Changes, Easily Integrated, How Diet Works and Low Effort. This is consistent with the thinness-focussed motivational profile identified earlier, with the addition of convenience factors Easily Integrated and Low Effort. For the diet methods set of the first canonical variate, there are high positive loadings on Calorie Counting, Special Food, Meal Plan, Supplement and High Protein/Low Carb. Dieters who are more preoccupied with becoming thinner than their dieting peers and value quick weight loss while being less concerned with permanent weight loss, long-term change, the easy integration of the diet into their lives, and understanding the diet mechanisms: tend to select and maintain the aforementioned diet methods.

For the second canonical variate within the diet outcome evaluations set, there are high positive loadings on Thinness, Low Effort, Natural, Cost, Easily Integrated and
Lifelong Changes. For the diet methods set of the second canonical variate, there are high positive loadings on Low GI and Calorie Counting, and high negative loadings on Supplement and Meal Plan. Dieters who are relatively more preoccupied with becoming thinner, yet also focussed on making long-term changes that are easy and fit into their lives, using natural and inexpensive food stuffs: tend to maintain Low GI and Calorie Counting diet methods but tend to avoid Supplement and Meal Plan methods.

3.4 Discussion

The primary aim of Study 2 was to elucidate a profile of diet values that is motivated by thinness versus a profile motivated by health; and to ascertain which diet methods are associated with such motivational profiles and/or associated with eating disorder symptomatology, in a group of women who are currently dieting. The importance of sampling current dieters was twofold. Firstly, these are women who are maintaining weight-loss diets: they have made their diet choice(s), are regularly thinking about and adhering to the rules of their diet, and are currently experiencing any associated health and psychosocial sequelae to their weight-loss efforts. As such, they are good candidates for assessment involving the initial use of the diet method and dieting outcome typologies. Secondly, the use of current dieters allows for the assessment of factors that are relevant to the maintenance of diets, such as current patterns of disordered eating, investment in the Western thin ideal and poor or positive body image. Investigating diet maintenance is an equally important endeavour to the research of diet initiation. When weight-loss diets are not maintained, yoyo dieting with its associated weight fluctuations can occur, which is a significant health concern (Amigo & Fernández, 2007; Andres et al., 1993; Dulloo, 2005; Luo et al., 2007; Pamuk et al., 1993; Rzehak et al., 2007; Søgaard et al., 2008). Moreover, one of the primary
concerns of both psychosocial and medical dieting research is the maintenance of diets, with the medical field striving towards dietary change being maintained in the long-term by overweight and obese individuals (e.g., Lejeune, van Aggel-Leijssen, Baak, & Westerterp-Plantenga, 2003), and the psychosocial field attempting to break the maintenance of unhealthy dieting in the eating disordered (e.g., Paxton, 1993).

The results of Study 2 are discussed in the following subsections, beginning with a consideration of the characteristics of current dieters, including dieters’ actual BMI, their ideal BMI and level of body dissatisfaction. Next the motivational profiles and their psychosocial correlates are examined, followed by a discussion of the diet method typology. Finally, current dieters’ decision to maintain the various diet methods is discussed with reference to the thinness-focussed motivational profile and eating disorder symptomatology.

3.4.1 The characteristics of current dieters and motives for weight loss. The predominant motivation for weight loss in the dieters sampled was appearance rather than health concerns. On average, dieters were more preoccupied with becoming thinner than they were concerned about their health. In fact, health was rated on average as the least important outcome out of all the diet outcomes measured including diet cost. The trends in body dissatisfaction and body weight were consistent with how the diet motives were ranked. Approximately half the dieters were already at a healthy weight, according to BMI ranges set by the WHO (2006), with some even considered underweight. BMI had no impact on the amount of dissatisfaction felt by dieters over their weight and shape: the majority of normal and underweight dieters had high levels of body dissatisfaction. This lack of relationship between BMI and body dissatisfaction diverges from prior research findings, but studies have typically measured this
relationship across all adolescents or adults rather than dieters alone (e.g., Blowers, Loxton, Grady-Flesser, Occhipinti, & Dawe, 2003; Brodie & Slade, 1988; Caldwell, Brownell, & Wilfley, 1997; Holsen, Jones, & Birkeland, 2012; Lam et al., 2009; Yates, Edman, & Aruguete, 2004), or made group comparisons between dieters and non-dieters (Fett, Lattimore, Roefs, Geschwind, Jansen, 2009). The present results are unsurprising, however, in the context of a sample of dieters who are predominantly motivated to lose weight because of appearance concerns: body dissatisfaction is the psychological basis for dieting. Normal and underweight dieters typically aspired to an ‘ideal’ weight just below their current weight, which attests to the sociocultural pressure felt by these women to have an overly slender figure given that they are already at (or below) a physically healthy BMI. The pursuit of losing the ‘last few kilograms/pounds’ is a popular topic of dieting articles (e.g., Hoy, 2011), forums and weight-loss books (e.g., Bridges, 2011).

Overweight and obese dieters can potentially be motivated by health and/or thinness concerns. It is well-known that excessive weight is associated with many physical health issues, including type II diabetes, hypertension, coronary artery disease, osteoarthritis, and some forms of cancer (Ruser, 2005). However, body dissatisfaction was also high in the overweight and obese, and so it is unlikely that any dieter was purely motivated by health (Clarke, 2002; O’Brien et al., 2007). In terms of ideal weight, overweight and obese dieters typically aimed for a more dramatic weight loss compared to normal and underweight dieters. There was a logarithmic trend between a dieter’s actual BMI and their ideal BMI, in which ideal BMI tapered off at approximately 30kg/m², the point at which BMI changes from being classified as obese to overweight. Recent research shows that a relatively small amount of weight loss in overweight or
obese dieters (or simply the changes to eating and exercise patterns prior to weight loss) can lead to considerable improvements in physical health (Bacon & Aphramor, 2011; Ruser, 2005). However, it seems this idea was not salient for obese dieters. It could be argued that these dieters were unconcerned about health and simply focussed on thinness, however they did not place their ideal weight within the normal or underweight BMI range which would be consistent with sociocultural ideals. Instead, the data suggests that those individuals in the obese category were aware of what personal weight coincides with them transitioning from being classified as obese to being classified as overweight. This raises the question of where dieters obtain their diet-related ideas, information and advice from. While it is hoped that dieters focus their attention on the information provided by health professionals, there are many possible options in this climate of mass information exchange. In the final study of this thesis, Study 3 examined which sociocultural influences (health professionals, the media or family and friends) are important in the dissemination of dieting advice.

While dieters varied considerably in their BMI, they were reasonably consistent in their high level of nutritional knowledge, as measured by the Dietetics Association of Australia quiz items produced for the general public. Importantly, there was nothing in the data to imply that this sample was a particularly unusual subset of dieters. In particular, these dieters predominantly started their weight-loss dieting attempts in childhood and adolescence, which has been demonstrated as the most common developmental period to commence weight-loss behaviours (Bun et al., 2012; Maloney, McGuire, Daniels, & Specker, 1989; McVey, Tweed, & Blackmore, 2004; Muir, Wertheim, & Paxton, 1999; Ricciardelli & McCabe, 2001). Obviously, using a
representative sample has important implications for the validity of the results to the
greater dieting population.

3.4.2 Thinness-focussed versus health-focussed motivational profiles. Health professionals agree that for dieting, a focus on appearance can be problematic whereas a focus on the health aspects of weight loss is ideal (O’Brien et al., 2007; Putterman & Linden, 2004; Reas et al., 2004; Ruser, 2005; Vartanian, Wharton, & Green, 2012). However, it is unknown how these motivations for weight loss impact dieters’ diet-related cognitions; namely, their priorities and preferences when selecting a diet method. Although prior research has investigated the link between diet motives and diet behaviour (Putterman & Linden, 2004), this research builds upon the small literature base with an examination of the decision-making process of diet selection that is motivated by either thinness or health. Thus, an important aim of Study 2 was to investigate whether there are certain diet outcomes that are differentially important to a dieter focussed on thinness versus a dieter focussed on health.

The profile associated with a focus on thinness was concerned with achieving quick weight loss, and relatively unconcerned about making lifelong changes, understanding the weight-loss mechanisms behind a diet method, or maintaining long-term weight loss, as compared to other dieters. These diet values all related to one another in a coherent way revealing a cluster of values associated with a preoccupation with thinness. Adding to the picture of a thinness-motivational profile, these diet values were associated with poor body image, high internalisation of the thin ideal and excessive body comparison behaviour. Previous research had already ascertained that those dieting for appearance reasons have higher levels of body dissatisfaction (O’Brien et al., 2007; Putterman & Linden, 2004; Reas et al., 2004) and greater internalisation of
sociocultural pressure to be thin (Vartanian et al., 2012). This is unsurprising. However, these results demonstrate that, not only do dieters with a preoccupation with thinness have poor body image and are more susceptible to sociocultural appearance pressures, but they are also more likely to conceptualise and approach dieting in a certain way.

The association between a focus on thinness and desire for quick weight loss is understandable: a dieter who is strongly influenced by Western sociocultural ideals about attractiveness and is dissatisfied with their body, desperately wants to become thinner and wants to become thinner as quickly as possible, presumably to ease their angst regarding their own body shape and/or size. While unsurprising, these results do have important implications for clinical practice. As reviewed in Section 1.2.1, health professionals advocate slow weight loss (NICE, 2006; Ruser, 2005); although this idea is not based on any reliable evidence (Purcell, 2010; Purcell et al., 2010). Recent medical research into dieting for the obese is examining the potential of rapid weight loss for producing better treatment adherence and weight-loss results (Purcell, 2010; Purcell et al., 2010). The results here reveal the psychosocial correlates of a desire for rapid weight loss in the general dieting population: it is those dieters who are strongly engaged with sociocultural pressure to be thin, and have poor body image, who are focussed on achieving quick weight loss. In terms of diet values, dieters who value quick weight loss are relatively disinterested in making lifelong changes for permanent weight loss or in educating themselves in nutrition. This is the first known research to highlight the potential danger of encouraging rapid weight loss and confirms what health professionals intuitively suspected: dieters focussed on quick weight loss are more likely to be ‘fad’ dieters with poor body image.
The health-focussed motivational profile was less elaborate. The only diet outcome that a high concern over health was associated with was a desire to use natural foods for weight loss. This is consistent with the theme of previous research that found dieters motivated by health reasons were less likely to consume diuretics and laxatives as aids to weight loss (Putterman & Linden, 2004). In terms of the psychosocial correlates of the health-focussed motivational profile, it was anticipated that dieters relatively unscathed by sociocultural pressure to be thin, with positive body image, will be motivated by health concerns (O’Brien et al., 2007; Reas et al., 2004). This was based on the idea that if appearance was of little consequence to a dieter, then a concern with health must be the driving force behind their weight-loss behaviour. However, contrary to expectations and prior research, the health-focussed motivational profile was unrelated to the extent a dieter is influenced by sociocultural ideals and making social body comparisons, and; dieters highly concerned with health (but not a concern for natural products) were more likely to have higher levels of dissatisfaction with their weight and shape. Recent results examining exercise behaviour and dietary restraint found the same trend (Vartanian et al., 2012). Overall, it is difficult to gain a good understanding of how the dieter, motivated by health, thinks about their bodies and dieting, and the implications of a health motive for diet choice. This is likely a result of the difficulty in separating out thinness and health motives (Clarke, 2002; O’Brien et al., 2007). Indeed, dieters are mostly driven by multiple motives (Brink & Ferguson, 1998; Clarke, 2002; O’Brien et al., 2007; Vartanian et al., 2012) and as discussed in the previous section, the majority of these dieters had high levels of body dissatisfaction so it is unlikely that many dieters, if any, were motivated by health concerns alone. It is worth noting that the diet outcomes that were not relevant to either weight-loss motive were related to the (in)convenience of the method: the amount of effort required to carry
out a diet regime, how many enjoyable events or activities a diet interferes with, and diet expense.

A final yet important implication for clinical practice is that the extent of a dieter’s preoccupation with thinness was unrelated to their level of concern with health. Many practicing health professionals aim to focus a dieter’s goals onto the physical health aspects of their body weight (NICE, 2006) due to the established relationship between a focus on thinness and poor mental health outcomes (O’Brien et al., 2007; Putterman & Linden, 2004; Reas et al., 2004; Vartanian et al., 2012). Presumably, the rationale behind this tactic is that an increased understanding and importance placed on the physical health issues related to body weight may negate the detrimental impact associated with being so concerned with the aesthetic aspects of body shape and size. Put simply, it is hoped that an increase in concern over health will coincide with a decrease in a dieter’s concern over becoming thinner, so that their priorities are shifted in a more helpful direction. However, this practice was not supported by the data. There was no relationship between the diet motives of health and thinness. Moreover, a strong health motive for weight loss was not shown as protective against psychosocial pressure to be thin and body dissatisfaction. These findings have implications for health professionals and suggest that the practice of refocusing people on their health may not be effective at eliminating an obsession with thinness. As such, an intervention that purely addresses an increase in the dieter’s concern over their health, without expressly targeting a decrease in their focus on the aesthetic aspects of weight loss, may just be adding to a dieter’s obsession with weight loss rather than ameliorating psychological distress.
3.4.3 Diet methods. This study used a different approach to the research of diet behaviour with the measurement of distinct diet methods. In general, previous research has simply ascertained the presence or absence of diet-related behaviours as if dieting is a cohesive set of actions for weight loss. When dieting has been broken down into more specific subsets of dieting behaviours, prior research has investigated broad categories of weight-loss behaviours (e.g., dangerous dieting practices versus effortful calorie restriction versus healthful food changes; Putterman & Linden, 2004), or very specific instances of weight-loss behaviour (e.g., the frequency of artificial sweetener use; Malinauskas et al., 2006) that are sometimes exemplars of low incidence behaviour typically seen in the eating disorder population (e.g., the use of laxatives for weight loss; Yahia et al., 2011). This is instead of conceptualising a complex set of diet rules, cognitions and behaviours that dieters typically follow.

The current research examined dieting behaviour as grouped into eight diet methods, a typology produced specifically for this research (see Study 1). As intended, this typology of diet methods captures eight unique styles of dieting: the methods showed minimal association with each other when current dieters reported their use of weight-loss diets. It seems the behaviour of ‘dieting’ is not a combination of interrelated weight-loss techniques but a collection of distinct behaviours that can be categorised into specific methods. It is not a unified construct like that typically used in research.

A minority of dieters had engaged in dieting behaviour that was outside the scope of the diet method typology. Beyond the specified diet methods, dieters were asked to describe other dieting attempts. In addition to subscribing to formal diet programs, responses revealed a “health kick” style approach in which dieters tried to make healthier choices based on their existing knowledge. While all these dieter-created
methods could have all fit under the umbrella term of “health kick,” there was still diverse variation in actual techniques used. Some dieters simply reduced food amount (i.e. portion control), while others reduced or increased the intake of food groups (e.g. vegetables), and some honed in on specific foods only (e.g., chocolate). Further, dieters had created their own categorisations of foods, such as “junk food,” and this definition would likely vary between individuals (e.g., whether roast chicken is perceived to be junk food would depend on the individual). Again, these responses by current dieters highlight the complex variation in strategies that exists when someone states, “I am on a diet to lose weight.”

Whilst the typology of diet methods is not perfect, this study has demonstrated that weight-loss behaviour can be successfully categorised into diet methods. Of the diet methods, Calorie Counting diets were the most popular weight-loss regime with just over half of the sample using this method of dieting, and; Pre-prepared Meal diets were least popular, with approximately 15% of the sample having used this method in the past 12 months.

3.4.4 Diet choice and diet maintenance. Study 2 culminated in the examination of the ongoing use of the eight diet methods: which methods are associated with problematic eating cognitions and behaviours, and how dieting values influence the maintenance of diets, with a particular focus on the health-focussed versus thinness-focussed motivational profiles.

As an aside, it is worth noting that the research question of the present study – which diet motives and values prompt the selection and maintenance of various diet methods – overlaps with those of marketing researchers. Indeed, marketing claims for diet products were a source of data for extracting the relevant outcomes of dieting (a
new measure created for this research project: see Study 1) based on the reasonable assumption that diet companies had used market research to examine which aspects of weight loss and dieting are most salient to their consumers. It could be argued that the question of which beliefs, values and sociocultural groups drive the selection of various diet methods puts a psychological slant on the market research question of what appeals to the consumers of diet products and who should be used to advocate their purchase in advertisements. The objective of this psychological research is to better understand cognitions that drive diet selection and to comprehend how dieters use dieting information, with the ultimate aim of promoting healthy weight-loss behaviours and discouraging dieting that stems from a preoccupation with thinness and appearance in general; whereas, marketing research seeks to understand the dieter in order to tailor a product to neatly fit the dieter’s desires and present the product in the most appealing and accessible way for the consumer. While the objectives of these two research areas are disparate, research techniques can be shared, and Study 2 utilised a common statistical technique to consumer behaviour research – canonical analysis.

The thinness-focussed motivational profile (as discussed earlier in Section 3.4.2 – that values quick weight loss, and is relatively unconcerned with permanent weight loss, lifelong changes and education about diet methods – was revealed as important to the maintenance of a number of diet methods. This profile of diet values, along with a relatively low concern with a diet being easy or integrated into one’s lifestyle, was associated with the maintenance of Calorie Counting, Special Food, Meal Plan, High Protein/Low Carb, and Supplement diet methods. It is also important to note that this thinness-focussed motivational profile was not associated with an increased use of Low GI, Meal Replacement and Pre-Prepared Meal diets.
The diet methods associated with a thinness-focussed motivational profile are potentially harmful given the constellation of dieting values linked with a preoccupation with thinness. Particularly concerning is the relative disinterest in permanent weight loss that is associated with this profile and suggests a level of desperation if a dieter is so focussed on the short-term that they consider forgoing weight-loss maintenance (the item measuring permanent weight loss was “Losing weight is more important to me than keeping the weight off”). The most popular dieting method, Calorie Counting, was also revealed as most problematic in terms of eating disordered cognitions and behaviours. Calorie Counting was the method most predictive of excessive dietary restraint and eating concerns, in addition to its link with a strong thinness motive for weight loss. Alongside Calorie Counting; Supplement, High Protein/Low Carb and Special Food diet methods were also associated with eating disorder symptomatology. As expected, the Special Food method was used by those dieters who devalue making lifelong dietary changes. The Meal Plan method was the only method in this cluster of thinness-motivated diets that was not linked to eating disorder symptomatology.

The canonical analysis extracted another grouping of diet values that coincide with being preoccupied with thinness. In this second canonical variate, the diet outcome evaluations describe a dieter concerned with appearance but more moderate in their pursuit of weight loss, characterised by a preference for long-term, cost-effective and relatively minor changes that do not interfere with current lifestyle and involve natural foods. This pattern of dieting values was associated with the maintenance of Low GI and Calorie Counting diets and a reduced tendency towards the use of Meal Plan and Supplement diets. As compared to the thinness-focussed motivational profile described earlier, this could be described as a healthier dieter: they are more focussed on the long-
term and more pragmatic in their cognitions; and they are more likely to maintain Low GI and Calorie Counting diet methods.

Bivariate correlations showed that a health motive for dieting was only associated with the maintenance of one method – Low GI diets. The perception that Low GI diets are healthy is potentially a result of this method being prescribed for the control of diabetes mellitus (Brand-Miller, Hayne, Petocz, & Colagiuri, 2003). Against expectations, the naturalness of a diet product was not a consideration in the selection and maintenance of the diet methods. Similarly, the cost of diet products was revealed as unimportant in diet maintenance decisions. A noteworthy trend in the data was that those dieters who valued permanent weight loss and understanding how a diet works were consistently less likely to use and maintain the diet methods measured here. If not using a structured diet regime, presumably they have the knowledge and flexibility to follow their own set of dieting rules, akin to that described earlier in the qualitative descriptions of “health kicks” or what Putterman and Linden (2004, p.188) have referred to as “healthier eating habits as a weight-loss strategy” rather than “dieting” per se.

These results have little positive to say about structured diet methods, apart from some support for the Low GI diet method. In light of the recent bid to the Australian Government by the Weight Management Council that large-scale diet products should be publicly funded, such as Weight Watchers and Jenny Craig, these results are interesting. In particular, the practice of counting calories in food, which is the basis of the Weight Watchers method⁶, was associated with the thinness-focussed motivational profile along with excessive dietary restraint and concern over eating. Calorie Counting was also linked to the more moderate thinness-focussed profile and of course,

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⁶ Although the Weight Watchers program uses a ‘Points’ system instead of calorie counting, this is merely a simplified way of counting the energy of foods.
correlation does not prove causality. However, these preliminary results should not be ignored: thinness obsession, excessive restraint and unwarranted eating concerns are problematic cognitions and behaviours to be associated with a diet method. While the advocates of Weight Watchers becoming a government endorsed program point to evidence that a group of dieters lost more weight with the program than others who were treated by General Practitioners alone (Jebb et al., 2011), from a holistic health perspective the results here introduce doubt as to the psychological health aspects of the Calorie Counting diet method.

Another significant concern raised by this data is that the dieters who value understanding the mechanisms behind how a diet produces weight loss were seemingly less likely to use a formal diet method, as measured by the diet method typology. This suggests that dieters who do actually use and maintain specific diet products and programs may be relatively unconcerned about how the method they are using produces its weight-loss results. That is, the users of commercial diet products and programs may be mindless consumers, instead of critical evaluators of diets with an inherent interest in learning about nutrition. If correct, this is problematic because in reality the dieting industry is loosely regulated (Rose, 2010) and dieting products and programs should not be blindly followed. A limitation of Study 2 is that only a general measure of curiosity about diet mechanisms was adopted rather than interest in the diet’s mechanisms on a method-by-method basis (the reverse-coded item read “I am not concerned how a diet works, as long as it produces results.”) While the results of Study 2 are not conclusive on this point, it does raise the question of how prospective dieters investigate diets and digest this information in their selection of a diet method. A more thorough investigation of this phenomenon would enlist a measure of diet-specific knowledge. In the following
study with non-current dieters, Study 3 examined what kind of information prospective
dieters’ desire when considering the initiation of a diet, from the diet’s effectiveness to
the diet’s unwanted consequences, and this was conducted separately for each diet
method.

3.4.5 Conclusions. This was the first research, to our knowledge, to measure
dieting behaviour according to a typology of diet methods frequently used by dieters in
the Western world and to investigate the selection and maintenance of these methods by
current dieters. Across the sample of dieters, a concern with the aesthetic aspects of
weight and shape was more prevalent than a concern with the health implications of
excess weight. As such, the data revealed a profile of diet values that are associated with
an extreme concern with appearance: dieters preoccupied with thinness valued quick
weight loss but had a relatively low concern over achieving permanent weight loss,
making lifelong dietary changes or learning the mechanisms behind a diet’s weight loss.
This set of diet values suggests that a strong focus on appearance when dieting induces a
short-sighted and potentially risky pursuit of thinness. As expected, the thinness-
focussed motivational profile was associated with a strong internalisation of the thin
ideal, excessive body comparison behaviour and poor body image. Rapid weight loss is
a controversial issue within medical communities, with recent research challenging old
notions that slow weight loss is best (Gedilaghine, 2010; Purcell, 2010; Purcell et al.,
2010). This research demonstrates the potential pitfalls of encouraging rapid weight loss
in dieters from a psychological perspective.

The thinness-focussed motivational profile was associated with the maintenance
of Calorie Counting, Special Food, Meal Plan, High Protein/Low Carb, and Supplement
diets. Apart from Meal Plans, these methods were also associated with eating disorder
symptomatology. A more moderate dieting profile, still motivated by appearance but with a more practical and long-term focus, was associated with the maintenance of Low GI diets and Calorie Counting, and a reduced tendency to use Supplement and Meal Plan diet methods. A health motive for weight loss was difficult to isolate from coexisting appearance concerns and as such, little more is known about health-motivated dieting cognitions and diet choice apart from the links that a concern with health had with the maintenance of Low GI diets and the desire to use natural foods for dieting.

Study 2 investigated diet motives, values and the maintenance of eight diet methods in a group of dieting women. A core issue inherent to this research is whether these results are relevant to the motivations to start a diet and selection of a diet method. That is, do the patterns of motivational profiles and endorsement of diet methods in current dieters correspond to those in prospective dieters? Study 3 examined this issue using women who were not dieting, but have experience with dieting in their past. A further question raised by the results of Study 2 is how dieters accumulate dieting and weight-loss knowledge: BMI categories are salient to obese dieters yet they seem uninformed (or disinterested) in the health benefits from small amounts of weight lost, and; dieters who utilise formal diet methods tend to be unconcerned about the mechanisms by which their diet achieves weight loss. Study 3 addressed this question also, going beyond the examination of existing motivations and cognitions, to investigate the acquisition of knowledge by prospective dieters.
Study 3: Motivational Profiles, Sociocultural Sources of Information and the Content of Information Sought in the Initiation of a Diet Method by Prospective Dieters

4.1 Introduction

Study 2 demonstrated the relevance of a thinness-focused motivational profile for dieting decisions, and overall the findings are consistent with the proposition that diet methods can be successfully categorised and measured. Importantly, Study 2 revealed diet choice as an important field of health research with the evidence that diet methods are differentially linked with eating disorder symptomatology and a preoccupation with thinness. Study 3 built on the previous study and examined decision making and diet choice in a sample of 182 women who were not dieting. In lieu of recent diet choice and diet maintenance, these women’s intention to use the eight diet methods in the near future was measured. A focus on diet choice at the point of initiating diet behaviour is important from a health perspective, with the potential to shift prospective dieters away from unhealthy or psychologically risky methods towards more helpful methods of managing weight, particularly if the intervention is provided early enough before chronic patterns of harmful weight-loss behaviour emerge.

Applying the theory of reasoned action to diet choice, in order to understand a prospective dieter’s selection of diet method, it is the individual’s outcome-related beliefs about diets that are instructive (i.e., their ‘behavioural beliefs’ and ‘outcome evaluations’ as per Figure 1.2 of the Introductory Chapter). In a parallel analysis to that in Study 2, the relative importance of non-dieting women’s existing beliefs about the outcomes of dieting were considered, in light of their intention to use the various diet methods in the future. In addition to existing beliefs, the decisional relevance of
unknown information about dieting needed consideration also. The rationale for this extension of the theory of reasoned action was because diet choice is a process that does not begin simply with a weighing of evidence – that would assume that the evidence is already available and easily understandable. In relation to weight-loss dieting, this is certainly not the case. There are a multitude of diet products to select from, that go in and out of favour in the popular media and health community, along with much conflicting information. For example, the Lemon Detox diet (a slight variation on the ‘Master Cleanse’ created 60 years ago) was created by a naturopath, but receives severe criticism from dietitians and nutritionists, has received media attention for helping famous singer Beyonce lose 6kg quickly, yet she reported that she would not recommend it (Berry, 2013; Connolly, n.d.; “Lemon detox diet,” 2007). As iterated throughout this thesis, it is a confusing area of health behaviour and prospective dieters are likely to investigate dieting information in the process of selecting a diet method rather than relying purely on their existing knowledge.

Therefore, it is suggested that what also needs investigating is the way evidence is gathered by prospective dieters: how motivated they are, what sort of information is sought out and from whom. That is, what is interesting here is the balance between the desire to investigate the effectiveness of the diet versus the inclination to investigate the negative aspects of the diet (i.e., the often hidden difficulties in sustaining the diet, the side effects and risks); and from which source(s) of information this evidence is sought. According to the theory of reasoned action, sociocultural groups are important to decision making (Ajzen & Fishbein, 1980) and it was expected that this is the case in weight-loss dieting where sociocultural groups exert much pressure to diet (Thompson et al., 1999). In this research, how motivated prospective dieters are to listen to the various
sociocultural sources of information on diet methods was examined. That is, how information is sought by prospective dieters was measured in two ways, examining both the sociocultural source of dieting information and the content of information sought.

In summary, Study 3 researched the decision to embark on the eight diet methods by prospective dieters. Initially, non-dieting women’s weight-loss motives and diet values were examined with reference to the thinness-focussed motivational profile revealed in Study 2. Next, behavioural beliefs and outcome evaluations were surveyed and related to non-current dieters’ intention to adopt particular diet methods. Finally, an assessment of how prospective dieters gather new information for their dieting decisions was conducted. The relevance of sociocultural sources of information –the media, family and friends, and medical professionals – to weight-loss motives and across the diet methods was investigated. Then an assessment of the relative importance of the content of information was conducted. This involved comparing the relevance of information about the effectiveness of a diet method for weight loss versus the potential unwanted consequences of the method in determining intention to adopt that diet. These sections are described in more detail in the remainder of this introduction.

In contrast to those in Study 2, the women in Study 3 were not current dieters although they did have a history of dieting to lose weight at some point in their past. This ensured that they were conscious of dieting as a means of weight loss; that they possessed some existing knowledge, beliefs and values about the outcomes of diets and the available methods of dieting; that they could reasonably be considered prospective dieters given they have used dieting as a means to weight loss in the past, and; because of this past experience, their stated intention to diet could be considered more relevant to
future behaviour than in a sample of women who have never dieted. Therefore, the sample in Study 3 will be referred to as non-current dieters.

4.1.1 Motives for weight loss, motivational profiles and diet choice. To begin with, Study 3 examined non-current dieters’ existing knowledge of weight loss and dieting and its implications for diet choice, where beliefs and values about the outcomes of dieting are informed by past personal experience, observation of other dieters and immersion in popular media. In an equivalent set of analyses to that performed in Study 2, the present study examined: (a) non-current dieters’ body weight, ideal body weight and extent of body dissatisfaction in reference to BMI ranges in order to gauge intensity and type of weight-loss motivation (health versus appearance); (b) the diet values associated with self-reported health and thinness motivations for weight loss to investigate the reliability of health-focussed versus thinness-focussed motivational profiles, and; (c) the conjunction of outcome-related beliefs and values with future diet choice that are motivated by appearance concerns versus those motivated by health concerns.

The abovementioned analyses replicated that performed in Study 2 but with one difference because the sample was made up of non-current dieters: in line with the theory of reasoned action, behavioural beliefs – non-current dieters’ beliefs about the likely outcomes of dieting – needed to be measured. In the previous study, it was inferred that current dieters had engaged in dieting because they believed it would provide them with personally valued outcomes and as such, what these dieters valued was the sole construct measured. For the present study with non-current dieters, not only were diet values measured but also whether they believed that diets could provide these valued outcomes (i.e., behavioural beliefs). As an example, it was important to gauge
not only whether a prospective dieter desires quick weight loss, but also the extent to which they believe that diets will provide them with quick weight loss. While it was expected that non-current dieters’ outcome-related beliefs and preferences would reveal an underlying pattern of a thinness-focussed motivational profile, which would be important for diet selection; in the absence of previous research this remained a broad exploration of the associations between non-current dieters’ motives, diet beliefs and diet method preference.

4.1.2 Sociocultural sources of information about dieting. The investigation into how non-current dieters’ acquire information began by examining the relevance of sociocultural groups for diet choice across women with different weight-loss motives. Measuring social influence is consistent with the theory of reasoned action, which includes a pathway of social pressure whereby individuals motivated to comply with social group norms are swayed by these groups’ beliefs about the target behaviour. In the food choice research described in Section 1.4.3 of the introductory literature review, the social influence pathway of the theory of reasoned action was not important in distinguishing food choice (Bogart & Delahanty, 2004). However, social comparisons, cues and pressures play a major role in body image, and weight and shape dissatisfaction (Thompson et al., 1999) so it is expected that sociocultural groups will play a more prominent role in dieting decisions. Additionally, the issue of where dieters obtain their dieting and weight-loss advice from was raised by the results of Study 2. In the previous study, there was a ceiling effect in obese dieter’s ideal weight which corresponded to a BMI on the lower cusp of the obese BMI range, implying that these dieters are aware of BMI categorisations. For many obese dieters this goal weight meant striving for a substantial amount of weight loss. Overall, these results suggest that dieters are
knowledgeable about the health implications of being classified as ‘obese’, but potentially ignorant to the health benefits gained from a relatively small amount of weight loss (Bacon & Amphramor, 2011; Bacon et al., 2005).

Three sources of sociocultural influence were included here as justified in Section 2.3 of Study 1: health professionals, the media, and family and friends. It was expected that health-focussed versus thinness-focussed dieters would rely on different sources of dieting information and it was also expected that sociocultural groups would be perceived as differentially important in providing information across the eight diet methods. While it was hoped that prospective dieters look to health professionals for diet and weight-loss information and disregard information that the fashion media and celebrities disseminate, predictions could not be made about the importance of the three sociocultural groups for diet choice. A reliance on the media for weight-loss information is more physically and psychologically risky than turning to health professionals because: the media is not ethically bound to provide scientifically valid information like health professionals; they typically portray unrealistic weight-loss goals in the form of images of the female physique that are atypical in proportions, thinness and/or muscularity, often with digital enhancement (Thomsen, Bower, & Barnes, 2004; “Truth in Advertising,” 2011), and; they also provide generic diet advice as opposed to individually-tailored information. Indeed, frequent perusal of dieting and weight-loss information produced by the popular media is predictive of unhealthy weight-control behaviour (van den Berg et al., 2007).

4.1.3 How invested prospective dieters are in researching unfavourable information about diet methods. The final section of Study 3 examines the content of information that non-current dieters pursue when considering a diet method.
Specifically, it investigates how women weigh up the effectiveness of a diet against potential unwanted consequences (‘the cons’) of the method. Some diet methods may receive a thorough consideration of the cons; or equally, the initiation of some methods may be driven by a focus on weight loss to the exclusion of acknowledging possible side effects. The latter diet methods have the potential to be physically and psychologically harmful if dieters blindly follow them without a critical evaluation of the cons of the method. From a health perspective, it is hoped that prospective dieters will consider the potential unwanted consequences of a diet method to be (at least) equally as important as the information about the effectiveness of a diet. The extent to which the effectiveness information versus the negative aspects of the diet are influential to diet choice is unknown across the diet methods.

This analysis measured desire for information regarding the effectiveness and the cons on a method-by-method basis (e.g., “How interested are you in finding out more about the effectiveness of calorie counting diets?” and “How interested are you in finding out more about any unwanted consequences that may result from being on a calorie counting diet?”) The inclusion of hypothetical effectiveness and con information was important in the context of diets because the marketing claims of effectiveness are often unrealistic, bordering on fraudulent (Cleland et al., 2002: e.g., “Lose 12-kg of stomach-fat in just 4-weeks with this 1 simple food” was the claim in the Facebook advertisement [February, 2013] for the ‘African Mango Slim and Purensa Cleanse’ diet). Further, evidence-based information about diet effectiveness is largely non-existent, pertaining to specific samples (e.g., the medically unwell; Kris-Etherton, Eckel, Howard, St. Jeor, & Bazzarre, 2001), or difficult to publicly access; and potential
unwanted consequences are often obscured (e.g. the ‘fine print’) or too medically complex or hypothetical to be salient for the consumer.

Cognitive psychologists have identified a bias in which undesirable outcomes (real or imagined) are more salient and more memorable than desirable ones (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Information concerning undesirable outcomes commands greater attention, as evidenced by the greater demand to read about bad events in the news and fictional novels; and receives more thorough cognitive processing than information concerning desirable outcomes (Baumeister et al., 2001). Extrapolating from this bias to the dieting context, it would be expected that information concerning the unwanted consequences of a particular diet method would be more salient to prospective dieters than information concerning effectiveness of the method (which may contain some unfavourable effectiveness information if available but will almost certainly contain favourable effectiveness information consistent with the product’s marketing strategy).

However, in direct contradiction to this prediction other research suggests that this bias reverses when individuals are motivated to reach a particular conclusion, an effect referred to as ‘motivated reasoning’ (Kunda, 1990). In this context, motivated reasoning translates to the consumer, who wants to try diet product X, will selectively attend to and process information in a self-serving way in order to justify their desire (and consequent behaviour) of using product X. In this instance, the positive outcomes of the diet would be most salient to the consumer. Recent research has demonstrated motivated reasoning in consumer behaviour: consumers demonstrated a positive bias when evaluating a goal-enabling product when their confidence in achieving their ultimate goal was threatened (de Mello et al., 2007). As reviewed in Section 1.5 of the
Introductory Chapter, in such circumstances the consumer is seen to engage in motivated reasoning whereby they: selectively search for favourable information about the goal-enabling product; they are less discerning about the credibility of the evidence for the product and discount the evidence against the product, and; are more likely to hold a positive attitude towards the product in the face of unfavourable information (de Mello et al., 2007). The prediction here is that consumers of diet products will disregard or discount the negative aspects of the diet method. As such, motivated reasoning predicts that information about the effectiveness of a diet will be more important than the diet’s cons.

These two relevant patterns in human cognition predict contradictory findings. Therefore, it was also important to consider the specific motives of these women because this is a sample of non-current dieters. Unlike the current dieters in Study 2 who have committed to dieting, the prospective dieters here are not dieting and are not necessarily interested. In fact, their experiences in the past may have put them off dieting. Consequently, non-current dieters’ desire for information about the effectiveness versus the unwanted consequences was examined in relation to how invested they are in starting the diet method in the near future. If a self-serving bias holds true in this context and for each diet method, those dieters intent on starting a diet method will be relatively disinterested in finding out about any unwanted consequences associated with the method.

**4.1.4 Research aims and hypotheses.** In an extension of Study 2, the general aim of Study 3 was to examine diet selection and decision making in prospective dieters: including, how relevant existing beliefs and knowledge are for diet choice and how prospective dieters gather evidence to further inform their choice of diet method. A
sample of 182 non-dieting women (aged between 18 and 64), who acknowledged use of diets in the past, completed an online questionnaire that assessed: outcome-related beliefs about dieting; intention to use the eight diet methods in the next 12 months; the perceived relevance of sociocultural groups as sources of dieting information, and; desire to know more about the effectiveness versus unwanted consequences of diet methods. After examining motivational profiles of diet values and whether these are relevant to diet choice, Study 3 investigated the acquisition of knowledge – both the source and content – for diet initiation. As in Study 2, due to the dearth of prior literature the hypotheses for Study 3 were exploratory and descriptive.

4.1.4.1 Aim 1 and related hypothesis. Self-reported ideal weight and extent of body dissatisfaction amongst non-current dieters was examined to gauge motivation for weight loss and the relative importance of health and appearance.

Hypothesis 4.1: If non-current dieters do not have motivation to lose weight, their ideal weight should be equivalent to their actual weight and they should not report dissatisfaction with their weight and shape.

4.1.4.2 Aim 2 and related hypothesis. The co-occurrence of diet outcome evaluations was assessed in relation to thinness and health motives for weight loss. If the motivational profiles revealed in Study 2 are robust, then the underlying patterns of diet values should mirror that in Study 2. However, without prior research this remained a broad investigation of the co-occurrence of diet outcome evaluations.

Hypothesis 4.2: Outcome evaluations will be differentially associated with health and thinness motivations for dieting.
4.1.4.3 Aim 3 and related hypothesis. Applying the theory of reasoned action, outcome-related beliefs about dieting should differentiate the selection of diet methods by prospective dieters. Of particular relevance to this research is whether the relationships between behavioural beliefs and outcome evaluations with the diet methods reflect underlying differences in health-focussed versus thinness-focussed motivational profiles.

Hypothesis 4.3: The set of outcome evaluations and behavioural beliefs related to a preoccupation with thinness (as identified by Hypothesis 4.2) will be associated with different diet methods as compared to the set of outcome evaluations and behavioural beliefs that are related to a concern with health (in Hypothesis 4.2).

4.1.4.4 Aim 4 and related hypotheses. Three sociocultural groups apply pressure to lose weight: health professionals, the media, and family and friends (Ko et al., 2008; Thompson et al., 1999). The proposition was tested that these groups are also perceived as valuable sources of dieting information. Firstly, it was expected that health-focussed versus thinness-focussed prospective dieters rely on different sociocultural groups for information about dieting.

Hypothesis 4.4.1: The relationships between outcome evaluations and sociocultural sources of information will reveal an underlying pattern in which the thinness-focussed motivational profile (as identified by Hypothesis 4.2) will show a preference for a different sociocultural group(s) as compared to the health-focussed motivational profile (as identified by Hypothesis 4.2).
Secondly, with regards to diet choice it was expected that sociocultural groups will be differentially important for the dissemination of information on different diet methods.

*Hypothesis 4.4.2*: Preference for sociocultural sources of information will be differentially associated with non-current dieter’s choice of diet method.

### 4.1.4.5 Aim 5 and related hypothesis

The proposition was tested that bias exists in the way prospective dieters investigate effectiveness versus con information about diet methods. Although undesirable outcomes are generally found more salient (Baumeister et al., 2001), research has also observed a self-serving bias in how people attend to and process information in contexts in which they want to reach a desired outcome (Kunda, 1990; de Mello et al., 2007).

*Hypothesis 4.5*: If a self-serving bias operates in the context of diet initiation, those non-current dieters intent on starting a diet method will disregard negative information about the method.

### 4.2 Method

#### 4.2.1 Participants

All participants were not actively trying to lose weight by altering their diet at the time of completing the survey. However, they needed to have had some experience with using diets in the past. It was specified that it was not important how long they had dieted in the past, the type of diet they used, or whether they achieved their weight-loss goals. Participants were recruited using a brief written invitation which contained the URL link to the PLS and online questionnaire. The invitation was distributed via email, announcements on Deakin University’s online
notice boards for various undergraduate units, and advertised on social networking and online classified advertisement sites. Additionally, a snowball technique was employed where participants were invited to forward the questionnaire link to family and friends. Participation was voluntary and anonymous, and no financial inducements were offered.

A total of 189 participants took part in the study. Seven participants were removed from the sample for the following reasons: four of the participants did not complete a substantial portion of the questionnaire, two participants did not disclose their gender (the survey was open to both males and females), and the eldest participant was an outlier in terms of her age. A sample of 182 women remained aged 18 to 64 years ($M = 31.18$, $SD = 9.78$). The majority of the sample resided in Australia (86.8%) with the remaining participants living in other developed countries.

4.2.2 Materials. The questionnaire included the following measures.

4.2.2.1 Demographic and weight information. Participants indicated their age, gender, current weight, ideal weight and height. They were able to enter this information in imperial or metric units of measurement to maximise the accuracy of this self-report data. BMI was calculated by dividing an individual’s weight in kilograms by their height in metres squared (State Government of Victoria, 2010a). WHO (2006) BMI classifications were applied to provide an indication of the physical health status of participants’ current and ideal weight. WHO (2006) has deemed people with a BMI of: below 18.5kg/m$^2$ as “underweight”; between 18.5kg/m$^2$ and 24.9kg/m$^2$ as within the “normal range”; between 25.0kg/m$^2$ and 29.9kg/m$^2$ as “overweight”, and; 30.0kg/m$^2$ and above as “obese”. 
4.2.2.2 Diet methods. Participants were asked about eight common diet methods: their future intended use and interest in acquiring information about these methods (see Appendix J). The eight categories were identical to that used in Study 2: Calorie Counting; Pre-Prepared Meal; Meal Plan; Meal Replacement; High Protein/Low Carb; Supplement; Special Food; and Low GI. Using 11-point Likert scales, three questions were asked about each method of dieting. Item one asked about the participants’ near future intention to use this diet method (e.g., “What is the likelihood of you using a calorie counting diet in the next 12 months?” with scale anchors labelled “definitely will not” and “definitely will”). Item two asked about participants’ interest in gaining information about the effectiveness of the diet (e.g., “How interested are you in finding out more about the effectiveness of calorie counting diets?” with scale anchors labelled “not at all interested” and “extremely interested”). Item three addressed their interest in gaining information regarding possible unwanted consequences of the diet (e.g., “How interested are you in finding out more about any unwanted consequences that may result from being on calorie counting diets?” with scale anchors “not at all interested” and “extremely interested”).

4.2.2.3 EDE-Q. As detailed in Study 2 Section 3.2.2.7, the EDE-Q is a valid and reliable self-report questionnaire (Fairburn & Beglin, 1994) that assesses attitudinal, emotional, and behavioural symptoms of disordered eating over the past four weeks (see Appendix F). The focus of Study 3 was to measure the extent that non-current dieters are dissatisfied with their weight and shape (i.e., the Weight Concern and Shape Concern subscales). As in Study 2, these two scales were highly correlated ($r = .91$) so they were averaged together to create a single measure of body dissatisfaction ($Body Dissatisfaction; \alpha = .95$).
4.2.2.4 *Behavioural beliefs and outcome evaluations.* In the same procedure as that in Study 2, ten diet outcome evaluations were measured (see Appendix K): (1) making lifelong changes (*Lifelong Changes*); (2) achieving permanent weight loss (*Permanent Weight Loss*); (3) achieving quick weight loss (*Quick Weight Loss*); (4) requiring little effort (*Low Effort*); (5) not interfering with things I enjoy (*Easily Integrated*); (6) preoccupied with thinness (*Thinness*); (7) concerned with health (*Health*); (8) knowing how the diet works (*How Diet Works*); (9) avoiding unnatural diet products (*Natural*); and (10) cost of diet product (*Cost*). One item measured each diet outcome evaluation using a five point Likert scale ranging from ‘never’ to ‘always’. For example, the item for Quick Weight Loss was ‘I want to lose weight as quickly as possible.’

For each of the diet outcome evaluations, two items (using the same Likert scale) measured participants’ beliefs about the extent to which dieting, diet products and diet programs can achieve these values (i.e., behavioural beliefs in the theory of reasoned action). The statements for Quick Weight Loss were as follows: ‘Diets produce rapid weight loss’ and ‘Diets are slow at reducing body weight’ (reverse coded).

To obtain an overall belief-evaluation score (consistent with calculations of McCarthy et al., 2003), the two behavioural belief responses were averaged (using the scale Never = 1 to Always = 5). The average behavioural belief score was then multiplied with the corresponding outcome evaluation response (Never = 1 to Always = 5) so that the possible score range for the belief-evaluation construct is 1 to 25.

4.2.2.5 *Sociocultural sources of information.* Items in the questionnaire addressed whether sociocultural sources of information were important influences in diet
choice (see Appendix K). Three sociocultural groups were included: health professionals including physicians and dietitians (*Professionals*), relevant media such as fashion magazines (*Media*), and family and friends (*Family/Friends*).

One or two items measured how valued the three sociocultural groups are using a five point Likert scale ranging from ‘never’ to ‘always’ (analogous to their motivation to comply with the social group within the theory of reasoned action). For example, an item for Family/Friends was ‘The advice of my family about diets and weight loss is very valuable to me.’ Additionally, one or two items measured whether non-current dieters thought the sociocultural groups were a valid information source for weight-loss information (akin to normative beliefs in the theory of reasoned action) using the same Likert scale. A corresponding item for Family/Friends was ‘Family members should be consulted for advice on effective diets’.

The same procedure was used as that to calculate the belief-evaluation constructs. If there was more than a singular item, the item responses were averaged (with Never = 1 to Always = 5). Then the scores, indicating how informative each group is, were multiplied by the corresponding ‘value’ rating.

**4.2.3 Procedure.** The study was approved by the Deakin University Human Ethics Advisory Group – Faculty of Health. Participants completed the questionnaire anonymously online. By submitting their responses, they indicated their consent to participate in the study and this was clearly explained in the PLS.
4.3 Results

4.3.1 Data screening. Preliminary data screening revealed missing data distributed randomly across items and participants. Fewer than 5% of cases for each variable had missing values and these were replaced with median values. All scales were screened for violations of normality. Variables with skewed distributions (Media, Prepared Meal Intent, Meal Replacement Intent, High Protein/Low Carb Intent, Supplement Intent and Special Food Intent) were transformed for parametric analyses. Examination of these transformed variables revealed that they were now sufficiently normally distributed. Univariate outliers were rescaled to values corresponding to three standard deviations above or below the mean. No multivariate outliers were identified for the regression analyses according to critical chi-square value cut-offs suggested by Tabachnick and Fidell (2007). Consistent with Study 2, due the number of variables and analyses conducted in this study a more conservative alpha level ($p < .01$) was used for inferential analyses.

4.3.2 Current BMI, Ideal BMI and Body Dissatisfaction in non-current dieters. In the previous study, current dieters’ appearance and health motives for weight loss were explored by examining their Ideal BMI and extent of Body Dissatisfaction in relation to their actual BMI. These same relationships were explored with the present sample of non-current dieters. If non-current dieters do not have motivation to lose weight, it was expected that Ideal BMI would be equivalent to Current BMI and that they would not report dissatisfaction with their body (Hypothesis 4.1).

As seen in Figure 4.1, most non-current dieters reported their Ideal BMI below their Current BMI (with only a small number of exceptions in which Ideal BMI was greater than $N = 2$ or equivalent to $N = 9$ Current BMI) and as such, the majority of
non-current dieters did have some motivation to lose weight. Those within (49.0%) and below (0.5%) the normal BMI range tended to have an Ideal BMI that was close to their Current BMI. As these women were not overweight, their desire to achieve a lower BMI cannot be attributed to health concerns and instead attests to their concern with appearance.\(^7\) The trend in Ideal BMI was different for those who were overweight or obese. Although Current and Ideal BMI were positively correlated, \(r = .72, p < .001\), the scatterplot in Figure 4.1 is best described by a logarithmic trend in which Ideal BMI does not increase in proportion to Current BMI and, similar to Study 2, tapers off at the lower end of the obese range. It should be noted that some of the non-current dieters who reported that they were at their ideal weight were within the overweight (\(N = 1\)) and obese (\(N = 5\)) BMI categories.

\(^7\) As noted in Study 2, this is one inference that can be drawn from the data and assumes that these women have knowledge of BMI categories.
Figure 4.1. Scatterplot of non-current dieters’ Current BMI and Ideal BMI (kg/m^2). The diagonal line represents the equation Ideal BMI = Current BMI. The two vertical lines in Current BMI represent the normal BMI range of 18.5kg/m^2 to 25.0kg/m^2.
Figure 4.2 presents non-current dieters' level of Body Dissatisfaction in relation to Current BMI. Although there is a medium-strength correlation between the variables, $r = .41, p < .001$, inspection of the scatterplot reveals many exceptions to a linear relationship, with some non-current dieters in the normal BMI range very dissatisfied with their weight and shape, and some in the obese range with relatively low concern over the aesthetic aspects of their body. Mean score for Body Dissatisfaction was 2.61 ($SD = 1.62$). On average, Body Dissatisfaction in non-current dieters was moderate and not dissimilar to community levels: almost a half (44%) of non-current dieters scored below female adult community norms of $M = 2.01$ (Mond et al., 2006). Given the disparity between Ideal BMI and Current BMI and moderate levels of body dissatisfaction, it seems the majority of non-current dieters had some motivation to lose weight and dieting was a reasonable prospect for them in the near future. Like the current dieters in Study 2, the majority were concerned about their appearance to some extent and so it was unlikely that many non-current dieters would commence a weight-loss diet for health reasons alone.
Figure 4.2 Scatterplot of non-current dieters’ Current BMI (kg/m²) and Body Dissatisfaction. The two vertical lines in Current BMI represent the normal BMI range of 18.5kg/m² to 25.0kg/m².
4.3.3 Health-focussed versus thinness-focussed motivational profiles in non-current dieters. In a parallel analysis to Study 2, the co-occurrence of diet values was examined and it was expected that diet values would be differentially associated with a concern for health versus a preoccupation with thinness (Hypothesis 4.2). Table 4.1 presents the correlations between the diet outcome evaluations. The thinness-focussed motivational profile in non-current dieters resembles that found in Study 2: Thinness is positively correlated with Quick Weight Loss and negatively correlated with How Diet Works and Permanent Weight Loss. However, Thinness is not correlated with Lifelong Changes as found in Study 2. The other difference is that Thinness is negatively correlated with Natural in the present study yet this was not found in Study 2. These results provide modest support for a thinness-focussed motivational profile that includes the pursuit of quick weight loss at the expense of permanent weight loss, along with a low concern over understanding the mechanisms behind how a diet causes weight loss. The correlation matrix in Table 4.1 reveals that, like Study 2, the weight-loss values – Quick Weight Loss, How Diet Works, Lifelong Changes and Permanent Weight Loss – all co-vary as a consistent set, so that the desire for quick weight loss is associated with the devaluation of education, lifelong changes and permanent weight loss, and vice versa.
Table 4.1

Bivariate Correlations (Pearson’s r Values), Means and Standard Deviations for Non-Current Dieters’ Outcome Evaluations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thinness</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Health</td>
<td>.39**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Lifelong Changes</td>
<td>-.11</td>
<td>.03</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Permanent Weight Loss</td>
<td>-.27**</td>
<td>-.15</td>
<td>.37**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. How Diet Works</td>
<td>-.45**</td>
<td>-.28**</td>
<td>.40**</td>
<td>.48**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Low Effort</td>
<td>.11</td>
<td>.06</td>
<td>-.14</td>
<td>-.14</td>
<td>-.15</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Easily Integrated</td>
<td>.10</td>
<td>-.01</td>
<td>-.00</td>
<td>.10</td>
<td>.00</td>
<td>.44**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Quick Weight Loss</td>
<td>.58**</td>
<td>.35**</td>
<td>-.25*</td>
<td>-.40**</td>
<td>-.60**</td>
<td>.19</td>
<td>.03</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Natural</td>
<td>-.27**</td>
<td>.03</td>
<td>.11</td>
<td>.11</td>
<td>.33**</td>
<td>-.05</td>
<td>.04</td>
<td>-.25*</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>10. Cost</td>
<td>.17</td>
<td>.16</td>
<td>.03</td>
<td>-.07</td>
<td>-.08</td>
<td>.33**</td>
<td>.24*</td>
<td>.25*</td>
<td>-.00</td>
<td>–</td>
</tr>
</tbody>
</table>

| M     | 1.91 | 2.18 | 3.11 | 3.22 | 3.13 | 2.80 | 3.02 | 1.81 | 2.81 | 2.36 |
| SD    | 1.14 | 1.04 | .99  | .90  | 1.05 | 1.07 | .94  | 1.33 | 1.22 | 1.23 |

Note. Possible score range for each scale is 0 - 4.
* p < .01; ** p < .001.
The health-focussed motivational profile in non-current dieters was different to that found in Study 2. Health was positively correlated with Quick Weight Loss and negatively correlated with How Diet Works: these correlations are consistent with the thinness-focussed motivational profile. Indeed, a concern with health was positively correlated with a preoccupation with thinness. For non-current dieters, a concern over health was entwined with a concern over appearance and as such, a health-focussed motivational profile has not been elucidated. Therefore, the remainder of the analyses focussed on the thinness-focussed motivational profile.

4.3.4 Outcome-related beliefs and diet choice. The relevance of outcome-related beliefs for prospective dieters’ choice of diet method was examined. With the present sample of non-current dieters, these women’s beliefs about the outcomes of diets (behavioural beliefs) and their diet-related values (outcome evaluations) were measured and multiplied together as per the theory of reasoned action to form a single construct (these product variables are referred to hereafter as ‘belief-evaluations’). The initial hypothesis predicted that the relationships between the belief-evaluation constructs and the diet methods would reflect underlying differences in health-focussed versus thinness-focussed motivational profiles (*Hypothesis 4.3*). In the absence of an unambiguous health-focussed motivational profile (as discussed in the previous section), these results instead focussed on those diet methods associated with a thinness-focussed motivational profile. Firstly, bivariate correlations were calculated to explore simple associations between single belief-evaluations with each diet method, and then canonical analysis was performed to simultaneously explore more complex relationships between the ten belief-evaluations and eight diet methods.
4.3.4.1 Bivariate correlations between belief-evaluations and diet methods.

Table 4.2 presents the bivariate correlations between each belief-evaluation and non-current dieters’ intention to use the eight diet methods over the next 12 months. Inspection of the correlation matrix reveals that there are only eight small-sized correlations that mostly involve the belief-evaluations Health and Permanent Weight Loss. These two belief-evaluations have positive correlations with Calorie Counting, Meal Plan and Low GI diet methods. The remaining two correlations are between Thinness and Calorie Counting (positive) and between Natural and Meal Replacement (negative).
Table 4.2

*Bivariate Correlations (Pearson’s r Values) between Belief-Evaluations and Diet Method Intent*

<table>
<thead>
<tr>
<th>Belief-evaluation</th>
<th>Calorie Counting</th>
<th>Meal Plan</th>
<th>Low GI</th>
<th>Meal Replacement</th>
<th>High Protein/Low Carb</th>
<th>Supplement</th>
<th>Special Food</th>
<th>Pre-prepared Meal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinness</td>
<td>.26**</td>
<td>.18</td>
<td>.16</td>
<td>.19</td>
<td>.06</td>
<td>.08</td>
<td>-.03</td>
<td>.16</td>
</tr>
<tr>
<td>Health</td>
<td>.20*</td>
<td>.29**</td>
<td>.24*</td>
<td>.14</td>
<td>.15</td>
<td>.11</td>
<td>.15</td>
<td>.19</td>
</tr>
<tr>
<td>Lifelong Changes</td>
<td>.00</td>
<td>.15</td>
<td>.13</td>
<td>.03</td>
<td>.07</td>
<td>-.03</td>
<td>.13</td>
<td>.00</td>
</tr>
<tr>
<td>Permanent Weight Loss</td>
<td>.24*</td>
<td>.25*</td>
<td>.20*</td>
<td>.12</td>
<td>.17</td>
<td>.14</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>How Diet Works</td>
<td>.06</td>
<td>.07</td>
<td>-.05</td>
<td>-.07</td>
<td>.06</td>
<td>-.13</td>
<td>.02</td>
<td>-.11</td>
</tr>
<tr>
<td>Low Effort</td>
<td>.10</td>
<td>.05</td>
<td>.08</td>
<td>.11</td>
<td>.03</td>
<td>.02</td>
<td>.15</td>
<td>-.02</td>
</tr>
<tr>
<td>Easily Integrated</td>
<td>.02</td>
<td>.03</td>
<td>.05</td>
<td>-.04</td>
<td>.15</td>
<td>-.08</td>
<td>.04</td>
<td>-.07</td>
</tr>
<tr>
<td>Quick Weight Loss</td>
<td>.04</td>
<td>-.13</td>
<td>-.01</td>
<td>-.06</td>
<td>.02</td>
<td>-.12</td>
<td>-.06</td>
<td>-.13</td>
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<tr>
<td>Natural</td>
<td>.06</td>
<td>.12</td>
<td>.06</td>
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<td>-.06</td>
<td>.01</td>
<td>.11</td>
<td>.03</td>
<td>.05</td>
<td>-.02</td>
</tr>
</tbody>
</table>

Note. * p < .01; ** p < .001.
4.3.4.2 Canonical analysis. Canonical analysis was performed to simultaneously examine the relationship between the set of belief-evaluations and the set of diet methods. For non-current dieters, with all canonical correlations included, $F(80, 1048) = 1.52, p < .005$. With the first canonical correlation removed, $F$ values were not significant, $F(63, 935) = 1.07, p = .34$. Therefore, only significant relationships in the first pair of canonical variates were interpreted. The canonical correlation was $r = .51$, representing 26.3% overlapping variance for the pair of canonical variates. Correlations between variables and the canonical variate (i.e., the canonical loadings) and the standardised canonical weights are shown in Table 4.3.

The canonical variate pair extracted 13.0% of the variance from the belief-evaluations set and 6.7% from the diet methods set. Using $r > .3$ as the criteria for inclusion, inspection of the canonical loadings in Table 4.3 shows the following. For the belief-evaluations set, the pair of canonical variates has high positive loadings on Health, Thinness and Permanent Weight Loss. Apart from High Protein/Low Carb diets, the canonical variates pair has high positive loadings on all of the diet methods. That is, non-current dieters who are motivated by both health and thinness, who value permanent weight loss, and believe that weight-loss diets will produce these valued outcomes; they are more likely to start all of the diet methods, except for the High Protein/Low Carb diet method. Hypothesis 4.3 was not confirmed. A thinness-focussed motivational profile was not relevant to diet choice: instead, the results simply demonstrate that the reasons for dieting – thinness, health and permanent weight loss – are compelling for prospective dieters but not important in distinguishing between methods.
Table 4.3  
*Canonical Loadings and Standardised Canonical Weights for Canonical Analysis with Belief-Evaluations and Diet Method Intention by Non-Current Dieters*

<table>
<thead>
<tr>
<th>Variate 1</th>
<th>Loadings</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Belief-evaluations set</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinness</td>
<td>.58</td>
<td>.36</td>
</tr>
<tr>
<td>Health</td>
<td>.65</td>
<td>.53</td>
</tr>
<tr>
<td>Lifelong Changes</td>
<td>.18</td>
<td>-.02</td>
</tr>
<tr>
<td>Permanent Weight Loss</td>
<td>.56</td>
<td>.26</td>
</tr>
<tr>
<td>How Diet Works</td>
<td>-.11</td>
<td>-.29</td>
</tr>
<tr>
<td>Low Effort</td>
<td>.28</td>
<td>.42</td>
</tr>
<tr>
<td>Easily Integrated</td>
<td>-.07</td>
<td>-.15</td>
</tr>
<tr>
<td>Quick Weight Loss</td>
<td>-.19</td>
<td>-.34</td>
</tr>
<tr>
<td>Natural</td>
<td>-.23</td>
<td>-.34</td>
</tr>
<tr>
<td>Cost</td>
<td>.03</td>
<td>-.05</td>
</tr>
<tr>
<td><strong>Diet methods set</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calorie Counting</td>
<td>.49</td>
<td>.37</td>
</tr>
<tr>
<td>Meal Plan</td>
<td>.53</td>
<td>.20</td>
</tr>
<tr>
<td>Low GI</td>
<td>.50</td>
<td>.37</td>
</tr>
<tr>
<td>Meal Replacement</td>
<td>.66</td>
<td>.39</td>
</tr>
<tr>
<td>High Protein/Low Carb</td>
<td>.14</td>
<td>-.21</td>
</tr>
<tr>
<td>Supplement</td>
<td>.54</td>
<td>.13</td>
</tr>
<tr>
<td>Special Food</td>
<td>.36</td>
<td>.20</td>
</tr>
<tr>
<td>Pre-prepared Meal</td>
<td>.62</td>
<td>.26</td>
</tr>
</tbody>
</table>

**4.3.5 Sociocultural sources of dieting information.** Health professionals, the media and peer groups are all influential in the decision to pursue weight loss (Ko et al., 2008; Thompson et al., 1999). This section examines whether these sociocultural groups are also influential in the selection of a diet method. Table 4.4 shows the intercorrelations and descriptive statistics for ratings of how informative the three groups
(Professionals, Media, Family/Friends) are on dieting. Family/Friends is positively correlated with both of the other groups but Professionals is not associated with Media: the extent to which a non-current dieter values health professionals as an information source had no bearing on whether they listen to advice from media sources.

A one-way repeated measures ANOVA was conducted to compare participants’ ratings of the three groups as valuable information sources. There was a significant difference between each information source, Wilks’ Lambda = .26, $F(2, 180) = 252.92$, $p < .001$, partial eta squared = .74, with Professionals rated as the most important information source, Family/Friends rated as the second most important information source, and Media rated as the least important information source for dieting (all pairwise comparisons with Bonferroni adjustment: $p < .001$). These results suggested that the media will be unimportant for decisions about initiating a diet.

Table 4.4

_Bivariate Correlations (Pearson’s r Values) and Descriptive Statistics for Sociocultural Sources of Information_

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professionals</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Media</td>
<td>-.02</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>3. Family/Friends</td>
<td>.25*</td>
<td>.41**</td>
<td>–</td>
</tr>
<tr>
<td><em>M</em></td>
<td>13.29</td>
<td>2.89</td>
<td>5.98</td>
</tr>
<tr>
<td><em>SD</em></td>
<td>5.96</td>
<td>2.03</td>
<td>4.01</td>
</tr>
</tbody>
</table>

*Note. *$p < .01$; **$p < .001$.*

Firstly, the relationship between weight-loss motives and reliance on sociocultural sources of information was examined. Bivariate correlations were
performed between outcome evaluations and sociocultural sources of information. In the absence of a comprehensive health-focussed motivational profile, whether the correlations reveal an underlying pattern whereby the thinness-focussed motivational profile is associated with a sociocultural group was the focus of this analysis (*Hypothesis 4.4.1*). Inspection of Table 4.5 reveals that the thinness-focussed motivational profile is linked to consultation of media sources for diet information. Those motivated by concerns with thinness and who value quick weight loss also consult their family and friends for diet advice. While a health-focussed motivational profile has not been clarified, it is important to note that health concern is linked to seeking information from health professionals, and so too is the valuation of lifelong changes.

Table 4.5

*Bivariate Correlations (Pearson’s r Values) between Sociocultural Sources of Information and Outcome Evaluations*

<table>
<thead>
<tr>
<th>Outcome evaluation</th>
<th>Professionals</th>
<th>Media</th>
<th>Family/Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinness</td>
<td>.14</td>
<td>.31**</td>
<td>.20*</td>
</tr>
<tr>
<td>Health</td>
<td>.24*</td>
<td>.14</td>
<td>.12</td>
</tr>
<tr>
<td>Lifelong Changes</td>
<td>.34**</td>
<td>-.14</td>
<td>.07</td>
</tr>
<tr>
<td>Permanent Weight Loss</td>
<td>.06</td>
<td>-.21*</td>
<td>-.10</td>
</tr>
<tr>
<td>How Diet Works</td>
<td>.12</td>
<td>-.45**</td>
<td>-.18</td>
</tr>
<tr>
<td>Low Effort</td>
<td>-.00</td>
<td>.10</td>
<td>.01</td>
</tr>
<tr>
<td>Easily Integrated</td>
<td>-.06</td>
<td>.05</td>
<td>-.07</td>
</tr>
<tr>
<td>Quick Weight Loss</td>
<td>.05</td>
<td>.29**</td>
<td>.28**</td>
</tr>
<tr>
<td>Natural</td>
<td>.00</td>
<td>-.20*</td>
<td>-.03</td>
</tr>
<tr>
<td>Cost</td>
<td>.14</td>
<td>.13</td>
<td>.16</td>
</tr>
</tbody>
</table>

*Note. *p < .01; **p < .001.*
Secondly, the relevance of sociocultural sources of information for starting the various diet methods was examined: it was expected that sociocultural groups would be differentially important for the dissemination of information across the various diet methods (Hypothesis 4.4.2). Table 4.6 presents the correlations between ratings of how valuable the sociocultural groups are for diet advice with intention to use the eight diet methods. Inspection of the correlations reveals that the media is the predominant information source, relevant to the initiation of Meal Replacement, Pre-prepared Meal, Supplement, Meal Plan and High Protein/Low Carb methods. The only other correlation is between Family/Friends and Meal Replacement diets. Health professionals are not relevant for the selection of structured diet regimes. Despite widespread scepticism of information the media provides on dieting, in the context of diet initiation, the media was found to be important to the thinness-focussed motivational profile and five of the diet methods.
Table 4.6

_Bivariate Correlations (Pearson’s r Values) between Sociocultural Sources of Information and Diet Method Intent_

<table>
<thead>
<tr>
<th>Diet method</th>
<th>Professionals</th>
<th>Media</th>
<th>Family/Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calorie Counting</td>
<td>.14</td>
<td>.08</td>
<td>.09</td>
</tr>
<tr>
<td>Meal Plan</td>
<td>.14</td>
<td>.22*</td>
<td>.15</td>
</tr>
<tr>
<td>Low GI</td>
<td>.08</td>
<td>.12</td>
<td>.01</td>
</tr>
<tr>
<td>Meal Replacement</td>
<td>.07</td>
<td>.34**</td>
<td>.21*</td>
</tr>
<tr>
<td>High Protein/Low Carb</td>
<td>.13</td>
<td>.20*</td>
<td>.09</td>
</tr>
<tr>
<td>Supplement</td>
<td>.01</td>
<td>.27**</td>
<td>.09</td>
</tr>
<tr>
<td>Special Food</td>
<td>-.05</td>
<td>.15</td>
<td>.11</td>
</tr>
<tr>
<td>Pre-prepared Meal</td>
<td>.03</td>
<td>.28**</td>
<td>.16</td>
</tr>
</tbody>
</table>

_Note._ *p < .01; **p < .001.

4.3.6 Investment in researching unfavourable information about a diet method. In addition to investigating source of dieting information, it was also important to understand the content of information sought, particularly whether prospective dieters are prone to biased decision making. The final section of Study 3 examined how invested non-current dieters are in researching the effectiveness of a diet method (labelled _Effectiveness_) compared to the possible unwanted consequences associated with the diet (labelled _Cons_). It was expected that the women intending on starting a diet method would be interested in finding out more about that diet method. If a self-serving bias does operate in this context, those non-current dieters intent on starting a diet method will avoid the information that is inconsistent with their desire to use that method (i.e., they will show bias against the Cons: _Hypothesis 4.5_).
Correlations and descriptive statistics for Effectiveness and Cons ratings, and non-dieters’ intention to use each of the eight diets are shown in the left section of Table 4.7. Inspection of the correlations across all diet methods reveals that Effectiveness and Cons have medium- to large-strength positive correlations with each other. Non-current dieters interested in diet effectiveness information were also interested in the cons of the method and vice versa. Consistently across all diet methods, the cons were rated as more important than effectiveness information, as tested by a series of paired-samples t-tests (the results of the t-tests are presented in the right section of Table 4.7). For the whole sample of non-current dieters, these women showed a preference to seek out information regarding the negative aspects of a diet method rather than effectiveness information.

However, it was important to evaluate non-dieters’ preference for Effectiveness or Cons information in the context of their intention to start the diet method. Inspection of the correlations in Table 4.7 shows that diet method ‘Intent’ has positive correlations with both Effectiveness and Cons variables. Non-current dieters who intended on starting a diet method were more interested in both the Effectiveness and Cons information, as compared to those who did not intend to start the diet. The extent to which each of these variables predicted variance in diet method Intent was tested using regression analyses, as detailed in the next section.
Table 4.7

*Descriptive Statistics and Paired-Samples t-test Comparing Desire for Effectiveness versus Cons Information for Each Diet Method*

<table>
<thead>
<tr>
<th>Diet Method</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calorie Counting</td>
<td>1. Effectiveness –</td>
<td>3.79</td>
<td>3.53</td>
<td>-6.61** .19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .49** –</td>
<td>5.53</td>
<td>3.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .71** .36** –</td>
<td>2.57</td>
<td>3.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meal Plan</td>
<td>1. Effectiveness –</td>
<td>4.39</td>
<td>3.38</td>
<td>-4.70** .11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .57** –</td>
<td>5.48</td>
<td>3.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .61** .28** –</td>
<td>2.69</td>
<td>2.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low GI</td>
<td>1. Effectiveness –</td>
<td>4.61</td>
<td>3.55</td>
<td>-4.22** .09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .71** –</td>
<td>5.45</td>
<td>3.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .61** .44** –</td>
<td>2.37</td>
<td>2.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meal Replacement</td>
<td>1. Effectiveness –</td>
<td>3.23</td>
<td>3.61</td>
<td>-7.39** .23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .66** –</td>
<td>4.91</td>
<td>3.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .55** .32** –</td>
<td>1.47</td>
<td>2.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Protein/Low Carb</td>
<td>1. Effectiveness –</td>
<td>3.59</td>
<td>3.37</td>
<td>-5.74** .15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .58** –</td>
<td>4.92</td>
<td>3.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .58** .18* –</td>
<td>1.48</td>
<td>2.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplement</td>
<td>1. Effectiveness –</td>
<td>3.35</td>
<td>3.41</td>
<td>-6.55** .19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .63** –</td>
<td>4.83</td>
<td>3.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .55** .30** –</td>
<td>1.12</td>
<td>2.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Food</td>
<td>1. Effectiveness –</td>
<td>2.58</td>
<td>3.22</td>
<td>-6.51** .19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .65** –</td>
<td>4.02</td>
<td>3.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .45** .27** –</td>
<td>.69</td>
<td>1.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Prepared Meal</td>
<td>1. Effectiveness –</td>
<td>3.05</td>
<td>3.28</td>
<td>-6.42** .19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cons .64** –</td>
<td>4.46</td>
<td>3.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Intent .57** .29** –</td>
<td>1.12</td>
<td>2.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Effectiveness = Interest in learning more about the effectiveness of the diet; Cons = Interest in learning more about unwanted consequences of the diet; paired-samples t-test df = 181.
*p < .01; **p < .001.*
4.3.6.1 Regression analyses. A series of simultaneous multiple regressions were performed for each diet method. Intention to engage in the diet method was regressed onto desire for effectiveness information and desire for the cons information. The results are summarised in Table 4.8. Each multiple regression is significant, with a substantial amount of variance explained in diet intent for the majority of diet methods ($R^2$ ranged from .21 to .50). The pattern of results is consistent across all diet methods. It is a desire for Effectiveness that consistently predicts an intention to start the diet method ($beta$ ranged from .48 to .71). The Cons is a significant predictor in only one regression: the intention to use the High Protein/Low Carb diet method. The $beta$ value for the Cons in this instance is in the negative direction suggesting an active avoidance of information about unwanted consequences by those non-current dieters intending to use this diet method. For the remaining regressions, Cons information is irrelevant to the decision to start a diet method. This finding supported Hypothesis 4.5 and is consistent with a motivated reasoning effect.
Table 4.8

Series of Regressions for Each Diet Method: Diet Intent Regressed on Desire for Effectiveness and Cons Information

<table>
<thead>
<tr>
<th>DV</th>
<th>IV</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
<th>$B$</th>
<th>se</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$r$</th>
<th>sr$^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calorie Counting</td>
<td>Effectiveness</td>
<td>.50**</td>
<td>.50</td>
<td>.64</td>
<td>.06</td>
<td>.70</td>
<td>11.59*</td>
<td>.71**</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>Cons</td>
<td></td>
<td></td>
<td>.02</td>
<td>.06</td>
<td>.02</td>
<td>.31</td>
<td>.36**</td>
<td>.00</td>
</tr>
<tr>
<td>Meal Plan</td>
<td>Effectiveness</td>
<td>.38**</td>
<td>.37</td>
<td>.59</td>
<td>.06</td>
<td>.67</td>
<td>9.39**</td>
<td>.61**</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>Cons</td>
<td></td>
<td></td>
<td>-.09</td>
<td>.06</td>
<td>-.10</td>
<td>-1.43</td>
<td>.28**</td>
<td>.01</td>
</tr>
<tr>
<td>Low GI</td>
<td>Effectiveness</td>
<td>.37**</td>
<td>.36</td>
<td>.48</td>
<td>.07</td>
<td>.60</td>
<td>7.08**</td>
<td>.61**</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td>Cons</td>
<td></td>
<td></td>
<td>.01</td>
<td>.07</td>
<td>.01</td>
<td>.08</td>
<td>.44**</td>
<td>.00</td>
</tr>
<tr>
<td>Meal Replacement</td>
<td>Effectiveness</td>
<td>.30**</td>
<td>.29</td>
<td>.06</td>
<td>.01</td>
<td>.60</td>
<td>7.14**</td>
<td>.55**</td>
<td>.20</td>
</tr>
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<td>Cons</td>
<td></td>
<td></td>
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<td>.01</td>
<td>-.08</td>
<td>-.93</td>
<td>.32**</td>
<td>.00</td>
</tr>
<tr>
<td>High Protein/</td>
<td>Effectiveness</td>
<td>.37**</td>
<td>.36</td>
<td>.07</td>
<td>.01</td>
<td>.71</td>
<td>9.71**</td>
<td>.58**</td>
<td>.33</td>
</tr>
<tr>
<td>Low Carb</td>
<td>Cons</td>
<td></td>
<td></td>
<td>-.02</td>
<td>.01</td>
<td>-.23</td>
<td>-3.13*</td>
<td>.18*</td>
<td>.03</td>
</tr>
<tr>
<td>Supplement</td>
<td>Effectiveness</td>
<td>.30**</td>
<td>.29</td>
<td>.06</td>
<td>.01</td>
<td>.59</td>
<td>7.28**</td>
<td>.55**</td>
<td>.21</td>
</tr>
<tr>
<td></td>
<td>Cons</td>
<td></td>
<td></td>
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<td>.01</td>
<td>-.07</td>
<td>-.81</td>
<td>.30**</td>
<td>.00</td>
</tr>
<tr>
<td>Special Food</td>
<td>Effectiveness</td>
<td>.21**</td>
<td>.20</td>
<td>.04</td>
<td>.01</td>
<td>.48</td>
<td>5.48**</td>
<td>.45**</td>
<td>.13</td>
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<tr>
<td></td>
<td>Cons</td>
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<td></td>
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<td>.01</td>
<td>-.04</td>
<td>-.41</td>
<td>.27**</td>
<td>.00</td>
</tr>
<tr>
<td>Pre-prepared Meal</td>
<td>Effectiveness</td>
<td>.33**</td>
<td>.33</td>
<td>.07</td>
<td>.01</td>
<td>.65</td>
<td>8.17**</td>
<td>.57**</td>
<td>.25</td>
</tr>
<tr>
<td></td>
<td>Cons</td>
<td></td>
<td></td>
<td>-.01</td>
<td>.01</td>
<td>-.12</td>
<td>-1.57</td>
<td>.29**</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. Effectiveness = Interest in learning more about the effectiveness of the diet; Cons = Interest in learning more about unwanted consequences of the diet.

*p < .01; **p < .001.
4.4 Discussion

Study 3 examined diet intention and the selection of a diet method by a group of non-current dieters. This decision making was investigated with regards to existing knowledge, beliefs and expectations about dieting; and with regards to how new knowledge is acquired, from the sociocultural source of this knowledge to the content of evidence sought. The principal aims of Study 3 was to ascertain whether the thinness-focussed motivational profile, as identified in Study 2, is relevant to prospective dieters and diet intention; and to expose potential bias in the way information is sought during the decision-making process of diet selection.

4.4.1 Motives for weight loss in non-current dieters. The majority of non-dieting women with a history of dieting do still have motivation to reduce their body weight, with the data suggesting that a concern with appearance is the main driving force. The majority of women within the healthy weight range idealised a slimmer physique and women of all weights reported some level of dissatisfaction with their weight and shape. Like the dieters in Study 2, very few non-current dieters, if any, held a slimmer ideal weight that could be attributed to a concern with health alone. It is interesting to note that between the two samples of current dieters in Study 2 and non-current dieters here in Study 3, there were more underweight dieters than non-current dieters: that is to say, quite a few women engaging in weight-loss diets are actually thinner than those who are not dieting.

A minority of overweight and obese women perceived themselves to be at their ideal weight, presumably because they have embraced the ‘love your body’ message advocated by those concerned with poor body image (e.g., www.loveyourbody.org/). If
this stance has truly been internalised rather than a facade of body satisfaction for a self-report questionnaire, then this is a very positive thing for mental health. Appearance aside however, it can still be argued that a weight within the overweight or obese BMI range is less than optimal and that these women should be striving for a lower weight (however slight) to improve physical health. Even ignoring the future-oriented risk of morbidity that may not be salient for some overweight and obese women particularly whilst young adults, just the physical pressure that excess weight places on the skeletal and muscular systems is a valid and tangible health problem (Corbeil, Simoneau, Rancourt, Tremblay, & Teasdale, 2001; Ells et al., 2006). Holistically, it may be difficult to accept that these overweight and obese women are at their ideal weight. This begets the question of whether, just like sociocultural pressure to be thin, the ‘love your body’ message can also be harmful if taken too literally by those carrying excess weight. A more accurate health message – love your body in the way it looks yet be dissatisfied with how it functions and aim to change this aspect – is a convoluted message to convey to the overweight and obese, especially since these women live in a culture that emphasises the complete opposite: appearance is paramount over function and thin is the only form of attractiveness (Battle & Brownell, 1996; Fredrickson & Roberts, 1997).

4.4.2 Motivational profiles and diet choice. The previous study with current dieters found a profile of diet values associated with being preoccupied with thinness, which differentiated between the maintenance of some diet methods over others. The current study provides modest support for a thinness-focussed motivational profile that includes a desire for quick weight loss, and devaluation of permanent weight loss and of education about how a diet produces weight loss. Unlike the thinness-focussed motivational profile, a consistent pattern of diet values associated with a health motive
was not elucidated. This is likely attributed to the low incidence of weight loss being motivated by health alone and because weight-loss motives are often entwined (Brink & Ferguson, 1998; Clarke, 2002; O’Brien et al., 2007; Vartanian et al., 2012).

Although a thinness-focussed motivational profile was revealed in non-current dieters, this profile was not found important to future diet choice. Overall, the outcome-related beliefs and values did not differentiate between the diet methods well. Only the goals of dieting – improving health, becoming thinner and achieving permanent weight loss – were found broadly relevant to prospective dieters when considering engaging in various weight-loss diets. That is, the women who believe that dieting can provide them with a way to slim down and become healthier, in the long-term, and strongly value achieving these ends, are more likely to embark on the various weight-loss diets. The reasons for dieting were most compelling to prospective dieters. Achieving thinness, permanent weight loss and health are the goals of weight-loss dieting, rather than non-goal relevant attributes of diet methods, such as the cost or naturalness of the product.

Overall, this banal pattern of results certainly fails to illuminate why prospective dieters select the diet methods that they do. A reason why the theory of reasoned action failed to provide any explanatory value in prospective dieter’s selection between the various diet options may be because the decision making around diet initiation and selection is a relatively short-term endeavour. Dieters are perhaps more likely to decide to embark on a diet and then select which method they will try in a 2 month timeframe. Instead, the time period measured in this research, of 12 months into the future, was relatively expansive given that the prospective dieters were asked specifically about which diet method they would use as opposed to a generic desire to lose weight in the next year.
Whilst not particularly insightful, the focus by prospective dieters on the goals of the behaviour is consistent with temporal construal theory. This theory posits that the more temporally distal the act is, the more salient the goals or desirability of the behaviour will be, as opposed to the feasibility aspects of the behaviour (Liberman & Trope, 1998; Trope & Liberman, 2003). As temporal distance decreases, feasibility issues concerning the behaviour become more salient (Liberman & Trope, 1998). The sample used here was of non-current dieters who were considering the potential to commence a diet within the next 12 months. This is a more temporally distal decision as compared to those dieters in Study 2 who were facing the decision to maintain their diet, or not maintain their diet, at their very next meal. Future research would do well to vary the timeframe in which diet intention is measured and examine the impact outcome-related beliefs about dieting have on diet choice then. Temporal construal theory would suggest that the feasibility aspects of dieting (e.g., how rapid the weight-loss results are supposedly achieved, the ability to afford a product, how natural it is etc.) will become more prominent in prospective dieters’ decisions when considering a temporally proximal diet. In summary, it is difficult to conclude that the characteristics of diet methods, such as the speed of promised weight loss, are relevant or irrelevant to future diet choice; and instead, more research is needed.

4.4.3 Sociocultural sources of dieting information. In addition to examining how prospective dieters use their existing knowledge to inform their choice of diet method, it is also important to understand how they gather new information in this process. Initially, the source of diet information was examined. This study is unique within the dieting literature because it examines sociocultural groups as a source of information on dieting, as opposed to measuring the extent to which these groups are
perceived to be a source of pressure to lose weight or diet. Three sociocultural groups were considered in this research: (a) health professionals such as physicians, dietitians and nutritionists; (b) women’s non-professional acquaintances, as in their family and friends, and; (c) the media including magazine articles and celebrity opinion. Given that health professionals have received the most rigorous scientific training on the topic and have the ability to provide individually-tailored advice as compared to the media’s generic message, and that the frequent perusal of dieting information produced by the media is predictive of problematic weight-control behaviours (van den Berg et al., 2007); it is argued that it is most beneficial to a prospective dieter’s health if they primarily consult health professionals.

Across the sample, the media was rated as the least influential information source for dieting. This suggests a general scepticism by non-current dieters regarding the information that the media provides on dieting and weight loss. In contrast, health professionals were held in high regard and considered the most influential information source by the sample. Family and friends were placed between these two groups: more influential than the media but less important than health professionals.

When weight-loss motives were taken into account, those concerned with health were more likely to trust health professionals advice, whereas those preoccupied with thinness rely more on the media and their family and friends. In fact, the thinness-focussed motivational profile was consistently associated with a reliance on the media for dieting information. Moreover, when this question was considered in the context of future diet choice, the media was the predominant sociocultural group associated with the intended use of various diet methods: Meal Replacement, Pre-Prepared Meal, Supplement, Meal Plan & High Protein/Low Carb diet methods. So in contrast to the
scepticism displayed by non-current dieters in general, those women likely to start the 
abovementioned diet methods in the near future do place their trust in the media for 
dieting advice. Health professionals were not relevant to the initiation of structured diet 
regimes. This is a worrying trend because the media is an unregulated industry in terms 
of the advice they provide, whereas health professionals are required to uphold a 
standard set by their professional registration bodies.

Interestingly, the perception of how important health professionals are as a 
source of dieting information was not associated with the perception of the media as an 
information source. In other words, those women who highly value a health 
professional’s advice do not necessarily mistrust the media and vice versa. Related to 
this point, a potential difficulty of the current research is that the media does provide 
some of its dieting information from “experts” in the field, such as columns written by 
nutritionists or celebrities with a background in the fitness industry. In the questionnaire, 
these segments of dieting information proffered by the media were not differentiated 
from the other pieces of information with less scientific backing (primarily the personal 
anecdotes provided by celebrities). As such, there was not an absolute delineation 
between the health professional group and the media. In future research, a more detailed 
depiction of the sociocultural groups and/or eliciting precisely what information dieters 
consume from the media would circumvent this issue.

4.4.4 Bias in diet decision making. The final section of Study 3 continued the 
investigation of how prospective dieters gather information to inform their diet choice. It 
asked what information prospective dieters are interested in learning about a diet 
method. The information was split into a simple dichotomy of hypothetical information 
regarding the effectiveness of the diet versus any unwanted consequences from being on
the diet. The chief concern was a pattern of bias towards rejecting unfavourable information about diet methods: obviously, this is problematic because risks to physical and psychological health do not weigh in on the decision-making process in this scenario.

It was found that, overall, there is a scepticism regarding diet methods. For the entire sample across all diet methods, non-current dieters showed a larger investment in seeking out information regarding the side-effects and negative aspects of diet methods, as compared to finding out about diet effectiveness. This is consistent with the general trend found by cognitive psychologists that bad outcomes are more salient and more compelling than good ones (Baumeister et al., 2001). However, once the results were placed in the context of diet initiation, those individuals who actually intended to start a particular diet method were only concerned with the diet’s effectiveness: an overwhelming bias of avoiding information that would not support their decision to start the diet. This pattern of results occurred regardless of which diet method the prospective dieter wished to partake in. On the whole, prospective dieters are poor consumers of diet information and these results are consistent with motivated reasoning – biased decision making so that an individual arrives at their desired conclusion (Kunda, 1990) – in yet another context.

Curiously, the self-justifying bias in researching a diet method was observed despite the straightforward study design. This research simply asked whether these women wanted to find out more about a diet method’s effectiveness and possible unwanted consequences: a question of what they would be willing to research about a diet method. It was merely two questions attached to Likert scales: they did not have to receive the information or digest it. This is a far less intricate and less covert design than
that used to investigate motivated reasoning in other contexts, in which participants have been required to read falsified medical research that challenges their existing behavioural habits (Kunda, 1987) or in which they have received failure feedback on intelligence tests which threatens their self-concept (Wyer & Frey, 1983). With high face validity in this study, it might be expected that social desirability would have impacted participants’ responses. Answering in a socially desirable way would dictate that people show concern and interest in diet side effects. After all, a rational human being would not want to cause themselves harm or experience negative consequences if preventable. However, the results are in stark contrast to this: the prospective users of a diet method did not even want to examine the cons of the diet in order to discount or refute their validity, which has often been the case in other research contexts (Kunda, 1990). It has been argued that motivated reasoning is an unconscious process; that an “illusion of objectivity” is maintained even to the individual victim to this processing bias (Kunda, 1990), and this idea has been supported by neuro-imaging techniques (Westen, Blagov, Harenski, Kilts, & Hamann, 2006). The results here seem to suggest a more conscious effort by weight-loss dieters to avoid contradictory evidence to their desired behaviour.

Research on motivated reasoning specific to consumer behaviour found that those consumers, with a low level of confidence in achieving an important life goal, were most susceptible to this bias when evaluating a product that purported to assist them in achieving this goal (de Mello et al., 2007). By holding a favourable view of a goal-attaining product, this provides the consumer with hope that their goal is indeed possible (de Mello et al., 2007); or parallel to that seen in this research, by avoiding unfavourable product information the consumer can avoid losing hope of goal
attainment and the uncomfortable ramifications that ensue when a goal is deemed improbable. To extend this research, it would be interesting to differentiate high versus low confidence dieters and ascertain their decision-making and behaviour when initiating a diet. It is not too far-fetched to conceive that dieters with a high confidence in their ability to shed body weight are less reliant on structured diet methods provided by the commercial weight-loss industry and instead engage in the self-created diets as described in Section 3.3.6 of Study 2. Further research could test this proposition.

Whether a conscious or unconscious process, the important point is that prospective dieters are avoiding information that does not encourage the use of the diet method they are intending to use. This is another demonstration of how compelling the reasons for weight-loss dieting are and shows the difficulty in providing effective health messages and interventions when diet consumers are already mentally committed to a particular course of dieting behaviour.

4.4.5 Conclusions. Study 3 continued the examination of diet decision making, this time investigating diet initiation by a group of non-dieting women with a history of dieting. Consistent with the previous study, a thinness-focussed motivational profile was found that included a desire for quick weight-loss results, and devaluation of achieving permanent weight loss and of acquiring knowledge as part of the dieting process. The thinness-focussed motivational profile tends to rely on the media for their dieting advice and information. When considering the decision to diet in the next 12 months, prospective dieters are only focussed on the goals of their weight-loss pursuits and do not differentiate between different diet methods. Applying temporal construal theory, this is because the decision (as measured here) is temporally distal. Once dieting becomes a more certain prospect in the near future, the attributes that differentiate
between diet methods and make them personally feasible should become a more primary concern for the prospective dieter.

Whilst it has been assumed that biased decision making occurs in the uptake of commercial diet products (de Mello et al., 2007), this research is the first, to our knowledge, to actually test this proposition. Indeed, prospective dieters who intend to start a particular diet method engage in motivated reasoning whereby they disregard unfavourable information about the method. This is despite a general attitude of scepticism towards diets amongst most non-current dieters.
General Discussion

5.1 Overview

The central aim of this research was to investigate decision-making in relation to weight-loss dieting among women who are current dieters versus prospective dieters. The inclusion of dieters and non-dieters permitted differentiation of the factors relevant to diet maintenance as well as those relevant to diet initiation. The focus on dieting was motivated by its high prevalence and its complex and important relationships with physical and mental health. These relationships include positive associations between weight loss and the prevention or treatment of overweight and obesity along with a host of other associated illness (NICE, 2006); as well as negative associations between body dissatisfaction, psychological distress (Amigo & Fernández, 2007; McFarlane et al., 1999), weight cycling (Friedman et al., 1998) and disordered eating (Stice, 2002). The focus on women and women’s behaviour was because societal pressures to be thin are disproportionately targeted at and felt by females (Conner et al., 2004) and in part, as a consequence of this, dieting is more prevalent amongst women relative to men (Hay, 1998).

There is a plethora of diet products available on the market which vary in their risk to physical and mental health, yet little is known about the reasons why dieters select one method over the multitude of other options. The research conducted into these issues was informed by the theory of reasoned action, which places emphasis on the personal importance of perceived outcome(s) from the behaviour under examination. Preference for diet outcomes was differentially associated with motives for dieting; specifically, health-focussed versus thinness-focussed ‘motivational profiles’ were
investigated for their relevance to choice of diet method. In the following sections the implications of each of these factors are examined in the context of this aim and in light of these results of the research.

The research reported in this thesis was conducted in three parts. Firstly, preliminary work was undertaken to address the absence of assessment tools in the literature that measure the factors relevant to diet choice. Most importantly, a way to measure various diet methods has not been published since prior research has largely focussed on dieting as a unified behaviour of energy restriction or alternatively, cognitive effort referred to as ‘restraint’. Perhaps the number, diversity and complexity of weight-loss tactics and products available to dieters explains, in part, why previous research has focussed on weight loss as a general behavioural motivator and dieting as a generic behaviour. However, according to the theory of reasoned action the operationalisation of dieting behaviour for research purposes is an important issue because in order to explain an individual’s behaviour, an understanding of their beliefs about the expected outcome of a particular action in conjunction with the importance they place on that outcome is required. In the context of dieting, this assumes that the individual possesses expectations relating some characteristic of a diet to some specific outcome. Therefore, in addition to the typology of diet methods and in accordance with the theory of reasoned action framework, a set of potential and relevant outcomes from dieting were required, as well as relevant sociocultural influences to diet choice. From interviews with health professionals and laypeople, and a systematic survey of the marketing information associated with diet products, Study 1 extracted a typology of diet methods, a typology of outcomes from dieting and one pertaining to sociocultural influences.
In the second study, the maintenance of diet methods by current dieters was examined, with a focus on weight-loss motives and the psychological correlates to particular styles of dieting. To date, research has largely been conducted from two broad perspectives (Neumark-Sztainer, 2005; Putterman & Linden, 2004): the medical investigation into weight loss for the obese and overweight which condones weight-loss dieting, including rigid meal replacement programs; and, the psychosocial research of body image which tends to blame dieting, particularly rigid regimes that prescribe the cognitive control of hunger and eating, as a cause of psychological distress and a precursor to eating pathology. These contradictory messages coexist in the public health space and whilst both camps have a valid argument, it is too simplistic to claim that all diets are ‘good’ or ‘bad’. Indeed, previous research has shown the importance of weight-loss motives to the physical and mental health ramifications of dieting (Putterman & Linden, 2004). In the only study to investigate this issue, appearance-driven dieting was found to be associated with harmful outcomes and health-driven dieting led to more beneficial dietary changes, using three broad categories of “diet strategies”; and called for research to further distinguish harm versus beneficence amongst types of diets as well as the types of dieters (Putterman & Linden, 2004). As such, Study 2 investigated how diet motives differentiate the approach dieters take towards weight loss; whether these motives influence diet choice, and; how the maintenance of various diet methods are related to eating disorder symptomatology.

Study 3 investigated the preferred diet methods, diet motives and relative importance of dieting outcomes in non-dieters. By investigating prospective dieting, Study 3 was designed to identify the characteristics of diets that attract prospective dieters, and differentiate these characteristics according to the prospective dieter’s
motivations for dieting. This extended the relevance of this research from factors relevant to diet and weight maintenance to factors relevant to diet selection and initiation. It was an important inclusion because the existence and success of particular diet methods depends primarily on being selected by dieters, and secondarily by their continued use by dieters. It was also important to consider the motivations underlying diet intentions and future diet choices because unhealthy dieting (both mentally and physically) is often characterised not by long-term commitment but by short-lived attempts at radical dietary changes: the promises and expectations that lead a prospective dieter to embark on a particular diet method may not be captured by examining retrospective decisions and the concrete behaviour of current dieters, and/or may be tainted by the discomfort the diet is causing. Additionally, Study 3 examined how prospective dieters gather evidence in order to inform their dieting decisions, from the source of information to the content of evidence. Prior research has suspected that biased decision-making occurs when selecting and purchasing diet products (de Mello et al., 2007) and this research sought to test this idea.

The results of these three studies were examined with the aim of better understanding real-world diet behaviour and diet consumers’ selection between diet methods. By clarifying which diet methods are motivated by a concern with appearance and associated with unhealthy body-change behaviours versus those that are motivated by a concern with health and lead to sustainable, helpful dietary change, this research intended to build a more comprehensive understanding of the implications of weight-loss dieting to both mental and physical health.
5.2 Weight-Loss Motives

The motivations for weight loss most commonly reported by dieters are a concern with health and a concern with appearance (Clarke, 2002; O’Brien et al., 2007; Putterman & Linden, 2004; Reas et al., 2004). Women’s concern over their weight and shape was certainly a predominant feature in the current research. Approximately half of the weight-loss dieters were already within, or even below, the healthy weight range. Typically, these women idealised a body slightly lighter than their current weight and this trend was also evident in the non-current dieters within the normal BMI range, attesting to the sociocultural pressure felt by women of a healthy weight to become overly slender. Indeed, the clear majority of normal and underweight women reported some level of dissatisfaction with their weight and/or shape, with the dieters showing a relatively high level of distress over their appearance. Not surprisingly, body dissatisfaction was also relevant to the overweight and obese, particularly those who were dieting. In 1985, Rodin, Silberstein, and Striegel-Moore coined the phrase “normative discontent” to describe how pervasive body dissatisfaction is for women in the Western world. Almost two decades on, the results here are consistent with this description amongst dieting and non-dieting women alike.

Only a few exceptions to “normative discontent” in relation to body weight were encountered: 4.9% of the non-current dieters reported being at their ideal weight (in which 6 out of these 9 women were overweight or obese) presumably because they are content with their appearance and have embraced the ‘love your body’ philosophy advocated by those concerned with poor body image. While this suggests excellent mental health in terms of these women’s body image, it is likely that many health
professionals would remain concerned for the overweight and obese women’s physical health and argue that these women cannot be at their ideal weight considering the physical sequelae to excess body weight. This is a prime example of the conundrum of weight-loss dieting: for optimal physical and mental health, the answer is not as simple as ‘start dieting’ or ‘stop dieting’. Instead, the public health message needs to encapsulate a focus on improving morbidity and markers of poor health with improvements to nutrition (and/or activity levels) which may result in a decrease in body weight for the overweight and obese, while at the same time promoting a greater acceptance of bodies at all shapes and sizes, including a greater focus on the function of the body rather than purely on appearance (Neumark-Sztainer, 2005). This is a complex message to convey and contradictory to Western culture that is fixated upon the appearance of women (Fredrickson & Roberts, 1997) and so strongly idealises a thin physique (Brownell, 1991; Myers & Biocca, 1992).

As for the other main motivator of weight loss – health – there was some indication that health was important in the context of weight-loss dieting. It was apparent that the BMI categories for healthy body weight are a salient idea for the obese: in general, there was a ceiling effect for reported ideal weight at the point at which BMI changes from being categorised as obese to categorised as overweight. Health was also an important factor in prospective dieters’ intention to commence a weight-loss diet; however, it is important to note that their concern with health was also associated with a preoccupation with becoming thinner. All in all, given the widespread dissatisfaction with weight and shape, it was difficult to establish if any of the women were dieting, or desired future dieting, purely because of a concern with health. Worryingly, dieters rated health as the least important outcome from dieting on average. It seems that for weight-
loss dieting, a concern with health is entwined with a concern over appearance. Indeed, past quantitative research has reported on the multidimensional nature of weight-loss motives (Brink & Ferguson, 1998; O’Brien et al., 2007; Vartanian et al., 2012) and qualitative research has provided insight into the difficulty of separating out diet motives: interviews with older women revealed the underlying notion that it is more socially acceptable to report striving for weight loss because of health reasons rather than admit to being ‘vain’ despite appearance being the key weight-loss motivator (Clarke, 2002). This is likely a valid idea for younger women too.

5.3 Motivational Profiles

Prior research has broadly connected appearance-motivated dieting with more potentially harmful dieting strategies, such as excluding food groups and using diuretics, and with disinhibited eating; as compared to health-motivated dieting (Putterman & Linden, 2004). The current research took a closer look at relationships between motivation and diet choice by examining the decision-making process of selecting between diet methods. In accordance with the theory of reasoned action, the outcomes from dieting that are differentially important to dieters (i.e. ‘outcome evaluations’ in theory of reasoned action parlance) were investigated for their association with the two predominant diet motives, health and appearance. Across both current dieters and non-current dieters, a concern with appearance – specifically a preoccupation with thinness – was associated with a desire for quick weight loss, and a devaluation of permanent weight loss and of learning about how a diet method produces its weight loss. In short, those preoccupied with becoming thinner tended to want weight-loss results immediately and were less likely to care about how the weight loss is achieved or how
long it lasts: this embodies the desperation that some dieters experience in their quest for weight loss. As expected and consistent with prior research (e.g., O’Brien et al., 2007; Puttermann & Linden, 2004; Reas et al., 2004; Vartanian et al., 2012), this thinness-focussed motivational profile was associated with problematic psychosocial factors: a high internalisation of sociocultural pressure to be thin, making excessive body comparisons with others, and poor body image.

The thinness-focussed motivational profile has implications for clinical practice. Any dieter who is already at a normal weight or underweight yet preoccupied with becoming thinner may suffer from disturbed body image, and this profile reveals that they also intend to engage in riskier diet behaviours. Importantly, the thinness-focussed motivational profile is relevant to the overweight and obese as well. For weight-loss treatment in the overweight and obese, it is considered best-practice to advocate slow weight loss at a rate of 0.5 to 1 kilograms per week at a maximum (NICE, 2006). Recent medical research into obesity treatment has challenged this notion, arguing that this “slow and steady” message is not based on any evidence and that preliminary results comparing slow versus rapid weight loss show improved treatment adherence and short-term weight-loss maintenance by dieters who lose weight rapidly (Purcell, 2010; Purcell et al., 2010). However, the current thesis highlights the potential dangers of encouraging quick weight loss from a psychosocial perspective. It cannot be claimed from these results that promoting rapid weight loss will cause a preoccupation with thinness, a thinness-focussed motivational profile or poor psychosocial outcomes; rather these results serve as a warning that clients with a strong desire for quick weight loss may have a host of problematic dieting and body-related cognitions, including the devaluation of permanent weight loss and as such, the desire for quick weight loss
should not be blindly encouraged. Clearly more research into the physical and psychological correlates and consequences of rapid weight loss is required.

In contrast to the thinness-focussed motivational profile, a profile depicting those motivated to lose weight because of a concern with their health was not discernible. As discussed in the previous section (5.2), on examination of the basic characteristics of these women (i.e., their ideal weight and extent of satisfaction with the aesthetic aspects of their body), it was difficult to establish if any of the dieters were solely focussed on their health. Women not carrying excess weight still idealised a slimmer physique, and there was a notable level of dissatisfaction with weight and shape, particularly amongst the women who were currently dieting. Previous research has noted the multidimensional nature of weight-loss motives (Brink & Ferguson, 1998; Clarke, 2002; O’Brien et al., 2007; Vartanian et al., 2012) and it seems here that health motives are too entwined with cosmetic concerns in order for this research to gauge how a concern with health impacts diet decision making. To examine this issue further, future research could specifically target dieting groups with salient health concerns, such as those making dietary changes to manage type II diabetes. Within such populations, a concern with health is likely to be a more prominent motivator for dietary change and could better highlight how health concerns impact dieting decisions and behaviour.

Together, the thinness-focussed motivational profile and the multidimensional nature of weight-loss motives have further implications for the medical intervention of excess weight. Health professionals typically focus overweight or obese individuals on the health repercussions of their excessive weight and potential weight loss (NICE, 2006). However, ensuring that dieters understand the physical ramifications of excess
weight is seemingly not enough. An assessment of how obsessed or preoccupied the individual is with their appearance is also warranted. Putterman & Linden (2004) described the drive for a skinnier physique as the “toxic factor” in dieting, not dietary change per se. In concordance with this, the thinness-focussed motivational profile reveals a set of dieting values at cross-purposes with the aims of health professionals: thinness-focussed dieters want a ‘quick-fix’, whereas health professionals have a long-term vision of weight loss with educational elements. If health professionals are aware of the appearance-related concerns of their clients, they will be better placed to address problematic conceptions of body, weight-loss and dieting. It seems, in addition to the major aspects of obesity treatment such as behavioural modification to diet and activity patterns, an important element of a weight-loss intervention should be the assessment and reduction of a client’s preoccupation with appearance, if required. While the elimination of all cosmetic concerns may be fanciful, with a more moderate focus on appearance a dieter should be in a better position to make more helpful changes to dietary habits. Consistent with this line of reasoning, the ‘health at every size’ or ‘non-dieting’ movement (described in Section 1.2.1 of the Introductory Chapter) includes body acceptance as a specific target of intervention. Encouragingly, a recent review of six randomised controlled trials using a non-dieting philosophy reported improvements in body image and self-esteem, alongside the measures of metabolic health that these researchers and practitioners say should be the focus of change rather than BMI or body weight (Bacon & Aphramor, 2011). Whether a ‘dieting’ or ‘non-dieting’ approach is taken, the results herein suggest that a reduction in appearance concerns should be a specific target of assessment and intervention in all dieters, not just those who are already at or below a normal BMI (Neumark-Sztainer, 2005). The NICE guidelines on
the assessment and treatment of obesity, which are a main reference point for best-practice health care in the United Kingdom, make vague reference to assessing ‘psychological problems’ and suggest further reading on guidelines regarding eating disorders particularly if the client asking about weight loss is not overweight (NICE, 2006). However, it is argued that best-practice recommendations should include a more explicit assessment of appearance concerns, for it is time that health professionals began working in a more holistic way (Neumark-Sztainer, 2005).

5.4 A Typology of Diet Methods.

In order to conduct research on diet choice, this thesis developed a typology of diet methods which, to our knowledge, is the first of its kind. Eight broad categories of diet methods were extracted by applying conventional qualitative content analysis (Hsieh & Shannon, 2005) to data from the commercial market of diet products and interviews with health professionals and laypeople. The typology of diet methods was found to adequately capture dieting behaviour. As intended, the diet methods showed minimal association with each other when dieters reported their use of weight-loss diets in the past 12 months. The Calorie Counting method was found to be the most popular, with over half of dieters having recently used it, and Pre-prepared Meal diets were the least popular, with approximately 15% of the sample reporting recent experience with this method.

Of course, more formal validity and reliability analyses could be undertaken and the diet method typology’s relevance beyond adult females with a history of dieting needs elucidation. One issue raised by the data was that the typology did not include unstructured ‘health kicks’ undertaken by some dieters using their existing nutritional
knowledge (e.g., “I didn’t use an actual diet product I just tried to eat healthier – [I] cut back on [my] consumption of junk food and increased [my] fruit and vegetable intake”). The inclusion of these health kicks into the diet method typology is not as straightforward as the inclusion of a ‘health kick’ category, for these strategies varied markedly in themselves which is hardly surprising given they are based on an individual’s unique ideas and knowledge about healthy eating. For instance, one dieter included animal products in their conception of what are unhealthy foods, a definition that will not be held by all dieters. It is likely that ‘health kick’ diets need a typology of their own in order to adequately measure their use and consequences.

5.5 Diet Choice

The selection of a diet method is an important focal point of research because methods vary widely in their implications for physical health (Katz, 2003; Shikany et al., 2007), and this thesis demonstrates that they also vary in their associations with psychological health. The precise link between dieting and eating pathology has so far been unclear (Stice, 2002). The present research showed a differential relationship between eating disorder symptomatology, the thinness-focussed motivational profile and the maintenance of various diet methods by current dieters. Five diet methods – Calorie Counting, Special Food, High Protein/Low Carb, Supplement and Meal Plan – were revealed as more risky regimes. Firstly, the thinness-focussed motivational profile (along with a low concern over a diet being easy or integrated into one’s lifestyle) was associated with the maintenance of these diet methods. Furthermore, all of these methods, except Meal Plan diets, were linked with eating disorder symptomatology. The
Calorie Counting diet method was the most predictive of dietary restraint and eating concern, the eating disorder symptomatology measured here.

In addition to the thinness-focussed motivational profile, another set of diet values were revealed as important to the maintenance of some diet methods by current dieters. This set of values described dieters who are concerned with appearance, but more moderate in their pursuit of weight loss, characterised by a preference for long-term, smaller, more natural and cost-effective changes, that cause minimal interference to current lifestyle. This profile was associated with the maintenance of Low GI and Calorie Counting diet methods and a reduced tendency towards the use of Meal Plan and Supplement diets. Compared to the thinness-focussed motivational profile, this describes a healthier dieter – more focussed on the long-term and more pragmatic in their approach to dietary change. Overall, Low GI diets were the only method to show some promise of positive health effects: they were also the only diet method to be associated with a health motive for weight loss (in bivariate correlations).

On the whole, this thesis has little positive to say about structured diet methods, apart from the abovementioned support of the Low GI diet method. Importantly, these results have implications for public health policy, particularly since the recent bid to the Australian Government by the Weight Management Council that large-scale diet products should be publicly funded, such as Weight Watchers and Jenny Craig. While obviously not definitive, these results point to potential risks inherent to some diet methods and suggest further research is warranted before spending public money on diet products that may be detrimental to mental health.
Unfortunately, these results could not be confirmed with the data concerning diet intention by prospective dieters. All that could be ascertained was that prospective dieters concerned over their appearance and health, and seeking permanent weight loss were more likely to start a weight-loss diet of any kind, as compared to the other non-current dieters. These common-sense results simply show that the goals of dieting are compelling. Perhaps the reason these results do not clarify choice of diet method for prospective dieters relates to the timeframe used in the study. Specifically, participants were asked to report on their intention to diet within the next 12 months. This timeframe was intentionally broad so as to include the outcome of as wide a range of decision-making processes as possible. However, by doing so participants’ responses may have been unduly affected by processes that are not relevant to decision making that leads to overt diet behaviours. For example, according to temporal construal theory, when considering an action in the distant-future, it is the goals or desirability of the behaviour that will be most salient (Liberman & Trope, 1998). In the context of dieting, prospective dieters know that they desire weight loss but thinking that far in advance about the specific type of diet may be too hypothetical a scenario to introspect in a realistic and meaningful way about diet choice. It is suggested that future research consider surveying prospective dieters over shorter timeframes; timeframes consistent with common weight-loss goals that are promoted in diet marketing (e.g., “look good for summer”). Then temporal construal theory predicts that the feasibility of the behaviour will become more of a consideration in addition to the desirability aspects (Liberman & Trope, 1998). Consider that it is predominantly the feasibility aspects that differentiate between diets because all diets promise alluring weight-loss results. If a shorter
timeframe of diet initiation was investigated it is expected that diet values and beliefs would better distinguish preference between diet methods.

5.6 How Information is Sought in Dieting Decisions

In addition to examining how prospective dieters use their existing knowledge to make decisions about dieting, this thesis also investigated how prospective dieters gather evidence about diet methods during the decision-making process. This was done in two ways: by investigating the sociocultural source of information that prospective dieters’ value the most and by examining the content of information sought. Overall, non-current dieters were found to be rational consumers of diet information. Firstly, they acknowledged health professionals as the most trustworthy source of diet advice whilst devaluing the media. It is argued that health professionals are the superior source of information on dieting, as compared to peer groups and the media, because of their standardised scientific training on the topic of nutrition and physical health more generally; they have the ability to provide individually-tailored advice as compared to the generic message disseminated by the media, and; because the use of the popular media for dieting advice has been found predictive of unhealthy weight-control behaviour (van den Berg et al., 2007). Secondly, non-current dieters were primarily interested in finding out about any unwanted consequences associated with a diet method instead of merely gathering evidence regarding the method’s effectiveness at weight loss, demonstrating an appropriate level of caution when evaluating diet methods. Overall, non-dieters present as sceptical of diets, particularly those not supported by health professionals.
However, once these questions were operationalised in more concrete, overt terms; that is, in terms of the likelihood of actually commencing a particular diet, the abovementioned trends were reversed. With regards to the source of diet information, the media became the most influential sociocultural group for dieting advice, particularly for the thinness-focussed motivational profile. Health professionals’ advice was not relevant to the initiation of structured diet regimes. Furthermore, it was demonstrated that prospective dieters with intentions to start a particular diet method engaged in a self-serving bias: when collecting evidence about the diet method, they disregarded information that would not support their desire to start the diet. That is, the information pertaining to the unfavourable aspects of the diet method – such as the side effects, inconvenience and excessive cost – were much less important to these women than the effectiveness information. This bias is consistent with motivated reasoning (see Kunda, 1990 for a review): prospective dieters with an interest in trying diet method X are motivated to arrive at the conclusion that they ought to try diet method X and so their attention to the evidence for and against the diet method is biased and they disregard the potential unwanted consequences of the diet.

This is a worrying trend and has important implications for the dissemination of information about diets. These results suggest that the complete disclosure of information about a diet product is not sufficient to ensure consumers will make objective choices that are optimal for their physical and mental health. Warnings about potential side effects, even if made more accessible to the general public by diet companies being compelled to disclose this information in plain language and larger print et cetera (McCann, 2005), are unlikely to have the intended effect if consumers are motivated to avoid such negative information about the product they wish to try. These
findings support the argument by the Dietetics Association of Australia that the weight-loss industry needs tighter regulation with regards to the effectiveness and potential harm of diet products beyond existing regulation that simply guarantees that the product is non-toxic (Rose, 2010). If more stringent regulation was to occur, riskier products would not be available for consumers to purchase removing their ability to make erroneous decisions.

One issue unanswered by this research is the extent to which diet methods provide consumers with a sense of hope about their goal of weight loss. Previous research on motivated reasoning by consumers found that bias in the evaluation of products was evoked when confidence in attaining a goal was threatened and products could be purchased in service of these goals. As such, by having a favourable view of the product, hope could be restored that the goal was indeed achievable. This makes intuitive sense within the dieting context: it is those dieters with a low confidence in their ability to achieve weight loss by making dietary changes on their own, who turn to specific diet methods which provide them with rules and structures to follow; and these products or programs, in turn, gives the low-confidence dieter hope that weight loss is achievable. However, the theoretical suggestion that motivated reasoning induces hopefulness, decreases uncomfortable emotions such as anxiety and provides the sense of control over goal accomplishment has not yet been examined.

5.7 Limitations

Before concluding it is worth considering the limitations of the research. Given the importance of replication in the scientific method, these limitations are acknowledged so that future research may address these issues. Firstly, it should be
acknowledged that measuring the use of eight diet methods is still a simplification of the multidimensional behaviour of weight-loss dieting. The diet method typology, while it more closely resembles dieting behaviour than that used in typical diet research, it still remains a proxy measure for what dieters actually do to lose weight. In particular, future research should attempt the measurement of the ‘health kicks’ reported by some women, that are not necessarily conceptualised as a ‘weight-loss diet’ or ‘diet method’ but are changes to eating habits in the pursuit of weight loss nonetheless. Moreover, the addition of vegetarianism or veganism for health reasons is required. An inclusion of these dietary changes when measuring diet methods would better mimic diet behaviour in the real world. Furthermore, beyond the qualitative analysis undertaken in the present thesis, future research could also consider diet method typologies based on consumer perceptions, rather than one based solely on diet characteristics. For example, multidimensional scaling could be used to ascertain the number of dimensions along which diets are discriminated. Salient dimensions identified through this could provide insights into diet method decision-making that is broader and more psychologically relevant than the diet method typology developed in the present thesis. Salient dimensions might include orthodox versus unorthodox; fashionable versus outmoded, and/or; familiar versus uncommon.

A second limitation is that the construct ‘health professionals’ was not adequately operationalised. The questionnaire items only provided respondents with the examples of “doctors, nutritionists and dietitians” rather than explicitly stating that these were the only professionals they should consider. Whereas, many diet products and programs have consultants with minimal training in the area (Rose, 2010), as compared to the abovementioned health professionals who have undergone university level studies.
Participants may have included consultants employed by weight-loss companies, and the like, in their conception of who a health professional is. Furthermore, health professionals sometimes provide advice in a range of formats, including columns in popular media sources such as magazines. This makes for a blurring of the lines between what is health professional advice and what is information supplied by the media. Overall, this research did not sufficiently define and delineate health professionals.

A third weakness of the present thesis is that the measurement of a thinness and health motive for weight loss was based on one questionnaire item each. While there is a shortage of scales available that measure dieting reasons, the previous similar study by Putterman and Linden (2004) constructed a four-item measure that assesses reasons for dieting and also the locus of motivation for dietary change. While the intrinsic/extrinsic distinction has already been examined by Putterman & Linden’s study, this dimension of weight-loss motivation could have been included for a more comprehensive understanding of women’s diet choice.

A fourth issue stems from how the participants were recruited. These were self-selected participants and it is likely that people with a particular interest in weight loss and dieting felt more compelled to participate. Perhaps people with issues around weight, eating, and weight loss were more likely to participate, which threatens how representative the sample is of the greater population. Also, the survey was made available over the internet making participation on an international scale easier and more likely. While the clear majority of participants resided within the same geographical area (Victoria, Australia) this does not negate the potential for cultural and/or ethnic differences to impact on diet decision-making. More information about the participants’
ethnicity was required in order to better understand which populations these results might generalise. Investigating cultural differences is a possibility for future research.

Another potential avenue for future research is to consider male weight- and shape-change behaviours. As this research was innovative and because dieting for weight loss is predominantly attempted by females (Hay, 1998), the current thesis restricted its focus to adult women. Furthermore, women with some personal experience of dieting behaviour (past or present) were targeted to ensure that they possessed some existing knowledge, beliefs and values about the outcomes of dieting, and could reasonably be considered prospective dieters. As such, the results are limited in their interpretation to this population. With further research, the extension of these empirical questions to males, women without a history of dieting, and adolescent populations is warranted.

There is certainly increasing pressure on men in Western society to be lean, muscular and athletic (Blond, 2008; McCabe & Ricciardelli, 2004), and this is a particularly important area of research into body-change behaviour, including increasing the scope of body-change strategies investigated to comprise of muscle-mass building products and methods.

A fifth limitation is that it cannot be definitively concluded that health professionals are unimportant to diet choice; and likewise, that negative aspects of a diet are unimportant in the selection between diet methods, as discussed in Study 3. What the results of Study 3 do show is that these factors do not differentiate among individuals who select different diet methods.

Perhaps most importantly, this thesis is limited by its design as a cross-sectional, self-report questionnaire about decision-making. Firstly, there is a lack of control
inherent in the research of decision-making. That is, participants cannot be randomly allocated to diet method groups so that the physical and psychological sequelae can be examined (akin to treatment and control groups) because, quite simply, it is the participant’s choice of diet method that is under investigation. It is a more naturalistic phenomenon being studied, that cannot be investigated by randomised-controlled trials, and thus, causal relationships cannot be inferred from these correlation-based analyses.

Secondly, like much psychological research, these studies were conducted with a cross-sectional design leaving the relationships between dieting cognitions, diet methods and eating disorder symptomatology primarily descriptive in nature. Future longitudinal research would help reveal the directionality of relationships and causal effects. The cross-sectional design and correlational analyses do not negate the results, but rather should be borne in mind when interpreting the findings: the presence or direction of causal relationships between the variables cannot be inferred.

Finally, these results rely on data extracted from self-report questionnaires. While the current research program provided interesting preliminary results about dieting behaviour, diet choice and how dieters use knowledge to inform their dieting decisions, there is much scope to expand this research area. In particular, a more experimental style of research should improve our understanding of diet decision making if the actual behaviour of choosing a diet was observed rather than a questionnaire research design. Questionnaires are used extensively in psychological research particularly to obtain a measure of constructs which cannot be outwardly observed (Gravetter & Forzano, 2003), like the outcome evaluations, beliefs and

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8 Obviously, future research could include an investigation of exercise habits in conjunction with weight-loss motives and diet choice.
behavioural intentions within the theory of reasoned action. The other main advantage of questionnaire research designs is their resource efficiency when gathering large amounts of data (Gravetter & Forzano, 2003). A questionnaire was useful for this preliminary research using the theory of reasoned action, to ascertain the salient beliefs and influential sociocultural groups in diet method decisions. Questionnaires are, however, limited in very important ways within the context of the proposed research. Questionnaires assume accuracy, honesty (no social desirability), and the ability of participants to introspect and respond meaningfully and realistically. Further, questionnaires impel their respondents to engage in a particular style of reasoning or cognitive processing, provoked by their set of standard questions, rather than provide the space for spontaneous thinking (Gold, 2007). This is not only unrealistic; it is also unnatural and thus can be of questionable ecological validity. Indeed, social psychological frameworks, as measured via questionnaires, explain relatively modest amounts of the variance in health behaviours (Bogart & Delahanty, 2004). Ultimately, an investigational approach is required that allows unambiguous and preferably causal inferences to be made; one that taps a prospective dieter’s cognitive processing based on what is personally salient to them in the ‘here and now’.

There are many examples of cleverly designed research that are ecologically valid (e.g., Liberman & Trope, 1998; de Mello et al., 2007). Within the context of diet choice, the internet is a key marketing tool for weight-loss companies, suggesting that dieters use this communication medium as a primary means for researching and selecting diet programs. Indeed, a recent search (in February 2013) of the internet, using the search engine Google and the search term ‘diet’, returned approximately 118 million links to diet-related websites, including numerous marketing links to diet company
websites where individuals can purchase diet products or programs, or even partake in a program delivered wholly online. It follows that a simulated weight-loss website offering the creation of an ‘individually tailored’ diet program by indicating one’s preferences, in which data corresponds to a participant’s web browsing behaviour rather than their self-reports, may provide researchers with valuable insights into the spontaneous cognitive processes underlying diet selection.

5.8 Conclusions and Recommendations for Future Research

Ample research exists on the sociocultural pressures on Western women to achieve a thinner body (e.g., Brownell, 1991; Miller & Pumariega, 2001; Myers & Biocca, 1992; Thompson et al., 1999). These pressures not only include influences from the media, family, and peers on women to adhere to a narrow and, for many women, unrealistically thin aesthetic ideal (Thompson et al., 1999), but also from the medical and health-promotion professions concerned with the health risks associated with increasing overweight and obesity in the West (Bacon & Aphramor, 2011; NHMRC, 2000; NICE, 2006). And research shows that women, including those who are not overweight or obese and who are not at an elevated risk of falling ill to a weight-related disease, will also be exposed to various prominent and convincing sources of information – from health messages to marketing information – to use dieting to achieve weight loss in the pursuit of an ideal appearance and/or optimised health (Andersen & DiDomenico, 1992; Malkin et al., 1999; van den Berg et al., 2007). Not surprisingly, previous research documents the prevalence of weight-loss dieting, particularly among women, as a common way of achieving weight loss (e.g., French et al., 1999; Jeffery et al., 1984), the factors that influence the achievement and maintenance of weight-loss
through dieting (e.g., Lejeune et al., 2003; Loveman et al., 2011; Rolland et al., 2009), and even the risks that dieting efforts will, for some women, serve as a precursor for unhealthy and disordered eating (see Stice, 2002 for a review). What has been lacking from this large body of research is the investigation into specific diet methods and the motives that drive dieting behaviour; including the links between diet motives and methods that vary in risk to physical and mental health.

The novel contribution of the present thesis was to investigate diet choice between popular diet methods amongst the general (and ample) female dieting population. Several main themes emerged. Firstly, it was found that a concern with appearance predominates over a concern with health as the motive for weight-loss dieting. Most women, including those within the normal or underweight BMI ranges, were dissatisfied with their weight and shape and idealised a slimmer physique. So even if poor physical health was a concern for these women, there was still an aesthetic element to their motivation for weight loss. Importantly, there was evidence of a thinness-focussed motivational profile in which those women preoccupied with becoming thinner approached dieting with a desire to lose weight as quickly as possible, at the expense of maintaining weight loss in the long term, and devalued education in nutrition. This profile was also associated with a reliance on the media for dieting advice.

Secondly, the results of the present thesis suggest that diet methods vary in their implications for mental health. The eight diet methods were differentially associated with the thinness-focussed motivational profile and eating disorder symptomatology with Calorie Counting, Supplement, High Protein/Low Carb, Special Food and Meal
Plan diet methods implicated as more problematic forms of dieting, as compared to Low GI, Meal Replacement and Pre-prepared Meal diet methods.

Finally, prospective dieters were found to be biased consumers of information about diets. While there was an underlying scepticism regarding the information that the media disseminates; in the context of initiating a diet method, the media became the most valuable sociocultural group. A similar trend was found when investigating how prospective dieters research a diet method. Overall, there was an underlying scepticism regarding the potential risk that diets pose and women were more focussed on finding out about the unwanted consequences associated with a diet method. However, those prospective dieters who intended to commence the diet method were dismissive of learning about any unwanted consequences, and instead focussed on the diet’s effectiveness, consistent with the self-serving information-processing bias, motivated reasoning.

Taken together, the results of the present thesis proffer implications for future research and clinical practice. In terms of future research, there was confirmation of the diet method typology and its potential usefulness in differentiating health outcomes of dieting. The diet methods were found to be differentially associated with eating disorder symptomatology and this supports the proposition that research should attempt a more accurate measurement of the cognitions and behaviours that dieters engage in when subscribing to popular diet regimes. The link between weight-loss dieting and eating disorders remains unclear (Stice, 2002), and the investigation of specific diet methods is a promising avenue of research that could highlight how dieting predisposes an individual to eating pathology. Similarly, diet motives are important to investigate as
they were found to impact diet decision-making and choice of diet method, with dieters who were more preoccupied with their appearance taking a riskier approach to dieting and showing a preference for certain diet methods over others. For clinical practice, these results suggest that it should become routine practice for health professionals to assess a dieter’s motives when consulting on weight loss. Finally, prospective dieters engage in a self-serving bias when researching a diet method, in that they will seek out information that supports their desire to commence the diet rather than make an objective evaluation of the evidence. This supports the argument that dieters need more protection from potentially harmful diet products, in that government bodies should take a stronger role in regulating the products available for purchase (Rose, 2010).

In summary, the present thesis attests to the complex and multidimensional nature of weight-loss dieting that is yet to be fully acknowledged by the medical/disease-prevention research into treatment for overweight and obesity or the psychosocial research into poor body image and disordered eating (Neumark-Sztainer, 2005). While the primary motive for dieting was to improve appearance, the present thesis suggests that dietary change for weight loss need not be psychologically problematic, as diet methods were found to vary in their implications for eating disorder symptomatology and association with a strong drive for thinness. Indeed, diet motives are likely to form the crux of the healthy/unhealthy dieting debate and further research is needed (Putterman & Linden, 2004). It is time for research to begin a more comprehensive examination of diet cognitions, motives and behaviours in order to build on the present results and reach a more accurate picture of weight-loss dieting beyond a simple dichotomisation of dieting as good or bad.
References


doi:10.2466/pms.2000.90.3.885


van den Berg, P., Thompson, J. K., Obremski-Brandon, K., & Coover, M. (2002). The tripartite influence model of body image and eating disturbance A covariance


Appendix A: Interview Schedules (Study 1)

**Interview Schedule for Dieters**

What is the most recent weight-loss diet you have been on?

1. Tell me about this diet.
2. What did you have to do in order to follow this diet?
3. What was your experience of the diet?
4. What did you find appealing about this diet?
5. What did you find unappealing about this diet?
6. What were the good things or positive aspects of this diet?
7. What were the bad things or negative aspects of this diet?
8. Tell me anything else you would like to add about your experience of this diet.

What is another recent weight-loss diet that you have been on?

*Follow with questions 1-8 from above*

**Interview Schedule for Health Professionals**

What are the most common weight-loss diets you come across in your work?

1. Tell me about this diet.
2. What do dieters need to do in order to follow this diet?
3. What are the positive aspects of this diet?
4. In what way does this diet appeal to its consumers?
5. What are the negative aspects of this diet?
6. What, if any, are the unappealing aspects of this diet to the consumer?

What have been some of the most bizarre or strangest diets that you have heard about?

*Follow with questions 1-5 from above*
Appendix B: Diet Methods (Study 2)

TYPES OF DIETS
We would like to know about your use of various diets in the past.
The following pages contain brief descriptions of 8 types of diet: calorie counting diets, pre-prepared meal diets, diet meal plans, meal replacement diets, high-protein diets, supplement diets, 'special food' diets, and low GI diets.
In the past you may have tried these types of diets on their own or in various combinations. The following questions ask you to consider each style of dieting. Please click on a number in the scales of 0 to 10 to indicate your answer.

Calorie counting diets
Think of diets that require you to count calories and limit the number of calories you consume each day. Calorie counting diets include:
- Weight Watchers (food is given ‘POINT’ values to represent how much energy they contain)
- Calorie King Australia (online diet and weight loss club)

Over the previous 12 months, how often were you on calorie counting diets?
never always
0 1 2 3 4 5 6 7 8 9 10
○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Pre-prepared meal diets
Think of diets that provide you with pre-prepared meals. Pre-prepared meal diets include:
- Lite n’ Easy
- Jenny Craig

Over the previous 12 months, how often were you on pre-prepared meal diets?
never always
0 1 2 3 4 5 6 7 8 9 10
○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Diet meal plans
Think of diets that provide you with a daily meal plan to follow. These diets don’t provide you with pre-prepared food, but they give you a very clear plan of what you should eat at each meal. Diet meal plans include:
- The CSIRO total wellbeing diet
- The Great Australian Diet (by Dr John Tickell)
- GutBusters

Over the previous 12 months, how often were you on diet meal plans?
never always
0 1 2 3 4 5 6 7 8 9 10
○ ○ ○ ○ ○ ○ ○ ○ ○ ○
**Meal replacement diets**
Think of diets that provide you with diet products (such as shakes, soups, mousse or bars) that replace most or all of your normal daily meals. Meal replacement diets include:
- The Tony Ferguson Weightloss Program
- Celebrity Slim
- OptiSlim
- UltraSlim

Over the previous 12 months, how often were you on meal replacement diets?

never       always

0 1 2 3 4 5 6 7 8 9 10

**High-protein diets**
Think of diets that encourage you to consume high-protein foods (meat, fish, eggs, etc.) at the expense of high-carbohydrates foods (grains, pastas, etc.). High-protein diets include:
- ‘The Atkins Diet’ from the book Dr Atkins’ New Diet Revolution
- The Ultra Lite weight loss and detox program
- The Zone Diet by Dr. Barry Sears

Over the previous 12 months, how often were you on high-protein diets?

never       always

0 1 2 3 4 5 6 7 8 9 10

**Supplement diets**
Think of diets in which drugs or chemical supplements are ADDED to your normal diet. These diets often involve taking pills, powders or liquids that claim to burn fat, enhance your metabolism, suppress your appetite, or cleanse/detoxify your body. These diets include:
- Blackmores Metabolism Advantage, Sugar Balance, and/or Weight-Loss Accelerate
- Xantrax tablets
- Naturopathica range: FatBlaster, FatBlaster MAX, FatMagnet and/or Metabolism Boost
- 4.3.2.1 Slim & Detox
- Slimeze (‘7 Day Hollywood Weight Loss Diet’ or ‘14 Day Weight Loss Program’)
- Elimitora Slim + Detox

Over the previous 12 months, how often were you on supplement diets?

never       always

0 1 2 3 4 5 6 7 8 9 10
‘Special food’ diets
Think of diets that ask you to eat special foods or drinks throughout the day. These foods or drinks either REPLACE normal meals or are to be consumed WITH every meal. ‘Special food’ diets include:
- the Cabbage Soup Diet
- the Apple Cider Vinegar Diet
- the Grapefruit Diet
- Wu-Yi Tea or Wu-Long Tea
- The Lemon Detox Diet

Over the previous 12 months, how often were you on ‘special food’ diets?
never always
0 1 2 3 4 5 6 7 8 9 10

Low GI diets
Think of diets that ask you to eat foods that have a low glycaemic index (the rate at which the food raises your blood sugar level). Low GI diets include:
- Ultimate EnerGI Health Club (an internet-based weight loss program with e-book)
- “The Low GI Diet: Lose Weight With Smart Carbs” - book by Prof. Jennie Brand-Miller, Kaye Foster-Powell, Joanna McMillan-Price

Over the previous 12 months, how often were you on low GI diets?
never always
0 1 2 3 4 5 6 7 8 9 10
### Appendix C: Diet Outcome Evaluations (Study 2)

**YOUR BELIEFS ABOUT WEIGHT-LOSS**

The statements below refer to foods, products, and programs that claim to help you lose weight. Please read through each statement and indicate the extent to which you agree with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
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</thead>
<tbody>
<tr>
<td>I am preoccupied with the desire to be thinner</td>
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<tr>
<td>I worry about my health</td>
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<tr>
<td>I want to lose weight as quickly as possible</td>
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<tr>
<td>I am concerned about the possible side-effects due to eating unnatural supplements, meal replacements and diet pills</td>
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<tr>
<td>If a diet method requires too much effort I am unlikely to continue with it</td>
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<tr>
<td>I do not want a diet to interfere with the things in life I enjoy</td>
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<tr>
<td>I am very price conscious when choosing which diet or diet product to buy</td>
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<tr>
<td>Losing weight is more important to me than keeping the weight off</td>
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<tr>
<td>I am not concerned how a diet works, as long as it produces results</td>
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<td></td>
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</tr>
<tr>
<td>Making lifelong changes is more important to me than a quick fix</td>
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<td></td>
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</tbody>
</table>
Appendix D: Nutritional Knowledge (Study 2)

YOUR KNOWLEDGE OF HEALTHY EATING, EXERCISE AND WEIGHT-LOSS

The following 20 questions are on healthy eating. Please just answer as best as you can ‘off the top of your head’ without researching the correct answers. Click on the circle next to the best answer.

1. How many serves of vegetables do you need daily?
   ○ 1
   ○ 2
   ○ 3
   ○ 4
   ○ 5

2. Fruit is good for you because it contains?
   ○ Fibre
   ○ Carbohydrates
   ○ Vitamin C
   ○ Antioxidants
   ○ All of the above

3. For better nutrition choose foods low in:
   ○ Folate
   ○ Salt
   ○ Calcium
   ○ Protein

4. Increasing soluble fibre can help reduce your risk of:
   ○ Osteoporosis
   ○ Gout
   ○ Tooth decay
   ○ Reflux
   ○ High cholesterol

5. Which of the following is a healthy snack for you?
   ○ Fruit salad
   ○ Raw, unsalted nuts
   ○ Low fat yoghurt
   ○ Raisin toast with a thin spread of jam
   ○ Carrot with tomato salsa dip
   ○ All of the above

6. How much physical activity should you be doing each day for good health?
   ○ 20 minutes low-intensity exercise
   ○ 30 minutes moderate-intensity exercise
   ○ 10 minutes high-intensity exercise
7. What is a legume?
- Sweets
- A type of bread
- Beans, peas or lentils
- A fruit
- Nuts

8. Which of the foods below does not belong in the dairy food group?
- Milk
- Cheese
- Yoghurt
- Butter
- Almonds
- Custard

9. If a product is 'cholesterol free' is it always low in fat?
- Yes
- No

10. If you eat chocolate, which type is better for you?
- White
- Dark
- Milk

11. At a restaurant, which would be the healthiest choice?
- Creamy Pasta
- Chicken Schnitzel with vegetables
- Pan based pizza
- Grilled fish with salad
- Butter chicken

12. How many eggs can be included in a healthy diet?
- 1 per week
- None
- 3-4 per day
- 3-4 per week

13. Is the mushroom a:
- Fruit
- Vegetable
- Fungi
- Meat

14. The bread, cereal, pasta and rice group is a good source of:
- Vitamin C
15. What is incidental exercise?
- Getting off the bus one or two stops earlier and walking the rest of the way
- Parking in the furthest carpark and walking
- Taking the stairs instead of the lift
- Delivering messages in person instead of email at work
- Hiding the remote and getting up to change the TV channel
- All of the above

16. How much fibre do you need for good health?
- 5g
- 15g
- 20g
- 30g
- 60g

17. Which of the following is another name for sugar?
- Malt Extract
- Glucose
- Fructose
- Mannitol
- Lactose
- All of the above

18. If a product says it has 'no added sugar', is it always low in sugar?
- Yes
- No

19. What are kilojoules?
- A measure of energy
- Calories
- Sugar
- Fat
- None of the above

20. You can include legumes (baked beans, lentils, chick peas) as a serve of meat, fish, poultry and alternatives group?
- True
- False
**Appendix E: Sociocultural Attitudes Towards Appearance Questionnaire-3**

**YOUR ATTITUDES TO YOUR PHYSICAL APPEARANCE**

The following questions ask you about your attitudes towards your physical appearance, and about the times when you compare your physical appearance to others. Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

1 = Definitely Disagree  
2 = Mostly Disagree  
3 = Neither Agree Nor Disagree  
4 = Mostly Agree  
5 = Definitely Agree

<table>
<thead>
<tr>
<th>TV programs are an important source of information about fashion and &quot;being attractive.&quot;</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I've felt pressure from TV or magazines to lose weight.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I do not care if my body looks like the body of people who are on TV.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I compare my body to the bodies of people who are on TV.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>TV commercials are an important source of information about fashion and &quot;being attractive.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I do not feel pressure from TV or magazines to look pretty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I would like my body to look like the models who appear in magazines.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I compare my appearance to the appearance of TV and movie stars.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Music videos on TV are not an important source of information about fashion and &quot;being attractive.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I've felt pressure from TV and magazines to be thin.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I would like my body to look like the people who are in movies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I do not compare my body to the bodies of people who appear in magazines.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Magazine articles are not an important source of information about fashion and &quot;being attractive.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I've felt pressure from TV or magazines to have a perfect body.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I wish I looked like the models in music videos.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I compare my appearance to the appearance of people in magazines.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Magazine advertisements are an important source of information about fashion and &quot;being attractive.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I've felt pressure from TV or magazines to diet.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I do not wish to look as athletic as the people in magazines.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I compare my body to that of people in &quot;good shape.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
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</tr>
<tr>
<td>Pictures in magazines are an important source of information about fashion and &quot;being attractive.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I've felt pressure from TV or magazines to exercise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wish I looked as athletic as sports stars.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I compare my body to that of people who are athletic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movies are an important source of information about fashion and &quot;being attractive.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I've felt pressure from TV or magazines to change my appearance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not try to look like the people on TV.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movie stars are not an important source of information about fashion and &quot;being attractive.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Famous people are an important source of information about fashion and &quot;being attractive.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to look like sports athletes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix F: Physical Appearance Comparison Scale

Using the following scale please select a number that comes closest to how you feel:

<table>
<thead>
<tr>
<th>Never (1)</th>
<th>Seldom (2)</th>
<th>Sometimes (3)</th>
<th>Often (4)</th>
<th>Always (5)</th>
</tr>
</thead>
</table>

At parties or other social events, I compare my physical appearance to the physical appearance of others.

The best way for a person to know if they are overweight or underweight is to compare their figure to the figure of others.

At parties or other social events, I compare how I am dressed to how other people are dressed.

Comparing your "looks" to the "looks" of others is a bad way to determine if you are attractive or unattractive.

In social situations, I sometimes compare my figure to the figures of other people.
Appendix G: Eating Disorder Examination-Questionnaire

YOUR ATTITUDES TO FOOD AND EATING

The following questions are concerned with the PAST FOUR WEEKS ONLY (28 days). Please read each question carefully and click on the circle which corresponds to the appropriate number for you.

<table>
<thead>
<tr>
<th>ON HOW MANY DAYS OUT OF THE PAST 28 DAYS...</th>
<th>No days</th>
<th>1-5 days</th>
<th>6-12 days</th>
<th>13-15 days</th>
<th>16-22 days</th>
<th>23-27 days</th>
<th>Every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>...Have you been deliberately trying to limit the amount of food you eat to influence your shape and weight?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you gone for long periods of time (8 hours or more) without eating anything in order to influence your shape and weight?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you tried to avoid eating any foods which you like in order to influence your shape and weight?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you tried to follow definite rules regarding your eating in order to influence your shape or weight; for example, a calorie limit, a set amount of food, or rules about what or when you should eat?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you wanted your stomach to be empty?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Has thinking about food or its calorie content made it much more difficult to concentrate on things you are interested in; for example, read, watch TV, or follow a conversation?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you been afraid of losing control over eating?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you had episodes of binge-eating?</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---</td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>...Have you eaten in secret? (Do not count binges)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you definitely wanted your stomach to be flat?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Has thinking about your <strong>weight</strong> made it more difficult to concentrate on things you are interested in; for example, read, watch TV, or follow a conversation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you had a definite fear that you might gain weight or become fat?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you felt fat?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Have you had a strong desire to lose weight?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Has thinking about your <strong>shape</strong> made it more difficult to concentrate on things you are interested in; for example, read, watch TV, or follow a conversation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**OVER THE PAST FOUR WEEKS (28 DAYS)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>On what proportion of times that you have eaten have you felt guilty because of the effect on your shape or weight? (Do not count binges)</td>
<td>- None of the times</td>
</tr>
<tr>
<td></td>
<td>- A few of the times</td>
</tr>
<tr>
<td></td>
<td>- Less than half the times</td>
</tr>
<tr>
<td></td>
<td>- Half the times</td>
</tr>
<tr>
<td></td>
<td>- More than half the times</td>
</tr>
<tr>
<td></td>
<td>- Most of the time</td>
</tr>
<tr>
<td></td>
<td>- Every time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over the past four weeks (28 days) have there been times when you have eaten what other people would regard as an unusually large amount of food given the circumstances?</td>
<td>- No</td>
</tr>
<tr>
<td></td>
<td>- Yes</td>
</tr>
</tbody>
</table>

How many such episodes have you had over the past four weeks? ______

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>During how many of these episodes of overeating did you have a sense of having lost control over your eating?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you had other episodes of eating in which you have had a sense of having lost control and eaten too much, but have NOT eaten an unusually large amount of food given the circumstances?</td>
<td>- No</td>
</tr>
<tr>
<td></td>
<td>- Yes</td>
</tr>
</tbody>
</table>

How many such episodes have you had over the past four weeks? ______

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over the past four weeks have you made yourself sick (vomit) as a means of controlling your shape or weight?</td>
<td>- No</td>
</tr>
<tr>
<td></td>
<td>- Yes</td>
</tr>
</tbody>
</table>

How many times have you done this over the past four weeks? ______
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you taken laxatives as a means of controlling your shape or weight?</td>
<td>○ No    ○ Yes</td>
</tr>
<tr>
<td>How many times have you done this over the past four weeks?</td>
<td>______</td>
</tr>
<tr>
<td>Have you taken diuretics (water tablets) as a means of controlling your shape or weight?</td>
<td>○ No    ○ Yes</td>
</tr>
<tr>
<td>How many times have you done this over the past four weeks?</td>
<td>______</td>
</tr>
<tr>
<td>Have you exercised hard as a means of controlling your shape or weight?</td>
<td>○ No    ○ Yes</td>
</tr>
<tr>
<td>How many times have you done this over the past four weeks?</td>
<td>______</td>
</tr>
<tr>
<td>OVER THE PAST FOUR WEEKS (28 DAYS)...</td>
<td>Not at all</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>...Has your weight influenced how you think about (judge) yourself as a person?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>...Has your shape influenced how you think about (judge) yourself as a person?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>...How much would it upset you if you had to weigh yourself once a week for the next four weeks?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>...How dissatisfied have you felt about your weight?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>...How dissatisfied have you felt about your shape?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>...How concerned have you been about other people seeing you eat?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>...How uncomfortable have you felt seeing your body; for example, in the mirror, in show window reflections, while undressing or taking a bath or shower?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>...How uncomfortable have you felt about others seeing your body; for example, in communal changing rooms, when swimming or wearing tight clothes?</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>
Appendix H: Plain Language Statement

DEAKIN UNIVERSITY
PLAIN LANGUAGE STATEMENT

School Of Psychology
Deakin University

Full Project Title: Choosing weight-loss diets
Principal Researcher: Dr Alexander Mussap
Student Researcher: Ms Romana Murfett

Your Consent
You are invited to take part in this research project. This Plain Language Statement contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project so that you can make a fully informed decision whether you are going to participate.

Please read this Plain Language Statement carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this.

Once you understand what the project is about and if you agree to take part in it, you will be asked to complete a survey. By completing the survey and submitting your answers, you indicate that you understand the information and that you give your consent to participate in the research project.

Purpose and Background
The purpose of this project is to find out why people choose certain types of weight-loss diets over others. The results of this research may also be used to help student researcher Ms Romana Murfett to obtain a Doctorate in Psychology.

A total of approximately 200 people will participate in this project.

You are invited to participate in this research project if you are at least 18 years of age and you have at some time in your life attempted to lose weight through dieting, using weight-loss products, eating special foods, joining diet programs, and/or eating according to a formal diet plan. However, if you have never attempted to lose weight, and if you are not currently on a diet, there is no need for you to complete this survey.

Funding
This research is totally funded by Deakin University.

Procedures
Participation in this project will involve completing an anonymous online survey (that should take no longer than 60 min to complete) which asks about:

• your reasons for dieting;
• your history of dieting;
• your attitudes and feelings concerning your body and weight-loss;
• your knowledge about nutrition, dieting, and weight-loss.

**Possible Benefits**

Your contribution to this research project will help us to understand and promote healthy weight-loss choices and discourage unhealthy weight-loss choices. However, we cannot guarantee or promise that you will receive any benefits from this project.

**Possible Risks**

Some of the questions we ask may cause you some discomfort, particularly if you have concerns with your appearance or if you are suffering or have suffered from an eating disorder. Examples of the questions and statements used include:

• Have you had episodes of binge-eating?
• Have you taken laxatives as a means of controlling your shape or weight?
• Have you felt fat?
• Have you eaten in secret?

If you find that the questions cause you discomfort, please do not continue with this study. If you experience an adverse reaction to participating in this project, and if you are on a Deakin University campus, we encourage you to seek assistance from a qualified university counsellor available free of charge to all enrolled Deakin students on Level 2, Building B, of the Melbourne campus (03 9244 6300). The Eating Disorders Foundation of Victoria (www.eatingdisorders.org.au, 03 98850318 or 1300 550 236 for non-metro callers) and LifeLine (13 11 14) are available to provide free, confidential counselling and referral for the cost of a local call. Alternatively, if you are currently receiving treatment we strongly recommend that you seek assistance from your regular clinic or agency.

**Privacy, Confidentiality and Disclosure of Information**

The survey you complete will be entirely anonymous – you will not be asked to write your name on it. If you give us your permission by submitting your completed survey, we plan to publish the results in an international Psychology journal. The results obtained in this project will be kept in secure storage at Deakin University for 6 years after final publication, after which it will be destroyed. The data is not identifiable; therefore it will not be possible to trace who completed each survey. In any publication, information will be provided in such a way that you cannot be identified.

**Results of Project**

This project will be completed and the results written up by December 2010. If you wish to receive information about the outcomes of the study please phone the principal researcher on 03 9251 7103.

**Participation is Voluntary**

Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. Please note that as this is an anonymous survey it will be impossible to retrieve and remove your data once you have submitted your completed answers. If you decide to withdraw from this project before completing the survey, simply stop answering questions and do not click the “submit” button.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with Deakin University.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Complete the survey only after you have had a chance to ask your questions and have received satisfactory answers.

**Ethical Guidelines**

This project will be carried out according to the National Statement on Ethical Conduct in Human Research (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

The ethics aspects of this research project have been approved by the Human Research Ethics Committee of Deakin University.
Complaints
If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact: Secretary HEAG-H, Dean's Office, Faculty of Health, Medicine, Nursing and Behavioural Sciences, 221 Burwood Hwy, Burwood, VIC 3125. Telephone: , Email: hmnbsresearch@deakin.edu.au

Please quote project number HEAG-H 76/09.

Reimbursement for your costs
You will not be paid for your participation in this project.

Further Information, Queries or Any Problems
If you require further information or if you have any problems concerning this project (for example, any side effects), you can contact the principal researcher.

The researchers responsible for this project are:

Dr Alexander Mussap
School of Psychology
Deakin University
221 Burwood Hwy
Burwood, VIC 3125
Email: mussap@deakin.edu.au
03 9251 7103

Ms Romana Murfett
School of Psychology
Deakin University
221 Burwood Hwy
Burwood, VIC 3125
Email: rkmu@deakin.edu.au

☑️ I have read and understood this Plain Language Statement and wish to participate in the survey
☑️ I am over the age of 18 years

Continue to Questionnaire
Appendix I: Correlations between Internalisation, Comparison and Body Dissatisfaction (Study 2)

*Bivariate Correlations (Pearson’s r Values) for Internalisation, Comparison and Body Dissatisfaction*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internalisation</td>
<td></td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>2. Comparison</td>
<td>.66**</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>3. Body Dissatisfaction</td>
<td>.38**</td>
<td>.37**</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note. *p < .01; **p < .001*
Appendix J: Diet Methods (Study 3)

TYPES OF DIETS

We would like to know about your interest level in certain types of dieting, and your future intentions to try different diets.

The following pages contain brief descriptions of 8 types of diet: calorie counting diets, pre-prepared meal diets, diet meal plans, meal replacement diets, high-protein diets, supplement diets, ‘special food’ diets, and low GI diets.

In the past you may have tried these types of diets on their own or in various combinations. The following questions ask you to consider each style of dieting. Please click on a number in the scales of 0 to 10 to indicate your answer.

Calorie counting diets
Think of diets that require you to count calories and limit the number of calories you consume each day. Calorie counting diets include:
- Weight Watchers (food is given ‘POINT’ values to represent how much energy they contain)
- Calorie King Australia (online diet and weight loss club)

1. What is the likelihood of you starting a calorie counting diet in the next 12 months?
   definitely
   will not
   0  1  2  3  4  5  6  7  8  9  10

2. How interested are you in finding out more about the effectiveness of calorie counting diets?
   not at all
   interested
   extremely interested
   0  1  2  3  4  5  6  7  8  9  10

3. How interested are you in finding out more about any unwanted consequences that may result from being on calorie counting diets?
   not at all
   interested
   extremely interested
   0  1  2  3  4  5  6  7  8  9  10

Pre-prepared meal diets
Think of diets that provide you with pre-prepared meals. Pre-prepared meal diets include:
- Lite n’ Easy
- Jenny Craig

1. What is the likelihood of you starting a pre-prepared meal diet in the next 12 months?
   definitely
   will not
   0  1  2  3  4  5  6  7  8  9  10

2. How interested are you in finding out more about the effectiveness of pre-prepared meal diets?
   not at all
   interested
   extremely interested
   0  1  2  3  4  5  6  7  8  9  10
3. How interested are you in finding out more about any unwanted consequences that may result from being on **pre-prepared meal diets**?

<table>
<thead>
<tr>
<th>not at all interested</th>
<th>extremely interested</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
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</tbody>
</table>

**Diet meal plans**

Think of diets that provide you with a daily meal plan to follow. These diets don’t provide you with pre-prepared food, but they give you a very clear plan of what you should eat at each meal. Diet meal plans include:
- The CSIRO total wellbeing diet
- The Great Australian Diet (by Dr John Tickell)
- GutBusters

1. What is the likelihood of you starting a **diet meal plan** in the next 12 months?

<table>
<thead>
<tr>
<th>definitely will not</th>
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<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
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</table>

2. How interested are you in finding out more about the effectiveness of **diet meal plans**?

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<tr>
<th>not at all interested</th>
<th>extremely interested</th>
</tr>
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<tbody>
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<td>0 1 2 3 4 5 6 7 8 9 10</td>
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</table>

3. How interested are you in finding out more about any unwanted consequences that may result from being on **diet meal plans**?

<table>
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<th>not at all interested</th>
<th>extremely interested</th>
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<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
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</tbody>
</table>

**Meal replacement diets**

Think of diets that provide you with diet products (such as shakes, soups, mousse or bars) that replace most or all of your normal daily meals. Meal replacement diets include:
- the Tony Ferguson Weightloss Program
- Celebrity Slim
- OptiSlim
- UltraSlim

1. What is the likelihood of you starting a **meal replacement diet** in the next 12 months?

<table>
<thead>
<tr>
<th>definitely will not</th>
<th>definitely will</th>
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<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
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</table>

2. How interested are you in finding out more about the effectiveness of **meal replacement diets**?

<table>
<thead>
<tr>
<th>not at all interested</th>
<th>extremely interested</th>
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<td>0 1 2 3 4 5 6 7 8 9 10</td>
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</table>
3. How interested are you in finding out more about any unwanted consequences that may result from being on meal replacement diets?

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<th>extremely interested</th>
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<td>1</td>
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<td>6</td>
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<td>4</td>
<td>5</td>
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</tbody>
</table>

**High-protein diets**
Think of diets that encourage you to consume high-protein foods (meat, fish, eggs, etc.) at the expense of high-carbohydrates foods (grains, pastas, etc.). High-protein diets include:
- ‘The Atkins Diet’ from the book Dr Atkins’ New Diet Revolution
- The Ultra Lite weight loss and detox program
- The Zone Diet by Dr. Barry Sears

1. What is the likelihood of you starting a high-protein diet in the next 12 months?
   definitely will not definitely will
   0 1 2 3 4 5 6 7 8 9 10

2. How interested are you in finding out more about the effectiveness of high-protein diets?
   not at all extremely interested
   0 1 2 3 4 5 6 7 8 9 10

3. How interested are you in finding out more about any unwanted consequences that may result from being on high-protein diets?
   not at all extremely interested
   0 1 2 3 4 5 6 7 8 9 10

**Supplement diets**
Think of diets in which drugs or chemical supplements are ADDED to your normal diet. These diets often involve taking pills, powders or liquids that claim to burn fat, enhance your metabolism, suppress your appetite, or cleanse/detoxify your body. These diets include:
- Blackmores Metabolism Advantage, Sugar Balance, and/or Weight-Loss Accelerate
- Xantrax tablets
- Naturopathica range: FatBlaster, FatBlaster MAX, FatMagnet and/or Metabolism Boost
- 4.3.2.1 Slim & Detox
- Slimeze (‘7 Day Hollywood Weight Loss Diet’ or ‘14 Day Weight Loss Program’)
- Elimitora Slim + Detox

1. What is the likelihood of you starting a supplement diet in the next 12 months?
   definitely will not definitely will
   0 1 2 3 4 5 6 7 8 9 10

2. How interested are you in finding out more about the effectiveness of supplement diets?
   not at all extremely interested
   0 1 2 3 4 5 6 7 8 9 10
3. How interested are you in finding out more about any unwanted consequences that may result from being on supplement diets?

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‘Special food’ diets
Think of diets that ask you to eat special foods or drinks throughout the day. These foods or drinks either REPLACE normal meals or are to be consumed WITH every meal. ‘Special food’ diets include:
- the Cabbage Soup Diet
- the Apple Cider Vinegar Diet
- the Grapefruit Diet
- Wu-Yi Tea or Wu-Long Tea
- The Lemon Detox Diet

1. What is the likelihood of you starting a ‘special food’ diet in the next 12 months?

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<tr>
<th>definitely will not</th>
<th>definitely will</th>
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</table>

2. How interested are you in finding out more about the effectiveness of ‘special food’ diets?

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3. How interested are you in finding out more about any unwanted consequences that may result from being on ‘special food’ diets?

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<th>not at all interested</th>
<th>extremely interested</th>
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Low GI diets
Think of diets that ask you to eat foods that have a low glycaemic index (the rate at which the food raises your blood sugar level). Low GI diets include:
- Ultimate EnerGI Health Club (an internet-based weight loss program with e-book)
- “The Low GI Diet: Lose Weight With Smart Carbs” - book by Prof. Jennie Brand-Miller, Kaye Foster-Powell, Joanna McMillan-Price

1. What is the likelihood of you starting a low GI diet in the next 12 months?

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<th>definitely will</th>
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</table>

2. How interested are you in finding out more about the effectiveness of low GI diets?

<table>
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<tr>
<th>not at all interested</th>
<th>extremely interested</th>
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<tbody>
<tr>
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</tbody>
</table>
3. How interested are you in finding out more about any unwanted consequences that may result from being on low GI diets?

<table>
<thead>
<tr>
<th>not at all interested</th>
<th>extremely interested</th>
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## Appendix K: Behavioural Beliefs, Outcome Evaluations and Social Influence (Study 3)

### YOUR BELIEFS ABOUT WEIGHT-LOSS

The statements below refer to foods, products, and programs that claim to help you lose weight. Please read through each statement and indicate the extent to which you agree with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dieting is an effective way of reducing body weight</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Dieting improves health</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Diets produce <em>rapid</em> weight-loss</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Friends should be consulted for advice on effective diets</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. I am preoccupied with the desire to be thinner</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. The advice of health professionals about diets and weight-loss is very valuable to me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Diets achieve permanent weight-loss</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Dieting is effortful</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>9. I worry about my health</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. Diets are not effective at producing weight-loss</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>11. Diets are expensive</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>12. The advice of my family about diets and weight-loss is very valuable to me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13. I want to lose weight as quickly as possible</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14. I am concerned about the possible side-effects due to eating unnatural supplements, meal replacements and diet pills</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. Diets involve enduring changes to your lifestyle</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16. Diets <em>do not</em> reduce the risk of physical illness</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17. Fashion and celebrity magazines include very effective diets and diet tips</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>18. Diets <em>do not</em> produce changes in body weight that last</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>19. A diet is a short-term change to my eating habits</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>20. If a diet method requires too much effort I am unlikely to continue with it</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>21. I do not want a diet to interfere with the things in life I enjoy</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>22. I am very price conscious when choosing which diet or diet product to buy</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>23. Diets incorporate natural foods</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
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<td>o</td>
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</tr>
<tr>
<td>24. Losing weight is more important to me than keeping the weight off</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>25. Diet programs do all the thinking for you</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>26. Diets and diet products are affordable</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<td>o</td>
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<tr>
<td>27. Diet programs provide you with nutritional education so that you can make informed choices</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<td>o</td>
<td>o</td>
</tr>
<tr>
<td>28. Dieting involves eating meal replacements, artificial supplements or taking diet pills</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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</tr>
<tr>
<td>29. I am not concerned how a diet works, as long as it produces results</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>30. A health professional, such as a doctor, nutritionist or dietician, should be consulted for weight-loss advice</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>31. Making lifelong changes is more important to me than a quick fix</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>32. Celebrities are the first to find out about the latest and most effective diet methods</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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</tr>
<tr>
<td>33. A diet is just one small component of your entire life</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>34. Family members should be consulted for advice on effective diets</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
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<tr>
<td>35. Diets are slow at reducing body weight</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>36. Diets are an easy way to lose weight</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>37. Dieting requires you to turn your life 'upside down'</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>38. When celebrities I admire recommend a diet product, I take their advice seriously</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>39. The advice of my friends about diets and weight-loss is very valuable to me</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
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